

WORLD BOOK

Research Guide • 22
Index



Boston Public Library

REFERENCE

V R

The World Book Encyclopedia



World Book, Inc.

a Scott Fetzer company

Chicago

The World Book Encyclopedia

© World Book, Inc. All rights reserved. This volume may not be reproduced in whole or in part in any form without prior written permission from the publisher.

World Book, Inc.
233 North Michigan
Chicago, IL 60601

www.worldbook.com

WORLD BOOK and the GLOBE DEVICE are registered trademarks or trademarks of World Book, Inc.

Copyright © 2003, 2002, 2001, 2000, 1999, 1998, 1997, 1996, 1995, 1994, 1993, 1992, 1991, 1990, 1989, 1988, 1987, 1986, 1985, 1984, 1983 by World Book, Inc.
Copyright © 1982, 1981, 1980, 1979, 1978 by World Book-Childcraft International, Inc.
Copyright © 1977, 1976, 1975, 1974, 1973, 1972, 1971, 1970, 1969, 1968, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1959, 1958, 1957 by Field Enterprises Educational Corporation.
Copyright © 1957, 1956, 1955, 1954, 1953, 1952, 1951, 1950, 1949, 1948 by Field Enterprises, Inc.
Copyright 1948, 1947, 1946, 1945, 1944, 1943, 1942, 1941, 1940, 1939, 1938 by The Quarrie Corporation.
Copyright 1937, 1936, 1935, 1934, 1933, 1931, 1930, 1929 by W. F. Quarrie & Company.
The World Book, Copyright 1928, 1927, 1926, 1925, 1923, 1922, 1921, 1919, 1918, 1917 by W. F. Quarrie & Company.
Copyrights renewed 1990, 1989, 1988, 1987, 1986, 1985, 1984, 1983 by World Book, Inc.
Copyrights renewed 1982, 1981, 1980, 1979, 1978 by World Book-Childcraft International, Inc.
Copyrights renewed 1977, 1976, 1975, 1974, 1973, 1972, 1971, 1970, 1969, 1968, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958 by Field Enterprises Educational Corporation.
Copyrights renewed 1957, 1956, 1955, 1954, 1953, 1952, 1950 by Field Enterprises, Inc.

International Copyright © 2003, 2002, 2001, 2000, 1999, 1998, 1997, 1996, 1995, 1994, 1993, 1992, 1991, 1990, 1989, 1988, 1987, 1986, 1985, 1984, 1983 by World Book, Inc.
International Copyright © 1982, 1981, 1980, 1979, 1978 by World Book-Childcraft International, Inc.
International Copyright © 1977, 1976, 1975, 1974, 1973, 1972, 1971, 1970, 1969, 1968, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1959, 1958, 1957 by Field Enterprises Educational Corporation.
International Copyright © 1957, 1956, 1955, 1954, 1953, 1952, 1951, 1950, 1949, 1948 by Field Enterprises, Inc.
International Copyright 1948, 1947 The Quarrie Corporation.

ISBN 0-7166-0103-6

Library of Congress Control Number 2002068987

Printed in the United States of America

03 54321

About this volume

This volume consists of two basic parts:

A comprehensive index to *World Book*

An instructional section, *A Student Guide to Better Writing, Speaking, and Research Skills*

The index includes more than 150,000 entries that direct you to information in *World Book*. The index, together with *World Book's* extensive system of cross-references, its single alphabetical arrangement, and its other ease-of-use features, helps you find what you want to know quickly and easily. For general instructions on how to find a fact or an article in *World Book*, see the section "How to use *World Book*" in Volume A. To learn how to use the Index, see page 2 of this volume. The index itself begins on page 39.

The section "A Student Guide to Better Writing, Speaking, and Research Skills" begins on page 4. It includes practical advice on such topics as improving your writing skills and preparing a short report, a book review, and a term paper; preparing, rehearsing, and delivering a speech; and using a library's resources and tapping other sources of information. Related information on conducting research follows on page 35. Included are a *Glossary* of terms and abbreviations encountered in research; a listing of general and specific *Selected reference books*; and information on two systems for arranging materials in a library—*Dewey Decimal Classification* and *Library of Congress Classification*.

This volume was prepared with the advice of the *World Book* Advisory Board, other leading educators, practicing teachers, and skilled librarians.

How to use the index

The index is designed to help you find information in *World Book*. It tells you what articles have information on the subject you are looking up. To make it even easier for you to find what you seek, the index refers you to the specific volume and page where the information appears. If it sends you to a fairly long article, it tells you which section or sections of that article to look for.

The references to *World Book* appear under *index headings* that are printed in heavy type. These headings are arranged in alphabetical order. To find where *World Book* contains information on your subject, simply look for an index heading that seems to match the subject you are seeking. For example, if you are looking for information on employment, look for the index heading

Employment

and you have found the references you want.

If the index heading you find is also the title of an article in *World Book*, the volume and page number are shown immediately after the heading. In the case of

Mythology M: 973

the index heading and article title are the same, and the article begins on page 973 of the M volume. Page numbers in the two C volumes are indicated with *C* and *Ci*, and those in the two S volumes are indicated with *S* and *So*. Page numbers for the volumes that contain more than one letter indicate the letter you seek, rather than the first letter of the volume. For example, the reference to "Yankee Doodle" sends you to Y: 554, page 554 of the W-X-Y-Z volume.

If the heading you find is not the title of an article, you will find the titles of *World Book* articles listed as *index entries* in light type under the heading:

Microbe

Microbiology **M: 513**

If the article referred to is divided into sections, you will find the appropriate subheadings in parentheses between the article title and the page number, pinpointing the place where the information may be found:

Aksum [ancient country] **A: 255** *with map*
Africa (The influence of Christianity) **A: 131**
Eritrea (History) **E: 353**

Sometimes you will find two page numbers after a title and subheading. They indicate that the section referred to covers more than one page and begins on the first page listed, but the information you seek appears on the second:

World Trade Center

New York City (Manhattan) **N: 323-324**

The index entries listed under an index heading normally appear in alphabetical order. But if one entry is much more important as a source of the information you seek, it appears first:

Flavor

Taste **T: 50**

Spice **So: 781**

Some headings have only a few entries under them. Others, such as the Africa heading, have many. In many long lists, you will find the entries divided into smaller groups under such subjects as Agriculture, Art and architecture, and Education.

Identifiers, words or phrases in brackets, indicate which of several similar headings is the one you seek:

Core [botany]
Core [electromagnetism]
Core [geology]
Core [nuclear reactor]
CORE [organization]
Core [sun]

Some identifiers are not complete in themselves, but the article titles that follow them complete the identification.

Lincoln, William Wallace [son of]

Lincoln, Abraham (Lincoln's family) **L: 315**

Cross-references guide you in using the index. A *see* reference means that the information you seek appears under another heading, rather than the one you have chosen:

Faisal

See Faisal in this index

A *see also* reference indicates that another heading in the index has entries you may want to look up.

Accident

See also First aid *in this index*

Many cross-references send you to lists of Related articles:

See also the list of Related articles in the American literature article

You can thus find the long lists of articles in *World Book*, such as this list of American authors, but these lists do not take up space in the index.

References to illustrations appear along with other references in this index, not separately. The wording shows whether you will find both pictures and text information or only pictures on the pages listed. If the entry says *with picture*, *with portrait*, *with diagram*, *with map*, or a similar phrase, it indicates that text material appears on the page named and that a related illustration appears on the same page or the page facing it. In the case of

Brake [mechanics]

Automobile (The brake system) **A: 954**
with diagram

the text information appears on A: 954 and is accompanied by a diagram showing a brake system.

If the entry says *picture on*, *diagram on*, or *map on* a given page, it indicates that the illustration listed is relat-

ed to the subject of the index heading you found, even though no significant text information on that subject appears on the same page. In the case of

Revere, Paul

Boston Massacre *picture on* **B: 505**

the picture illustrates Revere's handiwork but the Boston Massacre article does not go into detail about Revere.

The order of headings in this index is alphabetical, with the items arranged word by word, not letter by letter, just as they are in *World Book*:

Consumer Price Index

Consumerism

Consumers League, National

Letters are usually regarded as separate words unless they normally form parts of a larger word or an acronym:

E [letter]

E Pluribus Unum

Eakins, Thomas

EAM [organization]

Numbers at the beginnings of headings are treated as though they were spelled out, even when they appear as figures:

Fifth Republic

50° summer isotherm

Fifty-Four Forty or Fight

A Student Guide to Better

Writing, Speaking, and Research Skills



Do you panic when faced with a writing assignment? Are you nervous about getting up to speak before a group? Do you sometimes find it difficult to find the right research materials? You're not alone. Many students have the same problems. That's why we developed this section—to help you improve your skills in these important areas.

A Student Guide to Better Writing, Speaking, and Research Skills consists of three parts. Part one, A Guide to Writing Skills, includes practical tips to help you become

a better writer. It also provides how-to-advice on preparing a short report and on preparing a book report. In addition, it takes you through the various steps involved in preparing a research paper: from making a schedule and choosing a topic, through background reading and making an outline, to writing a first draft, making the final copy, and preparing footnotes and a list of sources.

Part two, A Guide to Speaking Skills, covers the six basic steps in preparing a speech. It also pro-

vides useful information on the different kinds of speeches and easy-to-follow tips on rehearsing and delivering a speech. The section concludes with helpful hints on the effective use of audio-visual aids.

A Guide to Research Skills, part three, helps you get the most of the resources from the library or media center. It includes detailed information about library catalog systems and reference sources. It tells how to evaluate reference sources and how to prepare source cards and take notes. The



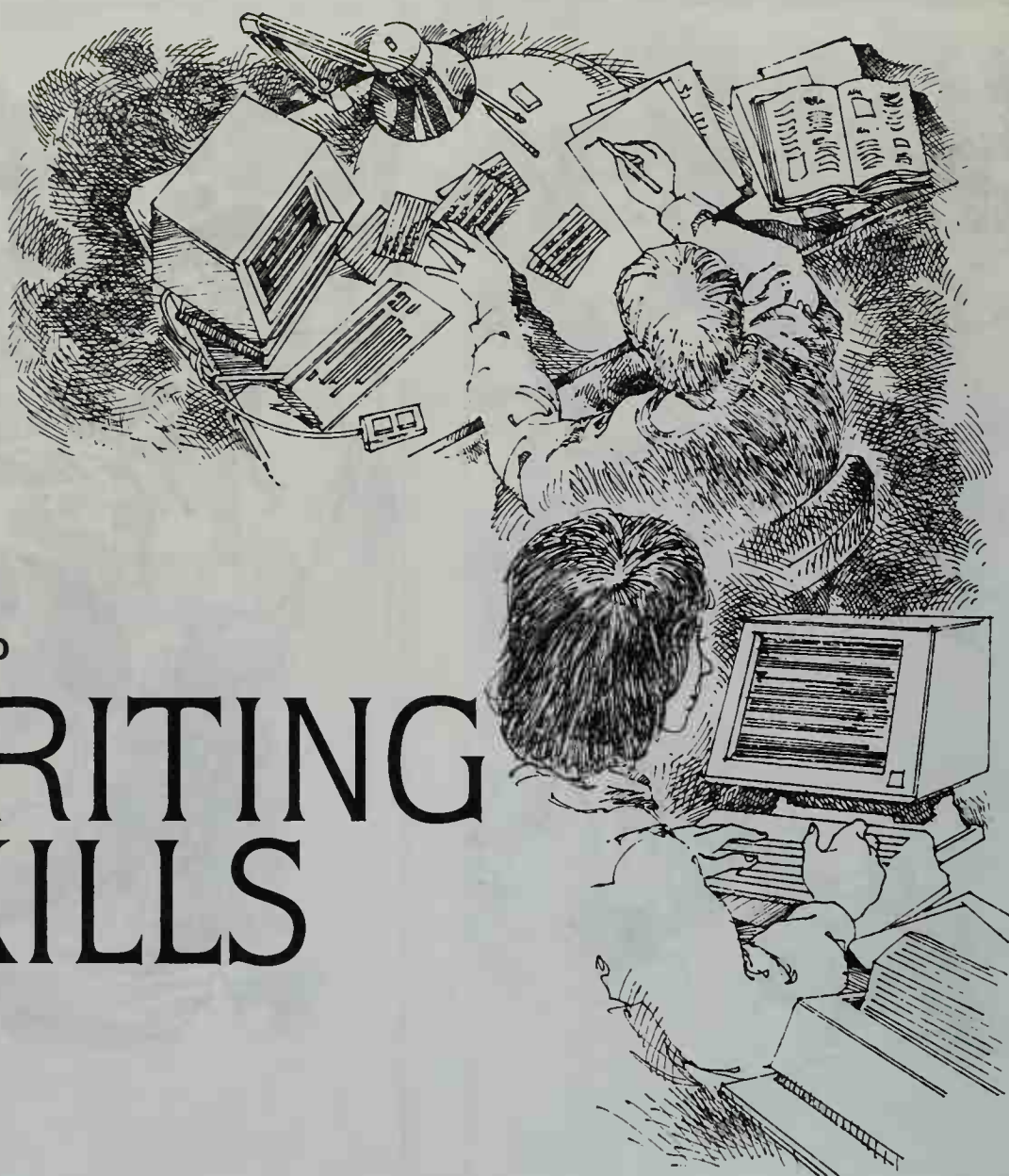
section provides guidance for tapping sources of information outside of the library, such as conducting an interview or using television or the Internet as a source.

A Student Guide to Better Writing, Speaking, and Research Skills concludes with a Glossary of terms and abbreviations often encountered in research; a list of general and specific Selected Reference Materials; and information on two library classification systems—Dewey Decimal Classification and Library of Congress Classification.

Contents

A Guide to Writing Skills 6	Reference and Source
Writing tips 6	Materials 30
Preparing a Short Report .10	Preparing Source cards . . 33
Preparing a Book Report .12	Taking Notes 33
Preparing a Research	Using Other Sources 34
Paper 14	Related information
A Guide to Speaking Skills . . 20	Glossary 35
Preparing a Speech 20	Selected Reference and Source
Rehearsing and Delivering	Materials 36
a Speech 23	Dewey Decimal Classification
A Guide to Research Skills . . 26	and Library of Congress
Getting to know	Classification 38
the Library 26	

The illustrations in the feature were prepared for WORLD BOOK by Mike Eagle, Kirchoff-Wohlberg, Inc..



A Guide to

WRITING SKILLS

Learning to be a good writer is a goal worth striving for. Schoolwork involves a steady stream of writing assignments, and many jobs require the writing of effective letters, memos, and reports. Writing also plays a role in your personal life, as you fill out forms or write letters to friends and relatives.

Good writing gets its message across so clearly that the reader knows exactly what the writer meant to say. It also holds the reader's attention so completely that the entire message—not just a fragment of it—is received.

Don't believe anyone who tells

you that it's easy to write well. It isn't. People who have no trouble expressing themselves out loud may freeze when they pick up a pencil. Like any other skill—for example, shooting baskets or playing the piano—writing requires practice. The more you do it, the better you become.

Writing Tips

Practice helps. If practicing writing sounds like drudgery, you probably haven't thought of all the possibilities. Your practice writing doesn't have to be perfect. It should simply get you into the habit of using written words

The following sections contain information that can help you improve your writing skills in general. They also provide specific guidelines for preparing such school assignments as short reports, book reports, and research papers.

to express yourself.

You can get into the writing habit in many ways. Keep a journal or diary to record your experiences, thoughts, and feelings. Write letters or e-mails to

friends, relatives, or a pen pal. Try writing a fan letter to your favorite author, TV personality, or rock star. And don't forget to send post cards when you travel. Send for brochures, pamphlets, and free samples that you see advertised in newspapers or magazines. You might also consider writing your own invitations and greeting cards instead of buying commercially produced ones.

The more you write for fun, the more you'll realize that writing doesn't have to be a chore. Every time you write, you'll be practicing a skill and getting better at it.

Preliminary steps for success. Some of your school writing assignments, such as themes, essays, and stories, are based on your own opinions, ideas, or imagination. Other writing assignments, such as book reports and research papers, are based on facts gained from reading and research. Whatever the assignment may be, your work will proceed more smoothly if you follow these suggestions before you begin putting words on paper:

1. Be sure you understand the specifics of the assignment, such as its length and whether the topic is your choice or assigned.
2. Plan ahead and organize your time to help assure that you have enough time to do a good job.
3. If the topic is your choice, select one that interests you, one that you already know something about, or one that you're eager to learn more about. Limit your topic so that you can cover it adequately in the assigned length and the available time.
4. Jot down ideas whenever and wherever they occur to you. Simply talking about your assignment with friends can trigger ideas that

you might be able to use in your paper.

5. Develop an outline to organize your thoughts and to guide your writing so you won't forget a point you intended to include. A simple list of the main ideas may be adequate for a short assignment. Major assignments may require a more formal outline.

The three-part plan. Many writing projects can be organized into three parts: (1) the introduction, (2) the body, and (3) the conclusion. In the introduction, you briefly introduce your topic, giving the reader a preview of what's to come. The body of the paper—the longest part by far—provides the facts, examples, and details that support the main idea expressed in the introduction. The conclusion summarizes and restates the main idea.

The three parts of your paper should work together to make an effective whole. Strive for an attention-getting introduction—one that will arouse interest and encourage your reader to read on. In the body, make sure each point relates to the subject you're discussing. Don't stray into unrelated material or get caught up in trivial details that don't support your main idea. Your conclusion is your last chance to impress the reader. Don't end on a weak note. Try to make your conclusion as strong and effective as you can.

As you get ready to start writing, think of the three parts of your paper in terms of this simple formula.

1. Tell the reader what you're going to say.
2. Say it.
3. Tell the reader what you said.

Writing the first draft. When the time comes for you to write a first draft, don't sit with pencil poised waiting for the perfect sentence to come to mind. It's better to plunge right in, without worrying about making mistakes in grammar, spelling, and punctuation. At this stage, you simply need to put down the information and ideas you've gathered. Don't feel you have to use complete sentences. You can go back later to change and improve your work. And don't feel you have to begin with the introduction, especially if you're having difficulty with it. In many cases, you'll think of an effective introduction after you've written the body of your paper.

Always write or type your first draft on one side of the paper only, with wide margins to allow plenty of room for revisions. If you write the draft, use every other line of the paper. If you type, set your computer, word processor, or typewriter for double- or triple-spacing.

**“Like any other skill...
writing requires practice.
The more you do it, the
better you become.”**

enclosures

enclosures that resemble sleeping bags. These ~~enable~~ astronauts **without being** **down to keep from** to sleep ~~unstrapped without floating~~ **about**.

Eating and drinking. Eating aboard the space shuttle **also requires** **astronauts to** **They** involves adjusting to the conditions of weightlessness. **Astronauts** eat their meals with their feet strapped down ~~to keep~~ **Their** ~~them from floating about~~. Food must be nutritious, easy to eat, **to** and convenient ~~se~~ store. Foods include frozen or chilled **facilities for heating** soups, vegetables, and meats. The shuttle has ~~ways to heat~~ food. **use** The astronauts ~~eat with~~ dishes and silverware.

"Editing your own work is one of the... most important tasks in turning out a well-written paper... Look for weak spots in content, organization, and writing style as well as errors in grammar, capitalization and punctuation."

Revising your work. Think of writing as a building process, with words, sentences, and paragraphs as building blocks. Your goal is to choose the best words, to put them together into clear, grammatical sentences, to form the sentences into logical, coherent paragraphs, and to link the paragraphs into a well-organized paper.

Don't expect to reach your goal the first time around. In most cases, writing involves a lot of rewriting—turning out as many drafts as necessary to produce the best results.

After you've completed your first draft, the best thing to do is forget about your paper for a while. Leave it alone for an hour, a day, or several days if time permits. Then look at it again with a fresh, critical eye.

Begin your revision by reading your work carefully. You might be so impressed or satisfied with your first effort that you think it can't be improved. But chances

are it can be. Editing your own work is one of the hardest and most important tasks in turning out a well-written paper. Reading your work aloud will help you catch parts that need revision. Parts that sound unnatural or don't make sense require reworking. Also look for weak spots in content, organization, and writing style, as well as for errors in grammar, spelling, capitalization, and punctuation. Keep a dictionary, thesaurus, and grammar handbook nearby—and be sure to use them. If you are working on a word processor, use such built-in aids as the dictionary.

Use a colored pencil and make your corrections right on the paper. If you're adding one or more sentences, write them in the margin and use an arrow to show where the additions should go. If you want to take out material, don't erase it or black it out completely. Instead, draw a neat line through the material or draw a circle around it. That way, if you later decide to restore the material or move it somewhere else, it

will still be readable. If you are using a word processor, save the revised file under a name different from the original.

Judging the content. To judge the content of your paper, keep in mind your reader and your purpose. Ask yourself these questions: Is the introduction as effective as I can make it? Will it arouse the reader's interest? Does the body of the paper include all the points I wanted to cover? Will the reader understand what I'm trying to say? Are there enough examples or details to support my main idea? Are there gaps that need to be filled? Are there parts that don't really fit and so should be eliminated? Does my conclusion leave a strong impression?

Checking the organization. Be sure each paragraph has a *topic sentence*. A topic sentence expresses the central idea of the paragraph. All other sentences in the paragraph should relate to the topic sentence. If you have a sentence that doesn't seem to fit in the paragraph, move it to another

paragraph or eliminate it. Don't make it a paragraph by itself. Every paragraph should consist of at least two sentences. Make sure your paragraphs flow smoothly from one to the next in logical order.

Style pointers. Style—the way you express yourself—can make a big difference in the effectiveness of your writing. A paper that has all the necessary information but is boring to read may leave the reader disappointed and unimpressed. To make your writing as interesting and effective as it can be, keep in mind these points:

1. Use specific, vivid words, including action verbs. If you're writing a report on the Pueblo Indians, for example, tell how the Indians *dug* irrigation ditches, *wove* cloth, and *carved* dolls, not how they *made* ditches, cloth, and dolls.

2. Vary your sentence structure. Don't write a paper that consists entirely of short, simple sentences. Avoid beginning too many sentences with the same word.

3. Use interesting comparisons to bring statistics to life. For example, a figure for the population of India is more interesting if you add the fact that more people live in India than in all the countries of North and South America combined.

4. Avoid wordiness, unnecessary "big words," and overused expressions. Don't use excess words that only take up space. For example, write *today* or *now* rather than *at the present time* and *if* rather than *in the event that*. Don't use words that you yourself don't understand or that are intended merely to impress your reader. For example, write *end* rather than *termination* and *best* rather than *optimum*. Replace overused expressions, called

clichés, with fresher expressions. *Hungry as a bear*, *the last straw*, and *last but not least* are examples of clichés.

5. Avoid overly formal writing. Think of writing as a kind of conversation with yourself or a friend. For certain assignments, your writing style may be more formal than your everyday conversation. However, try to make your writing sound natural.

Common grammatical errors. Mistakes in grammar can confuse the reader and even change the meaning of what you write. Here are some of the most common grammatical problems you should look for as you revise your work.

1. *Run-on sentences* consist of two or more independent clauses written together without a proper connection. A comma alone cannot be used to link such clauses.

Example: It stopped raining, we played the rest of the game.

There are several ways to correct the error.

Make two separate sentences:

It stopped raining. We played the rest of the game.

Use a semicolon to link the independent clauses:

It stopped raining; we played the rest of the game.

Use a conjunction, such as *and* or *but*, to link the clauses:

It stopped raining, and we played the rest of the game.

Make one of the clauses a phrase or dependent clause:

After it stopped raining, we played the rest of the game.

2. *Sentence fragments* are incomplete sentences. Phrases and dependent clauses cannot stand alone as sentences. To correct a fragment, you can join it to a sentence or add words to make it a sentence.

Fragment: known for their skill as hunters.

Correction: Known for their skill as hunters, lions have little trouble finding food.

or

Lions are known for their skill as hunters.

3. *Subject-verb agreement.* A subject and verb must agree in number and person.

Number: The *star* appears at dusk. [singular]

The *stars* appear at dusk. [plural]

Person: *I* am careful. [First person singular]
You are careful. [Second person singular]
He, she, it is careful. [Third person singular]

We are careful. [First person plural]

You are careful. [Second person plural]

They are careful.

[Third person plural]

4. *Pronoun agreement.* As shown above, a pronoun used as a subject must agree with its verb. A pronoun must also agree with its *antecedent*—that is, the particular noun to which it refers.

Bill rode *his* bike to school.

The women announced *their* decision.

5. *Unclear pronoun references.* Pronouns can cause confusion if their antecedents are not clear.

Confusing: When Karen told Ann the story, she looked surprised.

Clear: When Karen told Ann the story, Ann looked surprised.

or

Ann looked surprised when Karen told her the story.

6. *Dangling modifier* is an element in a sentence that seems to modify a word that it does not logically modify.

Dangling: Running at record-



"A short report demands a narrow topic... Topics that could be... handled in a short report might be 'How White Blood Cells Fight Disease,' 'Tools Used by Colonial Farmers,' or 'Life Aboard the Space Shuttle.'"

breaking speed, the race was the highlight of the day.

Correct: Running at record-breaking speed, Kelly made the race the highlight of the day.

7. Misplaced modifier is a phrase or clause not close enough to the word it modifies. As a result, it may seem to modify another word.

Misplaced: Jack ran to his mother *waving the letter*.

Correct: *Waving the letter*, Jack ran to his mother.

8. Shifts in verb tense. Generally, you should use one verb tense throughout your paper. If your paper describes past events, you should use the past tense. For many other papers, you will use the present tense. Be consistent in whichever tense you choose.

After you've completed all your revisions, your work should be the best it can be. You're then ready to produce the final copy. The next sections provide specific suggestions on how to prepare a

short report, book report, and research paper as well as general guidelines for producing the final copy.

Preparing a Short Report

During a school year, you'll probably be asked to write short reports on various subjects. The typical short report runs from 300 to 500 words and involves gathering information from one or more sources. This research provides you with "raw material"—the information you need for your report. As the writer, your job is to produce a finished product—a report that presents the research information in your own words in a clear, interesting manner.

Before you write. The section *Writing Tips* included a list of preliminary steps to follow before

you begin a writing task. Here are some additional suggestions that apply specifically to short reports.

Understanding the assignment. Be sure you know how long the report should be. Your teacher may give you a specific figure, such as 400 words, or a range, such as 300 to 500 words. It probably won't matter if you're a bit over or under the number of words assigned, but stay close to the target.

You need to know if your teacher expects a *summary report* or a *critical report*. In a summary report, you present the informa-

tion you've found without expressing any opinions or judgments. For example, a paper describing the founding of the United Nations could be presented as a summary report. In a critical report, on the other hand, you're expected to present *your own reactions* to the information you've found. You need to evaluate the information, take a stand, and justify your stand with supporting points. In a critical report on the United Nations, you might take a position for or against continued United States membership in the organization.

If your teacher lets you choose between a summary report and a critical report, wait and see how you react to the research material before you decide. If you find yourself strongly agreeing or disagreeing with what you read, a critical report might be in order. On the other hand, if the information seems straightforward and noncontroversial, a summary report would be appropriate.

Choosing a topic. A short report demands a narrow topic. You simply won't have enough space to cover a lot of territory. For example, if you tried to write a paper on "The Circulatory System," "Life in Colonial America," or "The U.S. Space Program," you'd find yourself swamped with information. Topics that could be more easily handled in a short report might be "How White Blood Cells Fight Disease," "Tools Used by Colonial Farmers," or "Life Aboard the Space Shuttle."

One way to get ideas on how to limit your topic is to check an encyclopedia. Using the index or the search feature, look for the general subject heading you're interested in, such as Circulatory System. The article titles listed under the heading will provide you with a starting point for narrowing your topic. Then check the indi-

vidual articles to see what they cover and how they are organized. A subheading in one of the articles might give you just the idea you need for a suitable topic. Other sources of ideas include the table of contents of a book covering your topic or the articles listed under your topic in a periodical index.

Background reading will help you become familiar with your topic. Encyclopedia articles on your topic are good sources for background reading. As you read, you can decide what kinds of information you'd like to include in your report and what can be left out. It's a good idea to jot down a list of points to serve as a sort of preliminary outline and a guide to your research. Your list might take the form of a series of questions you hope to answer in your report. If your topic is "Life Aboard the Space Shuttle," for example, your questions might include: What does the inside of the shuttle look like? How big are the crew's quarters? How do the astronauts eat? How do they spend most of their time?

Researching the topic involves finding sources, reading them, and taking notes on what you've read. The encyclopedia articles you used for your background reading may have included *additional resources*—lists of books or Web sites that provide additional information about your subject. You can also look through the catalog at your school or public library and check such basic reference works as *The Readers' Guide to Periodical Literature* and *The World Almanac and Book of Facts*.

After you've found good source material, you need to read it carefully and take accurate notes. For a short report that requires only a few sources, you may find it easiest to take notes on lined paper

or a notepad. Many people prefer using index cards, however, because they can easily be arranged and organized. If you are using electronic reference materials, you can print out the information you need or save it on a disk. See "A Guide to Research Skills" for more complete information on research sources and how to take good notes.

Preparing an outline is the last step you need to do before writing your report. Prepare an outline even if your teacher doesn't ask for one. It will help you organize your notes and make writing your first draft easier.

Begin preparing the outline by gathering all your notes and reviewing them. Then decide how the information can be organized into major topics and subtopics. Assign a heading to each topic and subtopic. Next, arrange the headings in logical order. For a short report, your outline can be simple, with only a few main headings and subheadings. Here is an example of an outline for the report on "Life Aboard the Space Shuttle":

- I. The crew's quarters
 - A. Size
 - B. Arrangement
- II. Basic needs
 - A. Breathing
 - B. Sleeping
 - C. Eating and drinking
 - D. Eliminating wastes
- III. Daily tasks
 - A. Navigating the spacecraft
 - B. Communicating with Earth
 - C. Performing scientific experiments

This kind of outline is a *topic outline*. It uses words or phrases for headings. A *sentence outline* uses complete sentences for head-

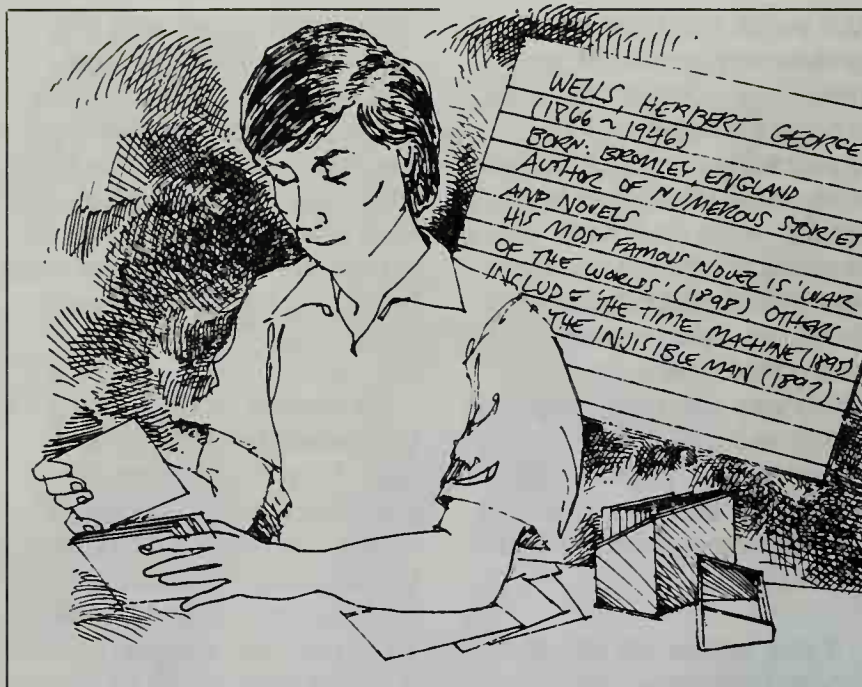
ings. You should be consistent in using one form or the other. Don't mix phrases and sentences in the same outline. For more detailed information about outline format, see page 16.

Writing a short report. After you've completed your outline, stop and think about the information you've gathered. What is the main idea you've discovered? Summarize your main idea and make it your *thesis sentence*. Put the thesis sentence at or near the beginning of your paper. It should tell the reader what your paper is about and should guide you as you write. All the points you make in your report should relate in some way to the thesis sentence. Here is an example of a thesis sentence for the report on "Life Aboard the Space Shuttle":

A look inside a space shuttle shows how people can adapt to living under unusual circumstances.

When you're ready to write your first draft, keep your notes and outline nearby. Focus on your thesis sentence and begin. Your notes should provide you with the specific details and examples you'll need to support your thesis statement. Follow the suggestions given in the section "Writing Tips" that begins on page 6 as you write and revise your work.

**"All points. . .
should relate
. . . to the
thesis sentence."**



"Begin preparing the outline by gathering all your notes and reviewing them. Then decide how the information can be organized into major topics..."

Preparing the final copy. After you've made your last revision, you're ready to prepare a clean, fresh copy of your report. If your teacher has given you instructions on how to submit the report, follow them exactly. Otherwise, you can use these guidelines.

If you can, type your report on a computer, a word processor, or a typewriter. Use high-quality paper and check the print. Double-space your report. Make your margins 1 to 1½ inches (2½ to 4

centimeters) wide on the left and 1 inch (2½ centimeters) on the right, top and bottom.

If you cannot type, write your report in ink on white, lined paper, using one side only. Write as neatly as possible.

Before you submit your paper, reread it carefully to make sure you've copied everything correctly from your final version. Check, too, for last-minute mistakes in spelling or punctuation and for typing errors. Correct the errors as neatly as you can.

Preparing a Book Report

As a student, you will probably write many short papers about books. A written report about a book may be only a brief summary, or it may be a lengthy analysis.

Before you write. See the section "Writing Tips" for a list of preliminary steps that apply to various writing assignments. In addition, here are some specific suggestions to help you prepare for writing a good paper about a

book.

Understanding the assignment. It's important that you understand exactly what you are expected to cover in a book report. Does your teacher simply want a summary of the book? If the book is a novel, for example, does your teacher want only a brief retelling of the story? Or are you expected to write a *critique*, in which you state your reactions

and give your opinions about the book? May you select both the book and the topic for your report? Or has your teacher specified the book and the topic? In the case of an assigned novel, for instance, have you been asked to analyze the main character or discuss the theme? In the case of an assigned biography, are you to explain how the subject influenced the times in which he or she lived? Be sure you understand the assignment before you start reading. That way, you'll know what factors to pay particular attention to as you read the book.

Choosing a book. If you are allowed to choose the book for your report, you obviously should pick one that you think you'll enjoy reading, whether it's fiction or nonfiction. Also consider how much time you have available. If a book report is due in three weeks, don't assume you'll have three weeks to read a book. You'll also need several days to write and revise the report. Select a book you can finish well within your time for the assignment.

Consider the reading level of the book as well. Don't pick a

book that's too easy to read just so you can finish it quickly. On the other hand, don't choose a book in which the content, vocabulary, or writing style is too difficult. Select a book that seems to be at or slightly above your reading level. The booklists at the end of many *World Book* articles are divided into categories for younger and older readers. The bibliography in the article *Literature for children* also rates books according to various reading levels. If you have trouble selecting an appropriate book, ask your teacher or librarian for suggestions.



"Ask yourself questions to help decide on a topic. What impressed you particularly about the book?... In the case of a biography, did you feel you really got to know the subject?"

Hints for effective reading. If the book you are to report on has a preface or introduction, be sure to read it. It may contain information that will help you understand the author's purpose, the period in which the book was written, and other factors that can help you judge the book fairly. You can also gain background information by checking other sources, such as *World Book*, for a biography of the author or articles on other related subjects.

If the teacher has specified the topic you are to report on, pay particular attention to the parts of the book that pertain to that topic. Take notes as you go along, and record page numbers of passages you want to remember. If the book is your own copy, you may underline or otherwise highlight important parts and make notes in the margins.

Choosing an appropriate topic. If the topic of your book report is your choice, take time after you've finished the book to think about what you've read. Ask yourself questions to help decide on a topic. What impressed you particularly about the book? In the case of a novel, for example, did the story keep you interested to the very end? Did you sympathize with the characters? In the case of a biography, did you feel you really got to know the subject? Did the author present an unbiased view of the subject? Did the author of your book have a style that you liked—or didn't like? Did you learn anything especially interesting about human nature, a historical period, or another country?

You may decide there were more things you *didn't like* about the book than you liked. Whatever your overall impression was, it's best to select one or two aspects of the book as the topic of your book report.

Preparing an outline. After you've decided what your topic will be, it's helpful to make an outline to guide your writing. The outline may consist of a simple list of points you want to cover. Or it may be a traditional outline, as described in the section on "Preparing a Short Report."

Writing a book report. Follow the suggestions in the section "Writing Tips" on pages 6-10 as you write the first draft and revisions. Remember the need for a strong introduction, a supportive body, and an effective conclusion.

In the body of your book report, back up your thesis sentence with direct references to the

book. Interweave your personal comments with summaries of specific parts of the book or direct quotations. If you quote directly, be sure to copy accurately, use quotation marks, and include the page number in parentheses after the quotation. If you quote from a source other than the book you're reporting on, you'll need to use a footnote. See page 17 for information on how to prepare footnotes.

When you're ready to prepare your final copy, follow your teacher's instructions precisely. If you have no instructions, use the guidelines on page 19. Double-check quoted material to ensure you've copied it exactly.

Preparing a Research Paper

"Research paper." The very words make some students quake with fear. Preparing a research paper *is* a big job. But if you go about it the right way, it's a manageable task. It helps to start out with a positive attitude.

Think of your research paper assignment as a chance to learn a lot more about something that interests you. It's also an opportunity to develop skills in information gathering, organization, and writing. These skills will make you better equipped to handle many other school assignments and perhaps job duties later in life.

Like a short report, a research, or term, paper is based on research. But a research paper is longer—generally eight or more pages—and it requires checking more sources. It also has more parts, including a title page, an outline, footnotes, and a list of sources. The following sections give specific guidelines you'll need for preparing a research paper.

Before you write. You may be

surprised to learn that *writing* your research paper is one of the last steps you'll do after receiving the assignment. There are many tasks that need to be completed before you can begin writing.

Making a schedule. Planning ahead is a good idea for any writing assignment. For a research paper, it's a must. You might have several weeks, or even months, to prepare a research paper. Whatever you do, don't let yourself be lulled into thinking you can relax until a week or two before the deadline. As soon as you get your research paper assignment, make a schedule.

Consider other assignments and commitments you have and plan to spend a certain number of hours a day—perhaps two or three—working on your research paper. Then mark the due date for the paper on your calendar. Count backward to plan blocks of time for finishing the final draft, revising the first draft, writing the first draft, organizing your note cards, and preparing a final outline.



"Planning ahead is a good idea for any writing assignment. For a research paper, it's a must... Consider other assignments and commitments you may have..."

Follow these guidelines to plan a realistic schedule:

1. Give yourself at least an hour per page to write the first draft.
2. Plan to spend at least two hours per page revising the first draft. (Don't include the final outline and the list of sources in this estimate.)
3. Allow about an hour per page to type the final copy, including all text pages, the final outline, and the list of sources. That hour or so includes time for proofreading, making corrections, and placing footnotes correctly.
4. Allow one day to organize your notes and one day to prepare your final outline.

The time left will be used to choose your topic, read, gather

information, and take notes.

Choosing a topic. In most cases, your instructor will allow you to choose the topic for your research paper. One way to begin the selection process is to choose a broad topic and then narrow it down. Look at the study aids at the end of the article in *World Book*.

Remember that you'll be spending much time on your research paper, so be sure you choose a topic you're really interested in. Give your topic choice careful thought. Even if you don't particularly like the subject, you can probably find a specific topic within the subject area that appeals to you. For example, perhaps you don't care much for United States history, but you love music. A U.S. history research paper on songs of the Civil War could be more fun to prepare

than you thought possible.

Be sure to narrow the topic of your research paper to manageable size. Don't be fooled into thinking that you'll have plenty of time and space to cover a broad topic. It's far better to cover a narrow topic in depth than to skim over a broad topic. See the section "Preparing a Short Report" for how to narrow your topic.

Another important point to consider in selecting a research paper topic is the availability of research materials. Go to the library or media center and check the library catalog and *The Readers' Guide to Periodical Literature* to be sure enough books or articles have been written on your topic. If no such books or articles are available, your topic may be too recent or too specialized.

Background reading. After you've chosen your research paper topic, do some background reading. A good, up-to-date encyclopedia can be an excellent place to begin. An encyclopedia won't give you all the information you need, but it will provide an overview of the topic. Check the index and read the various articles that deal with your topic. Most likely, your background reading will turn up aspects of your topic you hadn't thought of. You may find yourself reshaping your topic according to something that strikes your interest. As you read, jot down ideas that occur to you about what you'd like to cover in your paper. Note charts, tables, photographs, maps, and bibliographies that could be helpful.

The preliminary outline. With your background reading behind you, you're ready to prepare a preliminary outline for your research paper. The outline will help you organize your thoughts and guide your research.

Begin your preliminary outline by figuring out what the main idea, or purpose, of your research paper is. This purpose is called the *thesis*. Try to state it in one sentence. As you're figuring out your thesis, also decide what kind of *approach* your paper will take. If your subject inspires strong opinions, you may want to take a *pro* or *con* approach, in which you take a stand for or against a certain proposition. Some papers use a *descriptive* approach or an *explanatory* approach. Other papers attempt to *prove* or *disprove* a theory or idea. You may choose to *compare* or *contrast* two or more things or show the *cause and effect* of something. A *chronological* approach, which traces the order in which events occurred, suits some topics. Other topics lend themselves to an *analytical* approach, in which a topic is thoroughly examined.

After you've decided on your thesis and approach, ask yourself what points you want to cover to support your thesis. Write down each point as the basis of your preliminary outline. At this stage, you needn't be too concerned about the order or completeness of your outline. Remember it's a *preliminary* outline; so keep it simple. You're likely to change it as you explore your topic in greater depth. The important thing is that you give yourself a clear direction before you begin to conduct your research.

Preparing a list of sources. The next step you need to perform is preparing a list of sources to consult in your research. To begin with, go back to the encyclopedia articles you read earlier to see if they include lists of sources to check for additional information. Many *World Book* articles, for example, include *bibliographies*—lists of books for further reading.

In addition, many of the sources you consult for your paper will include additional source lists or bibliographies. You'll find additional sources when you check the catalog, magazine and newspaper indexes, and electronic sources in your library.

For each source you locate—book, article, pamphlet, record, tape, Web site, and so on—make a note. If you are using a computer, you can add each source you find to one list. If you are writing your source list, use one index card for each source. These cards will be easy to organize and alphabetize when you later prepare your final list of sources. If a source does not have usable information, make a note on your list, or draw a line through its card. But keep the note so that you'll have a record of every source you checked in doing your research.

Doing research. The quality of

your research paper depends greatly on the information in it. It's important to find reliable, interesting information and record it in accurate notes.

You may need to examine various kinds of sources before you find the best possible ones. Books and articles are traditional sources. But you may discover that your best information comes from a survey or interview, the Internet, or a museum or historical society in your community. Valuable information may turn up in places you least expect to find it. The notes on a record jacket, for example, could provide interesting details for a report on the origins of rock music. View your research as an investigation. You're out to track down leads and find the facts you will need to write the best paper you can.

See "A Guide to Research Skills" beginning on page 26 for detailed suggestions on how to use the library or media center and on how to get information from various sources. The guide also gives specific instructions on taking notes.

The final outline. When you feel you have all the information you need, it's time to review and organize your notes. Go back and read them carefully. Then look at your thesis statement. Does it still make sense? Should it be changed somewhat on the basis of what you learned from your research? Remember, the thesis statement should summarize the purpose of your paper. Be sure you've got it right before you go any further.

Next, arrange your information according to your preliminary outline. Does the outline still work? Is your approach still appropriate? Should you change or rearrange any of the main headings? Are there information gaps that need additional research? Can any of your notes be set aside because

they don't further the purpose of your paper?

All these questions will help you get ready to prepare your final outline. The final outline will direct your writing. It should be an accurate guide to what you plan to include in your paper.

After you've arranged your information in logical order, group it into large, obvious divisions. These divisions will be your main topics. Three to five main topics are generally enough for a research paper. Next, see how your main topics can be subdivided. These subtopics must relate to the main topic. You must have at least two subtopics under a main topic—or none at all.

The final outline may be a topic outline or a sentence outline, but not a combination of them. In either form, all the headings must be expressed in parallel phrasing. All topics of equal importance must be equally indented. Topics and subtopics are identified by Roman numerals, capital letters, Arabic numerals, and lower-case letters, in that order, followed by periods. The bottom of this column shows an example of a final outline for a research paper, preceded by the thesis sentence.

Writing your research paper.

At this stage, most of the work is

behind you. If you've done a good job on all the preceding steps, the writing should go smoothly.

Writing the first draft. With your final outline before you and your notes arranged in proper order, you're ready to begin writing your first draft. Write or type the draft on one side of the paper only. Use double- or triple-spacing and wide margins to make later revisions easier.

As you write your first draft, concentrate on putting your ideas down in a clear and orderly fashion, with smooth transitions from one point to the next. Your thesis sentence should appear in the introduction and guide you as you write. The details you include in the body of your report should relate to the thesis sentence. Your conclusion should restate your thesis in an effective way.

If you use a quotation, copy it exactly and enclose it in quotation marks. A quotation that is more than five lines long should be indented and single-spaced, with no quotation marks. If you omit part of a quotation, use an ellipsis (...) in place of the part left out. If you need to add words of your own to make the meaning of the quotation clear, enclose those words in brackets ([]).

Preparing footnotes. Quota-

tions and certain other material in your research paper require footnotes. The main purpose for footnotes in a research paper is to *document sources*—that is, to give credit to the author whose words or ideas you are using. Even if you restate someone else's idea or opinion in your own words, you must credit that person. Otherwise you may be guilty of *plagiarism*—stealing someone else's words or ideas and passing them off as your own. You should also footnote facts or figures that a reader might have cause to question.

As you write your first draft, put a footnote number in the margin whenever you write something that needs documentation. On a separate sheet, write the footnote number and information about the source—title, author, and page number. You'll use this information later when you type your final draft.

Some instructors require that footnotes appear at the bottom of each page on which documentation is required. Others prefer to have all footnotes on a separate sheet headed "Notes" after the text of the paper. Some allow putting footnotes in parentheses after the quotation or material being footnoted. Be sure to follow your teacher's preference.

Footnotes are numbered consecutively from 1 up throughout the paper. The number of the footnote appears slightly raised above the line, after the quotation or other material being footnoted. That same number appears before the footnote itself at the bottom of the page or on the separate "Notes" sheet. The footnote number is raised slightly above the line, and the start of the footnote is indented like a paragraph.

Footnote form varies. Be consistent, and follow your teacher's

THESIS SENTENCE: Computers are learning tools that can significantly improve the writing skills of students, and they should be made available nationwide.

- I. Current availability
- II. Uses in the classroom
 - A. Encyclopedia and Internet research
 - B. Interactive learning programs
 - C. Testing spelling and other skills

- D. Word processing
- III. Benefits to users
 - A. Individualized instruction
 - B. Immediate feedback
 - C. High student interest and motivation
- IV. Sources of funding
 - A. Government programs
 - 1. Federal
 - 2. State
 - 3. Local
 - B. Private foundations
 - C. PTA's and other local organizations

instructions. Here are some examples of correct footnote form for a book with one author, a book with two authors, an edited book, a magazine article, an encyclopedia article, and a personal interview:

¹Tony Hare, *The Greenhouse Effect*, p. 17.

²Victoria Wise and Susanna Hoffman, *The Well-Filled Tortilla Cookbook*, p. 234.

³Sylvia K. Burack, ed., *The Writer's Handbook*, p. 403.

⁴James C. Giblin, "Writing Children's Books for Today's Readers," *The Writer*, April 1, 2000, p. 7.

⁵Jay Pasachoff and Leon Golub, "Sun," *The World Book Encyclopedia*, 2001, Vol. 18, pp. 974-987.

⁶Peg Lightner, personal interview.

The following examples show correct footnote form for a microform, an information service, a computer program, a Web site, and a videotape recording:

⁷Chapman, Dan. "Panel Could Help Protect Children." *Winston-Salem Journal* 14 Jan. 1990: 14. *Newsbank: Welfare and Social Problems* 12 (1990): fiche 1, grids A8-11.

⁸Barbara M. Moskal, *Scoring Rubrics: What, when, how* (College Park, MD: Department of Measurement, Statistic, and Evaluation, University of Virginia, March 2000), 2, ERIC <http://ericae.net/para/getvn.asp?v=7&n=3>

⁹Building Life Cycle Cost Program Rel. (BLCC 4.8-00) (Washington, D.C.: Federal Energy Management Program).

¹⁰Paul Gorenstein, "Moon," *World Book Online*; <http://www.worldbookonline.com>

[/na/ar/fs/ar370060.htm](http://na/ar/fs/ar370060.htm), December 3, 2001.

¹¹*Sitting for Success: The Basics of Babysitting*, VHS, 30 min., 1998, distributed by GRA Video Production Services, Elgin, IL.

For later references to a previously cited source, you can use a shortened footnote form, such as the author's last name and the page number. Some teachers prefer Latin abbreviations, such as *ibid.* and *op. cit.* (see the Glossary on page 35). Follow your teacher's preference.

Preparing the list of sources. The list of sources contains all the sources—books, articles, pamphlets, letters, interviews, Web links, and so on—that you used to prepare your research paper. Do not include sources that you consulted but didn't use. The list of sources tells the reader both where you got your information and where further information on the topic can be obtained.

With your source cards or printout at hand, preparing your final list is easy. Simply arrange the cards in alphabetical order by author (or title for a work that has no author), and copy the information. Generally, source list entries are not numbered.

There are various forms for source lists. Be sure to use the one your teacher prefers. Here is a sample list, with entries for various types of sources:

Burack, Sylvia K., ed. *The Writer's Handbook*. Boston: The Writer, Inc., 1991.

Davis, Kristin, and Kainen, Bertha. "Kids in Business." *Changing Times*, March 1990, pp. 96-97.

Hare, Tony. *The Greenhouse Effect*. New York: Watts, 1990.

Lightner, Peg. Educational Review Committee Member. Personal interview, August 20, 1991.

National Futures Association. "Inventors' Bill of Rights." Pamphlet no. 549, 1987.

Jay Pasachoff and Leon Golub, "Sun," *The World Book Encyclopedia*, 2001, Vol. 18, pp. 974-987.

"Updates from the Fitness Front." *The Washington Post*, March 13, 1990, Sec. WH, p. 22.

Wise, Victoria, and Hoffmann, Susanna. *The Well-Filled Tortilla Cookbook*. New York: Workman Publishing, 1990.

Preparing an appendix. You may decide to include tables, charts, graphs, diagrams, lists, or other material with your research paper. If so, place the material at the end of the paper and label each item Appendix A, Appendix B, and so on. Each item should also be given a title. In the appropriate place in your text, you can refer to the material with a cross-reference to the specific appendix. You can write, for example, "for a graph showing the nation's population growth, see Appendix A."

Revising your first draft. If time permits, set aside the first draft of your research paper for at least a day before you begin to revise it. Then cast a critical eye on it and judge it for content, organization, and style, as well as for such mechanical details of grammar, spelling, and punctuation. See pages 8-10 for detailed guidelines on revising your work.

Revising a research paper involves a few more steps than are needed for most other written work. First, see that your footnotes are numbered correctly and have the required information. Second, check any direct quotations to be sure they are worded



"Prepare a title page...Fasten your paper in the upper left-hand corner, or put it in a folder or binder...Then congratulate yourself. You're finished, and the paper is ready to turn in."

accurately. Finally, check the list of sources to see that it is alphabetized properly and that each entry has all the required information with correct punctuation.

The final copy. If your teacher has given you a style sheet, be sure to follow it precisely as you prepare your final copy. If there is no style sheet, follow these guidelines:

1. Type or print out your report on high-quality white paper, using one side only. (If you must prepare a handwritten report, write in ink on standard ruled paper.)

2. Leave a margin of 1 to 1½ inches (2½ to 4 centimeters) on the left and 1 inch (2½ centimeters) on the right, the top, and the bottom of the paper. However, start the outline page 2 inches (5 centimeters) from the top.

3. Double-space the text.

4. Indent paragraphs five spaces.

5. Single-space the outline, but double-space between the main

headings.

6. Indent the first line of a footnote five spaces, and put the second and following lines flush with the left margin. Single-space the lines within a footnote, but double-space lines between footnotes.

7. Begin each item on the list of sources at the left margin and indent the second and following lines five spaces. Single-space within each entry, but double-space between entries.

8. Single-space quotations that are indented rather than run-in with the text.

9. Number all pages except the title page. Use lower-case Roman numerals (i, ii, iii, ...) for the outline pages and Arabic numerals for all other pages. Center the number at the bottom of the first page of the outline, the text, and the bibliography. Center the number at the top of all other pages.

10. Prepare a title page, which contains the title, your name, and the date. You may also include the

name of the teacher and class.

After you've finished typing or writing all the parts of your paper, assemble them in this order:

1. The title page.

2. The final outline, including the title of the paper and the thesis sentence.

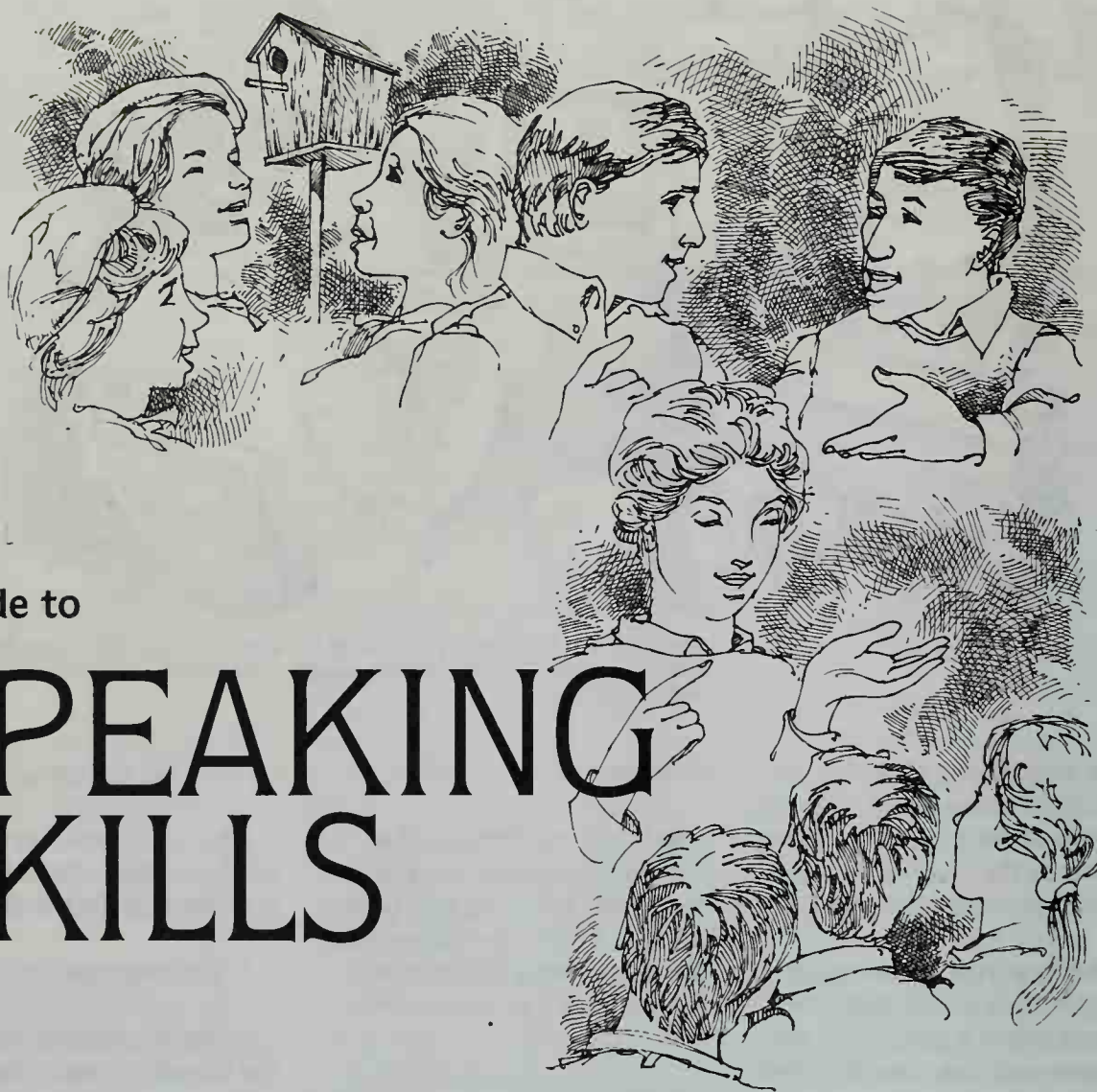
3. The text of the paper, with the title of the paper repeated in all capital letters on the first page.

4. A page titled NOTES, which lists the footnotes if you did not put them at the bottom of each page.

5. The list of sources.

6. The appendix, if included.

Fasten your paper in the upper left-hand corner, or put it in a folder or binder. You may want to make an extra copy. Then congratulate yourself. You're finished, and the paper is ready to turn in.



A Guide to

SPEAKING SKILLS

If you're like most people, you spend a lot of time talking. Yet the thought of making a speech before an audience may fill you with dread. If so, you're not alone. Many people are terrified if they have to make a public speech.

The guidelines given here for preparing and delivering a speech can help you become a confident speaker. You may never have to address a huge audience. But as a student, you'll give a variety of oral presentations. And chances are that sometime during your life you will be asked to give a committee report at a club meeting, ask for donations for a charity, or make a presentation to your boss. Learning how to handle

speaking situations with ease is a skill well worth developing. It will help you communicate more ef-

fectively in a wide variety of everyday situations.

Preparing a Speech

There are six basic steps to follow in preparing a speech. They are (1) analyzing the audience, (2) choosing a topic, (3) determining the purpose of the speech, (4) gathering information, (5) organizing the content, and (6) choosing a format.

Analyzing the audience. To speak effectively before a group of people, you need to know something about them. You need to know such factors as their age and educational level and their attitudes regarding various subjects.

You also must know the size of your audience.

Age and educational level. People of different ages and educational levels have different vocabularies and different abilities to understand ideas. Be sure your audience can understand what you're talking about and adjust your vocabulary to their abilities. Also consider how much knowledge about the topic your audience already has. For example, a speech about Apache Indian crafts presented to a group of 8-year-

olds would be far different from a speech on the same topic presented to a group of high school students. The language you use and the number and kinds of facts you present would differ.

Attitudes. If you are presenting a controversial topic, try to find what attitude your audience already holds toward the topic. Are most of the members inclined to agree or disagree with the position you will present? Or are they indifferent? If they're indifferent or likely to disagree, you may have to gather more facts and present them more forcefully to be effective.

Size. A large group may require a more formal speech presentation than a small group. If the group is large, you may be speaking behind a podium or on a stage. If the group is small, you simply may be seated at a table with the other members of the group. These factors may influence your choice of speech format and your delivery techniques.

Choosing a topic. There are several points to consider in choosing a topic. First, choose a topic that interests you or that you already know something about. You're more likely to enjoy preparing and delivering a speech on a topic you like than on one you don't particularly care about. You're also more likely to get a good response from your audience. Second, consider the probable interests of your audience. A speech on how to improve scores on video games might win an enthusiastic response from a sixth-grade class. But such a speech would probably be of little interest to a group of senior citizens. Third, make sure the topic and tone of your speech fit the occasion. You would not make the same kind of speech at a graduation ceremony that you would at a pep rally. Fourth, if your topic

requires research, see that the necessary information is readily available. Finally, make sure you can cover your topic adequately within the time allowed. Limit your topic so you can present your main idea and support it with meaningful details.

Determining the purpose. Almost every speech has at least one of three main purposes: (1) to inform, (2) to persuade, or (3) to entertain. An *informative speech* provides information and consists largely of facts presented in a straightforward manner. A *persuasive speech* tries to convince an audience to do something or adopt a particular point of view. Persuasive speeches may rely on emotional appeals as well as facts to achieve their purpose. An *entertaining speech* provides a pleasant experience for the audience and may have a more informal tone than the other two kinds of speeches.

Many speeches have two or three main purposes. For example, you may try to entertain the members of your audience in order to win them over—or persuade them—to accept your point of view.

Gathering information. If your speech requires information you don't already have, you'll need to do research. Here are three ways to go about it:

1. Observe the subject matter itself. If your speech is about how newspapers are recycled, for example, you could visit a recycling plant to observe the process.

2. Use the library. The books, magazines, newspapers, pamphlets, electronic databases, Web sites, and other materials you'll find will provide information on almost any speech topic.

3. Interview an expert or others who have firsthand knowledge. If you're preparing a speech on the effects of budget cutbacks on elementary schools, for example, you might interview the principal and some of the teachers at a local elementary school.

For pointers on how to do research, see "A Guide to Research Skills" on pages 26-34.

Organizing the content. Like a written report, a good speech needs good organization. Most speeches are organized in three parts: (1) the introduction, (2) the body, and (3) the conclusion.

As you develop the content of your speech, always keep in mind the importance of attracting your audience's interest in the beginning and holding it to the end. The introduction to your speech needs to tell the members of your audience what your speech is about—but in a way that will

**“Be sure your audience
can understand what you’re talking
about and adjust your vocabulary
to their abilities.”**

make them want to listen. Don't begin by saying, "This speech is about...." Instead, try using a personal anecdote or lead in with a dramatic statement.

In the body of the speech, present your main points and supporting details. Make sure the details are closely related to your topic and interesting to your audience. You can present your main points in several ways, depending on your topic. You can arrange them in order of importance, putting the most important points first. You can use chronological order, describing events in the order in which they occurred. In some speeches, you might discuss a topic that is new to your audience or difficult to understand. In such cases, begin with the simplest facts and work your way up to the more difficult ones. Or think of something that the members of your audience already know about that could help them understand the new or more difficult topic.

The conclusion of your speech is your last opportunity to impress the members of your audience. Try to leave them with something to think about. In many cases, a quotation from a famous person could provide a memorable conclusion to your topic.

An outline can help you organize the ideas and facts that make up each part of your speech. The phrases or sentences of the outline briefly state the points to be presented. You may use a formal outline format like the one on page 11 in "A Guide to Writing Skills." Or your outline may consist of a simple list of points to be covered—in proper order, of course. You can use the outline as a guide when you deliver your speech.

Choosing a format. You need

to decide what kind of format to use in delivering your speech. You have four choices: (1) reading the speech, (2) memorizing the speech, (3) speaking impromptu, and (4) speaking extemporaneously. In choosing a speech format, make sure it is one you are comfortable with and one that suits the occasion. Each format has advantages and disadvantages.

Reading the speech may seem like the safest format. You don't have to worry about forgetting anything, and you can make sure your speech precisely fits the allotted time. But reading your speech also has disadvantages. You may become so engrossed in your manuscript that you forget to look up at the audience. You may begin speaking in a monotone, causing your listeners to lose interest. Once they've lost interest, the point of your speech may never get across. Reading your speech also makes it difficult to adjust the content in response to audience reactions.

If you choose to read your speech, type it double-spaced or write it out neatly so that you can read it easily. Some people write their speeches on large note cards and make an effort to look up at the audience at least at the end of each card.

Memorizing the speech requires that you first write it out and then memorize it word for word. Depending on the length of the speech, this type of delivery could mean hours or days of extra preparation time and effort. The format also has several other disadvantages. You might skip an important point or forget what comes next. You might concentrate so hard on remembering the speech that your voice sounds unnatural. And you'll be unlikely to add remarks or otherwise adjust your speech to suit the mood of

the audience. If you decide to memorize your speech, you'll have to keep in mind the need to make your delivery natural and relaxed.

Speaking impromptu requires little or no preparation. As a result, it is rarely used for a formal speech. Comments offered at a committee meeting or club gathering are examples of impromptu speaking. This format can succeed only if you are well-informed about the subject. An impromptu speech enables you to give a lively, spontaneous delivery. What you say can be suited specifically to the mood of the audience. But an impromptu speech risks being unorganized. Without adequate preparation, you may ramble and never get your point across effectively. If you know ahead of time that you'd like to say something at a meeting or other occasion, take at least a few minutes to organize your thoughts and perhaps jot down your main ideas to serve as a checklist.

Speaking extemporaneously is the most commonly used type of delivery in public speaking. You organize your ideas in a written outline and use it as a guide when you give your speech. An extemporaneous speech has the advantage of being both organized and spontaneous. Although you don't write down the complete speech, you can refer to the key words or sentences of the outline to keep yourself "on track." You can easily add or omit details on the basis of audience reaction. And it's not as difficult to maintain eye contact with your audience when you speak extemporaneously as it is when you read from a manuscript.

To take full advantage of the flexibility of the extemporaneous speech, learn about your topic in depth. Gather more details than you'll actually need. That way,

A speaker's check list.

There are many steps involved in the preparation of an effective speech. It is easy to forget a step or two along the way. And yet this would be the kind of mistake that could ruin a presentation. If you are about to begin the preparation of a speech, use the following questions to make sure you "cover all the bases."

	YES	NO
1. Have I carefully studied and analyzed the audience?	_____	_____
2. Have I chosen a topic for my speech that not only interests me, but is also adaptable to the likes and dislikes of my audience?	_____	_____
3. Have I set the purpose of my speech?	_____	_____
4. Have I carefully gathered all of the information and materials I will need to document my speech?	_____	_____
5. Have I developed a well-organized and logical outline for my speech?	_____	_____
6. Have I rehearsed my presentation to the point that I am sure I can deliver the speech confidently and without hesitation?	_____	_____

you'll have a full stock of material to draw upon to keep your speech interesting. You can also vary the

content, depending on the audience's reaction.

Rehearsing and Delivering a Speech

After you've completed all the steps in preparing your speech, you're ready to begin rehearsing unless you're going to give an impromptu speech. Rehearsing is obviously necessary for a memorized speech, but it is also vital to a good extemporaneous speech or to a speech you plan to read. The more you rehearse your speech, the more confident you'll be when the time comes to deliver it.

As you rehearse, remember that you want to convey more than information. You also want to convey enthusiasm for your topic. If *you* sound interested, your *audience* will be more likely to listen to, and enjoy, your speech.

How to rehearse. Begin rehearsing by using your outline or reading aloud from your manuscript. As you repeat the speech many times, you'll come to depend less and less on your written

words. If possible, make a tape recording of your speech and listen to it critically. You may find that you're not pronouncing all your words clearly or that you're going too fast or too slow.

Next, practice in front of a mirror, paying attention to your posture and gestures. Then, ask someone to listen to your speech and give an honest reaction to both content and delivery. Your listener may be able to spot distracting mannerisms that you should correct, such as clenching your fists at your sides or shuffling your feet. You can also videotape yourself to observe your own strengths and weaknesses. Finally, if you will be delivering your speech in an unfamiliar place, try to practice it there at least once. That way, you can practice with a podium and microphone if they are to be provided.

Your voice. The way you use

your voice can add greatly to the impression you make when delivering your speech. As you speak, pay special attention to the *volume*, *speed*, and *pitch* of your voice and to *clarity of pronunciation*.

Volume. Obviously, you'll want to speak loudly enough so that the audience can easily hear you. You'll have to consider such factors as the size of the room, whether you'll be using a microphone, and whether there are outside noises you must speak over. Try to vary your volume to make your voice sound more interesting. At times, you might speak more loudly to emphasize an important point. At other times, you might gain attention by speaking more softly, making the audience listen more carefully.

Speed. Don't speak so fast that you slur your words or become difficult to understand. If you have a time limit, pace yourself so that you can finish your speech without having to hurry at the end. Varying your speed from time to time can make your speech more effective. You can slow down to emphasize a point. And a dramatic pause at the end of a particularly important statement can be an effective technique.

Pitch is how high or low your voice sounds. You vary your pitch automatically during normal conversation. Your voice sounds higher when you are excited and lower when you are serious. During a speech, your voice should follow this natural pattern of pitch variation. Try to avoid speaking in a monotone.

Clarity of pronunciation. Speak as distinctly as you can without sounding unnatural. Avoid saying "er" or "uh" between words or phrases. Enunciate word endings, such as *-ing*, clearly.

Your appearance and the way you use your body can be almost as important as your voice when you give a speech. Dress neatly in comfortable clothing that is appropriate to your audience. Avoid wearing unusual clothes or jewelry that might distract the audience or get in your way as you speak. Stand up straight, but in a relaxed manner. Don't slouch or lean on the podium if you're using one. Try to keep a pleasant expression on your face.

As you speak, keep eye contact with your audience. Don't look up at the ceiling or down at the floor. If you're reading from a manuscript, hold it up slightly so that you can easily glance at the audience from time to time.

Gestures can help emphasize important parts of your speech. But don't overdo them. If you gesture constantly, you'll lessen the effect and make the audience more aware of your gestures than your words. And make sure your gestures look natural and blend smoothly with what you're saying.

Audio-visual aids can enliven your presentation. Such aids include drawings, photographs, maps, charts, graphs, diagrams, chalkboards, models, slides, computer graphics, films, records, tape recordings, and videotapes. Audio-visual aids can add welcome variety to your speech and help hold the audience's attention. They can enable the audience to understand exactly what you mean. They can also make your speech more memorable by leaving the audience with a more vivid impression of your topic than words alone can convey.

Whichever kind of audio-visual aid you choose, be sure it serves a definite purpose. An effective aid should clarify, illustrate, or dramatize a fact or idea. For example, a speech explaining how the human ear works would benefit from a drawing, model, or computer animation of an ear. A discussion of various dialects might be greatly enhanced by a tape recording.

Be sure your audio-visual aid fits your needs precisely. If you

want to show where major battles of the Civil War occurred, for example, don't use a map of the entire Western Hemisphere. In graphs and charts, the use of different colors can make statistical comparisons much easier to understand. You also need to be sure that your visual aid is big enough to be seen by the entire audience and that it is clearly labeled. Take into consideration the size of the room and the size of the audience as you choose and prepare your audio-visual aids.

Rehearse with your audio-visual aids so you can incorporate them smoothly into your speech. Here's a list of points to remember when using audio-visual aids:

1. Have them set up and ready to use before your speech. If an aid is particularly interesting or unusual, it may be a good idea to have the aid handy, but hidden, until the appropriate time in your speech. Otherwise, your audience may be too distracted to pay close attention to the earlier parts of your speech.



"The more you rehearse your speech, the more confident you'll be when the time comes to deliver it... Begin rehearsing by using your outline... Practice in front of a mirror, paying attention to your posture and gestures."



"Audio-visual aids can add welcome variety to your speech... They can also make your speech more memorable by leaving the audience with a more vivid impression of your topic than words alone can convey."

2. Mount illustrations and set them up on an easel, rather than trying to hold them while speaking.

3. If you're going to write on a chalkboard or paper, remember to keep turning back to your listeners to keep your eye contact with them.

4. If you'll be using such equipment as a film, a tape, a video-tape recorder, or a computer, check it out before you speak. Be sure it's in good working order and that an electrical outlet is nearby.

5. Don't pass a visual aid around during your speech. It's too distracting. If you have material to pass out, do it before or after your speech.

6. Don't stand in front of a visual aid or block the view of part of the audience.

7. Remember to talk to the audience, not to the aid.

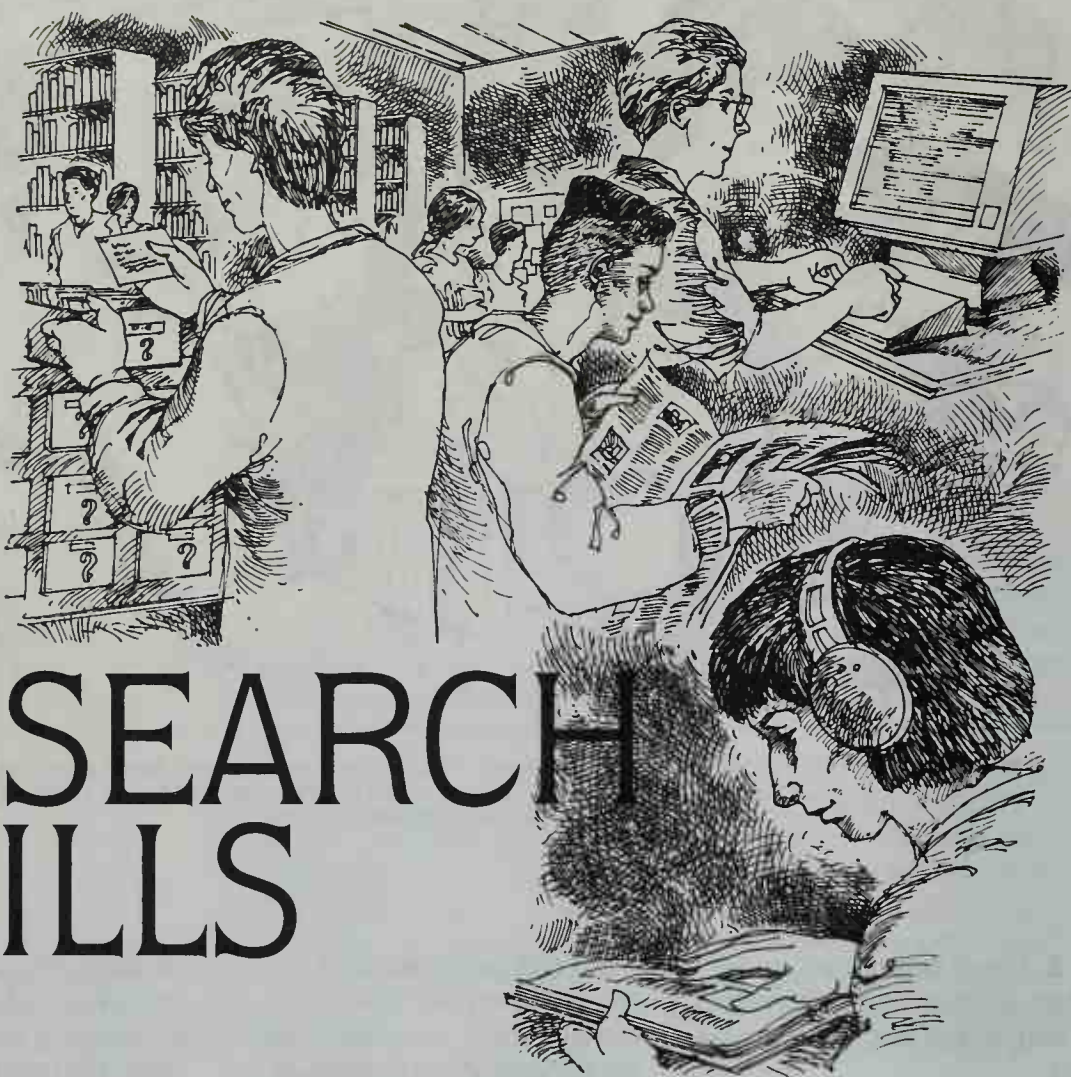
Stage fright. When the time finally comes to deliver your speech, you'll probably suffer from that common ailment—stage fright. To keep your ner-

vousness from working against you, concentrate on what the person speaking before you is saying, rather than worrying about your own presentation.

When your turn comes, take a deep breath or two to help stay calm. *Act* confident, even if you don't *feel* confident. Remember that your audience is rooting for you to do well. Walk briskly to your place and look directly at the audience to gain the group's attention. Then begin. Once you begin speaking, your nervousness will decrease.

A Guide to

RESEARCH SKILLS



Questions. Life is full of them. Most of us spend time each day asking questions and finding the answers to them. What's the quickest way to get to Uncle Bill's house? How much will a new bike cost? Who can fix that broken watch? Some questions are easily answered. But others are more difficult, and you may need help in finding the answers.

Asking questions and finding answers is what research is all about. It involves locating and retrieving information and then working with or communicating that information. If you know where to go or the person to ask to get answers to your questions, you've developed a skill that you can use all your life—in school, in a career, and in many everyday situations. Developing good re-

search skills can help you find information more quickly and efficiently, thus saving time.

This section will help you become familiar with the library and

its resources. You'll also learn other ways to get information and how to take notes so you can put your information to good use.

Getting to Know the Library

What the library provides.

The library is probably the first place that comes to mind when you think about doing research. Libraries—or *media centers* in many schools—contain more information than any one person could learn in a lifetime. That information comes in many forms. Books, magazines, and newspapers make up the major part of most school and public libraries. Many libraries also have pamphlets, brochures, computerized information, microreproductions, prints, photographs, maps, audio-

tapes and videotapes, slides, and movies. In addition, a library may have videotape recorders, slide and movie projectors, personal computers, copiers, satellite dishes, and other equipment.

Whether you're using a small school library or the main branch of a major city library system, it's good to know what materials and services the library provides. Some libraries provide online orientations to familiarize you with their services. Many libraries have brochures that describe what they

offer. Ask for one and read it. Then take some time to browse around in the library to become familiar with the various sections.

Sections of the library. Most libraries have two major sections—the general circulation section and the reference section. The general circulation section contains books and other materials that may be checked out of the library. In that section, you're likely to find all the fiction and most of the nonfiction books your library owns. The reference section has materials that, in most instances, must be used in the library. Most books in the reference section are not the kinds you would read from cover to cover. They include encyclopedias, dictionaries, atlases, and other reference works that play an important role in research. In some libraries, the reference section may consist of a few shelves. In other libraries, it may be a separate room or a series of rooms.

Librarians themselves are an excellent resource when doing research. They can help you find an answer to a specific question, such as "When was Babe Ruth born?" Or they can direct you to sources that contain information on a broader topic, such as the history of baseball. Some libraries have several librarians who specialize in different kinds of information and services. For example, a reference librarian would be more familiar with the library's reference section than a children's librarian would be. A librarian also can help familiarize you with the library's various electronic and mechanical resources and devices, such as the Internet, a CD-ROM, or a photocopier. For more information about librarians, see Library (Assisting patrons; Communicating information.)

Exploring the library catalog.

The library catalog is your guide to locating the vast resources of

the library. It has information about every book the library contains and gives its location. Catalogs may also include entries for records, tapes, films, and other nonprint items. If your library does not include entries for nonprint items in its catalog, ask where such material is indexed.

Library catalogs take various forms, from traditional card catalogs to computer catalogs. It's important to learn how to use whatever type of catalog your library has. If you go directly to the shelves without checking the catalog, you may never know about books that have been checked out or are waiting to be reshelfed. If you know your library has a particular book, but can't find it on the shelves, the librarian—or *media specialist* in many school libraries—may be able to see if it's simply waiting to be shelved. Most computer catalogs show if an item is on the shelf or checked out. If the book has been checked out, you can ask that a "reserve" be put on it. You will then be notified when the book is returned.

The card catalog is the traditional form of library catalog. In many libraries, however, it has been replaced or supplemented by other kinds of catalogs. The card catalog consists of one or more cabinets with drawers of file cards arranged alphabetically. For most books, there is one card under the author's name, one under the book title, and one or more under the general subject. Some books may have additional cards for a joint author, an editor, a translator, or an illustrator.

The author card is called the *main entry*. The other cards are *added entries*. They look much like the main entry, but they have an additional line at the top, giving the title, the subject, or some other heading above the author's name. The cards are arranged in

alphabetical order, according to the words on the top line. Each drawer has author cards, title cards, and subject cards, all interfiled alphabetically.

The subject cards are the best place to begin library research if you don't have a specific title or author in mind. To find books on your topic, you first need to think of an appropriate subject heading. Try to think in specific terms, rather than broad generalities. For example, look under *HIMALAYA*, rather than *MOUNTAINS*; *DICKINSON, EMILY*, rather than *POETS*. If you have trouble finding books on your topic, ask the librarian to suggest other subject headings to look under.

Filing rules. It's helpful to know the library rules for filing catalog cards. These may vary somewhat among libraries. Here are some of the rules commonly used:

1. Cards are arranged in alphabetical order, letter by letter to the end of the word, then word by word to the end of the heading. Punctuation marks are disregarded.

2. If a title begins with "a," "an," or "the," the card is filed beginning with the next word in the heading.

3. Abbreviations are arranged alphabetically according to the letters in the abbreviation, not the letters of the entire word that is being abbreviated. In the list below, "Col. Adams" appears before "Collection of poems" because, alphabetically, the letters *c-o-l-a* come before *c-o-l-l*.

Coal	New York
Col. Adams	No. 8
Collection of poems	Number
Colonel Jones	N.Y.

4. Numbers written as numerals are filed ahead of words consisting of letters and are arranged according to their numerical val-

ue: 2, XX (Roman numerals for 20), 1994. Numbers spelled out as words are filed alphabetically: nineteen ninety-four, twenty, two.

5. Names beginning with Mc and Mac are listed alphabetically and treated as one word.

Macadamia nuts	Macmillan,
Macbeth	Thomas
Machinery	McAdam
Maclean, John	McHenry
	McLean, Alan

6. Historical subheadings are filed in chronological order:
 U.S.—HISTORY—WAR of 1812
 U.S.—HISTORY—CIVIL WAR
 U.S.—HISTORY—1920-1929
 U.S.—HISTORY—WORLD WAR, 1939-1945

7. Catalog entries for books *by* a person are filed before entries for books *about* that person.

Some filing rules do not apply when using computer catalogs. Unlike the card catalog, the computer catalog does not interfile all the records. Instead, the catalog has separate indexes containing authors, subjects, or titles. In addition, the computer catalog files alphabetically rather than chronologically. For example, the computer screen would display U.S.—HISTORY—CIVIL WAR before U.S.—HISTORY—WAR OF 1812.

What the cards can tell you. Each catalog card contains information that can help you decide how useful a book will be. The author, or main entry, card shows the author's name and life dates. When the author lived may be important in judging the value of the book for your particular purposes. Similarly, the publication date can provide a clue as to how useful the book will be. If you're looking for up-to-date information, a book published 20 years ago may not be helpful. The card tells you how many pages of *front matter* (content in front of the main text) the book has. A

lengthy preface or introduction might include valuable information. The card also tells how many text pages there are and whether the book is illustrated. The summary gives you an idea of the book's content. Listed near the bottom of the card are other places in the catalog where a card for the book is filed. This information can lead you to subject headings where you will find entries for other books.

Understanding call numbers. Call numbers are used to classify nonfiction books and other materials according to subject area and to arrange them on the shelves in a certain order. Most public and school libraries use the Dewey

Decimal Classification System to classify nonfiction books. Some large libraries use the Library of Congress Classification System (LC). A letter and number code based on the author's name appears below the Dewey or LC number. See page 38 for a guide to the Dewey and LC systems.

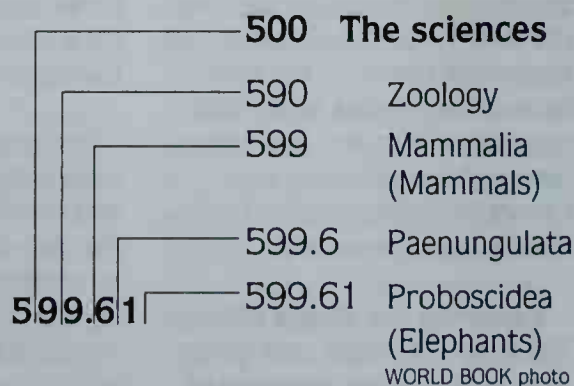
The call number of a book appears in the upper left-hand corner of the catalog card and on the spine of the book itself. The call number is important because it acts as the book's "address," telling you exactly where to find the book on the shelves.

If a call number has the letters R or REF in front of it, the book

Dewey Decimal Classification



This numbering system, devised by Melvil Dewey in 1876, is a method for classifying books by subject so that books on related materials are shelved together. There are 10 main classes, 000 to 900, each of which is divided into 10 subclasses or divisions (*e.g.*, 590). These are further divided into 10 sections (*e.g.*, 599). Continued decimal notation (*e.g.*, 599.6 and 599.61) permits ever-finer subdivisions. In this case, the last subdivision is Proboscidae (Elephants). A number appears on each library book and determines the way books are arranged in the library. By getting the number from an author, title, or subject record in the card catalog, you can quickly locate any book on the shelves.



is located in the library's reference section. In most libraries, biographies are shelved together, separate from other nonfiction books. Biographies are arranged in alphabetical order according to the last name of the person the book is about. If only letters or the letter F appears instead of a call number, the book is a work of fiction. Such books are shelved separately in alphabetical order according to the author's last name.

When you find an entry in the catalog for a book you want to use, copy down the call number, title, and author. Go to the appropriate section of the library, and the call number should guide you to the book you are looking for.

Computer, or electronic, library catalogs have replaced traditional card catalogs in many libraries. Like traditional catalogs, they store information about books and other media.

You can access information in computer catalogs by using the *keyword search technique*. For example, to find information about Siamese cats, you can type the keyword *Siamese*. The computer then searches the database for all "matches" or "hits" of that word. The keyword may appear anywhere in the title, subject, or description of the topic.

Using a specific keyword, such as *Siamese*, helps you find information faster than using a more general word, such as *cat*. If your search turns up nothing, you then can try using a broader keyword. Likewise, starting any search with a general word such as *war*, *history*, *geography*, or *science* will probably yield too much material.

Words such as *or*, *and*, and *not*, called *Boolean operators*, connect keywords. Use *or* if you need to expand a topic or are unsure about how a topic is listed. For example, you can search under

The electronic catalog record contains the same information you would find in a traditional card catalog record. This information includes the title, subject, author, publisher and copyright date, number of pages, illustration information, and call number.

ELEPHANTS: A Cultural and Natural History/Gronig, Karl; Saller, Martin.--English ed--Cologne [Germany] Konemann, 1999.

482 p:ill., maps; 33cm.

1. Elephants

German ed. published 1988. Includes biographical references and index.

599.67 G765 1999

ISBN 3829017529

"Britain or United Kingdom" if you are uncertain about the proper word. *And* narrows the scope of your search. For information on the history of the United Kingdom, you would search under "United Kingdom and History." Using *not* helps limit your search. For example, if you want information on the Reformation leader Martin Luther but not on the civil rights leader Martin Luther King, your search terms might be "Martin *and* Luther *not* King."

Computer card catalogs also allow searches by author, by subject, and by title. Many also allow you to limit your search to materials published before or after a certain date or to certain types of materials. Most computer catalogs indicate if material is in the library or checked out. With many computer card catalogs, you can print out information you need.

Some computer catalogs only store information about materials available on site. Other catalogs are *networked*, or connected, to other libraries and collections in your city, region, or state. You can obtain such materials through interlibrary loan.

Other kinds of catalogs.

Some libraries have catalogs in book form, with separate volumes for listings by author, subject, and title. Other libraries store catalog information on microfilm or microfiche.

In microfilm and microfiche catalogs, printed material is photographed and greatly reduced in size, so that many lines fit onto a small piece of film. Special equipment enables users to enlarge the film image so it can be read on a screen. Some libraries store their card catalogs on compact discs.

The vertical file consists of file cabinets in which libraries keep pamphlets, brochures, newspaper and magazine clippings, pictures, and other items that would be difficult to shelve. The material is usually kept in file folders arranged alphabetically according to subject headings.

Libraries frequently update and replace items in the vertical file. For this reason, each individual item may not be listed in the library catalog. Familiarize yourself with the system your library uses.

Reference and Source Materials

Kinds of reference materials.

You can find many answers to your research questions in reference materials. Some reference works, such as almanacs and encyclopedias, provide information directly. Other works, such as in-

dexes and bibliographies, tell you where to find information. *General* reference works cover a variety of subjects. *World Book* is an example of a general reference work. *Special* or *subject* reference works, such as *The New Grove*

Dictionary of Music and Musicians and *The Encyclopedia of the American Revolution*, provide information on only one subject. Such reference works cover a subject in greater detail than general reference works.

Many reference books and indexes are available in electronic formats, online via the Internet, or on CD-ROM (Compact Disc Read-Only Memory). Many of these sources are in multimedia format and supply photographs, graphics, sound, and video; information originally published in other sources such as newspapers or magazines; or articles in books. These are discussed more fully on page 31.

Like the rest of the nonfiction collection, the reference section is arranged according to subject. Familiarize yourself with the part of the reference collection that contains materials for your research. Then you will be able to refer to them quickly when you need information. The list of Selected Reference and Source Materials on pages 36-38 includes general and special reference works commonly found in libraries.

Frequently used reference works. Most libraries have hundreds or thousands of reference materials. You won't use all of them. But some will become reliable sources of information that you turn to again and again. The most frequently used reference works include (1) encyclopedias, (2) yearbooks, (3) almanacs, (4) dictionaries, and (5) periodical and newspaper indexes.

Encyclopedias can be a good place to begin research. They contain thousands of articles on a variety of topics, and so the subject you're interested in is likely to be covered in some form. Reading an encyclopedia article can give you a good introduction to your topic

and provide you with many of the facts you'll need. The encyclopedia will also list related information, both encyclopedia articles and other sources.

Yearbooks are annual supplements to encyclopedias. Together with yearly almanacs, they provide up-to-date statistics and other facts on many topics, including business, politics, sports, entertainment, foreign countries, and population. These sources can be useful for information about current events. Archives, or collections of yearbook articles, can also be a good source of information on recent history. *World Book Online* includes such articles covering nearly a century in its *Back in Time* feature.

Dictionaries. Most people think of a dictionary as a source to use when they want to know how to spell or pronounce a word or learn what it means. But if you take time to become familiar with a good dictionary, you may be surprised at the other kinds of information you find. For example, it may contain information about grammar, writing style, and how to proofread a manuscript. Many dictionaries list foreign alphabets and words, common signs and symbols, and place names.

Periodical and newspaper indexes. Magazines and newspapers are valuable sources of information, especially for topics of current interest that may not be covered adequately in books. They can also give you present-day views of events, issues, and personalities of the past. Periodical and newspaper indexes are the reference tools that can tell you where to find articles on your topic in such sources. Some online sources provide methods of searching newspapers and magazines, and enable the user to select and read articles of interest. Others, such as *World Book On-*

line, contain links to relevant magazine articles.

The Readers' Guide to Periodical Literature is the most widely used guide to magazine articles. It indexes articles from over 200 leading nontechnical magazines. The *Readers' Guide* is issued several times a year in paperback. Each year's issues are then reissued in a bound volume. The periodicals included may vary from volume to volume, so be sure to check the list that appears in the volume you're using. You'll also need to find out which periodicals your library has in its collection. The *Readers' Guide* is also issued in CD-ROM and online format.

The entries in the *Readers' Guide* appear in alphabetical order by subject and author and, sometimes, by title. Abbreviations are used for many parts of the entry, including the name of the magazine and the date of the issue. An explanation of the abbreviations appears in the front of each volume of the guide. Be sure to read it so that you can understand the entry. Here's a sample entry for an article on acid rain:

Acid rain

When nitrate reigns [air pollution damage to forests; cover story] J. Raloff. il.
Science News 147:90-1 F 11. '95.

The entry tells you that an article titled "When nitrate reigns," by J. Raloff, begins on page 90 of the February 11, 1995, issue of *Science News*. It discusses air pollution damage to forests. The article is illustrated.

In addition to the *Readers' Guide*, there are a number of specialized guides to periodicals, such as the *Art Index* and the *Business Periodicals Index*. These works may lead you to articles not indexed in the *Readers' Guide*.

The New York Times Index is

an index to the articles in *The New York Times*. Many libraries subscribe to this newspaper because it provides broad coverage of national and international news. Entries are listed alphabetically, mainly by subject.

Electronic reference materials are carried by many libraries. The two most common electronic formats are online, where information from a remote computer is delivered via the Internet, and CD-ROM. Electronic sources provide information quickly. Many are also updated more frequently than printed materials.

Some electronic sources provide video, sound, and motion in addition to text. A feature called *hypertext* found in some electronic sources allows you to click on a word or phrase of interest, which will cause additional information to be displayed.

Keyword searching is used to find information in most electronic sources. Some sources also have a site map, menu, or table of contents. See page 29 for information about keyword searching.

Electronic encyclopedias store all the information found in a multivolume set of encyclopedias. *World Book Online* is an electronic version of *The World Book Encyclopedia*. It contains all the encyclopedic information, plus additional features covering recent events and history. Such encyclopedias as *The McGraw-Hill Encyclopedia of Science and Technology* are also available in electronic format. Other reference works stored in electronic systems include dictionaries, the Bible, William Shakespeare's plays, ZIP Codes and addresses, and Bartlett's *Familiar Quotations*.

Electronic periodical indexes, such as *InfoTrac*, index hundreds of magazines and journals. In ad-

dition to bibliographic information, electronic indexes may include a summary of the article or the article's full text. Most electronic periodical indexes are searched by using keywords.

The Internet is a worldwide network of computers that has become a popular online information service. Government agencies, businesses, nonprofit organizations, and individuals provide free or fee-based access to their Web sites. Each site is a collection of information taken from other publications or produced specifically for online delivery.

Search features such as those in America Online (AOL), Netscape, and Yahoo on the World Wide Web allow keyword searching to find new Web sites or specific information. The Internet is especially useful when you are looking for information that changes often. For example, you might go to the Web site of a newspaper to search the advertising section for used cars or apartments for rent.

Before going "online," think about your information needs and your search strategy. There is a wealth of information on the Internet, but much of it is unreliable or of poor quality. You will find help in evaluating information sources in the section *Judging the value of reference and source materials* on this page and on page 32. Additional electronic information sources are listed on page 38.

Getting what you need. In most school and public libraries, you can go to the shelves directly to find the item you want. But in some large libraries, you'll need to fill out a *call slip* and request the item from someone who works at the library.

Most libraries keep current issues of newspapers and maga-

zines on shelves for easy access. Past issues may be kept as bound volumes or on microfilm. Bound volumes consist of all the issues for a particular period bound together in one volume. On microfilm, pages are photographed and greatly reduced in size. The images appear on a reel or on a sheet called *microfiche*. A viewing machine enlarges the images and projects them on a screen so you can read the pages. Microfilm of newspapers and magazines is generally stored in file cabinets. As with books, you may be able to get bound volumes and microfilm yourself, or you may need to fill out a call slip.

Judging the value of reference and source materials. After you have the references and sources you want, how can you judge if they are really useful? There are several factors to consider:

1. *Scope of coverage.* Turn to a book's index to see how much coverage your topic receives. If your topic appears on several pages, the work is worth checking carefully. A Web site may have an index or a search feature. You can use either one to see how much coverage there is on your topic. More information about using an index appears in the following section, titled "Getting the most out of a reference work."

2. *Publication date.* If you're doing research in a rapidly developing field, such as computers, you'll want the latest material available. But if you're dealing with a historical topic, such as the Korean War, the publication date may not be as important. In a book, the publication date usually appears on the back of the title page.

On a Web site, if the publication date is not available, spot check the Web site by searching on it

for a recent event that you know of, such as the death of a famous person. If the site contains the current information, it is more likely that the rest of the site is kept up to date.

3. *Authoritativeness.* Is the author well known in the field? Has the author written other works on this subject? The book jacket or introduction can help you find out.

Are there footnotes, appendixes, or other indications of careful scholarship? If you're consulting periodicals, it may be wise to avoid articles in popular magazines not recognized as authoritative. If you have any doubts about the suitability of a magazine article, check with your teacher to see if it would be acceptable.

If you use a newspaper article as a source, keep in mind that the information presented is perishable. Ongoing events are covered in newspapers on a day-to-day basis as more information comes to light. As a result, comprehensive coverage on a topic is seldom available in one newspaper article.

If you are using the Internet to find sources, one way to ensure authoritativeness is to use Web sites with a ".org," ".gov," or ".edu" extension in the address of the site. These extensions are used for the official Web sites of organizations, government agencies, and educational institutions.

Web sites with ".com" extensions are generally owned by companies or individuals, and are often less authoritative. For example, if you wanted to find reliable information about Glacier National Park, it would be best to go to the U.S. National Park Service government Web site, rather than a personal Web page entitled, "My trip to Glacier National Park." Although the latter Web

site may have some interesting information, it is likely to be narrower in focus, be opinion-based, or omit important information.

4. *Bias.* Does the author have an apparent bias that could hamper the objectivity of the book or article? For example, if you are doing research on the 1967 Arab-Israeli war, a book, article, or Web site on the subject by either an Arab or an Israeli author might be biased. Although it could be an interesting source to include among others, it would be unwise to use it as your main source.

5. *Edition.* Check the title page or copyright page to see if the book is a first edition or a revised edition. If there have been several editions, it could mean that the book has been well received and is considered a reliable source. Try to use the latest edition available.

6. *Reading level.* Skimming a few pages should tell you if a book, article, or Web site will be easy to understand or if it is chiefly for scholars in the field. Does the author use a lot of technical language? Are unfamiliar words defined?

7. *Special features.* Check to see if the book, article, or Web site has illustrations, maps, charts, a glossary, a bibliography, or other helpful features. Some Web sites provide animations, simulations, and video and audio files. Such features may suggest that the source is a useful one.

8. *Overall quality.* Judging the quality of a book is relatively easy. If it is in a library, it will have been carefully chosen. However, there are thousands of Web sites, and judging their quality can be more difficult.

The presentation of information on a Web site does not necessarily determine the reliability of that

information. However, to minimize the time spent researching your topic, you should avoid sites that are poorly organized or slow to use because of advertising or irrelevant graphics.

There are certain things to look for in a Web site. Some questions to ask are: Is the layout of the Web site logical and easy to understand? Is it easy to find your way around the site? Is biographical information provided about authors who publish articles on the Web site? Is background and contact information available about the organization that controls the Web site?

Getting the most out of a reference work. To make full use of a reference work, take time to familiarize yourself with its organization before you plunge in to search for information. See if the book or Web site has an introductory section on how to use the work, a key to abbreviations, or similar helpful information.

Consult the table of contents to get an idea of what the reference work covers and how the material is organized. The table of contents lists chapter titles and such features as illustrations and maps. Don't neglect to check any material that appears in the front and back of the book. An introduction and author's foreword can have valuable information. Appendixes may include charts, tables, the text of documents, and author's notes. Bibliographies can provide you with titles of additional sources to check.

When you're ready to find specific information, turn to the index. The index offers a far more complete guide to the book or Web site than the table of contents. Most reference books have one general index, which lists proper names, titles, and topics together. Some works have sever-

al indexes—for example, an author index, a title index, and a subject index. Always check the index to find out where the information you want is located.

To use an index, think of the word that most clearly identifies your topic. For information on the Nile River, for example, look

under “Nile,” not “River.” For information on the presidency of Nelson Mandela, look under “Mandela,” not “presidency.”

After you’ve located the proper pages, skim the text quickly to see if it has the information you need. Look at any headings; the first, or *topic*, sentence of each

paragraph; and concluding summaries. This method should help you spot main ideas. If the source has useful information, fill out a source card, read the text carefully, and take notes. For more information on taking notes and preparing source cards, see the following sections.

Preparing Source Cards

You should prepare a source card for every source you consult—books, magazine and newspaper articles, pamphlets, filmstrips, records, and so on. Source cards are simply file cards that contain all the information you’ll need later when you prepare a list of sources for your report.

To prepare source cards, use standard-sized cards, ruled or unruled, and write in ink on one side only. Use one card for each source you consult. That way, it will be easy to arrange the cards in alphabetical order later. Use the same format for your source cards that you’ll use for the final list of sources. (See page 18 for samples of the list of sources for-

5	
Gronig, Karl, and Saller, Martin.	
<u>Elephant: A Cultural and Natural History.</u> Konemann, 1999.	
QL737.P98	Carnegie Library of Pittsburgh

Number each source card.

When citing a book, include the authors' last names, first names, the title and publisher of the book, and the year the book was published.

This is the Library of Congress call number for the book. Libraries using the Dewey Decimal system would list the item as 599.67 G765.

Note the name of the library where you found the book.

mat.) If you number each source card in the upper right-hand corner, you can use this number on your note cards to identify the source of the note, instead of writing the author and title. It's

also a good idea to include on the source card the call number of the book and the library where you found it. Then if you need to check the source again, you'll know exactly where to find it.

Taking Notes

Good research depends on good notes. The information you find in reference works must be clearly and accurately recorded in your notes before it can become part of a well-organized and well-written report. There are various ways to go about taking notes. It's important to find a system that works well for you.

One of the best systems uses note cards. Take notes in ink, on one side of the card only. Put only one item—fact, quotation, or idea—on each card. This method will make it easier to arrange and combine your notes in any order you want. Write the source number (taken from your source card)

in the upper right-hand corner of the note card. Include the page number of the source in case you need that information for a footnote later. Write a short heading—called a *slug*—at the top of

the card to identify the topic or subtopic the note refers to. If you've prepared an outline, the slug should correspond to a heading in your outline.

Elephant anatomy	5
African elephants flap their large ears to cool themselves off. Heat is released through the skin from a system of blood vessels in the elephant's earlobes.	
Note: Follow this with info about cooling methods using the trunk.	
Gronig, Karl, and Saller, Martin	p.63

The slug goes here. If you already made an outline, use the main topics as slugs.

This number should correspond to the related source card.

Limit each card to one idea and use your own words.

Write notes to yourself in a different color or circle them.

Authors' names

Page number

Before you write a note, evaluate the material you've read to make sure the information is worth recording. If it is, don't just copy it word for word. Paraphrase or summarize the information. You may also wish to add personal reactions or other comments on your notes. If so, circle them, write them in a different color, or use some other method to distinguish them.

Using Other Sources

The library and the Internet are by no means the only sources for research material. People and places near and far can provide you with information that will make your research more complete and more interesting.

Writing or e-mailing for information. Government agencies and business and professional associations can be important sources of information. By contacting such organizations, you may be able to get reliable statistics and other facts that would be difficult to track down elsewhere. For example, if you were writing a report about literacy in Canada, it might be helpful to e-mail or write to Canada's provincial departments of education for the most recent statistics on literacy. Furthermore, these sources publish a variety of pamphlets and other materials that you can use for research. Many of these materials are free or very inexpensive.

Your library will have directories with addresses of government, business, and other organizations. Searching the Internet is another source of addresses.

When you write for information, keep in mind that some groups are better equipped than others to handle requests. Make your request specific and reasonable. Include a self-addressed, stamped envelope for the reply.

Generally, make notes in your own words because they reflect *your* thinking, not somebody else's. You should use direct quotes only when the author's words are particularly striking, when you want to refer to an expert's knowledge or opinion, or when you want to hold an author accountable for a particular idea or statement.

Most important, don't assume that the reply will arrive by the time you need it. It might not. Be prepared to use information from other sources if necessary.

Conducting an interview can be an effective way to get facts and personal viewpoints that add special interest to your report. Begin with a courteous phone call or letter identifying yourself and requesting an interview. Specify the sort of information you need. Make yourself available at a time that is convenient for the person you are contacting.

Before the interview, read background material about the topic. That way, you'll be better able to ask intelligent questions and follow-ups. Prepare a list of questions ahead of time.

Listen carefully during the interview. Take notes on important points and be careful to write direct quotations exactly as they are said. Be sure to ask permission to use a direct quote. Ask for clarification of points you don't understand and the spelling of unfamiliar terms or names. A tape recorder can eliminate the need for taking lengthy notes by hand. But again ask permission beforehand. Some people object to being taped or "freeze" when the tape begins. If you use a tape recorder, make sure that it's working properly and that you have enough tape for the length

of the interview, as well as fresh batteries or an extension cord.

Before you leave the interview, be sure to write down accurately the subject's name, position or title, and place of business. You'll need this information for your list of sources and footnotes. Don't forget to thank your subject at the end of the interview. Also follow up with a thank-you note.

Conducting a survey is another way to get unique material. You can ask people questions in person or draw up a written questionnaire. In either case, phrase your questions carefully so that people can respond easily and clearly. Surveys that use a "yes or no" or "for or against" format are the easiest to evaluate. You may want to include a "no opinion" category. Or you may prefer a format that allows for a range of opinion. Whatever method you choose, take care to record the results accurately.

Using television as a source.

Television documentaries, news programs, and interview shows can give you access to expert opinions and valuable information. If you watch a program as part of your research, be prepared to take careful notes. Be sure to note the name of the program, the network, and the date of broadcast for your list of sources and footnotes.

Museums, art galleries, and historical societies may enable you to explore your subject firsthand. For example, a report on the painter Vincent van Gogh could be enhanced by a visit to an art museum that exhibits some of his works. Many museums and other cultural centers have libraries or other research facilities open to the public. Check to see what your community has to offer that can help you understand your topic better.

Glossary

A selected list of terms and abbreviations commonly encountered in research.

Abbr. Abridged; abridgment

added entry The heading above the author line on a catalog card. The card is filed by this entry.

annotation A brief description of the content of a book.

anon. Anonymous (author unknown)

appendix A section that follows the text, containing material relative to but not essential to the subject.

bibliography A list of books or other sources. May be general, selective, on a particular subject, or have a common theme, often annotated.

bk., bks. Book(s)

c. or ca. *circa*, about. Refers to an approximate date (e.g., c. 1340).

call number The classification number used to request a book.

CD-ROM Compact Disc Read-Only Memory. A small disc used to hold text, graphics, video, and sound for catalogs and reference works.

cf. *Confer*; compare one source with another.

ch., chap., chaps. Chapter(s)

class number The number by which a book is identified in a classification system (e.g., the Dewey Decimal Classification System or the Library of Congress Classification System). It indicates the subject matter of the book.

col., cols. Column(s)

continuation A work (e.g., *The World Almanac*) issued at regular intervals.

copr.; © Copyright The copyright notice usually consists of the symbol © (with or without the word copyright) and the year in which the book was copyrighted. May apply to the entire work or only a part. It generally appears on the verso (back side) of the title page.

cross-reference A reference to another entry. A *see* reference is to the preferred entry, the one under which the material appears; a *see also* reference is to related material.

cumulate The contents of several volumes arranged into one volume.

database Information stored in a computer.

DVD-ROM Digital Video (or Versatile) Disc Read-Only Memory. A compact disc that can hold between 8 and 20 times as much information as a CD-ROM.

documentation Support for a statement, as in a footnote or bibliography.

e.g. *exempli gratia*, for example

ed., eds. Editor(s); edition(s)

ellipsis Three spaced periods used to indicate an omission. At the beginning of a sentence, may or may not be followed by a capital letter; at the end of a sentence, is preceded by a period.

et al. *et alii*, and others

et seq. *et sequens*, and following

etc. *et cetera*, and so forth

f., ff. And the following (e.g., pp. 65 f.: pp. 64 ff.)

fig., figs. Figure(s)

front. *Frontispiece* (picture facing the title page of a book or of a section of a book)

hot link In an electronic document, a text or illustrative link that, when activated, leads to another document.

hypertext In an electronic document, highlighted text that, when activated, leads to another document.

i.e. *id est*, that is

ibid. *ibidem*, the same. In a footnote, refers to the book cited in immediately preceding reference. *Ibid.* takes the place of the author's name, the title, and any identical material in

the preceding footnote. The page number may differ.

id. *idem*, the same. Used in place of the author's name in additional references within a single footnote.

ii., illus. Illustrations, illustrator, illustrated

infra See below; to be mentioned later.

Internet A global computer network that links smaller networks, including government facilities, universities, corporations, and individuals.

I., II Line(s)

LC Library of Congress

loc. cit. *loco citato*, in the place cited. In a footnote, refers to a passage already identified when there are intervening references to other sources.

main entry The catalog card that has full information about a book (the author card).

modem Modulator-Demodulator. A device that adapts a terminal or computer to a telephone line, allowing users to communicate with one another.

MS., MSS. Manuscript(s)

n., nn. Note(s)

N.B. *Nota bene*, note well; take notice

n.d. No date of publication or copyright given.

network An information system that links several pieces of computer equipment and computer databases together for sharing information among many users and stations.

no., nos. Number(s)

op. cit. *opere citato*, in the work cited. In a footnote, refers to a previously identified work when a different part is cited and there are intervening references. Pages are included in the citation.

p., pp. Page(s)

paraphrase A restatement conveying the general meaning of the original.

pass. *passim*, here and there; throughout the work (e.g., pp. 60, 81, *et pass.*)

periodical Primarily a magazine, published at regular or irregular intervals.

printing date The year the book is printed (usually appears on the title page). Not always the same as the copyright date.

pseud. Pseudonym, a name other than an author's real name; a pen name.

pub. Published, publication

q.v. *quod vide*, which see

recto Right-hand page of a book; the back of a verso page

rev. Revised, revision

scope Extent of treatment, coverage

series title The collective title for a group of books.

sic So, thus, in this way. Used within brackets in a quotation to show that an error is in the original: "It was to [sic] late."

sup., supp., suppl. Supplement

supra See above; previously mentioned

thesis The statement of purpose, the proposition to be explained or proved.

tr., trans. Translator, translation

v., vol., vols. Volume(s)

v. vide, see

verso Left-hand page of a book; the back of a recto page

viz. *videlicet*, namely. Introduces examples or lists.

vs. *Versus*, against

Web site A site location on the World Wide Web. Each Web site contains a home page, and may also contain additional documents and files. Each site is owned and managed by an individual, company, or organization.

World Wide Web A system of Internet servers that support specially formatted documents, which can be easily accessed using a Web browser. Not all Internet servers are part of the World Wide Web.

Selected Reference and Source Materials

The following list of reference materials will give you some idea of the variety of sources available for research. In order to list as many items as possible, information is limited to titles and individual authors. Within each group, the books are listed alphabetically by title. The section on electronic information sources represents those materials most frequently found in school and public libraries.

In the section on special reference works, the number in parentheses after a heading—Theater (792)—is the Dewey Decimal Classification for that group. Although some libraries may give different classifications to certain titles, this device will assist you in locating books on these subjects.

The books listed below were selected from the many that exist under each subject heading. They represent some of the most inclusive sources of information on various subjects of interest to students from the junior high school through the college level. Students should find these books most useful in helping them accumulate the kind of information they need in order to write essays, research papers, reports, theses, and dissertations. The books listed below are available in many school and public libraries.

General reference books

Almanacs and yearbooks

- Britannica Book of the Year*, 1938-
- Collier's Year Book*, 1939-
- The Americana Annual*, 1923-
- The Time Almanac*, 1947-
- Whitaker's Almanac*
- The World Almanac and Book of Facts*, 1868-
- The World Book Year Book*, 1922-
(also published as *World Book's Year in Review*)

Bibliographies

- American Book Publishing Record*, 1960-
- Books in Print*, 1948-
- Canadian Books in Print*, 1967-
- Paperbound Books in Print*, 1955-1996
- Subject Guide to Books in Print*, 1957-

Biography

Indexes

- Biography Index*, 1946-

International

- Current Biography*, 1940-
- The International Who's Who*, 1935-
- McGraw-Hill Encyclopedia of World Biography*
- Webster's New Biographical Dictionary*
- Who's Who*

United States

- American National Biography*
- The Biographic Dictionary of Hispanic Americans*, Nicholas E. Meyer
- The Encyclopedia of Native American Biography*, Donald A. Grinde and Bruce E. Johansen
- Notable Asian Americans*, Susan B. Gall and Helen Zia, eds.
- Who's Who Among African Americans*, 1996-
- Who's Who in America*, 1899-
- Who's Who of American Women*, 1958-
- Who Was Who in America*, 1897-1981
- Who Was Who in America: Historical Volume*, 1607-1996

Canada

- Canadian Who's Who*, 1910-

Dictionary of Canadian Biography

United Kingdom

Dictionary of National Biography

Who's Who, 1849-

Who Was Who

"Curious fact" books

- Famous First Facts*, Joseph N. Kane
- Guinness Book of Records*

Encyclopedias, general

- The Encyclopedia Americana*
- The New Book of Knowledge*
- The New Encyclopaedia Britannica*
- The World Book Encyclopedia*

English-language dictionaries

General dictionaries

- Funk & Wagnalls New International Dictionary of the English Language*
- The Oxford English Dictionary*
- The Random House Unabridged Dictionary*
- Merriam Webster's Collegiate Dictionary*
- Webster's Third New International Dictionary of the English Language, Unabridged*
- The World Book Dictionary*

Abbreviations

- Abbreviations Dictionary*, Ralph DeSola

Rhymes

- Whitfield's University Rhyming Dictionary*, Frances Stillman and Jane S. Whitfield

Slang

- A Dictionary of Slang and Unconventional English*, Eric Partridge
- Random House Historical Dictionary of American Slang*

Synonyms and antonyms

- Roget's International Thesaurus*
- Webster's Dictionary of Synonyms*

Periodicals and newspapers

Bibliographies

- Gale Directory of Publications and Broadcast Media*, 1869-
- Ulrich's International Periodicals Directory*

Indexes

- The New York Times Index*, 1913-
- Nineteenth Century Readers' Guide to Periodical Literature*, 1890-1899
- Readers' Guide to Periodical Literature*, 1900-

Research, library use, and writing

- The Elements of Style*, William Strunk, Jr., and E. B. White
- Guide to Reference Books*, Robert Balay
- Index to English*, Wilma R. and David R. Ebbitt
- A Manual for Writers of Term Papers, Theses, and Dissertations*, Kate L. Turabian
- MLA Handbook for Writers of Research Papers*, Joseph Gibaldi
- Oxford Guide to Library Research*, Thomas Mann
- The Research Paper and the World Wide Web*, Dawn Rodrigues

Special reference books

The humanities: The meaning of life.

Architecture (720)

The Penguin Dictionary of Architecture, John Fleming, et al.
Sir Banister Fletcher's A History of Architecture, Banister Fletcher

Art, general (700)

Art Index, 1929-
Gardner's Art Through the Ages

Literature (800)

American Authors and Books, 1640 to the Present Day, William Burke and Will Howe
Brewer's Dictionary of Phrase and Fable, E. C. Brewer
Encyclopedia of World Literature in the 20th Century
Oxford Illustrated History of English Literature
Contemporary Authors, 1962-
Cyclopedia of World Authors, Frank N. Magill, ed.
Familiar Quotations, John Bartlett
Granger's Index to Poetry
Play Index, 1949-1997

Music (780)

The New Grove Dictionary of Music and Musicians
The New Oxford History of Music

Mythology (290)

Bulfinch's Mythology
A Dictionary of World Mythology, Arthur Cotterell
Meridia Handbook of Classical Mythology, Edward Tripp

Philosophy (100)

The Concise Encyclopedia of Western Philosophy and Philosophers, James O. Urmson and Jonathan Ree, eds.
Concise Routledge Encyclopedia of Philosophy

Theater (792)

The Oxford Companion to the Theatre, Phyllis Hartnoll, ed.
Shakespeare's Theatre, C. Walter Hodges
Theatre World, 1945-

The sciences: Nature and the physical world.

General (500; 600)

American Men and Women of Science
The Hutchinson Dictionary of Scientific Biography
The New Book of Popular Science, Grolier
McGraw-Hill Encyclopedia of Science and Technology
Van Nostrand's Scientific Encyclopedia
Words of Science and the History Behind Them, Isaac Asimov

Biology (574)

The Peterson Field Guides [series]

Engineering (620)

The Dictionary of Space Technology, Joseph A. Angelo
Energy: A Guidebook, Janet Ramage
Random House Webster's Computer and Internet Dictionary
Webster's New World Computer Dictionary

Medicine (610)

Doctors: The Biography of Medicine, Sherwin Nuland
Dorland's Illustrated Medical Dictionary

Oceanography (551.4)

Essentials of Oceanography, Harold Thurman

Zoology (590)

Walker's Mammals of the World, Ronald M. Nowak, ed.

The social sciences: People and society.

General (300)

International Encyclopedia of the Social Sciences
Oxford Dictionary of Sociology, Gordon Marshall

Anthropology (301)

Encyclopedia of Social and Cultural Anthropology, Alan Barnard and Jonathan Spencer
Encyclopedia of Human Evolution and Prehistory, Alison Brooks, Eric Delson, Ian Tattersall, and John Vancouvering, eds.

Customs and folklore (390)

Anniversaries and Holidays, Bernard Trawicky
Funk and Wagnalls Standard Dictionary of Folklore, Mythology and Legend

Economics (330)

Penguin Dictionary of Economics

Geography and travel (900-919)

The Columbia Gazetteer of the World
Fodor's [Travel publications]
National Geographic Atlas of the World
Rand McNally The New International Atlas
Webster's New Geographical Dictionary
The World Book Encyclopedia of People and Places

History (900-909; 930-999)

Basic Documents in American History, Richard B. Morris, comp.
Dictionary of American History
Encyclopedia of American History
An Encyclopedia of World History, Peter N. Stearns, ed.
The New Cambridge Modern History
The Times Atlas of World History

Law (340)

Black's Law Dictionary, Henry Campbell Black, et al.
Charter of the United Nations: Commentary and Documents, Leland M. Goodrich, et al.

Statistics (310)

Historical Statistics of the United States, 1789 to Present
The Statesman's Yearbook
Statistical Abstract of the United States
Statistical Yearbook [United Nations]

U.S. federal and state governments (353)

The Book of the States [yearbook]
Monthly Catalog of United States Government Publications, 1895-
United States Government Manual
Using Government Information Sources: Electronic and Print
Government Information on the Internet

Electronic information sources

CD-ROM magazine indexes

Info Trac/TOM, Gale Group
Magazine Article Summaries, EBSCO
Wilson Disc, H. W. Wilson Co.

CD-ROM materials

Columbia Granger's World of Poetry
Complete National Geographic
Facts on File News Digest, CD-ROM
The Grolier Multimedia Encyclopedia
History of the World
McGraw-Hill Multimedia Encyclopedia of Science and Technology
Microsoft Encarta
Newsbank
U.S. History on CD-ROM

World Book Encyclopedia CD-ROM

Online news/information services

America Online
Britannica.com
Burrelle's Broadcast Database
Concise Columbia Electronic Encyclopedia
DataTimes
DataStar
Dialog
Dow Jones Interactive
EBSCOhost
eLibrary
Encarta Online
Funk and Wagnalls Multimedia Encyclopedia
GaleNet

Grolier Online
Grove's Dictionary of Art
Grove's Dictionary of Music
Information Please
LEXIS/NEXIS Services
NewsBank
OCLC
Ovid
Prodigy
ProQuest
SIRS
WebSPIRS
WilsonWeb
World Book Online

Dewey Decimal Classification

000 Generalities	330 Economics	660 Chemical engineering
010 Bibliography	340 Law	670 Manufacturing
020 Library & information sciences	350 Public administration & military science	680 Manufacture for specific uses
030 General encyclopedia works	360 Social problems & services; association	690 Buildings
040	370 Education	
050 General serial publications	380 Commerce, communications, transportation	700 The arts Fine and decorative arts
060 General organizations & museology	390 Customs, etiquette, folklore	710 Civic & landscape art
070 News media, journalism, publishing		720 Architecture
080 General collections	400 Language	730 Plastic arts Sculpture
090 Manuscripts & rare books	410 Linguistics	740 Drawing & decorative arts
	420 English & Old English	750 Painting & paintings
100 Philosophy & psychology	430 Germanic languages German	760 Graphic arts Printmaking & prints
110 Metaphysics	440 Romance languages French	770 Photography & photographs
120 Epistemology, causation, humankind	450 Italian, Romanian, Rhaeto-Romanic	780 Music
130 Paranormal phenomena	460 Spanish & Portuguese languages	790 Recreational & performing arts
140 Specific philosophical schools	470 Italic languages Latin	
150 Psychology	480 Hellenic languages Classical Greek	800 Literature & rhetoric
160 Logic	490 Other languages	810 American literature in English
170 Ethics (Moral philosophy)		820 English & Old English literatures
180 Ancient, medieval, Oriental philosophy	500 Natural sciences & mathematics	830 Literatures of Germanic languages
190 Modern Western philosophy	510 Mathematics	840 Literatures of Romance languages
	520 Astronomy & allied sciences	850 Italian, Romanian, Rhaeto-Romanic
200 Religion	530 Physics	860 Spanish & Portuguese literatures
210 Philosophy & theory of religion	540 Chemistry & allied sciences	870 Italic literatures Latin
220 Bible	550 Earth sciences	880 Hellenic literatures Classical Greek
230 Christianity Christian theology	560 Paleontology Paleozoology	890 Literatures of other languages
240 Christian moral & devotional theology	570 Life sciences Biology	
250 Christian orders & local church	580 Plants	900 Geography & history
260 Social & ecclesiastical theology	590 Animals	910 Geography & travel
270 History of Christianity & Christian church		920 Biography, genealogy, insignia
280 Christian denominations & sects	600 Technology (Applied sciences)	930 History of ancient world to ca. 499
290 Comparative religion & other religions	610 Medical science Medicine	940 General history of Europe
	620 Engineering & allied operations	950 General history of Asia Far East
300 Social sciences	630 Agriculture & related technologies	960 General history of Africa
310 Collections of general statistics	640 Home economics & family living	970 General history of North America
320 Political science	650 Management & auxiliary services	980 General history of South America
		990 General history of other areas

Reproduced from *Dewey Decimal Classification and Relative Index*, Edition 21 (1996), by permission of Forest Press. A Division of OCLC Online Computer Library Center, Inc., owner of copyright.

Library of Congress Classification

The system of classification devised by the Library of Congress uses 21 letters of the alphabet to represent the principal

branches of knowledge. Subdivision is achieved by adding second letters and Arabic numerals through 9999.

A General works	J Political science	R Medicine
B Philosophy, psychology, religion	K Law	S Agriculture
C Auxiliary sciences of history	L Education	T Technology
D History: General and Old World	M Music and books on music	U Military science
E-F History: America	N Fine arts	V Naval science
G Geography, anthropology, recreation	P Language and literature	Z Bibliography, library science, information resources
H Social sciences	Q Science	

The Index to World Book

A

- A** [letter] **A**: 1 *with pictures*
A [symbol]
 Angstrom **A**: 467
A & P [company] *See* Great Atlantic and Pacific Tea Company *in this index*
À Becket, Thomas *See* Becket, Saint Thomas *in this index*
A cappella [music]
 Barbershop quartet singing **B**: 107
 Singing **S**: 472
A-frame tent
 Tent (Kinds of tents) **T**: 171
A horizon [geology]
 Soil (Characteristics of soils) **So**: 574 *with diagram*
A-line style
 Clothing (The 1900's) **Ci**: 703
A. Philip Randolph Institute [organization]
 Rustin, Bayard **R**: 568
A priori knowledge
 Philosophy (Epistemology) **P**: 383-384;
 (Modern philosophy) **P**: 387-388
"A-Tisket, A-Tasket" [song]
 Fitzgerald, Ella **F**: 190
A. W. Mellon Educational and Charitable Trust *See* Mellon Educational and Charitable Trust, A. W. *in this index*
Aa [geology]
 Volcano (Lava) **V**: 439
A.A. [organization] *See* Alcoholics Anonymous *in this index*
AAA [U.S. history]
 New Deal (Helping the farmers) **N**: 201
AAAS [organization]
 American Association for the Advancement of Science **A**: 407
Aachen [Germany] **A**: 2
 Architecture *picture on* **A**: 618
 Charlemagne (Administration and influence) **C**: 379
Aachen Cathedral [Germany]
 Architecture *picture on* **A**: 618
Aachen situla [sculpture]
 Sculpture (Early medieval sculpture) **S**: 248-249 *with picture*
AAES *See* American Association of Engineering Societies *in this index*
AAF [military unit] *See* Army Air Forces *in this index*
Aaiun, El *See* El Aaiun *in this index*
AALS [organization]
 Law (Law education) **L**: 138
Aalto, Alvar [Finnish architect] **A**: 2
 Architecture *picture on* **A**: 607
 Furniture *picture on* **F**: 583
Aalto Theater
 Aalto, Alvar **A**: 2
AAM [weapon] *See* Air-to-air missile *in this index*
Aandahl, Fred G. [American political leader]
 North Dakota (table) **N**: 513
Aardvark [animal] **A**: 2 *with picture*
 Animal *picture on* **A**: 476
 Anteater **A**: 541
 Mammal (table) **M**: 129 *with picture*
Aardwolf [animal] **A**: 2 *with picture*
Aarhus [Denmark]
 Århus **A**: 661
Aaron [Biblical figure] **A**: 3
 Birthstone **B**: 380
Aaron, Hank [American baseball player] *See* Aaron, Henry *in this index*
Aaron, Henry [American baseball player] **A**: 3
with portrait
 Baseball (table: Hall of Fame) **B**: 134; (table: Modern major league records) **B**: 137
with picture; (Recent developments) **B**: 137-138 *with picture*
Aaron Manby [ship]
 Ship (Ships of iron) **S**: 412
Aaronic order
 Mormons (Church organization) **M**: 807
AARP [organization] **A**: 3
AAU [organization] *See* Amateur Athletic Union *in this index*
AAUW [organization] *See* American Association of University Women *in this index*
ABA [law] *See* American Bar Association *in this index*
Ababemba
 Bemba **B**: 246
Abacá [plant] **A**: 3
 Philippines (Agriculture) **P**: 378 *with picture*
 Rope (Natural-fiber rope) **R**: 476
Abacha, Sani [Nigerian political leader]
 Nigeria (Recent developments) **N**: 418
Abaco Islands [Atlantic]
 Bahamas (Land and climate) **B**: 29 *with map*
Abacus [architecture]
 Column (The Greek orders) **Ci**: 865
Abacus [calculator] **A**: 3 *with picture*
Abacus, Book of the [book by Fibonacci]
 Fibonacci, Leonardo **F**: 89
Abadan [city, Iran] **A**: 4
Abaft
 Ship (Nautical terms) **S**: 416
Abajo Mountains [Utah]
 Utah (Land regions) **U**: 240-242
Abalone [sea animal] **A**: 4
Abalone pearl
 Pearl (Shape) **P**: 217
Abalone steak [food]
 Abalone **A**: 4
Abandoned property [law]
 Escheat **E**: 357
Abandonment [law] **A**: 4
See also Desertion *in this index*
Abayah [clothing]
 Saudi Arabia (Clothing) **S**: 157-158
Abbado, Claudio [Italian conductor] **A**: 4
Abbei River [Ethiopia]
 Lake Tana **L**: 46
Abbas I [shah of Iran] **A**: 4
 Iran (The Safavid dynasty) **I**: 406
 Isfahan **I**: 462
 Safavid dynasty **S**: 8
Abbas the Great *See* Abbas I *in this index*
Abbasids [ancient people]
 Arabs (The rise and spread of Islam) **A**: 588
 Egypt (Muslim rule) **E**: 130
 Harun al-Rashid **H**: 79
 Iraq (Arab rule) **I**: 413
 Middle East (Islamic empires) **M**: 533
 Muslims (The Muslim Empire) **M**: 964c
 Syria (The Muslim Arabs) **So**: 1075
 World, History of the (The Islamic world) **W**: 434-435
Abbe, Cleveland [American meteorologist]
 Ohio (Interesting facts) **O**: 681
Abbes [religious title]
 Abbot **A**: 4
 Convent **Ci**: 1024
Abbott, Leon [American political leader]
 New Jersey (table) **N**: 249
Abbey [monastery]
 Abbot **A**: 4
Abbey Theatre [Ireland]
 Colum, Padraic **Ci**: 851
 Gregory, Lady **G**: 388
 Irish literature (The Irish literary revival) **I**: 431-432; (Drama) **I**: 432
 Yeats, William Butler **Y**: 555
Abbott [religious title] **A**: 4
Abbotsford [estate]
 Scott, Sir Walter **S**: 222
Abbott, Edith [American social reformer] **A**: 4
Abbott, Grace [American social reformer] **A**: 4
Abbott, Sir John Joseph Caldwell [Canadian political leader] **A**: 5 *with portrait*
 Thompson, Sir John Sparrow David (Prime minister) **T**: 264
Abbott, Robert Sengstacke [American journalist] **A**: 6 *with portrait*
Abdoud, Ibrahim [Sudanese general]
 Sudan (Independence) **So**: 956
Abbreviation **A**: 7
 Capitalization **C**: 196
 Postal Service, United States (table) **P**: 700
See also the articles on specific letters of the alphabet
ABC [sports] *See* American Bowling Congress *in this index*
ABC television network
 Television (The national networks) **T**: 114
 Walt Disney Company **W**: 20
ABCD [memory aid]
 Skin cancer **S**: 492 *with pictures*
Abd al-Malik [Muslim ruler]
 Muslims (The Muslim Empire) **M**: 964c
Abd-al-Mumin [Berber leader]
 Rabat **R**: 46
Abd al-Rahman [Arab ruler]
 Muslims (The fall of the Abbasids) **M**: 964c
'Abd al-Sabur, Salah [Egyptian author]
 Arabic literature (Poetry) **A**: 583
Abd al-Wahhab, Muhammad ibn [Arab religious leader]
 Saudi Arabia (The Saud dynasty) **S**: 160-161
Abdel Rahman, Sheikh Omar [Egyptian cleric]
 New York City (Recent developments) **N**: 342-343
Abdomen [anatomy] **A**: 9 *with diagram*
 Insect (Abdomen) **I**: 288; *diagram on* **I**: 286
 Peritonitis **P**: 288
See also the list of Related Articles in the Abdomen article
Abdominal hernia [disorder]
 Hernia **H**: 212
Abdominal muscles [anatomy]
 Physical fitness (Abdominal strength) **P**: 434
Abdominal oblique muscle [anatomy]
 Human body *diagram on* **H**: 422
Abduh, Muhammad [Egyptian lawyer]
 Muslims (Reform and renewal) **M**: 965
Abdu'l-Bahá [religious author]
 Bahá'u'lláh **B**: 28
Abdul Ilah [prince of Iraq]
 Iraq (Independence) **I**: 413
Abdul-Jabbar, Kareem [American basketball player] **A**: 9 *with picture*
 Basketball *picture on* **B**: 153
 Chamberlain, Wilt *picture on* **C**: 371
Abdul Rahman, Tunku [Malaysian political leader]
 Malaysia (Building national unity) **M**: 102
Abdulhamit II [sultan of the Ottoman Empire]
 Armenia (History) **A**: 718b
 Ottoman Empire (The empire ends) **O**: 878
 Turkey (The Ottoman decline) **T**: 510; (The Young Turks) **T**: 510
Abdullah [Saudi Arabian prince]
 Saudi Arabia (Recent developments) **S**: 162
Abdullah II [king of Jordan] **A**: 9

Abdullah, Rania [queen of Jordan]
Abdullah I A: 9

Abdullah ibn Hussein [emir of Jordan]
Jordan (History) J: 164-165

Abdur Rahman Khan [emir of Afghanistan]
Afghanistan (The Anglo-Afghan wars) A: 95

Abe Lincoln in Illinois [play by Sherwood]
Sherwood, Robert Emmet S: 398

Abednego [Biblical figure]
Daniel, Book of D: 33

Abegweit
Prince Edward Island P: 783

Abel [Biblical figure] A: 10
Cain C: 15
Jehovah's Witnesses J: 89

Abel, John J. [American chemist]
Drug (The drug revolution) D: 359

Abel Janszoon Tasman's Journal
New Zealand *picture on* N: 356

Abelard, Peter [French philosopher] A: 10
Science (The Middle Ages) S: 197

Abelson, P. H. [American physicist]
Neptunium N: 130

Abenaki Indians
Indian, American (Indians of the Northeast) I: 154-155
Maine (Indian days) M: 89

Aberdeen [Scotland] A: 10

Aberdeen, Earl of [British political leader]
United Kingdom (table: British prime ministers) U: 72

Aberdeen and Temair, Marquess of [British statesman] A: 10

Aberdeen-Angus [breed]
Cattle (Aberdeen-Angus) C: 308 *with picture*; (table) C: 312

Aberdeen Proving Ground [Maryland] A: 10

Aberhart, William [Canadian political leader]
Alberta (table) A: 328

Abernathy, Ralph David [American social reformer] A: 10 *with portrait*

Aberation [optics] A: 10 *with diagrams*
Telescope (Optical telescopes) T: 103-104

ABET [organization]
Engineering (Professional organizations and standards) E: 289

Abgeordnetenhaus [legislature]
Berlin (Government) B: 264

Abidjan [city, Côte d'Ivoire] A: 11
Africa *picture on* A: 110
Côte d'Ivoire Ci: 1084a, *picture on* Ci: 1084b
Yamoussoukro Y: 550

Abilene [Kansas] A: 11
Westward movement in America (Cattle frontiers) W: 251

Ability
Careers (Aptitudes) C: 215
Intelligence I: 317
Testing (Kinds of tests) T: 181

Ability to pay principle
Income tax (Current issues) I: 102

Abiotic environment
Environment (Abiotic environment) E: 329
Ecology (Ecosystems) E: 54

Abkhazia [region]
Georgia (History) G: 111

Ablative case [grammar]
Case (Cases in Latin) C: 272

Able-bodied seaman
Ship (Officers and crew) S: 423

ABM [weapon] See *Antiballistic missile in this index*

Abnormal psychology A: 11
Psychology (Major fields of psychology) P: 848

ABO blood groups
Blood (The ABO blood groups) B: 412

Abolition movement [social reform] A: 12
African Americans (The antislavery movement) A: 136f
Amistad Rebellion A: 433
Civil War (The Compromise of 1850) Ci: 616
Emancipation Proclamation (Early views on emancipation) E: 254
Garrison, William Lloyd G: 45
Grimké, Sarah Moore G: 393
Liberty Party L: 233
Lundy, Benjamin L: 523
Massachusetts (Progress as a state) M: 292
Ohio *picture on* O: 701
Philadelphia (Industrial beginnings) P: 366
Slavery (The decline of slavery) S: 504
United States, History of the (The abolition movement) U: 171

Women's movements (The beginnings of women's movements) W: 385
See also *the list of Related Articles in the Abolition movement article*

Abolitionist Union Humane Society [organization]
Lundy, Benjamin L: 523

Abomasum [zoology]
Cattle (Stomach) C: 307 *with diagram*
Ruminant R: 519 *with diagram*

Abominable Snowman A: 13
See also *Bigfoot in this index*
Folklore (Legends) F: 324
Mount Everest M: 884
Nepal (Land and climate) N: 126

Aboriginal and Torres Strait Islander Commission
Australia (Recent developments) A: 925

Aboriginal Development Commission
Aborigines, Australian (Aboriginal life today) A: 14

Aboriginal English [dialect]
Aborigines, Australian A: 13

Aboriginal Land Rights (Northern Territory) Act [1976]
Aborigines, Australian (Aboriginal life today) A: 14

Aborigines, Australian [people] A: 13 *with picture*
Australia A: 895; (People) A: 900-902 *with picture*; (The arts) A: 906 *with picture*; (History) A: 922
Boomerang B: 475
Exploration (Exploring Australia's interior) E: 448
National park (Australia) N: 42b; (The rights of original inhabitants) N: 42i
Outback O: 879
Races, Human (Climatic adaptations) R: 58
Rain forest (Australia and the Pacific Islands) R: 126c
Stolen Generation So: 907
Tasmania (The people) T: 49

Abortion A: 14
Birth control (Methods of birth control) B: 378-379; (In other countries) B: 379
Medical ethics M: 361
Miscarriage M: 617
National Right to Life Committee N: 60
Roe v. Wade R: 399
Supreme Court of the United States (Civil rights) So: 1001; (table) So: 1002
Women's movements (In Western societies) W: 386

Above the line cost
Motion picture (Preparing the final budget) M: 851

Abraham [Biblical figure] A: 16
Hittites (History) H: 269-270
'Id al-Adha I: 25
Isaac I: 461
Ishmael I: 462
Islam (Prophets) I: 463; (The Five Pillars of Islam) I: 463-464
Jews (Beginnings) J: 120
Judaism (The covenant with God) J: 179
Kaaba K: 208
Muslims (Before Muhammad) M: 964
Ur U: 213

Abraham, F. Murray [American actor]
Motion picture (Best performance by an actor: 1984) M: 862-863

Abraham, Spencer [American political leader]
Bush, George Walker (table) B: 723
Energy, Department of (table) E: 276

Abraham and Isaac [woodcut by Van Leyden]
Van Leyden, Lucas *picture on* V: 283

Abraham and the Three Angels [painting]
Painting (Gothic painting) P: 50 *with picture*

Abraham Lincoln [book by Sandburg]
Sandburg, Carl S: 108; (His prose) S: 108

Abraham Lincoln [ship]
Aircraft carrier (The United States carrier fleet) A: 206
Navy, United States *picture on* N: 82

Abraham Lincoln National Historic Site [Illinois]
National Park System (table: National historic sites) N: 52

Abram See *Abraham in this index*

Abramovich, Shalom Jacob [Yiddish author]
Hebrew literature (Modern Hebrew literature) H: 162-163
Yiddish literature Y: 566

Abrams, Creighton W. [American general]
Vietnam War (The opposing forces) V: 375

Abrasive
Ceramics (Kinds of ceramic products) C: 359
Machine tool M: 18

Abrasive wheel cutting
Grinding and polishing (Grinding methods) G: 395

Abreva [drug]
Cold sore Ci: 761

Abruzzo, Ben [American balloonist]
Balloon (Long-distance balloon flights) B: 62

ABS [chemical]
Detergent and soap (The development of detergents) D: 165

ABS [plastic]
Plastics (table) P: 556

Abalom [Biblical figure]
David (King of Israel) D: 45

Abalom, Abalom! [book by Faulkner]
Faulkner, William F: 55

Abalom and Achitophel [book by Dryden]
Dryden, John D: 370
English literature (John Dryden) E: 318

Absaroka Range [mountains]
Montana (Land regions) M: 752
Wyoming (Land regions) W: 526

Abscess [disorder] A: 17
Pelvic inflammatory disease P: 233
Teeth (Performing root canal therapy) T: 83

Abscissic acid
Hormone (Other growth regulators) H: 337

Abscissa [mathematics]
Geometry (Analytic geometry) G: 104 *with diagrams*

Abscission zone [botany]
Leaf (The leaf becomes fully grown) L: 152

Absecon Island [New Jersey]
Atlantic City A: 862

Absent without leave [military law] See *AWOL in this index*

Absentee voting
Voting (Methods of voting) V: 450

Absolute dating [archaeology]
Archaeology (Dating) A: 598

Absolute filter
Air cleaner (Types of air cleaners) A: 175-176

Absolute magnitude [astronomy]
Magnitude M: 63
Star (Magnitude and luminosity) So: 842; *diagram on* So: 844; *diagram on* So: 849

Absolute monarchy
Absolutism A: 17
Dictatorship D: 191
French Revolution (Background) F: 524-525

Absolute property interest [law]
Property P: 827

Absolute temperature scale
Absolute zero A: 17
Gas [physics] (Gas laws) G: 48-49

Absolute value
Algebra (Positive and negative numbers) A: 352-353

Absolute veto
Veto V: 346

Absolute zero [temperature] A: 17
Heat (Refrigeration) H: 154
Matter (States of matter) M: 311
Metric system (Heat) M: 440
Superconductivity So: 993
Temperature T: 130

Absolutism [political science] A: 17
Political science (Constitutionalism) P: 639

Absorber [device]
Refrigeration (The gas refrigerator) R: 202 *with diagram*

Absorber cleaner
Air cleaner (Types of air cleaners) A: 175-176

Absorption and adsorption [physics] A: 17 *with diagrams*
Air cleaner (Types of air cleaners) A: 175-176
Charcoal (Uses of charcoal) C: 377
Chromatography C: 537
Ink (Printing inks) I: 273
Laser (Producing laser light) L: 83-84
Light (Reflection, refraction, and absorption) L: 286
Natural gas liquids N: 64
Silica gel S: 457

Absorption hygrometer [measuring device]
Hygrometer (Other hygrometers) H: 474

Absorption line [physics]
Astronomy (Optical astronomy) A: 838-840
Star (Color and temperature) So: 843-844
Telescope (Analyzing spectra) T: 105

Abstinence-only program

Sex education (How sex education is taught) S: 336

Abstract art A: 18

Painting (Abstract painting) P: 34; (The 1900's in Europe) P: 77 *with pictures*
Kandinsky, Wassily K: 213 *with picture*

Abstract expressionism [art] A: 18 *with picture*

De Kooning, Willem D: 94 *with picture*
Gorky, Arshile G: 277 *with picture*
Mitchell, Joan M: 677
Painting (Abstract expressionism) P: 84 *with picture*

Pollock, Jackson P: 646
Rothko, Mark R: 487 *with picture*
Still, Clyfford So: 900
United States *picture on* U: 116

Abstract noun [grammar]

Noun (Abstract and concrete nouns) N: 552

Abstract of title [law]

Deed D: 81

Abstract reasoning aptitude

Careers (Aptitudes) C: 215

Abstract surrealism [art]

Painting (Surrealism) P: 81

Abstraction [philosophy]

Piaget, Jean P: 445

Absurd, Theater of the *See* Theater of the absurd *in this index*

Abu Bakr [Muslim caliph]

Muhammad (His religious life) M: 910-911
Muslims (The early caliphs) M: 964a
Religion (Islam) R: 222-223
Shiites S: 400
Sunnites So: 992

Abu Dhabi [state]

United Arab Emirates U: 43

Abu Dhabi [city, United Arab Emirates] A: 19

United Arab Emirates U: 43 *with picture*

Abu Nuwas [Arab poet]

Arabic literature (Poetry) A: 583

Abu Sayyaf [political group]

Philippines (Recovering democracy) P: 381

Abu Simbel, Temples of [Egypt] A: 19

Ramses II R: 134 *with picture*
Sculpture (Egyptian) S: 234

Abu Talib [uncle of]

Muhammad (Early life) M: 910

Abu Tammam [Arab poet]

Arabic literature (Poetry) A: 583

Abu Zaby [city, United Arab Emirates] *See* Abu Dhabi *in this index*

Abubakar, Abdulsalami [Nigerian political leader]

Nigeria (Recent developments) N: 418

Abuja [city, Nigeria] A: 19

Lagos L: 31
Nigeria N: 410 *with picture*

Aby [cat]

Cat (Short-haired breeds) C: 290

Abyssal plain [oceanography]

Atlantic ocean (The Mid-Atlantic Ridge) A: 864
Deep sea (The deep-sea floor) D: 82a
Ocean (Deep-sea peaks, valleys, and plains) O: 662

Abyssinia [former name]

Ethiopia E: 367

Abyssinian cat

Cat (Short-haired breeds) C: 290; *picture on* C: 288

Abzug, Bella Savitzky [American political leader] A: 19

AC *See* Alternating current *in this index*

Ac [symbol]

Actinium A: 30

Acacia [plant] A: 19 *with picture*

Australia (Native plants) A: 914 *with picture*; *picture on* A: 916
Catechu C: 300
Gum arabic G: 440
Plant (How plants protect themselves) P: 544
Acacia senegal [tree]
Gum arabic G: 440

Academic American Encyclopedia [books]

Encyclopedia (Today's encyclopedias) E: 268b

Academic aptitude test

Testing (Kinds of tests) T: 181

Academic art

Painting (The 1800's) P: 67

Academic Festival Overture

Brahms, Johannes (His music) B: 549

Academic freedom A: 20

Academic Skepticism [philosophy]

Skepticism S: 481

Academica [book by Cicero]

Skepticism S: 481

Académie Française, L' [organization] *See*

French Academy *in this index*

Academy [ancient Greece]

Aristotle (Aristotle's life) A: 663
Plato (Plato's life) P: 567
Carneades C: 241

Academy [organization] A: 20

Academy [secondary school]
Colonial life in America (Education) Ci: 803
Education (Development of U.S. education) E: 102
Virginia (Schools) V: 402

Academy and Institute of Arts and Letters, American

American Academy and Institute of Arts and Letters A: 407

Academy Awards [motion pictures]

Motion picture (Festivals and awards) M: 861 *with picture*; (table) M: 861

Academy of Arts and Sciences, American
Arts and Sciences, American Academy of A: 764

Academy of Ethical and Political Science
Institute of France I: 305

Academy of Fine Arts [Belgium]

Teniers, David, the Younger T: 133

Academy of Fine Arts [France]

Institute of France I: 305

Academy of Inscriptions and Belles Lettres
Institute of France I: 305

Academy of Model Aeronautics

Airplane, Model A: 240

Academy of Motion Picture Arts and

Sciences A: 20
Motion picture (Festivals and awards) M: 861

Academy of Music

Philadelphia (The arts) P: 363

Academy of Natural Sciences of Philadelphia

Philadelphia (Libraries and museums) P: 364

Academy of Sciences [France]

Institute of France I: 305

Acadia [Canadian history] A: 21 *with map*

Cajuns C: 19
Grand Pré G: 309
New Brunswick (French rivals) N: 196
Nova Scotia (Exploration and settlement) N: 568; (The struggle in Acadia) N: 568

Acadia Forest [ship]

Ship (LASH ships) S: 419-420

Acadia National Park [Maine] A: 21

Camping *picture on* C: 92
Maine (Places to visit) M: 78 *with picture*
National Park System (table: National parks) N: 48

Acadian flycatcher [bird]

Flycatcher F: 311 *with picture*

Acadian Geology [book by Dawson]

Dawson, Sir John William D: 51

Acadian Historical Village

New Brunswick (Places to visit) N: 188

Acadian Museum [New Brunswick]

New Brunswick (Museums) N: 185

Acadian Village [Lafayette]

Louisiana (Places to visit) *picture on* L: 488

Acadiana [Louisiana]

Louisiana (Places to visit) L: 488; *picture on* L: 499

Acanthocephala [zoology]

Animal (A classification of the animal kingdom) A: 506 *with picture*

Acanthodes [fish]

Prehistoric animal *picture on* P: 738

Acanthodian [zoology]

Fish (The first fish) F: 171

Acanthus [shrub] A: 21 *with picture*

ACAP [organization] *See* American Council on Alcohol Problems *in this index*

Acapulco [Mexico] A: 21 *with picture*

ACBL [organization]

Bridge (Regulation of tournaments) B: 605

Accelerando

Music (table) M: 954

Acceleration [physics]

Motion (Acceleration) M: 844
Calculus (Differential calculus) C: 22-23
Falling bodies, Law of F: 17
Force (Acceleration) F: 369; [physics] G: 2
Gravitation (Einstein's theory of relativity) G: 332
Inertia I: 263
Mass M: 268
Metric system (Space and time) M: 437

Relativity (Inertial frames) R: 210; (Principle of equivalence) R: 212

Velocity (Acceleration) V: 297

Accelerator [automobile]

Automobile *diagram on* A: 951

Accelerator [chemistry]

Rubber (Compounding and mixing) R: 505

Accelerator, Particle *See* Particle accelerator *in this index*

Accelerator mass spectrometry [technique]

Archaeology (Dating) A: 598

Accelerometer [measuring device]

Automatic flight control system (How an AFCS works) A: 944

Inertial guidance I: 263

Accent [music]

Music (Rhythm) M: 951

Accent [pronunciation] A: 22

Language (Linguistic terms) L: 63

Accent light

Lighting (In the home) L: 296

Acceptance [economics]

Bill of exchange B: 301

Draft D: 318

Acceptance speech

Political convention (Making nominations) P: 629-630

Accessory [decoration]

Interior design (Selecting accessories) I: 333 *with pictures*

Accessory [heraldry]

Heraldry (Elements of a coat of arms) H: 194-196 *with pictures*

Accessory molecule [biochemistry]

Immune system (The cell-mediated immune response) I: 88a

Accident

See also First aid *in this index*

Automobile (Problems of safety) A: 948

Safety S: 9

Trauma center T: 405

Accident, The [book by Wiesel]

Wiesel, Elie W: 299

Accident insurance

No-fault insurance N: 438

Accident prevention *See* Safety *in this index*

Accidental infanticide [crime]

Infanticide I: 264

Accidental President

Vice President of the United States V: 348

Accidentals

Music (Indicating pitch) M: 953

Accipiter

Hawk H: 111

Accius, Lucius [Roman poet]

Latin literature (Early Latin literature) L: 115

Accolade [ceremony]

Knights and knighthood (Knighting) K: 348

Accommodation [physiology]

Eye (Focusing) E: 462-463 *with picture*
Farsightedness F: 48

Accommodations of Desire [painting by Dali]

Dali, Salvador *picture on* D: 10

Accordion [musical instrument] A: 22 *with pictures*

Account executive [occupation]

Advertising (Creating advertisements) A: 76a

Account manager [occupation]

Advertising (Creating advertisements) A: 76a

Accountability [education]

Curriculum (Curriculum changes) Ci: 1197

Education (How can performance be improved?) E: 105-106

Teaching (The effectiveness of teaching) T: 69

Accountancy *See* Accounting *in this index*

Accounting A: 22

Bookkeeping B: 472 *with pictures*

Careers (Technical and mathematical occupations) C: 232

Computer (Spreadsheet programs) Ci: 917-918

Accounting Industry Reform Act [2002]

Business (Recent developments) B: 726

Accra [city, Ghana] A: 24

Ghana *picture on* G: 180

Accreditation [education]

Community college (Accrediting) Ci: 899

Education (Control and support of U.S. education) E: 91

Universities and colleges (Accrediting) U: 207

Accreditation Board for Engineering and Technology

Engineering (Professional organizations and standards) E: 289

42 Accretion

Accretion [geology]

Growth (In nonliving things) G: 404

Life (Growth) L: 274-275

Accretion disk [astronomy]

Galaxy (Emissions from galaxies) G: 8b

Acculturation [anthropology]

Culture (Contact with other cultures) Ci: 1189

Accuracy skydiving

Skydiving S: 496

ACCUS [organization]

Automobile racing (Formula One racing)

A: 976-977

Accusative case [grammar]

Case (Cases in Latin) C: 272

Accutane [drug]

Acne A: 28

Ace [aviation] A: 24

Air force (World War I) A: 185

Air Force, United States (World War I) A: 194

World War I (The war in the air) W: 460-461

Ace [tennis]

Tennis (The serve) T: 163

Acela [train]

Railroad (Intercity trains) R: 105-106

Transportation (Improvements in public transportation) T: 398

Acellular microorganism

Microbiology (Microorganisms) M: 513

Acerola [tree] A: 24 with picture

Acesulfame-K [synthetic food]

Artificial sweetener A: 761

Acetabulum [anatomy]

Hip H: 238

Acetal

Plastics (table) P: 556

Acetaminophen A: 24

Analgesic A: 448

Pain (Treating pain) P: 22

Acetate [chemistry] A: 25

Cellulose (Industrial uses) C: 341

Fiber (Regenerated fibers) F: 87

Textile (Manufactured fibers) T: 213

Acetic acid [chemical] A: 25

Acid (The strength of an acid) A: 27

Cider Ci: 552

Vinegar (Making vinegar) V: 386

Acetification [industrial process]

Vinegar (Making vinegar) V: 386

Acetobacter [bacteria]

Vinegar (Making vinegar) V: 386

Acetone [chemical] A: 25

Acetyl-coenzyme A

Metabolism (Catabolism) M: 424

Acetylation [process]

Acetate A: 25

Acetylcholine [biochemistry]

Alzheimer's disease (Diagnosis) A: 398-399

Atropine A: 878

Myasthenia gravis M: 970f

Acetylene [gas] A: 25

Gas [fuel] (How gas is manufactured) G: 57

Hydrocarbon (Aliphatic hydrocarbons) H: 465

Acetylsalicylic acid See Aspirin in this index

Achaean League [ancient Greece]

Achaean A: 25

Achaean people] A: 25

Achaemenid coin [money]

Persia, Ancient (picture on P: 298

Achaemenid Empire

Aryans A: 765

Persia, Ancient (Government) P: 298; (The

Achaemenid Empire) P: 298 with map

Sculpture (Middle Eastern) S: 233 with picture

Acheampong, I. K. [Ghanaian political leader]

Ghana (History) G: 179-180

Achebe, Chinua [Nigerian author] A: 25

Achene [botany]

Sycamore So: 1062

Achernar

Star (table: The 10 brightest stars as seen from Earth) So: 842

Acheron [legendary river]

Hades H: 4

Acheson, Dean Gooderham [American statesman] A: 26

Truman, Harry S. (table) T: 469

Acheson, Edward [American inventor]

Graphite G: 323

Acheson-Lilienthal Report [U.S. history]

Acheson, Dean Gooderham A: 26

Achievement test

College entrance examination (The College

Entrance Examination Board) Ci: 775

Testing (Kinds of tests) T: 181

Achille Lauro [ship]

Reagan, Ronald Wilson (Terrorism) R: 170

Achilles [legendary figure] A: 26

Alexander the Great (His youth) A: 342

Hector H: 164

Iliad I: 51

Priam P: 774

Trojan War (The siege of Troy) T: 449

Ulysses (The Trojan War) U: 17-18

Achilles and Ajax Playing Checkers [painting

by Exekias]

Painting (Greek painting) P: 42 with picture

Achilles tendon [anatomy] A: 26 with diagram

Leg (The leg) L: 182

Achondrite

Meteor (Meteorites) M: 431

Achroite [gem]

Tourmaline T: 347

Achromatic vision [birth defect]

Color blindness Ci: 827

Acid [chemistry] A: 26

Antacid A: 529

Etching E: 364

First aid (Eye injury) F: 140

Food additive (Kinds of additives) F: 339-340

Litmus L: 391

Neutralization N: 154

pH P: 353

Soil (Chemical conditions) So: 575

See also the list of Related Articles in the Acid article

Acid dye

Dye (Synthetic dyes) D: 395-396

Acid rain A: 27

Conservation (Canada) Ci: 988; (Energy conservation) Ci: 983-984

Energy supply (Environmental effects) E: 281

Environmental pollution (Air pollution) E: 331; picture on E: 333

Rain (Characteristics of rain) R: 122-123

Water pollution (Industrial wastes) W: 136

Acid rock

Rock music (Expanding styles and sounds) R: 378-379

Acid test [geology]

Mineral (Other identification tests) M: 567

Acidemia [disorder]

Acidosis A: 27

Acidimeter [measuring device]

Hydrometer H: 471

Acidophilus milk [food]

Milk (At a processing plant) M: 547

Acidosis [disorder] A: 27

Acini [anatomy]

Breast B: 590

Acklins Island [Bahamas]

Bahamas (Land and climate) B: 29 with map

ACLU [organization] See American Civil Liberties

Union in this index

Acmeists

Russian literature (Post-symbolism) R: 563

Acne [disorder] A: 27 with diagrams

Dermatology D: 153

Pimple P: 466

Pore P: 678

Skin (Other skin disorders) S: 491

Aco, Michel [French explorer]

Iowa (Exploration and early settlement) I: 393

Acelomate [biology]

Coelom Ci: 753

Acoma [hill, New Mexico]

New Mexico (Land regions) N: 266

Acoma Indians

United States, History of the picture on U: 151

Aconagua [mountain, Argentina] A: 28

Andes Mountains (Physical features) A: 452

Argentina (The Andine) A: 653 with map

Mountain (table) M: 894 with diagram

South America So: 626 with picture

Volcano (table) V: 441 with map

Aconite [plant] A: 28 with picture

Aconitine [chemical]

Aconite A: 28

Acorn [nut] A: 28

Indian, American (Before European contact)

I: 163-164

Oak O: 635 with pictures

Plant (How plants protect themselves) P: 544-545

Acorn squash

Squash (Winter squashes) So: 813 with picture

Acoustic-homing torpedo

Torpedo (How a torpedo works) T: 340b-340c

Acoustic mine

Mine warfare (Naval mines) M: 565

Acoustic neuroma [disorder]

Ear (Diseases) E: 12

Acoustical engineering

Engineering (Other specialized fields) E: 287

Acoustical guitar

Guitar G: 435 with pictures

Acoustical tile

Insulation (Insulation against sound) I: 307

Acoustics [physics] A: 28

Physics (Sound) P: 437

Sound (table) So: 599; (Controlling sound)

So: 604; (Modern acoustics) So: 606

Acquaculture

Seafood S: 265

Acquired blindness

Blindness B: 401

Acquired immunodeficiency syndrome [disorder] See AIDS in this index

Acquired immunological tolerance

Burnet, Sir Macfarlane B: 708

Acquired lands

Public lands P: 858

Acquired need

Human relations (Individual needs) H: 427

Acquittal [law]

Jury (Petit juries) J: 202

Trial (Reaching a verdict) T: 437

Acre [former name, Akko]

Crusades (Other Crusades) Ci: 1161

Acre [unit of measure] A: 29

Acreage allotment [agriculture]

Farm and farming (Federal farm programs) F: 44

Acrisius [Greek mythology]

Perseus P: 295

Acrobatic skiing

Skiing (Freestyle skiing) S: 483

Acrobatics

Circus (At the circus) Ci: 562 with picture; picture on Ci: 565

Gymnastics G: 447 with pictures

Acrochordidae [zoology]

Snake (File snakes) S: 535

Acrocorinth [ruins, Greece]

Citadel Ci: 567

Corinth Ci: 1053

Acromegaly [disorder]

Giant G: 183

Acromion [anatomy]

Collarbone Ci: 773 with diagram

Acronym

Abbreviation A: 7

Memory (Mnemonic devices) M: 393

Slang (Acronyms) S: 500

Acrophobia [psychology]

Phobia P: 392

Acropolis [hill] A: 29 with picture

Architecture (Classical Greek architecture) A: 615-616

Athens (Landmarks) A: 854-855 with picture and map; (The Acropolis and its buildings) A: 856

Greece, Ancient (The land) G: 366; (The arts) G: 369

Parthenon P: 182

Across the River and Into the Trees [book by

Hemingway]

Hemingway, Ernest (Later years) H: 181

Acrylic A: 29

Fiber (Synthetic fibers) F: 87

Interior design (Choosing patterns and textures) I: 332

Plastics (table) P: 556; (Growth of the plastics industry) P: 560

Rugs and carpets (Materials used in rugs and carpets) R: 513-514

Acrylic paint

Paint (Household paints) P: 23

Painting (Synthetic resins) P: 40

Acrylonitrile [chemical]

Cyanide Ci: 1202

ACT [test]

College entrance examination (The American College Testing Program) Ci: 775

Act of ...

Laws that begin Act of or Act for appear under their key words, as in Union, Act of.

- Communication (During ancient times) Ci: 879
Journalism (The first newspapers) J: 174
- ACTH** [hormone] A: 30
Adrenal gland A: 67
Endorphin E: 272
Hormone (Endocrine control hormones) H: 336
Steroid (The adrenal steroids) So: 895
Stress (How stress affects the body) So: 926-927
- Acting**
Careers (Sports and entertainment) C: 230-231
Hispanic Americans (Entertainment and arts) H: 248
Method acting M: 434
Motion picture (Production) M: 852-853; (table: Academy Award winners) M: 862
Opera (The singers) O: 792
Shakespeare, William (Acting companies) S: 353-354
Television (Planning and preparation) T: 110c-110d
Theater T: 232; (Casting) T: 236; (The performers) T: 237 *with pictures*
- Actinide** [chemistry]
Element, Chemistry diagram on E: 221
Rare earth R: 144
- Actinium** [element] A: 30
Radiation (Naturally radioactive substances) R: 77
- Actinomyces** [bacteria]
Actinomycosis A: 30
- Actinomycolysis** [disease] A: 30
- Actinopterygian** [zoology]
Fish (The Age of Fishes) F: 171
- Action** [gun]
Handgun (Parts of a handgun) H: 43
Rifle (The parts of a rifle) R: 338
- Action** [piano]
Piano (The action) P: 446 *with picture*
- ACTION** [U.S.] A: 30
Peace Corps P: 207
- Action for Cities** [program]
United Kingdom (City life) U: 55
- Action painting** [art]
Abstract expressionism A: 19
Painting (Abstract expressionism) P: 84-85
- Action potential** [physiology]
Nervous system (Conduction along the axon) N: 135
- Actium, Battle of** [31 B.C.] A: 30
Agrippa, Marcus A: 162
Cleopatra (Cleopatra and Mark Antony) Ci: 662a-662b
Rome, Ancient (Breakdown of the republic) R: 446
- Activated carbon**
Water (Purifying and treating water) W: 126
- Activated charcoal**
Charcoal C: 377; (Uses of charcoal) C: 377
- Activated sludge process**
Sewage (Secondary treatment) S: 330 *with diagram*
- Activation product** [physics]
Radiation (Artificial radioactive substances) R: 77-78
- Active component**
Electronics (Passive components) E: 212
- Active euthanasia**
Death (The right to die) D: 61
Euthanasia (Active and passive euthanasia) E: 421
- Active galaxy** [astronomy]
Galaxy (Emissions from galaxies) G: 8b
- Active immunity**
Immune response (How the body develops immunity) I: 88b
- Active layer** [geology]
Permafrost P: 289
- Active medium**
Laser (Parts of a laser) L: 83 *with diagram*
- Active noise cancellation** [sound]
Sound (Modern acoustics) So: 606
- Active prominence** [astronomy]
Sun (Prominences) So: 981 *with picture*
- Active religious order** [group]
Religious life R: 226
- Active structural-acoustic control** [sound]
Sound (Modern acoustics) So: 606
- Active voice** [grammar]
Conjugation Ci: 951
Tense T: 171
Voice V: 437
- Active volcano**
Volcano (Classifying volcanic activity) V: 442
- Activity badge**
Boy Scouts pictures on B: 538
- Activity center**
Nursery school (Nursery school instruction) N: 615-616
- Activity series** [chemistry] See Electromotive series in *this index*
- Acton, John Emerich Edward Dalberg**
Acton, Lord A: 31
- Acton, Lord** [British historian] A: 31
- Actor and actress** See Acting in *this index*
- Actor Bando Hikosaburo III and the Actor Iwai Hanshiro IV, The** [print by Sharaku]
Japanese print picture on J: 63
- Actors Studio**
Method acting M: 434
- Actress** See Acting in *this index*
- Acts of the Apostles** [New Testament] A: 31
Bible (Books of the New Testament) B: 282-283
Jesus Christ (Early life) J: 104
New Testament (Books) N: 287
- Acts of the Apostles** [tapestry]
Tapestry (History) T: 40
- Actual fraud** [law]
Fraud F: 496
- Actual malice** [law]
Libel L: 226
- Actuary** [career]
Insurance (Careers in the industry) I: 315
- Actuator** [machine]
Telescope (Reflecting telescopes) T: 104-105
- Acuff, Roy** [American musician] A: 31
Country music (Emergence of the country music industry) Ci: 1098b-1098c
Popular music picture on P: 670
- Acupuncture** A: 31 *with picture*
Alternative medicine A: 388
Asian Americans (Asian influences on American culture) A: 812c
Cancer (Alternative medicine) C: 173
China (Health care) C: 485
Medicine (China and India) M: 372
- Acura NSX** [automobile]
Sports car (History) So: 803 *with picture*
- Acushnet** [ship]
Melville, Herman (His early life) M: 390
- Acute angle** [mathematics]
Angle A: 463 *with picture*
- Acute epiglottitis** [disease]
Croup Ci: 1157
- Acute glaucoma** [disease]
Eye (Glaucoma) E: 466
- Acute glomerulonephritis** [disorder]
Scarlet fever (Complications) S: 173
- Acute hemolytic transfusion reaction** [disorder]
Blood transfusion (Risks of transfusion) B: 417
- Acute otitis media** [disorder]
Ear (Diseases) E: 12
- Acute pain**
Pain P: 21
- Acute retroviral syndrome** [disease]
AIDS (Stages of HIV infection) A: 164
- Acute triangle** [geometry]
Triangle (Kinds of triangles) T: 438 *with diagram*
- Acutely psychotic infanticide** [homicide]
Infanticide I: 264
- ACV** See Air cushion vehicle in *this index*
- Acyclovir** [drug]
Antiviral drug A: 560
Cold sore Ci: 761
Elion, Gertrude Belle E: 236
Herpes, Genital H: 214
- A.D.** [calendar] A: 31
Calendar (Some calendars today) C: 29
Christian Era C: 523
- AD** [disease] See Alzheimer's disease in *this index*
- Ad** [communications] See Advertising in *this index*
- Ad** [sports]
Tennis (Scoring) T: 162-163
- Ad Dawhah** See Doha in *this index*
- Ad interim committee**
State government (Organization) So: 862-864
- Ad libitum**
Music (table) M: 954
- Ad valorem tariff** [economics]
Tariff (Main kinds of tariffs) T: 43
- ADA** [enzyme] See Adenosine deaminase in *this index*
- ADA** [organization]
Americans for Democratic Action A: 431
- Adagio** [dance]
Ballet (A ballet class) B: 46-47
- Adagio**
Music (table) M: 954
- Adagio for Strings** [music by Barber]
Barber, Samuel B: 106
- Adair, John** [American political leader]
Kentucky (table) K: 290
- Adalet** [drug]
Calcium channel blocker C: 21
- Adam** [Scottish architects] A: 31 *with picture*
- Adam, James** [Scottish architect]
Adam (family) A: 31
- Adam, Robert** [Scottish architect]
Adam (family) A: 31 *with picture*
Architecture (Neoclassical architecture) A: 623-624 *with picture*
Furniture (English neoclassical furniture) F: 579 *with picture*
Museum picture on M: 937
- Adam and Eve** [Biblical figures] A: 32
Byzantine art picture on B: 750
Eden E: 76
Islam (Prophets) I: 463
Roman Catholic Church (Sin, the Incarnation, and salvation) R: 404
- Adam Bede** [book by Eliot]
Eliot, George E: 237
- Adami, Eddie Fenech** [Maltese political leader]
Malta (History) M: 113-114
- Adams, Abigail Smith** [wife of John Adams]
A: 32
Adams, John (Adams' family) A: 35; *picture on* A: 36
First ladies F: 142
Washington, George (Life in the Executive Mansion) W: 101-102
- Adams, Alva** [American political leader]
Colorado (Interesting facts) Ci: 829; (table) Ci: 844
- Adams, Ansel** [American photographer] A: 32 *with picture*
- Adams, Brock** [American government official]
Carter, Jimmy (table) C: 257
Transportation (table) T: 400
- Adams, Brooks** [American historian] A: 33
- Adams, Charles** [son of]
Adams, John (Adams' family) A: 35
- Adams, Charles Francis** [1807-1886, American statesman] A: 33
Adams, John (Adams' family) A: 35
Adams, John Quincy (Adams' family) A: 41
Civil War (Relations with Europe) Ci: 623-624
- Adams, Charles Francis** [1866-1954, American government official]
Hoover, Herbert Clark (table) H: 330
- Adams, George Washington** [son of]
Adams, John Quincy (Adams' family) A: 41
- Adams, Gerry** [Irish political leader] A: 33
- Adams, Sir Grantley Herbert** [West Indian political leader]
Barbados (History) B: 104
- Adams, Henry** [American colonist]
Adams, John (Childhood) A: 34
- Adams, Henry Brooks** [American historian]
A: 33
American literature (Nonfiction writers) A: 420
- Adams, J. M. G.** [Barbadian political leader]
Barbados (History) B: 104
- Adams, James H.** [American political leader]
South Carolina (table) So: 658
- Adams, Jewett W.** [American political leader]
Nevada (table) N: 173
- Adams, John** [British adventurer]
Pitcairn Island P: 498
- Adams, John** [father of]
Adams, John (Childhood) A: 34
- Adams, John** [son of]
Adams, John Quincy (Adams' family) A: 41
- Adams, John** [U.S. President] A: 34 *with pictures*
Adams, Abigail Smith A: 32
Constitution of the United States (The background of the Constitution) Ci: 1000
Declaration of Independence picture on D: 77
First ladies F: 142
Hamilton, Alexander (Political disputes) H: 33
Jefferson, Thomas (The Declaration of Independence) J: 79 *with picture*; (Vice President) J: 81; (The sage of Monticello) J: 86

44 Adams, John C.

Logan Act L: 423
 Marshall, John (Political career) M: 229
 Revolutionary War in America (The Treaty of Paris) R: 285; *picture on* R: 276
 United States, History of the (Foreign affairs) U: 162-163
 Vice President of the United States (President of the Senate) V: 352; (Early days) V: 352-353
 Washington, George (table) W: 102; (Farewell Address) W: 106

Adams, John C. [British astronomer]
 Astronomy (Finding new planets) A: 848
 Neptune (Discovery) N: 129

Adams, John Coolidge [American composer]
 Classical music (Classical music today) Ci: 651 *with picture*
 Opera (American opera) O: 800

Adams, John Quincy [U.S. President] A: 40 *with pictures*
 Adams, Charles Francis A: 33
 Amistad Rebellion A: 433
 Calhoun, John Caldwell (Early career) C: 35
 United States, History of the (The election of 1824) U: 170

Adams, Louise Johnson [American first lady]
 Adams, John Quincy (Diplomat) A: 41; *picture on* A: 42
 First ladies (table) F: 142

Adams, Mount [New Hampshire]
 New Hampshire (Mountains) N: 220

Adams, Samuel [American patriot] A: 44 *with portrait*
 Boston Tea Party B: 506
 Massachusetts (table) M: 288
 Revere, Paul (Paul Revere's ride) R: 267
 Revolutionary War in America (The Tea Act) R: 273

Adams, Samuel Hopkins [American author] A: 44

Adams, Scott [American cartoonist] A: 44 *with picture*

Adams, Sherman [American government official] A: 44
 Eisenhower, Dwight David (Midterm elections) E: 154
 New Hampshire (table) N: 223

Adams, Susanna [daughter of]
 Adams, John (Adams' family) A: 35

Adams, Susanna Boylston [mother of]
 Adams, John (Childhood) A: 34

Adams, Thomas [American lawyer]
 Adams, John (Adams' family) A: 35

Adams, Thomas [American druggist]
 Chewing gum (History) C: 416-417

Adams, William H. [American political leader]
 Colorado (table) Ci: 844

"Adams and Liberty" [song]
 "Star-Spangled Banner" (How the song became famous) So: 854

Adam's apple [anatomy]
 Larynx L: 79

Adams National Historic Site [Quincy, Massachusetts]
 Adams, John *picture on* A: 35
 Adams, John Quincy *picture on* A: 41

Adams National Historical Park [Massachusetts]
 National Park System (table: National historical parks) N: 56

Adam's needle [tree]
 Yucca Y: 575

Adams-Onís Treaty [1819]
 Florida (The second Spanish period) F: 262
 Louisiana Purchase (Boundary disputes) L: 503

Adamson, George [British conservationist]
 Adamson, Joy A: 45

Adamson, Joy [British conservationist] A: 45

Adamson Act [1916]
 Goethals, George Washington (Engineer and supply officer) G: 246
 Wilson, Woodrow (Legislative program) W: 322-323

Adán Buenosayres [book by Marechal]
 Latin-American literature (The mid-1900's) L: 113

Adapid [animal]
 Primate (The evolution of primates) P: 778b

Adaptation [biology] A: 45 *with picture*
 See also Natural selection in this index
 Animal (Animals of the polar regions) A: 484; (The bodies of animals) A: 488 *with pictures*
 Fish (Bony fish) F: 147-148

Human being H: 413
 Island (How life develops on islands) I: 473
 Life (Adaptation) L: 275
 Plant (How plants change) P: 540
 Races, Human (Evolutionary theory) R: 53-54; (The population approach) R: 57; (Climatic adaptations) R: 58

Adapter [electronic device]
 Internet I: 350
 Telephone (Modems) T: 97

Adaptive control [industrial process]
 Machine tool (Numerical control of machine tools) M: 19

Adaptive optics
 Astronomy (Optical astronomy) A: 838-841
 Telescope (Producing detailed images) T: 103; (Adaptive optical systems) T: 106

ADB [organization] See Asian Development Bank in this index

Adda River [Italy]
 Lake Como L: 37 *with map*

Addams, Charles [American cartoonist] A: 46
 Cartoon (Single panel cartoons) C: 265-266 *with picture*

Addams, Jane [American social reformer] A: 46 *with portrait*
 American literature (Nonfiction writers) A: 420
 Hull House H: 412
 King, William Lyon Mackenzie (Education) K: 325
 Nobel Prizes *picture on* N: 448
 Social work (History) So: 559

Addams family [fictional characters]
 Addams, Charles A: 46

Addax [animal] A: 46 *with picture*
 Animal *picture on* A: 483

Addend [mathematics]
 Addition (Writing addition) A: 49

Adder [electronics]
 Electronics (Digital circuits) E: 213-214

Adder [snake] A: 46 *with picture*
 Viper V: 391

Adderley, Cannonball [American saxophonist]
 Davis, Miles *picture on* D: 49

Adder's-tongue [plant]
 Dogtooth violet D: 284 *with picture*

Addiction
 See also Drug abuse in this index
 Smoking S: 520

Adding machine
 Abacus A: 3
 Burroughs, William B: 711
 Calculator C: 21

Adding Machine, The [play by Rice]
 Drama *picture on* D: 339
 Rice, Elmer R: 328

Addington, Henry [British political leader]
 United Kingdom (table: British prime ministers) U: 72

Addis Ababa [city, Ethiopia] A: 47 *with picture*
 Ethiopia *picture on* E: 368; (Transportation and communication) E: 370-371
 Menelik II M: 400

Addison, Joseph [English author] A: 47
 English literature (Addison and Steele) E: 318
 Essay (Personal essays) E: 359
 Steele, Sir Richard So: 882

Addison, Thomas [British doctor] A: 48

Addison's disease A: 48
 Addison, Thomas A: 48

Addition [mathematics] A: 48 *with pictures*
 Algebra (Addition) A: 354
 Arithmetic (Addition) A: 665 *with pictures*;
 (Subtraction) A: 666; (Arithmetic of negative numbers) A: 668-669
 Decimal system (Addition and subtraction) D: 71 *with diagrams*
 Fraction (Calculations using fractions) F: 448
 Numeration systems (Decimal addition) N: 606

Additive
 See also Food additive in this index
 Gasoline (Gasoline blends and additives) G: 61
 Livestock (Feed) L: 397
 Plastics (Making synthetic resins) P: 556-557

Additive color mixture
 Color (Mixing colored lights) Ci: 821-822 *with diagram*

Additive principle
 Numeration systems (The Roman numeral system) N: 607

Addonizio, Hugh [American political leader]
 Newark (History) N: 358

Address [correspondence]

Letter writing (The inside address) L: 210 *with picture*; (The envelope address) L: 211 *with pictures*

Address, Forms of [language] A: 53
 Letter writing (The salutation) L: 210

"Address to the Unco Guid" [poem by Burns]
 Burns, Robert (Burns's works) B: 710

Addressable set-top box [machine]
 Television (Cable television) T: 110b

Addresses to the German Nation [book by Fichte]
 Fichte, Johann Gottlieb F: 90

Adductor muscle [zoology]
 Hand *diagrams on* H: 40
 Human body *diagram on* H: 422
 Mollusk (Bivalves) M: 695
 Oyster (Shell) O: 890 *with diagram*
 Shell (Bivalves) S: 388; *diagram on* S: 385

Ade, George [American author] A: 54

Adelaide [city, Australia] A: 55
 Exploration (Exploring Australia's interior) E: 448
 South Australia (The people) So: 639 *with map*

Adelchi [play by Manzoni]
 Italian literature (Romanticism) I: 495

Adélie penguin [bird]
 Animal *picture on* A: 499
 Antarctica (Animal life) A: 534-535 *with picture*
 Penguin *pictures on* P: 239

Adelman, Leonard [American computer scientist]
 Codes and ciphers (Public-key systems) Ci: 750

Adelphian [literary society]
 Sorority So: 597

Adelphi [buildings, London]
 Adam [family] A: 32

Adelson e Salvini [opera by Bellini]
 Bellini, Vincenzo B: 244

Aden [city, Yemen] A: 55
 Yemen Y: 561; (Economy) Y: 562-563 *with picture*

Aden [former colony]
 Yemen (History) Y: 563 *with picture*

Adena Indians
 Mound builders (The Adena culture) M: 881

Adena State Memorial [Chillicothe]
 Ohio (Places to visit) O: 690

Adenauer, Konrad [German statesman] A: 55 *with portrait*
 De Gaulle, Charles André Joseph Marie (The Fifth Republic) D: 91
 Germany (West Germany) G: 170

Adenine [biochemistry]
 DNA D: 258
 Heredity (The structure of DNA) H: 205-206
 RNA R: 357

Adenoidectomy [medicine]
 Adenoids A: 56

Adenoids [anatomy] A: 55 *with diagram*
 Lymphatic system (Lymphoid tissue) L: 534
 Tonsil T: 330

Adenosine deaminase [enzyme]
 Gene therapy G: 81
 Heredity (The era of genetic engineering) H: 209

Adenosine triphosphate See ATP in this index

Adeodatus I [pope]
 Pope (table) P: 666

Adeodatus II [pope]
 Pope (table) P: 666

Ader, Clément [French engineer]
 Airplane (Powered flight) A: 230

ADH [hormone] See Antidiuretic hormone in this index

ADHD [disorder] See Attention deficit disorder in this index

Adhesion [physics] A: 56

Adhesion [physiology] A: 56

Adhesive A: 56
 Gum G: 440
 Mucilage M: 908
 Woodworking (Fastening) W: 398

Adi Granth [religious book]
 Sikhism S: 455

Adirondack Cottage Sanitarium [New York]
 Trudeau, Edward Livingston T: 460

Adirondack Mountains [New York] A: 56
 New York (Land regions) N: 304; (Mountains) N: 306; (Lakes) N: 306-307

Adirondack Park [New York]
 Adirondack Mountains A: 56
 New York (Places to visit) N: 302

- Adit**
Mining (Underground mining methods) M: 576
- Adja** [people]
Benin (People) B: 249
- Adjacent side** [geometry]
Polygon P: 650 *with diagram*
- Adjectival** [grammar]
Adjective (Classifying adjectives) A: 57
- Adjective** [grammar] A: 56
Adverb (Simple adverbs) A: 70; (Adverb-adjective confusion) A: 71
Capitalization C: 196
Comparison C: 902b
Grammar G: 303
Participle P: 184
- Adjustable-rate mortgage**
Mortgage M: 821
- Adjusted gross income**
Income tax (Figuring the individual income tax) I: 104
- Adjustment** [treatment]
Chiropractic C: 514
- Adjutant** [bird] A: 58 *with picture*
- Adjuvant drug therapy** [medicine]
Cancer (Multimodality therapy) C: 172
- Adkins, Homer Martin** [American political leader]
Arkansas (table) A: 712
- Adler, Alfred** [Austrian psychiatrist] A: 58
Freud, Sigmund (His life) F: 530
- Adler, Dankmar** [American architect] A: 58
Architecture (Early modern architecture in America) A: 629
Sullivan, Louis Henri So: 970
Wright, Frank Lloyd (Early career) W: 507
- Adler Planetarium** [Chicago]
Chicago (Museums) C: 428-429
Illinois (Museums) I: 57
- Adlerian psychology**
Adler, Alfred A: 58
- Adlib**
Radio (Putting a show on the air) R: 86
Television (Planning and preparation) T: 110c-110d
- Administration**
Political science (Public administration) P: 638
School (Public school operation) S: 183
- Administration, Office of** [U.S.]
President of the United States (The executive branch) P: 764
- Administration for Children and Families** [U.S. government] See Children and Families, Administration for *in this index*
- Administrative agency**
Law (Public law) L: 130-131
- Administrative law**
Law (Public law) L: 130-131
- Administrative ruling**
Law (Public law) L: 130-131; (How laws are changed) L: 132
- Administrative support**
Careers (Administrative support) C: 219 *with picture*
- Administrator** [law] A: 58
Will (Administration) W: 306
- Admirable Crichton, The** [play by Barrie]
Barrie, J. M. B: 118
- Admiral** [rank] A: 58
Rank, Military (table) R: 140
Navy, United States *pictures on* N: 86
- Admiral David Farragut** [sculpture by Saint-Gaudens]
Saint-Gaudens, Augustus S: 33
- Admiral Graf Spee** [ship]
Graf Spee G: 298
- Admiral Nakhimov** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Admiral of the Ocean Sea** [title]
Columbus, Christopher *picture on* Ci: 861
- Admiralty** [government] A: 59
- Admiralty Board** [Britain]
Admiralty A: 59
- Admiralty Islands** [Papua New Guinea] A: 59 *with picture*
Bismarck Archipelago B: 382
- Admiralty law** See Maritime law *in this index*
- Admission** [law]
Confession Ci: 936
- Admonitions of the Instructress to the Court Ladies** [painting by Gu Kaizhi]
Gu Kaizhi G: 407
Painting (Chinese painting) P: 44-45 *with picture*
- Adobe** [building material] A: 59 *with picture*
Indian, American (Shelter) I: 136d-141; (Before European contact) I: 166-167
Pueblo Indians (Early life) P: 871 *with picture*
- Adobo** [food]
Philippines (Way of life) P: 374-375
- Adoian, Vossanig Manooq** [American painter]
See Gorky, Arshile *in this index*
- Adolescent A: 60** *with pictures*
See also Teen age *in this index*
Anorexia nervosa A: 519
Developmental psychology D: 173
Drug abuse (Causes and effects of drug abuse) D: 364
Erikson, Erik Homburger E: 352
Growth (Growth rate) G: 405
Optimist International O: 813
Pimple P: 466
Psychoanalysis (Psychoanalytic theory) P: 846
Sexuality (Biological factors) S: 337-338
- Adolescent, The** [play by Fonvizin]
Russian literature (The classical movement) R: 559-560
- Adolescent egocentrism** [psychology]
Adolescent (Intellectual development) A: 61-62
- Adolescent medicine**
Medicine (table) M: 369
- Adolphus, Gustavus** See Gustavus Adolphus *in this index*
- Adonai** [Hebrew god]
God G: 243
Jehovah J: 88
- Adonais** [poem by Shelley]
Shelley, Percy Bysshe (His life) S: 391
- Adonis** [legendary figure] A: 65 *with picture*
Aphrodite A: 565
Phoenicia (Religion) P: 394
- Adonis** [plant] A: 65 *with picture*
- Adonis blue** [insect]
Butterfly *picture on* B: 734
- Adoption** [law] A: 66
See also Foster parent *in this index*
Family (Family relationships) F: 21
- Adoption Assistance** [program]
Children's Bureau C: 457
- Adoration of the Kings** [painting by Leonardo]
Leonardo da Vinci (Leonardo's life) L: 199 *with picture*; (Paintings) L: 200b
- Adoration of the Shepherds, The** [painting by Rembrandt]
Jesus Christ *picture on* J: 105
- Adoula, Cyrille** [Congolese political leader]
Congo (Kinshasa) (Civil disorder) Ci: 940e
- Adrastea** [satellite]
Jupiter (Satellites) J: 198
- Adrenal body** [zoology]
Frog *picture on* F: 537
- Adrenal cortex** [anatomy]
Adrenal gland A: 67 *with diagram*
Cortisone Ci: 1074
Hormone (Metabolic hormones) H: 335-336; (Blood composition hormones) H: 336
Stress (How stress affects the body) So: 926-927
- Adrenal gland** [anatomy] A: 67 *with diagram*
ACTH A: 30
Addison's disease A: 48
Cortisone Ci: 1074
Epinephrine E: 343
Gland (Endocrine glands) G: 207; (table) G: 208
Human body *diagram on* H: 422
Steroid (The adrenal steroids) So: 895
Stress (How stress affects the body) So: 926
- Adrenalin** [hormone]
See also Epinephrine *in this index*
Adrenal gland A: 67
Drug (The drug revolution) D: 359
Hormone (Stress hormones) H: 336
Stress (How stress affects the body) So: 926
- Adrenocorticotrophic hormone** See ACTH *in this index*
- Adria** [city, Italy]
Adriatic Sea A: 68
- Adrian** [Roman emperor] See Hadrian *in this index*
- Adrian I** [pope]
Pope (table) P: 666
- Adrian II** [pope]
Pope (table) P: 666
- Adrian III, Saint** [pope]
Pope (table) P: 666
- Adrian IV** [pope] A: 67
Pope (table) P: 666
- Adrian V** [pope]
Pope (table) P: 666
- Adrian VI** [pope]
Pope (table) P: 666
- Adrian, Edgar Douglas** [British physiologist]
Nobel Prizes (Physiology or medicine: 1932) N: 444
- Adrianople** [Turkey]
Edirne E: 77
- Adrianople, Battle of** [378]
Edirne E: 77
- Adrianople, Treaty of** [1829]
Turkey (The Ottoman decline) T: 510
- Adriatic Sea** [Mediterranean] A: 68 *with map*
- Adsorption** See Absorption and adsorption *in this index*
- Adsorption cleaner**
Air cleaner (Types of air cleaners) A: 175-176
- Adulis** [ancient city]
Aksum A: 255 *with map*
- Adult Basic Education**
Poverty (Educational programs) P: 725
- Adult education A: 68** *with pictures*
Careers (Teaching) C: 231
Correspondence school Ci: 1072
Education (Kinds of education) E: 88
Extension programs E: 456
Library (Services for adults) L: 241
Literacy (Illiteracy in the United States) L: 351
United States (Schools) U: 113 *with picture*
- Adult stage** [entomology]
Ant (Reproduction) A: 524-525 *with picture*
- Adulthood**
Adolescent (The "invention" of adolescence) A: 60
Adult education A: 68
Developmental psychology (Maturity and old age) D: 174
Growth (When people stop growing) G: 406
Indian, American (Children) I: 136c
Minor M: 608
Sleep (Human sleep patterns) S: 506
Voting (Who may vote) V: 449
- Adunis** [Lebanese author]
Arabic literature (Poetry) A: 583
- Advance** [publishing]
Publishing (Acquiring the manuscript) P: 868
- Advance directive** [law]
Death (The right to die) D: 61
- Advanced Encryption Standard** [cryptology]
Codes and ciphers (Later developments) Ci: 751-752
- Advanced Light Source** [physics]
Lawrence Berkeley National Laboratory L: 146
- Advanced light water reactor**
Nuclear energy (Advanced fission reactors) N: 594
- Advanced photo system**
Camera *picture on* C: 83
Photography (Cameras) P: 417; (Film) P: 417; (Developing and printing) P: 419-420
- Advanced Photon Source** [machine]
X rays *picture on* X: 542
- Advanced Placement Program**
College entrance examination (The Advanced Placement Program) Ci: 776
- Advanced Research Projects Agency**
Internet (History of the Internet) I: 350e
- Advanced train control system**
Railroad (Other train controls) R: 112
- Advancement of Learning, The** [book by Bacon]
Bacon, Francis B: 18
Philosophy (Modern philosophy) P: 387
- Advantage**
Tennis (Scoring) T: 162-163
- Advection fog**
Fog F: 314 *with diagram*
- Advent** [religion] A: 70
Christmas (Religious practices) C: 533 *with picture*
- Advent wreath**
Christmas (Religious practices) C: 533 *with picture*
- Advantists** [religious groups] A: 70
Seventh-day Adventists S: 328
- Advantitious bud** [botany]
Bud B: 666
- Advantitious root** [botany]
Root (Kinds of roots) R: 473-474 *with diagram*
- Adventure** [organization]
Camp Fire Boys and Girls (Club programs) C: 88-89 *with picture*
- Adventure** [ship]
Cook, James (Second Pacific voyage) Ci: 1026

Adventure Galley [ship]

Kidd, William K: 311

Adventure story

Literature for children (Fiction) L: 358

Adventurer [English history]

London Company L: 445

Adventures of Augie March, The [book by Bellow]

Bellow, Saul B: 244

Novel (After World War II) N: 574

Adventures of Master F. J., The [book by Gascoigne]

Gascoigne, George G: 60

Adventures of Pinocchio, The [book by Collodi]

Collodi, Carlo Ci: 776

Adventures of Prince Achmed [film]

Animation (Animation in Europe) A: 514

Adventures of Uncle Sam, The [book]

Uncle Sam U: 20

Adverb [grammar] A: 70

Adjective (Usage) A: 57

Comparison Ci: 902b

Grammar G: 303

Verb (Multiple-word verbs) V: 315

Adverse possession, Title by [law]

Title T: 302

Advertising A: 72 *with pictures*

Careers (Sales) C: 229-230

Cartoon (Advertising) C: 266; (Developing the idea) C: 266-267

Cigarette Ci: 553

Colonial life in America (Why the colonists came to America) Ci: 787 *with picture*

Commercial art Ci: 872

Computer graphics (In advertising) Ci: 924g

Consumerism (The right to choose) Ci: 1019

Doll (The early 1900's) D: 291-292

Internet (Other uses) I: 350c

Journalism (Criticism of the press) J: 173

Magazine (Scheduling the advertising) M: 43; (How magazines earn income) M: 43

Magic (Magic today) M: 51

Marketing (Promotion) M: 214

Modeling (A model's work) M: 685

Motion picture (Distribution) M: 860

Neon picture on N: 124

Newspaper (Preparing advertisements) N: 383; (The business department) N: 382; (Advertising) N: 385

Propaganda (Businesses) P: 824

Public relations (Methods) P: 864

Publishing (Marketing the book) P: 869

Radio (Stations and networks) R: 90

Sales S: 62

Suggestion So: 963

Telemarketing T: 93

Television (Commercial television) T: 110; (The national networks) T: 114

Tobacco (History) T: 307-308

Advertising agency

Advertising (Creating advertisements) A: 76a; (Advertising agencies) A: 77; (The development of advertising agencies) A: 79

Advertising art *See* Commercial art *in this index***Advertising campaign**

Advertising (Creating advertisements) A: 76a

Advertising Council [organization]

Advertising (Advertising associations) A: 77

Advertising Review Board, National

Advertising (Advertising associations) A: 77

Advertising service and supply house

Advertising (Production) A: 76b

Advertising song [bird]

Bird (Calls and songs) B: 354

Advice and consent [government]

Constitution of the United States (Article II, Section 2) Ci: 1009

Advocacy journalism

Journalism (Influencing public opinion) J: 172

Advocates' Library

Edinburgh E: 77

Adwa, Battle of [1896]

Ethiopia (Menelik II) E: 371

Adz [tool]

Indian, American picture on I: 139

AE [pen name]

Russell, George William R: 524

Aeacus [Greek mythology]

Hades H: 4

AEC *See* Atomic Energy Commission *in this index***Aëdes aegypti** [insect]

Yellow fever Y: 556

A.E.F. *See* American Expeditionary Forces *in this index***AEG Turbine Factory** [Berlin]Architecture (Early modern architecture in Europe) A: 627-629 *with picture***Aegean Bronze Age**

Aegean civilization A: 82

Aegean civilization A: 82 *with picture and map*Painting (Aegean painting) P: 41 *with picture*Sculpture (Aegean) S: 234 *with pictures***Aegean Islands** [Mediterranean]Greece (The Aegean Islands) G: 358 *with map***Aegean Sea** [Mediterranean] A: 84 *with map*

Dardanelles D: 36

Aegeis [Greek mythology]

Medea M: 360

Theseus T: 257

Aegis [Roman mythology] A: 84

Minerva M: 572

Aegisthus [legendary figure]

Cassandra C: 275

Clytemnestra Ci: 715

Electra E: 164

Aegospotami, Battle of [405 B.C.]

Lysander L: 538

AEI [organization] *See* American Enterprise Institute for Public Policy Research *in this index***Aelfric** [English author]

English literature (Old English prose) E: 315

Aelia Capitolina

Jerusalem (Roman rule) J: 101

Aemilianus [Roman emperor]

Rome, Ancient (table) R: 447

Aeneas [Greek mythology] A: 84*See also Aeneid in this index*

Aeolus A: 85

Cerberus C: 361

Mythology picture on M: 987

Aeneid [book by Virgil] A: 84

Dido D: 195

Juno J: 197

Laocoön L: 70

Latin literature (The Augustan Age) L: 116

Mythology (The Aeneid) M: 981

Neptune N: 128

Poetry (Ancient poetry) P: 595-596

Trojan War (The fall of Troy) T: 449

Virgil (His works) V: 391-392

Aeolian harp [musical instrument] A: 84**Aeolians** [ancient people] A: 84**Aeolus** [Greek mythology] A: 85**Aepycamelus** [animal]

Prehistoric animal picture on P: 740

Aerated water

Mineral water M: 572

AerationSewage (Secondary treatment) S: 330 *with diagram*

Water (Purifying and treating water) W: 126

Aerial *See* Antenna *in this index***Aerial ballet** [circus act]

Circus picture on Ci: 565

Aerial Experiment Association

Bell, Alexander Graham (His later life) B: 241

Aerial-ladder truckFire department (Fire trucks) F: 125-126 *with picture***Aerial perspective** [art]

Leonardo da Vinci (Paintings) L: 200b

Perspective P: 304 *with picture***Aerial photography**Archaeology (Locating sites) A: 595-596 *with picture*

City planning picture on Ci: 600

Fairchild, Sherman Mills F: 9

Map (How maps are made) M: 180; (Mapmaking and modern technology) M: 185

Photogrammetry P: 407 *with pictures***Aerial root** [botany]Root (Kinds of roots) R: 473-474 *with diagram***Aerial skiing** [sport]

Skiing (Freestyle skiing) S: 483

Aerial spraying [conservation]Airplane (Special-purpose planes) A: 212 *with picture***Aerial stem** [botany]Plant (Stems) P: 530 *with pictures***Aerial surveying***See also* Photogrammetry *in this index*
Surveying (Types of surveys) So: 1010-1011**Aerialist** [career]Circus (At the circus) Ci: 562 *with picture***Aerie** [chapter]

Eagles, Fraternal Order of E: 6

Aerie [nest]Eagle (Nests) E: 4; *picture on* E: 3**Aero Club of America**

Aviation (The first flying regulations) A: 987

AerobaticsAirplane (Special-purpose planes) A: 212-213 *with picture***Aerobe** [bacteriology]

Bacteria (Where bacteria live) B: 20

Environmental pollution (Water pollution)

E: 334

Water pollution (Disruption of natural processes) W: 138

Aerobee

Rocket (High-altitude rockets) R: 390

Aerobic power

Physical fitness (Performance-related fitness) P: 433-434; (Health-related fitness) P: 434

Aerobics [exercise] A: 85

Physical fitness (Developing physical fitness) P: 435

Running R: 520

Aerodrometics

Glider (After World War I) G: 230

Aerodrome [aircraft]

Airplane (Powered flight) A: 230-231

Langley, Samuel Pierpont L: 61

Aerodynamics [physics] A: 85 *with pictures*

Airplane (First human flights) A: 230

Fluid mechanics (External fluid mechanics) F: 304

Propeller P: 826

Sailing (Why a boat sails) S: 25

Wind shear W: 332

*See also the list of Related articles in the Aerodynamics article***Aeroflot** [airline]

Russia (Transportation and communication) R: 546

Aerogel [insulating material]

Materials picture on M: 301

Aeronautic Association, National

National Aeronautic Association N: 27

Aeronautical chart

Airplane (Pilotage) A: 226

Map (Navigation maps) M: 177-178

Aeronautical Division [U.S. Army]

Air Force, United States (Early years) A: 194

Aeronautics *See* Airplane; *Aviation in this index***Aeronautics and Space Administration, National** *See* National Aeronautics and Space Administration *in this index***Aeroplane** *See* Airplane *in this index***Aerosol** [chemistry] A: 89 *with diagram*

Air (Particles in the air) A: 168

Colloid Ci: 777

Ozone hole O: 894

Aerosol canAerosol A: 89 *with picture***Aerospace engineering**

Engineering (Aerospace engineering) E: 284

Aerospace industry

Aviation A: 983; (Industry mergers) A: 991

Aerospace medicine A: 89**Aerospace Workers, International Association of Machinists and** *See* Machinists and Aerospace Workers, International Association *in this index***Aeschylus** [Greek dramatist] A: 90

Drama (Tragedy) D: 326

Furies F: 566 *with picture*

Greek literature (Drama) G: 377

Sophocles So: 595

Aesculapius [Roman mythology] *See* Asclepius *in this index***Aesir** [Norse mythology]

Mythology (The construction of the world) M: 984-985

Aeson [Greek mythology]

Jason J: 64

Aesop [Greek storyteller]

Aesop's fables A: 90

Aesop's fables [stories] A: 90

Allegory A: 371

Fable F: 3

La Fontaine, Jean de L: 29

Literature for children (Folk literature) L: 357-358 *with picture***Aesthetic Education of Mankind** [book by Schiller]

Schiller, Johann Christoph Friedrich von S: 175

Aesthetics [philosophy] A: 90

- Art and the arts (The aesthetic experience)
A: 745; (Enjoying the arts) A: 748;
(Studying the arts) A: 748
Philosophy (Aesthetics) P: 385
Aestivation See Estivation in *this index*
Aeta [people]
Philippines (Early days) P: 379
Aethra [Greek mythology]
Theseus T: 257
Aëtius, Flavius [Roman military leader]
Valentinian III V: 264
Aetna, Mount See Mount Etna in *this index*
Aetna Life and Casualty Insurance Company
Insurance (table) I: 315
AFA [organization]
Arts, American Federation of A: 763
Afars [people]
Djibouti (People) D: 256
Ethiopia (People) E: 368
Afars and Issas [former territory]
Djibouti D: 256
AFB [organization] See American Foundation for
the Blind in *this index*
AFC See Automatic Frequency Control in *this
index*
AFCS [aviation] See Automatic flight control sys-
tem in *this index*
AFDC See Aid to Families with Dependent
Children in *this index*
AFES [organization] See Terence in *this index*
AFES [organization] See Armed Forces
Emergency Services in *this index*
Affective disorder [psychology] See Mood dis-
order in *this index*
Affel, Herman A. [American engineer]
Cable (Telephone cables) C: 7
Coaxial cable (History) Ci: 740
Affenpinscher [dog] A: 91
Dog picture on D: 274
Affidavit [law] A: 91
Affiliate [communications]
Radio (Stations and networks) R: 90
Television (Commercial stations) T: 114; (The
national networks) T: 114
Affinity [sociology]
Family (Family relationships) F: 21
Affirmation [law]
Oath (Affirmation) O: 639
Affirmative action [employment] A: 91
African Americans (Economic and social
progress) A: 136n; (Disappointments and
controversy) A: 136q
Civil rights (Major changes in the field of civil
rights) Ci: 610
Stevens, John Paul So: 896
Affluent Society, The [book by Galbraith]
Galbraith, John Kenneth G: 9
Afonso I [king of Kongo]
Kongo K: 365
Afforestation
Forestry (Planting) F: 405
AFGE See American Federation of Government
Employees in *this index*
Afghan hound [dog] A: 91
Dog picture on D: 271
Afghan War [1878-1881]
India (British India) I: 130-131
Afghan War [2001-]
Afghanistan (Recent developments) A: 97
Pakistan (Recent developments) P: 92
Afghani, Jamal al-Din al- [Iranian political
leader]
Muslims (Reform and renewal) M: 965
Afghanistan A: 92 with *pictures and maps*
Asia (The spread of Communism) A: 809-810
Bin Laden, Osama B: 308
Bush, George Walker (Bush's administration)
B: 722f-723
Carter, Jimmy (Foreign affairs) C: 257-258
Clinton, Bill (International affairs) Ci: 682f
Cold War Ci: 762
Communism (Communist influence in other
areas) Ci: 894
Gorbachev, Mikhail Sergeyevich (International
policies) G: 272
Guerrilla warfare (History) G: 421 with *picture*
Immigration (Asia) I: 85
International relations (The war against terror-
ism) I: 346
Khyber Pass K: 309 with *maps*
Pashtuns P: 190
Qa'ida, Al-Q: 2
September 11 terrorist attacks S: 310
Taliban T: 19
Turkistan (Afghan Turkistan) T: 501
Union of Soviet Socialist Republics (The col-
lapse of détente) U: 40
United States, History of the (Recent events)
U: 195-196
See also the list of *Related Articles* in the
Afghanistan article
AFL See American Federation of Labor in *this
index*
AFL-CIO See American Federation of Labor and
Congress of Industrial Organizations in *this
index*
Aflatoxin [botany]
Mycotoxin M: 970f
Afonso I (king of Portugal)
Lisbon (History) L: 348
Portugal (Founding the Portuguese nation)
P: 693
Afonso Henriques See Afonso I in *this index*
Africa A: 98 with *pictures and maps*
Agriculture
Agriculture (Africa) A: 154
Art and architecture
Africa (The arts) A: 116 with *pictures*
Bell picture on B: 239
Pottery picture on P: 717
Sculpture (African sculpture) S: 239 with
pictures
Communications and mass media
Africa (Communication) A: 129
Newspaper (In Africa and the Middle East)
N: 386
Television (In Africa) T: 116
Ecology
Bird (Birds of Africa) B: 348 with *pictures*
Education
Library (The Middle East) L: 253
Finance and banking
Bank (Banks throughout the world) B: 91
Health and welfare
AIDS (AIDS around the world) A: 165;
(History of AIDS) A: 165
Medicine (Unequal distribution of medical
care) M: 377
Schweitzer, Albert (His life) S: 190
Sleeping sickness S: 507
Welfare (Welfare around the world) W: 190
History
Africa (History) A: 130 with *pictures*
Amistad Rebellion A: 433
Berlin Conference B: 266
Cold War (Africa) Ci: 766; (The battle for the
neutral nations) Ci: 769
Colonialism (Later colonialism) Ci: 814;
(Effects of colonialism) Ci: 815
Columbus, Christopher (The plan to sail
westward) C: 858
Exploration (The first explorers) E: 440;
(Reaching the tip of Africa) E: 443 with
map; (The exploration of Africa) E: 448
with *map*
Immigration (Africa) I: 85
Kingsley, Mary Henrietta K: 331
Nubia N: 578
Patriotism (Foundations of patriotism) P: 198
Prehistoric people (Prehuman ancestors)
P: 744; (Three species) P: 745
Roman Catholic Church (In Africa) R: 411
Slavery (The Middle Ages) S: 501-502;
(Modern times) S: 502
Union of Soviet Socialist Republics
(Brezhnev comes to power) U: 39
United Nations picture on U: 90
World, History of the (African civilizations)
W: 437 with *picture*; (Imperialism)
W: 445; (The birth of new nations)
W: 448
Language
Africa (Languages) A: 104
Language (Other language families) L: 65-66
with *map*
Mining
Textile (In Africa) T: 218
Natural resources
Conservation (Africa) Ci: 990
Diamond (Where natural diamonds are
found) D: 181
National park (table) N: 42f
Petroleum (Africa) P: 333
Rain forest (Africa) R: 126b with *map*
People
Africa (People) A: 104 with *pictures*
African Americans (The African background)
A: 136c with *pictures and maps*
Arabs A: 584
Clothing *pictures* on Ci: 692
Family (Non-Western families) F: 24 with
picture
Mythology (African mythology) M: 982
Population (World population) P: 672
Races, Human R: 52; (Susceptibility to
genetic diseases) R: 58
Physical features
Africa (The land) A: 119 with *pictures and
maps*
Continental divide Ci: 1022
Great Rift Valley G: 347
Plate tectonics (The rifting of continents)
P: 562 with *diagrams*
Social and cultural life
Dance (Ritual ethnic dances) D: 27
Doll (Doll festivals and customs) D: 287 with
picture
Jazz J: 68
Music (African music) M: 956
Rock music (Rock and society) R: 380
Technology and science
Telephone (The telephone industry) T: 99
Transportation
Railroad (In other countries) R: 113-114
Africa, Star of See Star of Africa in *this index*
Africa Nova [Roman province]
Libya (Early days) L: 267
Africaine, L' [opera by Meyerbeer]
Meyerbeer, Giacomo M: 479
African American History, Museum of [Detroit]
See Museum of African American History in
this index
African American literature A: 136a
American literature (Nonfiction writers) A: 420;
(The Harlem Renaissance) A: 422; (The
black experience) A: 423; (Works by
minority writers) A: 425; (Drama) A: 425
Novel (After World War II) N: 574; (The novel
today) N: 575
African Americans A: 136b with *pictures*
Arts
Ballet (Ballet in the United States) B: 53-54
Country music (The roots of country music)
Ci: 1098a-1098b
Dance (European and American theatrical
dance) D: 31-32
Folk art picture on F: 320
Folk music (American folk music) F: 321-322
Jazz J: 68
Popular music (Popular music before record-
ing) P: 669; (The recording era) P: 671
Rap music R: 141
Rock music (The emergence of rock 'n' roll)
R: 377; (Growing popularity) R: 377;
(Expanding styles and sounds) R: 378-
379
Spiritual So: 795
United States picture on U: 111
See also African American literature in *this
index*
Health and welfare
Prostate cancer P: 829
Sickle cell anemia S: 448
History
Amistad Rebellion A: 433
Buffalo Soldiers B: 680
Civil War (Blacks and the war) Ci: 621
Colonial life in America (The lower class)
Ci: 793
Family (Early Western families in America)
F: 22-23
Freedom (The 1900's) F: 503
Illinois (The early 1900's) I: 75
Latin America (Ancestry) L: 94-95
Liberia L: 228
Lynching L: 535
Mississippi (The mid-1900's) M: 644
North America (People) N: 458-459
Pioneer life in America (Why the pioneers
headed west) P: 476-477
Pittsburgh (People) P: 500b
Reconstruction R: 176 with *picture*
Scalawags S: 169
Scottsboro Case S: 223
Slavery (Slavery in the United States) S: 502
with *picture*
Tuskegee Airmen T: 524
United States, History of the
(Reconstruction) U: 175; (Poverty and
discrimination) U: 191 with *picture*;
(Protests and reform movements)
U: 192 with *picture*

Washington, D.C. (The issue of slavery) W: 86
 Western frontier life in America (The people) W: 235
 World War II (In the United States and Canada) W: 494

Organizations
 Association for the Study of African-American Life and History A: 819
 Black Caucus, Congressional B: 386
 Black Muslims B: 389
 Black Panther Party B: 390
 Congress of Racial Equality Ci: 941
 Freedmen's Bureau F: 500
 Masonry (History) M: 267-268
 Nation of Islam N: 27
 National Association for the Advancement of Colored People N: 29
 National Medical Association N: 40
 Southern Christian Leadership Conference So: 688
 Student Nonviolent Coordinating Committee So: 932
 United Negro College Fund U: 97
 Urban League U: 219

Recreation and sports
 Baseball (Postwar baseball) B: 137 *with pictures*
 Cowboy (The early cowboys) Ci: 1112

Social issues
 Chicago (Ethnic groups) C: 426; (Social problems) C: 427-428
 Civil rights (The struggle for the rights of blacks) Ci: 609
 Dialect D: 180
 Ghetto (Ghettos today) G: 181
 Minority group (African Americans) M: 610
 Name (Black names) N: 5
 New Orleans (Ethnic groups) N: 281
 Racial profiling R: 61
 Riot (Expressive riots) R: 348
 Segregation S: 285; (Racial segregation in the United States) S: 285
 Washington, D.C. (People) W: 81
See also the list of Related Articles in the African Americans article

African Art, National Museum of [Washington, D.C.] *See* National Museum of African Art *in this index*

African Association
 Park, Mungo P: 169

African ball python [snake]
 Snake *picture on* S: 525

African civet [animal]
 Civet Ci: 604 *with picture*

African Democratic Rally Party [political party]
 Burkina Faso (History) B: 707

African Development Bank
 Foreign aid (Regional development programs) F: 385

African elephant
 Animal *pictures on* A: 469, A: 477
 Ear (The ears of animals) E: 12-13 *with picture*
 Elephant E: 226 *with pictures*
 Ivory I: 521

African fish eagle [bird]
 Eagle (Other kinds of eagles) E: 5

African Freedom Day
 May M: 321

African gaboon viper [snake]
 Snake (Vipers) S: 535, *picture on* S: 525

African giant swallowtail [insect]
 Butterfly (Swallowtails) B: 736

African goose [bird]
 Goose (Kinds of geese) G: 270

African hunting dog A: 136s *with picture*
 Mammal *picture on* M: 124

African independent church
 South Africa (Religion) So: 612

African Lakes Corporation
 Malawi (History) M: 98

African lion
 Animal *picture on* A: 477
 Lion L: 340 *with pictures*

African lion hound [dog]
 Rhodesian ridgeback R: 318

African live-bearing toad
 Toad (Kinds of toads) T: 304

African Methodist Episcopal Church [religious group] A: 136t
 Allen, Richard A: 371

African Methodist Episcopal Zion Church [religious group] A: 136t

African National Congress [political organization] A: 136t
 Inkatha Freedom Party I: 273
 Luthuli, Albert John L: 529
 Mandela, Nelson M: 136
 Mbeki, Thabo M: 330
 South Africa (Political parties) So: 609; (The Union of South Africa) So: 618-619
 Xhosa X: 544

African oak [tree]
 Teak T: 71

African ostrich [bird]
 Bird *picture on* B: 329

African pancake tortoise [animal]
 Turtle (Young) T: 521-522

African Party for the Independence of Cape Verde [political party]
 Cape Verde (Government) C: 189-190; (History) C: 190-191

African Party for the Independence of Guinea and Cape Verde [political party]
 Guinea-Bissau (Government) G: 433; (History) G: 434

African Plate [geology]
 Plate tectonics P: 562 *with diagram*

African puff adder [snake]
 Snake *picture on* S: 529

African race [theory]
 Races, Human (The geographical-race theory) R: 53-54

African rock python [snake]
 Python P: 922

African sleeping sickness [disease]
 Sleeping sickness S: 507
 Trypanosome T: 475
 Tsetse fly T: 475

African snail
 Shell (Gastropods) S: 385

African Squadron [U.S. history]
 Perry, Matthew Calbraith P: 294

African teak [tree]
 Teak T: 71

African Union [organization] A: 36T
 Organization of African Unity O: 854

African Unity, Organization of *See* Organization of African Unity *in this index*

African violet [plant] A: 137 *with picture*
 Flower *picture on* F: 292
 Gardening (Some popular house plants) G: 37 *with picture*

African vulture
 Animal *picture on* A: 477

Africans [people]
See also Blacks *in this index*
 South Africa (People) So: 609

Africanus *See* Scipio Africanus, Publius Cornelius *in this index*

Afrifa, Akwasi Amankwa [Ghanaian political leader]
 Ghana (History) G: 179-180

Afrika Korps [World War II]
 Rommel, Erwin R: 450
 World War II (Fighting in Africa) W: 476

Afrikaans language
 Afrikaners A: 137
 South Africa (Languages) So: 609; (Arrival of Europeans) So: 617-618

Afrikaners [people] A: 137
 Concentration camp (Other concentration camps) Ci: 927
 Hertzog, James Barry Munnik H: 217
 Smuts, Jan Christiaan S: 522
 South Africa (People) So: 609; (History) So: 617
 Swaziland (History) So: 1019

Afro [hair style]
 Hairdressing (The 1900's) H: 12-13 *with picture*

Afro-American Symphony [music by Still]
 Still, William Grant So: 900

Afro-Americans *See* African Americans *in this index*

Afro-Asian languages
 Africa (Languages) A: 104-105
 Language (Other language families) L: 65

Afrocentrism [education]
 African Americans (Developments in education) A: 136q

AFS Intercultural Programs [organization] A: 137

AFT *See* American Federation of Teachers *in this index*

Aft [ship]
 Sailing (Hull) S: 23
 Ship (Nautical terms) S: 416

After a Suicide: Young People Speak Up [book by Kuklin]
 Literature for children (Information books) L: 359-360

After the Fall [play by Miller]
 Miller, Arthur M: 553

Afterbirth
 Baby (Birth) B: 6
 Childbirth (The birth process) C: 456
 Placenta P: 505
 Reproduction, Human (The stages of labor) R: 249

Afterbody
 Torpedo (How a torpedo works) T: 340-340b *with diagram*

Afterburner [engine]
 Jet propulsion (Turbojet) J: 111-114

Afterdamp [gas]
 Damp D: 24

Afterimage
 Color (Surprising color-vision effects) Ci: 819 *with picture*

Afterlife *See* Life after death *in this index*

Afternoon of a Faun, The [ballet]
 Nijinsky, Vaslav *picture on* N: 422

"Afternoon of a Faun, The" [poem by Mallarmé]
 Mallarmé, Stéphane M: 110

Aftershock [earthquake]
 Earthquake (Reducing earthquake damage) E: 35-36

Ag [symbol]
 Silver (Properties of silver) S: 464

Aga Khan IV [Ismaili religious leader]
 Islam (Divisions of Islam) I: 466

Agadez [city, Niger]
 Niger (History) N: 409

Against Heresies [book by Irenaeus]
 Irenaeus, Saint I: 429

Against Interpretation [book by Sontag]
 Sontag, Susan So: 594

Against Jovinian [work by St. Jerome]
 Jerome, Saint J: 93

Agamemnon [legendary figure] A: 137
 Achilles A: 26
 Iliad I: 51
 Iphigenia I: 397
 Lesbos L: 205
 Trojan War (The beginning of the war) T: 449

Agamemnon [ship, 1700's]
 Nelson, Horatio (Wounded at Calvi) N: 122

Agapetus I, Saint [popel]
 Pope (table) P: 666

Agapetus II [pope]
 Pope (table) P: 666

Agar [seaweed extract]
 Algae (Red algae) A: 349
 Bacteriology (Studying bacteria) B: 22
 Seaweed (Uses) S: 277

Agaric [fungus]
 Mushroom (Kinds of mushrooms) M: 943 *with pictures*

Agassi, Andre [American tennis player] A: 137
 Tennis (table: United States Open) T: 167

Agassiz, Lake
 Lake Agassiz L: 35

Agassiz, Louis [American naturalist] A: 138
 Geology (Experimental geology) G: 99

Agate [mineral] A: 138 *with picture*
 Chalcedony C: 369
 Gem *picture on* G: 78

Agate Fossil Beds National Monument [Nebraska] A: 138
 National Park System (Areas preserved for natural features) N: 45-46; (table: National monuments) N: 50

Agatho, Saint [pope]
 Pope (table) P: 666

Agave *See* Century plant; Maguey; Sisal *in this index*

Agave weevil [insect]
 Beetle *picture on* B: 218

Agawa Canyon [Ontario]
 Ontario (Places to visit) O: 774

AGB star
 Star (Intermediate-mass stars) So: 848

Agbada [clothing]
 Benin (People) B: 249

Agca, Mehmet Ali [Turkish public figure]
 John Paul II J: 134

Age
 Population (Age) P: 673

Age of Anxiety, The [book by Auden]
 Auden, W. H. A: 881

- Age of Athens**
Greek literature (The Golden Age) G: 377
- Age of consent** [law]
Rape [crime] R: 141
- Age of Dinosaurs** See Mesozoic Era in this index
- Age of Fable, The** [book by Bulfinch]
Bulfinch, Thomas B: 687
- Age of Fishes** See Devonian Period in this index
- Age of Innocence, The** [book by Wharton]
Wharton, Edith W: 265
- Age of Innocence, The** [painting by Reynolds]
Reynolds, Sir Joshua picture on R: 289
- Age of Jackson** [U.S. history]
Jackson, Andrew J: 6
- Age of Jackson, The** [book by Schlesinger]
Schlesinger, Arthur Meier, Jr. S: 177
- Age of Liberty** [Swedish history]
Sweden (The Age of Liberty) So: 1034
- Age of majority**
Minor M: 608
- Age of Mammals** See Cenozoic Era in this index
- Age of Pericles** See Golden Age of Athens in this index
- Age of print**
McLuhan, Marshall M: 343
- Age of Rationalism** See Age of Reason in this index
- Age of Reason** [book by Paine]
Paine, Thomas (French revolutionary) P: 22-23
- Age of Reason** [European history] A: 138
Diderot, Denis D: 195
Education (The Age of Reason) E: 101
Europe (The Age of Reason) E: 412
France (Literature) F: 461-462
Freedom (During the Age of Reason) F: 503
Freedom of speech (History) F: 507
French literature (The Age of Reason) F: 520
Invention (The Age of Reason) I: 360
Italian literature (The baroque period and the Age of Reason) I: 494
Philosophes P: 382
Philosophy (Modern philosophy) P: 387-389
Roman Catholic Church (The Age of Reason) R: 409
Rousseau, Jean-Jacques R: 492
Science (The Age of Reason) S: 199
Women's movements (From the Renaissance to the 1800's) W: 384
- Age of Roosevelt, The** [book by Schlesinger]
Schlesinger, Arthur Meier, Jr. S: 177
- Age of Uncertainty, The** [book by Galbraith]
Galbraith, John Kenneth G: 9
- Age regression** [psychology]
Hypnotism (Hypnotic phenomena) H: 478 with pictures
- Age-specific birth rate** [statistics]
Birth and death rates B: 377
- Age spots**
Skin (Skin color) S: 490
- Age Unlimited** [boat]
Raft R: 102
- Aged** See Geriatrics; Old age in this index
- Agee, James** [American author] A: 140
- Ageism**
Old age (Attitudes toward old age) O: 738-739
- Agency, Advertising** See Advertising agency in this index
- Agency, Independent** [government] See Independent agency in this index
- Agency for International Development** [U.S.] A: 140
Alliance for Progress A: 374
Food for Peace F: 340
Foreign aid (Economic development and mutual security) F: 383-384
Library (International library programs) L: 254
State, Department of So: 859; (Since World War II) So: 861
- Agency for Toxic Substances and Disease Registry**
Public Health Service P: 857
- Agenda**
Parliamentary procedure (table) P: 176
- Agenor** [Greek mythology]
Cadmus C: 12
Europa E: 379
- Agent** [law] A: 140
Partnership (Rights and responsibilities of partners) P: 188
- Agent, County**
County agricultural extension agent Ci: 1099
- Agent, Insurance** See Insurance agent in this index
- Agent, Literary** See Literary agent in this index
- Agent, Theatrical**
Motion picture (Developing the story) M: 848-849
- Agent Orange** [herbicide] A: 140
Dioxin D: 215
Herbicide (Hazards of herbicides) H: 198
Vietnam War (Growing protest) V: 376
- Ageratum** [plant] A: 141 with picture
- Agglomerate** [geology]
Rock (Extrusive rock) R: 371
- Aggregate** [geology]
Cement and concrete (Materials) C: 343
Rock R: 371
- Aggregate culture**
Hydroponics (Methods of hydroponics) H: 472 with diagram
- Aggregate fruit**
Fruit (Compound fruits) F: 548; pictures on F: 547
Plant (Seeds) P: 531-532
- Aggregation** [zoology]
Squirrel (Territories and groups) So: 816
- Aggregation, Signs of**
Algebra (Symbols in algebra) A: 354
- Aggression** [international relations]
Nonaggression pact N: 452
- Aggression** [behavior] A: 141
Adler, Alfred A: 58
Child (Aggressive and antisocial behavior) C: 452
Dominance D: 301
- Agile wallaby** [mammal]
Kangaroo (Other macropods) K: 215
- Agility trial**
Dog (Dog competitions) D: 280-281
- Agincourt, Battle of** [1415] A: 141
- Archery** (History) A: 603-604
England (The Hundred Years' War) E: 306
Feudalism (The decline of feudalism) F: 83
Henry V [of England] H: 187
War (Technological advancements) W: 26
- Aging** A: 141
See also Geriatrics; Old age in this index
Deafness (Aging) D: 57
Disease D: 226; (Diseases associated with aging) D: 230
Middle age M: 521
Progeria P: 811
Skin (Skin color) S: 490
- Aging** [food] See Ripening in this index
- Agitato**
Music (table) M: 954
- Agitator machine**
Washing machine W: 45 with diagrams
- Agitprop**
Propaganda (History) P: 824-825
- Aglaia** [Greek mythology]
Graces G: 296 with picture
- AGM** [missile] See Air-to-ground missile in this index
- Agnaatha**
Fish (A classification of fish) F: 172
- Agnes Grey** [book by Brontë]
Brontë sisters (Their works) B: 637
- Agnew, Spiro Theodore** [American political leader] A: 142 with portrait
Ford, Gerald Rudolph (The resignation of Agnew) F: 376
Maryland (table) M: 255; (The mid-1900's) M: 259
Nixon, Richard Milhous (The 1968 election) N: 432 with picture; (Events at home) N: 435-436
United States, History of the (Political scandals) U: 194
Vice President of the United States (Growth of the shme presidency) V: 353
- Agnon, Shmuel Yosef** [Israeli author] A: 143
Hebrew literature (Modern Hebrew literature) H: 162-163
- Agnosticism** [religion] A: 143
See also Atheism in this index
God (Ideas about God) G: 244
Huxley, Thomas Henry H: 459
Ingersoll, Robert Green I: 270
- Agon** [ballet]
Stravinsky, Igor (The 12-tone works) So: 923
- Agony** [painting by Gorky]
Gorky, Arshile picture on G: 277
- Agony in the Garden, The** [painting by Mantegna]
Jesus Christ picture on J: 107
- Agora** [ancient Athens]
Athens (Other buildings) A: 857
Greece, Ancient (The land) G: 366 with picture
- Agoraphobia** [psychology]
Mental illness (Anxiety disorders) M: 405-406
Panic disorder P: 131
Phobia P: 392
- Agouti** [animal] A: 143 with picture
- Agouti coat**
Cat (Short-haired breeds) C: 290
- Agra** [city, India] A: 143
- Agaphia** [disorder]
Aphasia A: 565
- Agrarian Democratic Party**
Moldova (History) M: 690a-690b
- Agrarian law**
Land reform L: 57
- Agreement** [grammar]
Language (Linguistic terms) L: 63
Pronoun P: 819
- Agreement** [law]
Contract Ci: 1023
- Agri Dagi** [mountain, Turkey] See Mount Ararat in this index
- Agribusiness** A: 143
FFA F: 84
- Agricola** [book by Tacitus]
Biography (Early biographies) B: 312-313
- Agricola, Georgius** [German geologist]
Geology (The Renaissance) G: 98
- Agricola, Gnaeus Julius** [Roman general] A: 144
Scotland (The Roman invasion) S: 219
- Agricultural Adjustment Act** [1933]
Parity (economics) P: 167
- Agricultural Adjustment Administration**
New Deal (Helping the farmers) N: 201
- Agricultural Credit Act** [1987]
Farm Credit System (History) F: 46
- Agricultural Credit Association**
Farm Credit System (Organization) F: 45
- Agricultural economist**
Economics (Careers in economics) E: 65
- Agricultural education** A: 144 with picture
Bailey, Liberty Hyde B: 31
FFA F: 84
4-H F: 433 with pictures
- Agricultural engineering** [career]
Engineering (Other specialized fields) E: 287
- Agricultural experiment station** A: 145
- Agricultural extension work**
County agricultural extension agent Ci: 1099
- Agricultural fair**
Fair (Agricultural fairs) F: 7
- Agricultural inspector**
Careers (Farming, fishing, and forestry) C: 222
- Agricultural Labor Relations Act** [1974]
Huerta, Dolores Fernandez H: 408
- Agricultural Library, National**
Library (United States government libraries) L: 248 with picture
- Agricultural machinery** See Farm and farming in this index
- Agricultural Marketing Act** [1929]
Hoover, Herbert Clark (Champion of prosperity) H: 329
- Agricultural parity** [economics]
Parity (economics) P: 167
- Agricultural research**
Agricultural experiment station A: 145
- Agricultural revolution**
Agriculture (The Agricultural Revolution) A: 157
Invention (The Age of Reason) I: 360-361; (The Industrial Revolution) I: 361-362
- Agricultural scientist**
Careers (Life, physical, and social sciences) C: 225
- Agricultural spray plane**
Airplane (Special-purpose planes) A: 212 with picture
- Agricultural Stabilization and Conservation Service** [U.S.] A: 145
- Agriculture** A: 146 with pictures and maps
See also Farm and farming in this index
Agricultural education A: 144
Agriculture, Department of A: 161
Air pollution (Agriculture) A: 199
Civilization (How civilizations develop) Ci: 636
Clay Ci: 658
Environmental pollution (Agriculture) E: 337
Food supply (Limited agricultural resources) F: 348
Human being (Agricultural societies) H: 415

50 Agriculture, Census of

- Invention (Prehistoric times) I: 357; (The early and middle 1900's) I: 363
 Phenology P: 356
 Physiocrats P: 444
 Prehistoric people (The first human beings) P: 745; (The rise of agriculture) P: 751
 State government (Agriculture) So: 865
 Technology (Agriculture and civilization) T: 74
 Truck (Agricultural uses) T: 457
 Water pollution (Agricultural chemicals and wastes) W: 138
See also the list of Related articles in the Agriculture article
- Agriculture, Census of**
 Census (Kinds of censuses) C: 346-347
- Agriculture, Department of [U.S.] A: 161 with picture**
 Agricultural education (History) A: 145
 Consumerism (The right to information) Ci: 1018
 Cooperative Extension System Ci: 1037
 Farm and farming (Obtaining management assistance) F: 43-44
 4-H (Organization) F: 435
 Library (United States government libraries) L: 248
 Livestock (Marketing livestock) L: 398
 Meat (How to select meat) M: 347
 Meat packing (U.S. government inspection) M: 352
 Washington, D.C. map on W: 76
- Agriculture, Secretary of [office]**
 Agriculture, Department of A: 161
 Flag picture on F: 211
- Agriculture and agri-food, Minister of [office]**
 Canada, Government of (The Cabinet) C: 132; diagram on C: 137
- Agriculture Canada [education program]**
 Agricultural education (In other countries) A: 145
- Agrionomy [botany] A: 162**
- Agrippa, Marcus [Roman general] A: 162**
 Actium, Battle of A: 30
 Aqueduct (Ancient aqueducts) A: 581
 Augustus (Rise to power) A: 889
- Agrippina the Younger [mother of Nero] A: 162**
 Claudius Ci: 657
 Nero N: 130
- Agrobacterium tumefaciens [bacteria]**
 Gall G: 13
- Agroforestry**
 Forestry (Community forestry) F: 406
- Agromony [agriculture] A: 162**
 Botany (Uses of plants) B: 508
 Farm and farming (Modern crop production) F: 33 with pictures
- Agua Caliente Indians**
 Palm Springs P: 109
- Agua de panela [drink]**
 Colombia (Food and drink) Ci: 781
- Aguardiente [drink]**
 Latin America (Food and drink) L: 98-99
- Ague [disease]**
 Colonial life in America (Health and medicine) Ci: 809
- Aguinardo, Emilio [Filipino patriot] A: 163**
 Philippines (Revolt against the Spaniards) P: 379-380; (The Spanish-American War) P: 380
- Aguirre Cerda, Pedro [Chilean political leader]**
 Chile (Years of progress) C: 469
- Aguiyi-Ironsi, Johnson [Nigerian general]**
 Nigeria (Civil war) N: 418
- Agustin I [emperor of Mexico]**
 Iturbide, Agustin de I: 520
- Agustini, Delmira [Uruguayan poet]**
 Latin-American literature (The early 1900's) L: 113
- Ah, Wilderness! [play by O'Neill]**
 O'Neill, Eugene Gladstone (His life) O: 762
- Ahab [king of ancient Israel]**
 Elijah E: 236
- Ahab [literary figure]**
 Melville, Herman (His literary career) M: 390
- Ahad Ha-am [Hebrew poet]**
 Hebrew literature (Modern Hebrew literature) H: 162-163
- Ahaggar Mountains [Algeria]**
 Algeria (The Sahara) A: 363
 Sahara (Land and climate) S: 20
- Ahasuerus [king of Persia]**
 Esther, Book of E: 361
 Purim P: 909
- Ahasuerus [legendary figure]**
 Wandering Jew W: 23
- Ahern, Bertie [Irish political leader]**
 Ireland (table) I: 428
- Ahern, James [American dramatist]**
 Herne, James A. H: 212
- Ahimsa [religion]**
 India (Hinduism) I: 116
- Ahmad Ibn Majid [Arab sailor]**
 Exploration (The voyage around Africa) E: 444
- Ahmad Shah I [sultan of Gujarat]**
 Ahmadabad A: 163
- Ahmabad [city, India] A: 163**
- Ahmadu Bello University**
 Nigeria (Education) N: 413-414
- Ahmed Ibn Tulun mosque [Cairo, Egypt]**
 Cairo (The city) C: 15-16
- Ahmes [Egyptian mathematician]**
 Algebra (History) A: 359
- Ahtisaari, Martti [Finnish political leader]**
 Finland (The late 1900's) F: 118
- Ahu [archaeology]**
 Easter Island E: 45
- Ahura Mazda [Persian god]**
 Persia, Ancient (Religion) P: 297 with picture; picture on P: 298
- Zoroastrianism (Beliefs) Z: 611 with picture**
- Ai [animal]**
 Sloth S: 508a
- AI [science] See Artificial intelligence in this index**
- AIA [organization]**
 Architecture (Education and training) A: 634
- AID See Agency for International Development in this index**
- Aid [riding]**
 Horse (To control a horse) H: 353
- Aid to Families with Dependent Children [U.S.]**
 Welfare (Since 1960) W: 191-192
- Aida [opera by Verdi]**
 Opera (Giuseppe Verdi) O: 798; (Aida) O: 801; picture on O: 790
- Aidid, Mohammed Farah [Somali political leader]**
 Somalia (History) So: 589-590
- AIDS [disorder] A: 163 with pictures**
 Adolescent (Risk taking) A: 64
 Blood (Infections) B: 414
 Blood transfusion (Risks of transfusion) B: 417
 Disease (table) D: 226; (Viral diseases) D: 227; picture on D: 225
 Epidemic E: 343
 Evolution (Direct observation of evolution) E: 431
 Fungal disease (In people) F: 558
 Hemophilia (Treatment) H: 183
 Herpes, Genital H: 214
 Homosexuality (Attitudes toward homosexuality) H: 307
 Immune system (Immunodeficiency diseases) I: 88c with picture; (Further breakthroughs) I: 88d
 Medical ethics M: 361
 Medicine (Unequal distribution of medical care) M: 377
 Pneumonia P: 586
 Prostitution P: 830
 Sexually transmitted disease S: 338b
 South Africa (Recent developments) So: 621 with picture
 Virus (Virus diseases in human beings) V: 426-427
- AIDS quilt [memorial]**
 AIDS (Public awareness) A: 164b with picture
- Aiga [family]**
 Samoa (People) S: 80a
- Aigrette [feather]**
 Egret E: 119
- Aiguille du Midi [mountain, Europe]**
 Mont Blanc M: 741
- Aiken, Conrad Potter [American poet] A: 165**
- Aiken, George David [American political leader]**
 Vermont (table) V: 333
- Aiken, George L. [American dramatist]**
 Stowe, Harriet Beecher So: 916
- Aiken, Howard [American educator]**
 Computer (The first electronic computers) Ci: 924b
- Aiken, William [American political leader]**
 South Carolina (table) So: 658
- Aikido [sport]**
 Martial arts M: 234
- Ailanthus [tree] A: 166**
 Tree pictures on T: 420
- Aileron [airplane]**
- Airplane (The wing) A: 213 with picture; (Basic movements and controls) A: 222-223 with diagrams**
- Glider (The wings) G: 228**
- Ailey, Alvin [American choreographer] A: 166**
- Dance (European and American theatrical dance) D: 31-32**
- Ailurophobia [psychology]**
 Phobia P: 392
- AIM See American Indian Movement in this index**
- AIM [weapon] See Air interceptor missile in this index**
- Aimag [political province]**
 Mongolia (Government) M: 722
- Ainslie, Lake**
 Nova Scotia (Rivers and lakes) N: 562
- Ainsworth, William [British author]**
 Turpin, Dick T: 519
- Aintree Race Course [Liverpool]**
 Grand National G: 308
- Ainu [people, Japan] A: 166**
 Japan (Ancestry) J: 35 with picture
 Kuril Islands K: 393
 Sakhalin S: 58
- Air A: 166 with pictures**
See also Climate; Wind in this index
 Aerodynamics A: 85
 Air pollution A: 197 with pictures
 Anaximenes A: 449
 Empedocles E: 261
 Jet stream J: 115
 Soil (Air) So: 573
 Sound (table) S: 601
 Waves W: 150
- Air, Liquid**
 Liquid air L: 346 with diagram
- Air and Space Museum, National See National Air and Space Museum in this index**
- Air attaché [military officer]**
 Attaché A: 878
- Air bag [safety device] A: 175 with picture**
 Nader, Ralph N: 2
- Air battery [electricity]**
 Battery (Primary batteries) B: 168-169
- Air bladder [fish]**
 Fish (Special organs) F: 163 with diagram
 Sound (Animal sounds) So: 598
- Air-blast circuit breaker [electricity]**
 Circuit breaker Ci: 558
- Air-blast freezing**
 Food, Frozen (Commercial methods of quick freezing) F: 338
 Food preservation (Freezing) F: 342
- Air brake**
 Brake (Air brakes) B: 562
 Locomotive (Diesel locomotives) L: 414-415
 Railroad (Rolling stock) R: 107
 Westinghouse, George W: 242
- Air Canada [airline]**
 Canada (Air travel) C: 126
- Air carrier airport See Commercial service airport in this index**
- Air chamber**
 Plumbing diagram on P: 578
- Air circulation**
 Air conditioning (Circulating the air) A: 179
- Air cleaner A: 175**
 Air conditioning (Cleaning the air) A: 177
 Deodorizer D: 148
 Gasoline engine (Fuel system) G: 65
- Air Combat Command**
 Air Force, United States (Combat commands) A: 192
 Langley Air Force Base L: 61
 Strategic Air Command So: 919
- Air Command**
 Canada, Armed Forces of (Organization) C: 128
- Air Commerce, Bureau of [U.S.]**
 Aviation (Aviation progress) A: 988-989
- Air Commerce Act [1926]**
 Aviation (Aviation progress) A: 988-989
- Air compressor A: 176**
 Brake (Air brakes) B: 562
 Jet propulsion (Turbojet) J: 111
 Pneumatic tool P: 586
 Turbine (Gas turbine systems) T: 497
- Air-Conditioned Nightmare, The [book by Miller]**
 Miller, Henry M: 554
- Air conditioning A: 176 with diagrams**
 Air cleaner (Uses) A: 175
 Filter F: 103

- Heat pipe H: 156
House (Heating and air conditioning) H: 383
Skyscraper (Service areas) S: 498
- Air-conduction aid**
Hearing aid (Types of hearing aids) H: 130 *with picture*
- Air-cooled engine**
Gasoline engine (Cooling) G: 64
- Air-core transformer** [electricity]
Transformer T: 372
- Air curing**
Tobacco (Kinds of tobacco) T: 305-306 *with picture*; (Curing tobacco) T: 306
- Air current**
Glider G: 228; *diagram* on G: 229
- Air cushion vehicle** A: 181 *with pictures*
Amphibious warfare (History of amphibious warfare) A: 442-443
Ducted propeller D: 377
Ship (Other passenger vessels) S: 417 *with picture*
Transportation (Water transportation) T: 384-385
- Air-data system** [aviation]
Automatic flight control system (How an AFCS works) A: 944
- Air defense**
Radar (In the military) R: 65
- Air drying** [industrial process]
Lumber (Seasoning lumber) L: 519
- Air embolism** [disorder]
Diving, Underwater (Dangers of underwater diving) D: 246
- Air express** [mail]
Airmail A: 207
- Air force** A: 182 *with pictures*
Flag (Military flags) F: 195-208 *with picture*
See also the list of Related Articles in the Air force article
- Air Force, Department of the** [U.S.] A: 187
Air Force, United States (The Department of the Air Force) A: 192
- Air Force, Royal Canadian** [Canadian history]
Canada, Armed Forces of (Organization) C: 128
- Air Force, United States** A: 188 *with pictures*
Air force (The United States Air Force) A: 184
Army, United States (The early 1900's) A: 739
Defense, Department of D: 87
Flag *picture* on F: 211
Medals, decorations, and orders (Military awards) M: 355 *with pictures*
National Guard N: 37
NORAD N: 453
Rand Corporation R: 136
Rank, Military R: 139
Reserve Officers Training Corps (Air Force ROTC) R: 258
United States Air Force Academy U: 197 *with pictures*
- Air Force Academy, United States** *See* United States Air Force Academy *in this index*
- Air Force Cross**
Medals, decorations, and orders (table) M: 357 *with picture*
- Air Force Materiel Command**
Air Force, United States (Support commands) A: 193
- Air Force Museum, United States**
Ohio (Museums) O: 685
- Air Force Reserve** [U.S.]
Air Force, United States (Air Force reserves) A: 194
- Air Force Reserve Officers Training Corps**
Reserve Officers Training Corps (Air Force ROTC) R: 258
- Air Force Special Operations Command**
Air Force, United States (Combat commands) A: 192-193
- Air-independent system**
Submarine (The power plant) So: 941
- Air interceptor missile** [weapon]
Air Force, United States (Missiles) A: 191
Guided missile (Air-to-air missiles) G: 426
- Air-launched missile**
Air force (Missiles) A: 183
Air Force, United States (Missiles) A: 191
- Air layering** [botany]
Plant (Layering) P: 535
- Air letter**
Postal Service, United States (Stamps and other mailing materials) P: 699
- Air Line Pilots Association** A: 196
- Air lock** A: 196 *with diagram*
- Space exploration (Leaving the spacecraft) So: 704
- Air mail** *See* Airmail *in this index*
- Air marshal** [title]
Marshal M: 228
- Air mass**
Air turbulence A: 201
Weather (table: Weather terms) W: 157; (Synoptic-scale systems) W: 159 *with diagram*
- Air Medal**
Medals, decorations, and orders (table) M: 357
- Air Mobility Command**
Air Force, United States (Support commands) A: 193
- Air Mountains** [Niger]
Niger (Land and climate) N: 408-409
- Air National Guard**
Air Force, United States (Air Force reserves) A: 194
National Guard N: 37
- Air Patrol, Civil** [U.S.] *See* Civil Air Patrol *in this index*
- Air piracy** *See* Skyjacking *in this index*
- Air plant** *See* Epiphyte *in this index*
- Air pollution** A: 197 *with pictures*
See also Environmental pollution *in this index*
Air cleaner A: 175
Asbestos (Hazards of asbestos) A: 765
Automobile (Environmental impact) A: 949
Catalytic converter C: 298
City Ci: 574; (Physical problems) Ci: 591
Coal (Coal as a fuel) Ci: 719; (Coal research) Ci: 730-731
Disease (Environmental and occupational diseases) D: 230
Dust (Influence on human health) D: 390
Environmental pollution (Types of pollution) E: 331 *with picture*
Gasoline (History) G: 62
Gasoline engine (Air pollution controls) G: 66
Incinerator I: 100
Iron and steel *picture* on I: 451
Los Angeles (Recent developments) L: 470
Mexico (City life) M: 451-454
Mexico City (Environmental problems) M: 477
Minnesota (Recent developments) M: 606
National park (Changes in the environment) N: 42h
Ozone O: 893
Persian Gulf War *picture* on P: 300d
Smoke S: 520
Sulfur dioxide So: 967
United Kingdom (Climate) U: 61-62
Virginia (Pollution problems) V: 422
Weather (How people affect the weather) W: 170
- Air pressure**
See also Atmospheric pressure *in this index*
Tire (History) T: 298
See also the list of Related Articles in the Air article
- Air pump** *See* Pump *in this index*
- Air Quality Act** [1967]
Air pollution (In the United States) A: 199
- Air quality standards**
Air pollution (Control of air pollution) A: 199
- Air resistance**
Air (Air resistance) A: 169 *with diagrams*
- Air rights** [real estate] A: 200 *with picture*
- Air route**
Aviation (Aviation agencies) A: 985-986
- Air sac** [anatomy]
See also Alveolus *in this index*
Bird (The respiratory system) B: 365
Human body (Air passages) H: 420-421
- Air speed**
Airplane (Measuring flying speed) A: 225
- Air-speed indicator** [instrument]
Airplane (Measuring flying speed) A: 225
- Air staff** [military]
Air Force, United States (Organization of the Air Force) A: 192
- Air taxi**
Airplane (General aviation planes) A: 211
Aviation (General aviation activities) A: 984 *with picture*
- Air terminal** *See* Airport *in this index*
- Air thermometer**
Thermometer (Thermal expansion thermometers) T: 254
- Air-to-air missile** [weapon]
Guided missile (Air-to-air missiles) G: 426; *picture* on G: 425
- Air-to-ground missile**
Air Force, United States (Missiles) A: 191
- Air-to-surface missile** [weapon]
Guided missile (Air-to-surface missiles) G: 426
- Air traffic control**
Airplane (Safety) A: 227
Airport (The control tower) A: 245; (Air traffic control) A: 246; *picture* on A: 243
Careers (Transportation) C: 235
Radar (In aviation) R: 65 *with picture*
- Air traffic control center**
Airport (The control tower) A: 245
Aviation (Aviation agencies) A: 985-986
Radar (In aviation) R: 64-65 *with picture*
- Air train**
Air cushion vehicle (History) A: 181
- Air Training Command**
Air Force, United States (Support commands) A: 193
- Air Transport Association, International** *See* International Air Transport Association *in this index*
- Air Transport Association of America** A: 200
- Air travel**
Aviation A: 983
Transportation (The beginnings of modern transportation) T: 390-391 *with pictures*
- Air turbulence** A: 200
- Air University**
Air Force, United States (Support commands) A: 193
- Air washer**
Air conditioning (Cleaning the air) A: 177-178
- Airborne troops** A: 201 *with picture*
Army (Armies in the two world wars) A: 728
Parachute (Uses of parachutes) P: 142
- Airborne Warning and Control System** [defense]
Air Force, United States (Defense and deterrence) A: 190; *picture* on A: 193
- Airbrush** [painting] A: 201 *with picture*
- Airbus** [aircraft]
Aviation (Aircraft manufacturing) A: 984
- Airbus Industrie** [program]
Aviation (Internationalization) A: 991
- Aircraft**
See also Airplane *in this index*
Aircraft carrier A: 206
Airship A: 250 *with pictures*
Autogiro A: 942 *with picture*
Automatic flight control system A: 944
Aviation (Aircraft manufacturing) A: 984
Balloons B: 57 *with pictures*
Blimp B: 400
Engineering (Aerospace engineering) E: 284
Glider G: 228 *with pictures*
Guided missile G: 423 *with pictures*
Helicopter H: 169 *with pictures*
Ornithopter O: 858
Rocket R: 384
Seattle (Economic expansion) S: 276
Test pilot T: 181
V/STOL V: 452
- Aircraft, Military** A: 201 *with pictures*
Air force A: 182 *with pictures*
Air Force, United States (Planes and weapons of the Air Force) A: 190 *with pictures*
Airplane (Military planes) A: 212; *picture* on A: 211
Airport (Military airfields) A: 243
Automation (Uses of automation) A: 944
Aviation (Aircraft manufacturing) A: 984; (History of the aviation industry) A: 986-987
Bomber B: 453 *with pictures*
Guided missile G: 423 *with pictures*
Helicopter (For military missions) H: 170 *with pictures*
Jet propulsion (Turbojet) J: 111-114 *with pictures*
Korean War (The air war) K: 382
Marine Corps, United States (Marine aviation) M: 208
Navy (Ships and aircraft) N: 77
World War I (The war in the air) W: 460 *with picture*
World War II (The air war) W: 481 *with picture*
- Aircraft carrier** [ship] A: 206 *with pictures*
Navy (Aircraft carriers) N: 78
Navy, United States (Combat ships) N: 84
Warship (Aircraft carriers) W: 39; *picture* on W: 43
- Aircraft instruments**
Airplane (The controls and instruments) A: 217 *with picture*; (Basic movements and controls) A: 222-223 *with picture*

Aircraft model

Airplane, Model A: 240 *with pictures*

Aire, River [England]

Leeds L: 180

Airedale terrier [dog] A: 207

Dog picture on D: 272

Airfoil

Aerodynamics (Lift) A: 85

Airframe

Airplane (The parts of an airplane) A: 213

Airlift

Air force (Transport missions) A: 183

Airline

Airport (Commercial service airports) A: 243

Aviation (Airline operations) A: 984; (The first airlines) A: 988; (Aviation progress)

A: 988; (The industry comes of age)

A: 989; (A new age of flight) A: 990; (Jobs with airlines and airports) A: 992

National Mediation Board N: 40

Railway Labor Act R: 122

Transportation (Intercity service) T: 394, (Overseas service) T: 384

Airline Deregulation Act [1978]

Aviation (Deregulation of the U.S. airlines) A: 991

Public utility (History) P: 867

Airline hijacking See Skyjacking in this index**Airline stewardess** See Flight attendant in this index**Airline transport pilot license**

Aviation (Jobs with airlines and airports)

A: 992

Airliner

Airplane (Commercial transport planes) A: 210 *with picture; picture on A: 208*

Airmail A: 207

Airplane (The golden age) A: 235

Aviation (Aviation progress) A: 988 *with picture*

Postal Service, United States (Technological advancements) P: 701 *with picture*

Airman [rank]

Rank, Military (table) R: 140

Airman's Medal

Medals, decorations, and orders (table) M: 357

Airplane A: 208 *with pictures*

Aerodynamics A: 85

Air (Air resistance) A: 169

Air conditioning (Air conditioners for vehicles) A: 179

Air turbulence A: 200

Aircraft carrier A: 206

Airport A: 242 *with pictures*

Army (Armies in the two world wars) A: 728

Aviation A: 983 *with pictures*

Bomber B: 453 *with pictures*

Fourth dimension F: 438

Inertial guidance I: 263

Invention (The inventive process) I: 355-357

Map (Navigation maps) M: 177-178,

(Mapmaking and modern technology) M: 185

Propeller (The airplane propeller) P: 826 *with picture*

Radar (In aviation) R: 64-65

Rocket (Rocket-powered airplanes) R: 391

Ship (Ocean liners) S: 415

Signaling (Aircraft signaling) S: 454

Sikorsky, Igor Ivanovich S: 456 *with picture*

Starter (Airplane starters) So: 858

Terrorism (Security procedures) T: 179

Test pilot T: 181

Transportation (Air transportation) T: 385, (The beginnings of modern transportation) T: 390-391 *with pictures*

United States picture on U: 132

Weather (Weather balloons, airplanes, and ships) W: 163

Wind shear W: 332

Wind tunnel W: 333

Wright brothers W: 508 *with picture*

See also the list of Related Articles in the Airplane article

Airplane, Model A: 240 *with pictures*

Remote control (Applications of remote control) R: 230

Airplane pilot

Airplane (Learning to fly) A: 226; (Air navigation) A: 226

Aviation (Careers in aviation) A: 992

Airplane propeller

Airplane (General aviation planes) A: 211 *with*

picture; (Propellers) A: 217 with pictures,

(Drag and thrust) A: 221 *with diagram*

Propeller (The airplane propeller) P: 826 *with picture*

Airport A: 242 *with pictures*

Aviation (Airport operations) A: 985 *with picture; (Jobs with airlines and airports)*

A: 992

Beacon B: 179

Fire department (Special fire vehicles) F: 127

See also the Transportation sections in specific city, country, state, and province articles

Airport crash truck

Fire Department (Special fire vehicles) F: 127

Airport master plan

Airport (Airport development) A: 248

Airport security

Airport (Airport security) A: 247; *picture on*

A: 248

September 11 terrorist attacks (The aftermath) S: 310-310a

Terrorism (Security procedures) T: 179

Airport Surveillance Radar

Airport (Air traffic control) A: 246-247

Airpower [military]

Mitchell, Billy M: 677

Airpower theory [warfare]

Nuclear weapon (Nuclear weapons in military planning) N: 599-600

Aircrew See Airplane propeller in this index**Airship** A: 250 *with pictures*

Air Force, United States (World War I) A: 194

Airplane (First human flights) A: 230

Balloon B: 57

Blimp B: 400

Airsickness

Motion sickness M: 874

Airways

Aviation (Aviation agencies) A: 985-986

Airy, Sir George B. [British astronomer]

Neptune (Discovery) N: 129-130

Aisha [wife of Muhammad]

Muslims (The early caliphs) M: 964a

Aishiya [organization]

Muslims (Reform and renewal) M: 965

Aisne River [France] A: 253**Aites** [legendary figure]

Medea M: 360

Aitken, William Maxwell See Beaverbrook,

Lord in this index

Aitutaki [island, Pacific]

Cook Islands Ci: 1026

Aitys [competition]

Kazakhstan (People) K: 250a-250b

Aiun, El See El Aaiun in this index**Aix-la-Chapelle** [Germany] See Aachen in this index**Aix-la-Chapelle, Congress of** [1818] A: 253

Ambassador A: 404

Aix-la-Chapelle, Treaty of [1748]

French and Indian wars (King George's War)

F: 512

Louisbourg L: 477

Maria Theresa M: 199

Nova Scotia (The struggle in Acadia) N: 568

Succession wars (The War of the Austrian

Succession) So: 950

Ajaccio [city, Corsica]

Corsica (Size and description) Ci: 1073 *with map*

Ajanta [India]

India (Architecture and sculpture) I: 119, (The

golden age) I: 129

Painting (Indian painting) P: 44

Ajax [play by Sophocles]

Sophocles So: 595

Ajax the Greater [legendary figure] A: 253**Ajax the Lesser** [legendary figure] A: 253**Ajeemah and His Son** [book by Berry]

Literature for children (Fiction) L: 358

Ajegaq [game]

Inuit (Recreation) I: 354f

Ajiaco [food]

Colombia (Food and drink) Ci: 781

Ajman [state]

United Arab Emirates U: 43

Ak-Sar-Ben, Knights of [organization] See

Knights of Ak-Sar-Ben in this index

Akaka Falls [Hawaii]

Hawaii (Places to visit) H: 98

Akan [people]

Côte d'Ivoire (People) Ci: 1084a

Akenyuru River [Burundi-Rwanda]

Rwanda (Land) R: 571 *with map*

Akashi Kaikyo Bridge [Japan]

Bridge (table: Suspension) B: 603

Akbar [Mughal emperor] A: 253

India (The Mughal Empire) I: 129

Mughal Empire M: 910

Muslims (The Mughal Empire) M: 964d

AKC [organization] See American Kennel Club in this index**Akela**

Boy Scouts (Cub Scouting) B: 536-537

À Kempis, Thomas [German author]

Thomas à Kempis T: 262

Akerlof, George Arthur [American economist]

Nobel Prizes (Economics: 2001) N: 449

Akerman, Amos T. [American government official]

Grant, Ulysses S. (table) G: 316

Justice, Department of (table) J: 203

Akhenaten [king of ancient Egypt] A: 253 *with picture*

Egypt, Ancient (The New Kingdom) E: 143

with picture

Mythology (The influence of Egyptian mythology) M: 977

Nefertiti N: 119

Sun worship picture on So: 988

Tutankhamen T: 525

Akhetaten [ancient city]

Akhenaten A: 253

Egypt, Ancient (The New Kingdom) E: 143

Akhmatova, Anna [Soviet author]

Russian literature (World War II) R: 564

Akhmatov [opera by Glass]

Glass, Philip G: 224

Akialos [bird]

Hawaiian honeycreeper picture on H: 110

Akihabara district

Tokyo (Other places of interest) T: 317

Akihito [emperor of Japan] A: 253 *with portrait*

Hirohito (After the war) H: 242

Japan (Postwar boom) J: 58-59

Mikado M: 539

Akimiski [island, Hudson Bay]

James Bay J: 28

Akita [dog] A: 253 *with picture***Akiva ben Joseph** [Jewish scholar] A: 254

Jews (Roman rule) J: 122

Saint (Non-Christian saints) S: 29

Akkad [ancient region]

Sargon of Akkad S: 126

Akkadian [language]

Babylonia (Language and literature) B: 13

Akkadians [ancient people]

Babylonia (The Semites) B: 14

Mesopotamia M: 422

World, History of the (The Tigris-Euphrates

Valley) W: 422-424

Aklavik [Northwest Territories]

Inuvik I: 354j

Akmola [city, Kazakhstan] See Astana in this index**Akmolinsk** [former name] See Astana in this index**Akosombo Dam** [Volta River]

Lake Volta L: 48 *with map*

Akron [Ohio] A: 254

Ohio picture on O: 701

Akron [airship]

Airship (Between world wars) A: 252

Aksakov, Sergey [Russian author]

Russian literature (Early realism) R: 562

Aksum [ancient city]

Aksum A: 255

Aksum [ancient country] A: 255 *with map*

Africa (The influence of Christianity) A: 131

Eritrea (History) E: 353

Ethiopia (History) E: 371

Aku-Aku [book by Heyerdahl]

Heyerdahl, Thor H: 220

Akuffo, Frederick William Kwasi [Ghanaian

political leader]

Ghana (History) G: 179-180

Akvavit

Alcoholic beverage (Other distilled beverages)

A: 336

Al [symbol]

Aluminum A: 391

Al ...

Names beginning Al are alphabetized as single

words: Al-Azhar University appears after

Alaska

ALA [organization] See American Library

Association in this index

- Alabama A:** 256 *with pictures and maps*
 Scottsboro Case S: 223
See also the list of Related Articles in the
Alabama article
- Alabama** [battleship]
 Alabama (Places to visit) A: 266
- Alabama** [ship] A: 255 *with picture*
 Grant, Ulysses S. (Foreign relations) G: 316
 Neutrality (Rights and duties) N: 153
 Washington, Treaty of W: 109
- Alabama, Republic of** [U.S. history]
 Alabama (The Civil War and Reconstruction)
 A: 276
- Alabama, University of A:** 279
- Alabama Claims** [U.S. history]
 Grant, Ulysses S. (Foreign relations) G: 316
 Washington, Treaty of W: 109
- Alabama Indians** [American Indians]
 Creek Indians C: 1126
- Alabama Platform** [U.S. history]
 Alabama (Early statehood) A: 275-276
- Alabama River** [Alabama] A: 279
- Alabama secession convention** [U.S. history]
 Alabama (The Civil War and Reconstruction)
 A: 276
- Alabaster** [mineral] A: 280 *with pictures*
- Aladdin** [literary figure] A: 280
Arabian Nights A: 582b
- Aladdin's turban** [plant]
 Gourd picture on G: 281
- Alagnak Wild River** [Alaska]
 National Park System (table: National park-
 ways and other national parklands) N: 55
- Alais, Peace of** [1629]
 Richelieu, Cardinal (Strengthening the monar-
 chy) R: 331
- Alamance, Battle of** [1771]
 North Carolina (Places to visit) N: 482;
 (Revolution and independence) N: 492
 Westward movement in America (Regional
 conflict) W: 245-246
- Alameda** [park]
 Mexico City (Downtown) M: 476-476a
- Alamein, El** *See El Alamein in this index*
- Alamo** [San Antonio, Texas] A: 280 *with picture*
 San Antonio (The city) S: 84
 Texas (Places to visit) T: 194 *with picture*
- Alamo, Battle of the** [1836]
 Alamo (The siege) A: 280 *with picture*
 Crockett, Davy (The Alamo) Ci: 1148d *with*
picture
 Mexico (VVar with Texas and the United
 States) M: 471
 San Antonio (History) S: 86-87
 Santa Anna, Antonio López de (VVar with
 Texas) S: 113
 Travis, William Barret T: 406
- Alamo chain** [U.S. history]
 Mission life in America (Western missions)
 M: 618-619
- Alamo City**
 San Antonio S: 84
- Alanbrooke, Lord** [British general] A: 281
- Alani** [people]
 Hun H: 437
- Al-Anon** [organization] A: 281
- Al Aqabah** [Jordan]
 Jordan (Transportation and communications)
 J: 164
- Al Aqsa** [mosque]
 Jerusalem (Islamic sites) J: 96 *with map*
- Alarcón, Fabián** [Ecuadorian political leader]
 Ecuador (The 1900's) E: 73-74
- Alarcón, Pedro Antonio de** [Spanish author]
 A: 281
 Spanish literature (The 1800's) So: 761-762
- Alaric** [king of the Visigoths] A: 281
 Goths G: 279
- Alarm, Burglar**
 Burglar alarm B: 704
- Alarm reaction** [physiology]
 Stress (How stress affects the body) So: 926
- Alas, Leopoldo** *See Clarín in this index*
- Alaska A:** 282 *with pictures and maps*
 Exploration (The Russians in Siberia) E: 447
 Flag picture on F: 209
 Glacier picture on G: 203
 Indian, American (Indians of the Subarctic) I: 153
 Inuit I: 354 *with map*; (History) I: 354g; (The
 Inuit today) I: 354h
 Roosevelt, Theodore (Foreign policy) R: 469
 Russia (Expansion in Asia) R: 551
 State, Department of (Changing responsibili-
 ties) So: 860 *with picture*
- United States (Climate) U: 126 *with picture*
See also the list of Related Articles in the
Alaska article
- Alaska, University of A:** 305
 Alaska picture on A: 286
- Alaska blackfish** [fish]
 Blackfish B: 393
- Alaska-cedar** [tree]
 Cedar (Scale-leaved cedars) C: 324
- Alaska Highway A:** 305
 Alaska (Places to visit) A: 290; (Transportation)
 A: 298; (World War II) A: 301-303
- Alaska Marine Highway** *See Inside Passage in*
this index
- Alaska National Interest Lands Conservation**
Act [1980]
 Alaska picture on A: 302; (Land-use issues)
 A: 304
- Alaska Native Brotherhood** [political organiza-
 tion]
 Alaska (The early 1900's) A: 301
- Alaska Native Claims Settlement Act** [1971]
 Alaska (Land-use issues) A: 304
- Aleuts A:** 340
 Indian, American (In the United States) I: 179
 Tlingit Indians T: 303
- Alaska Native Sisterhood** [political organiza-
 tion]
 Alaska (The early 1900's) A: 301
- Alaska Panhandle**
 Alaska (Land regions) A: 292
- Alaska Permanent Fund**
 Alaska (The discovery of oil) A: 304
- Alaska pipeline** *See Trans-Alaska Pipeline*
System in this index
- Alaska pollock** [fish]
 Pollock P: 646
- Alaska Railroad**
 Railroad (Railroad systems) R: 112
- Alaska Range** [mountains, Alaska]
 Alaska (Land regions) A: 292
- Alaska SeaLife Center** [Seward]
 Alaska (Recent developments) A: 304
- Alaska State Library** [Juneau]
 Alaska (Libraries and museums) A: 286
- Alaska State Museum** [Juneau]
 Alaska (Libraries and museums) A: 286
- Alaska Time Zone**
 Standard time (Time zones) So: 835
 Time (Time zones in the United States and
 Canada) T: 289-292 *with maps*
- Alaskan brown bear**
 Bear B: 182; (Brown bears) B: 184; *picture on*
 B: 186
- Alaskan fur seal**
 Mammal picture on M: 116
- Alaskan malamute** [dog] A: 305
 Dog picture on D: 267
 Sled dog S: 505
- Alateen** [organization]
 Al-Anon A: 281
- Alaungpaya** [king of Myanmar]
 Myanmar (British conquest and rule) M: 970d
 Yangon Y: 551
- Alawi** [ruling family]
 Morocco (Corsairs and sharifs) M: 814
- Alay Mountains** [mountains, Asia]
 Tajikistan (Land and climate) T: 18a *with map*
- Al-Azhar mosque** [Cairo, Egypt]
 Cairo (The city) C: 15-16
- Al-Azhar University** [Cairo] A: 305
 Cairo (Education and cultural life) C: 16;
 (History) C: 17
 Fatimid dynasty F: 55
 Universities and colleges (European universi-
 ties) U: 210
- Al-Aziz, Abd** [sultan of Morocco]
 Morocco (French and Spanish control) M: 814
- Alba**
 Scotland (Beginning of the Scottish kingdom)
 S: 219
- Alba, Duke of** [Spanish general] A: 305
 Belgium (Habsburg rule) B: 233
- Alba Longa** [ancient city]
 Romulus and Remus R: 450
- Alba Madonna, The** [painting by Raphael]
 Madonna and Child picture on M: 37
- Albacore** [fish]
 Tuna T: 485
- Al-Bakr, Ahmed Hasan** [Iraqi political leader]
 Iraq (The republic) I: 413-414
- Albania A:** 306 *with pictures and map*
 Cold War (The Iron Curtain descends) Ci: 763;
 (The great blocs split) Ci: 768
- Communism (In Eastern Europe) Ci: 896-897
 Flag picture on F: 205
 Hoxha, Enver H: 402
 Television picture on T: 117
 Warsaw Pact W: 39
 World War II (table: The Axis) W: 471
- Albanian language**
 Language (Indo-European) L: 64
- Albanians** [people]
 Kosovo K: 385
 Macedonia (People) M: 12; (History) M: 12a-
 12b
- Al-Banna, Hasan** [Egyptian teacher]
 Muslim Brotherhood M: 964
- Albano, Lake** [Italy]
 Lake Albano L: 35
- Albans** [people]
 Mythology (The seven kings) M: 981
- Albany** [New York] A: 309
 New York picture on N: 291
- Albany Congress** [1754] A: 310
 French and Indian wars (The French and
 Indian War) F: 512-513
- Albany Plan of Union** [U.S. history]
 Albany Congress A: 310
 Franklin, Benjamin (The Plan of Union) F: 489
- Al-Bashir, Umar Hasan Ahmad** [Sudanese
 political leader]
 Sudan (Recent developments) So: 956
- Al Basrah** [city, Iraq] A: 310
 Iraq (Economy) I: 412
 Persian Gulf War (Disputes between Iraq and
 Kuwait) P: 300b
- Al Batinah** [region]
 Oman (Land and climate) O: 758
- Albatross** [bird] A: 310 *with picture*
 Animal picture on A: 498
- Albedo** [botany]
 Orange (The fruit and the tree) O: 814
- Albee, Edward** [American dramatist] A: 311
 American literature (Drama) A: 425 *with por-
 trait*
 Theater picture on T: 246
- Albee, Fred H.** [American doctor]
 Surgery (History) So: 1007
- Albemarle, Duke of** *See Monck, George in this*
index
- Albemarle County**
 North Carolina (Exploration and settlement)
 N: 490-492; (Colonial days) N: 492
- Albemarle Island**
 Galapagos Islands G: 7 *with map*
- Albéniz, Isaac** [Spanish composer] A: 311
- Alberich** [opera character]
 Opera (*Ring of the Nibelung, The*)
 O: 806-807
- Albers, Josef** [German-American painter] A: 311
 Corcoran Gallery of Art Ci: 1050 *with picture*
- Albert** [antipope]
 Pope (table) P: 666
- Albert** [prince of Monaco]
 Rainier III R: 129
- Albert I** [king of Belgium]
 Albert I A: 311
 Belgium (The world wars) B: 234
- Albert I** [prince of Monaco]
 Monaco (History) M: 700
- Albert II** [king of Belgium]
 Belgium (Recent developments) B: 235
- Albert, Carl Bert** [American political leader]
 A: 311
- Albert, Lake** [Africa] *See Lake Albert in this*
index
- Albert, Prince** [husband of Queen Victoria]
 A: 311
 Victoria (Personal life) V: 356
- Albert Canal** [waterway, Belgium]
 Canal (table) C: 164
- Albert Edward Nyanza**
 Lake Edward L: 37
- Albert Memorial Chapel** [England]
 Windsor Castle W: 335
- Albert Nile** [river, Uganda]
 Lake Albert L: 35
- Albert Nyanza** [lake, Africa] *See Lake Albert in*
this index
- Albert N'yanza, Great Basin of the Nile, The**
 [book by Baker]
 Baker, Sir Samuel White B: 32
- Albert of Hohenzollern** [German crusader]
 Teutonic Knights T: 183
- Alberta A:** 312 *with pictures and maps*
 Canada, Government of picture on C: 133
 Prairie Provinces P: 733

See also the list of Related Articles in the
Alberta article

Alberta, University of A: 331
Edmonton (Education) E: 84

Alberta Plain
Alberta (Land regions) A: 322

Alberti, Leon Battista [Italian architect] A: 331
Architecture (Early Renaissance architecture)
A: 620-621 *with picture*
Italy (Architecture) I: 504
Perspective P: 304

Alberto Lleras C. Dam [Colombia]
Dam (table) D: 18

Albert's Son [painting by Wyeth]
Painting picture on P: 38

Albertson, Jack [American actor]
Motion picture (Best performance by an actor
in a supporting role: 1968) M: 863

Albertus Magnus, Saint [German philosopher]
A: 332
Arsenic A: 744
Physics (The Middle Ages) P: 438

Albigenses [religious group] A: 332
Innocent III (Crusades) I: 275

Albinism [disorder] See Albino in this index

Albino [biology] A: 332
Evolution (How mutations change a species)
E: 428
Eye (The uveal tract) E: 460-461
Horse (Color types) H: 345
San Blas Indians S: 87

Albion [English history]
Chalk C: 370

Al Borak [legendary animal]
Horse (table): Famous horses in history and
legend H: 361

Albright, Madeleine Korbel [American diplo-
mat] A: 332 *with portrait*
Clinton, Bill (Domestic events) Ci: 682f
State, Department of (table) So: 860
United Nations (table) U: 86

Album quilt
Quilt Q: 41

Albumen [egg]
See also Albumin in this index
Bird (The reproductive system) B: 366
Egg (Shell membranes) E: 117 *with picture*

Albumin [protein] A: 332
Blood (Transporting nutrients and wastes)
B: 408, (Regulating the volume of blood
components) B: 410
Liver (Other functions) L: 394
Plasma (Functions of plasma) P: 551
Protein (How the body uses proteins) P: 832

Albuquerque [New Mexico] A: 333
New Mexico (table: Average monthly weather)
N: 268; *picture on* N: 257

Alburt, Lev [American chess player]
Chess (United States chess champions)
C: 414

Al Bu Said [ruling family]
Oman (History) O: 759

Albuterol [drug]
Bronchodilator B: 636

Alcalá Zamora, Niceto [Spanish political leader]
Spain (The Spanish republic) So: 750

Alcan Aluminium Limited A: 333
Aluminum (In Canada) A: 396; (The growth of
the aluminum industry) A: 397

Alcan Highway See Alaska Highway in this
index

Alcatraz [former prison, San Francisco] A: 333

Alcatraz Island
Alcatraz A: 333

Alcayaga, Lucila Godoy See Mistral, Gabriela in
this index

Alcazar [architecture] A: 333
Castle picture on C: 281
Santo Domingo S: 117

Alcestis [ballet]
Graham, Martha picture on G: 300

Alchemist, The [play by Jonson]
Jonson, Ben J: 160

Alchemy A: 333
Chemistry (Alchemy) C: 400 *with picture*
Magic (During the Middle Ages) M: 50

Alcibiades [Greek general] A: 334
Peloponnesian War P: 232

Alcid [bird] See Auk in this index

Alcindor, Lew See Abdul-Jabbar, Kareem in this
index

Alcmaeonid clan [Greek history]
Cleisthenes Ci: 661

Alcmene [Greek mythology]

Hercules (Early life) H: 198

Alcoa Inc. [company] A: 334

Alcan Aluminium Limited A: 333

Aluminum (The growth of the aluminum
industry) A: 397

Alcock, Sir John William [British aviator]
Alcock and Brown A: 334

Alcock and Brown [British aviators] A: 334

Alcohol [chemistry] A: 334
Corn (Industrial uses) Ci: 1057; (The fermenta-
tion and distilling industry) Ci: 1062
Disinfectant D: 235
Distillation (Simple distillation) D: 238 *with dia-
gram*
Methanol M: 434
Nutrition (Beware of alcohol) N: 628
Thermometer (Thermal expansion thermome-
ters) T: 254

Alcohol abuse
Alcoholism A: 337

Alcohol dependence See Alcoholism in this
index

Alcohol, Tobacco, and Firearms, Bureau of
[U.S.] A: 335

Alcohol Problems, American Council on See
American Council on Alcohol Problems in
this index

Alcoholic See Alcoholism in this index

Alcoholic beverage A: 335
Adolescent (Alcohol and drug abuse) A: 63
Brewing B: 595
Depressant D: 150
Distillation (Simple distillation) D: 238-239
Distilling D: 239
Driving while intoxicated D: 348
Drug (Antianxiety and hypnotic drugs) D: 352
Drug abuse (Abuse of legal drugs) D: 361
Grain (Other uses) G: 301
Local option L: 409
Nutrition (Beware of alcohol) N: 628
Prohibition P: 814

Alcoholics Anonymous [organization] A: 337
Al-Anon A: 281
Drug abuse (Treatment of substance use dis-
orders) D: 364
Overeaters Anonymous O: 881

Alcoholism [disease] A: 337
Al-Anon A: 281
Alcoholics Anonymous A: 337
Automobile (Problems of safety) A: 948-949
Benzodiazepine B: 255
Breath testing B: 591
City (Social problems) Ci: 591
Delirium tremens D: 116
Disulfiram D: 240
Health (Tobacco, alcohol, and drug abuse)
H: 126-127
Mental illness (Substance use disorders)
M: 406

Alcoholometer [measuring device]
Hydrometer H: 471

Alcools [poem by Apollinaire]
Apollinaire, Guillaume A: 566
French literature (Surrealism) F: 522

Alcor [star]
Big and Little Dippers (The Big Dipper) B: 296

Alcorn, James L. [American political leader]
Mississippi (table) M: 640

Alcott, Bronson [American social reformer]
A: 338
Alcott, Louisa May A: 338
American literature (Nonfiction prose) A: 418

Alcott, Louisa May [American author] A: 338
with portrait
American literature (The sentimental novel)
A: 415-418

Alcyone [poems by Lampman]
Lampman, Archibald L: 54

Aldabra Islands
British Indian Ocean Territory B: 632

Al-Darazi, Ismail [Egyptian religious leader]
Druses D: 368

Alden, John and Priscilla [American colonists]
A: 338
Longfellow, Henry Wadsworth (Narrative
poems) L: 450

Alder [tree] A: 339 *with picture*
Tree pictures on T: 420

Alder, Kurt [German chemist]
Nobel Prizes (Chemistry: 1950) N: 443

Alder Gulch
Montana (Interesting facts) M: 743

Alderdice, Frederick C. [Canadian political
leader]

Newfoundland and Labrador (Ruin and recov-
ery) N: 377

Alderman [office]
City government C: 595
Ward W: 35

Aldermen, Board of [political science] See City
council in this index

Alderney [island, English Channel]
Channel Islands C: 375 *with map*

Aldhelm, Saint [English religious leader]
Literature for children (Early children's litera-
ture) L: 361

Aldobrandini, Ippolito See Clement VIII in this
index

Aldosterone [hormone]
Adrenal gland A: 67
Hormone (Blood composition hormones)
H: 336
Hypertension (Causes) H: 475-476
Steroid (The adrenal steroids) So: 895

Aldrich, Chester H. [American political leader]
Nebraska (table) N: 110

Aldrich, Nelson Wilmarth [American political
leader]
Taft, William Howard (Legislative defeats)
T: 10-11

Aldridge, Ira [American actor] A: 339 *with por-
trait*

Aldrin, Buzz [American astronaut] A: 339
Armstrong, Neil Alden A: 723
Astronaut (Achievements in space) A: 829-
830; (table) A: 830
Space exploration (Landing on the moon)
So: 717 *with pictures*
Television picture on T: 110

Aldrin, Edwin Eugene, Jr. [American astronaut]
See Aldrin, Buzz in this index

Aldus Manutius See Manutius, Aldus in this
index

Ale [drink]
Alcoholic beverage (Other fermented bever-
ages) A: 336
Beer B: 211

Aleatory music A: 339
Cage, John C: 14
Classical music (Experimental music) Ci: 650

Alecto [Greek mythology]
Furies F: 566

Alegria, Ciro [Peruvian author]
Latin-American literature (The mid-1900's)
L: 113

Aleichem, Sholem [Jewish author] See Sholem
Aleichem in this index

Aleijadinho See Lisbôa, Antônio Francisco in
this index

Aleixandre, Vicente [Spanish poet] A: 339

Alekhine, Alexander [Russian chess player]
Chess (World chess champions) C: 414

Alemán, Mateo [Spanish author]
Spanish literature (The 1600's) So: 759

Alemán Lacayo, José Arnoldo [Nicaraguan
political leader]
Nicaragua (Recent developments) N: 400-401

Alemanni [people]
Valentinian I V: 264

Alemannians [people]
Switzerland (Early days) So: 1058-1059

Alencar, José de [Brazilian author]
Brazil (The arts) B: 576-577
Latin-American literature (Romanticism) L: 112

Aleph, The [stories by Borges]
Borges, Jorge Luis B: 487

Aleph Zadik Aleph [organization]
B'nai B'rith (B'nai B'rith Youth Organization)
B: 426

Aleppo [Syria] A: 340
Syria picture on So: 1074

Aleppo pine [tree]
Pine (Other pines) P: 470

Alessandri Palma, Arturo [Chilean political
leader]
Chile (Era of changes) C: 469; (Years of
progress) C: 469

Alessandri Rodríguez, Jorge [Chilean political
leader]
Chile (Years of progress) C: 469

Alatsch Glacier [Switzerland]
Alps (How the Alps were formed) A: 384-385

Aleutian Islands [Alaska] A: 340 *with map*
Alaska (Interesting facts) A: 283; (Land
regions) A: 292; (World War II) A: 301
Aleuts A: 340

Aleutian low [meteorology]
Arctic (Climate) A: 638

- Aleutian Range** [mountains, Alaska]
Alaska (Land regions) A: 292
- Aleuts** [people] A: 340
Alaska (Population) A: 286
Indian, American (Peoples of the Arctic) I: 152
Indian reservation I: 188
Inuit (Alaska) I: 354h-354i
Mask (Burial masks and death masks) M: 265
with picture
- Alewite** [fish] A: 340 with picture
- Alexander** [king of Serbia]
Peter I P: 323
- Alexander** [American Indian chief]
Massasoit M: 296
- Alexander I** [czar of Russia] A: 341
Aix-la-Chapelle, Congress of A: 253
Helsinki H: 179
Napoleon I (Disaster in Russia) N: 18
Russia (Alexander I) R: 550
- Alexander I** [king of Greece]
Constantine I Ci: 993
Greece (World War I) G: 363
- Alexander I** [king of Yugoslavia] A: 341
Croatia (History) Ci: 1148a-1148b
Peter I P: 323
Yugoslavia (A new nation) Y: 579
- Alexander II** [czar of Russia] A: 341
Anarchism A: 448
Russia (Alexander II) R: 551
- Alexander III** [pope] A: 341
- Alexander III** [czar of Russia] A: 341
Russia (Alexander III) R: 551
- Alexander III** [king of Scotland]
Scotland (Struggles with England) S: 219
- Alexander IV** [king of Macedonia]
Alexander the Great (His death) A: 343
- Alexander V** [antipope]
Pope (table) P: 666
- Alexander VI** [pope] A: 341
Borgia, Cesare B: 488
Borgia, Lucrezia B: 488
Columbus, Christopher (Return to Spain)
Ci: 861
Julius II J: 187
Line of Demarcation L: 333
Savonarola, Girolamo S: 166
- Alexander VII** [pope]
Sculpture (European sculpture) S: 253 with picture
- Alexander VIII** [pope]
Pope (table) P: 666
- Alexander, Grover Cleveland** [American baseball player] A: 341
Baseball (The early 1900's) B: 135-136; (table: Hall of Fame) B: 134; (table: Modern major league records) B: 137
- Alexander, Harold Rupert Leofric George**
[British statesman] See Alexander of Tunis, Earl in this index
- Alexander, Joshua W.** [American government official]
Commerce, Department of (table) Ci: 871
Wilson, Woodrow (table) W: 323
- Alexander, Lamar** [American political leader]
Education, Department of (table) E: 111
Tennessee (table) T: 152
- Alexander, Lloyd** [American author] A: 341 with picture
Literature for children picture on L: 368
Regina Medal (table: 1986) R: 206
- Alexander, Moses** [American political leader]
Idaho (table) I: 42
- Alexander, Nathaniel** [American political leader]
North Carolina (table) N: 490
- Alexander, William** [American artist]
Mission life in America picture on M: 619
- Alexander, Sir William** [British settler]
Nova Scotia (The struggle in Acadia) N: 568
- Alexander Archipelago** [islands, Alaska]
Alaska (Coastline) A: 294
Coast Ranges Ci: 739
- Alexander Graham Bell Association for the Deaf**
Bell, Alexander Graham (His later life) B: 241
Deafness (Education) D: 59
- Alexander Graham Bell National Historic Site**
Canada (table: National historic sites) C: 114
Nova Scotia (Places to visit) N: 560
- Alexander Helios** [son of]
Cleopatra (Cleopatra and Mark Antony)
Ci: 662a-662b
- Alexander Nevsky** [music by Prokofiev]
Prokofiev, Sergei Sergeyevich P: 817
- Alexander of Battenberg** [prince of Bulgaria]
Battenberg B: 167
- Alexander of Tunis, Earl** [British statesman]
A: 342
World War II (In northern Africa) W: 480
- Alexander Sarcophagus**
Sculpture (Kinds of sculpture) S: 230;
(Classical sculpture) S: 245-246 with picture
- Alexander the Great** [king of Macedonia]
A: 342 with picture and map
Diogenes D: 214
Europe (Ancient Greece) E: 408
Exploration (The Greeks) E: 441 with picture and map
Gordian knot G: 273
Greece, Ancient (The Hellenistic Age) G: 374 with picture
India (Persian and Greek invasions) I: 128
Jerusalem (Ancient times) J: 100
Khyber Pass K: 309
Olympias O: 746
Syria (The age of non-Semitic rule) So: 1075
- Alexander's dark band**
Rainbow (How to find a rainbow) R: 127-128
- "Alexander's Feast"** [poem by Dryden]
Dryden, John D: 370
- "Alexander's Ragtime Band"** [song by Berlin]
Berlin, Irving B: 266
- Alexandra** [wife of]
Nicholas II [czar] N: 402 with picture
- Alexandra** [wife of]
Edward VII E: 113
- Alexandra Falls** [waterfall, Northwest Territories]
Northwest Territories picture on N: 531
- Alexandra Land** [island, Arctic]
Franz Josef Land F: 494
- Alexandria** [Egypt] A: 344
Alexander the Great (Invasion of Asia) A: 342
Greek literature (The Hellenistic Age) G: 378
Seven Wonders of the Ancient World (The Lighthouse of Alexandria) S: 325; picture on S: 327
- Alexandria** [Virginia] A: 344
Washington, D.C. (Choosing the capital)
W: 85
Washington, George (Professional surveyor)
W: 93
- Alexandria Quartet, The** [books by Durrell]
Durrell, Lawrence D: 389
- Alexandrian Library** [Egypt]
Information retrieval (History) I: 269
Library (Ancient libraries of papyrus) L: 258 with picture
- Alexandrine** [poetry]
Drama (Neoclassical playwrights) D: 333-334
Poetry (table) P: 594; (Renaissance poetry) P: 596
- Alexandrite** [gem] A: 345
Gem pictures on G: 78
- Alexeieff, Alexander** [Russian-born artist]
Animation (Animation in Europe) A: 514
- Alexeyev, Konstantin Sergeyevich** See Stanislavski, Konstantin in this index
- Alexeyev, Rostislav** [Soviet scientist]
Hydrofoil (Modern hydrofoil development)
H: 468
- Alexia** [disorder]
Aphasia A: 565
- Alexis** [son of]
Nicholas II [czar] picture on N: 403
- Alexis I** [czar of Russia]
Romanov R: 426
Russia (table: Czars and empresses) R: 549
- Alexius Comnenus** [Byzantine emperor]
Byzantine Empire (The decline and end of the empire) B: 754
Crusades (How the Crusades began) Ci: 1159-1160
- Alfalfa** [plant] A: 345 with pictures
- Alfalfa weevil** [insect]
Weevil W: 180
- Alfano, Franco** [Italian composer]
Puccini, Giacomo P: 870
- Alfaro, Eloy** [Ecuadorian general]
Ecuador (Independence) E: 73
- Al Fatah** [guerrilla organization]
Arafat, Yasir A: 591
Palestine Liberation Organization P: 106
- Al-Fatah University** [Tripoli]
Libya (Education) L: 266
- Alferov, Zhores Ivanovich** [Russian physicist]
Nobel Prizes (Physics: 2000) N: 442
- Alfieri, Vittorio** [Italian author] A: 348
Italian literature (The baroque period and the Age of Reason) I: 494-495
- Alfilaria** [plant]
Geranium G: 136
- Alfio** [opera character]
Opera (*Cavalleria Rusticana*) O: 803
- Alfisol** [soil]
Indiana (Natural resources) I: 211
Soil (How soils are classified) So: 575 with map
- Alfonsín, Raúl** [Argentine political leader]
Argentina (Recent developments) A: 659
- Alfonso I d'Este** [duke of Ferrara]
Borgia, Lucrezia B: 488
- Alfonso II d'Este** [duke of Ferrara]
Tasso, Torquato T: 50
- Alfonso VI** [king of León and Castile]
Cid, The Ci: 552
Madrid (History) M: 40
Portugal (Founding the Portuguese nation)
P: 693
- Alfonso X** [king of Castile]
Cádiz C: 12
Spanish literature (Early medieval literature)
So: 757-758
- Alfonso XII** [king of Spain]
Spain (The reign of Isabella II) So: 749
- Alfonso XIII** [king of Spain] A: 348
Franco, Francisco (As dictator) F: 483
Spain (The reign of Alfonso XIII) So: 749
Spanish Civil War (Background to the war)
So: 756
- Alfonso, Pedro** [Spanish author]
Spanish literature (Early medieval literature)
So: 757-758
- Alfred Bulltop Stormalong** [legendary figure]
Stormalong, Alfred Bulltop So: 912
- "Alfred Hitchcock Presents"** [television program]
Hitchcock, Alfred H: 263
- Alfred P. Murrah Federal Building**
Oklahoma City (History) O: 736-737 with picture
- Alfred the Great** [king of the West Saxons]
A: 348
Anglo-Saxons A: 464
England (The Anglo-Saxon period) E: 304-305
English literature (Old English prose) E: 315
Navy (Navies in the Middle Ages) N: 79
- Alfredo Germont** [opera character]
Opera (*Traviata, La*) O: 807-808 with picture
- Al Fujeyrah** [state]
United Arab Emirates U: 43
- Al-Fustat** [Egyptian history]
Cairo (History) C: 17
- Alfvén, Hannes Olof Gösta** [Swedish physicist]
A: 348
Nobel Prizes (Physics: 1970) N: 441
- Alfvén wave** [physics]
Alfvén, Hannes Olof Gösta A: 349
- Algae** [biology] A: 349 with picture
See also Seaweed in this index
Classification, Scientific (Groups in classification) Ci: 654-655
Coral reef (How coral reefs form) Ci: 1048b
Diatom D: 185
Earth (Earth's early development) E: 26-27
Environmental pollution (Water pollution)
E: 334
Eutrophication (How eutrophication occurs)
E: 421
Lichen L: 269 with pictures
Plant P: 517
Sewage S: 329
Spore (Algal and fungal spores) So: 802 with diagram
Water plant W: 136
Water pollution (Disruption of natural processes) W: 138
- Algal bloom** [biology]
Algae A: 349
Eutrophication (How eutrophication occurs)
E: 421
- Algebra** [mathematics] A: 350 with pictures
Factor (Algebraic factors) F: 4
Gauss, Carl Friedrich G: 70
Geometry (Analytic geometry) G: 104
Mathematics (Branches of mathematics)
M: 303; (Arab mathematics) M: 306
Set theory (Using set theory) S: 322
- Alger, Horatio** [American author] A: 359
- Alger, Russell A.** [American political leader]

56 Algeria

- McKinley, William (table) M: 342
Michigan (table) M: 507
- Algeria** A: 360 *with pictures and maps*
Barbary States B: 105 *with map*
De Gaulle, Charles André Joseph Marie (The Fifth Republic) D: 91
Flag picture on F: 198
Foreign Legion F: 386
France (History) F: 471-476
Guerrilla warfare (History) G: 420
- Algerian ivy** (plant)
Ivy picture on I: 522
- Algerian revolt** [1954]
Algeria (The Algerian Revolution) A: 365
- Algiers** [city, Algeria] A: 365
Africa picture on A: 108
Algeria A: 360 *with picture*
- Algiers** [district]
New Orleans (The city) N: 278-279
- Algiers, University of**
Algeria (Education) A: 362
- Algin** [extract]
Algae (Brown algae) A: 349
Ocean (The importance of the ocean) O: 653-654
- Algol** [star] A: 366
Perseus P: 295
- Algoma, November** [painting by Jackson]
Jackson, Alexander Young picture on J: 5
- Algonkin Indians** See Algonquin Indians *in this index*
- Algonquian** [language group]
Algonquin Indians A: 366
Indian, American (Indians of the Northeast) I: 154-155
Massachusetts (Indian days) M: 289
Rhode Island (Indian days) R: 312
Vermont (Indian days) V: 334
Wigwam W: 300
- Algonquian Town of Pomeioc** [painting by White]
Indian, American picture on I: 156
- Algonquin Indians** [American Indians] A: 366
Champlain, Samuel de (The founding of Quebec) C: 373
Toronto (History) T: 340
- Algonquin Peak**
New York (Mountains) N: 306
- Algonquin Round Table** [literary group]
Parker, Dorothy P: 170
- Algorithm** [mathematics] A: 366
Codes and ciphers C: 749
Square root (Finding square roots) So: 812
- Algren, Nelson** [American author] A: 366
- Alguaciles**
Bullfighting (The order of the bullfight) B: 695
- Al-Hafidh, Abd** [sultan of Morocco]
Morocco (French and Spanish control) M: 814-815
- Al Hajar** [mountains]
Oman (Land and climate) O: 758
- Al-Hakim** [caliph of Egypt]
Druses D: 368
- Al-Hakim, Tawfiq** [Egyptian author]
Arabic literature (Drama) A: 584
- Alhambra** [Granada, Spain] A: 366 *with picture*
Islamic art (Other buildings) I: 468-469,
(Carved and molded plaster) I: 470
Spain (Architecture) So: 739 *with picture*
- Alharizi, Judah** [Hebrew author]
Hebrew literature (Medieval works) H: 162
- Alhazen** [Arab astronomer]
Color (Early theories of color vision) Ci: 825-826
Mathematics (Arab mathematics) M: 306
Science (The Middle Ages) S: 197
- Al Hillah** [Iraq]
Babylon B: 11
- Al-Huss, Salim** [Lebanese political leader]
Lebanon (Recent developments) L: 174
- Ali** (Muslim ruler)
Muhammad (Early life) M: 910
Muslims (Muhammad) M: 964-964a, (The early caliphs) M: 964a-964b
Shiites S: 400
Sunnites So: 992
- Ali, Muhammad** [American boxer] A: 367 *with portrait*
Boxing picture on B: 534, (Recent developments) B: 535 *with pictures*
Olympic Games (The postwar games) O: 751-752
- All Baba** [literary figure]
Arabian Nights A: 582b
- Ali Muhammad** [Iranian religious leader]
Bahá'is B: 27
- Ali Reza** [Muslim leader]
Meshad M: 421
- Alia, Ramiz** [Albanian government official]
Albania (Communist control) A: 308
- Alianza Popular Revolucionaria Americana** [political party]
Peru (The rise of APRA) P: 315
- Alibates Flint Quarries National Monument** [Texas] A: 367
National Park System (table: National monuments) N: 50
- Alice** [literary figure]
See also Alice's Adventures in Wonderland *in this index*
Carroll, Lewis (The Alice books) C: 249
- Alice in Wonderland and Through the Looking Glass** [book by Carroll]
Literature for children picture on L: 376
- Alice's Adventures in Wonderland** [book by Carroll]
Carroll, Lewis C: 248 *with picture*
Tenniel, Sir John T: 160 *with picture*
- Alicyclic** [chemistry]
Hydrocarbon (Alicyclics) H: 465
- Alidade** [instrument]
Surveying (Early tools) So: 1011-1012
- Al-Idrisi** [Arab explorer]
Exploration (Muslim exploration) E: 442 *with picture*
Map (Maps in the Middle Ages) M: 182
- Alids** [Arab history]
Arabs (The rise and spread of Islam) A: 588
- Alien A:** 367
Citizenship Ci: 568; (What it means to be a citizen) Ci: 569
Deportation D: 149
Illegal alien I: 51
Immigration and Naturalization Service I: 86
- Alien** [extraterrestrial]
Unidentified flying object U: 27
- Alien and Sedition Acts** [1798] A: 367
Adams, John (The Alien and Sedition Acts) A: 38
Jefferson, Thomas (Vice President) J: 81-82
Kentucky (Statehood) K: 291
Kentucky and Virginia Resolutions K: 295
United States, History of the (The Alien and Sedition Acts) U: 163
- Alien Enemies Act** [1798]
Alien A: 367
Alien and Sedition Acts A: 367
- Alien Friends Act** [1798]
Alien and Sedition Acts A: 367
- Alien Registration Act of 1940** See Smith Act *in this index*
- Alienation** [psychology] A: 368
- Alienation of affections** [law] A: 368
- Alighieri, Dante** See Dante Alighieri *in this index*
- Alignment** [archaeology]
Megalithic monuments M: 383
- Al-Ikhwan al-Muslimun** [organization] See Muslim Brotherhood *in this index*
- Aliki** [American author]
Literature for children picture on L: 381
- Alimentary canal** [anatomy] A: 368 *with diagram*
Digestive system D: 202 *with diagram*
Human body (The digestive system) H: 419
- Alimony** [law] A: 369
Divorce (Financial arrangements) D: 254
- Alinsky, Saul David** [American social reformer] A: 369
- Aliphatic hydrocarbon** [chemistry]
Hydrocarbon (Aliphatic hydrocarbons) H: 465
- Alison's House** [play by Glaspell]
Glaspell, Susan G: 210
- Aliteracy**
Reading (Reading problems) R: 161
- Alizarin** [dye]
Mordant M: 801
- Al Jazirah** [region, Sudan]
Sudan (Central Sudan) So: 954
- Al Jizah** See Giza *in this index*
- Alkali** [chemistry] A: 369
Base B: 123
Detergent and soap (How soap is made) D: 164
First aid (Eye injury) F: 140
Food additive (Kinds of additives) F: 339-340
Soil (Chemical conditions) So: 575
Turmeric T: 515
- Alkali feldspar** [mineral]
Feldspar F: 68
Granite G: 311
- Alkali metal** [chemistry]
Alkali A: 369
Element, Chemical diagram on E: 221
- Alkali metal halide** [chemistry]
Alkali A: 369
- Alkali metal hydroxide** [chemistry]
Alkali A: 369
- Alkaline batteries** [electricity]
Battery (Primary batteries) B: 168
- Alkaline earth metal** [chemistry]
Element, Chemical diagram on E: 221
Magnesium (Properties) M: 54
- Alkaloid** [chemistry] A: 369
Nightshade N: 421
- Alkalosis** [disorder] A: 369
- Alkane** [chemistry]
Hydrocarbon (Aliphatic hydrocarbons) H: 465
- Alkene** [chemistry]
Hydrocarbon (Aliphatic hydrocarbons) H: 465
- Al Khalifah Arabs**
Bahrain (History) B: 30
- Al-Khawarizmi** [Arab mathematician]
Algebra (History) A: 359
Mathematics (Arab mathematics) M: 306
- Al-Khuwarizmi** [Persian scholar]
Encyclopedia (The first reference works) E: 268a
- Alki Point**
Seattle (History) S: 275-276
- Al-Krim, Abd** [Moroccan political leader]
Morocco (French and Spanish control) M: 814-815
- Al-Kuwatly, Shukri** [Syrian political leader]
United Arab Republic U: 45
- Alkylation** [industrial process]
Petroleum (Conversion) P: 345
- Alkylbenzene sulfonate** [chemical]
Detergent and soap (The development of detergents) D: 165
- Alkyne** [chemistry]
Hydrocarbon (Aliphatic hydrocarbons) H: 465
- All About Eve** [film]
Motion picture (Best picture: 1950) M: 861
- All-America Football Conference**
Football (The rise of professional football) F: 366-367
- All-American Canal** [canal, Arizona-California]
Canal (Major canals in the United States and Canada) C: 163
Imperial Valley I: 92
- All-American Soap Box Derby** (Akron, Ohio)
Soap Box Derby So: 543
- All-Burma Students' Union** [political movement]
Myanmar (British conquest and rule) M: 970d
- All Creatures Great and Small** [book by Herriot]
Herriot, James H: 216
- All-England Championship**
Tennis (table) T: 166
- All England Women's Hockey Association**
Field hockey (History) F: 93
- All for Love** [play by Dryden]
Dryden, John D: 370
- All Green Shall Perish** [book by Mallea]
Latin-American literature (The mid-1900's) L: 113
- All Hallow Summer** [weather]
Indian summer I: 189
- All Hallow's Eve** [holiday]
All Saints' Day A: 370
Halloween H: 24a
- "All in the Family"** [television series]
Television picture on T: 121
- All-or-nothing phenomenon**
Nervous system (The beginning of an impulse) N: 135
- All Quiet on the Western Front** [book by Remarque]
Remarque, Erich Maria R: 228
- All Quiet on the Western Front** [film]
Motion picture (Best picture: 1929-30) M: 861
- All Said and Done** [book by Beauvoir]
Beauvoir, Simone de B: 191
- All Saints' Church, Margaret Street** [London]
Architecture (The Gothic Revival) A: 626
- All Saints' Day** [religious custom] A: 370
Dia de los muertos D: 178
Halloween H: 24a, (All Saints' and All Souls' Day) H: 25
New Orleans (Ethnic groups) N: 281

- All Souls' Day** [holiday]
Día de los muertos D: 178
Halloween (All Saints' and All Souls' Day)
H: 25
- All-Star Baseball Game**
Baseball (All-Star Game) B: 130; (Depression and war) B: 136
- All-Star Hockey Game**
Hockey (Famous players and All-Star teams)
H: 281
- All-suite hotel**
Hotel (History) H: 377
- All the Best: My Life in Letters and other Writings** [book by Bush]
Bush, George Herbert Walker (Later years)
B: 722a
- All the King's Men** [book by Warren]
Warren, Robert Penn W: 37
- All the King's Men** [film]
Motion picture (Best picture: 1949) M: 861
- All Things Bright and Beautiful** [book by Herriot]
Herriot, James H: 216
- All Things Wise and Wonderful** [book by Herriot]
Herriot, James H: 216
- All-wheel drive**
Transmission (Transmissions and drives)
T: 375
- Alla prima**
Painting (Baroque) P: 58
- Allah** [religion] A: 370
God G: 243
Islam I: 463
Islamic art (Characteristics) I: 467
Muslims (The Arabs before Islam) M: 964
Quran (Teachings) Q: 44
Religion (Islam) R: 222
- Allahabad** [city, India] A: 370
- Allain, William A.** [American political leader]
Mississippi (table) M: 640
- Allais, Maurice** [French economist]
Nobel Prizes (Economics: 1988) N: 449
- Allan, Sir Hugh** [Canadian businessman]
Abbott, Sir John Joseph Caldwell (Early political career) A: 5-6; (The Pacific Scandal) A: 6
Macdonald, Sir John Alexander (The Pacific Scandal) M: 9
Mackenzie, Alexander (Leader of the Opposition) M: 22
- Allan, John** [foster father of]
Poe, Edgar Allan (Poe's life) P: 589
- Allegheny Front**
West Virginia (Land regions) W: 218
- Allegheny Mountains** [United States] A: 370
with map
Pennsylvania (Land regions) P: 256
West Virginia (Land regions) W: 218; picture on W: 206
- Allegheny Plateau** [region, U.S.] See Appalachian Plateau in this index
- Allegheny Portage Railroad National Historic Site** [Pennsylvania]
National Park System (table: National historic sites) N: 52
- Allegheny River** [New York-Pennsylvania]
A: 370
Pittsburgh (The city) P: 500a with picture
- Allegiance, Oath of** See Oath of allegiance in this index
- Allegiance, Pledge of** See Pledge of Allegiance in this index
- Allegory** A: 371
- Allegory of Love, The** [book by Lewis]
Lewis, C. S. L: 220
- Allegri, Antonio** See Correggio in this index
- Allegro** [dance]
Ballet (table) B: 45
- Allegro** [music]
Music (table) M: 954
- "Allegro, L"** [poem by Milton]
Milton, John (His early life and works) M: 557
- Allele** [genetics]
Genetic testing (How genes carry information) G: 85
Heredity (Patterns of heredity) H: 202
Races, Human R: 57 with map
- Allele frequency** [genetics]
Heredity (Gene pools and allele frequency) H: 204
- Allen, Augustus C.** [American settler]
Houston H: 394
- Allen, Barbara** [literary figure] A: 371
- Allen, Ebenezer** [American settler]
Rochester (Government and history) R: 370
- Allen, Ethan** [American soldier] A: 371
Arnold, Benedict (A courageous soldier) A: 741
Fort Ticonderoga F: 416
Green Mountain Boys G: 380
Revolutionary War in America (The evacuation of Boston) R: 275
Vermont picture on V: 335
- Allen, Forrest C.** [American basketball coach]
Rupp, Adolph R: 521
- Allen, Frank G.** [American political leader]
Massachusetts (table) M: 288
- Allen, George Felix** [American political leader]
Virginia (table) V: 417
- Allen, Gracie** [American entertainer]
Burns, George B: 709
Radio (The Golden Age of Broadcasting) R: 92-93 with picture
- Allen, Henry J.** [American political leader]
Kansas (table) K: 234; (Spirit of reform) K: 237-238
- Allen, Henry W.** [American political leader]
Louisiana (table) L: 496
- Allen, Hervey** [American author] A: 371
- Allen, Ivan, Jr.** [American political leader]
Atlanta (The mid-1900's) A: 861
- Allen, John K.** [American settler]
Houston H: 394
- Allen, Marcus** [American football player]
Football (table) F: 363
- Allen, Oscar K.** [American political leader]
Louisiana (table) L: 496
- Allen, Paul** [American businessman]
Computer (The personal computer) Ci: 924c-924d
- Allen, Philip** [American political leader]
Rhode Island (table) R: 311
- Allen, Phog** [American basketball coach]
Rupp, Adolph R: 521
- Allen, Richard** [American religious leader]
A: 371 with portrait
African Methodist Episcopal Church A: 136t
Jones, Absalom J: 157
- Allen, William** [American jurist]
Allentown A: 373
- Allen, William** [American political leader] A: 372
Ohio (table) O: 699
- Allen, William Cardinal** [English religious leader] A: 372
- Allen, William Francis** [American publisher]
Spiritual So: 796
- Allen, Woody** [American director] A: 372
Motion picture (Best achievement in directing: 1977) M: 862; (A new generation of filmmakers) M: 872
- Allenby, Lord** [British general] A: 372
World War I (The fighting ends) W: 463
- Allende, Isabel** [Chilean author]
Latin-American literature (Recent developments) L: 113
- Allende Gossens, Salvador** [Chilean political leader] A: 372
Chile (Marxism and military rule) C: 470
- Allentown** [area]
Buffalo (Other interesting places to visit) B: 678
- Allentown** [Pennsylvania] A: 372
- Allergen** [biochemistry]
Allergy A: 373
Anaphylactic shock A: 448
Dust mite D: 392
Immune system (Allergies) I: 88c
- Allergic rhinitis** [disorder]
Hay fever (Treatment) H: 116
Rhinitis R: 293
- Allergy** [disease] A: 373
Anaphylactic shock A: 448
Antibiotic (Allergic reactions) A: 551
Asthma (Causes) A: 824-825
Croup Ci: 1157
Disease (Disorders of the immune system) D: 229-230
Drug (Effect on the body) D: 354
Dust mite D: 392
Eczema E: 74
Hay fever H: 116
Herbal medicine H: 196
Hives H: 270
Immune system (Allergies) I: 88c
Medicine (table) M: 369
Milk (Milk in the human diet) M: 546
- Poisonous plant P: 602
Serum S: 319
- Alley cat**
Cat (Breeds of cats) C: 290
- Alley Theatre**
Theater picture on T: 246
- Alley, Roderick** [fictional character]
Marsh, Ngao M: 227
- Alliance** [Malaysian history]
Malaysia (Building national unity) M: 102
- Alliance** [political science]
See also Allies; Central Powers in this index
Balance of power B: 36
International relations (Treaties) I: 344
- Alliance for Labor Action** [labor union]
Reuther, Walter Philip R: 266
- Alliance for Progress A: 374**
Foreign aid (Economic development and mutual security) F: 383-384
Kennedy, John Fitzgerald (Other developments) K: 266
Latin America (Latin America and the United States) L: 109
Pan-American conferences (Stronger ties) P: 113
- Alliance of Free Democrats** [political party]
Hungary (Politics) H: 439; (Multiparty elections) H: 448
- Allied Command Atlantic** [military]
North Atlantic Treaty Organization (Organization) N: 471
- Allied Command Channel** [military]
North Atlantic Treaty Organization (Organization) N: 471
- Allied Command Europe** [military]
North Atlantic Treaty Organization (Organization) N: 471
- Allied High Commission** [German history]
Germany (West Germany) G: 170
- Allied Invasion** See Normandy Invasion in this index
- Allies** [World War I and II]
World War I W: 452
World War II W: 468; (table: The Allies) W: 471
- Alligator** [reptile] A: 375 with pictures
Crocodile Ci: 1149
Reptile (Crocodilians) R: 251
- Alligator gar** [fish]
Gar G: 28
- Alligator Reef Light Station** [Florida]
Lighthouse picture on L: 295
- Alligator snapper** [animal]
Turtle (Snapping turtles) T: 523
- Allin, Roger** [American political leader]
North Dakota (table) N: 513
- Al Lisan** [Jordan]
Dead Sea D: 56
- Allison, Abraham K.** [American political leader]
Florida (table) F: 260
- Allison, Bobby** [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1983) A: 981
- Alliteration** [poetry] A: 376
Poetry (table) P: 594; (Sounds) P: 594-595
Shakespeare, William (Rhetoric) S: 367
- Allocative efficiency** [economics]
Industry (Performance) I: 262
- Allograft** [medicine]
Skin grafting S: 494
- Allopathy** [medicine] A: 376
- Allopolyploidy** [biology]
Evolution (Evolution of new species) E: 429-430
- Allopurinol** [drug]
Gout G: 281
- Allosaur** [dinosaur]
Dinosaur (True dinosaurs) D: 206b-211 with picture
- Allosaurus** [dinosaur] A: 376
Dinosaur pictures on D: 206c, D: 207
- Allotrope** [chemistry]
Allotropy A: 376
Manganese (Properties) M: 139
Phosphorus P: 403
Sulfur (Forms) So: 966
- Allotropy** [chemistry] A: 376
- Allouez, Claude Jean** [French religious leader]
Wisconsin (Exploration and settlement) W: 365
- Allowance race**
Horse racing (Allowance races) H: 365
- Alloy** [metal] A: 377 with pictures
Aluminum (Properties of aluminum alloys) A: 391-392

58 Alloy, Polymeric

- Bismuth B: 383
Cobalt (Uses) Ci: 741
Gold (Gold alloys) G: 251
Iron and steel (Kinds of iron and steel) I: 437
Materials (Metals and alloys) M: 300d
Metallurgy (Physical metallurgy) M: 427
Money (United States currency today) M: 709-711
Zinc Z: 598
- Alloy, Polymeric**
Plastics (The chemistry of plastics) P: 556
- Alloy steel**
Alloy (Alloys of iron) A: 377-378
Iron and steel (Kinds of iron and steel) I: 437
- Allport, Gordon W.** [American psychologist] A: 378
- Alfred, James V.** [American political leader] Texas (table) T: 203
- All's Well that Ends Well** [play by Shakespeare] Shakespeare, William (*All's Well That Ends Well*) S: 362
- Allspice** [spice] A: 378
Pimento P: 465
- Allstate Life Insurance Company**
Insurance (table) I: 315
- Allston, Robert F. W.** [American political leader] South Carolina (table) So: 658
- Allston, Washington** [American painter] A: 379
- Alltel Stadium**
Jacksonville (Cultural life and recreation) J: 18
- Alluvial diamond**
Diamond (Where natural diamonds are found) D: 181
- Alluvial fan** [geology]
River (Alluvial fans and deltas) R: 353 with diagram
- Allylic**
Plastics (table) P: 556
- Alma-Ata** [city, Kazakhstan] See *Almaty in this index*
- Alma mater** A: 379
- Alma-Tadema, Sir Lawrence** [British artist] Painting (Later neoclassicism) P: 67-68; (The art world, 1850-1900) P: 73
- al-Ma'arri** [classical Arabic poet]
Arabic literature (Poetry) A: 583
- Almagest** [book by Ptolemy]
Mathematics (The Greeks) M: 306
Ptolemy P: 854
- Almagro, Diego de** [Spanish explorer]
Chile (Spanish conquest) C: 468
Exploration (Spain's conquests in the New World) E: 445
Pizarro, Francisco (First expeditions) P: 504; (Later life) P: 504
- Al-Mahdi, Muhammad** [Islamic religious leader] Islam (Divisions of Islam) I: 466
- Al Mahdi, Sadiq** [Sudanese political leader] Sudan (Recent developments) So: 956
- Almanac** [book] A: 379 with picture
Calendar picture on C: 29
- Almandine** [gem]
Garnet G: 45
Mineral picture on M: 569
- Al-Mensur, Abu Jafur** [caliph of Abbasid empire]
Baghdad (History) B: 26
- Almaty** [city, Kazakhstan] A: 380
Kazakhstan K: 250a
- Almaviva, Count** [literary figure]
Opera (*Barber of Seville, The*) O: 801 with picture; (*Marriage of Figaro, The*) O: 805-806
- Almayer's Folly** [book by Conrad]
Conrad, Joseph Ci: 973
- Almeida, Francisco de** [Portuguese government official]
Magellan, Ferdinand (Early life) M: 46
- Almodóvar, Pedro** [Spanish director]
Spain (Motion pictures) So: 739
- Almohad Empire**
Berbers B: 256
- Almond** [nut] A: 380 with picture
Nut (Kinds of nuts) N: 621 with picture
- Almond, Edward M.** [American general]
Korean War (The Inchon landing) K: 381
- Almond, J. Lindsay, Jr.** [American political leader]
Virginia (table) V: 417
- Almond, Lincoln C.** [American political leader]
Rhode Island (table) R: 311
- Almoravid Dynasty**
Berbers B: 256
- Almoravids** [people]
Ghana Empire G: 181 with map
- Almquist, Carl Jonas Love** [Swedish author]
Scandinavian literature (The Golden Age) S: 171
- Almsgiving**
Islam (The Five Pillars of Islam) I: 463-464
- Almshouse**
Welfare (History) W: 191
- Al Muharra** [island, Bahrain]
Bahrain (Land and climate) B: 30 with map
- Al-Mutanabbi** [Arab poet]
Arabic literature (Poetry) A: 583
- Almy & Brown** [textile firm]
Slater, Samuel S: 501
- Alnico** [metal]
Alloy (Other alloys) A: 378
- Amilam** [novel by Dickey]
Dickey, James D: 190
- Aloe** [plant] A: 380 with picture
- Aloe Plaza**
Saint Louis (Places to visit) S: 49
- Aloe vera** [plant]
Aloe A: 380
- "Aloha Oe"** [song]
Liliuokalani, Lydia Kamekeha L: 303
- Aloha shirt**
Hawaii (Clothing) H: 94
- Aloha State** [name for]
Hawaii H: 88
- Aloha Tower** [Honolulu]
Hawaii (Places to visit) H: 98
- Along This Way** [book by Johnson]
Johnson, James Weldon J: 143
- Alouettes, Montreal**
Football (Canadian Football League) F: 364
Montreal (Sports) M: 775
- Alpaca** [animal] A: 380 with picture
Mammal picture on M: 119
- Alpenhorn** [musical instrument] See *Alphorn in this index*
- Alpha** [letter]
A: 1 with picture
Alphabet (The Greeks) A: 383
- Alpha cells**
Pancreas P: 128
- Alpha Centauri** [star] A: 381
Star (Brightness of stars) So: 840; (table: The 10 brightest stars as seen from Earth) So: 842; (table: The 10 known stars nearest Earth) So: 843; (Size) So: 845
- Alpha Cygni** [star] See *Deneb in this index*
- Alpha decay** [physics]
Transmutation of elements T: 378
- Alpha fetoprotein** [chemical]
Testicular cancer T: 181
- Alpha-hemolytic streptococcus** [bacterium]
Streptococcus So: 926
- Alpha interferon** [drug]
Hepatitis (Hepatitis B) H: 192; (Hepatitis C) H: 192
Interferon I: 324
- Alpha Lyrae** [star]
Vega V: 291
- Alpha particle** [radiation] A: 381
See also *Alpha ray in this index*
Atom (Radioactivity) A: 873
Helium H: 175
Nuclear energy (The beginning of nuclear physics) N: 590
Radiation (Particle radiation) R: 76; (Dose) R: 79-80; (Discovery of radioactivity) R: 80-81; picture on R: 78
Radon (Radon decay) R: 100
Star (Destruction of light nuclei) So: 846
Transmutation of elements T: 379
- Alpha ray** [radiation]
See also *Alpha particle in this index*
Nuclear energy (The beginning of nuclear physics) N: 590
- Alpha Ridge** [geography]
Arctic Ocean (Depth and the ocean floor) A: 642-643 with map
- Alpha wave** [physiology]
Transcendental Meditation T: 370
- Alphabet** A: 381 with pictures
Braille B: 550 with pictures
Communication (Early writing systems) Ci: 879
Flag pictures on F: 196
Greek language (Alphabet) G: 376 with pictures
Handwriting (Early forms of writing) H: 49-50
Hebrew language H: 161 with pictures
Latin language (Alphabet) L: 114
- Morse code pictures on M: 820
Phoenicia (Language) P: 393
Phonetics (An international phonetic alphabet) P: 400
Russian language (Alphabet) R: 557 with pictures
Semaphore pictures on S: 291
Shorthand S: 435 with pictures
Writing (The alphabet) W: 513
See also the articles on specific letters, such as A and the list of Related articles in the Alphabet article
- Alphabet, Cipher**
Codes and ciphers (Substitution) Ci: 750
- Alphabetical arrangement**
Encyclopedia (Arrangement of content) E: 266
- Alphadon** [animal]
Prehistoric animal picture on P: 739
- Alpher, Ralph A.** [American physicist]
Big bang B: 296
- Alpheus** [god, Greek mythology]
Arethusa A: 645
- Alphonsus Liguori, Saint** [Italian religious leader] A: 384
- Alphorn** [musical instrument] A: 384 with picture
- Alpine avens**
Flower picture on F: 289
- Alpine ibex** [animal]
Goat (Domestic goats) G: 239
Ibex I: 3
- Alpine phacelia**
Flower picture on F: 289
- Alpine pond**
Pond (Kinds of ponds) P: 656
- Alpine skiing**
Olympic Games (Winter Olympic Games) O: 746d
Skiing (Alpine skiing) S: 482 with picture; (Ski equipment and clothing) S: 483; (Alpine competitions) S: 486; diagrams on S: 484
- Alpine style climbing**
Mountain climbing (Styles of mountain climbing) M: 897
- Alpine tundra**
Flower (Flowers of alpine tundras) F: 289 with pictures
Tundra T: 485
- Alpinism** See *Mountain climbing in this index*
- Alprazolam** [drug]
Benzodiazepine B: 256
Tranquilizer T: 370
- Alps** [mountains, Europe] A: 384 with pictures and map
Austria (The land and climate) A: 934 with picture; (Tourism) A: 936 with picture
Europe (The Alpine Mountain System) E: 395 with picture
Germany (The Bavarian Alps) G: 157 with picture and map
Ice age (Evidence of ice ages and their climates) I: 6-7
Italy I: 496 with picture; (The Alpine Slope) I: 506 with picture
Saint Gotthard tunnels S: 34
Switzerland (The Swiss Alps) So: 1055 with map
Tunnel (Railroad tunnels) T: 491
Tyrol T: 542 with map
See also the list of Related Articles in the Alps article
- Al Qahirah**
Cairo (History) C: 17
- Al-Qa'ida** [organization] See *Qa'ida, Al- in this index*
- Al Qayrawan** [Tunisia]
Fatimid dynasty F: 55
- Al-Qays, Imru** [Arab poet]
Arabic literature (Poetry) A: 583
- ALS** [disease] See *Amyotrophic lateral sclerosis in this index*
- Al-Sabah** [ruling family]
Kuwait (History) K: 396
- al-Sabur, Salah 'Abd** [Egyptian author]
Arabic literature (Poetry) A: 583
- Alsace-Lorraine** [region, France] A: 387 with map
France picture on F: 466
Rhine River (The Rhine in history) R: 293
- Al-Sayyab, Badr Shakir** [Iraqi author]
Arabic literature (Poetry) A: 583
- Alsop, Mary O'Hara** [American author]
O'Hara, Mary O: 679
- Aisted, Johann Heinrich** [German theologian]

- Encyclopedia (From the 1200's to the 1600's) E: 268a
- Alston, Joseph** [American political leader]
South Carolina (table) So: 658
- Alston, Walter** [American baseball manager]
Baseball (table: Hall of Fame) B: 134
- Alta River dam**
Norway *picture* on N: 544
Sami (History) S: 80
- Altai Mountains** [Asia] A: 387
Kazakhstan (Land and climate) K: 250b *with map*
- Altai wapiti** [animal]
Elk (The European elk) E: 242
- Altaic language**
Japanese language J: 61
Language (Other language families) L: 65 *with map*
- Altar** [religion] A: 388 *with picture*
Mexico *picture* on M: 469
Riemenschneider, Tilman *picture* on R: 337
Sculpture (Roman sculpture) S: 247-248 *with picture*
- Altar of Peace** [sculpture]
Rome, Ancient (Sculpture and painting) R: 441
- Alternate host** [biology]
Rust R: 567
- Alternating current** [electricity]
Capacitor C: 186
Electric current (Direct and alternating current) E: 168
Electric generator (A simple generator) E: 170-171
Electric motor E: 178
Electricity (Direct and alternating current) E: 193-194
Electronics (Diodes) E: 210-212
Induction coil I: 240 *with diagram*
Tesla, Nikola T: 180
Transformer T: 371
Vacuum tube (Kinds of vacuum tubes) V: 258
- Alternating current generator**
Electric generator E: 170; (Alternating current generators) E: 171-173 *with diagrams*
- Alternating current motor**
Electric motor E: 178; (AC motors) E: 181 *with diagram*
- Alternation of generations** [genetics] A: 388
Fern (Life cycle of a fern) F: 75 *with picture*
Hornwort H: 341
Kelp K: 257
Moss (How mosses live) M: 834-835
Plant (Sexual reproduction) P: 532
Spore (Plant spores) So: 801
- Alternative**
Bullfighting (Types of bullfights) B: 695
- Alternative medicine** A: 388
Cancer (Alternative medicine) C: 173
- Alternative school** [education] A: 388
Education (What should be taught?) E: 105
School (Recent developments) S: 184-185
- Alternator** *See* Alternating-current generator *in this index*
- Altgeld, John Peter** [American political leader] A: 389
Cleveland, Grover (Labor unrest) Ci: 672-673
Illinois (table) I: 71; (Industrial development) I: 74-75
- Al-Thani, Hamad bin Khalifa** [ruler of Qatar]
Qatar (History) Q: 3
- Al-Thani, Khalifa bin Hamad** [ruler of Qatar]
Qatar (History) Q: 3
- Althing** [government]
Iceland (National government) I: 20; (Early days) I: 23; (Great disasters) I: 23
Parliament (Parliaments in other countries) P: 174
- Althusius, Johannes** [German political scientist]
Political science (Secularism) P: 639
- Altimeter** [instrument] A: 390
Barometer (Uses) B: 116
- Altiplano**
Bolivia (The Andean Highlands) B: 445;
(Climate) B: 445
- Altis** [ancient region]
Olympia O: 745
- Altitude** [astronomy]
Altitude A: 390
- Altitude** [aviation]
Airplane (Changing altitude) A: 221
- Altitude** [geography] A: 390
Altimeter A: 390
Climate (Why climates vary) Ci: 676
Mountain (Measuring mountains) M: 896
- Weather (Air temperature) W: 157
- Altitude** [geometry]
Triangle (Properties and relationships of triangles) T: 438
- Altitude record**
Glider (table) G: 230
- Altitudinal migration**
Migration (Types of migration) M: 538
- Altman, Robert** [American film director] A: 390
- Altman, Sidney** [American chemist]
Nobel Prizes (Chemistry: 1989) N: 443
- Alto** [music] *See* Contralto *in this index*
- Alto flute** [musical instrument]
Flute F: 307
- Alto-rilievo** [art]
Relief (High relief) R: 212 *with picture*
- Altocumulus**
Cloud (Middle clouds) Ci: 709 *with pictures*
- Alton Locke** [book by Kingsley]
Kingsley, Charles K: 331
- Alton Observer** [newspaper]
Lovejoy, Elijah Parish L: 508
- Altostratus**
Cloud (Middle clouds) Ci: 709
- Altricial bird**
Bird (Caring for the young) B: 359
- Altruism**
Golden rule G: 256
- Altruistic infanticide** [homicide]
Infanticide I: 264
- Altrusa International** [organization] A: 390
- Al-Turabi, Hassan** [Sudanese political leader]
Sudan (Recent developments) So: 956
- Al-Tusi, Nasir al-Din** [Persian mathematician]
Mathematics (Arab mathematics) M: 306
- ALU** *See* Digital logic unit *in this index*
- Alum** [chemistry] A: 390
Sulfate So: 966
Water (Purifying and treating water) W: 126
- Alumax Incorporated**
Aluminum (In the United States) A: 396
- Alumina** [mineral] A: 390
Aluminum (Sources of aluminum) A: 392-393;
(How aluminum is produced) A: 393
Bauxite B: 174
Ceramics (Kinds of ceramic products) C: 359-360
- Aluminum** *See* Aluminum *in this index*
- Aluminum** [element] A: 391 *with pictures*
Alloy (Alloys for strength and lightness) A: 378
Bauxite B: 174
Electrolysis (Uses of electrolysis) E: 201
Sound (table) So: 601
Wire (Uses of wire) W: 343
- Aluminum bronze** [metal]
Bronze (Silicon and aluminum bronze) B: 638
- Aluminum Company of America** *See* Alcoa Inc. *in this index*
- Aluminum Company of Canada, Ltd.**
Kitimat K: 341
- Aluminum hydroxide** [compound]
Antacid A: 529
- Aluminum oxide** *See* Alumina *in this index*
- Aluminum sulfate** [chemical]
Water (Purifying and treating water) W: 126
- Alva, Duke of** [Spanish general] *See* Alba, Duke *of in this index*
- Alvarado, Pedro de** [Spanish conqueror] A: 398
El Salvador (Colonial period) E: 252
Guatemala (Colonial period) G: 416
Latin America (The conquest of the Indians) L: 106 *with map*
- Alvarado, Salvador** [Mexican political leader]
Yucatán Peninsula Y: 575
- Alvarez Armelino, Gregorio** [Uruguayan political leader]
Uruguay (Military government) U: 228
- Alvarez de Toledo, Fernando** [Spanish general]
See Alba, Duke of *in this index*
- Álvarez Quintero, Joaquín** [Spanish dramatist]
Spanish literature (Drama) So: 763
- Álvarez Quintero, Serafín** [Spanish dramatist]
Spanish literature (Drama) So: 763
- Alvaro Obregon Dam** [Mexico]
Dam (table) D: 18
- Alveolar macrophage**
Tuberculosis (Primary infection) T: 477-478
- Alveoli** [lung]
Blood (Carrying oxygen and carbon dioxide) B: 408 *with diagram*
Emphysema (How emphysema affects breathing) E: 262 *with diagrams*
Hemoglobin H: 182
Human body (The air passages) H: 420-421;
(The exchange of carbon dioxide and oxygen) H: 421 *with picture*
- Lung** (Parts of the lungs) L: 523; (Gas exchange in the lungs) L: 523-524 *with diagram*
- Respiration** (Structures of breathing) R: 260
- Tuberculosis** (How tuberculosis affects the body) T: 477
- Alveolus** [teeth]
Teeth (Periodontal ligament) T: 81 *with diagram*
- Alvin** [submersible]
Marine biology (Biological oceanographers) M: 205
Ocean (Submersibles) O: 663 *with picture*
Pacific Ocean (Scientific research) P: 15
- Alvin Ailey American Dance Theater**
Ailey, Alvin A: 166
- Always Room for One More** [book by Nic Leodhas]
Hogrogian, Nonny H: 289
- Always the Young Strangers** [book by Sandburg]
Sandburg, Carl S: 108
- ALWR** [nuclear reactor] *See* Advanced light water reactor *in this index*
- Alyattes** [king of Lydia]
Croesus C: 1150
- Alysheba** [horse]
Kentucky Derby (table) K: 296
- Alyssum, Sweet** [plant]
Sweet alyssum So: 1036 *with picture*
- Alzheimer, Alois** [German psychiatrist]
Alzheimer's disease A: 398
- Alzheimer's disease** A: 398
Brain (Genetic disorders) B: 557-558
Disease (Diseases associated with aging) D: 230-231
Mental illness (Dementia) M: 405
Senility S: 300
- Am** [symbol]
Americium A: 431
- A.M.** [time]
Hour H: 379
- AM screening**
Printing (Preparing illustrations for reproduction) P: 797
- AMA** [organization] *See* American Medical Association *in this index*
- Amadeus** [film]
Motion picture (Best picture: 1984) M: 861
- Amadeus** [play by Shaffer]
Shaffer, Peter S: 342
- Amadis of Gaul** [book] A: 399
Spanish literature (The 1400's) So: 758
- Amado, Jorge** [Brazilian author] A: 399
Brazil (The arts) B: 576-577
Latin-American literature (The early 1900's) L: 113
- Amager** [island, Denmark]
Copenhagen C: 1038
- Amago salmon**
Salmon (Kinds of salmon) S: 70
- Amahl and the Night Visitors** [opera by Menotti]
Menotti, Gian Carlo M: 403
- Amalekites** [ancient people] A: 399
- Amalgam** [metal]
Metallurgy (Amalgamation) M: 427
Silver (Uses of silver) S: 464
Teeth (Dental decay) T: 82-83
- Amalgamated Association of Iron and Steel**
Homestead Strike H: 305
- Amalgamated Association of Iron, Steel, and Tin Workers**
Steelworkers of America, United So: 882
- Amalgamated Clothing and Textile Workers Union**
Hillman, Sidney H: 232
Labor movement (table) L: 8
Union of Needletrades, Industrial and Textile Employees U: 27
- Amalgamated Meat Cutters and Butcher Workmen of North America**
United Food and Commercial Workers International Union U: 47
- Amalgamated Transit Union**
Labor movement (table) L: 8
- Amalgamated Wood Workers of America**
Carpenters and Joiners of America, United Brotherhood of C: 246
- Amalienburg Pavilion** [Germany]
Architecture *picture* on A: 623
- Amalthea** [satellite]
Jupiter (Satellites) J: 200

Amana Church Society [religious group]

Amanites A: 399

Amana ColoniesIowa (Places to visit) I: 384 *with picture***Amanita** [fungus]Mushroom (Poisonous mushrooms) M: 945 *with pictures***Amanites** [religious group] A: 399

Brethren B: 593

Amanullah Khan [emir of Afghanistan]

Afghanistan (Independence) A: 96

Amaranth [plant] A: 400 *with picture***Amarcord** [film]

Fellini, Federico F: 68

Amargosa Range [mountains, California]

Death Valley D: 62

Amarillo [Texas] A: 400 *with picture***Amarna Revolution** [ancient Egyptian history]Egypt, Ancient (The New Kingdom) E: 143
Nefertiti N: 119**Amaryllis** [plant] A: 400 *with picture*Flower F: 301 *with picture***Amaterasu-Omikami** [Shinto goddess]

Religion (Shinto) R: 214

Amateur astronomy

Astronomy (Learning about astronomy) A: 846

Amateur Athletic Union A: 401

Queensberry Rules Q: 39

Amateur Baseball Congress, American

Baseball (Amateur leagues) B: 131

Amateur Hockey Association of the United States

Hockey (Amateur development) H: 281-282

Amateur league

Baseball (Amateur leagues) B: 131

Amateur radio *See* Radio, *Amateur in this index***Amateur Softball Association** [U.S.]

Softball (History) So: 572

Amati, Andrea [Italian violinmaker]

Amati family A: 401

Amati, Antonio [Italian violinmaker]

Amati family A: 401

Amati, Girolamo [Italian violinmaker]

Amati family A: 401

Amati, Nicolo [Italian violinmaker]

Amati family A: 401

Amati family [Italian violinmakers] A: 401**Amauta** [teacher]

Inca (Communication and learning) I: 97

Amazing Stories [magazine]

Science fiction (The early 1900's) S: 205

Amazon ant

Ant (Slave makers) A: 526

Amazon.com [company]

Retailing (Nonstore retailing) R: 265

Amazon molly [fish]

Molly M: 696

Amazon parrot [bird]Parrot (Kinds of parrots) P: 179; *picture on*
P: 180**Amazon porpoise** *See* River dolphin *in this index***Amazon rain forest** [South America] A: 401*with pictures and map*

Rain forest (The Americas) R: 126b

Amazon River [South America] A: 402 *with picture and map*Brazil (Land and climate) B: 577 *with picture*

Exploration (Exploring the New World) E: 444

Orellana, Francisco de O: 851

Rain forest (The Americas) R: 126b

River (table) R: 352

South America (Rivers) So: 628

Amazon River dolphinMammal *picture on* M: 117**Amazon stone** [rock]

Feldspar F: 68

Amazonia National Park [Brazil]

National park (table) N: 42g

Amazonian Period

Mars (Periods of evolution) M: 226b-226c

Amazons [Greek mythology] A: 404

Amazon River (History) A: 404

Ambassador [diplomat] A: 404

Address, Forms of (Officials of the United States) A: 53; (Foreign officials in the United States) A: 54

Diplomacy (Diplomatic representatives) D: 216

Extraterritoriality E: 459

International law I: 340

Ambassador Dodd's Diary [book by Dodd]

Dodd, William Edward D: 260

Ambassador extraordinary and plenipotentiary [diplomat]

Ambassador A: 404

Diplomacy (Diplomatic representatives) D: 216

Ambassadors, The [book by James]

James, Henry (His works) J: 26

Ambedkar, Bhimrao [Indian political leader]

Buddhism (The sangha) B: 668-669

Amber A: 404 *with picture*

Electricity (Early discoveries) E: 196

Fossil (Other processes) F: 425-426

Gem *picture on* G: 78**Ambergris** [industrial product] A: 405

Whale (American whaling) W: 262-263

Amberina glass

Glass (Types of art glass) G: 220

Amberjack [fish] A: 405 *with picture***Ambient diving**

Diving, Underwater (Ambient diving) D: 245

*with picture***Ambler, E.** [American physicist]

Parity [physics] P: 167

Ambler, Eric [British author] A: 405**Amblyopia** [disease]

Blindness (Diseases) B: 401

Ambon [city, Indonesia]

Indonesia (The Molucca Islands) I: 234

Amboseli National Park [Kenya]

National park (table) N: 42f

Ambrones [ancient people]

Teutons T: 183

Ambrose, Saint [Italian religious leader] A: 405

Augustine, Saint (His life) A: 888

Sculpture (Early medieval sculpture) S: 248-249

Ambrosia [mythology] A: 405**Ambrosian Library** [Milan]Library (Libraries of the 1600's and 1700's)
L: 260-261**Ambrosio, Aloysius Cardinal** [Canadian religious leader] A: 405**Ambulance** A: 405 *with picture*

Emergency Medical Services E: 258

Fire department (Emergency medical operations) F: 124

Paramedic (Duties) P: 153

Radio (In public safety) R: 84-85 *with picture*

Society for the Prevention of Cruelty to

Animals *picture on* So: 563**Ambulatory**Architecture (table) A: 608 *with picture; picture on* A: 618Cathedral (The plan of a cathedral) C: 301-302 *with diagram***Ambulatory dialysis** [medicine]

Kidney (Kidney diseases) K: 312

Ambulatory surgery [medical procedure]

Surgery (A typical operation) So: 1006

A.M.E. [organization] *See* African Methodist Episcopal Church *in this index***A.M.E. Zion** [organization] *See* African Methodist Episcopal Zion Church *in this index***Ameba** [microorganism] A: 406 *with picture*Life *picture on* L: 274

Protozoan (Structure) P: 837; (Sarcodines) P: 837

Amebelodon [animal]Prehistoric animal *picture on* P: 740**Amebic colitis** [disease]

Colitis C: 772

Amebic dysentery [disease]

Ameba A: 406

Dysentery D: 398

Parasite (Parasites that feed on people and animals) P: 154

Ameboid cell [biology]

Ameba A: 406

Ameche, Alan [American football player]

Football (table) F: 363

Ameche, Don [American actor]

Motion picture (Best performance by an actor in a supporting role: 1985) M: 863

Amelia [book by Fielding]

Fielding, Henry (His novels) F: 94

Amelia Goes to the Ball [opera by Menotti]

Menotti, Gian Carlo M: 402

Amelung glass

Glass (Types of art glass) G: 220

Amendment [legislation] A: 406

Congress of the United States (Proposing constitutional amendments) Ci: 946

Constitution Ci: 995

Constitution of the United States

(Amendments) Ci: 1002; (Article V)

Ci: 1010; (Amendments to the

Constitution) Ci: 1011-1016

Government (Constitutional questions) G: 286

Parliamentary procedure (Motions) P: 176

See also specific amendments, such as First Amendment, *in this index***Amenemhet** [king of ancient Egypt]

Egypt, Ancient (The Middle Kingdom) E: 143

Amenhotep IV *See* Akhenaton *in this index***Ament** *See* Catkin *in this index***America** [continents] A: 407*See also* Central America; North America;South America *in this index*Central America C: 354 *with map*

Columbus, Christopher (Third voyage westward) Ci: 862

Exploration (The great age of European exploration) E: 442-443 *with map*; (Linking the

globe) E: 446

Map (Mapping the Americas) M: 184

North America N: 458 *with pictures and maps*Rain forest (The Americas) R: 126b *with map*South America So: 622 *with pictures and maps***America** [country] *See* United States *in this index***America** [hymn] A: 407**America** [ocean liner]

Virginia (Interesting facts) V: 399

America [sailboat]

America's Cup A: 431

Sailing (America's Cup) S: 27

America [ship]

Jones, John Paul (Russian service) J: 159

America ² [sailboat]

America's Cup A: 431

America First Committee [U.S. history] A: 407**America the Beautiful** [song] A: 407

Bates, Katharine Lee B: 163

America Today [painting by Benton]

Benton, Thomas Hart B: 254

American Academy and Institute of Arts and Letters A: 407**American Academy of Arts and Sciences**
Arts and Sciences, American Academy of
A: 764**American Advertising Federation**

Advertising (Advertising associations) A: 77

American aloe [plant] *See* Century plant *in this index***American Amateur Baseball Congress**

Baseball (Amateur leagues) B: 131

American Antiquarian Society [Worcester]

Massachusetts (Libraries) M: 274

American Anti-Slavery Society [U.S. history]Abolition movement (In the United States)
A: 12

Garrison, William Lloyd G: 45

Philadelphia (Industrial beginnings) P: 366-367

Phillips, Wendell P: 382

American Arctic Paleoasian [language group]

Indian, American (Language groups) I: 149-150

American artColonial life in America (Painting) Ci: 807 *with picture*

Indian, American (Painting) I: 146

Painting (Painting outside France) P: 72; (The 1900's in North America) P: 82 *with pictures*

Sand painting S: 107

Sculpture (Early sculpture) S: 242 *with pictures*; (American sculpture) S: 255 *with pictures*

Western frontier life in America (Art) W: 240

American Art Portrait Gallery Building

[Washington, D.C.]

Washington, D.C. *map on* W: 76**American Association for the Advancement of Science** A: 407**American Association for the Relief of Misery on the Battlefields**

Red Cross (In the United States) R: 187

American Association of Advertising Agencies

Advertising (Advertising associations) A: 77

American Association of Classified School Employees

Labor movement (table) L: 8

American Association of Family and Consumer Sciences

Home economics (Career requirements)

H: 301

American Association of Retired Persons *See* AARP *in this index***American Association of School Librarians**

- Library (School library standards) L: 245
- American Association of University Women**
A: 407
- Palmer, Alice Elvira Freeman P: 110
- American Association of Variable Star Observers**
Astronomy (Learning about astronomy) A: 846
- American Astronomical Society**
Astronomy (Astronomy associations) A: 849
- American Ballet, School of**
Balanchine, George B: 37
Kirstein, Lincoln Edward K: 337
Lincoln Center for the Performing Arts L: 327
- American Ballet Center**
Joffrey, Robert J: 130
- American Ballet Theatre**
Art and the arts *picture on* A: 748
Ballet (Ballet in the United States) B: 53-54
- American Baptist Association** A: 408
- American Baptist Churches in the U.S.A.**
A: 408
Baptists (Baptists in America) B: 101
- American Bar Association** A: 408
Law (Law education) L: 138
Law Day U.S.A. L: 141
- American Baseball League** *See* American League *in this index*
- American Basketball Association**
Basketball (The history of professional basketball) B: 153-155
- American Battle Monuments Commission**
[U.S.] A: 408
National cemetery N: 31
- American Beauty** [film]
Motion picture (Best picture: 1999) M: 861
- American Beauty rose** [flower]
Rose (Popular roses) R: 478
- American Bell Telephone Company**
Telephone (The Bell System) T: 100-101
- American Bible Society**
Bible Society, American B: 288
- American Bicentennial Celebration**
Bicentennial Celebration, American B: 289
- American bond**
Brick (Bonds) B: 599 *with picture*
- American Book Trade Directory** [publication]
Book collecting (Collecting books) B: 469
- American Bowling Congress** A: 408
Bowling (The 1900's) B: 525
- American Bowling Congress Masters Champions**
Bowling (table) B: 524
- American Broadcasting Company** *See* ABC, Inc. *in this index*
- American Buffalo** [play by Mamet]
Mamet, David M: 115
- American Cancer Society** *See* Cancer Society, American *in this index*
- American Capitalism** [book by Galbraith]
Galbraith, John Kenneth G: 9
- American chameleon** *See* Anole *in this index*
- American Chemical Society** A: 408
Science *picture on* S: 195
- American chestnut** [tree]
Chestnut C: 415 *with pictures*
- American Circus Corporation**
Circus (The Golden Age) C: 564
- American Civil Liberties Union** A: 408
Creationism (The 1900's) C: 1123
Ginsburg, Ruth Bader G: 192
- American class** [breeds]
Chicken (Kinds of chickens) C: 441 *with picture*
- American Clock, The** [drama by Miller]
Miller, Arthur M: 553
- American cocker** [dog]
Cocker spaniel C: 744
- American College of Cardiology** [organization]
Medicine (Medical organizations) M: 370
- American College Testing Program**
College entrance examination C: 775
- American Colonies** *See* Colonial life in America *in this index*
- American Colonization Society**
Abolition movement (In the United States) A: 12
African Americans (Free blacks) A: 136e-136f
Liberia (The Liberian settlement) L: 231
- American Commonwealth, The** [book by Bryce]
Bryce, James B: 656
- American Contract Bridge League**
Bridge (Regulation of tournaments) B: 605
- American Cookery** [book by Simmons]
Connecticut (Interesting facts) Ci: 953
- American copper butterfly**
Butterfly *picture on* B: 734
Insect *picture on* I: 282
- American Council on Alcohol Problems**
A: 409
Prohibition Party P: 816
- American Council on Education** A: 409
- American cowslip** [plant]
Cowslip Ci: 1113
- American cream** [breed]
Horse (table: Some types and breeds of horses) H: 343
- American Crisis, The** [book by Paine]
American literature (The revolutionary period [1765-1787]) A: 415
Bradford, William, III B: 546
Paine, Thomas (American revolutionary) P: 22
- American crocodile**
Crocodile Ci: 1149 *with picture*
Endangered species (table) E: 270; *picture on* E: 271
- American curl**
Cat (Long-haired breeds) C: 292
- American dagger moth**
Moth *picture on* M: 841
- American Dam** [Mexico-U.S.]
Rio Grande (Upper course) R: 346-347
- American darter** [bird]
Anhinga A: 467
- American Daughter, An** [play by Wasserstein]
Wasserstein, Wendy W: 112
- American Democracy, The** [book by Laski]
Laski, Harold Joseph L: 87
- American Dental Association** *See* Dental Association, American *in this index*
- American Dental Hygienists' Association**
Dental hygiene (Career) D: 143
- American Dictionary of the English Language, An** [book by Webster]
Webster, Noah W: 178
- American Dilemma: The Negro Problem and Modern Democracy, An** [book by Myrdal]
Myrdal, Gunnar M: 971
- American dipper**
Dipper D: 217 *with picture*
- American dog tick**
Rocky Mountain spotted fever R: 394 *with picture*
Tick T: 279
- American dogwood** [plant]
Dogwood D: 284
- American Dream, An** [book by Mailer]
Mailer, Norman M: 67
- American Eagle** [coin]
Eagle E: 6
- American eagle**
Great Seal of the United States (The face) G: 348
- American Education Week** [custom]
American Legion (Activities) A: 412
Education Week, American E: 111
- American Educational Research Association**
Educational psychology (Careers in educational psychology) E: 111
- American eel**
Fish *picture on* F: 159
- American-Egyptian cotton** *See* Pima cotton *in this index*
- American Elasmobranch Society**
Shark (Sharks and people) S: 376
- American elk**
Elk E: 241 *with picture*
- American elm** [tree]
Elm (Kinds) E: 245 *with picture*
Tree *pictures on* T: 421
- American Enterprise Institute for Public Policy Research** A: 409
- American Eskimo dog** A: 409 *with picture*
- American Exodus: A Record of Human Erosion, An** [book by Lange]
Lange, Dorothea L: 60
- American Expeditionary Forces** [World War I]
American Legion (History) A: 413
Pershing, John Joseph P: 295
World War I (The United States enters the war) W: 462-463 *with picture*
- American Express Company**
Traveler's check T: 405
- American Falls**
Niagara Falls N: 391 *with picture*; (Description) N: 391-392 *with picture*; (History) N: 392-393
- American Farm Bureau Federation** A: 409
- American Federation of Arts**
Arts, American Federation of A: 763
- American Federation of Government Employees** A: 410
Labor movement (table) L: 8
- American Federation of Labor**
Labor movement (The first nationwide labor organizations) L: 9-10
American Federation of Labor and Congress of Industrial Organizations (History) A: 410
Gompers, Samuel G: 267
Green, William G: 380
Industrial Workers of the World I: 255
Lewis, John L. L: 221
United Automobile Workers U: 46
United States, History of the (Early reform efforts) U: 181
- American Federation of Labor and Congress of Industrial Organizations** A: 410
Hotel Employees and Restaurant Employees International Union H: 377
Kirkland, Lane K: 336
Labor movement (The levels of union organization) L: 8
Meany, George M: 345
Reuther, Walter Philip R: 266
Union of Needletrades, Industrial and Textile Employees U: 27
United Automobile Workers U: 46
See also the separate entries American Federation of Labor and Congress of Industrial Organizations
- American Federation of Musicians** *See* Musicians, American Federation of *in this index*
- American Federation of State, County and Municipal Employees** A: 410
Labor movement (table) L: 8; (New groups become unionized) L: 14
- American Federation of Teachers** A: 411
Labor movement (table) L: 8
Shanker, Albert S: 372
Teaching (Teachers organizations) T: 69
- American Federation of Television and Radio Artists**
Labor movement (table) L: 8
- American FFA degree**
FFA (Degrees) F: 85
- American Field Service** [organization]
AFS Intercultural Programs A: 137
- American flag** *See* Flag, United States *in this index*
- American Football Conference**
Football (Professional competition) F: 364
- American Football League**
Football (The rise of professional football) F: 366-367
- American Forest Institute** [organization]
Tree farming T: 433
- American Foundation for the Blind**
Blindness (Education and training) B: 403
Disabled (table) D: 222
- American foxhound** [dog] A: 411 *with picture*
Dog *picture on* D: 270
- American Friends Service Committee** [organization] A: 411
Nobel Prizes (Peace: 1947) N: 447
Peace Corps (History) P: 208
- American Fur Company** [U.S. history]
Kansas City [Missouri] (History) K: 243
Missouri M: 671
Nebraska (American exploration and settlement) N: 111-112
- American gauge** [measurement]
Wire (Sizes of wire) W: 343
- American Geographical Society**
Geography (Careers in geography) G: 96
- American GI Forum of the United States** [organization] A: 411
Hispanic Americans (Effects of World War II) H: 252
- American Gothic** [painting by Wood]
Painting (Regionalism) P: 82-83 *with picture*
Wood, Grant W: 390
- American Graffiti** [film]
Lucas, George L: 513
- American Heart Association**
Heart Association, American H: 147
- American Historical Association**
Historical Association, American H: 260
- American history** *See* United States, History of *the in this index*

- American History, National Museum of** See National Museum of American History in *this index*
- American Home Economics Association**
Home economics (History) H: 300
- American house spider**
House spider H: 388
Spider picture on So: 788; (table) So: 790
- American Humane Association**
Rodeo R: 397
- American Immigrant Wall of Honor**
Ellis Island E: 244
- American in Paris, An** [film]
Motion picture (Best picture: 1951) M: 861
- American in Paris, An** [music by Gershwin]
Gershwin, George G: 174
- American Independent Party** See American Party in *this index*
- American Indian** See Indian, American in *this index*
- American Indian Movement** [organization]
A: 411
Indian, American (In the United States) I: 179
South Dakota (The mid-1900's) So: 684
Wounded Knee W: 502
- American Indian Religious Freedom Act** [1978]
Indian, American (Political gains) I: 182
- American Indians, National Congress of**
National Congress of American Indians N: 31
- American Institute of Aeronautics and Astronautics** A: 412
- American Institute of Architects**
Architecture (Education and training) A: 634
- American Institute of Public Opinion**
Gallup, George Horace G: 16
- American Iron and Steel Institute**
Iron and Steel Institute, American I: 453
- American ivy** [plant]
Virginia creeper V: 424 with picture
- American Journal of Science** [magazine]
Silliman, Benjamin S: 462
- American karate** [sport]
Martial arts (American martial arts) M: 234
- American Kennel Club** [organization] A: 412
Dog (Kinds of dogs) D: 265-266; (Dog competitions) D: 280
United Kennel Club U: 47
- American kestrel** [bird]
Bird (Birds of grasslands) B: 336 with picture
Falcon (The American kestrel) F: 14 with picture
- American Labor Party** [U.S. history]
Labour Party (In other countries) L: 16-17
- American Landrace**
Hog (table) H: 286; (American breeds) H: 285 with picture
- American Language, The** [book by Mencken]
Mencken, H. L. M: 398
- American Law Schools, Association of**
Law (Law education) L: 138
- American League**
Baseball (Players) B: 125; (Major leagues) B: 130; (table) B: 130; (Professional baseball) B: 133
- American Legion** [organization] A: 412 with picture
Boys State B: 542
Roosevelt, Theodore, Jr. R: 473
Veterans' organizations (In the United States) V: 344-345
- American Legion Auxiliary** [organization]
A: 413 with picture
Girls State G: 201
- American Liberty League**
Liberty League L: 233
- American Library Association** A: 413
Dewey, Melvil D: 177
Library (International library programs) L: 254; (Professional associations) L: 256
- American literature** A: 414 with pictures
Colonial life in America (Literature) Ci: 806
Lost Generation L: 472
Novel (The United States) N: 573; (Alter World War II) N: 574
Pulitzer Prizes (tables) P: 893
Realism (In fiction) R: 171-172
United States, History of the (An age of heroes) U: 186
See also the list of *Related articles in the American literature article*
- American Lung Association** A: 428
- American Lutheran Church, The** [religious group]
Evangelical Lutheran Church in America E: 422
- American Magazine, The**
Magazine (History) M: 43
Pennsylvania (Interesting facts) P: 245; (Communication) P: 262
- American manual alphabet**
Sign language S: 453 with picture
- American Medical Association** A: 428
Chiropractic C: 515
Hypnotism (Dangers of hypnotism) H: 478-479
Medicine (Medical organizations) M: 370; (Professional organizations and medical reform) M: 376
- American Mercury** [magazine]
Mencken, H. L. M: 398
Roaring Twenties (Cultural trends) R: 364
- American Morse Code**
Morse code M: 819
- American Motors Corporation**
Automobile (World War II and the postwar years) A: 968-970
Nash, Charles William N: 22
- American mulberry** [plant]
Mulberry M: 913
- American Municipal Association**
National League of Cities N: 40
- American Museum** [New York City]
Barnum, P. T. B: 115
- American Museum of Natural History** [New York City] A: 428
Andrews, Roy Chapman A: 456
- American National Game of Baseball, The** [lithograph by Currier and Ives]
Baseball picture on B: 133
- American Newspaper Guild** See Newspaper Guild in *this index*
- American Normal School Association**
National Education Association of the United States N: 34
- American Nurses' Association**
Nursing (The history of nursing) N: 620
- American Occupational Therapy Association**
Occupational therapy (Careers) O: 649
- American Osteopathic Association**
Osteopathic medicine (Careers in osteopathic medicine) O: 867
- American Party** [political party] A: 428
LeMay, Curtis Emerson L: 187
States' rights (Later developments) So: 866-867
Wallace, George Corley W: 16
- American Party** [U.S. history] See Know-Nothings in *this index*
- American Pharmaceutical Association**
Pharmacy (Training and careers in pharmacy) P: 354-355
- American Philosophical Society**
Colonial life in America (Science) Ci: 808-809
Franklin, Benjamin (Civic leader) F: 487-488
Philadelphia (Libraries and museums) P: 364
- American Physical Therapy Association**
Physical therapy (Careers in physical therapy) P: 435
- American pipit** [bird]
Pipit P: 492 with picture
- American plan** [travell]
Hotel (Resort hotels) H: 377
- American plum**
Plum (Kinds of plums) P: 577 with picture
- American Podiatric Medical Association**
Podiatry P: 588
- American Point System** [printing]
Type (Sizes of type) T: 537
- American Postal Workers Union**
Labor movement (table) L: 8
- American Printing House for the Blind** A: 429
- American Professional Football Association**
Football (The rise of professional football) F: 366
- American Psychological Association**
Educational psychology (Careers in educational psychology) E: 111
Psychology (Careers in psychology) P: 850-851
- American Psychological Society**
Psychology (Careers in psychology) P: 850-851
- American Public Health Association**
Public health (History) P: 857
- American quarter horse** [breed]
Horse (table: Some types and breeds of horses) H: 343
- American Railway Express Company**
Airmail A: 207
Wells, Fargo & Company W: 195
- American Railway Union** [labor union]
Debs, Eugene Victor D: 65
Labor movement (Opposition to unions) L: 10-11
Pullman Strike P: 897
- American Red Cross** [organization]
Red Cross (The American Red Cross) R: 185
- American Revolution** See Revolutionary War in America in *this index*
- American Revolution, Sons of the** [organization]
Sons of the American Revolution So: 594
- American Revolution Bicentennial Administration** [U.S.]
Bicentennial Celebration, American B: 289
- American rhythm style**
Ballroom dancing B: 63
- American robin** [bird]
Robin R: 366 with picture
- American sable** [animal] See Pine marten in *this index*
- American Samoa** [islands, Pacific] A: 429 with picture and map
Flag picture on F: 213
Pacific Islands picture on P: 3
Territory (American territorial government) T: 177
- American Samoa, National Park of** [American Samoa] A: 430
National Park System (table: National parks) N: 48
- "American Scholar, The"** [speech by Emerson]
Emerson, Ralph Waldo (His prose works) E: 259
- American Shakespeare Theatre** [Stratford, Connecticut]
Shakespeare, William picture on S: 365
- American shorthair** [cat]
Cat (Short-haired breeds) C: 290
- American Sign Language**
Deafness (Special language techniques) D: 58; (Deaf community and culture) D: 59-60
Sign language S: 453
- American smooth style**
Ballroom dancing B: 63
- American Society for the Prevention of Cruelty to Animals**
Society for the Prevention of Cruelty to Animals So: 563
- American Society of Composers, Authors and Publishers** A: 430
- American Society of Interior Designers**
Interior design (Training) I: 334
- American Spanish** [dialect]
Spanish language So: 756b
- American Speech and Hearing Association**
Speech therapy (History) So: 773-774
- American Staffordshire terrier** A: 430
Dog picture on D: 273
Pit bull P: 498
- American Standard Code for Information Interchange** [computing]
Computer (Computer code) Ci: 911
- American States, Organization of** See Organization of American States in *this index*
- American Stock Exchange** [stock exchange] A: 430
New York City (Finance) N: 334
Stock exchange (History) So: 904
- American System** [U.S. history]
Clay, Henry (National leader) Ci: 658
Monroe, James ("The American System") M: 736
Tariff (United States tariffs) T: 44
United States, History of the (Nationalism and the economy) U: 165
Whig Party (The first program) W: 280
- American Tail, An** [film]
Animation (The animation revival) A: 514b
- American Teaching Method**
Skiing (Ski instruction) S: 486
- American Telephone and Telegraph Company**
AT&T Corp. A: 852
- American Tobacco Company**
Duke, James Buchanan D: 380
- American Tragedy, An** [book by Dreiser]
Dreiser, Theodore D: 346
Naturalism (Naturalism in fiction) N: 65
- American trotter** [horse] See Standardbred in *this index*
- American Unitarian Association** [religious group]

- Unitarian Universalist Association U: 42
Unitarians (Organization) U: 43
American Veterans Committee [organization]
Veterans' organizations (In the United States)
V: 344-345
**American Veterans of World War II, Korea,
and Vietnam** [organization] See *AMVETS in
this index*
American water spaniel [dog] A: 430
Dog picture on D: 269
American Weekly Mercury [newspaper]
Pennsylvania (Communication) P: 262
American white pelican [bird]
Pelican (Kinds) P: 231
American windmill
Windmill W: 334
American wirehair cat
Cat (Short-haired breeds) C: 290
American Woman Suffrage Association
Woman suffrage (Growth of the movement)
W: 380
Women's movements (The right to vote)
W: 385
American Zoo and Aquarium Association
Zoo (Wildlife conservation) Z: 604; (How zoos
operate) Z: 607
Americanism [religion]
Leo XIII L: 198
Roman Catholic Church (In the United States)
R: 412
Americanization [cultural influence]
Europe (City life) E: 388
Americanoids [people]
Arctic (Americanoids) A: 639
American's Creed A: 431
Americans for Democratic Action A: 431
Americans with Disabilities Act [1990]
Bus (Bus regulations) B: 715
Civil rights (Major changes in the field of civil
rights) Ci: 610
Deafness (Special devices) D: 58-59
Disabled (Attitudes toward people with disabil-
ities) D: 221-222
America's Cup A: 431
Sailing (America's Cup) S: 27 *with picture*
America's Dairyland [title]
Wisconsin W: 346
America's Rhine [nickname]
Hudson River H: 405
Americium [element] A: 431
Transuranium element T: 401
Americo-Liberians [people]
Liberia (People) L: 229
Amerigo Vespucci See *Vespucci, Amerigo in
this index*
Amerika [book by Kafka]
Kafka, Franz K: 209
Amerind
Indian, American I: 136c
Ames, Adelbert [American political leader]
Mississippi (table) M: 640
Ames, Adelbert, Jr. [American physicist] A: 431
Ames, Benjamin [American political leader]
Maine (table) M: 87
Ames, Fisher [American political leader]
Adams, John Quincy (U.S. senator) A: 41
Ames, Oakes [American businessman]
Credit Mobilier of America Ci: 1125
Ames, Oliver [American political leader]
Massachusetts (table) M: 288
Ames-Dryden Flight Research Center
[California]
Edwards Air Force Base E: 114
Amethyst [gem] A: 431
Gem picture on G: 78
Amethystine python [snake]
Python P: 922
Amex [stock exchange] See *American Stock
Exchange in this index*
Amhara [people]
Ethiopia (People) E: 368
Amheric [language]
Ethiopia (People) E: 368
Amherst [New York]
Buffalo (The city) B: 677
Amherst, Lord Jeffery [British general] A: 431
Amherst College
Folger Shakespeare Library F: 315
Amide [compound]
Aramid A: 591
Amidships
Ship (Nautical terms) S: 416 *with diagram*
Amiens [France] A: 432 *with picture*
Amiens, Treaty of [1802]
Napoleon I (Peacemaking) N: 16
Amiens Cathedral [France]
Architecture picture on A: 619
Gothic art (High Gothic architecture) G: 278
with picture
Amillennialism [religion]
Millennium M: 553
Amín Dada, Idi [Ugandan political leader] A: 432
Tanzania (The united republic) T: 35
Uganda (History) U: 4
Amino acid [biochemistry] A: 432
Acid (Organic acids) A: 27
Cell (Producing energy) C: 332-333 *with dia-
gram*
Dietary supplement D: 200
Food (Building and repairing tissues) F: 331
Food supply (Protein) F: 346
Heredit (The flow of genetic information)
H: 205
Hormone (How hormones work) H: 337
Life (Proteins) L: 278; *diagram on L: 277*
Metabolism (Catabolism) M: 424
Nutrition (Proteins) N: 625
Protein (The structure of proteins) P: 832;
(How the body uses proteins) P: 832-833
Aminoglycoside [antibiotic]
Streptomycin So: 926
Aminta [play by Tasso]
Tasso, Torquato T: 50
Amir [title] See *Emir in this index*
Amis, Kingsley [British author] A: 432
Amis, Martin [British author]
Amis, Kingsley A: 433
English literature (Recent English fiction)
E: 323
Novel (The novel today) N: 575
Amish [religious group] A: 433 *with picture*
Clothing (Communication) Ci: 688-689
Evolution (Genetic drift) E: 429
Pennsylvania picture on P: 248
Pennsylvania Dutch P: 270
Amish Acres
Indiana (Places to visit) I: 206
Amistad, La [ship]
African Americans (The growth of slavery)
A: 136e
Amistad Rebellion A: 433
New Haven (The city) N: 229
Amistad Dam [Mexico-U.S.]
Rio Grande (Middle course) R: 347
Amistad National Recreation Area [Texas]
National Park System (table: National recre-
ation areas) N: 49
Amistad Rebellion [U.S. history] A: 433
Adams, John Quincy (The Amistad Rebellion)
A: 43
Amitriptyline [drug]
Antidepressant A: 553
Amman [city, Jordan] A: 433
Arabs picture on A: 584
Jordan J: 160 *with picture*
Ammann, Jacob [Swiss religious leader]
Amish A: 433
Ammeter [instrument]
Electric meter E: 176
Ammonoete [animal]
Lamprey (Habits) L: 55
Ammonia [chemical] A: 433
Anhydrous ammonia A: 467
Coal (Coal as a raw material) Ci: 720
Fertilizer (Inorganic fertilizers) F: 79
Haber process H: 2
Liver (Purification of the blood) L: 394
Molecule (Individual molecules) M: 692 *with
diagram*
Smelling salts S: 514
Ammonia gelatin [chemical]
Dynamite (Kinds of dynamite) D: 397
Ammonia maser
Maser M: 263
Ammonium hydroxide [chemical]
Ammonia (Properties of ammonia) A: 434
Ammonium nitrate [chemical]
Ammonia (Uses) A: 434
Nitric acid N: 425
Ammons, A. R. [American poet] A: 434
American literature (Poetry) A: 423
Ammons, Albert [American musician]
Jazz (The swing era) J: 71
Ammons, Elias M. [American political leader]
Colorado (table) Ci: 844
Ammons, Teller [American political leader]
Colorado (table) Ci: 844
Ammunition A: 434 *with pictures*
Cartridge C: 268
Explosive E: 454
Guided missile G: 423 *with pictures*
Handgun (Types of handguns) H: 43
Magazine M: 46
Ordnance O: 825
Amnesia [disorder] A: 437
Hypnotism (Hypnotic phenomena) H: 478
Memory (Memory disorders) M: 394
Mental illness (Dissociative disorders) M: 406
Amnesty [law] A: 437
Ford, Gerald Rudolph (The national scene)
F: 376-377
Immigration (The fourth wave) I: 83
**Amnesty and Reconstruction, Proclamation
of** [1865]
Lee, Robert Edward (Last years) L: 178
Amnesty International [organization] A: 438
Human rights (Independent organizations)
H: 428a
Nobel Prizes (Peace: 1977) N: 448
Political prisoner P: 638
Amniocentesis [medicine] A: 438
Genetic counseling (Reasons for seeking
genetic counseling) G: 84
Pregnancy (Medical care) P: 734-735
Reproduction, Human (Checking the fetus)
R: 248
Amniotic fluid [physiology]
Amniocentesis A: 438
Reproduction, Human (Nourishing the embryo)
R: 247
Amniotic sac [physiology]
Baby (The developing baby) B: 4-5 *with dia-
gram*
Childbirth (The birth process) C: 456
Amoco [company]
BP B: 543
Amoeba See *Ameba in this index*
Amoebic dysentery See *Amebic dysentery in
this index*
Amon [Egyptian god] A: 438
Akhenaten A: 253
Egypt, Ancient (Religion) E: 137
Hatshepsut H: 86
Mythology (Other Egyptian divinities) M: 977
Amon-Re [Egyptian god]
Egypt, Ancient (Religion) E: 137; (The New
Kingdom) E: 143; *picture on E: 140*
Mythology (Other Egyptian divinities) M: 977
with picture
Thebes T: 251
Amon-Re, Temple of See *Karnak, Temples at in
this index*
Among the Millet [poems by Lampman]
Lampman, Archibald L: 54
Amor [Roman god] See *Cupid in this index*
Amoretti [poems by Spenser]
Sonnet So: 593
Spenser, Edmund (Spenser's other poems)
So: 778
Amorphous carbon [chemistry]
Carbon (Forms of carbon) C: 205-206
Charcoal C: 377
Amorsolo, Fernando [Filipino artist]
Philippines (The arts) P: 375
Amortized mortgage loan
Housing (Housing since 1900) H: 391-392
Amos [Biblical figure]
Amos, Book of A: 438
Amos, Book of [Old Testament] A: 438
Amos Fortune, Free Man [book by Yates]
Yates, Elizabeth Y: 553
"Amos 'n' Andy" [radio program]
Radio (The Golden Age of Broadcasting) R: 92-
93
**Amos Tuck School of Business
Administration**
Dartmouth College D: 39
Amosite
Asbestos (Types of asbestos) A: 765
Amount of substance [chemistry]
Metric system (Chemistry) M: 440
Amoxicillin [medication]
Ampicillin A: 443
Penicillin (Early history) P: 240-241
Amoy See *Xiamen in this index*
Amp See *Ampere in this index*
Ampere [electricity] A: 438
Electric current (Conductors and insulators)
E: 168
Metric system (Structure of the metric sys-
tem) M: 437; (Electricity) M: 440
Ampère, André Marie [French physicist] A: 438

- Electricity (Electricity and magnetism) E: 197
Electromagnetism E: 203
Magnetism (Electricity and magnetism) M: 61
Physics (Developments in the 1800's) P: 440
- Amphetamine** [drug] A: 439
Brain (How drugs affect brain chemistry) B: 556
Drug (Stimulants) D: 352; (The drug revolution) D: 359
Drug abuse (table: Some commonly abused drugs) D: 363
Methamphetamine M: 433
Stimulant So: 901
- Amphib** [ship] See *Amphibious ship in this index*
- Amphibian** [airplane]
Airplane (Seaplanes) A: 212 *with picture*
- Amphibian** [zoology] A: 439 *with pictures*
Animal (table: Length of life of animals) A: 473; (A table of animal intelligence) A: 493
Brain (In vertebrates) B: 559
Earth (The Paleozoic Era) E: 27
Evolution (Geographic distribution of species) E: 430-431
Fish (The first fish) F: 171
Heart (Amphibians and reptiles) H: 146 *with diagram*
Prehistoric animal (The move onto land) P: 737; (Amphibians) P: 738 *with picture*
Reproduction (Amphibians) R: 243
- Amphibious assault** [warfare]
Navy (Wartime roles) N: 77
- Amphibious ship** A: 442 *with picture*
Navy (Amphibious ships) N: 78
Warship (Amphibious warfare ships) W: 40; (Warships in the two world wars) W: 41-42 *with picture*
- Amphibious warfare** A: 442
Amphibious ship A: 442
Marine M: 203
Navy (Wartime roles) N: 77
Warship (Amphibious warfare ships) W: 40
- Amphibole** [mineral] A: 443
Asbestos (Types of asbestos) A: 765
- Amphictyonic League** [ancient Greece]
Peace (Ancient Greece and Rome) P: 206
- Amphidrome** [oceanography]
Tide (Tidal patterns) T: 282
- Amphion** [Greek mythology]
Niobe N: 424
- Amphioxus** [sea animal] A: 443 *with picture*
Animal (Invertebrates and vertebrates) A: 488 *with diagram*
- Amphisbaenian** [animal] A: 443 *with picture*
Reptile (Lizards, amphisbaenians, and snakes) R: 250
- Amphitheater**
Arena A: 645
Drama *picture on* D: 326
Rome, Ancient (Recreation) R: 439
- Amphitrite** [Greek mythology]
Neptune N: 128
Nereids N: 130
Poseidon P: 697
- Amphitruo** [play by Plautus]
Plautus P: 570
- Amphotericin** [drug]
Antibiotic (Other kinds of antibiotics) A: 550; (Disruption of the cell membrane) A: 550
Fungal disease (In people) F: 558
- Ampicillin** [medication] A: 443
Antibiotic (table) A: 551
Penicillin (Early history) P: 240-241; (Forms of penicillin) P: 240
- Amplification** [physics]
Electronics (Transistors) E: 212; *diagram on* E: 211
Laser (Producing laser light) L: 83-84
Transistor (What transistors do) T: 372
- Amplifier** [electronics]
Electronics (Transistors) E: 212; *diagram on* E: 211
Phonograph (Parts of a phonograph) P: 400-401 *with diagram*
Radio (How radio programs are received) R: 88-89 *with picture*
Stereophonic sound system (Parts of a stereo system) So: 892
Tape recorder (Erasing and recording) T: 37-38
Television (Amplifiers and separators) T: 123
Vacuum tube (Kinds of vacuum tubes) V: 258-259
- Amplitude** [physics]
Electronics (Digital-analog conversion) E: 214
Light (The nature of light) L: 284 *with diagram*
Radio (Transmitting radio waves) R: 87
Sound (Intensity and loudness) So: 600 *with diagram*
Vibration V: 347
Waves (Measuring waves) W: 152; *diagram on* W: 150
- Amplitude modulation** [electronics]
Antenna A: 543-544
Frequency modulation F: 528
Radio (Transmitting radio waves) R: 87 *with diagram*
Television (Broadcasting) T: 122-123
Wireless communication (How wireless communication works) W: 345
- Ampulla** [anatomy]
Ear (The inner ear) E: 8
- Ampulla** [fallopian tube]
Reproduction, Human (Fertilization) R: 246
- Ampullae of Lorenzini** [zoology]
Shark (Senses) S: 375
- Amputation** [medicine] A: 443
See also *Artificial limb in this index*
Artificial limb (Preparation of an artificial limb) A: 760
Surgery (Some common surgical operations) So: 1006
- Amritsar** [India] A: 444
India (India under Indira Gandhi) I: 133-134
Sikhism S: 455 *with picture*
- Amritsar Massacre** [1919]
Gandhi, Mohandas Karamchand (Gandhi's independence campaigns) G: 25
India (Rise of Indian nationalism) I: 131
- Amsterdam** [The Netherlands] A: 444 *with picture*
Europe *picture on* E: 388
Netherlands (National government) N: 139 *with picture; picture on* N: 141
- Amsterdam, University of**
Netherlands (Education) N: 142
- Amsterdam-Rhine Canal** [The Netherlands]
Canal (table) C: 164
- Amsterdam Stock Exchange**
Architecture (Early modern architecture in Europe) A: 627-628 *with picture*
- Amtrak** [corporation] A: 445
Interstate Commerce Commission I: 352
Railroad (Intercity trains) R: 105-106 *with map*; (Railroad systems) R: 112-113; *picture on* R: 108
- Amtrak's Hudson River Tunnel** [New Jersey-New York]
Hudson River tunnels (Amtrak's Hudson River Tunnel) H: 407
- Amu** [unit of measure] See *Atomic weight in this index*
- Amu Darya** [river, Asia]
Tajikistan (Land and climate) T: 18a *with map*
Turkmenistan (Land and climate) T: 514a *with map*
Uzbekistan (Land and climate) U: 254
- Amulet** A: 445
- Amulius** [legendary figure]
Romulus and Remus R: 450
- Amundsen, Roald** [Norwegian explorer] A: 445 *with picture and map*
Antarctica (The "Heroic Era") A: 536 *with picture; picture on* A: 531
Arctic (Arctic exploration) A: 639-640
Exploration (Arctic exploration) E: 449-450 *with picture and map*
Northwest Passage N: 529 *with picture*
- Amundsen Abyssal Plain**
Southern Ocean (The ocean floor) So: 688a
- Amundsen-Scott South Pole Station**
Antarctica *picture on* A: 540
South Pole So: 686
- Amur River** [Siberia] A: 446
Okhotsk, Sea of O: 710
- Amusement park** A: 446
See also *Theme park in this index*
Denmark (Recreation) D: 136-137 *with picture*
Ferris wheel F: 77 *with picture*
Merry-go-round M: 419
Roller coaster R: 402
- Amusements** See *Recreation in this index*
- AMVETS** [organization] A: 446
Veterans' organizations (In the United States) V: 344-345
- Amygdaloid complex** [anatomy]
Brain (In thinking and remembering) B: 555
- Amylase** [enzyme]
Digestive system (In the small intestine) D: 203
Malt M: 112
- Amyloid** [protein]
Alzheimer's disease (Diagnosis) A: 398-399
- Amylose** [botany]
Rice (Kinds of rice) R: 323-324
- Amyotrophic lateral sclerosis** [disease] A: 446
Gehrig, Lou G: 75
Gulf War syndrome G: 439
- Amytal**
Barbiturate (Medical uses) B: 107
- An Duong** [Vietnamese ruler]
Vietnam (Nam Viet) V: 369
- An Lushan** [Manchurian military leader]
Tang dynasty (The middle years) T: 26
- Anabaena** [alga]
Algae *picture on* A: 349
- Anabaptists** [religious group] A: 447
Hutterites H: 458
Mennonites M: 402
Protestantism (The radical reform movements [the 1500's and 1600's]) P: 835
Reformation (Zwingli and the Anabaptists) R: 197-198
- Anabasis** [book by Xenophon]
Xenophon X: 543
- Anableps** [fish] A: 447 *with picture*
Fish *picture on* F: 145
- Anabolic steroid**
Steroid (The sex steroids) So: 894-895
Drug abuse (Steroids) D: 362
Olympic Games (Charges of steroid use) O: 753
Testosterone T: 182
- Anabolism** [physiology]
Metabolism (Anabolism) M: 424
- Anacapa Island** [California]
Channel Islands National Park C: 375
- Anacletus II** [antipope]
Pope (table) P: 666
- Anacletus, Saint** [pope]
Pope (table) P: 666
- Anaconda** [snake] A: 447 *with picture*
Snake S: 525
- Anaconda Company**
Montana (Statehood) M: 760; (The mid-1900's) M: 760
- Anacostia Museum** [Washington, D.C.]
Washington, D.C. (Smithsonian museums) W: 71-73
- Anacostia River**
Washington, D.C. (The city) W: 78-79
- Anacraon** [Greek poet] A: 447
- Anacreontics** [poetry]
Anacreon A: 447
- Anacrusis**
Poetry (table) P: 594
- Anadromous fish** [zoology]
Fish (Fish migrations) F: 151
Fishing (Fishing tips) F: 179
- Anaemia** See *Anemia in this index*
- Anaerobe** [bacteria]
Bacteria (Where bacteria live) B: 20-21
- Anaerobic capacity**
Physical fitness (Performance-related fitness) P: 433-434
- Anaerobic power**
Physical fitness (Performance-related fitness) P: 433-434
- Anaesthesia** See *Anesthesia in this index*
- Anagen** [anatomy]
Hair (Cycles of hair growth) H: 10
- Anagenesis** [biology]
Evolution (Main ideas of evolutionary theory) E: 426; (Direct observation of evolution) E: 431
- Anahaim** [California] A: 447
- Anaheim Angels**
Baseball (table) B: 130
- Anaheim Mighty Ducks**
Hockey (table: National Hockey League) H: 281
- Anahoa Island Refuge**
Nevada (Plant and animal life) N: 168
- Anal clasper** [zoology]
Butterfly (The larva) B: 740-741 *with diagram*
- Anal fin** [zoology]
Fish (Fins) F: 160-161 *with picture*
- Anal phase** [psychology]
Libido L: 233
Psychoanalysis (Psychoanalytic theory) P: 846
- Anal proleg** [zoology]
Butterfly (The larva) B: 740-741 *with diagram*

- Anal sac** [zoology]
Dog (Behavior) D: 277
- Analgesic** [medication] A: 448
Drug (Drugs that affect the nervous system) D: 352
Opiate O: 810
- Analogue** [magazine]
Science fiction (The Golden Age) S: 205
- Analogue computer** A: 448
Computer Ci: 908
- Analogue information**
Digital technology D: 203
Telecommunications T: 89
- Analogue meter**
Electric meter (Analogue meter) E: 176
- Analogue recording**
Phonograph (How phonographs work) P: 400
Stereophonic sound system (Parts of a stereo system) So: 892
Tape recorder T: 37 *with diagrams*
- Analogue signal** [electronics]
Digital technology D: 203
Electronics (How electronic circuits process information) E: 213
- Analogue switch**
Telephone (Transmitting the telephone signals) T: 96
- Analogue-to-digital converter** [machine]
Compact disc (Recording) Ci: 901
Electric meter (Digital meters) E: 177
Seismograph S: 288
- Analogue watch**
Watch (Kinds of watches) W: 114
- Analogue xerography**
Copying machine (Electrostatic copying) Ci: 1045
- Analogous structures** [biology]
Homologous structures H: 306
- Analogue**
Prostaglandin P: 829
- Analysis**
Criticism Ci: 1146
Psychoanalysis P: 846
Statistics (Analyzing the data) So: 868
- Analysis of Beauty, The** [book by Hogarth]
Hogarth, William H: 288
- Analysts** [literature]
Homer (Analysts and unitarians) H: 303
- Analytic cubism** [art]
Cubism Ci: 1181 *with picture*
Painting (Cubism) P: 77-78
Picasso, Pablo (Cubism) P: 448b
- Analytic geometry**
Geometry (Types of geometry) G: 103;
(Analytic geometry) G: 104
Mathematics (Branches of mathematics) M: 303; (Mathematics and the scientific revolution) M: 306-307
- Analytic phonics**
Reading (Phonics instruction) R: 159
- Analytic process** [industry]
Manufacturing (Making products) M: 170
- Analytical balance**
Balance B: 34
- Analytical engine** [machine]
Babbage, Charles B: 2
Computer (Early punched-card computing devices) Ci: 924a-924b
- Analytical index** [reference]
Index I: 107
- Analytical Mechanics** [book by Lagrange]
Lagrange, Joseph-Louis L: 31
- Analytical psychology**
Jung, Carl Gustav J: 194
Psychotherapy (Analytic psychotherapy) P: 852
- Anand, Viswanathan** [Indian chess player]
Chess (World chess champions) C: 414
- Ananda Mahidol** [king of Thailand]
Thailand (Changes in government) T: 227;
(Opposition to Communism) T: 227
- Anansi** [folk character]
Folklore F: 322
- Anapest** [poetry]
Poetry (table) P: 594
- Anaphase** [biology]
Cell (Mitosis) C: 330-331
- Anaphylactic shock** [disorder] A: 448
- Anarchism** [political science] A: 448
Government (Anarchism) G: 283
Haymarket Riot H: 122
Proudhon, Pierre Joseph (Ideas) P: 838
Russia (Alexander II) R: 551
Sacco-Vanzetti case S: 4
- Anarchy, The** [English history]
Stephen [English king] So: 890
- Anasazi** [people] A: 448a *with picture*
Archaeology *picture on* A: 597
Architecture (Pre-Columbian architecture) A: 614
Arizona (Early days) A: 688
Canyon de Chelly National Monument C: 185
Chaco Culture National Historical Park C: 365
Indian, American (Indians of the Southwest) I: 166; *picture on* I: 152
Mesa Verde National Park M: 420
New Mexico (Indian days) N: 272 *with picture*
Pueblo Indians (Early life) P: 871
Utah (Indian days) U: 246 *with picture*
- Anastasia** [grand duchess of Russia]
Nicholas II [czar] *picture on* N: 403
- Anastasia Krupnik** [book by Lowry]
Lowry, Lois L: 511
- Anastasis, The** [fresco]
Byzantine art *picture on* B: 750
- Anatol** [play by Schnitzler]
Schnitzler, Arthur S: 177
- Anatolia** [region, Turkey]
Asia Minor A: 812a *with map*
Ottoman Empire (The beginning of the empire) O: 878
Turkey T: 502 *with maps*; (The land) T: 507
- Anatolian shepherd** [dog] A: 448b *with picture*
- Anatomical Procedures** [book by Galen]
Galen G: 9
- Anatomical Study on the Motion of the Heart and Blood in Animals, An** [book by Harvey]
Harvey, William H: 81
- Anatomy** A: 448b
See also Comparative anatomy *in this index*
Biology (table) B: 317
Human body *diagrams on* H: 422
Leonardo da Vinci (Leonardo's works) L: 200-200a
Physiology P: 445
Science (The life sciences) S: 193
- Anatomy Lesson, The** [book by Roth]
Roth, Philip R: 487
- Anatomy Lesson of Professor Tulp** [painting by Rembrandt]
Rembrandt (Early Amsterdam years) R: 229
World, History of the *picture on* W: 440
- Anatomy of Criticism** [book by Frye]
Frye, Northrop F: 549
- Anawrahta** [Burmese ruler]
Myanmar (Early days) M: 970d
- Anaxagoras** [Greek philosopher] A: 448b
Pre-Socratic philosophy (The teachings of Parmenides) P: 772-773
- Anaximander** [Greek philosopher] A: 448b
Pre-Socratic philosophy (The first pre-Socratics) P: 772
- Anaximenes** [Greek philosopher] A: 449
Pre-Socratic philosophy (The first pre-Socratics) P: 772
- Anaya, Toney** [American political leader]
New Mexico (table) N: 272
- Anaza** [people]
Kuwait (History) K: 396
- ANC** *See* African National Congress *in this index*
- ANC** [sound] *See* Active noise cancellation *in this index*
- Ancestor worship** [religion] A: 449
Mythology (African mythology) M: 982
- Ancestral being** [religion]
Aborigines, Australian (Aboriginal life) A: 14
- Ancestry**
Genealogy G: 82
- Anchor** A: 449 *with pictures*
- Anchor arm** [architecture]
Bridge (Cantilever bridges) B: 601 *with diagram*
- Anchorage** [Alaska] A: 449 *with picture*
Alaska (Population) A: 286; (table) A: 295;
(Statehood) A: 303 *with picture*; *picture on* A: 283
- Anchorage** [construction]
Bridge (Suspension bridges) B: 601-602 *with diagram*
- Anchors Aweigh** [film]
Animation *picture on* A: 514a
- "Anchors Aweigh"** [song]
Navy, United States N: 83
- Anchovetta** [fish]
Peru (Fishing) P: 313
- Anchovy** [fish] A: 450 *with picture*
- Ancient and Honorable Artillery Company** [Boston]
Massachusetts (Interesting facts) M: 271
- Ancient Arabic Order of Nobles of the Mystic Shrine** *See* Shrine, The *in this index*
- Ancient civilization** [history] A: 450
Civilization (How civilizations develop) Ci: 636
Law (The development of law) L: 133
Seven Wonders of the Ancient World S: 325;
pictures on S: 326-327
- Art, literature and music**
Painting (Early painting) P: 40
- Science**
Alchemy A: 334
Medicine (History) M: 371-372 *with pictures*
- Society**
Calendar (History) C: 30
Clothing (Ancient times) Ci: 696 *with pictures*
Food (Ancient times) F: 336
World, History of the (Early centers of civilization) W: 422 *with pictures and map*
See also the list of Related Articles *in the Ancient civilization article*
- Ancient Egypt** *See* Egypt, Ancient *in this index*
- Ancient Egyptian Arabic Order of Nobles of the Mystic Shrine** *See* Shrine, The *in this index*
- Ancient Greece** *See* Greece, Ancient *in this index*
- Ancient Macmillan plaid**
Tartan *picture on* T: 47
- Ancient Mystical Order Rosae Crucis** [organization] *See* Rosicrucian Order *in this index*
- Ancient Persia** *See* Persia, Ancient *in this index*
- Ancient Rome** *See* Rome, Ancient *in this index*
- Ancient Voices of Children** [music by Crumb]
Crumb, George Ci: 1159
- Ancon** [ship]
Panama Canal (The oceans united) P: 126
- Antón, Treaty of** [1883]
Peru (The War of the Pacific) P: 315
- Ancona** [breed]
Chicken (Mediterranean class chickens) C: 441; (table) C: 443
- Anconeus** [anatomy]
Arm A: 717
- Ancus Marcius** [legendary figure]
Mythology (The seven kings) M: 981
- Ancyra** [ancient city]
Galatia G: 8
- AND-gate** [computer]
Electronics (Digital circuits) E: 213-214
- Andalusian Dog, An** [film]
Dali, Salvador D: 10
- Andalusian Scenes** [works by Estébanez Calderón]
Spanish literature (The 1800's) So: 761-762
- Andaman and Nicobar Islands** [India]
Bay of Bengal B: 175
- Andante**
Music (table) M: 954
- Andean condor**
Condor Ci: 929 *with picture*
Vulture (New World vultures) V: 453-454
- Andean deer** *See* Huemul *in this index*
- Andean-Equatorial** [language group]
Indian, American (Language groups) I: 149-150
- Andean Indians**
Cocaine (History) Ci: 743
Indian, American (Indians of the Andes) I: 173
with pictures and map
- Andean Pact**
Latin America (Trade relations and economic developments) L: 108-109
- Anders, William Alison** [American astronaut]
Astronaut (Achievements in space) A: 829-830
Space exploration (Orbiting the moon) So: 715
- Andersen, Elmer L.** [American political leader]
Minnesota (table) M: 602
- Andersen, Hans Christian** [Danish author]
A: 451
Fairy (Fairies in literature) F: 11
- Andersen, Arthur** [accounting firm]
Enron Corporation E: 327
- Anderson, C. Elmer** [American political leader]
Minnesota (table) M: 602
- Anderson, Carl David** [American physicist]
A: 451
Dirac, Paul Adrien Maurice D: 217
Muon M: 928
- Anderson, Charles** [American political leader]
Ohio (table) O: 699
- Anderson, Clinton Presba** [American political leader]
Agriculture, Department of (table) A: 161

Anderson, Eugenie [American diplomat]
Owen, Ruth Bryan O: 883

Anderson, Forrest H. [American political leader]
Montana (table) M: 757

Anderson, Hugh J. [American political leader]
Maine (table) M: 87

Anderson, James T. M. [Canadian political leader]
Saskatchewan (table) S: 144

Anderson, John, Jr. [American political leader]
Kansas (table) K: 234

Anderson, Judith [Australian actress] A: 451

Anderson, Marian [American singer] A: 451
with portrait
African Americans (The Great Depression) A: 136! *with picture*

Anderson, Maxie [American balloonist]
Balloon (Long-distance balloon flights) B: 62

Anderson, Maxwell [American dramatist] A: 452

Anderson, Philip Warren [American physicist]
Nobel Prizes (Physics: 1977) N: 441

Anderson, Ray [American musician]
Jazz (Recent developments) J: 74

Anderson, Robert [Union military leader]
Fort Sumter F: 416
Lincoln, Abraham (Fort Sumter and war) L: 321

Anderson, Robert B. [American government official]
Eisenhower, Dwight David (table) E: 152
Treasury, Department of the (table) T: 407

Anderson, Sherwood [American author] A: 452
with portrait
American literature (Realist fiction) A: 422

Anderson, Sigurd [American political leader]
South Dakota (table) So: 680

Anderson, Sparky [American baseball manager]
Baseball (table: Baseball Hall of Fame) B: 134

Anderson, Victor E. [American political leader]
Nebraska (table) N: 110

Anderson, Wendell R. [American political leader]
Minnesota (table) M: 602

Andersonville National Historic Site [Georgia]
National Park System (table: National historic sites) N: 52

Andersonville prison [U.S. history]
Civil War (Prisons) Ci: 631

Andes, Crown of the
Crown picture on C: 1158

Andes Mountains [South America] A: 452 *with picture and map*
Argentina (The Andine) A: 653 *with picture and map*
Bolivia (The Andean Highlands) B: 445
Chile (The Central Valley) C: 464-465 *with picture*
Colombia (The Andes Mountains) Ci: 782 *with picture*
Ecuador E: 67 *with picture*
Indian, American (Indians of the Andes) I: 173
Mountain (The Andes Mountains) M: 893
Peru P: 306 *with picture*; (The highlands) P: 311
South America So: 626 *with pictures*

Andesine [mineral]
Feldspar F: 68

Andesite [rock]
Mars (Crust) M: 225

Andhra Pradesh [state, India]
India (Languages) I: 114; (India in the 1950's and early 1960's) I: 133

Andhres dynasty
India (Southern India) I: 129

Andine [region, Argentina]
Argentina (The Andine) A: 653 *with map*

Andorra [country] A: 454 *with picture and map*
Flag picture on F: 205

Andorra la Vella [city] A: 455 *with picture*
Andorra A: 454 *with picture*

Andrade e Silva, José Bonifácio de [Brazilian government official] A: 456

Andrade, Mario de [Brazilian author]
Latin-American literature (The early 1900's) L: 113

Andredite [gem]
Garnet G: 45

André, John [British spy] A: 456

Arnold, Benedict (Turns traitor) A: 742

Lafayette, Marquis de (Service to the United States) L: 27

André, Louis [French religious leader]
Visconsin (Exploration and settlement) W: 365

"Andrea del Sarto" [poem by Browning]
Browning, Robert (Browning's poems) B: 646

Andrea Doria [ship]
Shipwreck (table: Major shipwrecks) S: 428

Andreanof Islands [Alaska]
Alaska picture on A: 287

Andretti, Mario [American race driver] A: 456
Automobile racing (table: Grand Prix world champions) A: 980; (table: Indianapolis 500 winners) A: 980

Andrew, John A. [American political leader]
Massachusetts (table) M: 288

Andrew, Prince [British prince]
Elizabeth II (The royal family) E: 240

Andrew, Saint [apostle] A: 456
Peter, Saint (Early life) P: 324

Andrew Johnson National Historic Site [Tennessee]
National Park System (table: National historic sites) N: 52

Andrew W. Mellon Foundation *See* Mellon Foundation *in this index*

Andrews, Charles B. [American political leader]
Connecticut (table) Ci: 967

Andrews, James J. [Union spy]
Civil War (Raids) Ci: 629

Andrews, Julie [British actress]
Motion picture (Best performance by an actress: 1964) M: 862

Andrews, Roy Chapman [American explorer] A: 456

Andrews Air Force Base [Maryland] A: 456

Andrews' Raid [U.S. history]
Civil War (Raids) Ci: 629

Andreyev, Leonid [Russian author] A: 456
Russian literature (Symbolism) R: 563

Andrić, Ivo [Yugoslav author]
Nobel Prizes (Literature: 1961) N: 446

Androcles [Roman slave] A: 457

Androcles and the Lion [play by Shaw]
Androcles A: 457

Androclus *See* Androcles *in this index*

Androgen [hormone]
Adrenal gland A: 67
Hormone (Growth and sex hormones) H: 336
Steroid (The sex steroids) So: 894
Testosterone T: 182

Androgyny
Sexuality (Androgyny) S: 338a

Andromaque [play by Racine]
French literature (Classical drama) F: 520

Andromeda [constellation] A: 457

Andromeda [Greek mythology] A: 457

Andromeda Galaxy [astronomy] A: 457 *with picture*
Andromeda A: 457
Galaxy G: 8a
Hubble, Edwin Powell H: 403
Universe U: 205

Andronicus, Livius [Greek author]
Latin literature (Early Latin literature) L: 115

Andronicus of Rhodes [Greek editor]
Aristotle (Aristotle's place in Western thought) A: 664

Andropov, Yuri Vladimirovich [Soviet political leader] A: 457
Gorbachev, Mikhail Sergeyevich (Early life and political rise and fall) G: 272
Union of Soviet Socialist Republics (The rise of Gorbachev) U: 40

Andros, Sir Edmund [English colonial official] A: 457
Charter Oak C: 386
Connecticut (Defending the colony) Ci: 970
Massachusetts (Troubles with England) M: 291

Andros Island [West Indies]
Bahamas (Land and climate) B: 29 *with map*

Androscoggin River
Maine (Rivers and lakes) M: 82
New Hampshire (Rivers and lakes) N: 220

Androsterone
Hormone (Growth and sex hormones) H: 336

Andrus, Cecil D. [American political leader]
Carter, Jimmy (table) C: 257
Idaho (table) I: 42
Interior, Department of the (table) I: 325

Andrus, Ethel Percy [American educator]
AARP A: 3

Andruss, Leonard [American businessman]
Deere, John D: 87

Anegada [island]
Virgin Islands, British V: 397

Aneirin [Welsh poet]
Wales (The arts) W: 11

Anemia [disorder] A: 458
See also Pernicious anemia; Sick cell anemia *in this index*
Blood (Diagnostic tests) B: 413; (Anemia) B: 414
Cancer (Erythropoietin) C: 173
Cell (Metabolic diseases) C: 336-337
Chloramphenicol C: 516
Iron (How iron is used in medicine) I: 435
Leukemia L: 215
Nutrition (Deficiency diseases) N: 630-631
Thalassemia T: 228

Anemic anoxia [disorder]
Anoxia A: 519

Anemometer [instrument] A: 458 *with picture*
Weather (Land-based observation stations) W: 162

Anemone [botany] A: 458
Plant picture on P: 519

Anemone, Sea [sea animal] *See* Sea anemone *in this index*

Anemonefish
Fish picture on F: 155

Aneroid barometer [instrument]
Altimeter A: 390
Barometer (Kinds of barometers) B: 115 *with diagram*

Anesidemus [Greek philosopher]
Skepticism S: 481

Anesthesia [medicine] A: 459
Acupuncture A: 31
Barbiturate (Medical uses) B: 107
Benzocaine B: 255
Childbirth (Methods of childbirth) C: 456-457
Coca Ci: 742
Cocaine Ci: 742
Dentistry (Modern dentistry) D: 145
Drug (Anesthetics) D: 352; (The drug revolution) D: 359
Halothane H: 27
Hypnotism (Uses of hypnotism) H: 478; (Scientific studies) H: 479
Lidocaine L: 270
Long, Crawford Williamson L: 446
Medicine (The first anesthetic) M: 375 *with picture*
Menthol M: 411
Morton, William Thomas Green M: 821
Nitrous oxide N: 427
Surgery (Anesthesia) So: 1004

Anesthesin
Benzocaine B: 255

Anesthesiologist [career]
Anesthesiology A: 459
Surgery (A typical operation) So: 1006

Anesthesiology [medicine] A: 459
Medicine (table) M: 369

Anesthetic *See* Anesthesia *in this index*

Anethole [chemical]
Licorice L: 270

Aneto, Pico de [mountain, Spain]
Pyrenees P: 919

Aneurysm [disorder] A: 459
DeBakey, Michael Ellis D: 63

Anfinsen, Christian Boehmer [American chemist]
Nobel Prizes (Chemistry: 1972) N: 443

ANFO [explosive]
Dynamite (History) D: 397

Angekok [shaman]
Inuit (Religion) I: 354e

Angel [religion] A: 460
Michael, Saint M: 482

Angel, Jimmy [American pilot]
Angel Falls A: 460

Angel Falls [waterfall, Venezuela] A: 460
South America (Waterfalls) So: 628 *with picture*
Venezuela (The Guiana Highlands) V: 302
Waterfall (table: Famous waterfalls of the world) W: 143 *with picture*

Angel of Death and the Sculptor, The [sculpture by French]
French, Daniel Chester F: 511

Angela Merici, Saint [Italian religious leader]
Religious life (Religious life in the 1500's and 1600's) R: 227

Angelfish [fish] A: 460 *with picture*
Fish picture on F: 155

Angelico, Fra [Italian painter] A: 460 *with picture*
Painting (The 1400's) P: 52-53 *with picture*

- Angèle de Montbrun** [book by Conan]
Canadian literature (Fiction: 1850-1918) C: 158
- Angell, Sir Norman** [British economist]
Nobel Prizes (Peace: 1933) N: 447
- Angelo** [literary figure]
Shakespeare, William (*Measure for Measure*) S: 362
- Angelotti, Cesare** [opera character]
Opera (*Tosca*) O: 807
- Angelou, Maya** [American author] A: 460
African Americans (Achievements) A: 136p
- Angels, Anaheim** See Anaheim Angels in this index
- Angels Fall** [play by Wilson]
Wilson, Lanford W: 317
- Angels in America** [play by Kushner]
Drama (Later United States drama) D: 340-341
- Angel's trumpet** [plant]
Datura D: 43
- Angelus** [prayer]
Annunciation A: 518
- Anger**
Emotion (Early theories about emotions) E: 261
- Angevin** [English history]
Plantagenet P: 550
- Angina pectoris** [disorder] A: 461
Beta-blocker B: 274
Calcium channel blocker C: 21
Heart (Symptoms and diagnosis) H: 137
- Angiogenesis** [biology]
Angina pectoris A: 461
Cancer (Molecular medicine) C: 173
Thalidomide T: 229
- Angiogenesis inhibitor** [medicine]
Cancer (Molecular medicine) C: 173
- Angiogram** [medicine]
Angiography A: 461
Heart (Symptoms and diagnosis) H: 137-138 with picture
- Angiography** [medicine] A: 461
See also Coronary angiography in this index
- Angioplasty** [medicine] A: 461 with pictures
Angina pectoris A: 461
Arteriosclerosis (Prevention and treatment) A: 750
Disease (Medical treatment) D: 232-233
Heart (Treatment) H: 138; (Progress in treatment and prevention) H: 145
- Angiosperm** [botany] A: 462 with picture
Earth (The Mesozoic Era) E: 27-28
Flower F: 272
Paleobotany P: 102
Plant (Seed plants) P: 519 with pictures; (Parts of plants) P: 529; (Sexual reproduction) P: 532 with picture; (Early plants) P: 540-541; (Classification of plants) P: 546-547 with pictures
Seed S: 281 with diagrams
Tree (Broadleaf trees) T: 414; pictures on T: 417
- Angiotensin** [chemical]
Hypertension (Causes) H: 475-476
- Angiotensin converting enzyme inhibitor** [drug]
Heart (Valve disease) H: 141-142
- Angiotensin II** [chemical]
Blood pressure B: 416
- Angkor** [ancient city] A: 462
Cambodia (History) C: 72-73
- Angkor National Park** [Cambodia]
National park (table) N: 42f
- Angkor Thom** See Angkor in this index
- Angkor Wat, Temple of** [Cambodia]
Angkor A: 462
Architecture (Indian architecture) A: 613 with picture
- Angle** [ancient people] See Angles in this index
- Angle** [geometry] A: 463 with diagrams
Geometry (Congruence) G: 102; (Bisecting an angle) G: 103 with diagrams
Radian R: 73
Triangle T: 438 with diagrams
- Angle of attack**
Aerodynamics (Lift) A: 85 with diagram
Airplane (Changing altitude) A: 221; diagrams on A: 224
Helicopter (Lift) H: 171 with diagram
Hydrofoil (Fully submerged hydrofoils) H: 468
Kite (How kites fly) K: 339 with diagram
- Angle of incidence** [physics]
Light (Reflection, refraction, and absorption) L: 286 with diagrams
Mirror (Plane mirrors) M: 616 with diagrams
- Reflection R: 194
Refraction R: 199 with diagram
Waves (Refraction and reflection) W: 152-153
- Angle of reflection** [physics]
Light (Reflection, refraction, and absorption) L: 286 with diagram
Mirror (Plane mirrors) M: 616 with diagrams
Reflection R: 194
- Angle of Repose** [book by Stegner]
Stegner, Wallace So: 883
- Angler** [sports]
Fishing F: 175
- Anglerfish**
Animal picture on A: 487
Deep sea (Fish) D: 82b-82c with picture
Fish pictures on F: 156, F: 167
- Angler's knot**
Knots, hitches, and splices diagram on K: 356
- Angles** [ancient people] A: 463
Anglo-Saxons A: 464 with map
England (The Germanic invasions) E: 304; (The Anglo-Saxon period) E: 304
Saxons S: 168
- Anglesey** [island, United Kingdom]
Wales (Rivers and coastline) W: 11-12
- Angleworm** See Earthworm in this index
- Anglia** [English history]
England (The Anglo-Saxon period) E: 304
- Anglican Communion** See Anglicans in this index
- Anglicans** [religious group] A: 463
See also Church of England in this index
Catechism C: 299
Episcopal Church E: 344
Jefferson, Thomas (Virginia lawmaker) J: 79
Protestantism (The conservative reform movements [the 1500's]) P: 834
Reformation (In England) R: 198
Thirty-Nine Articles T: 259
Tutu, Desmond T: 526
- Angling** See Fishing in this index
- Anglo-Afghan wars**
Afghanistan (The Anglo-Afghan wars) A: 95 with picture; (Independence) A: 96
Khyber Pass K: 310
- Anglo-America** [region]
North America N: 458
- Anglo-Boer War** See Boer War in this index
- Anglo-Irish Agreement** [1985]
Ireland (The Republic of Ireland) I: 427-428
Northern Ireland (The continuing conflict) N: 525
United Kingdom (Thatcher) U: 73
- Anglo-Irish Treaty** [1921]
Irish Republican Army (IRA) (Beginnings) I: 433
Ulster Unionist Party U: 16
- Anglo-Japanese Alliance** [1902]
Meighen, Arthur (First term) M: 386
- Anglo-Nubian goat**
Goat (Domestic goats) G: 239; picture on G: 241
- Anglo-Persian Oil Company**
Iran (The Qajar dynasty) I: 406
- Anglo-Saxon** [language]
English language (The development of English) E: 313
English literature (Old English literature) E: 314
- Anglo-Saxon Attitudes** [book by Wilson]
Wilson, Angus W: 316
- Anglo-Saxon Chronicle** [literature] A: 464
Alfred the Great A: 348
English literature (Old English prose) E: 315
- Anglo-Saxons** [people] A: 464 with maps
Alfred the Great A: 348
Angles A: 463
Egbert E: 116
England (The Anglo-Saxon period) E: 304
English literature (Old English literature) E: 314
Jutes J: 204
Saxons S: 168
Wales (Struggles against the Anglo-Saxons) W: 12
- Angola** A: 464 with pictures and map
Cuba (Foreign relations) Ci: 1179
Flag picture on F: 198
Portuguese language P: 695
- Angora** [hair] A: 466
- Angora cat**
Cat (Long-haired breeds) C: 292; picture on C: 289
- Angora goat**
Goat (Domestic goats) G: 239; picture on G: 241
Mohair M: 687
- Angora rabbit**
Rabbit (Domestic rabbits) R: 46 with picture
- Angostura** [Venezuelan history]
Bolívar, Simón (Fight for freedom) B: 441
Ciudad Bolívar Ci: 604
- Angra Mainyu** [religion]
Zoroastrianism (Beliefs) Z: 611
- Angry Young Men** [literature]
Amis, Kingsley A: 432
English literature (Literature after World War II) E: 322-323
- Angstrom** [unit of measure] A: 467
Weights and measures (Miscellaneous weights and measures) W: 184
X rays (Wavelength) X: 541
- Ångström, Anders Jonas** [Swedish physicist]
Angstrom A: 467
- Anguilla** [island, West Indies] A: 467
West Indies (Independence movements) W: 205
- Angular momentum** [physics]
Pauli, Wolfgang P: 201
- Angus, Rita** [New Zealand painter]
New Zealand (The arts) N: 349
- Angus cattle**
Cattle (Aberdeen-Angus) C: 308 with picture
- Anhedral crystal**
Crystal (Crystallization) Ci: 1166
- Anhinga** [bird] A: 467
Bird picture on B: 351
- Anhydration** [chemistry]
Hydrate H: 462
- Anhydride** [chemical] A: 467
- Anhydrous ammonia** [chemical] A: 467
- Anhydrous lanolin** [animal product]
Lanolin L: 68
- Ani** [bird] A: 467
- Aniakchak National Monument** [Alaska]
National Park System (table: National monuments) N: 50
- Aniakchak National Preserve** [Alaska]
National Park System (table: National preserves) N: 58
- Anicetus, Saint** [pope]
Pope (table) P: 666
- Aniliidae** [zoology]
Snake (The pipe snake) S: 535
- Aniline** [chemical] A: 467
Indigo I: 223
- Animal** A: 468 with pictures and maps
Balance of nature B: 34
Cell (Inside a living cell) C: 328 with diagram
Classification, Scientific (Groups in classification) Ci: 654-655 with pictures
Clone Ci: 684
Genetic engineering (Uses of genetic engineering) G: 84a-84b
Life L: 274 with pictures
Nitrogen (Nitrogen and life) N: 425
Nitrogen cycle N: 426
Plant P: 516; (Seed dispersal) P: 541-542
Soil (Plant and animal matter) So: 573
Anatomy and physiology
Brain (The brain in animals) B: 558 with pictures
Ear (The ears of animals) E: 12 with pictures
Embryo E: 257
Eye (Eyes of animals) E: 469 with pictures
Fur F: 561
Heart (Hearts of animals) diagrams on H: 146
Homologous structures H: 306
Magnetism (Magnets in living things) M: 60c
Metamorphosis M: 428
Muscle M: 933
Nervous system (The nervous system in other animals) N: 136
Protective coloration P: 831 with pictures
Respiration R: 260
Skeleton S: 479 with diagrams
Ultrasound (Animal uses of ultrasound) U: 16
Venom V: 308
- Behavior**
Culture Ci: 1186
Frisch, Karl von F: 534
Hibernation H: 221
Instinct (Instinct and learning) I: 305
Lorenz, Konrad Zacharias L: 454
Migration M: 538
Photoperiodism P: 430
Psychology picture on P: 849
Reproduction R: 242

- Sleep (Sleep among animals) S: 506
 Sociobiology **So**: 563
 Territoriality T: 176
 Tinbergen, Nikolaas T: 295
 Virus (Virus diseases in animals) V: 427
- Evolution**
 Adaptation **A**: 45
 Evolution **E**: 426
 Extinct animal **E**: 456
 Fossil **F**: 422 *with pictures*; (How fossils reveal the past) **F**: 422-425 *with pictures*
 Prehistoric animal **P**: 736 *with pictures*
- Habitats**
 Deep sea (Life in the deep sea) **D**: 82a *with pictures*
 Desert (Desert animals) **D**: 156
 Ecology **E**: 53
 Forest (The life of the forest) **F**: 396
 Habitat **H**: 3
 Ocean (Life in the ocean) **O**: 655 *with pictures*
 Rain forest **R**: 126 *with pictures*
 Seashore (Life on rocky shores) **S**: 270 *with pictures*
- Humans and animals**
 Animal (Animals and people) **A**: 471 *with pictures*; (The future of animals) **A**: 504
 Animal experimentation **A**: 510
 Biodiversity (Kinds of biodiversity) **B**: 311
 Breeding (Animal breeding) **B**: 592
 Circus **Ci**: 562 *with pictures*
 Comparative psychology **Ci**: 902a
 Conservation (Biodiversity conservation) **Ci**: 976
 Disease (Spread of infectious diseases) **D**: 228
 Drug (Animals) **D**: 355
 Endangered species **E**: 269 *with pictures*
 First aid (Animal bites or stings) **F**: 138
 Game **G**: 21
 Hunting **H**: 450
 Invasive species **I**: 354j
 Livestock **L**: 396
 Materials (Animal fibers) **M**: 300d
 Pet **P**: 319 *with pictures*
 Transplant (Sources of donor organs) **T**: 380
 Vegetarianism **V**: 294
 Veterinary medicine **V**: 345 *with pictures*
 Wildlife conservation **W**: 303
 Zoo **Z**: 603 *with pictures*
See also the lists of Related Articles in the Animal and Zoology articles
- Animal, Dwarf**
 Dwarf **D**: 394
- Animal, Extinct** *See* Extinct animal in this index
- Animal, Prehistoric** *See* Prehistoric animal in this index
- Animal breeding**
 Breeding (Animal breeding) **B**: 592
 Careers (Farming, fishing, and forestry) **C**: 222
 Cattle (Breeding) **C**: 311
 Hybrid **H**: 461
 Livestock (Breeding livestock) **L**: 398
 Pedigree **P**: 228
- Animal communities** *See* Community [biology] in this index
- Animal Crackers** [film]
 Marx brothers **M**: 238
- Animal dye**
 Dye (Natural dyes) **D**: 396
- Animal experimentation** **A**: 510
- Animal Farm** [book by Orwell]
 Orwell, George **O**: 860
- Animal geography** [biology]
 Wallace, Alfred Russel **W**: 15
- Animal husbandry** [agriculture] *See* Livestock in this index
- Animal in Its World, The** [book by Tinbergen]
 Tinbergen, Nikolaas T: 295
- Animal Kingdom** [theme park]
 Walt Disney Company **W**: 20
- Animal magnetism**
 Hypnotism (Mesmerism) **H**: 479
 Mesmer, Franz Anton **M**: 421
- Animal protection movement**
 Animal rights movement **A**: 510
- Animal protein**
 Food supply (Protein) **F**: 346
- Animal quarantine** [law]
 Quarantine **Q**: 7
- Animal rights activist**
 Animal rights movement **A**: 510
- Animal rights movement** **A**: 510
- Animal experimentation (The debate over animal experimentation) **A**: 510
 Fur (Controversy over fur) **F**: 563
 People for the Ethical Treatment of Animals **P**: 277
- Animal science**
 Livestock **L**: 396
- Animal starch**
 Carbohydrate (Kinds of carbohydrates) **C**: 203-204
- Animal tracks**
 Bear picture on **B**: 185
 Beaver picture on **B**: 193
 Deer picture on **D**: 83
 Fox picture on **F**: 440
 Giraffe pictures on **G**: 195
 Lion picture on **L**: 341
 Mouse picture on **M**: 902
 Raccoon picture on **R**: 50
 Rat picture on **R**: 146
 Squirrel picture on **So**: 816
 Tiger picture on **T**: 285
- Animal training**
 Animal (A table of animal intelligence) **A**: 493
 Dog (Training a dog) **D**: 280 *with picture*
 Dolphin (Training dolphins) **D**: 300; picture on **D**: 297
 Homing pigeon **H**: 305
 Horse (Training horses) **H**: 359 *with picture*
 Lion (Training lions) **L**: 343
 Mouse picture on **M**: 902
- Animal Welfare Act** [1966]
 Animal experimentation (Laws and regulations) **A**: 510
- Animal worship** [religion] **A**: 510
- Animalcule** [biology]
 Leeuwenhoek, Anton van **L**: 181
- Animales Mexicanos** [book by del Campo]
 Literature for children picture on **L**: 355
- Animalia** [biology]
 Animal (The scientific classification of animals) **A**: 472
 Kingdom **K**: 329
- Animation** [motion pictures] **A**: 511 *with pictures*
 Advertising (Production) **A**: 76b-77
 Computer graphics (In engineering) **Ci**: 924f; (In advertising) **Ci**: 924g
 Disney, Walt **D**: 235 *with pictures*
- Animation** [religion]
 Abortion (Abortion history) **A**: 15
- Animato**
 Music (table) **M**: 954
- Animator**
 Animation (Cel animation) **A**: 511 *with pictures*
- Animism** [religion] **A**: 514b
 Animal worship **A**: 510
 Asia (Religions) **A**: 784
 Mythology (Tylor's theory) **M**: 986
 Sami (Religion) **S**: 79
- Anion** [chemistry]
 Electrolyte **E**: 202
 Ion (Behavior of ions) **I**: 371-372
- Anise** [plant] **A**: 514b *with picture*
- Anise swallowtail** [insect]
 Butterfly picture on **B**: 736
- Anishinabe Indians**
 Chippewa Indians **C**: 514
- Anjou, Philip of** *See* Philip V [king of Spain] in this index
- Anjou dynasty** [European history]
See also Plantagenet in this index
 Hungary (The Kingdom of Hungary) **H**: 445
- Anjouan** [island, Comoros]
 Comoros **Ci**: 899
- Ankara** [city, Turkey] **A**: 515
 Galatia **G**: 8
 Turkey picture on **T**: 505
- Ankle** [anatomy] **A**: 515 *with diagram*
 Ligament **L**: 281
- Ankylosaur** [dinosaur]
 Dinosaur (True dinosaurs) **D**: 206b-206c
- Ankylosaurus** [dinosaur] **A**: 515
 Dinosaur picture on **D**: 207
- Ankylosing spondylitis** [disease]
 Arthritis (Other forms of arthritis) **A**: 752
- Ankylosis** [disease] **A**: 516
- Ann Arbor** [city, Michigan] **A**: 516
- Anna** [Indian coin]
 Coin collecting picture on **Ci**: 758
- Anna, Antonio López de Sante** *See* Santa Anna, Antonio López de in this index
- Anna, Donna** [opera character]
 Opera (*Don Giovanni*) **O**: 803
- Anna Bolena** [opera by Donizetti]
 Donizetti, Gaetano **D**: 307
- Anna Christie** [play by O'Neill]
 O'Neill, Eugene Gladstone **O**: 762
- Anna Karenina** [book by Tolstoy]
 Russian literature (The 1860's and 1870's) **R**: 562
 Tolstoy, Leo (His masterpieces) **T**: 323
- "Annabel Lee"** [poem by Poe]
 American literature (Poetry) **A**: 418-419
- Annals** [book by Tacitus]
 Tacitus, Cornelius **T**: 4
 History (The ancient Greeks and Romans) **H**: 261-262
- Annals** [poem by Ennius]
 Latin literature (Early Latin literature) **L**: 115
- Annam** [region, Vietnam]
 Indochina (The Khmer) **I**: 225; (French influence) **I**: 225
 Vietnam (French rule) **V**: 370
- Annamite Range** [mountains, Vietnam]
 Vietnam (Central Vietnam) **V**: 368
- Annan, Kofi Atta** [Ghanaian diplomat] **A**: 516
 Nobel Prizes (Peace: 2001) **N**: 449
 United Nations (The secretary-general) **U**: 83 *with portrait*
- Anand, William** [Canadian political leader]
 Nova Scotia (table) **N**: 567
- Annapolis** [city, Maryland] **A**: 516
 Maryland picture on **M**: 249
 United States capitals **U**: 199
 United States Naval Academy **U**: 203
- Annapolis Convention** [U.S. history] **A**: 516
 Articles of Confederation **A**: 759
 Constitution of the United States (The need for the Constitution) **Ci**: 998-999
- Annapolis River**
 Nova Scotia (Rivers and lakes) **N**: 562
- Annapolis Royal** [Nova Scotia] **A**: 516
 Nova Scotia (The struggle in Acadia) **N**: 568
- Annapolis Valley** [region, Nova Scotia]
 Nova Scotia (Natural resources) **N**: 565; (Agriculture) **N**: 566; picture on **N**: 555
- Annapurna** [mountain, Nepal] **A**: 516
 Mountain (table) **M**: 894 *with diagram*
- Anna's Art Adventure** [book by Sortland]
 Literature for children picture on **L**: 354
- Anne** [empress of Russia]
 Russia (table: Czars and empresses) **R**: 549
- Anne** [queen of Britain] **A**: 517 *with portrait*
 England (War with France) **E**: 309; (The Augustan Age) **E**: 309
 Marlborough, Duke of **M**: 215
 Stuart, House of **So**: 931
 United Kingdom (History) **U**: 67; (table: British monarchs) **U**: 72
- Anne** [British princess]
 Elizabeth II (The royal family) **E**: 240
- Anne, Saint** [mother of Mary] **A**: 517
- Anne Boleyn** *See* Boleyn, Anne in this index
- Anne of Austria** [wife of Louis XIII] **A**: 517
 Buckingham, Duke of **B**: 664
 Louis XIV **L**: 475
 Mazarin, Jules Cardinal **M**: 329
- Anne of Brittany** [wife of Louis XII]
 Scotland (The House of Stuart) **S**: 219
- Anne of Cleves** [wife of Henry VIII]
 Henry VIII [of England] **H**: 188
- Anne of Green Gables** [book by Montgomery]
 Canadian literature (Fiction: 1850-1918) **C**: 158-159
 Montgomery, Lucy Maud **M**: 767
 Prince Edward Island (Visitor's guide) **P**: 788
- Annealing** [industrial process] **A**: 517
 Glass (Annealing) **G**: 216
 Iron and steel (Finishing) **I**: 447-448; *diagram on I*: 446
- Annelide** [zoology] *See* Segmented worm in this index
- Annenberg, Walter** [American businessman]
 Annenberg Foundation **A**: 517
- Annenberg Foundation** **A**: 517
 Foundations (table) **F**: 430
- Annexation** [political science] **A**: 517
 Metropolitan area (Annexation) **M**: 443
- Annie Get Your Gun** [musical]
 Oakley, Annie **O**: 638
- Annie Hall** [film]
 Allen, Woody **A**: 372
 Motion picture (Best picture: 1977) **M**: 861
- Annihilation** [physics]
 Antimatter **A**: 557
 Gamma rays **G**: 23
- Anniston Museum of Natural History**

Alabama (Museums) A: 261
Anniversary, Wedding
 Wedding anniversary W: 178
Anno Domini [calendar] See A.D. in this index
Annual [botany] A: 518
 Flower (Garden flowers) F: 275; (Garden annuals) F: 276 with pictures
 Gardening (Planning the garden) G: 31-32
 Plant (Germination) P: 536-537
 Weed (How weeds grow) W: 179
Annual ring [botany]
 Climate (Growth rings) Ci: 679
 Sequoia (Age) S: 311
 Stem (Woody stems) So: 887-888 with diagram
 Tree (How trunks and branches grow thicker) T: 418-419 with diagram
Annuit coeptis
 Great Seal of the United States (The reverse side) G: 348
Annuitant
 Insurance (Annuities) I: 311
Annuity [insurance] A: 518
 Insurance (Annuities) I: 311
 Pension (Group annuity plans) P: 273
Annular eclipse [astronomy]
 Eclipse (Solar eclipses) E: 51
Annulet
 Heraldry picture on H: 195
Annuli [zoology]
 Earthworm E: 39
Annulment [divorce] A: 518
 Divorce D: 253
 Marriage (Laws concerning marriage) M: 220
Annulus [botany]
 Mushroom (Parts of a mushroom) M: 941
Annunciation [painting by Fra Angelico]
 Angelico, Fra picture on A: 461
Annunciation [painting by Martin]
 Simone Martini S: 467
Annunciation [religion] A: 518
Annunciation, Cathedral of the [Moscow]
 Kremlin K: 387
Annunciation, The [painting by Campin]
 Campin, Robert C: 91 with picture
Annunciation, The [painting by Fra Angelico]
 Painting (The 1400's) P: 52-53 with picture
Annunciation, The [painting by van Eyck]
 Painting (The northern Renaissance) P: 57 with picture
Annunciation device [electronics]
 Burglar alarm B: 704
Annunzio, Gabriele d' See D'Annunzio, Gabriele in this index
Anoa [animal]
 Buffalo B: 674
Anode [electricity]
 Battery (How batteries work) B: 168
 Electrolysis (How electrolysis works) E: 200-201 with diagram
 Silver (Extracting and refining silver) S: 465
 Vacuum tube (How a vacuum tube works) V: 258
 X rays diagram on X: 541
Anodizing [electrolysis] A: 518
 Aluminum (Electrochemical finishes) A: 396
Anointed one See Messiah in this index
Anointing of the sick [religion] A: 518
 Eastern Orthodox Churches (Sacraments) E: 46-47
 Roman Catholic Church (Worship) R: 404-405
Anole [animal] A: 518 with picture
 Chameleon C: 372
 Evolution (Directional selection) E: 428
Anomalepididae [zoology]
 Snake (Primitive blind snakes) S: 535
Anomalistic month [time]
 Month M: 767
Anomalous component cosmic rays
 Cosmic rays (Anomalous component cosmic rays) Ci: 1076
Anomalous sunflower [plant]
 Evolution (Direct observation of evolution) E: 431-432 with picture
Anopheles mosquito [insect]
 Malaria M: 95 with picture
 Mosquito M: 831 with picture; pictures on M: 833
Anoplura [entomology]
 Insect (table) I: 300
Anorexia nervosa [disorder] A: 519
 Adolescent (Eating disorders) A: 63-64
 Mental illness (Eating disorders) M: 406
Another Country [book by Baldwin]
 Baldwin, James B: 39

Another Part of the Forest [play by Hellman]
 Hellman, Lillian H: 178
Anouilh, Jean [French dramatist] A: 519
 French literature (French drama of the mid-1900's) F: 523
Anovulation [disorder]
 Infertility (Causes) I: 265
Anoxia [disorder] A: 519
Anoxic anoxia [disorder]
 Anoxia A: 519
Anschluss [European history]
 Austria (After World War I) A: 939
Anschütz-Kämpfe, Hermann [German scientist]
 Gyrocompass G: 453
 Gyroscope (History) G: 454
Anse aux Meadows National Historic Park, L' [Newfoundland]
 Canada, History of (Early European exploration) C: 140-141
 Newfoundland and Labrador (Places to visit) N: 368 with picture
Ansel, Martin F. [American political leader]
 South Carolina (table) So: 658
Anselm, Saint [English religious leader] A: 519
 William II W: 308
Anskar, Saint [French missionary]
 Sweden (The early kingdom) So: 1032
Anson, Cap [American baseball player]
 Baseball (Early strategy and stars) B: 133, (table: Hall of Fame) B: 134
Answer [law]
 Court (How civil courts work) Ci: 1102
Answer [music]
 Classical music (Fugue) Ci: 645
 Fugue F: 553
Answer print [filmmaking]
 Motion picture (The answer print) M: 856
Ant [insect] A: 520 with pictures
 Animal pictures on A: 480
 Aphid A: 565
 Fire ant F: 122
 Formic acid F: 410
 Hamilton, William Donald H: 33
 Insect (Abdomen) I: 288; (Smell) I: 291, (Family life) I: 294-295 with picture; picture on I: 283
 Plant (How plants protect themselves) P: 544
 Wilson, Edward Osborne W: 316
"Ant and the Grasshopper, The" [fable]
 Aesop's fables A: 90
Ant bread
 Ant (Harvester ants) A: 526
Ant egg
 Ant (Reproduction) A: 524 with picture
Ant farm
 Ant (Keeping an ant farm) A: 528
Ant lion [insect larva] A: 529 with picture
Ant-loving cricket [insect]
 Cricket Ci: 1130
Antabuse [drug]
 Alcoholism (Treatment) A: 338
 Disulfiram D: 240
Antacid [drug] A: 529
Antaeus [Greek mythology]
 Hercules (Other adventures) H: 199
Antagonist [chemistry]
 Prostaglandin P: 829
Antakya [Turkey]
 Antioch A: 557
Antanacsis [language]
 Shakespeare, William (Rhetoric) S: 367
Antananarivo [city, Madagascar] A: 529
 Madagascar M: 26; picture on M: 27
Antarctic bottom waters
 Atlantic Ocean (The ocean depths) A: 864
Antarctic Circle [geography] A: 529
 Climate (The role of latitude) Ci: 676
 Midnight sun M: 536
Antarctic Circumpolar Current
 Ocean (Circulation) O: 658
 Southern Ocean (Water masses) So: 688b
Antarctic Convergence [geography]
 Southern Ocean (Boundaries) So: 688
Antarctic intermediate water
 Pacific Ocean (Water masses) P: 15
 Southern Ocean (Water masses) So: 688b
Antarctic Ocean See Southern Ocean in this index
Antarctic Treaty [1959]
 Antarctica (Recent activities) A: 538
 Southern Ocean (Boundaries) So: 688
Antarctica A: 530 with pictures and maps
 Animal (Animals of the polar regions) A: 484 with picture and map

Antarctic Circle A: 529
 Bird (Birds of the ocean and the Antarctic) B: 344 with pictures
 Byrd, Richard Evelyn B: 746
 Cook, James (Second Pacific voyage) Ci: 1026
 Enderby Land E: 272
 Exploration (The exploration of Antarctica) E: 450 with map
 Glacier picture on G: 203
 Ice age (Development of the Pleistocene glaciers) I: 6
 Icecap I: 19
 Ozone O: 893
 Ozone hole O: 894 with pictures
 Palmer, Nathaniel Brown P: 110
 South Pole So: 686
 Southern Ocean So: 688
Antares [star]
 Star (Size) So: 845; picture on So: 847
Anteater [animal] A: 540 with picture
 Animal picture on A: 481
 Echidna E: 49
 Pangolin P: 130
Antebellum Trail
 Georgia (Places to visit) G: 122
Antecedent [grammar] A: 541
 Pronoun P: 819
Antelope [animal] A: 541 with pictures
 Addax A: 46
 Animal picture on A: 501
 Gazelle G: 74 with picture
 Steenbok So: 883
Antelope Island [Utah]
 Great Salt Lake G: 347
Antelope jack rabbit
 Jack rabbit J: 3
Antenna [communications] A: 543 with pictures
 Communications satellite (How communications satellites work) Ci: 888b with picture
 Radar (The antenna) R: 71 with diagram; picture on R: 66
 Radio (Transmitting radio waves) R: 87 with diagram; (The antenna) R: 88
 Television (Broadcasting) T: 122-123; (Receiving television signals) T: 123; diagram on T: 124
Antenna cleaner
 Bee (Legs) B: 201
Antennae [entomology] A: 544 with pictures
 Ant (Sense organs) A: 522 with picture
 Beetle (The bodies of beetles) B: 215-216 with diagram
 Butterfly (The head) B: 738 with diagram
 Fly (Head) F: 309 with diagrams
 Insect (Eyes and antennae) I: 287 with diagrams; (Smell) I: 291 with picture
 Moth (The head) M: 837-838 with diagram
Anterograde amnesia [psychology]
 Memory (Memory disorders) M: 394
Anterus, Saint [popel]
 Pope (table) P: 666
Anthem
 Classical music (The Reformation) Ci: 646-647
Anthem [book by Rand]
 Rand, Ayn R: 136
Anthemius [Roman emperor]
 Rome, Ancient (table) R: 447
Anthemius of Tralles [Byzantine architect]
 Architecture (Byzantine architecture) A: 617
Anthor [botany]
 Flower (The stem) F: 293-294
 Plant (Flowers) P: 531 with picture; (Sexual reproduction) P: 532 with pictures
 Seed (Seed development in angiosperms) S: 281-282
Antheridium [botany]
 Fern (Life cycle of a fern) F: 75
 Liverwort L: 396
 Moss (How mosses live) M: 834-835
Anthocyanin [pigment]
 Leaf (The leaf changes color) L: 152
Anthony, George T. [American political leader]
 Kansas (table) K: 234
Anthony, Henry B. [American political leader]
 Rhode Island (table) R: 311
Anthony, Susan Brownell [American social reformer] A: 544 with portrait
 Dollar picture on D: 295
 Woman suffrage (Growth of the movement) W: 380
 Women's movements (The right to vote) W: 385

Anthony Dollar

Dollar (The United States dollar) D: 295 *with picture*

Anthony of Padua, Saint [Italian religious leader] A: 545

Anthony of Thebes, Saint [Christian monk] A: 545

Monasticism (Christian monasticism) M: 700
Religious life (Religious life in early Christianity) R: 226

Anthopsida [botany]

Flower (The classifying of flowers) F: 299

Anthracene [chemical]

Hydrocarbon (Aromatics) H: 465

Anthracite

Coal (How coal was formed) Ci: 717; (Location of U.S. and Canadian reserves) Ci: 718 *with map*; (The uses of coal) Ci: 719

Fuel (Solid fuels) F: 550

Heating (Coal) H: 160

Pennsylvania (Mining) P: 261

Anthracnose [plant disease]

Alfalfa (Diseases and pests) A: 347

Bean (Pests and diseases) B: 182

Raspberry (Diseases and pests) R: 145

Anthrax [disease] A: 545

Bacteria (Harmful bacteria) B: 19-20

Cattle (Diseases) C: 312-313

Koch, Robert K: 360

Medicine (Scientific study of the effects of disease) M: 375 *with picture*

Pasteur, Louis (His work in medicine) P: 193

September 11 terrorist attacks (The aftermath) S: 310-310a

Terrorism (The war against terrorism) T: 179-180

Anthropoid [zoology]

Primate P: 777; (Anthropoids) P: 778 *with pictures*

Ape A: 563 *with pictures*

Anthropology A: 545 *with pictures*

Archaeology A: 594

Blood (The significance of blood groups) B: 412

Careers (Life, physical, and social sciences) C: 225-226 *with picture*

Culture (How people study culture) Ci: 1189

Ethnography E: 372

Mythology (Comparing myths) M: 975

Prehistoric people P: 743; (Studying prehistoric people) P: 753 *with picture*

Psychology (Psychology and other sciences) P: 847

Races, Human R: 52

Sapir, Edward S: 121

Science (The social sciences) S: 194

See also the list of Related Articles in the Anthropology article

Anthropology, Museum of [Mexico]

Library picture on L: 254

Anthropology, Museum of [Vancouver]

British Columbia picture on B: 616

Anthropomorphic divinity

Mythology (Mythical beings) M: 974

Anthroposophy [spiritual movement]

Steiner, Rudolf So: 886

Anturium [plant] A: 550

Anti-...

Headings beginning Anti- are alphabetized as single words: Anti-Masonic Party appears after Antihistamine

Anti-A antibody

Blood (The ABO blood groups) B: 412

Antiaircraft defense [warfare]

Artillery (Antiaircraft artillery) A: 762 *with pictures*

Machine gun (Antiaircraft weapons) M: 16

Radar (In the military) R: 65

Antianxiety and hypnotic drug

Depressant D: 149

Mental illness (Somatic therapy) M: 407

Tranquilizer T: 369

Antianxiety drug [medication]

Benzodiazepine B: 255

Drug (Drugs that affect the nervous system) D: 352

Mental illness (Somatic therapy) M: 407

Sedative S: 279

Tranquilizer T: 369

Antiarrhythmic

Drug (Antiarrhythmics) D: 351

Anti-Atlas Mountains [Africa]

Atlas Mountains A: 869

Anti-B antibody

Blood (The ABO blood groups) B: 412

Antiballistic missile

Guided missile (Surface-to-air missiles) G: 426; *diagram on G: 425*

Nixon, Richard Milhous (The national scene) N: 433-434

Nuclear weapon (Deterrence) N: 600

Strategic Arms Limitation Talks So: 919

Antibaryon [physics]

Hadron H: 4

Antibiotic [medication] A: 550 *with pictures*

Bacteria (Protection against harmful bacteria) B: 20

Disease D: 226; (Medical treatment) D: 232

Drug (Drugs that fight infection) D: 351; (The drug revolution) D: 359

Dubos, René Jules D: 372

Farm and farming (Livestock care) F: 39

Fermentation F: 73

Fungi (The importance of fungi) F: 559-560

Gonorrhea G: 268

Pneumonia (Treatment and prevention) P: 587

Sexually transmitted disease (Diagnosis and treatment) S: 339

Tetracycline T: 183

Typhoid fever (Treatment and prevention) T: 539

See also the list of Related Articles in the Antibiotic article

Antibody [physiology]

AIDS (Diagnosis) A: 164

Allergy (How an allergy develops) A: 373

Antitoxin A: 559

Bacteria (Protection against harmful bacteria) B: 20

Blood (White blood cells) B: 408; (The ABO blood groups) B: 412

Cancer (Biological response modifiers) C: 172 *with picture*

Disease (Immune responses) D: 231-232 *with picture*

Drug (Vaccines) D: 351

Food (Regulating body processes) F: 331

Gamma globulin G: 23

Immune system (Parts of the immune system) I: 87

Immunization I: 89

Influenza (How influenza spreads) I: 268b

Kidney (Kidney diseases) K: 312

Lymphatic system (Lymphocytes) L: 534

Measles (Cause and effects) M: 345-346

Monoclonal antibody M: 730

Plasma (Functions of plasma) P: 551

Protein (How the body uses proteins) P: 832

Rh factor R: 289

Serum S: 319

Virus (Virus diseases in human beings) V: 426

Antibody immune response [physiology] *See Humoral immune response in this index*

Anticholinergic drugs

Parkinson disease (Treatment with drugs) P: 171

Anticholinesterase [medication]

Myasthenia gravis M: 970f

Antichrist [religion] A: 553

Anticleia [legendary figure]

Ulysses (The Trojan War) U: 17-18

Anticline [geology]

Petroleum (How petroleum was formed) P: 334-335; *picture on P: 336*

Anticoagulant [medication] A: 553

Ocean (Medicines) O: 654

Stroke (Prevention) So: 930

Anticodon [genetics]

Heredity (How proteins are made) H: 206-208

Anticonvulsant [drug] A: 553

Anti-Corn Law League [British history]

Corn Laws Ci: 1064

Anticosti [island, Quebec] A: 553

Anticruelty society *See Humane society in this index*

Anticyclone [weather]

Calms, Regions of (The horse latitudes) C: 69

Weather (Synoptic-scale systems) W: 159-161

Anti-Defamation League [organization]

B'nai B'rith (The Anti-Defamation League of B'nai B'rith) B: 426

Antidepressant [drug] A: 553

Depression D: 151

Fibromyalgia F: 90

Pain (Treating pain) P: 22

Psychiatry (Somatic therapy) P: 845

Antidiuretic hormone

Diabetes (Diabetes insipidus) D: 180

Hormone (Blood composition hormones) H: 336

Antidote [medication] A: 554

Poison P: 601

Antidraft riot [1863]

Riot (During the 1800's) R: 348-349

Anti-Dreyfusards [French history]

Dreyfus affair (Efforts to clear Dreyfus's name) D: 347-348

Anti-Drug Abuse Acts [1986, 1988]

Drug abuse (Reducing demand) D: 365

Antietam, Battle of [1862]

Civil War (table) Ci: 624; (Battle of Antietam) Ci: 627 *with picture*

Lee, Robert Edward (Opening campaigns) L: 178

Lincoln, Abraham (Building the army) L: 321-322

Maryland (The Civil War) M: 258-259 *with picture*

McClellan, George Brinton (Military career) M: 332-333

President of the United States *picture on P: 764*

Antietam National Battlefield [Maryland]

National Park System (table: National battlefields) N: 55

Anti-Fascist People's Freedom League

[Myanmar]

Myanmar (World War II) M: 970d

Anti-Federalists [U.S. history] A: 554

Constitution of the United States (Ratifying the Constitution) Ci: 1001

Antifermion [subatomic particle]

Fermion F: 74

Antiferromagnetic material [physics]

Magnetism (Magnetism of materials) M: 60b *with diagram*

Antifreeze [automobile] A: 554

Freezing point F: 510

Glycol G: 237

Antigen [protein]

Blood (Blood groups) B: 412

Cancer (Biological response modifiers) C: 172-173

Immune system (Parts of the immune system) I: 87

Monoclonal antibody M: 730

Transplant (Preventing rejection) T: 380-381

Antigen-MHC complex [physiology]

Immune system (The cell-mediated immune response) I: 88a

Antigen peptide [physiology]

Immune system (The cell-mediated immune response) I: 88a

Antigen-presenting cell [physiology]

Immune system (Antigen-presenting cells) I: 88

Antiglobalization

Globalization (The debate over globalization) G: 233

Antigone [literary figure] A: 554 *with picture*

Antigone [play by Anouilh]

Anouilh, Jean A: 519

Antigone [play by Sophocles]

Sophocles So: 595

Antigonid dynasty [Greek history] A: 554

Antigonish [Nova Scotia]

Nova Scotia (Visitor's guide) N: 560

Antigonus I [king of Macedonia]

Antigonid dynasty A: 555

Antigonus II [king of Macedonia]

Antigonid dynasty A: 555

Antigorite [mineral]

Serpentine S: 318

Antigravity A: 555

Antigua [Guatemala] A: 555

Guatemala (Colonial period) G: 416-417

Antigua [island, West Indies]

Antigua and Barbuda A: 555 *with map*

Antigua and Barbuda [country, West Indies]

A: 555 *with picture and map*

Flag picture on F: 200

Antihistamine [medication] A: 556

Allergy (Diagnosis and treatment) A: 374

Hay fever (Treatment) H: 116

Antihypertensive

Drug (Antihypertensives) D: 352

Anti-icer [additive]

Gasoline (Gasoline blends and additives) G: 61-62

Anti-imperialism [political science]

Spanish-American War (Results of the war) So: 754

- Antiknock gasoline**
Gasoline (Gasoline octane ratings) G: 61
- Anti-Lebanon Mountains**
Lebanon (Land and climate) L: 172
Syria (The mountains) So: 1073
- Antilepton** [atomic particle]
Lepton L: 205
- Anti-litter law**
Oregon (Interesting facts) O: 827
- Antilles** (West Indies) See Greater Antilles;
Lesser Antilles; Netherlands Antilles *in this index*
- Antilock-brake system**
Automobile (The brake system) A: 954
Brake (Hydraulic brakes) B: 560-562 *with diagram*
Technology (The computer age) T: 75
- Antimacassar**
Hairdressing (The 1800's) H: 12
- Anti-Masonic Party** [U.S. history] A: 556
Political convention (The history of national conventions) P: 630
- Antimasque** [literature]
Masque M: 268
- Antimatter** [physics] A: 556
Antigravity A: 555
Astronomy (Gamma-ray astronomy) A: 845
Matter (Unusual forms of matter) M: 311
Meson M: 421
Neutrino N: 154
Radiation (Beta particles) R: 76
Subatomic particle So: 936
- Antimicrobial** [medicine]
Drug (Drugs that fight infection) D: 351
- Antimicrobial agent** [nutrition]
Food additive (Kinds of additives) F: 339
- Antimissile missile**
Guided missile (Surface-to-air missiles) G: 426
- Anti-Monopoly Party** [U.S. history] A: 557
- Antimony** [element] A: 557
- Antimony chloride** [chemical]
Hydrolysis H: 471
- Antineutrino** [physics]
Neutrino N: 154
Radiation (Beta particles) R: 76
- Anting** [behavior]
Bird (Feather care) B: 354-355
- Antinomians** [religious group]
Hutchinson, Anne Marbury H: 458
- Antioch** [Turkey] A: 557
- Antiochus III** [Seleucid king]
Hannibal (After the war) H: 52
- Antiochus IV** [Seleucid king]
Daniel, Book of D: 34
Jerusalem (Ancient times) J: 100
Jews (The Hellenistic period) J: 121
Judah Maccabee J: 178
- Antiope** [Greek mythology]
Farnese Bull F: 46
- Antioxidant** [chemical compound] A: 557
Flavonoid F: 230
Food additive (Kinds of additives) F: 339-340
Food preservation (Additives) F: 343
Gasoline (Gasoline blends and additives) G: 61-62
Rubber (General-purpose synthetic rubbers) R: 504
Tea (Tea and health) T: 63
- Antiparticle** [physics]
Antimatter A: 556
Gamma rays G: 23
Subatomic particle So: 936
- Antipersonnel mine**
Mine warfare (Land mines) M: 564
- Antiperspirant**
Deodorant D: 148
- Antipholus** [literary figure]
Shakespeare, William (*The Comedy of Errors*) S: 356
- Antiphonaire, L'** [book by Aquin]
Canadian literature (Modern literature: 1945 to the present) C: 160
- Antipope** [religion]
Pope (Early days) P: 662
- Antipoverty programs** See Poverty *in this index*
- Antiproton** [physics]
Particle accelerator (How accelerators work) P: 184-186
Physics (Advances in the mid-1900's) P: 442
Subatomic particle So: 936
- Antipsychotic drug** [medication]
Mental illness (Somatic therapy) M: 407
Psychiatry (Somatic therapy) P: 845
- Tranquilizer T: 370
- Antiquarian-book store**
Book collecting (Collecting books) B: 469
- Antiquarianism**
Archaeology (Beginnings) A: 599
History (Antiquarian research and the philosophes) H: 262
- Antiquark** [physics]
Gluon G: 236
Hadron H: 4
Meson M: 421
Psi particle P: 844
Quark Q: 7
- Antique A**: 557 *with pictures*
Button pictures on B: 745
Doll (Doll collecting) D: 293 *with pictures*
Enamel picture on E: 264
Watch pictures on W: 114
- Antique and Modern Poems** [work by Vigny]
French literature (Romantic poetry) F: 521
- Antiquities Act** [1906]
National Park System (History) N: 58
- Antiquity** [artwork]
Antique A: 557
- Antirenters** [U.S. history] A: 558
New York (Growing prosperity) N: 316-318
- Anti-Rh** [physiology]
Rh factor R: 289
- Antirust agent** [additive]
Gasoline (Gasoline blends and additives) G: 61-62
- Anti-Saloon League, American** See American Council on Alcohol Problems *in this index*
- Anti-Semitism A**: 558
Arab-Israeli conflict (Historical background) A: 582
Dreyfus, Alfred (Efforts to clear Dreyfus's name) D: 347-348
Herzl, Theodor H: 217
Hitler, Adolf (Mein Kampf) H: 266; (World War II) H: 268
Holocaust (Before the Holocaust) H: 296
Jews (Jews in Christian Europe) J: 122; (The growth of anti-Semitism) J: 123
Kristallnacht K: 388
Nazism (The birth of Nazism) N: 92
Nuremberg N: 612
Prejudice P: 755
Semites S: 293
Wagner, Richard (Wagner's philosophy) W: 4-5
- Antiseptic** [medication] A: 559
Bacteria (Protection against harmful bacteria) B: 20
Disinfectant D: 235
Hospital (The 1800's) H: 373
Iodine (Uses of iodine) I: 370
Lister, Sir Joseph L: 349
Medicine (Antiseptic surgery) M: 375; *picture on M: 374*
Sammelweis, Ignaz Philipp S: 293
Surgery (Antiseptics and asepsis) So: 1004
- Antiserum** [medication]
Drug (Antisera and globulins) D: 351
Immune system (Passive immunity) I: 88c
Serum S: 319
- Anti-Slavery Convention of American Women** [1837]
Mott, Lucretia Coffin M: 880
- Antislavery movement** See Abolition movement *in this index*
- Antisocial behavior** [psychology]
Child (Aggressive and antisocial behavior) C: 452
Mental illness (Personality disorders) M: 406
- Antisolar point** [physics]
Rainbow (How to find a rainbow) R: 127 *with diagram*
- Antisthenes** [Greek philosopher]
Cynic philosophy Ci: 1205
- Anti-Stratfordians** [English literature]
Shakespeare, William (*The anti-Stratfordians*) S: 349
- Antistrophe** [poetry]
Ode O: 673
Poetry (Lyric poetry) P: 591
- Antisubmarine helicopter**
Helicopter picture on H: 170
- Antisubmarine missile**
Guided missile (Surface-to-surface missiles) G: 426
Submarine (Attack submarines) So: 939-940
Torpedo (How a torpedo works) T: 340b-340c
- Anti-Tampering Act, Federal** [1983]
Drug (U.S. drug laws) D: 357-358
- Antitank mine**
Mine warfare (Land mines) M: 564 *with diagrams*
- Antithesis**
Hegel, G. W. F. (Hegel's dialectic) H: 165
- Antitoxin** [physiology] A: 559
Bacteria (Protection against harmful bacteria) B: 20
Diphtheria (Treatment) D: 216
Immune system (Early discoveries) I: 88d
Serum S: 319
Tetanus T: 182
- Antitrust laws A**: 560
Business (Antitrust laws) B: 726
Capitalism (Ensuring competition) C: 194
Telephone (Competition in the U.S. telephone industry) T: 101
- Antitumor drug**
Drug (Antitumor drugs) D: 353
- Antitopian fiction**
Science fiction (The early 1900's) S: 205
- Antivenin**
Snake (The importance of snakes) S: 535
- Antiviral drug A**: 560
- Antivivisection**
Animal experimentation A: 510
- Antivivar movement**
Pacifism P: 18
Vietnam War (Reactions in the United States) V: 375 *with picture*; (Vietnamization) V: 376
- Antler**
Caribou picture on C: 237
Deer D: 82d *with picture*; (Antlers) D: 83 *with pictures*
Horn H: 338 *with picture*
Moose (The body of a moose) M: 798 *with picture*
Reindeer R: 208 *with picture*
- Antley, Chris** [American jockey]
Kentucky Derby (table) K: 296
- Antofagasta** [city, Chile]
Chile (Climate) C: 465
- Antoine, André** [French producer]
Drama (Early realism) D: 338
- Antoinette, Marie** See Marie Antoinette *in this index*
- Antoinette de Mirecourt** [book by Leprohon]
Canadian literature (Fiction: 1850-1918) C: 158
- Antonescu, Ion** [Romanian political leader]
Romania (World War II) R: 424-425
- Antonie emperors**
Rome, Ancient (The height of the empire) R: 446-447
- Antonine Wall**
Antoninus Pius A: 561
Roman walls R: 414
- Antoninus Pius** [Roman emperor] A: 561
Hadrian H: 4
Marcus Aurelius M: 197
- Antonio** [literary figure]
Shakespeare, William (*The Merchant of Venice*) S: 358
- Antonioni, Michelangelo** [Italian director]
A: 561
- Antonov An-124** [aircraft]
Aircraft, Military (Transports) A: 203
- Antony, Mark** [Roman military leader] A: 561
Actium, Battle of A: 30
Augustus A: 889
Caesar, Julius (Last victories) C: 13
Cicero, Marcus Tullius (His life) Ci: 552
Cleopatra (Cleopatra and Mark Antony) Ci: 662a
Egypt, Ancient (Roman rule) E: 144
Navy (Ancient navies) N: 79
Octavia O: 669
Rome, Ancient (Breakdown of the republic) R: 446
Triumvirate T: 448
- Antony, Mark** [literary figure]
Shakespeare, William (*Julius Caesar*) S: 360;
(*Antony and Cleopatra*) S: 364
- Antony and Cleopatra** [play by Shakespeare]
Shakespeare, William (*Antony and Cleopatra*) S: 364
Dryden, John D: 370
- Antonym** [grammar] A: 561
Semantics S: 290
- Antrim, Mountains of**
Northern Ireland (Surface features) N: 522-523 *with map*
- Antshrike** [bird]
Bird (Birds of Central and South America)

- B: 345 *with picture*
Antwerp [Belgium] A: 561
 Belgium *picture on* B: 226
Anubis [Egyptian god] A: 562
 Mythology (Mythical beings) M: 974; (Other Egyptian divinities) M: 977 *with pictures; picture on* M: 973
Anura [zoology]
 Frog (Kinds of frogs) F: 539
Anus [anatomy]
 Colostomy Ci: 850
 Inflammatory bowel disease I: 266
 Insect (Abdomen) I: 288; (Digestive system) I: 289 *with diagram*
 Intestine I: 352 *with diagram*
Anvers [Belgium] See *Antwerp in this index*
Anvil [anatomy]
 Ear (The middle ear) E: 7-8 *with diagram*
"Anvil Chorus" [music by Verdi]
 Opera (*Travatore, II*) O: 808
Anxiety [psychology] A: 562
 Benzodiazepine B: 255
 Existentialism (What is existentialism?) E: 436-437
 Mental illness (Anxiety disorders) M: 405
 Personality (Personality traits) P: 302; (Emotional reactions) P: 303; (Freud's psychoanalytic theory) P: 302-303
 Phobia P: 392
 Tranquilizer T: 370
Any Given Sunday [film]
 Stone, Oliver So: 909
Anyang [ancient city]
 Jade J: 20
 Shang dynasty S: 371
"Anyone lived in a pretty how town" [poem by Cummings]
 Poetry (Rhythm and meter) P: 591-592
Anza, Juan Bautista de [Mexican explorer]
 San Francisco (Settlement by Europeans) S: 97
 Tucson T: 481
Anza-Borrego Desert State Park [California]
 San Diego (Recreation) S: 90a
Anzio [Italy] A: 562
ANZUS [alliance]
 Cold War (The West rearms) Ci: 764
 New Zealand (International tensions) N: 356
Ao dai [clothing]
 Vietnam (Clothing) V: 366
AOL Time Warner Inc. [company]
 Turner, Ted T: 518
Aorangi See *Mount Cook in this index*
Aorta [anatomy] A: 562
 Abdomen A: 9
 Aneurysm A: 459
 Artery (Principal arteries) A: 751
 Frog *picture on* F: 537
 Heart (Blood vessels) H: 135 *with picture; (Blockage of blood flow) H: 141*
 Human body *diagram on* H: 422
 Insect (Circulatory system) I: 288 *with diagram*
 Marfan syndrome M: 198
 Pulse P: 898
Aortic valve [anatomy]
 Heart (Chambers, valves, and inner lining) H: 133-135 *with pictures; (Blockage of blood flow) H: 141*
Aoun, Michel [Lebanese political leader]
 Lebanon (Recent developments) L: 174
Aozou Strip [Chad]
 Chad (History) C: 367-368
AP See *Associated Press in this index*
Apache Indians [American Indians] A: 562
 Cochise Ci: 743
 Geronimo G: 173
 Indian, American (Shelter) I: 136d, (Indians of the Southwest) I: 166-168
 Indian wars (Apache warfare) I: 195
Apache Trail
 Arizona (Places to visit) A: 678
Apalachee Indians [American Indians]
 Appalachian Mountains A: 567
Apapane [bird]
 Hawaiian honeycreeper *picture on* H: 110
Aparajito [film]
 Ray, Satyajit R: 152
Aparicio, Luis [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Apartheid [law] A: 563
 Africa (The movement to independence) A: 134-135
 African National Congress A: 136t
 Biko, Steve B: 299
 Botha, Pieter Willem B: 510
 De Klerk, Frederik Willem D: 94
 Hertzog, James Barry Munnik H: 217
 Human rights (Trade and diplomatic measures) H: 428a
 Mandela, Nelson M: 136
 Minority group (Minority groups in other countries) M: 610
 Olympic Games (Boycotts) O: 753
 Racism (History) R: 62
 Segregation (Segregation in other countries) S: 286
 South Africa So: 608; (People) So: 609; (History) So: 617-619
 Sullivan, Leon Howard So: 970
 Tutu, Desmond T: 526
 Vorster, Balthazar Johannes V: 449
Apartment
 Housing (Kinds of housing) H: 389 *with picture*
 Shelter *picture on* S: 393
Apartment, The [film]
 Motion picture (Best picture: 1960) M: 861
Apatite [mineral]
 Crystal (Classifying crystals) Ci: 1166-1167 *with picture*
 Fertilizer (Inorganic fertilizers) F: 79
Apatosaurus [dinosaur] A: 563
 Dinosaur D: 206; (True dinosaurs) D: 206b-209 *with picture*
APBA
 Motorboat racing M: 876
Ape [animal] A: 563 *with pictures*
 Animal (A table of animal intelligence) A: 493
 Brain *diagram on* B: 559
 Human being (Physical characteristics) H: 413; *picture on* H: 414
 Prehistoric people (Prehuman ancestors) P: 744
 Primate (Anthropoids) P: 778; (Conservation) P: 778c; *diagram on* P: 778b
 Yerkes, Robert Mearns Y: 565
APEC See *Asia-Pacific Economic Cooperation in this index*
Apelles [Greek artist] A: 564
Apene [race]
 Olympic Games (The ancient games) O: 750
Apennine Tunnel [Italy] A: 564
 Tunnel (table) T: 491
Apennines [mountains, Italy] A: 564
 Italy (The Apennines) I: 508
Aperture [photography]
 Camera (How a camera works) C: 80
 Motion picture (The camera) M: 857 *with diagram*
 Photography (Controlling exposure) P: 415 *with diagram; (Setting the exposure) P: 416 with picture*
Aperture [zoology]
 Shell *diagram on* S: 385
 Whelk W: 279
Aperture-priority mode [photography]
 Camera (Automatic controls) C: 80-81
Apex [botany]
 Plant (Stems) P: 530
Apex [zoology]
 Shell *diagram on* S: 385
Apgar, Virginia [American physician] A: 564
 Apgar score A: 565
Apgar score [medicine] A: 565
 Apgar, Virginia A: 564
Aphasia [disorder] A: 565
 Speech therapy (Types and causes of speech defects) So: 773
Aphalion [astronomy]
 Perihelion P: 288
Aphid [insect] A: 565 *with picture*
 Alfalfa (Diseases and pests) A: 347
 Ant (Dairying ants) A: 527 *with picture*
 Insect (Family life) I: 294-295 *with picture; pictures on* I: 281, I: 285
 Pea (Diseases and pests) P: 205
 Potato (Diseases and insect pests) P: 713
Aphid lion See *Lacewing in this index*
Aphrodite [Greek mythology] A: 565
 See also *Venus [Roman mythology] in this index*
 Adonis A: 65
 Ares A: 645
 Mythology (Greek heroes) M: 979-980; (table) M: 980
 Pygmalion P: 914
 Trojan War (The beginning of the war) T: 449
 Troy (The legendary Troy) T: 454
 Uranus U: 217
Aphthous stomatitis [disorder]
 Canker sore C: 177
Aphthous ulcer [disorder]
 Canker sore C: 177
Apia [city, Samoa] A: 566
 Samoa S: 80 *with picture*
Apiary
 Bee (As an industry) B: 206-207
Apical meristem [botany]
 Bud B: 665 *with diagram*
 Plant (Stems) P: 530
 Root (The root tip) R: 474 *with diagram*
Apicomplexan [zoology]
 Protozoan (Apicomplexans) P: 837 *with picture*
Apiculture
 Bee (As an industry) B: 206
Apinayé [people]
 Gê Indians G: 75
Apis [mythology]
 Serapis S: 312
Aplacophora [sea animal]
 Mollusk (Aplacophora) M: 696
Aplastic anemia [disorder]
 Anemia (Insufficient production of red blood cells) A: 458
Apomado falcon [bird]
 Falcon (Other North American falcons) F: 14; *picture on* F: 13
Apnea [disorder]
 Sleep apnea S: 507
Apocalypse [New Testament] See *Revelation, Book of in this index*
Apocalypse Now [motion picture]
 Coppola, Francis Ford Ci: 1045
Apocrine gland
 Skin (Hair, nails, and glands) S: 489
Apocrypha [religion]
 Bible (Development of the Christian Old Testament) B: 282
 Esther, Book of E: 361
 New Testament (Books) N: 287
 Old Testament (Contents) O: 740-741
Apodaca, Jerry [American political leader]
 New Mexico (table) N: 272
ApoE [protein] See *Apolipoprotein E in this index*
Apogee [astronomy]
 Orbit O: 819
 Moon (Rotation and orbit) M: 783
 Space exploration (Kinds of earth orbits) *diagram on* So: 697
Apolipoprotein E [protein]
 Alzheimer's disease (Diagnosis) A: 398-399
Apollinaire, Guillaume [French poet] A: 565
 French literature (Surrealism) F: 522
 Picasso, Pablo (The Rose Period) P: 448a
Apollo [Greek mythology] A: 566
 Cassandra C: 275
 Daphne D: 36
 Delphi D: 118
 Greece, Ancient *picture on* G: 371
 Iphigenia I: 397
 Midas M: 521
 Muses M: 937
 Mythology (table) M: 980
 Orion O: 856
 Sculpture (The importance of sculpture) S: 228 *with picture*
 World, History of the *picture on* W: 428
Apollo Belvedere [sculpture]
 Vatican City (Vatican Palace) V: 287
Apollo Club [English history]
 Club Ci: 714
Apollo Program
 Aldrin, Buzz A: 339
 Armstrong, Neil Alden A: 723
 Astronaut (Achievements in space) A: 829 *with picture*
 Borman, Frank B: 488
 Conrad, Charles, Jr. Ci: 973
 Grissom, Virgil Ivan G: 396
 Haise, Fred Wallace, Jr. H: 13
 Lovell, James Arthur, Jr. L: 509
 Moon (Apollo missions) M: 795; *picture on* M: 791
 Nixon, Richard Milhous (The national scene) N: 433-434
 Schirra, Walter Marty, Jr. S: 176
 Schmitt, Harrison Hagan S: 177
 Science *picture on* S: 204
 Space exploration (Apollo: Mission to the moon) So: 714 *with pictures*
 Swigert, John Leonard, Jr. So: 1041
 Young, John Watts Y: 572

Apollo-Soyuz Test Project

Astronaut (Achievements in space) **A**: 829-830; (Advanced mission training) **A**: 832
Space exploration (The Apollo-Soyuz Test Project) **So**: 721 *with picture*

Apollonios of Tralles [Greek sculptor]

Farnese Bull **F**: 46

Apollonius of Rhodes [Greek poet]

Greek literature (The Hellenistic Age) **G**: 378

Apologia pro Vita Sua [book by Newman]

Kingsley, Charles **K**: 331
Newman, John Henry **N**: 379

Apologies [book by Justin the Martyr]

Justin the Martyr, Saint **J**: 204

Apologue [literature]

Spanish literature (Early medieval literature) **So**: 757-758

Apology, The [book by Plato]

Plato (The dialogues) **P**: 567
Socrates (The Socratic problem) **So**: 567

Apology for Actors, An [pamphlet by Heywood]

Heywood, Thomas **H**: 221

Apology for the Life of Mrs. Shamela Andrews, An [book by Fielding]

English literature (The rise of the novel) **E**: 318-319
Fielding, Henry (His novels) **F**: 94-95

Apomorphine [drug]

Impotence **I**: 94

Aponte, José Antonio [Cuban revolutionary]

Cuba (Early years) **Ci**: 1175-1176

Aponta Martinez, Luis Cardinal [Puerto Rican religious leader] **A**: 566**Apoptosis** [biology]

Cancer (Molecular medicine) **C**: 173

Apotata, The [name for]

Julian **J**: 186

Apostle bird *See* **Apostlebird in this index****Apostle Islands** [Wisconsin]

Lake Superior (Description) **L**: 45 *with map*
Wisconsin (Places to visit) **W**: 356

Apostle Islands National Lakeshore [Wisconsin]

National Park System (table: National lakeshores) **N**: 58

Apostle of Germany [name for]

Boniface, Saint **B**: 459

Apostle of Mexican Democracy

Madero, Francisco Indalecio **M**: 30

Apostlebird **A**: 566**Apostles** **A**: 566**Apostlas, The** [literary group]

Tennyson, Lord (His life) **T**: 169

Apostles' Creed [religion] **A**: 566

Rosary **R**: 477

Apostolic delegate [diplomat]

Vatican City (Diplomatic corps) **V**: 288

Apostolic Fathers [early Christian writers]

Encyclical **E**: 265

Apostolic See [religion]

Pope **P**: 660

Apostolic succession [religion]

Bishop **B**: 381

Apostrophe

Punctuation (The apostrophe) **P**: 903

Apothecaries' weight [measurement] **A**: 567

Avoirdupois **A**: 994

Apothecary [career]

Pharmacy **P**: 354

Apothem [geometry]

Hexagon **H**: 220
Octagon **O**: 669

Appalachian dulcimer

Dulcimer **D**: 380 *with picture*

Appalachian Mountains [North America] **A**: 567 *with map*

Canada (Land regions) **C**: 112-118
Forest (Deciduous forests) **F**: 394
North America (Land regions) **N**: 462-464
North Carolina (Land regions) **N**: 484
Pioneer life in America **P**: 476; (Crossing the Appalachians) **P**: 477; (Pioneers and Indians) **P**: 485
United States (The Appalachian Highlands) **U**: 120 *with picture*; *map on* **U**: 123

Appalachian National Scenic Trail **A**: 568

National Park System (table: National parkways and other national parklands) **N**: 55

Appalachian Plateau [region, U.S.]

See also Cumberland Plateau *in this index*
Alabama (Land regions) **A**: 268
Georgia (Land regions) **G**: 124
Kentucky (Land regions) **K**: 285 *with picture*

Ohio (Land regions) **O**: 692

Pennsylvania (Land regions) **P**: 256; *picture on* **P**: 258

United States (The Appalachian Highlands) **U**: 120-121

Virginia (Land regions) **V**: 410

West Virginia (Land regions) **W**: 218

Appalachian Region

Quebec (Land regions) **Q**: 22

Appalachian Ridge and Valley Region

Georgia (Land regions) **G**: 124

Appalachian Spring [ballet]

Copland, Aaron **Ci**: 1040
United States *picture on* **U**: 119

Appalachian State University [North Carolina]

North Carolina, University of **N**: 495

Appalachian Trail *See* **Appalachian National Scenic Trail in this index****Appaloosa** [breed]

Horse (table: Some types and breeds of horses) **H**: 343; (Color types) **H**: 345

Apparel *See* **Clothing in this index****Apparent magnitude** [astronomy]

Magnitude **M**: 63
Star (Magnitude and luminosity) **So**: 842

Apparent motion

Motion **M**: 843

Apparent solar day

Time (Measuring time by the sun) **T**: 288

Apparent wind [physics]

Aerodynamics (Lift and drag in a sailboat) **A**: 87 *with diagram*

Appassionato [music]

Music (table) **M**: 954

Appeal [advertising]

Advertising (Advertising techniques) **A**: 76 *with picture*

Appeal [law] **A**: 568

Parliamentary procedure (table) **P**: 176

Supreme Court of the United States (Authority of the Supreme Court) **So**: 998

Trial (The criminal defendant's rights) **T**: 437-438

Appeal bond [law]

Bonding **B**: 455

Appeal to the Colored Citizens of the World, An [pamphlet by Walker]

Walker, David **W**: 14

Appeal to the Great Spirit [sculpture by Dallin]

Dallin, Cyrus Edwin **D**: 16 *with picture*

Appeals, Court of *See* **Court of Appeals in this index****Appeals, Lord of** [office]

Parliament (The House of Lords) **P**: 173

Appearance and Reality [book by Bradley]

Bradley, Francis Herbert **B**: 546

Appeasement policy

Chamberlain, Neville **C**: 371
Munich Agreement (Consequences) **M**: 928
World War II (The failure of appeasement) **W**: 472

Appellate court

Court (Types of courts) **Ci**: 1101; (Federal courts) **Ci**: 1102

Supreme Court of the United States (Original and appellate jurisdiction) **So**: 998

Trial (The criminal defendant's rights) **T**: 437-438

United States, Government of the (Lower court system) **U**: 144

Appellate judge [office]

Judge **J**: 183

Appellate jurisdiction [law]

Supreme Court of the United States (Original and appellate jurisdiction) **So**: 998

Appendectomy

Appendicitis (Treatment) **A**: 568

Surgery (A typical operation) **So**: 1005

Appendicitis [disease] **A**: 568

Appendix **A**: 569

Appendicular skeleton [anatomy]

Mammal (Skeleton) **M**: 118-119

Skeleton (The appendicular skeleton) **S**: 480

with diagrams

Appendix [anatomy] **A**: 569 *with diagrams*

Appendicitis **A**: 568

Human body *diagram on* **H**: 422

Appendix [balloon]

Balloon (Gas balloons) **B**: 58

Appendix [reference]

Book (Inside a book) **B**: 464-465

A Guide to Writing Skills Research Guide: 18

Apperson, Edgar and Elmer [American mechanics]

Haynes, Elwood **H**: 122

Appert, Nicolas [French inventor]

Food preservation (Modern food preservation) **F**: 344

Appetite [philosophy]

Plato (Psychology and politics) **P**: 568

Appetite [physiology]

Weight control (Causes of obesity) **W**: 181

Appian Way [ancient Rome] **A**: 569 *with picture and map*

Tomb **T**: 326

Apple [fruit] **A**: 569 *with pictures*

Bud *picture on* **B**: 665

Codling moth **Ci**: 752

Halloween (Fortunetelling) **H**: 24b

Tree *pictures on* **T**: 420

United States *picture on* **U**: 132

Washington (Agriculture) **W**: 63

Apple, Fiona [American singer]

Rock music (Rock music today) **R**: 380-381

Apple banana

Banana **B**: 72

Apple butter [food] **A**: 573**Apple Computer, Inc.**

Computer (Personal computers) **Ci**: 909-910; (Manufacturing) **Ci**: 924; (The personal computer) **Ci**: 924c

Desktop publishing **D**: 158

Apple juice [drink]

Cider **Ci**: 552

Apple maggot [insect] **A**: 573

Apple (Pests and diseases) **A**: 571

Fly (table) **F**: 310

Apple of Discord [Greek mythology]

Paris **P**: 159

Apple of Sodom [plant] **A**: 573**Apple scab** [plant disease]

Apple (Pests and diseases) **A**: 571-572

Parasite *picture on* **P**: 154

Applebee, Constance M. K. [British sports-woman]

Field hockey (History) **F**: 93

Applegate, Jessa [American pioneer]

Pioneer life in America (Life on the trail) **P**: 486-487

Apples of the Hesperides [Greek mythology]

Hercules (The twelve labors) **H**: 198-199

Hesperides **H**: 218

Applesed, Johnny [American frontiersman]

A: 573 *with picture*

Appleton, Sir Edward Victor [British physicist]

A: 573

Appleton, Frances [wife of Henry Wadsworth Longfellow] *See* **Longfellow, Frances**

Appleton *in this index*

Appleton, Jane Means [wife of Franklin Pierce]

See **Pierce, Jane Appleton in this index**

Appleton layer [physics]

Appleton, Sir Edward Victor **A**: 573

Application, Letter of

Careers (Contacting employers) **C**: 218
Letter writing (Letters of application) **L**: 211

with picture

Application form

Careers (Completing job applications) **C**: 218

Applications software

Computer (Computer software) **Ci**: 917

Applied anthropology

Anthropology (Careers in anthropology) **A**: 549

Applied arts

Decorative arts **D**: 80

Fine arts **F**: 104

Applied entomology

Entomology (What entomologists study) **E**: 328

Applied mathematics

Mathematics (The importance of mathematics) **M**: 302

Applied physics

Physics (Employment) **P**: 443

Applied science

Science (The importance of science) **S**: 191

Applied sociology

Sociology **So**: 564

Appling, Luke [American baseball player]

Baseball (table: Hall of Fame) **B**: 134

Appliqué [handicraft] **A**: 574 *with picture*

Quilt **Q**: 41 *with picture*

Appliqué lace

Lace **L**: 22, *picture on* **L**: 21

Appointment [politics]

Constitution of the United States (Article II, Section 2) **Ci**: 1009

Patronage **P**: 198

Appold, John G. [British inventor]
Pump (History) P: 900

Appomattox Court House [Virginia] A: 574 *with picture*
Civil War (The South surrenders) Ci: 633 *with picture*
Grant, Ulysses S. (Grant in command) G: 315
Lee, Robert Edward (Final engagements) L: 178
National Park System (table: National historical parks) N: 56
Virginia *picture on V: 419*

Apportionment [political science] A: 574
Baker v. Carr B: 32
House of Representatives (Size) H: 385
Senate (Membership of the U.S. Senate) S: 294
Supreme Court of the United States (Election issues) So: 1001

Apposition [grammar] A: 574

Appositive *See Apposition in this index*

Appraisal [economics] A: 575
Eminent domain E: 260

Apprentice [labor] A: 575
Adult education (The colonial period) A: 69
Careers (Apprenticeships) C: 217
Colonial life in America (Education) Ci: 803
Education (History) E: 97
Guild (Craft guilds) G: 428
Labor movement (Conducting apprenticeship programs) L: 7; (Craft guilds) L: 9
Vocational education (Other sources) V: 434

Apprenticeship and Training, Bureau of [U.S.] A: 575

Apprenticeship of Duddy Kravitz, The [book by Richler]
Richler, Mordecai R: 331

Approaching Chimney Rock [painting by Jackson]
Pioneer life in America *picture on P: 476*

Appropriation bill [government]
Budget (Preparation of the U.S. budget) B: 671

Approximation [mathematics]
Calculus (Finding areas) C: 24
Cube root Ci: 1180

APRA [political party]
Peru (The rise of APRA) P: 315

Apraxia [disorder]
Aphasia A: 565

"Après-midi d'un faune, L'" [poem by Mallarmé]
Mallarmé, Stéphane M: 110

Apricot [fruit] A: 575 *with picture*

April [month] A: 576 *with pictures*

April fish
April Fools' Day A: 578

April Fools' Day [custom] A: 577

Aprilis [month]
Calendar (The Romans) C: 30

Apron
Airport (Loading aprons and taxiways) A: 245

APS [photography] *See Advanced photo system in this index*

Apse [architecture]
Architecture (table) A: 608 *with picture*;
(Medieval architecture) A: 617
Byzantine art (Early Byzantine churches) B: 749-750
Cathedral (The plan of a cathedral) C: 301-302 *with diagram*

Apsyrtos [legendary figure]
Medea M: 360

Aptitude [psychology]
Careers (Aptitudes) C: 215

Aptitude test
Testing (Kinds of tests) T: 181

Apu Trilogy [film series]
India (Motion pictures) I: 121
Ray, Satyajit R: 152

Apuleius, Lucius [Roman author] A: 578
Latin literature (The Imperial Period) L: 116
Novel (Ancient Greek and Roman narratives) N: 572

Apulia [region, Italy]
Italy (Apulia and the Southeastern Plains) I: 508

Apulian Aqueduct [Italy]
Aqueduct (Present-day aqueducts) A: 581

Apurimac River [Peru]
Amazon River (The course of the Amazon) A: 403

Aqaba, Gulf of *See Gulf of Aqaba in this index*

Aqmola [former name] *See Astana in this index*

Aqua regia [chemistry] A: 578
Nitric acid N: 425
Platinum (Properties) P: 566

Aquaculture [farming] A: 578
Aquarium, Public (Research) A: 578b
Fishing industry (Fish farms) F: 182
Hawaii (Recent developments) H: 109
Ocean (The importance of the ocean) O: 653-654
Seafood S: 265

Aqualung
Cousteau, Jacques-Yves Ci: 1106
Diving, Underwater (History) D: 247
Exploration (Deep-sea exploration) E: 451
Skin diving (History) S: 494

Aquamarine [gem] A: 578
Gem *picture on G: 78*

Aquarena Springs [San Marcos]
Texas (Places to visit) T: 194

Aquarist
Aquarium, Home A: 578

Aquarium, Home A: 578 *with picture*
Pet (Pets for the home) P: 319-320 *with picture*

Aquarium, Public A: 578b *with pictures*

Aquarium and Marine Center
New Brunswick (Places to visit) N: 188

Aquarius [astrology] A: 580 *with picture*
Astrology (History) A: 827
Zodiac (The zodiac in astrology) Z: 601 *with picture*

Aquatic animal
Animal (Kinds of animals) A: 472

Aquatic plant *See Water plant in this index*

Aquatic region [geography]
Plant (Aquatic regions) P: 528 *with pictures*

Aquavit
Alcoholic beverage (Other distilled beverages) A: 336
Sweden (Food and drink) So: 1024

Aqueduct [water system] A: 580
City *picture on Ci: 580*
Rome, Ancient (Architecture and engineering) R: 440-441 *with picture*
World, History of the *picture on W: 429*

Aqueous humor [physiology]
Eye (The uveal tract) E: 460-462; (Glaucoma) E: 466

Aquidneck Island
Rhode Island R: 296; (Islands) R: 306;
(Settlement) R: 312

Aquifer [geology]
Artesian well A: 751 *with diagram*
Ground water G: 402
Irrigation (Ground water) I: 456
Water (Sources of supply) W: 124

Aquin, Hubert [Canadian author]
Canadian literature (Modern literature: 1945 to the present) C: 160

Aquinas, Saint Thomas [Christian theologian] A: 581
Angel A: 460
Civil disobedience (History of civil disobedience) Ci: 607
Dominicans D: 306
Maritain, Jacques M: 212
Philosophy (Medieval philosophy) P: 387
Physics (The Middle Ages) P: 438
Political science (Scholasticism) P: 639
Scholasticism (History) S: 179
Science (The Middle Ages) S: 197

Aquincum [Hungarian history]
Budapest (History) B: 666

Aquino, Benigno [Philippine political leader]
Aquino, Corazon A: 581
Philippines (The Marcos era) P: 380-381

Aquino, Corazon [Philippine political leader] A: 581
Philippines (The Marcos era) P: 380-381

Aquiteine [France]
Charlemagne *map on C: 379*
Eleanor of Aquitaine E: 158
Gascony G: 60

Aquitaine, Duke of *See Henry II [of England] in this index*

Aquitania Lowlands [region]
France (The land) F: 464

Ar [symbol]
Argon A: 660

Ar-Rifei Mosque
Cairo *picture on C: 16*

Ara Pacis [sculpture]
Rome, Ancient (Sculpture and painting) R: 441

Arab *See Arabs in this index*

Arab Americans
Racial profiling R: 61

Arab Emirates, United *See United Arab Emirates in this index*

Arab Emirates of the South, Federation of the [Arab history]
South Arabia, Federation of So: 639

Arab-Israeli conflict A: 582 *with picture and map*
Air force (Air forces in limited wars) A: 186-187
Arabs (Since independence) A: 589
Army (Armies in the nuclear age) A: 728
Asia (Other struggles) A: 810 *with picture*
Begin, Menachem B: 219
International relations (The Arab-Israeli conflict) I: 346
Jews (The rebirth of Israel) J: 124
Palestinians P: 107
Sadat, Anwar el- S: 7
Saudi Arabia (Continued progress) S: 161-162
Suez Canal (History) So: 958
1948-1949
Arab-Israeli conflict (The 1948 war) A: 582
Jerusalem (History) J: 100-101
Middle East (Palestine) M: 533
Palestine (World War II and the division of Palestine) P: 105
1956
Arab-Israeli conflict (The Suez crisis of 1956) A: 582
Egypt (Republic) E: 132
Middle East (Continuing conflict) M: 533
1967 (The Six-Day War)
Arab-Israeli conflict (The 1967 war) A: 582a *with picture*
Cold War (The great blocs split) Ci: 768;
(The battle for the neutral nations) Ci: 769
Egypt (Progress and conflict) E: 133
Hussein I H: 457
Israel (The Six-Day War) I: 488
Jordan (History) J: 164-165
Nasser, Gamal Abdel N: 24
Palestine (The continuing conflict and peace efforts) P: 105
Syria (The continuing Arab-Israeli conflict) So: 1075
West Bank (History and government) W: 200
1973
Arab-Israeli conflict (The 1973 war) A: 582a
Egypt (Renewed warfare and peace) E: 133
Kuwait (History) K: 396
Middle East (Continuing conflict) M: 533-534
Organization of the Petroleum Exporting Countries O: 855
United Nations (Peacekeeping operations) U: 90-91

Arab-Israeli peace agreements
Arabs (Since independence) A: 589-590
Arafat, Yasir A: 591
Gaza Strip G: 74
Israel (Recent developments) I: 489
Middle East (Recent developments) M: 534 *with picture*
Palestine Liberation Organization (History) P: 106
Rabin, Yitzhak R: 50
West Bank (History and government) W: 200

Arab League [alliance] A: 582b
Arabs (Since independence) A: 589
Egypt (The 1940's) E: 132
Flag *picture on F: 216*
Iraq (Independence) I: 413

Arab world [region]
Arabs A: 584 *with map*

Arabesque [ballet]
Ballet (table) B: 45 *with picture*

Arabesque [decoration] A: 582b
Islamic art (Design motifs) I: 467-468

Arabia [region] *See Arabian Peninsula in this index*

Arabian American Oil Company *See Aramco in this index*

Arabian camel [animal] *See Dromedary in this index*

Arabian Desert [region, Arabia] A: 582b

Arabian Desert [region, Egypt]
Egypt (The Eastern Desert) E: 126 *with map*
Sahara S: 20
Syrian Desert So: 1076

Arabien Gulf

- Persian Gulf P: 300
- Arabian horse**
Horse (table: Some types and breeds of horses) H: 343 *with picture; picture on* H: 344
Horse racing (Thoroughbred horses) H: 363
- Arabian Nights** [stories] A: 582b
- Aladdin A: 280
Arabic literature (Fiction) A: 583-584
Burton, Sir Richard Francis B: 712
Harun al-Rashid H: 80
Literature for children (Folk literature) L: 357
- Arabian Peninsula** A: 583
Arabs (Land of the Arabs) A: 585; (History) A: 588
Asia (Way of life in Southwest Asia) A: 774
- Arabian Sea** [Indian Ocean] A: 583
- Arabic alphabet**
Alphabet (Arabic and Hebrew) A: 363; *picture on* A: 383
Arabic language A: 583
- Arabic language** A: 583
Alphabet (Arabic and Hebrew) A: 383
Arabs A: 584; (Language) A: 586
Egypt (Language) E: 123
Saudi Arabia (Language) S: 156
- Arabic literature** A: 583
- Arabic numerals** A: 584
Decimal system D: 70
Fibonacci, Leonardo F: 89
Numeration systems (The Hindu-Arabic numeral system) N: 607
- Arabs** [people] A: 584 *with pictures and map*
Africa (Peoples of Africa) A: 104 *with picture; (Ways of life in northern Africa)* A: 107
Arithmetic (Written arithmetic methods) A: 669
Asia (The people) A: 778; (Country life) A: 779 *with picture; picture on* A: 773
Bedouins B: 199
Middle East (Ancestry) M: 530
Morocco (People) M: 811
Music (Arab music) M: 956
Palestine Liberation Organization P: 106
West Bank W: 199
- Arab countries**
Algeria A: 360
Bahrain (History) B: 30
Egypt E: 120
Iraq (People) I: 409
Jordan J: 160
Kuwait (People) K: 395
Lebanon (Ethnic groups and religion) L: 171
Libya L: 264
Qatar (People) Q: 3
Saudi Arabia (People) S: 156 *with picture*
Sudan (People) So: 952
Syria (People) So: 1071
Tunisia T: 487
- History**
Abraham A: 16
Arab-Israeli conflict A: 582
Biology (Beginnings) B: 317-318 *with picture*
Crusades (How the Crusades began) Ci: 1159
Horse (Horses and people) H: 360-361
Iraq (The 1950's) I: 413
Israel (Arabs) I: 480
Jerusalem (The people of Jerusalem) J: 96
Jews (The Zionist movement) J: 122-123; (The rebirth of Israel) J: 124
Lawrence, T. E. L: 146
Map (Maps in the Middle Ages) M: 182
Mathematics (Arab mathematics) M: 306
Muslims M: 964
Palestine (World War I and the Balfour Declaration) P: 105; (World War II and the division of Palestine) P: 105; (The continuing conflict and peace efforts) P: 105
Science (The Middle Ages) S: 197 *with picture*
United Arab Emirates U: 43
World, History of the (The Islamic world) W: 434-435
Yemen (People) Y: 562
Zionism (The Balfour Declaration) Z: 599
See also the list of Related Articles in the Arabs article
- Aracari** [bird]
Toucan T: 344 *with picture*
- Arachne** [Greek mythology] A: 590
- Arachnid** [zoology] A: 590
Arthropod A: 752 *with picture*
- Spider So: 783
- Arachnoid membrane** [anatomy]
Brain (How the brain is protected) B: 552
- Arachnoidiscus** [zoology]
Diatom *picture on* D: 186
- Arachnophobia** [psychology]
Phobia P: 392
- Arad, Ron** [Israeli designer]
Furniture *picture on* F: 587
- Arafat** [plain, Saudi Arabia]
Islam (The Five Pillars of Islam) I: 463-464
- Arafat, Yasir** (Palestinian political leader) A: 591 *with portrait*
Israel (Recent developments) I: 489
Middle East *picture on* M: 534
Nobel Prizes (Peace: 1994) N: 449
Palestine Liberation Organization (History) P: 106
United Nations *picture on* U: 93
- Aragats, Mount** [mountain, Armenia] *See* Mount Aragats *in this index*
- Arago, François** (French physicist)
Photogrammetry P: 407
- Aragon** [region, Spain]
Castile and Aragon C: 279
- Aragon, Louis** (French poet)
Dadaism D: 2
- Aragonite** [mineral]
Pearl (Characteristics of pearls) P: 217
- Arakan Yoma** [mountains, Myanmar]
Myanmar (Land regions) M: 970c *with map*
- Aral Sea** [lake, Kazakhstan-Uzbekistan] A: 591
Conservation (Water conservation) Ci: 977-978
Lake (table) L: 34
- Aramaic language** A: 591
Assyria (Language and literature) A: 821
Old Testament (Translations) O: 741
Persia, Ancient (Language and literature) P: 297
- Aramco**
Saudi Arabia (The new kingdom) S: 161; (Continued progress) S: 161-162
- Arameans** [people]
Syria (History) So: 1074-1075
- Aramid** [fiber] A: 591
Composite materials (Hybrid composites) Ci: 904-905
Rope (Synthetic-fiber rope) R: 476
- Aran Islands**
Ireland (Surface features) I: 422
- Arango, Doroteo**
Villa, Pancho V: 384
- Aransas National Wildlife Refuge** [Texas]
Bird (Bird refuges) B: 368
- Arantes do Nascimento, Edson** [Brazilian soccer player]
Pelé P: 231
- Aranyakas** [religious writings]
Hinduism (Sacred writings) H: 236
- Arapaho Indians** [American Indians] A: 591
Indian, American (Recreation) I: 142-143; (Indians of the Plains) I: 158-159; *picture on* I: 161
- Arapaima** [fish]
Fish *picture on* F: 157
South America (Animals) So: 631
- Ararat** [ancient country] A: 591
- Ararat, Mount** [volcano, Turkey] *See* Mount Ararat *in this index*
- Aras River** [river, Asia]
Armenia (Land and climate) A: 718a *with map*
- Araucana, La** [poem by Ercilla y Zúñiga]
Chile (The arts) C: 463
Latin-American literature (Colonial literature) L: 111
Spanish literature (The 1500's) So: 758-759
- Araucanian Indians** [American Indians] A: 592
Chile (Ancestry) C: 460; (Early days) C: 467
- Araucaria** [botany]
Tree (Needleleaf trees) T: 414-415
- Arawak Indians** [American Indians] A: 592
Barbados (History) B: 104
Columbus, Christopher (The first landing) Ci: 860
Dominica (History) D: 302
Grenada (History and government) G: 389
Haiti (History) H: 15
Hispanic Americans (In Puerto Rico and Cuba) H: 246
Indian, American (Indians of the Caribbean) I: 172
Jamaica (History) J: 24
Puerto Rico (People) P: 874-875; (Spanish rule) P: 883
- Saint Vincent and the Grenadines (History) S: 57
West Indies (Early days) W: 205
- Arbat** [district, Moscow]
Moscow (Entertainment and recreation) M: 825 *with picture*
- ARBED** [company]
Luxembourg (Economy) L: 531
- Arbela, Battle of** [331 B.C.]
Alexander the Great (Victory over Darius) A: 343
Darius III D: 37
Persia, Ancient (The Achaemenid Empire) P: 298-299
- Arbenz Guzmán, Jacobo** [Guatemalan political leader]
Central America (Developments since the mid-1900's) C: 356
Guatemala (The mid-1900's) G: 417
- Arber, Werner** [Swiss physiologist]
Nobel Prizes (Physiology or medicine: 1978) N: 445
- Arbitration** A: 592
Labor movement (Handling labor disputes) L: 6
National Mediation Board N: 40
Railway Labor Act R: 122
Strike (Strike settlements) So: 928
- Arbitron Ratings Company**
Television (The national networks) T: 114
- Arbor Day** [custom] A: 592
Nebraska (Statehood) N: 112
- Arbor Day** [painting by Wood]
Wood, Grant W: 390
- Arbor Lodge** [Nebraska City]
Nebraska (Places to visit) N: 102
- Arboreal animal**
Mammal (In trees) M: 122 *with diagram*
- Arboretum** [park] A: 592
- Arborvitae** [tree]
Cedar (Scale-leaved cedars) C: 324
Tree *pictures on* T: 424
- Arbour, Louise** [Canadian jurist]
Supreme Court of Canada (table) So: 997 *with portrait*
- Arbuckle Mountains**
Oklahoma (Land regions) O: 724 *with map; picture on* O: 726
- Arbusto Energy Incorporated**
Bush, George Walker (Bush's career) B: 722d
- Arbuthnot, John** [Scottish author]
John Bull J: 133
- Arbuthnot, May Hill** [American author]
Regina Medal (table: 1964) R: 206
- Arbutus** [plant] A: 592
- Arc** [geometry]
Circle (Parts of a circle) Ci: 558 *with diagram*
Geometry (Some basic geometric constructions) G: 103 *with diagrams*
Pendulum P: 236 *with diagram*
Rainbow (How to find a rainbow) R: 127 *with diagram*
- Arc, Electric** *See* Electric arc *in this index*
- Arc, Joan of** *See* Joan of Arc, Saint *in this index*
- Arc, The** [association]
Disabled (table) D: 222
- Arc de Triomphe** [Paris] A: 593
France *picture on* F: 452
Paris (Gardens, squares, and parks) P: 162 *with picture and map*
Unknown soldier U: 212
- Arc light**
Edison, Thomas Alva (The Wizard of Menlo Park) E: 78-79
Electric light (Gaseous-discharge lamps) E: 174 *with picture*
Electric power (Early developments) E: 186
- Arc welding** [industrial process]
Welding (Arc welding) W: 189 *with picture*
Helium (Uses) H: 176 *with picture*
Noble gas N: 451
- Arcade** [architecture]
Architecture (table) A: 608 *with picture; (Islamic architecture)* A: 613
- Arcade** [game room]
Video game (How video games work) V: 359
- Arcade, The** [shopping mall]
Rhode Island (Places to visit) R: 304 *with picture*
- Arcadia** [book by Sidney]
Sidney, Sir Philip S: 449
- Arcadia** [literary style]
Italian literature (The baroque period and the Age of Reason) I: 494-495

76 Arcadia

- Arcadia** [region, Greece] A: 593
Arcadia, La [book by Vega]
 Spanish literature (The 1500's) So: 758-759
Arcadian League [Greek history]
 Arcadia A: 593
Arcadian stag [Greek mythology]
 Hercules (The twelve labors) H: 198-199
Arcadius [Byzantine emperor]
 Theodosius I T: 252
Arcaro, Eddie [American jockey] A: 593
Arcas [Greek mythology]
 Big and Little Dippers (The Little Dipper)
 B: 296
Arcesilaus [Greek philosopher]
 Skepticism S: 481
Arch [anatomy]
 Foot (The arches) F: 352 *with diagram*
Arch [architecture] A: 593 *with diagram*
 Architecture (table) A: 608 *with picture*;
 (Roman architecture) A: 616
 Bridge (Arch bridges) B: 601 *with diagrams*
 Building construction (Beams, girders, and
 columns) B: 682-683
 Rome, Ancient (Architecture and engineering)
 R: 440-441 *with picture*
Arch bridge
 Bridge (Arch bridges) B: 601 *with diagrams*
Arch dam
 Dam (Masonry dams) D: 17
Arch of Constantine [ruins]
 Constantine the Great Ci: 993
 Rome (Other remains) R: 433 *with picture*
Arch of Septimius Severus [ruins]
 Forum, Roman F: 420 *with picture*
Arch of the aorta [anatomy]
 Aorta A: 562
Arch of Triumph See *Arc de Triomphe in this
 index*
Archaea [biology] A: 593
 Ocean (The food cycle) O: 655-658
Archaeocyte [reproduction]
 Sponge (Asexual reproduction) So: 800
Archaeology A: 594 *with pictures*
 Anthropology (Archaeology) A: 546
 Culture (How people study culture) Ci: 1189
with picture
 Prehistoric people P: 743; (Examining prehis-
 toric sites) P: 753-754
 Science picture on S: 191
 See also the list of *Related Articles in the
 Archaeology article*
Archaeology of Knowledge, The [book by
 Foucault]
 Foucault, Michel F: 429
Archaeometry
 Archaeology (Dating) A: 598
Archaeopteryx [extinct bird] A: 601
 Bird (The first known birds) B: 369
 Fossil picture on F: 425
 Prehistoric animal (Birds) P: 738
Archaic triad
 Mythology (Roman divinities) M: 981
Archangel [city, Russia] See *Arkhangelsk in this
 index*
Archangel [religion]
 Angel A: 460
Archangel Michael, Cathedral of
 Kremlin K: 387
 Moscow (Famous landmarks) M: 823-824
Archbald, Robert W. [American jurist]
 Impeachment (History) I: 91-92
Archbishop [title] A: 601
 Address, Forms of (Members of the clergy)
 A: 54
 Metropolitan M: 442
Archbishop of Canterbury [title]
 England (Religion) E: 298
Archduke [title]
 Duke D: 380
Archean Eon [geology]
 Earth (Age of Earth) E: 26
Archegonium [botany]
 Fern (Life cycle of a fern) F: 75
 Liverwort L: 396
 Moss (How mosses live) M: 834-835
Archelaos [Greek sculptor]
 Greece, Ancient picture on G: 373
Archelon [extinct reptile]
 Turtle T: 520
Archer, Frederick Scott [British photographer]
 Photography (The beginnings of modern pho-
 tography) P: 426
Archer, The [constellation]
 Sagittarius S: 19
Archerfish [fish] A: 601 *with picture*
 Fish picture on F: 145
Archery [sport] A: 601 *with pictures*
 See also Bow and arrow in *this index*
 Olympic Games (Summer Olympic Games)
 O: 746e
Archery Association, National
 Archery (Target archery) A: 602-603
Archery Federation, International
 Archery (Target archery) A: 602-603
Arches National Park [Utah] A: 604
 National Park System (table: National parks)
 N: 48
Archetype
 Jung, Carl Gustav (His theories) J: 195
 Mythology (Mythology and the individual)
 M: 988-989
Archibald, Adams George [Canadian political
 leader]
 Confederation of Canada (Fathers of
 Confederation) Ci: 935 *with picture*
Archidamian War [431-421 B.C.]
 Peloponnesian War P: 232
Archidamus [king of Sparta]
 Peloponnesian War P: 232
Archimedean screw [water system] A: 604
with diagram
 Invention (Ancient Greece) I: 358
Archimedean solid [geometry] A: 604 *with dia-
 gram*
Archimedes [Greek mathematician] A: 604
 See also Archimedes's principle in *this index*
 Airplane (Early experiments and ideas) A: 229
 Calculus (History) C: 25
 Elevator (History) E: 235
Archimedes [crater]
 Moon (Craters) M: 789
Archimedes's principle [physics]
 Archimedes (His discoveries) A: 605
 Fluid mechanics (Fluid statics) F: 304
 Hydraulics (Laws of hydrostatics) H: 463
 Mathematics (The Greeks) M: 306
Archipelago [geography] A: 605
Archipenko, Alexander [Russian-American
 sculptor] A: 605
Architect [career]
 Architecture (Careers) A: 634 *with pictures*
 Careers (Technical and mathematical occupa-
 tions) C: 232 *with picture*
 House (Building a house) H: 380
 Ship (Designing and constructing a ship)
 S: 425
Architects, American Institute of
 Architecture (Education and training) A: 634
Architects Collaborative, The [organization]
 Architecture (Walter Gropius) A: 630
 Gropius, Walter G: 397
Architectural acoustics
 Acoustics (Architectural acoustics) A: 27
Architecture A: 606 *with pictures*
 Baroque (Baroque architecture) B: 117
 Furniture (Recent developments) F: 584
 Interior design I: 326
 Mechanical drawing M: 353
 Postmodernism P: 709
 Renaissance (The fine arts) R: 235-236 *with
 pictures*
 School (Improvements in school design)
 S: 184 *with picture*
 Sculpture (As part of architecture) S: 229; (The
 peak of architectural sculpture) S: 249
with picture
 Ship (Designing and constructing a ship)
 S: 425
 See also the list of *Related Articles in the
 Architecture article*
Architrave
 Architecture (table) A: 608 *with picture*;
 (Minoan architecture) A: 615
Archival research
 History (History in the universities) H: 262
Archon [title] A: 635
 Areopagus A: 645
 Athens (Earliest times) A: 857
Archosaur [extinct animal]
 Dinosaur D: 206a
Archy [fictional character]
 Marquis, Don M: 218
Archyta [300's B.C., Greek inventor]
 Airplane (Early experiments and ideas) A: 229
 Screw (History) S: 226
 Sound (Early ideas about sound) So: 605
Arco [Idaho]
 Idaho (Postwar changes) I: 44
Arcology [experimental city]
 Soleri, Paolo So: 583 *with picture*
Arcosanti [experimental city, Arizona]
 Soleri, Paolo So: 583 *with picture*
Arctic A: 636 *with pictures and map*
 Animal (Animals of the polar regions) A: 484
with pictures and map
 Bernier, Joseph Elzéar B: 271
 Bird (Birds of the Arctic) B: 343 *with pictures*
 Exploration (Arctic exploration) E: 449 *with
 map*
 Flower (Flowers of the Arctic tundra) F: 283
with pictures
 Indian, American (Peoples of the Arctic) I: 152
with picture and map
 Inuit I: 354
 Lichen (The importance of lichens) L: 269 *with
 picture*
 MacMillan, Donald Baxter M: 25
 Ozone hole O: 894
 Peary, Robert Edwin P: 224
 Tundra T: 485
 See also the list of *Related Articles in the
 Arctic article*
Arctic air mass [meteorology]
 Weather (Synoptic-scale systems) W: 159
with diagram
Arctic Archipelago [region, Nunavut]
 Nunavut (Land and resources) N: 608 *with
 map*
Arctic bottom water
 Arctic Ocean (Currents, water masses, and
 tides) A: 643
Arctic Circle [geography] A: 640
 Arctic Ocean (Location and size) A: 641
 Climate (The role of latitude) Ci: 676
 Midnight sun M: 536
 Nunavut (Land and resources) N: 608
Arctic Coastal Plain [Alaska]
 Alaska (Land regions) A: 292-294
Arctic fox [animal] A: 641
 Animal picture on A: 485
 Fox (Arctic foxes) F: 440 *with picture*
Arctic gentian [plant]
 Flower picture on F: 289
Arctic ground squirrel
 Animal (Animals of the polar regions) A: 484
Arctic hare
 Animal picture on A: 484
Arctic hurricane
 Arctic Ocean (Climate) A: 643
Arctic loon [bird]
 Animal picture on A: 485
 Loon L: 453
Arctic lupine [plant]
 Flower picture on F: 283
Arctic National Wildlife Refuge [Alaska]
 Alaska (Federally protected lands) A: 294
Arctic Ocean A: 641 *with pictures and maps*
 See also *Arctic in this index*
 Atlantic Ocean (Boundaries and size) A: 864
 Maelstrom M: 40
 Ocean (The world ocean) O: 651
Arctic Research and Policy Act [1984]
 Arctic (Arctic exploration) A: 639-640
Arctic surface water
 Arctic Ocean (Currents, water masses, and
 tides) A: 643
Arctic tern [bird] A: 644 *with picture*
 Animal picture on A: 488
 Bird (Birds of the Arctic) B: 343 *with picture*;
picture on B: 329
 Tern T: 176
Arctic tundra [region]
 Tundra T: 485 *with picture*
Arctic wolf [animal]
 Wolf W: 375
Arcturus [star]
 Boötes B: 480
 Star (table: The 10 brightest stars as seen
 from Earth) So: 842
Árd-ri [title]
 Ireland (History) I: 425
Ardashir I [king of Persia]
 Iran (The Sassanid dynasty) I: 406
 Parthia P: 183
 Persia, Ancient (The Sassanid dynasty) P: 300;
picture on P: 299
Arden, Mary [mother of]
 Shakespeare, William (Shakespeare's parents)
 S: 346
Ardennes Mountains and Forest [Europe]
 A: 644
 Belgium (The Ardennes) B: 231 *with picture*

- Luxembourg (Land) L: 531
Ardgowen National Historic Site [Prince Edward Island]
 Canada (table: National historic sites) C: 114
Ardil [fiber]
 Peanut (In industry) P: 214
Ardipithecus ramidus [hominid]
 Prehistoric people (Where and when they lived) P: 744; (table) P: 752 *with map*
Ardizzone, Edward [British illustrator] A: 644
Arduenna
 Ardennes Mountains and Forest A: 644
Are You There God? It's Me, Margaret [book by Blume]
 Blume, Judy B: 425
Area [mathematics] A: 644
 Calculus (Finding areas) C: 24 *with diagrams*
 Cylinder Ci: 1204
 Fraction (Calculations using fractions) F: 448 *with diagram*
 Metric system (Space and time) M: 437; (The metric system at a glance) M: 438 *with pictures*; (Metric conversion table) M: 439 *with pictures*
 Rhombus R: 319
 Square measure So: 811
 Triangle (Properties and relationships of triangles) T: 438
 Weights and measures (table: Surface or area) W: 185
Area bombing
 World War II (The air war) W: 481
Area mining
 Coal (Strip mining) Ci: 721
Area rug
 Interior design (Planning on paper) I: 330-331; (Choosing patterns and textures) I: 332
Arecibo [Puerto Rico]
 Puerto Rico picture on P: 878
Arecibo Observatory [Puerto Rico] A: 644 *with picture*
 Telescope (Types of radio telescopes) T: 106-107
Arena A: 645
ARENA [political party] See Nationalist Republican Alliance in *this index*
Arena Chapel [Padua]
 Mural picture on M: 929
Arena Stage [Washington, D.C.]
 Theater picture on T: 244
Areole [botany]
 Cactus (Parts of the cactus) C: 9
 Saguaro S: 19
Areopagitica [book by Milton]
 Milton, John (Middle years) M: 557
 Freedom of the press (History) F: 508
 Journalism (The first newspapers) J: 174
Areopagus [ancient Athens] A: 645
 Solon So: 586
Arepe [food]
 Venezuela (Food) V: 301
Arequipa [Peru] A: 645
Ares [Greek mythology] A: 645
 See also Mars in *this index*
 Mythology (table) M: 980
Ares, Hill of [ancient Athens]
 Areopagus A: 645
Aresø, Lake
 Denmark (Lakes and rivers) D: 138
Arethusa [book by Shelley]
 Arethusa A: 645
Arethuse [Greek mythology] A: 645
Arévalo, Juan José [Guatemalan political leader]
 Guatemala (The mid-1900's) G: 417
Arfvedson, Johann August [Swedish chemist]
 Lithium L: 386
Argeli [breed]
 Sheep (Wild sheep) S: 380
Argall, Samuel [English sea captain]
 Delaware (Exploration and early settlement) D: 110
 Nova Scotia (The struggle in Acadia) N: 568
Argaña, Luis María [Paraguayan political leader]
 Paraguay (Stroessner's rule and overthrow) P: 150
Argand, Aimé [Swiss chemist]
 Lamp (Fat or oil lamps) L: 52
Argand lamp
 Lamp (Fat or oil lamps) L: 52 *with picture*; (Gas lamps) L: 53 *with picture*
Argent [color]
 Heraldry (Expansion) H: 194 *with picture*
Argentina A: 646 *with pictures and maps*
 Falkland Islands F: 15
 Flag picture on F: 200
 Human rights (Independent organizations) H: 428a
 Immigration (Latin America) I: 84
 Indian, American (Indians of the Andes) I: 173
 Latin America (Border disputes) L: 108
 National park (Argentina) N: 42b *with picture*
 Standard of living (table) So: 834
 United Kingdom (Thatcher) U: 73
 Vice president V: 347
 World War II (table: The Allies) W: 471
 See also the list of *Related Articles* in the *Argentina* article
Argentine ant
 Ant (Dairying ants) A: 527
Argentine Araucanians [American Indians]
 Araucanian Indians A: 592
Argentite [mineral]
 Silver (Sources of silver) S: 465
Argersinger v. Hamlin [U.S. history]
 Gideon v. Wainwright G: 188
 Supreme Court of the United States (table) So: 1002
Arges [legendary figure]
 Cyclops Ci: 1204
Argo [Greek mythology]
 Argonauts A: 660
 Argus A: 661
Argo [vehicle]
 Ocean (Submersibles) O: 663
Argo-Jason [diving vessel]
 Ballard, Robert Duane B: 43
Argon [element] A: 660
Argonaut [sea animal] A: 660 *with picture*
 Mollusk (Octopuses and squids) M: 695
 Shell (Octopuses and squids) S: 388
Argonautica [poem by Apollonius of Rhodes]
 Greek literature (The Hellenistic Age) G: 378
Argonauts [Greek mythology] A: 660 *with map*
 Golden Fleece G: 255
 Hercules (Other adventures) H: 199
 Jason J: 64
Argonauts, Toronto [football] See Toronto Argonauts in *this index*
Argonauts of the Western Pacific [book by Malinowski]
 Ethnography E: 373
Argonia [Kansas]
 Salter, Susanna Madora S: 76a
Argonne, Battle of the [1918]
 World War I (The last campaigns) W: 463
Argonne National Laboratory [Illinois] A: 660
 Chicago (Industry) C: 431-432
 Illinois (The mid-1900's) I: 75-76
 X rays picture on X: 542
Argos See Argus in *this index*
Arguedas, José María [Peruvian author]
 Latin-American literature (The early 1900's) L: 113
Argument
 Logic L: 425
 Philosophy (Logic) P: 384
Argus [Greek mythology] A: 660
 Hera H: 193
 Io I: 370 *with picture*
Argus [ship]
 Aircraft carrier (History) A: 207
Argyll, Duke of [Canadian statesman]
 Lorne, Marquess of L: 455
Arhat [religion]
 Buddhism (The Theravada) B: 669
Århus [Denmark] A: 661
Aria [music]
 Opera (Recitative and arias) O: 792; (Early baroque opera) O: 797
Aria da Capo [play by Millay]
 Millay, Edna St. Vincent M: 553
Ariadne [legendary figure]
 Dionysus D: 215
 Theseus T: 257
Ariane [rocket]
 International Space Station I: 346b
 Space exploration (European nations) So: 727 *with picture*; picture on So: 699
Arianespace [organization]
 European Space Agency E: 418
Arianism [religion] A: 661
 Ambrose, Saint A: 405
 Arius A: 669
 Constantine the Great Ci: 993
 Nicene Councils N: 402
 Theodoric T: 252
Arias de Ávila, Pedro [Spanish explorer]
 Panama City P: 128
Arias Peace Initiative
 Arias Sánchez, Oscar A: 661
Arias Sánchez, Oscar [Costa Rican political leader] A: 661
 Costa Rica (Recent developments) Ci: 1084
Arice [province, Chile]
 Rain (Some rainfall records) R: 124 *with map*
Aridisol [soil]
 Soil (How soils are classified) So: 575 *with map*
Ariel [essay by Rodó]
 Latin-American literature (Modernism) L: 112
 Rodó, José Enrique R: 399
 Uruguay (The arts) U: 225
Ariel [satellite]
 Satellite (The middle-sized icy satellites) S: 150a
Ariel gazelle [animal]
 Gazelle G: 74
Ariel glass
 Glass (Types of art glass) G: 221
Aries [astrology] A: 661 *with picture*
 Zodiac (The zodiac in astrology) Z: 601 *with picture*
Arif, Abdul Rahman [Iraqi political leader]
 Iraq (The republic) I: 413-414
Arif, Abdul Salam [Iraqi political leader]
 Iraq (The republic) I: 413-414
Arikara Indians [American Indians] A: 661
 Mandan Indians M: 135
 South Dakota (Indian days) So: 681
Arimaspian [Greek mythology]
 Griffin G: 393
Ariosto, Ludovico [Italian poet] A: 662
 Drama (Italian Renaissance drama) D: 330
 Italian literature (Humanism and the Renaissance) I: 494
Aristarchus [Greek astronomer] A: 662
 Physics (The Greeks) P: 438
Aristida grass [plant]
 Desert picture on D: 155
Aristide, Jean-Bertrand [Haitian political leader] A: 662
 Clinton, Bill (International affairs) Ci: 682e
 Haiti (History) H: 15-17
Aristide Bruant in His Cabaret [poster by Toulouse-Lautrec]
 Toulouse-Lautrec, Henri de T: 346
Aristides [Greek statesman] A: 662
 Themistocles T: 251
Aristides [horse]
 Horse (table: Famous horses in history and legend) H: 361
 Kentucky Derby (table) K: 296
Aristocracy [government] A: 662
Aristophanes [Greek dramatist] A: 662
 Drama (Old Comedy) D: 327
 Euripides E: 378
 Greek literature (Drama) G: 377
Aristotle [Greek philosopher] A: 663 *with portrait*
 Averroës A: 982
 Boethius, Anicius Manlius Severinus B: 436
 Encyclopedia (The first reference works) E: 268a
 Interest (History) I: 323
 Middle Ages (Learning and the arts) M: 527
 Plato (Plato's life) P: 567 *with picture*
 Porphyry P: 679
 Psychology (Beginnings) P: 849
 Sophocles So: 595
 Thales T: 228
Arts
 Criticism (History of literary criticism) Ci: 1146
 Drama (Tragedy) D: 325; (The structure of drama) D: 325
 Greek literature (Philosophical literature) G: 378
 Italian literature (Humanism and the Renaissance) I: 494
 Oratory (Classical orators) O: 819
Educator
 Alexander the Great (His youth) A: 342
 Library (Ancient libraries of papyrus) L: 258
 Lyceum L: 532
Philosopher
 Aristotle (Aristotle's writings) A: 663
 Democracy (Famous quotations about democracy) D: 120
 Ethics (Ancient ethics) E: 366
 Government (Aristotle's categories) G: 285
 Peripatetic philosophy P: 288

- Philosophy (Ancient philosophy) P: 386-387
 Political science (The development of political science) P: 639
 Scholasticism (History) S: 179
Scientist
 Aristotle (Philosophy of nature) A: 664
 Air (The study of air) A: 174
 Astronomy (Earth-centered theories) A: 835
 Botany (The history of botany) B: 509
 Chemistry (Beginnings) C: 400
 Classification, Scientific (Development of classification) Ci: 656
 Galileo (Mature scientific career) G: 11
 Geology (The ancient Greeks) G: 97
 Gravitation G: 331
 Heredity (Early ideas about heredity) H: 208
 Meteorology M: 432
 Physics (The Greeks) P: 438
 Science (Ancient Greece) S: 196
 Sound (Early ideas about sound) So: 605
 Zoology (History) Z: 610
Aristotle Contemplating the Bust of Homer
 [painting by Rembrandt]
 Aristotle picture on A: 663
Arita porcelain
 Porcelain (Oriental porcelain) P: 676-677
Arithmetic A: 665 with pictures
 Mathematics (Branches of mathematics) M: 303
 See also the list of Related Articles in the Arithmetic article
Arithmetic, Fundamental theorem of
 Number theory N: 605
Arithmetic/logic unit See Digital logic unit in this index
Arithmetic mean See Mean in this index
Arithmetic progression [mathematics]
 Progression (Arithmetic progressions) P: 812
 Series S: 316
Arithmetic series [mathematics]
 Series S: 316; (Working with finite series) S: 316
Arius [early Christian] A: 669
 See also Arianism in this index
Ariyoshi, George R. [American political leader]
 Asian Americans (Individual achievements) A: 812c
 Hawaii (table) H: 105
Arizona A: 670 with pictures and maps
 Mission life in America (Western missions) M: 618-619
 See also the list of Related Articles in the Arizona article
Arizona [ship]
 Hawaii picture on H: 107
 Pearl Harbor (The war memorials) P: 219 with picture
Arizona, University of A: 693 with picture
 Telescope (Reflecting telescopes) T: 104-105, picture on T: 108
Arizona Cardinals
 Football (National Football League) F: 364
Arizona City [former name]
 Yuma Y: 586
Arizona Diamondbacks [baseball team]
 Baseball (table) B: 130
Arizona poppy [plant]
 Flower picture on F: 291
Arizona-Sonora Desert Museum
 Arizona (Places to visit) A: 678
Arizona State University A: 693
Arjuna [legendary figure]
Bhagavad-Gita B: 276
 Hinduism (Sacred writings) H: 236
 Krishna K: 388
Ark [religion] A: 693
 Judaism (The synagogue) J: 180
 Mount Ararat M: 883
 Noah N: 439
Ark [ship]
 Maryland (Exploration and settlement) M: 256
Ark of the Covenant [religion] A: 693 with picture
 David (King of Israel) D: 45
 Tabernacle T: 2
Arkansas A: 694 with pictures and maps
 Clinton, Bill Ci: 682
 Clinton, Hillary Rodham Ci: 682h
 Creationism (The 1900's) Ci: 1123
 Evolution (Acceptance of evolution) E: 433-434
 See also the list of Related Articles in the Arkansas article
Arkansas, University of A: 715
 Arkansas picture on A: 699
Arkansas Democrat Gazette [newspaper]
 Arkansas (Communication) A: 711
Arkansas Gazette [newspaper]
 Arkansas (Communication) A: 711
Arkansas Post National Memorial
 Arkansas (Places to visit) A: 704
 National Park System (table: National memorials) N: 54
Arkansas River [U.S.] A: 715 with map
 Arkansas (Rivers and lakes) A: 706
 Oklahoma (Rivers and lakes) O: 727
Arkansas River Development Program [U.S.]
 Arkansas (The late 1900's) A: 715
Arkansas River Navigation System
 Inland waterway (Other systems) I: 274
Arkansas Territorial Restoration
 Little Rock (Description) L: 392
Arkansaw Territory
 Arkansas (Territorial years) A: 712
Arkham House [publishing firm]
 Derleth, August D: 152
Arkhangelsk [city, Russia] A: 716
Arktos [constellation]
 Arctic Ocean A: 641
Arkwright, Sir Richard [British inventor] A: 716
 Industrial Revolution (Spinning machines) I: 248-249
 Slater, Samuel S: 501
 Spinning (The water frame) So: 794
Arlandes, Marquis d' [French balloonist]
 Airplane (First human flights) A: 230
 Balloon (History) B: 60
Arlberg technique
 Skiing (The development of modern skiing) S: 487
Arlberg Tunnels [Austria]
 Tunnel (table) T: 491
Arles [France]
 France picture on F: 461
Arlesienne Suites, L' [music by Bizet]
 Bizet, Georges B: 385
Arlington House [estate]
 Arlington National Cemetery A: 716
 Lee, Robert Edward picture on L: 179
 National Park System (table: National memorials) N: 54
Arlington National Cemetery [Virginia] A: 716 with picture
 Unknown soldier U: 212 with picture
 Washington, D.C. (Arlington National Cemetery) W: 78 with picture
Arliss, George [British actor]
 Motion picture (Best performance by an actor: 1929-30) M: 862
Arm [anatomy] A: 717 with diagram
 Human body diagram on H: 422
 Skeleton (The appendicular skeleton) S: 480 with diagrams
Armada, Spanish See Spanish Armada in this index
Armadillo [animal] A: 717 with picture
 Animal picture on A: 494
 Mammal picture on M: 127
 Pangolin P: 130
 Shell picture on S: 384
Armageddon [hill, Israel] A: 717
Armaments See Weapon in this index
Armaments, Limitation of See Arms control in this index
Armani, Giorgio [Italian fashion designer]
 A: 718
Armas, Plaza de [Peru]
 Lima (The city) L: 305 with picture
Armature [mechanics] A: 718
 Electric generator (Parts of a generator) E: 171 with diagrams; (How AC generators work) E: 173
 Electric motor (Parts of an electric motor) E: 179
 Starter (Automobile starters) So: 857 with diagram
 Telegraph (The Morse telegraph) T: 90
Armbruster, William [designer]
 Furniture (Recent developments) F: 584
Armed forces
 Address, Forms of (Other forms) A: 54
 African Americans (World War II [1939-1945]) A: 1361 with picture
 Air force A: 182 with pictures
 Air Force, United States A: 188
 Aircraft, Military A: 201 with pictures
 Arms control A: 721
 Army A: 724 with pictures
 Army, United States A: 730
 Canada, Armed Forces of C: 128
 Careers (Armed forces schools) C: 217; (Community and social services) C: 221
 Censorship (Military censorship) C: 346
 Defense, Department of D: 87
 Draft, Military D: 318
 Marine M: 203 with picture
 Marine Corps, United States M: 206 with pictures
 Military training M: 544
 Militia M: 544
 Navy N: 76 with pictures
 Navy, United States N: 82 with pictures
 Oath (Military oaths) O: 639
 Rank, Military R: 139
 Red Cross (Armed Forces Emergency Services [AFES]) R: 185
 Signaling (Military signaling) S: 454
 Uniform Code of Military Justice U: 27
 War (Organization and control) W: 24
Armed Forces Day [custom] A: 718
Armed Forces Emergency Services
 Red Cross (Armed Forces Emergency Services [AFES]) R: 185
Armed Forces Movement [Portuguese history]
 Portugal (The 1974 revolution) P: 694
Armed Forces Staff College [Virginia] A: 718
Armed warhead
 Guided missile (The warhead) G: 423
Armenia [country, Caucasus] A: 718 with pictures and map
 Azerbaijan (History) A: 997-998
 Caucasus C: 317
 Flag picture on F: 202
 Kurds K: 392
 Standard of living (table) So: 834
 Union of Soviet Socialist Republics (History) U: 35
Armenian Church [religious group]
 Armenia (People) A: 718a
Armenian language
 Armenia (People) A: 718a
 Language (Indo-European) L: 64
Armenian Plateau [region, Asia]
 Armenia (Land and climate) A: 718a with picture
 Azerbaijan (Land and climate) A: 997
Armenian Rhapsody No. 1 [music by Hovhanness]
 Hovhanness, Alan H: 400
Armenians [people]
 Armenia (People) A: 718a
 Union of Soviet Socialist Republics (People) U: 31
Armer, Laura Adams [American author]
 Newbery Medal (table) N: 359
Armey, Dick [American political leader] A: 719
Armijo, Manuel [Mexican military leader]
 New Mexico (Mexican rule) N: 273-275
Armistead, W. H. [American chemist]
 Glass (table) G: 218
Armistice [warfare]
 Truce T: 456
Armistice [1918] See Versailles, Treaty of in this index
Armistice Day [custom]
 Veterans Day V: 344
Armor A: 719 with pictures
 Army, United States (Weapons and equipment of the Army) A: 734
 Heraldry (The development of heraldry) H: 194
 Indian, American pictures on I: 139
 Knights and knighthood (Armor) K: 350 with picture
 Shield S: 400 with pictures
Armor [zoology]
 Animal (Armor) A: 496, picture on A: 494
Armor-piercing bomb
 Bomb (Armor-piercing bombs) B: 450 with diagram
Armor-piercing bullet
 Ammunition (How shells explode) A: 436
 Bullet B: 694
Armored catfish
 Catfish picture on C: 300

Armored personnel carrier
Army, United States *picture on A*: 736

Armored reconnaissance vehicle
Tank T: 27

Armored-vehicle ammunition
Ammunition (Armored-vehicle ammunition)
A: 436 *with picture*

Armorer [occupation]
Armor (During the Middle Ages) A: 720

Armorial [book]
Heraldry (Expansion) H: 194

Armory Show [1913]
Davis, Stuart D: 50
Duchamp, Marcel D: 373

Armour, Jean [wife of]
Burns, Robert (Burns's life) B: 709-710

Armour, Philip Danforth [American businessman] A: 721
Cudahy, Michael Ci: 1184

Armour and Company
Armour, Philip Danforth A: 721

Arms, Coat of See Coat of arms *in this index*

Arms, College of
Heraldry (Heraldry today) H: 194

Arms control A: 721
Bush, George Herbert Walker (International affairs) B: 721
Gorbachev, Mikhail Sergeyevich (International policies) G: 272
Guided missile (Postwar developments)
G: 427-428
International relations (Treaties) I: 344, (The Cold War ends) I: 346
Kennedy, John Fitzgerald (Arms control)
K: 266
Nuclear Nonproliferation Treaty N: 595
North Atlantic Treaty Organization (History)
N: 471
Peace (Arms control) P: 207
Strategic Arms Limitation Talks So: 919
Strategic Arms Reduction Treaty So: 919
Union of Soviet Socialist Republics (Détente)
U: 39
United Nations (Arms control) U: 92
Washington Conference W: 109

Arms limitation See Arms control *in this index*

Arms of assumption
Heraldry (Heraldry today) H: 194

Arms race
Cold War (The West rearms) Ci: 764, (The death of Stalin) Ci: 764
International relations (The Cold War begins)
I: 345

Arms reduction See Arms control *in this index*

Armstrong, Edwin Howard [American engineer] A: 722

Armstrong, Ernest H. [Canadian political leader]
Nova Scotia (table) N: 567

Armstrong, Henry Jackson, Jr. [American boxer]
Boxing (The golden age of U.S. boxing)
B: 533-534

Armstrong, John [American government official]
Jackson, Andrew (Jackson the soldier) J: 8-9
Madison, James (table) M: 35
Monroe, James (Secretary of state) M: 736

Armstrong, Lance [American cyclist] A: 723

Armstrong, Louis [American musician] A: 723
with portrait
Hines, Earl H: 237
Jazz (The 1920's) J: 70; *picture on J*: 72
United States *picture on U*: 118

Armstrong, Neil Alden [American astronaut]
A: 723 *with portrait*
Astronaut (Achievements in space) A: 829-830; (table) A: 830
Exploration (Space exploration) E: 452
Space exploration (Voskhod and Gemini: The first multiperson space flights) So: 714, (Landing on the moon) So: 715-717 *with pictures*
United States, History of the (The space race)
U: 195

Armstrong, Samuel [American political leader]
Massachusetts (table) M: 288

Armstrong, William Howard [American author]
Newbery Medal (table) N: 359

Army A: 724 *with pictures*
Cavalry C: 318
Flag (Military flags) F: 195-196 *with pictures*
See also Army, United States, *in this index*
and the list of Related Articles in the Army article

Army, Canadian [Canadian history]
Canada, Armed Forces of (Organization)
C: 128

Army, Department of the [U.S.] A: 729

Army, United States A: 730 *with pictures*
See also Military unit *in this index*
Air Force, United States (History) A: 194
Army, Department of the A: 729
Asian Americans (Japanese internment)
A: 812e-812f
Buffalo Soldiers B: 680
Defense, Department of D: 87
Division D: 247
Flag (Military flags) F: 195-196; *picture on F*: 211
Infantry (Divisions) I: 265
Medals, decorations, and orders (Military awards) M: 355 *with pictures*
National Guard N: 37
Rank, Military R: 139
Reserve Officers Training Corps (Army ROTC)
R: 258
Salute (Military hand salutes) S: 76b
United States Army War College U: 198
United States Military Academy U: 201
See also the list of Related Articles in the Army, United States article

Army Air Corps
Air Force, United States (Between world wars)
A: 195
Tuskegee Airmen T: 524

Army Air Forces
Air Force, United States (World War II) A: 195
Roswell R: 485

Army ant
Ant (Army ants) A: 526 *with picture*
Insect (Family life) I: 294-296

Army Command and General Staff College
Army, United States (Training an officer)
A: 734

Army General Staff [U.S.]
Army, Department of the A: 729

Army group
Army (The organization of armies) A: 724-725

Army Materiel Command
Army, United States (Organization of the Army) A: 736-737

Army-McCarthy hearings [U.S. history]
McCarthy, Joseph Raymond M: 331
Television (Early programs) T: 119 *with picture*

Army Museum [Paris]
Paris (Museums and art galleries) P: 164-165

Army, Navy, and Air Force Veterans [organization]
Veterans' organizations (In Canada) V: 345

Army of Northern Virginia
Lee, Robert Edward (Opening campaigns)
L: 178

Army of the Andes [Latin American history]
Flag *picture on F*: 217

Army of the Cumberland [U.S. history]
Rosecrans, William Starke R: 480

Army of the Future, The [book by De Gaulle]
De Gaulle, Charles André Joseph Marie (Early life) D: 90

Army Ordnance Center [U.S. Army]
Aberdeen Proving Ground A: 10

Army Reserve Officers Training Corps
Reserve Officers Training Corps (Army ROTC)
R: 258

Army War College See United States Army War College *in this index*

Army worm [insect] A: 741

Arn, Edward F. [American political leader]
Kansas (table) K: 234

Arnall, Ellis [American political leader]
Georgia (table) G: 130

Arnaud, Émile [French statesman]
Pacifism P: 18

Arnaud, Antoine [French philosopher]
Pascal, Blaise P: 190

Arnaz, Desi [American actor]
Ball, Lucille B: 43

Arne [book by Bjørnson]
Bjørnson, Bjørnstjerne B: 385

Arneson, Robert [American artist]
Sculpture S: 260

Arnett, Peter [American journalist]
War correspondent W: 27

Arnica [medication]
Arnica A: 741

Arnica [plant] A: 741 *with picture*

Arniches, Carlos [Spanish dramatist]
Spanish literature (Drama) So: 763

Arnim, Achim von [German author]
German literature (Romanticism) G: 141

Arno, Peter [American cartoonist]
Cartoon (Single panel cartoons) C: 265-266

Arno River [Italy] A: 741

Arno Valley [region, Italy]
Arno River A: 741

Arnold, Benedict [American traitor] A: 741 *with portrait*
André, John A: 456
Maine (Places to visit) M: 78
Petersburg P: 325
Revolutionary War in America (The evacuation of Boston) R: 275; (The invasion of Canada) R: 275; (The campaign in New York) R: 280-281; (Victory at Saratoga) R: 282-283; (Camden) R: 284-285, (The end of the war) R: 285
Richmond (History) R: 333

Arnold, Billy [American race car driver]
Automobile racing (table: Indianapolis 500 winners) A: 980

Arnold, Eddy [American singer] A: 742

Arnold, Henry Harley [American general]
A: 742 *with portrait*
Air Force, United States (World War II) A: 195
World War II (The Allies attack in Europe and Northern Africa) W: 478

Arnold, Kenneth [American pilot]
Unidentified flying object U: 27

Arnold, Lemuel H. [American political leader]
Rhode Island (table) R: 311

Arnold, Margaret Shippen [wife of]
Arnold, Benedict (A disappointed officer)
A: 741-742

Arnold, Matthew [British poet] A: 742
English literature (Later Victorian literature)
E: 321

Arnold, Ripley A. [American military leader]
Fort Worth (History) F: 418

Arnold, Thomas [British educator]
Arnold, Matthew A: 743
Rugby School R: 513

Arnoldson, Klas Pontus [Swedish statesman]
Nobel Prizes (Peace: 1908) N: 447

Arnolfini Wedding, The [painting by Van Eyck]
Van Eyck, Jan V: 282

Arnot, Adolphus [pseudonym]
Burr, Aaron (Tried for treason) B: 711

Aromatic hydrocarbon
Aramid A: 591
Hydrocarbon (Aromatics) H: 465
Petrochemicals P: 329
Petroleum (Conversion) P: 345

Aronson, J. Hugo [American political leader]
Montana (table) M: 757

Aroostook Plateau [region, Maine]
Maine (Land regions) M: 80

Aroostook War [1839]
Maine (Statehood) M: 89
New Brunswick (The Aroostook War) N: 198

Arosemena Monroy, Carlos Julio [Ecuadorian political leader]
Ecuador (The 1900's) E: 73

Aroutet, François Marie See Voltaire *in this index*

Around the World in Eighty Days [book by Verne]
Verne, Jules V: 338

Around the World in 80 Days [film]
Motion picture (Best picture: 1956) M: 861

Arp, Jean [French artist] A: 743
Painting (Dadaism) P: 80
Sculpture (Varieties of abstraction) S: 258

Árpád [Magyar chief]
Hungary (History) H: 445

Árpád dynasty [Hungarian history]
Hungary (The Kingdom of Hungary) H: 445

ARPAnet [computer network]
Computer (The Internet) Ci: 920
Internet (History of the Internet) I: 350e

Arpino, Gerald [American choreographer]
A: 743

Arquebus [gun]
Harquebus H: 67 *with picture*

Arrabal, Fernando [Spanish dramatist]
Spanish literature (Spanish literature today)
So: 763

Arrack [drink]
Date palm (Uses) D: 42

Arraignment [law]
Court (How courts work) Ci: 1101
Criminal justice system (Pretrial procedures)
Ci: 1143

- Law enforcement (Trial) L: 141
Arrangement in Gray and Black [painting by Whistler]
 Whistler, James Abbott McNeill W: 282 *with picture*
Array [engineering]
 Solar energy (Using photovoltaic cells) So: 578
Array [mathematics]
 Determinant D: 166
Arrector pili [anatomy]
 Hair (Glands and muscles) H: 9 *with diagram*
Arrest [law] A: 743
Miranda v. Arizona M: 616
 Police (Police activities) P: 620-621
Arrested Development [musical group]
 Rock music *picture on* R: 381
Arresting gear [ship]
 Aircraft carrier (Flight operations) A: 206 *with picture*
Arresting trap
 Trapping (Kinds of traps) T: 403 *with pictures*
Arrhenius, Svante August [Swedish chemist]
 Chemistry (Development of physical chemistry) C: 404
 Nobel Prizes (Chemistry: 1903) N: 442
Arrhythmia [disorder] A: 743
 Defibrillator D: 88
 Electrocardiograph E: 200
 Heart (Diagnosis and treatment) H: 139;
 (Abnormal heart rhythms) H: 142
Arrington, Richard, Jr. [American political leader]
 Birmingham (History) B: 376
Arriola, Don Andres d' [Spanish military leader]
 Pensacola P: 272
Arrival and Departure [book by Koestler]
 Koestler, Arthur K: 361
Arrow [weapon]
 Archery (Arrows) A: 602 *with picture*
 Arrowhead A: 743 *with pictures*
 Indian, American (Hunting, gathering, and fishing) I: 141; *picture on* I: 144
Arrow, Kenneth Joseph [American economist]
 A: 743
Arrow keys [computer]
 Keyboard K: 308 *with picture*
Arrow poison frog [amphibian]
 Color *picture on* Ci: 816
 Frog *picture on* F: 536
Arrow worm See *Chaetognatha in this index*
Arrowhead [weapon] A: 743 *with pictures*
Arrowhead-shaped micrathena
 Spider (table) So: 790; *picture on* So: 789
Arrowroot [plant] A: 744
 Tapioca T: 41
Arrowsmith [book by Lewis]
 Lewis, Sinclair L: 221
Arroyo [geography]
 Desert (Desert land and climate) D: 156
Arroyo Seco Parkway
 California (Transportation) C: 57
 Road (Modern roads) R: 362
Ars Nove [music]
 Classical music (Secular music) Ci: 646
Arsenate of lead See *Lead arsenate in this index*
Arsenault, Aubin E. [Canadian political leader]
 Prince Edward Island (table) P: 791
Arsenic [element] A: 744
 Arsenical A: 745
 Poison (Kinds of poisons) P: 601
Arsenic trioxide [chemical]
 Arsenic A: 744
Arsenical [medication] A: 745
Arson [crime] A: 745
 Fire department (Arson investigation) F: 124
 Pyromania P: 920
Arsphenamine [medication]
 Ehrlich, Paul E: 145
Art See *Art and the arts; Commercial art in this index*
ART [medicine] See *Assisted reproductive technology in this index*
"Art" [poem by Gautier]
 Gautier, Théophile G: 71
Art, Commercial See *Commercial art in this index*
Art, Philosophy of See *Aesthetics in this index*
Art and Architecture Building [Connecticut]
 Rudolph, Paul R: 509 *with picture*
Art and the arts A: 745 *with pictures*
 Avant-garde A: 982
 Careers (Art, design, and communications)
 C: 220 *with picture*
 Criticism Ci: 1146
 Dance (Artistic reasons) D: 26
 Hobby (The arts) H: 272
 Humanism (Humanism and the arts) H: 431
 Indian, American (Arts and crafts) I: 145 *with pictures*
 Plato (Art) P: 569
 Prehistoric people (The appearance of art)
 P: 750 *with pictures*
 Works Progress Administration W: 405
 See also *the list of Related Articles in the Art and the arts article and the Arts sections in specific country articles, such as Mexico (Arts)*
Art appreciation
 Art and the arts (Enjoying the arts) A: 748
Art as Experience [book by Dewey]
 Dewey, John D: 177
Art deco [design] A: 749 *with picture*
 Furniture (Art deco) F: 583; *picture on* F: 584
Art director [occupation]
 Encyclopedia (Basic steps in the preparation of a World Book article) E: 268 *with picture*
 Motion picture (Assembling the production team) M: 850
 Newspaper (The editorial department) N: 381-382
 Television (Planning and preparation) T: 110c-110d
Art Ensemble of Chicago [music]
 Jazz (Recent developments) J: 74
Art for art's sake
 Gautier, Théophile G: 71
 Avant-garde A: 982
 George, Stefan G: 109
Art Institute of Chicago A: 749
 Air rights *picture on* A: 200
 Chicago (Museums) C: 428-429 *with picture*
 Illinois *picture on* I: 63
Art museum
 Museum (Art museums) M: 938
Art music See *Classical music in this index*
Art nouveau [design] A: 749 *with picture*
 Beardsley, Aubrey Vincent B: 188 *with picture*
 Furniture (Art nouveau) F: 582; *picture on* F: 581
 Klimt, Gustav G: 344
 Tiffany, Louis Comfort T: 283
Art of Fugue, The [music by Bach]
 Bach, Johann Sebastian (His works) B: 16-17
Art of Love [book by Ovid]
 Ovid O: 882
Art of Loving, The [book by Fromm]
 Fromm, Erich F: 541
Art of Poetry [book by Horace]
 Criticism (History of literary criticism) Ci: 1146
 Latin literature (The Augustan Age) L: 116
Art of Poetry, The [book by Boileau-Despréaux]
 Boileau-Despréaux, Nicolas B: 439
 French literature (Classical poetry) F: 520
Art of the Novel, The [book by James]
 James, Henry (His works) J: 26
Art rock
 Rock music (Rock goes pop) R: 379
Art Ross Trophy
 Hockey (Professional leagues) H: 279-280
Artamanovs' Business, The [book by Gorki]
 Russian literature (Late realism) R: 562-563
Artaphernes [Persian soldier]
 Marathon (The battle) M: 191
Artaud, Antonin [French dramatist]
 Drama (Experimental theater) D: 340
Artemis [Greek mythology] A: 750
 See also *Diana in this index*
 Arethusa A: 645
 Iphigenia I: 397
 Mythology (Greek divinities) M: 979; (table) M: 980
 Orion O: 856
 Selene S: 289
Artemis, Temple of [Turkey]
 Seven Wonders of the Ancient World (The Temple of Artemis at Ephesus) S: 325;
picture on S: 326
 Ephesus E: 341
Arterial sclerosis [disease]
 Arteriosclerosis A: 750
Arteriosclerosis [disease] A: 750
 Angina pectoris A: 461
 Artery (The walls of arteries) A: 751
 Cerebral hemorrhage C: 361
 Chelation therapy C: 396
 Circulatory system (Disorders of the circulatory system) Ci: 561
 Stroke (Causes) So: 930
Artery [anatomy] A: 750 *with diagram*
 Angiography A: 461
 Angioplasty A: 461 *with picture*
 Blood (What blood does in the body) B: 408
 Circulatory system (The blood vessels) Ci: 559
with picture
 First aid (Pressure on arteries) F: 137
 Heart H: 132 *with diagram*; (Blood vessels)
 H: 135 *with diagram*
 Human body (The blood vessels) H: 421; *diagram on* H: 422
 Pulse P: 898
 Vein V: 295
Artes populares [handicrafts]
 Latin America (Handicrafts) L: 103 *with picture*
Artesian basin
 Artesian well A: 751
Artesian Basin, Great
 Australia (Underground water) A: 911
Artesian well [geology] A: 751 *with diagram*
 Australia (Underground water) A: 911
 Well (Water wells) W: 193
Artha [Hinduism]
 Manu M: 168
Arthritis [disorder] A: 751 *with diagrams*
 Disease (Diseases associated with aging)
 D: 230
 Psoriasis P: 844
 Rheumatism R: 291
 Rheumatology R: 291
Arthropod [zoology] A: 752
 Animal (A classification of the animal kingdom)
 A: 507 *with picture*
 Invertebrate I: 366
 Prehistoric animal (The earliest animals) P: 736
Arthroscope [instrument]
 Arthroscopy A: 753 *with picture*
 Endoscope E: 272
 Fiber optics (Uses of optical fibers) F: 88-89
Arthroscopy [medicine] A: 753 *with picture*
 Surgery (Some common surgical operations)
 So: 1006
Arthur [prince of Wales]
 Catherine of Aragon C: 303
 Henry VII [of England] H: 188
Arthur, Chester Alan [U.S. President] A: 754
with pictures
 Garfield, James Abram (Election of 1880)
 G: 42; (table) G: 42
 Hayes, Rutherford Birchard (Civil service reform) H: 121
 Republican Party (Political inactivity) R: 255
 Vice President of the United States (table)
 V: 351; (Tyler takes over) V: 353
Arthur, Ellen Lewis Herndon [wife of]
 Arthur, Chester Alan (Arthur's family) A: 755;
picture on A: 756
Arthur, Gabriel [English explorer]
 Tennessee (Exploration) T: 153
Arthur, Harold J. [American political leader]
 Vermont (table) V: 333
Arthur, King [legendary figure] A: 757
 Camelot C: 79
 Excalibur E: 435
 Gawain, Sir G: 71
 Geoffrey of Monmouth G: 91
 Holy Grail (The search for the Grail) H: 298
with picture
 Knights and knighthood (Knighthood in literature) K: 351
 Lancelot, Sir L: 56
 Literature for children *picture on* L: 364
 Malory, Sir Thomas M: 111
 Mythology (Welsh myths) M: 984
 Round Table R: 490
 Tennyson, Lord (His poems) T: 169-170
Arthur, Owen [Barbadian political leader]
 Barbados (History) B: 104
Arthur Andersen [accounting firm]
 Enron Corporation E: 327
Arthur Kill [waterway]
 New York City (The city) N: 323;
 (Transportation) N: 334
Arthur M. Sackler Gallery
 Smithsonian Institution (Museums) S: 519
 Washington, D.C. (Smithsonian museums)
 W: 71-72; *map on* W: 76
Artichoke [plant] A: 758 *with picture*
Article [grammar] A: 758
Articles of Confederation [1781] A: 758

- Annapolis Convention **A**: 516
 Interstate commerce (The commerce clause) **I**: 350f
 Maryland (Statehood) **M**: 258
 President of the United States (The founding of the presidency) **P**: 767
 Revolutionary War in America (Patriot governments) **R**: 279
 United States, Government of the (Growth of the federal government) **U**: 145
 United States, History of the (Establishing a government) **U**: 160
 Virginia (Independence and statehood) **V**: 420
Articles of incorporation See Incorporation, Articles of in *this index*
Articles of Union
 Constitution **Ci**: 995
Articles of War [U.S. history] **A**: 759
Articulated armor
 Diving, Underwater (Diving in vehicles) **D**: 246
Articulation [anatomy]
 Joint **J**: 155 *with pictures*
Articulation [music]
 Music (Indicating expression) **M**: 955
Articulation [speech]
 Speech **So**: 773
 Speech therapy (Types and causes of speech defects) **So**: 773
Artifact [archaeology]
 Archaeology (What archaeologists study) **A**: 595 *with picture*; (Surveying sites) **A**: 596-597 *with picture*; (Evaluation) **A**: 598
Artificial bait
 Fishing (Bait) **F**: 177-178; *pictures on* **F**: 177
Artificial eye **A**: 759
Artificial fur
 Fur (Artificial fur) **F**: 561
Artificial heart **A**: 759 *with pictures*
 Heart (The first heart transplants and artificial hearts) **H**: 145
Artificial insemination [reproduction]
 Breeding (Animal breeding) **B**: 592
 Dairying (Improvements in dairy farming) **D**: 7
 Fertilization **F**: 78
 Infertility (Treatment) **I**: 265
 Reproduction, Human (Fertilization) **R**: 246
Artificial intelligence **A**: 760
 Computer (Artificial intelligence [AI] software) **Ci**: 920
 Computerized instruction (Trends in computerized instruction) **Ci**: 925
Artificial lake
 Lake (How lakes are formed) **L**: 32 *with picture*
Artificial light
 See also Lighting in *this index*
 Light (Sources of light) **L**: 283
 Photography (Light) **P**: 412
Artificial limb **A**: 760 *with picture*
 Biomedical engineering *picture on* **B**: 325
 Disabled (Rehabilitation medicine) **D**: 220 *with picture*
 Prosthetics **P**: 830 *with picture*
Artificial materials See Synthetics in *this index*
Artificial organ
 See also Artificial heart in *this index*
 Biomedical engineering (Biomechanics) **B**: 324 *with picture*
 Iron lung **I**: 453 *with picture*
Artificial reforestation
 Forestry (Planting) **F**: 405
Artificial respiration
 Asphyxiation **A**: 816
 Drowning (Giving first aid) **D**: 349
 First aid (Restoring breathing) **F**: 138 *with pictures*
Artificial satellite See Satellite, Artificial in *this index*
Artificial selection [biology]
 Breeding **B**: 592
 Evolution (Artificial selection) **E**: 432 *with picture*
Artificial silk See Rayon in *this index*
Artificial skin
 Skin grafting **S**: 494
Artificial snow
 Snow (Artificial snow) **S**: 539
Artificial sweetener **A**: 761
 Saccharin **S**: 4
 Soft drink (How soft drinks are made) **So**: 571
Artificial turf **A**: 761
Artificial valve [medicine]
 Heart (Valve disease) **H**: 141-142 *with picture*
Artigas, José Gervasio [Uruguayan patriot] **A**: 762
 Uruguay (Independence) **U**: 227
Artillery [weapons] **A**: 762 *with pictures*
 Ammunition **A**: 435; (Artillery ammunition) **A**: 435 *with pictures*
 Army **A**: 724
 Army, United States (Artillery) **A**: 734
 Firearm **F**: 132 *with picture*
 See also the Related Articles in the Artillery article
Artillery Park [Quebec]
 Canada (table: National historic sites) **C**: 114
Artiodactyla [zoology]
 Mammal (table) **M**: 128-129 *with picture*
Artist
 Careers (Art, design, and communications) **C**: 220
 Clothing (Fashion writers and artists) **Ci**: 706
 Commercial art **Ci**: 872
 Encyclopedia (Basic steps in the preparation of a World Book article) **E**: 268 *with picture*
 Painting **P**: 28
 See also the list of Related Articles in the Painting and Sculpture articles
Artist and repertoire executive [occupation]
 Recording industry (Before recording) **R**: 180-181
Artistic director [occupation]
 Ballet **B**: 44
Artistic skating
 Roller skating (Artistic skating) **R**: 403
Artist's model
 Modeling (Kinds of models) **M**: 684
Arts See Art and the arts in *this index*
Arts, American Federation of **A**: 763
Arts, Bachelor of See Bachelor's degree in *this index*
Arts, Master of See Master's degree in *this index*
Arts and crafts See Handicraft in *this index*
Arts and Crafts Movement
 Architecture (Early modern architecture in Europe) **A**: 627
Arts and Culture Centre (Saint John's)
 Newfoundland and Labrador (Libraries and museums) **N**: 364
Arts and Industries Building (Washington, D.C.)
 Washington, D.C. (Smithsonian museums) **W**: 71-72
Arts and Letters, American Academy of
 American Academy and Institute of Arts and Letters **A**: 407
Arts and Letters, National Institute of
 American Academy and Institute of Arts and Letters **A**: 407
Arts and Sciences, American Academy of **A**: 764
Arts Centre, National
 Ottawa (The National Arts Centre) **O**: 872 *with picture*
ARU [labor union] See American Railway Union in *this index*
Aru Islands
 Indonesia (The Molucca Islands) **I**: 234
Aruba [island, West Indies] **A**: 764 *with picture*
 Netherlands (The Kingdom of the Netherlands) **N**: 139
 Netherlands Antilles **N**: 151
 North America *picture on* **N**: 464
Arum [plant] **A**: 764 *with picture*
Aryan Nation [political group]
 Nazism (Neo-Nazism) **N**: 93
Aryans [Nazi concept]
 Aryans **A**: 765
 Nazism **N**: 92
 Races, Human (Race and discrimination) **R**: 59
Aryans [people] **A**: 764
 Afghanistan (Early invasions) **A**: 95
 Asia (The people) **A**: 781; (The Indus Valley) **A**: 805
 India (The Aryans) **I**: 128
 Iran (Early days) **I**: 405
 Mythology (Comparing myths) **M**: 975
 Sanskrit language **S**: 111
 Sanskrit literature (The Vedic period) **S**: 112
 World, History of the (The Mauryan Empire in India) **W**: 430
Arzew [city, Algeria]
 Algeria (Manufacturing and construction) **A**: 364 *with picture*
Arzú Irigoyen, Alvaro Enrique [Guatemalan political leader]
 Guatemala (Political developments) **G**: 417
As [symbol]
 Arsenic **A**: 745
As for Me and My House [book by Ross]
 Canadian literature (Literature between the world wars) **C**: 159-160
As Good As It Gets [film]
 Nicholson, Jack **N**: 404
As I Lay Dying [book by Faulkner]
 American literature (Modernist fiction) **A**: 421-422
 Faulkner, William **F**: 55
As Long As We're Together [book by Blume]
 Blume, Judy **B**: 425
As You Like It [play by Shakespeare]
 Shakespeare, William (*As You Like It*) **S**: 359; (Rhetoric) **S**: 367
ASA [medication] See Aspirin in *this index*
ASA number
 Photography (Speed) **P**: 418
ASAC [sound] See Active structural-acoustic control in *this index*
Asafetida [medication]
 Pioneer life in America (Health) **P**: 483
Asahi Shimbun
 Newspaper (In Asia) **N**: 386
Asanga [sculpture]
 Sculpture (Japan) **S**: 239 *with picture*
Asante See Ashanti in *this index*
Asare, Meshack Ghanaian illustrator
 Literature for children *picture on* **L**: 355
Asbaje y Ramirez, Juana Inés See Juana Inés de la Cruz in *this index*
Asbestos [Quebec]
 Trudeau, Pierre Elliott (Entry into public life) **T**: 462
Asbestos [fiber] **A**: 765 *with picture*
 Disease (Environmental and occupational diseases) **D**: 230
 Quebec (The mid-1900's) **Q**: 32
Asbestosis [disorder]
 Asbestos (Hazards of asbestos) **A**: 765-766
Asbjørnsen, Peter Christen [Norwegian author] **A**: 766
 Storytelling (The 1800's) **So**: 914
Asbury, Francis [American religious leader] **A**: 766
 Methodists (Early history) **M**: 434-435
Ascanius [legendary figure]
 Mythology (The *Aeneid*) **M**: 981
ASCAP [organization]
 American Society of Composers, Authors and Publishers **A**: 430
Ascari, Alberto [Italian race car driver]
 Automobile racing (table: Grand Prix world champions) **A**: 980
Ascaris lumbricoides [animal]
 Roundworm **R**: 491
Ascending aorta [anatomy]
 Aorta **A**: 562
Ascending colon [anatomy]
 Colon [anatomy] **Ci**: 785
 Intestine (The large intestine) **I**: 353 *with diagram*
Ascension [island, Atlantic] **A**: 766
 Animal (Animal travelers) **A**: 502-503
Ascension, The [painting by Rabula]
 Bible *picture on* **B**: 283
Ascension Day [custom]
 Easter (The end of the Easter season) **E**: 43
Ascent stage
 Space exploration (Apollo: Mission to the moon) **So**: 714-715
Asceticism [philosophy] **A**: 766
Asch, Sholem [Israeli author] **A**: 767
Ascham, Roger [English author]
 Archery (History) **A**: 603-604
Ascidian [sea animal]
 Sea squirt **S**: 263
ASCII [computing] See American Standard Code for Information Interchange in *this index*
Asclepius [Greek mythology] **A**: 767
 Epidaurus **E**: 342
 Greece, Ancient (Religion) **G**: 367; *picture on* **G**: 371
 Imhotep **I**: 79
 Medusa **M**: 383
Ascorbic acid See Vitamin C in *this index*
ASCS [organization]
 Agricultural Stabilization and Conservation Service **A**: 145
ASEAN [organization] See Association of Southeast Asian Nations in *this index*

82 Aseptic packaging

Aseptic packaging

Food preservation (Aseptic packaging) F: 343
Packaging P: 18

Aseptic surgery [medicine]

Medicine (Antiseptic surgery) M: 375 *with picture*

Surgery (Antiseptics and asepsis) So: 1004

Asexual reproduction

See also Budding; Spore *in this index*

Reproduction (Through asexual reproduction)
R: 242 *with picture*

Animal (How animals reproduce) A: 496 *with diagrams*

Clone Ci: 684

Heredity (Sex cells and reproduction) H: 201

Life (Reproduction) L: 274

Plant (How plants reproduce) P: 532;
(Vegetative propagation) P: 535 *with diagram*

Asfaw, Berhane [Ethiopian anthropologist]

Prehistoric people (table) P: 752

Asgard [Scandinavian mythology]

Mythology (The construction of the world)
M: 984

Vikings (Religion) V: 379-380

Ash [mineral] A: 767

Fire (What fire produces) F: 121

Ash [tree] A: 767

Tree pictures on T: 420, T: 422, T: 426

Ash Lawn [estate]

Monroe, James (Monroe's family) M: 735-736

Ash Shariqah [state]

United Arab Emirates U: 43; (History) U: 45

"Ash Wednesday" [poem by Eliot]

Eliot, T. S. (His works) E: 237-238

Ash Wednesday [religion] A: 767

Easter (The beginning of Lent) E: 42

Ashanti [people] A: 767

Africa pictures on A: 116, A: 117

Doll (Doll festivals and customs) D: 287 *with picture*

Ghana (People) G: 178, (History) G: 179

Mythology (African mythology) M: 982-983

Ashbery, John [American poet] A: 768

American literature (Poetry) A: 423

Postmodernism P: 709

Ashburn, Richie [American baseball player]

Baseball (table: Hall of Fame) B: 134

Ashburton, Lord [British statesman]

Webster-Ashburton Treaty W: 178

Ashcan School [art] A: 768 *with picture*

Henri, Robert H: 185

Lawson, Ernest L: 147

Prendergast, Maurice Brazil P: 756

Realism (In painting) R: 172

Ashcroft, John David [American political leader] A: 768

Bush, George Walker (table) B: 723

Justice, Department of (table) J: 203

Missouri (table) M: 668

Ashcroft, Dama Peggy [British actress]

Motion picture (Best performance by an actress in a supporting role: 1984) M: 863

Ash, Arthur [American tennis player] A: 768 *with portrait*

Ash, Gordon [pen name]

Creasey, John Ci: 1123

Ash, Samuel [American political leader]

North Carolina (table) N: 490

Ashes, The [award]

Cricket (History) Ci: 1134-1135

Asheville [North Carolina] A: 769

Ashgabat [city, Turkmenistan] A: 769

Turkmenistan T: 514

Ashikaga [Japanese history]

Japan (Rise of the shogun) J: 54

Shogun S: 433

Ashkenazic [language]

Hebrew language H: 162

Ashkenazim [people]

Israel (Jews) I: 480

Jews J: 120

Yiddish language Y: 565

Ashkenazy, Vladimir [Russian-born Icelandic musician] A: 769

Ashkhabad [city, Turkmenistan] See Ashgabat *in this index*

Ashland [estate]

Clay, Henry (The Compromise of 1850) Ci: 659

Ashleaf maple [tree]

Maple (Boxelder) M: 187

Tree pictures on T: 420

Ashley, William Henry [American explorer]

Fur trade (The 1800's) F: 565

South Dakota (Exploration and fur trade)

So: 681

Wyoming (Exploration) W: 533

Ashmolean Museum [England]

Museum (Early museums) M: 939

Ashmun Institute

Lincoln University L: 329

Ashoka [emperor of India] A: 769

Asia (The Indus Valley) A: 805

Buddhism (The sangha) B: 668-669

India (The Mauryan Empire) I: 128

Mauryan Empire M: 318

World, History of the (The Mauryan Empire in India) W: 430-431

Ashrama [Hinduism]

Manu M: 168

Ashton, Enrico [opera character]

Opera (*Lucia di Lammermoor*) O: 804

Ashton, Sir Frederick [British choreographer] A: 769

Ballet (Ballet in England) B: 53

Fonteyn, Margot F: 327

Ashton, Lucia [opera character]

Opera (*Lucia di Lammermoor*) O: 804

Ashton-Warner, Sylvia [New Zealand author]

New Zealand (The arts) N: 349

Ashur [Assyrian god]

Assyria (Religion) A: 821; (Government) A: 822

Ashura [celebration]

Islam (Holidays and celebrations) I: 465

Ashurbanipal [king of Assyria] A: 769

Assyria (Language and literature) A: 821

Gilgamesh, *Epic of* G: 190

Library (Ancient libraries of clay) L: 257-258

Nineveh N: 424

World, History of the picture on W: 428

Ashurnasirpal II [king of Assyria]

Clothing picture on Ci: 696

Ashvins [legendary figures]

Mythology (Mythology and society) M: 988

Ashworth, Mary W. [American author]

Freeman, Douglas Southall F: 509

Asi-Yaholo See Osceola *in this index*

Asia A: 770 *with pictures and maps*

Agriculture (Asia) A: 154

Arabs A: 584

Bank (Banks throughout the world) B: 91

Clothing pictures on Ci: 693

Colombo Plan Ci: 784

Colonialism (Later colonialism) Ci: 814

Columbus, Christopher (The plan to sail westward) Ci: 858

Communication (The rise of printing) Ci: 879

Conservation (Asia) Ci: 989 *with picture*

Continental divide Ci: 1022

Dance (Asian theatrical dance) D: 30 *with pictures*

Drama (Asian drama) D: 336 *with pictures*

Exploration (European exploration) E: 442

Immigration (The fourth wave) I: 83; (Asia) I: 85

Indian, American (The first Americans) I: 151

Language (Other language families) L: 65 *with map*

Library (Libraries of the world) L: 252-253

Music (Asian music) M: 955 *with pictures*

National park (table) N: 42f

Newspaper (In Asia) N: 386

Painting (Asian painting) P: 44 *with pictures*

Population (World population) P: 672

Prehistoric people (The spread of settlement) P: 751

Railroad (In other countries) R: 113-114

Rain forest (Asia) R: 126b *with map*

Roman Catholic Church (In Asia) R: 411

Russia (Expansion in Asia) R: 551

Sculpture (Asian sculpture) S: 236 *with pictures*

Telephone (The telephone industry) T: 99

Television (In Asia) T: 116

Textile (In Asia) T: 218

Welfare (Welfare around the world) W: 190

Wheat (Asia) W: 272 *with map*

World, History of the (Imperialism) W: 445;
(The birth of new nations) W: 448

See also the list of Related Articles in the Asia article

Asia Foundation

Library (International library programs) L: 254

Asia Minor [region, Asia] A: 812a *with map*

Alexander the Great (Invasion of Asia) A: 342

Turkey T: 502 *with maps*

Asia-Pacific Economic Cooperation [organization] A: 812a

Asiago [cheese]

Cheese (Very hard, or grating, cheese) C: 392 *with picture*

Asian Americans [people] A: 812b *with picture and map*

Los Angeles (Ethnic groups) L: 463

Asian clam [mollusk]

Clam (Types of clams) Ci: 637 *with picture*

Asian cockroach

Cockroach Ci: 745

Asian Development Bank A: 814

Foreign aid (Regional development programs) F: 385

Asian Drama: An Inquiry into the Poverty of Nations [book by Myrdal]

Myrdal, Gunnar M: 971

Asian elephant

Elephant E: 226 *with pictures*

Asian flu [disease]

Influenza (Flu epidemics) I: 268b

Asian fruit pigeon [bird]

Pigeon (The body of a pigeon) P: 458-459;

(Wild pigeons) P: 460

Asian long-horned beetle [insect]

Invasive species (Managing invasive species) I: 354k

Asian Pacific American Heritage Month

May M: 321

Asian race [theory]

Races, Human (The geographical-race theory) R: 54

Asian rice

Rice (Kinds of rice) R: 323-324

Asians

See also Asian Americans *in this index*

Africa (Peoples of Africa) A: 104

Races, Human (The clinal approach) R: 55-56

South Africa (People) So: 609; (Ways of life)

So: 611-612

Asiatic Barred Zone [U.S. history]

Asian Americans (Asian immigration halted)

A: 812e

Immigration (The third wave) I: 82

Asiatic black bear [animal]

Bear (Asiatic black bears) B: 185; *picture on*
B: 186

Asiatic class [breeds]

Chicken (Kinds of chickens) C: 441; (table)
C: 443

Asiatic cotton See Old World cotton *in this index*

Asiatic Exclusion League [U.S. history]

Asian Americans (The second wave) A: 812d-

812e

Aside [drama]

Shakespeare, William (Dramatic conventions)

S: 354

Asimov, Isaac [American author] A: 814

Asir [region]

Saudi Arabia (The Western Highlands) S: 158

with picture and map

ASIS [organization]

Library (Information science and technology)

L: 251

Askaniya Nova National Park [Ukraine]

National park (table) N: 42f

Askev, Reubin O'D. [American political leader]

Florida (table) F: 260

Askia I (the Great) See Askia Muhammad *in this index*

Askia Muhammad [king of the Songhai] A: 814

African Americans (The cultural heritage)

A: 136c

Mali (History) M: 109

Songhai Empire So: 593

ASL See American Sign Language *in this index*

ASM [weapon] See Air-to-surface missile *in this index*

Asmara [city, Eritrea] A: 814

Eritrea E: 352 *with picture*

Aso [rock]

Abuja A: 19

Asoka [emperor of India] See Ashoka *in this index*

Asp [snake] A: 814 *with picture*

Cleopatra (Cleopatra and Mark Antony)

Ci: 662a-662b

Snake (Burrowing asps) S: 534

Asp viper [snake]

Snake picture on S: 534

Asparagus [plant] A: 814 *with pictures*

Asparagus bean [plant]

Cowpe

- Beetle picture on B: 218
Asparagus fern [plant]
 Asparagus A: 815 *with picture*
Aspartame [chemical]
 Artificial sweetener A: 761
ASPCA [organization]
 Society for the Prevention of Cruelty to Animals So: 563
Aspdin, Joseph [British inventor]
 Cement and concrete (History) C: 345
Aspect [astrology]
 Horoscope (Parts of a horoscope) H: 341
Aspect ratio
 Photography (Film) P: 417
Aspen [Colorado] A: 815
Aspen [tree] A: 815
 Tree pictures on T: 420
Aspen Institute for Humanistic Studies
 Aspen A: 815
Aspen Music Festival
 Aspen A: 815
Asperger syndrome
 Autism A: 941
Asphalt [mineral] A: 815
 Gravel G: 330
Asphyxiation [disorder] A: 816
Aspidistra [plant] A: 816
Aspin, Les [American government official]
 A: 816
Aspinall Storage Unit [water system]
 Colorado (The mid-1900's) Ci: 847
Aspinwall
 Colón Ci: 785
Aspirant [pronunciation]
 Consonant Ci: 992
Aspirin [medication] A: 816
 Analgesic A: 448
 Heart (Treatment) H: 138
 Salicylic acid S: 66
Asquith, Herbert Henry [British political leader]
 A: 816
 Churchill, Sir Winston Leonard Spencer (World War I) C: 547
 Liberal Democrats (A major party) L: 227
ASROC [weapon] See Antisubmarine missile in this index
Ass [animal]
 Donkey D: 307
Assad, Bashar al- [Syrian political leader] A: 816
 Syria (Recent developments) So: 1076
Assad, Hafez al- [Syrian political leader] A: 817
 Assad, Bashar al- A: 816
 Syria (Independence) So: 1075
Assam [state, India]
 India (Religious and ethnic unrest) I: 134
Assam tea
 Tea (Processing tea) T: 62
Assassin, The [book by O'Flaherty]
 O'Flaherty, Liam O: 679
Assassination [crime] A: 817
 Terrorism T: 177
Assassins [Asian history] See Hashshashins in this index
Assateague Island National Seashore
 [Maryland-Virginia]
 National Park System (table: National seashores) N: 57
 Virginia (Visitor's guide) V: 408
Assault [crime]
 Assault and battery A: 817
 Crime (table) Ci: 1137
Assault [horse]
 Kentucky Derby (table) K: 296
Assault and battery [crime] A: 817
Assault weapon
 Clinton, Bill (National affairs) Ci: 682d
 Gun control (Approaches to gun control) G: 440-441
Assaying [metallurgy] A: 817
Assemblage [art]
 Nevelson, Louise N: 178 *with picture*
 Painting (The revival of subject matter) P: 86
 Rauschenberg, Robert R: 150
 Sculpture (The sculptor at work) S: 232;
 (Assemblages) S: 257 *with picture*
Assembler [occupation]
 Careers (Production) C: 229
 Clothing (Ready-to-wear clothes) Ci: 704-705
Assembler [program]
 Computer (Compiling or assembling a program) Ci: 923
Assemblies of Aesopic Tales [book]
 Aesop's fables A: 90
Assemblies of God [religious group] A: 817
 Pentecostal churches (Major Pentecostal churches) P: 275-276
Assembly [government]
 Colonial life in America (Colonial government) Ci: 794
 League of Nations (Powers and organization) L: 159
Assembly [religion]
 Presbyterians P: 756a
Assembly, Freedom of See Freedom of assembly in this index
Assembly language
 Computer (Using programming languages) Ci: 923
Assembly line [industry] A: 818
 Airplane (Mass production) A: 229
 Automobile (Manufacturing) A: 957 *with picture*;
 (The birth of the automobile industry) A: 963-964 *with picture*
 Aviation (World War I [1914-1918]) A: 987
 Conveyor belt (Uses) Ci: 1024 *with picture*
 Edison, Thomas Alva (Ore milling) E: 80
 Factory (Kinds of factories) F: 5
 Ford, Henry F: 379
 France picture on F: 469
 Kaiser, Henry John K: 210
 Manufacturing (How science helps manufacturing) M: 171
 Mass production M: 269
Assembly of First Nations
 Indian, American (In Canada) I: 178b
Assembly of the Republic
 Portugal (National government) P: 687
Assembly plant
 Airplane (Mass production) A: 229 *with picture*
Asser, Tobias Michael Carel [Dutch statesman]
 Nobel Prizes (Peace: 1911) N: 447
Assessment [taxation] A: 818
 Property tax P: 827
Asset fund [economics]
 Money market fund M: 718
Assets account
 Bookkeeping (Accounts) B: 472 *with picture*
Assigned frequency [electronics]
 Radio (Broadcasting power and frequency) R: 87-88
Assignee [law]
 Assignment A: 818
 Receiver R: 174
Assignment [law] A: 818
Assignor [law]
 Assignment A: 818
Assimilation [physiology] A: 818
Assimilation [sociology] A: 818
 Culture (Culture and society) Ci: 1188
 Immigration (Effects of immigration) I: 80
 Indian, American (In Canada) I: 178
 Jews (The Jews today) J: 125
 Minority group (Assimilation) M: 609
Assiniboia [Canadian history] A: 818 *with map*
Assiniboine Indians [American Indians] A: 818-819
 Indian, American picture on I: 141
Assiniboine River [Saskatchewan]
 Saskatchewan (Rivers and lakes) S: 138
Assis, Joaquim Maria Machado de [Brazilian author]
 Latin-American literature (Realism) L: 112
Assisi, Francis of See Francis of Assisi, Saint in this index
Assist
 Hockey (Hockey terms) H: 275
Assistant, The [book by Malamud]
 Malamud, Bernard M: 95
 Novel (After World War II) N: 574
Assistant engineer
 Ship (Officers and crew) S: 423
Assistant public printer [office]
 Government Printing Office G: 293
Assisted reproductive technology
 Infertility (Treatment) I: 265
Assisting heart [medicine]
 DeBakey, Michael Ellis D: 63
 Heart (Development of heart surgery) H: 144-145
Assman psychrometer [instrument]
 Hygrometer (The psychrometer) H: 473-474
Associated Fraternities of America [organization]
 Fraternal organization (History) F: 495
Associated Press [news service] A: 819
 Journalism (The growth of U.S. newspapers) J: 174
 Newspaper (News services) N: 383
Associated State of Vietnam [Vietnamese history]
 Vietnam (The First Indochina War) V: 371
Associate's degree [education]
 Degree, College (The associate's degree) D: 91
Association [psychology] A: 819
Association [social unit]
 Indian, American (Family groups) I: 136c
Association cortex
 Brain (The cerebrum) B: 550b
Association des Scouts du Canada, L'
 Scouts Canada (Organization) S: 224
Association football [sport]
 Soccer So: 544
 South Africa (Recreation) So: 612 *with picture*
Association for Childhood Education International See Childhood Education International, Association for in this index
Association for Educational Communications and Technology
 Library (School library standards) L: 245
Association for Supervision and Curriculum Development
 Teaching (Teachers organizations) T: 69
Association for the Preservation of Virginia Antiquities
 Jamestown J: 29
Association for the Study of African-American Life and History A: 819
 Black History Month B: 388
Association magazine
 Magazine (Other magazines) M: 42
Association neuron [anatomy]
 Nervous system (How the nervous system works) N: 132 *with diagram*; (Complex pathways) N: 134 *with diagram*
Association of American Geographers
 Geography (Careers in geography) G: 96
Association of American Law Schools
 Law (Law education) L: 138
Association of Christian Schools International
 Parochial school P: 178
Association of Collegiate Alumnae
 American Association of University Women A: 408
Association of Evangelical Lutheran Churches
 Evangelical Lutheran Church in America E: 422
Association of Junior Leagues, Inc.
 Junior Leagues J: 196
Association of Letter Carriers of the United States of America, National
 Labor movement (table) L: 8
Association of National Advertisers
 Advertising (Advertising associations) A: 77
Association of Public Radio Stations
 National Public Radio N: 59
Association of Research Libraries
 Library (Research libraries) L: 247
Association of Southeast Asian Nations
 A: 820
 Common market Ci: 875
 Vietnam (Recent developments) V: 372
Association of Teacher Educators
 Teaching (Teachers organizations) T: 69
Association of Tennis Professionals
 Tennis (Tennis tournaments) T: 165
Association of Theological Schools
 Seminary S: 292
Association of University Women, American
 See American Association of University Women in this index
Associative Law of Addition
 Algebra (Basic algebra) A: 354
Associative Law of Multiplication
 Algebra (Basic algebra) A: 354
Assonance [poetry]
 Poetry (table) P: 594; (Sounds) P: 594-595
Assumption [religion] A: 820
 August A: 886
 Pius XII P: 503
Assumption, Arms of
 Heraldry (Heraldry today) H: 194
Assumption, Cathedral of the
 Kremlin K: 387
Assumption of state debts [U.S. history]
 Washington, George (Finances) W: 103
Assumption of the Blessed Virgin Mary, Basilica of the
 Baltimore (The people) B: 67-68
 Latrobe, Benjamin Henry L: 117
Assumption of the Virgin [painting by El Greco]
 Art and the arts picture on A: 746

Assur [Assyrian god] *See* Ashur in this index

Assurbanipal *See* Ashurbanipal in this index

Assyria [ancient country] **A:** 820 *with picture and map*

Architecture (Mesopotamian architecture) **A:** 611

Army (Ancient armies) **A:** 726

Asia (The Tigris-Euphrates Valley) **A:** 804-805

Babylon (The Old Babylonian Empire) **B:** 11-12

Clothing (Ancient times) **Ci:** 696-697 *with picture*

Palestine (Invasions and conquests) **P:** 104

Samaritans **S:** 78

Sculpture (Middle Eastern) **S:** 233

Scythians **S:** 262

World, History of the (Civilizations of south-west Asia) **W:** 426

See also the list of Related Articles in the Assyria article

Astaire, Adele [American entertainer]

Astaire, Fred **A:** 822

Astaire, Fred [American entertainer] **A:** 822 *with portrait*

Rogers, Ginger **R:** 400

Astana [city, Kazakhstan] **A:** 823

Kazakhstan **K:** 250a; *picture on K:* 250b;

(History) **K:** 251-252

Astarta [Semitic goddess] **A:** 823

Astatine [element] **A:** 823

Halogen **H:** 27

Aster [plant] **A:** 823 *with picture*

Flower (Garden perennials) **F:** 278 *with picture*

Asterisk [reference]

Footnote **F:** 369

Asterius [legendary figure]

Europa **E:** 379

Asteroid [astronomy] **A:** 823 *with pictures*

Dinosaur (Why dinosaurs died out) **D:** 213

Eros **E:** 354

Moon (Origin and evolution of the moon) **M:** 788

Planet **P:** 507

Prehistoric animal (The Age of Mammals)

P: 740

Satellite **S:** 150

Shoemaker, Eugene Merle **S:** 433

Solar system (Asteroids) **So:** 581

Space exploration (Probes to asteroids)

So: 711

Asteroid belt [astronomy]

Asteroid **A:** 823

Solar system (Asteroids) **So:** 581

Asthenosphere [geology]

Earthquake (Where and why earthquakes occur) **E:** 36

Hot spot **H:** 374a

Mantle **M:** 168

Plate tectonics (Structure of tectonic plates)

P: 561-562

Asthma [disease] **A:** 824

Allergy **A:** 373

Bronchodilator **B:** 636

Dust mite **D:** 392

Hay fever (Symptoms) **H:** 116

Helium (Uses) **H:** 176

Astigmatism [disorder] **A:** 825 *with diagrams*

Eye (Astigmatism) **E:** 464 *with pictures*

Glasses (Prescription glasses) **G:** 224

Astigmatism [optics]

Aberration (Point aberration) **A:** 10-11

Astley, Philip [British performer]

Circus (The birth of the circus) **Ci:** 562b *with picture*

Aston, Francis William [British physicist]

Thomson, Sir Joseph John **T:** 265

Astor, John Jacob [American businessman]

A: 826

Chouteau, Pierre, Jr. **C:** 522

Missouri **M:** 671

North West Company **N:** 519

Oregon (Exploration and settlement) **O:** 846

Washington (Settlement) **W:** 66

Astor, Lady [British political leader] **A:** 826 *with portrait*

Astor, Mary [American actress]

Motion picture (Best performance by an actress in a supporting role: 1941) **M:** 863

Astor, Waldorf [British political leader]

Astor, Lady **A:** 826

Astoria [Oregon] **A:** 826

Astor, John Jacob **A:** 826

Astoria Bridge [Oregon]

Bridge (table: Continuous truss) **B:** 603

Astraea [pen name] *See* Behn, Aphra in this index

Astrakhan [city, Russia]

Caspian Sea **C:** 275

Astrakhan [fur]

Karakul **K:** 245

Astrodome [Houston]

Houston (Landmarks) **H:** 395

Astrogeology [science]

Moon (Describing lunar evolution) **M:** 794

Shoemaker, Eugene Merle **S:** 433

Astrolabe [instrument] **A:** 826

Exploration (The great age of European exploration) **E:** 442-443 *with picture*

Navigation (History) **N:** 74

Astrology **A:** 826 *with picture*

Horoscope **H:** 341

House **H:** 384

Religion (Religion today) **R:** 223

Zodiac (The zodiac in astrology) **Z:** 601

Astronaut **A:** 828 *with pictures*

See also Space exploration in this index

Aerospace medicine **A:** 89

Careers (Life, physical, and social sciences) **C:** 225-226 *with picture*

Clothing (Protection) **Ci:** 688 *with picture*

World, History of the *picture on W:* 446

Astronautics **A:** 833

Astronomer [occupation]

Astronomy **A:** 834, (Careers) **A:** 849

Careers (Life, physical, and social sciences) **C:** 225-226

Science *picture on S:* 191

Astronomer Royal [title]

Greenwich Observatory, Royal **G:** 387

Astronomical Almanac, The

Almanac **A:** 379

Astronomical horizon

Horizon **H:** 335

Astronomical season

Season **S:** 270

Astronomical Society of India

Astronomy (Astronomy associations) **A:** 849-850

Astronomical Society of the Pacific

Astronomy (Astronomy associations) **A:** 849

Astronomical unit

Astronomy (Units of distance) **A:** 837

Planet (The planets of our solar system)

P: 510

Weights and measures (Miscellaneous weights and measures) **W:** 184

Astronomical zenith [astronomy]

Zenith **Z:** 593

Astronomy **A:** 834 *with pictures*

Computer (Scientific visualization software)

Ci: 919

Interferometer **I:** 324

Radar (In scientific research) **R:** 67-68 *with picture*

Science (The physical sciences) **S:** 193;

(Ancient Greece) **S:** 196; (Achievements of the mid-1900's) **S:** 202

Telescope **T:** 102 *with pictures*

X rays (In astronomy) **X:** 541

See also the list of Related Articles in the Astronomy article

Astronomy Capital of the World [nickname]

Arizona (Interesting facts about Arizona)

A: 670

Astrophel and Stella [poems by Sidney]

Sidney, Sir Philip **S:** 449

Astrophysicist

Astrophysics **A:** 850

Astrophysics [astronomy] **A:** 850

Astronomy (Advances in astrophysics) **A:** 848

Astros, Houston *See* Houston Astros in this index

Astroworld [park, Houston]

Texas (Places to visit) **T:** 194

Asturias, Miguel Angel [Guatemalan author]

A: 851

Latin-American literature (The mid-1900's)

L: 113

Astyages [king of Media]

Cyrus the Great **Ci:** 1208

Media **M:** 360

Asunción [city, Paraguay] **A:** 851

Paraguay **P:** 144 *with picture*

Asvaghosa [Buddhist author]

Sanskrit literature (The Classical period) **S:** 112

Aswan [city, Egypt] **A:** 851

Egypt (Climate) **E:** 127

Aswan High Dam [Nile River, Egypt] **A:** 851

Cold War (Trouble at Suez) **Ci:** 765

Egypt (The Nile Valley and Delta) **E:** 125;

(Agriculture) **E:** 128-129, (Energy sources)

E: 129 *with picture*; (Republic) **E:** 132,

(Progress and conflict) **E:** 133

Lake Nasser **L:** 41 *with map*

Nile River **N:** 422

Suez Canal (History) **So:** 958

Suez crisis **So:** 958

Asylum [international law] **A:** 851

Illegal alien **I:** 51

Political prisoner **P:** 638

Asymmetrical system [cryptology] *See* Public-key system in this index

Asymptotic giant branch

Star (Intermediate-mass stars) **So:** 848

At [symbol]

Astatine **A:** 823

AT&T Broadband [company]

AT&T Corp. **A:** 852

AT&T Business Services [company]

AT&T Corp. **A:** 852

AT&T Consumer Services [company]

AT&T Corp. **A:** 852

AT&T Corp. **A:** 852

Public utility (History) **P:** 867

Telegraph (Decline) **T:** 92

Telephone (The Bell System) **T:** 100-101; (Competition in the U.S. telephone industry) **T:** 101

AT&T Wireless [company]

AT&T Corp. **A:** 852

At large election

House of Representatives (Size) **H:** 385

At the Moulin Rouge [painting by Toulouse-Lautrec]

Painting (Postimpressionism) **P:** 75

Toulouse-Lautrec, Henri de **T:** 346-347 *with picture*

ATA [organization]

Air Transport Association of America **A:** 200

Atabalipa *See* Atahualpa in this index

Atacama Desert [region] **A:** 852

Chile (The Northern Desert) **C:** 464 *with picture*

South America **So:** 622 *with picture*

Atacama Indians

Chile (Early days) **C:** 467

Atahualpa [Inca emperor] **A:** 852

De Soto, Hernando (Early expeditions) **D:** 160

Inca (The empire) **I:** 98

Indian, American (After European contact)

I: 175, *picture on I:* 143

Pizarro, Francisco (Conquest of Peru) **P:** 504

with picture

Atala [book by Chateaubriand]

Chateaubriand, François-René de **C:** 387

Atanasoff, John V. [American physicist]

Computer (The first electronic computers)

Ci: 924b

Atatürk, Kemal [Turkish political leader] **A:** 852

Ankara **A:** 515

Istanbul (History) **I:** 491-492

Ottoman Empire (The empire ends) **O:** 878

Sèvres, Treaty of **S:** 329

Turkey (After World War I) **T:** 511 *with picture*;

(The Republic of Turkey) **T:** 511

Ataturk Dam [Turkey]

Dam (table) **D:** 18

Ataxia [disorder] **A:** 852

Cerebral palsy (Types) **C:** 361

ATC [safety device]

Railroad (Other train controls) **R:** 112

Atchaf

- Athabasca tar sands** [region, Alberta]
Bituminous sands B: 385
- Athabaskan Indians** [American Indians]
British Columbia (Early days) B: 628
- Athamas** [legendary figure]
Golden Fleece G: 255
- Athanasius, Saint** [early Christian] A: 853
Religious life (Religious life in early Christianity) R: 226
- Atharva-Veda** [religious book]
Vedas V: 291
- Atheism** A: 853
God (Ideas about God) G: 244
Theism T: 251
- Athena** [Greek mythology] A: 853 *with picture*
See also Minerva in this index
Arachne A: 590
Greece, Ancient *pictures on* G: 370
Medusa M: 383
Mythology (Greek divinities) M: 979 *with picture*; (table) M: 980; *picture on* M: 973
Pegasus P: 229
Perseus P: 295
Ulysses (Return to Ithaca) U: 17-18
- Athena Nike, Temple of** [Athens]
Acropolis A: 29
- Athena Parthenos** [sculpture by Phidias]
Phidias P: 357
- Athenaeum**
Boston (Libraries and museums) B: 502
Massachusetts (Libraries) M: 274 *with picture*
- Athanaeus of Naucratis** [Greek author]
Greek literature (The Greco-Roman Age) G: 378
- Athenagoras I** [Greek religious leader]
Eastern Orthodox Churches (History) E: 45-46
- Atheneum** [Indiana]
Meier, Richard M: 384
- Athens** [Greece] A: 854 *with pictures and map*
Ancient Athens
Athens (The ancient city) A: 856
Acropolis A: 29
Areopagus A: 645
Aristides A: 662
Athens A: 853
Ballot (Older customs) B: 63
City (Government) Ci: 581
City-state Ci: 603
Democracy (Origins of democracy) D: 122
Education (Ancient Greek education) E: 97
Europe *picture on* E: 393
Greece, Ancient (Education) G: 367;
(Government) G: 372 *with map*; (The Persian wars) G: 373; *picture on* G: 366
Law (The influence of ancient Greece) L: 133
Oratory (Beginnings) O: 818
Painting (Greek painting) P: 42
Peloponnesian War P: 232
Pericles P: 287
Plato (Plato's life) P: 567
Socrates (Socrates' life) So: 567
Solon So: 586
Themistocles T: 251
Thirty Tyrants T: 259
Women's movements (In ancient societies) W: 384
World, History of the (The Greeks) W: 428-429
Modern Athens
Athens (The modern city) A: 854
Greece G: 352 *with picture*
- Athens of America** [nickname]
Boston B: 495
- Athens of the South** [nickname]
Nashville N: 22
- Atherosclerosis** [disease]
Aneurysm A: 459
Arteriosclerosis A: 750
Cholesterol (Cholesterol and heart disease) C: 520
Diabetes D: 179; (Complications of diabetes) D: 179
Disease (Diseases associated with aging) D: 230
Heart (Causes) H: 137
Stroke (Causes) So: 930
- Athetoid cerebral palsy** [disorder]
Cerebral palsy (Types) C: 361
- Athi River** [Africa]
Kenya (Rivers and lakes) K: 302
- Athina** *See Athens* [Greece] *in this index*
- Athlete** [occupation]
Blood doping B: 415
- Careers (Sports and entertainment) C: 230
with picture
- Athlete's foot** [disease] A: 858
- Fungicide F: 560
- Ringworm R: 344
- Skin (Infections) S: 490
- Athletics, Oakland** *See Oakland Athletics in this index*
- Athlone, Earl of** [British military leader] A: 858
- Athos, Mount** [religious community] *See Mount Athos in this index*
- Atitlán, Lake** *See Lake Atitlán in this index*
- Atiu** [island, Pacific]
Cook Islands Ci: 1026
- Ativan** [drug]
Benzodiazepine B: 256
Tranquilizer T: 370
- Atiyeh, Victor G.** [American political leader]
Oregon (table) O: 845
- Atka** [Alaska]
Alaska *picture on* A: 287
- Atkins, Chet** [American guitarist] A: 858
- Atkinson, George W.** [American political leader]
West Virginia (table) W: 225
- Atkinson, R. J. C.** [British archaeologist]
Stonehenge So: 910
- Atkinson, William Y.** [American political leader]
Georgia (table) G: 130
- Atlanta** [Georgia] A: 859 *with pictures and map*
Georgia G: 112; (Population) G: 116;
(Transportation) G: 129; *picture on* G: 113
Olympic Games (The recent games) O: 753-754
United States *picture on* U: 115
- Atlanta Arts Festival**
Atlanta *picture on* A: 860b
- Atlanta Braves** [baseball team]
Baseball (table) B: 130
- Atlanta Compromise**
Washington, Booker T. (Racial leader) W: 89
- Atlanta Falcons**
Football (National Football League) F: 364
- Atlanta Hawks**
Basketball (table) B: 150
- Atlanta History Center**
Georgia (Places to visit) G: 122
- Atlanta Project**
Atlanta (Social problems) A: 860a
- Atlanta Thrashers** [team]
Hockey (table: National Hockey League) H: 281
- Atlanta University Center**
Atlanta (Education) A: 860a
- Atlantic** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Atlantic bonito** [fish]
Bonito B: 460
- Atlantic cable**
Cable (Telegraph cables) C: 6
Field, Cyrus West F: 92
- Atlantic Charter** [1941] A: 862 *with picture*
Churchill, Sir Winston Leonard Spencer (Meetings with Roosevelt) C: 548
Roosevelt, Franklin Delano (The eve of war) R: 460
United Nations (The Atlantic Charter) U: 94
World War II (The Allies attack in Europe and Northern Africa) W: 478-479
- Atlantic City** [New Jersey] A: 862 *with picture*
New Jersey N: 230 *with picture*
- Atlantic Coastal Plain** [region]
Georgia (Land regions) G: 124
South Carolina (Land regions) So: 652
United States (The Coastal Lowlands) U: 121
- Atlantic cod**
Cod (Appearance and habits) Ci: 748; (Cod fishing and marketing) Ci: 748
Fish picture on F: 153
- Atlantic croaker** [fish]
Drum D: 367 *with picture*
- Atlantic Division**
Hockey (table: National Hockey League) H: 281
- Atlantic Fleet**
Navy, United States (The Operating Forces) N: 85
- Atlantic Flyway** [route]
Bird (Where birds migrate) B: 360-361
- Atlantic Intracoastal Waterway** [U.S.] A: 863
with picture and map
Inland waterway (Intracoastal Waterway System) I: 274
- Atlantic mackerel** [fish]
Mackerel M: 23
- Fish picture on* F: 153
- Atlantic Monthly** [magazine]
Holmes, Oliver Wendell (His life) H: 294
Howells, William Dean H: 402
- Atlantic Ocean** A: 864 *with map*
Deep sea (The deep-sea floor) D: 82a
Exploration (The great age of European exploration) E: 442-444 *with map*
Fishing industry (Where fish are caught) F: 181-182
Hurricane H: 452
Ocean (The world ocean) O: 651 *with picture*
Plate tectonics (Plate movement) P: 563
- Atlantic Provinces** [Canada] A: 868
Canada (The Atlantic Provinces) C: 101
- Atlantic ridley sea turtle** [animal]
Turtle (Sea turtles) T: 522
Endangered species (table) E: 270
- Atlantic salmon** [fish]
Salmon S: 69 *with pictures*; (Kinds of salmon) S: 70
- Atlantic States** [U.S.] A: 868
- Atlantic Telegraph Company**
Cable (Telegraph cables) C: 6
- Atlantic Time Zone**
Standard time (Time zones) So: 835
Time *map on* T: 289
- Atlantic Wall**
World War II (D-Day) W: 482-483
- Atlantic water**
Arctic Ocean (Currents, water masses, and tides) A: 643
- Atlantic white-cedar** [tree]
Cedar (Scale-leaved cedars) C: 324
- Atlantic wolffish**
Fish picture on F: 153
- Atlantis** [legendary island] A: 868
- Atlantis** [space shuttle]
International Space Station (History) I: 346b-347
National Aeronautics and Space Administration N: 28
Space exploration (Docking with Mir) So: 726; *picture on* So: 723
- Atlas** [book] A: 868 *with picture*
- Atlas** [book by Mercator]
Mercator, Gerardus M: 412
- Atlas** [Greek mythology] A: 868 *with picture*
Hesperides H: 218
- Atlas 2AS** [rocket]
Space exploration *picture on* So: 699
- Atlas cedar**
Cedar (Needle-leaved cedars) C: 324
- Atlas-Centaur** [rocket]
Rocket *picture on* R: 387
- Atlas Mountains** [Africa] A: 869
Morocco (Land regions) M: 813 *with picture*
Tunisia (Land) T: 488 *with map*
- Atlas of the Difficult World, An** [poetry]
Rich, Adrienne R: 328
- Atlas Shrugged** [book by Rand]
Rand, Ayn R: 136
- Atlasov, Vladimir V.** [Russian soldier]
Exploration (The Russians in Siberia) E: 447
- Atlatl** [weapon]
Anasazi (Way of life) A: 448a
Aztec (Warfare) A: 1002
Indian, American (Early days) I: 151
- ATM** *See Automated teller machine in this index*
- Atman**
Brahman B: 548
- Atmophile element**
Geochemistry G: 91
- Atmosphere** [air] A: 869
Air A: 166; (Origin of the atmosphere) A: 173
Climate (Atmospheric circulation) Ci: 676a
Dust (Influence on climate) D: 390
Earth (The atmosphere) E: 18 *with picture*; (Atmospheric circulation) E: 22; (Earth's early development) E: 26-27
Environmental pollution (Air pollution) E: 331
Greenhouse effect G: 382
Hydrosphere H: 472
Ionosphere I: 373
Mars (Atmosphere) M: 226a
Meteorology M: 432
Moon (The exosphere of the moon) M: 788
Ozone O: 893
Sky S: 496
Space exploration (The beginning of space) So: 696; (Returning to the earth) So: 701
Star (Twinkling of stars) So: 840
Stratosphere So: 920
Telescope (Adaptive optical systems) T: 106

86 Atmosphere

- Troposphere T: 452
Weather (What causes weather) W: 157;
(Mathematical models) W: 166
Atmosphere [unit of measure] A: 869
Atmosphere probe [astronomy]
Satellite (Spacecraft missions) S: 150c
Atmospheric aerosol
Aerosol A: 89
Atmospheric Environment Service [Canada]
Weather (Land-based observation stations)
W: 162
Atmospheric perspective
Painting (Roman painting) P: 42-43
Atmospheric pressure
Air (Weight and pressure) A: 168 *with diagrams; diagrams on A: 170*
Atmosphere A: 869
Barometer B: 115
Boiling point B: 439
Cyclone Ci: 1203
Hurricane (Hurricane conditions) H: 453
Isobar I: 474 *with map*
Mars (Atmosphere) M: 226a
Melting point M: 390
Pressure P: 773
Satellite S: 150
Tornado (The story of a tornado) T: 333-334
Vacuum V: 256
Weather (Air pressure) W: 157; (Planetary-scale systems) W: 158
Atole [corn-meal food]
Mexico (Food and drink) M: 455-456
Atoll [geology] A: 869 *with pictures*
Coral reef (Kinds of coral reefs) Ci: 1048a
Island (Kinds of islands) I: 471-472
Atom [physics] A: 870 *with pictures*
See also Atomic... and Nuclear... in this index
Atomism A: 877
Bohr, Niels B: 438
Bond B: 454
Chemistry (Fundamental ideas of chemistry)
C: 398-399
Democritus D: 129
Electricity (Electric charge) E: 191 *with diagram*
Electron E: 203
Element, Chemical (The periodic table of the elements) E: 219
Force (Kinds of force) F: 370
Ion I: 371 *with diagrams*
Laser (Producing laser light) L: 83 *with diagrams*
Leucippus L: 214
Magnetic resonance imaging M: 57
Magnetism (Magnetism in atoms) M: 60b
Materials (The role of bonds) M: 301
Matter (Structure of matter) M: 310
Mechanist philosophy M: 355
Molecule (Individual molecules) M: 692
Nanotechnology N: 11
Nuclear energy (Atoms and nuclei) N: 581 *with diagram*
Physics (Atomic, molecular, and electron physics) P: 437; (Uncovering the secrets of the atom) P: 442
Quantum mechanics (Quanta of energy) Q: 6
Quasicrystal Q: 9
Radiation (Radiation and radioactivity) R: 75
Relativity (General relativity) R: 211
Rutherford, Ernest R: 569
Science (Science in the early 1900's) S: 201
Spectrum So: 772
Star (Fusion in stars) So: 846
Transmutation of elements T: 378
Atom smasher *See Particle accelerator in this index*
Atomic bomb
See also Nuclear weapon in this index
Air force (Air forces in the nuclear age) A: 186
Army (Armies in the nuclear age) A: 728
Bomb (Atomic bombs) B: 451 *with diagram*
Cold War (The West rearms) Ci: 764
Einstein, Albert (Letter to President Roosevelt)
E: 147
Hiroshima H: 243
Manhattan Project M: 141
Nagasaki N: 2
New Mexico (World War II) N: 275 *with picture*
Nuclear energy (The development of nuclear weapons) N: 590
Nuclear weapon N: 596
Oppenheimer, J. Robert O: 812
Radiation (Artificial radioactive substances)
R: 77
Truman, Harry S. (The end of World War II)
T: 469
United States, History of the (Allied victory)
U: 190 *with picture*
Washington (The mid-1900's) W: 68
World War II (The atomic bomb) W: 492 *with picture; (The nuclear age) W: 497*
Atomic clock A: 877
Clock (Kinds of clocks) Ci: 682i
Atomic dipole [physics]
Magnetism (How magnetism works) M: 60a-60b *with diagrams*
Atomic Bomb Dome
Hiroshima H: 243 *with picture*
Atomic energy *See Nuclear energy in this index*
Atomic Energy Agency, International *See International Atomic Energy Agency in this index*
Atomic Energy Commission [U.S.] A: 877
Nevada (The mid-1900's) N: 176
Nuclear energy (The first peaceful uses)
N: 591; (The spread of nuclear capability)
N: 591
Oppenheimer, J. Robert O: 812
South Carolina (The mid-1900's) So: 662
Atomic Energy Control Board [Canada]
Nuclear energy (Government regulation)
N: 589
Atomic Energy of Canada Limited
Nuclear energy (Organization of the industry)
N: 589
Atomic fission *See Fission in this index*
Atomic force microscope
Microscope (Other kinds of microscopes)
M: 519
Scanning probe microscope S: 172 *with picture*
Atomic fusion *See Fusion in this index*
Atomic mass [chemistry]
Atomic weight (Atomic weight) A: 872
Element, Chemical (The periodic table of the elements) E: 219
Molecule (Individual molecules) M: 692
Atomic number
Atom (The atomic number) A: 871
Element, Chemical (The periodic table of the elements) E: 219; (table) E: 220
Isotope I: 476
Moseley, Henry Gwyn-Jeffreys M: 828
X rays (Penetrating power) X: 541
Atomic particle *See Subatomic particle in this index*
Atomic physics
Physics (Atomic, molecular, and electron physics) P: 437
Atomic power *See Nuclear energy in this index*
Atomic submarine *See Nuclear submarine in this index*
Atomic theory
Atom (Development of the atomic theory)
A: 874
Bohr, Niels B: 438
Chemistry (Beginnings) C: 400; (Dalton's atomic theory) C: 402
Dalton, John D: 16
Pauli, Wolfgang P: 201
Rutherford, Ernest R: 569
Science (Scientific advances of the 1800's)
S: 200-201
Atomic vapor laser isotope separation
Uranium (Separating uranium isotopes)
U: 215-216
Atomic weapon *See Nuclear weapon in this index*
Atomic weight
See also Atomic mass in this index
Atom (Atomic weight) A: 872
Electrolysis (Laws of electrolysis) E: 201
Element, Chemical (Atomic mass number)
E: 223
Metric system (Chemistry) M: 440
Atomism [philosophy] A: 877
Atom (Development of the atomic theory)
A: 874
Democritus D: 129
Leucippus L: 214
Materialism M: 300a
Pre-Socratic philosophy (The teachings of Parmenides) P: 772-773
Atoms for Peace [federal program]
Eisenhower, Dwight David (Foreign affairs)
E: 152-153
Atonal music
Classical music (Atonal music) Ci: 649
Music (Tone) M: 950-951
Atonement, Day of *See Yom Kippur in this index*
Atopic eczema [disease]
Asthma (Causes) A: 825
Eczema E: 74
ATP [biochemistry]
Aerobics A: 85
Biosynthesis B: 326
Cell (Producing energy) C: 332 *with diagrams; (Producing proteins) C: 333-334*
Life (Metabolism) L: 275
Mitochondria M: 679
Muscle (How muscles work) M: 935
Phosphorus P: 403
Respiration (Cellular respiration) R: 261
Atreus, Treasury of [Mycenae]
Architecture (Mycenaean architecture) A: 615
Atria [anatomy]
Tachycardia T: 4
Atrial fibrillation [disorder] *See Fibrillation in this index*
Atrial natriuretic factor [hormone]
Hypertension (Causes) H: 475-476
Atrial septal defect [anatomy]
Heart (Abnormal openings in the heart) H: 141
Atrioventricular node [anatomy]
Heart (Regulating the heart rate) H: 135-136
Atrioventricular valve [anatomy]
Heart (Chambers, valves, and inner lining)
H: 133-135; *diagram on H: 136*
Atrium [anatomy]
Heart (Chambers, valves, and inner lining)
H: 133 *with pictures; (The work of the heart) H: 135; diagram on H: 136;*
(Abnormal openings in the heart) H: 141;
(Abnormal heart rhythms) H: 142; (Hearts of animals) H: 146
Atrium [architecture] A: 877 *with picture*
Architecture (Medieval architecture) A: 617
Rome, Ancient (Food, clothing, and shelter)
R: 438-439 *with picture*
Atrocity [crime]
War crime W: 27
Atrophy [disease] A: 877
Muscle (Disorders of the muscles) M: 935-936
Atropine [drug] A: 877
Belladonna B: 242
Atropos [mythology]
Fates F: 54
ATS [safety device]
Railroad (Other train controls) R: 112
ATSIC [organization] *See Aboriginal and Torres Strait Islander Commission in this index*
Atsina Indians [American Indians]
Gros Ventre Indians G: 398
Attaché [diplomat] A: 878
Attachment [law] A: 878
Attachment disk
Spider (How spiders use silk) So: 786
Attack aircraft
Air force (Aircraft and missiles) A: 183
Attack at Dawn [painting by Schreyvogel]
Indian Territory *picture on I: 190*
Attack helicopter
Helicopter (For military missions) H: 170; *picture on H: 169*
Attack of the Clones [film by Lucas] *See Star Wars in this index*
Attack on St. Charles [painting by Hartnell]
Canada, History of *picture on C: 146*
Attack plane
Air Force, United States (Other aircraft) A: 191 *with picture*
Aircraft, Military (Bombers) A: 202 *with picture*
Attack submarine
Submarine (Attack submarines) So: 939 *with pictures*
Warship (Submarines) W: 41; *picture on W: 43*
Attainder [law] A: 878
Civil rights (Due process) Ci: 608
Attalus I [king of Pergamum]
Galatia G: 8
Attalus III [king of Pergamum]
Rome, Ancient (Expansion overseas) R: 445-446
Attan [dance]
Afghanistan (The arts) A: 94
Attar [perfume] A: 878
Attenborough, Richard [British director]
Motion picture (Best achievement in directing, 1982) M: 862
Attention deficit disorder A: 878

- Learning disabilities (Types) L: 165
Attenuator [engineering]
 Solar energy (Solar heating) So: 579
Attic
 House (table) H: 380
Attic [language]
 Greek language (Development of ancient Greek) G: 376
Attic Nights [book by Gellius]
 Latin literature (The Imperial Period) L: 116
Attica [region, Greece]
 Athens A: 854
Attica Correctional Facility [New York]
 Prison (Current problems) P: 808
 Riot (During the 1900's) R: 349
Attila [king of the Huns] A: 879 *with map*
 Goths G: 279
 Hun H: 437
Nibelungenlied (The background) N: 395
Attire See Clothing *in this index*
Attitude
 Ballet (table) B: 45 *with picture*
Attlee, Clement Richard [British political leader]
 A: 879
 Cold War (The alliance breaks up) Ci: 763
 Labour Party (History) L: 16
 United Kingdom (The welfare state) U: 71
Atto [prefix]
 Metric system (Metric prefixes) M: 439
Attorney See Lawyer *in this index*
Attorney, District [office]
 District attorney D: 240
Attorney, Power of [law] See Power of attorney *in this index*
Attorney general [U.S.] A: 879
 Address, Forms of (Officials of the United States) A: 53
 Deportation D: 149
 Flag *picture on* F: 211
 Independent counsel I: 107
 Justice, Department of J: 202
 State government (Other officers) So: 862
Attractaspidae [zoology]
 Snake (Burrowing asps) S: 534
Attractive interaction [physics]
 Superconductivity So: 993
Attu Island [Alaska]
 Alaska (Interesting facts) A: 283; (World War II) A: 301
Attucks, Crispus [American colonial figure]
 A: 880
 African Americans (Colonial times) A: 136d-136e *with picture*
 Revolutionary War in America (The Townshend Acts) R: 272-273
Atum [Egyptian god]
 Mythology (The Great Ennead) M: 976
Atwater Kent Museum
 Philadelphia (Libraries and museums) P: 364
Atwater's prairie-chicken [bird]
 Prairie chicken P: 732
Atwood, Margaret [Canadian author] A: 880
 Canadian literature (Characteristics of Canadian literature) C: 157; (Modern English-Canadian fiction) C: 160 *with picture*
Atzerodt, George [American public figure]
 Lincoln, Abraham (The trial of the conspirators) L: 326
AU [organization] See African Union *in this index*
Au [symbol]
 Gold (Physical properties) G: 249
Aubagne [France]
 Foreign Legion F: 386
Aubrey, John [English author]
 Biography (The 1600's) B: 313
Auburn-Cord-Duesenberg Museum
 Indiana (Places to visit) I: 206
Auburn System
 Prison (During the 1800's) P: 807
Auburn University A: 880
 Alabama *picture on* A: 260
AUC See United Self-Defense Forces of Colombia *in this index*
Auchincloss, Louis [American author] A: 880
Auckland [New Zealand] A: 880 *with picture*
 New Zealand N: 346 *with picture*
Auction [sale] A: 881
 E-commerce (Business-to-consumer transactions) E: 2
 Internet (Business transactions) I: 350b
Auction bridge [game]
 Bridge (History) B: 605-606
Auction market
 Farm and farming (Financing farm operations) F: 40
 Food (Marketing) F: 335
 Livestock (Marketing livestock) L: 398
 Meat packing (Kinds of markets) M: 350
Auction pinochle [game]
 Pinochle P: 474
Auctioneer [career]
 Auction A: 881
Audagost [former city, Africa]
 Ghana Empire G: 180 *with map*
Auden, W. H. [British poet] A: 881
 English literature (Poetry between the wars) E: 322
Audhali [sultanate]
 South Arabia, Federation of So: 639
Audhumla [Norse mythology]
 Mythology (The creation of life) M: 984; *picture on* M: 975
Audience
 Public speaking (Approach to a speech) P: 865
 A Guide to Speaking Skills Research
 Guide: 20
Audience research [media]
 Television (The national networks) T: 114
Audiencia of Guatemala
 Central America (The colonial period) C: 355; (Independence) C: 355
 Guatemala (Colonial period) G: 416
 Nicaragua (The colonial period) N: 398
Audio book [tape]
 Book (Modern books) B: 468
Audio compact disc [recording]
 Compact disc Ci: 901
Audio console [instrument]
 Television (Putting a show on the air) T: 111-113
Audio engineer [career]
 Television (Putting a show on the air) T: 111-113 *with picture*
Audio-frequency wave [physics]
 Radio (From sound waves to electric waves) R: 86; (The intermediate-frequency amplifier and detector) R: 89, *diagram on* R: 87
Audio materials
 Audio-visual materials (Audio materials) A: 883
 Blindness (Aids for blind people) B: 402
Audio surveillance [electronics]
 Wiretapping W: 345
Audio-visual materials [education] A: 882 *with picture*
 Filmstrip F: 103
 Library L: 236 *with picture*; (School libraries) L: 244
 Multimedia M: 919
 Teaching (Guiding and assisting student learning) T: 66
 A Guide to Speaking Skills Research
 Guide: 24
Audiology A: 881
 Deafness (Detection of hearing problems) D: 58
Audiometer [instrument]
 Deafness (Detection of hearing problems) D: 58 *with picture*
Audion tube
 De Forest, Lee D: 89
 Vacuum tube (Development of the vacuum tube) V: 259
Audit [business] A: 884
 Accounting (Auditing) A: 23
 Internal Revenue Service I: 337
Audition [drama]
 Motion picture (Assembling the cast) M: 851
 Television (Planning and preparation) T: 110c-110d
Auditor [career]
 Audit A: 884
Auditorium
 Opera O: 790
 Theater (The auditorium) T: 233
Auditorium Building [Chicago]
 Adler, Dankmar A: 58
 Sullivan, Louis Henri So: 970
Auditory arts
 Fine arts F: 104
Auditory canal [anatomy]
 Ear (The outer ear) E: 7; *diagrams on* E: 8, E: 10
Auditory nerve [anatomy]
 Deafness (Types of hearing loss) D: 57
 Ear (The inner ear) E: 8-9; (Diseases) E: 12
Auditory ossicle [anatomy]
 Ear (The middle ear) E: 7-8 *with diagram*;

- (Diseases) E: 12
Audubon, John James [American naturalist]
 A: 884 *with picture*
 Audubon Society, National A: 885
 Conservation (Early conservation problems) Ci: 985
 Louisiana (Places to visit) L: 488
Audubon Park
 Zoo *picture on* Z: 604
Audubon Society, National [organization]
 A: 885
 Bird (Bird study and protection) B: 367; (Bird watching) B: 367-368
Audumla See Audhumla *in this index*
Auer, Carl [Austrian chemist] See Welsbach, Baron von *in this index*
Auer, Leopold [Hungarian violinist] A: 885
Auerbach, Red [basketball coach] A: 885
Augean stables [Greek mythology]
 Hercules (The twelve labors) H: 198-199
Augeas [Greek mythology]
 Hercules (The twelve labors) H: 198-199
Auger [machine]
 Coal (Auger mining) Ci: 722
 Drill (Wood drills) D: 348
Augier, Émile [French dramatist]
 French literature (Realism) F: 521-522
Augmented interval
 Music (Harmony) M: 951
Augrabies Falls [South Africa]
 Orange River O: 817
Augsburg [Germany] A: 885
Augsburg, Diet of [1530]
 Augsburg Confession A: 885
Augsburg, Peace of [1555]
 Germany (The Reformation) G: 164
 Reformation (Martin Luther) R: 197
 Schmalkaldic League S: 177
 Thirty Years' War (Causes of the war) T: 259
Augsburg, War of the League of [1689-1697]
 French and Indian wars (King William's War) F: 512
 Grand Alliance G: 305
Augsburg Cathedral [Germany]
 Stained glass (Early stained-glass windows) So: 822
Augsburg Confession [religion] A: 885
 Luther, Martin (Building and defending the church) L: 528
 Lutherans (Doctrine) L: 529
 Melancthon, Philipp M: 388
 Reformation (Martin Luther) R: 197 *with picture*
Augur [ancient Rome] A: 885
August [month] A: 886 *with pictures*
 Julian calendar J: 187
August, Bille [Danish director]
 Denmark (Arts) D: 136
August, John [pen name]
 De Voto, Bernard Augustine D: 175
August 1914 [book by Solzhenitsyn]
 Solzhenitsyn, Alexander So: 587
August Revolution [Vietnamese history]
 Vietnam (The August Revolution of 1945) V: 370
Augusta [Georgia] A: 888
Augusta [Maine] A: 888
 Maine M: 68
Augusta National Golf Course
 Georgia (Visitor's guide) G: 122
Augustan Age [English history]
 Anne A: 517
 England (The Augustan Age) E: 309
 English literature (The Augustan Age) E: 318
 Poetry (Neoclassical poetry) P: 597
Augustan Age [Roman Empire]
 Augustus A: 889
 Classicism (Rome) Ci: 653
 Latin literature (The Augustan Age) L: 116
 Rome, Ancient (The height of the empire) R: 446-447
Augustine, Saint [Christian theologian] A: 888
 Ambrose, Saint A: 405
 Autobiography A: 942
 Neoplatonism N: 124
 Philosophy (Medieval philosophy) P: 387; *picture on* P: 388
 Predestination P: 734
Augustine of Canterbury, Saint [Italian missionary] A: 888
 England (The Germanic invasions) E: 304
Augustinians [religious group]
 Friar F: 532
Augustinus [book by Jansen]

88 Augustus

Jansen, Cornelius J: 29
Augustus [Roman emperor] A: 889 *with picture and map*
 Actium, Battle of A: 30
 Aeneid A: 84
 Agrippa, Marcus A: 162
 August A: 886
 Caesar C: 12
 February F: 60
 Galatia G: 8
 Latin literature (The Augustan Age) L: 116
 Navy (Ancient navies) N: 79
 Ovid O: 882
 Postal services (Ancient times) P: 703
 Praetorian Guard P: 729
 Rome (Other remains) R: 433
 Rome, Ancient (Breakdown of the republic) R: 446
 Tiberius T: 275
 Toga T: 309 *with picture*
 Urban renewal (History) U: 220
 Virgil (His life) V: 391
Augustus II, the Strong [king of Poland]
 Succession wars (The War of the Polish Succession) So: 950
Augustus, Mausoleum of
 Rome (Other remains) R: 433
Auk [bird] A: 890 *with pictures*
 Bird (Extinct birds) B: 369-370 *with picture*
Au Lac [kingdom]
 Vietnam (Nam Viet) V: 369
Aulaire, D' [American authors] See D'Aulaire in this index
Aulavik National Park [Northwest Territories]
 Canada (table: National parks and national park reserves) C: 113
"Auld Lang Syne" [song] A: 890
 Burns, Robert B: 709
Aulos [musical instrument]
 Classical music (Early music) Ci: 645
 Greece, Ancient (Education) G: 367
Aung San [Burmese political leader]
 Myanmar (History) M: 970d
Aung San Suu Kyi [Burmese political leader]
 A: 890 *with portrait*
 Myanmar (Military rule) M: 970e
 Nobel Prizes (Peace: 1991) N: 449
Aunt
 Family (Family relationships) F: 21
Aura [musical instrument]
 Harmonica H: 62
Aura [photography]
 Kirlian photography K: 336
Aura [physiology]
 Migraine M: 537
Aura River [Finland]
 Finland picture on F: 111
Aurangzeb [Mughal emperor] A: 891
 India (The Mughal Empire) I: 129-130
 Mughal Empire M: 910
Aurélia [poems by Nerval]
 Nerval, Gérard de N: 131
Aurelian [Roman emperor] A: 891
Aurelian Wall [ruins]
 Rome (Other remains) R: 433
Aurelius, Marcus [Roman emperor] See Marcus Aurelius in this index
Aurelius Augustinus See Augustine, Saint in this index
Aureus [money]
 Denarius D: 130
Auricle [ear]
 Ear (The outer ear) E: 7 *with diagram; diagram on E: 8*
Auriga [constellation] A: 891
Aurochs [animal] A: 891
 Cattle (Early cattle) C: 315
Aurora [meteorology] A: 891 *with picture*
 Air (The atmosphere) A: 173
 Light (Other sources of light) L: 283
 Magnetism (The magnetism of the earth) M: 60c
 Northwest Territories (Tourism) N: 532
Aurora [city, Nevada]
 Nevada (Interesting facts about Nevada) N: 157
Aurora [Roman mythology] A: 891 *with picture*
Aurora australis See Aurora in this index
Aurora borealis See Aurora in this index
Aurora Leigh [book by Browning]
 Browning, Elizabeth Barrett B: 646
Aurora 7 [spacecraft]
 Carpenter, M. Scott C: 246
Auschwitz [concentration camp] A: 892

Concentration camp (Nazi concentration camps) Ci: 927
 Holocaust (The camps) H: 296a-296b
 Mengele, Josef M: 400
Ausonius [Roman poet]
 Latin literature (Later periods) L: 116
Aussie [dog] See Australian shepherd in this index
Austen, Jane [British author] A: 892
 English literature (Romantic prose) E: 320
 Gothic novel G: 279
 Literature (Judging literature) L: 352-353
 Novel (Britain) N: 573
Austerlitz, Battle of [1805] A: 892
 Napoleon I (Dominates Europe) N: 16 *with map*
Austerlitz, Frederick See Astaire, Fred in this index
Austin [Nevada]
 Nevada (Places to visit) N: 164
Austin [Texas] A: 892 *with picture*
Austin, Alfred [British poet]
 Poet laureate (table: Poets laureate of the United Kingdom) P: 590
Austin, Horace [American political leader]
 Minnesota (table) M: 602
Austin, Moses [Texas pioneer]
 Texas (American settlement) T: 206
Austin, Stephen Fuller [Texas political leader]
 A: 893
 Texas (American settlement) T: 206
 Texas Rangers (Early days) T: 211
Austin, Warren R. [American diplomat]
 United Nations (table) U: 86
Austin-Healey [automobile]
 Sports car (History) So: 803
Austin High School [Chicago, Illinois]
 Jazz (The 1920's) J: 70
Australasia A: 893
Australia A: 894 *with pictures and maps*
 Agriculture
 Australia (Agriculture) A: 919 *with pictures*
 Agriculture (Australia and New Zealand) A: 154
 Prickly pear P: 776
 Sheep (table) S: 382
 Wheat (Australia) W: 273 *with map*
 Climate
 Australia (Climate) A: 912
 Tornado T: 333
 Communications and mass media
 Newspaper (In Australia and New Zealand) N: 386
 Television (In Australia and New Zealand) T: 116
 Education
 Australia (Education) A: 905 *with picture*
 Library (Australia and the Far East) L: 253
 Finance and banking
 Bank (Australia and New Zealand) B: 92
 Government
 Australia (Government) A: 895
 Colombo Plan Ci: 784
 Impeachment (Canada and Australia) I: 92
 Local government (Federal systems) L: 408
 Parliament (Parliaments in other countries) P: 174
 Police (In other countries) P: 623
 Health and welfare
 Aviation (General aviation activities) A: 984
 Managed care plans (In other countries) M: 131
 Standard of living (table) So: 834
 Welfare (Welfare around the world) W: 190
 History
 Australia (History) A: 922 *with pictures and maps*
 Dampier, William D: 24
 Exploration (Exploring the Pacific) E: 448
 with map; (Exploring Australia's interior) E: 448 *with map*
 Labor Day L: 2
 Papua New Guinea (History) P: 141
 Penal colony P: 235
 Stolen Generation So: 907
 Tasmania, Abel Janszoon T: 48
 Victoria V: 356
 World War II (table: The Allies) W: 471, (table: Military casualties) W: 497
 Manufacturing
 Australia (Manufacturing) A: 917
 Textile (In Australia and New Zealand) T: 218
 Natural resources
 Australia (Animals and plants) A: 913 *with*

pictures and map
 Bird (Birds of Australia and the Pacific Islands) B: 349 *with pictures*
 Conservation (Australia) Ci: 989
 Diamond (Where natural diamonds are found) D: 181-182
 Dingo D: 205
 Gold rush (Gold rushes in other countries) G: 254
 Marsupial (History of marsupials) M: 232
 National park (Australia) N: 42b *with picture; (table) N: 42f; (The rights of original inhabitants) N: 42i*
 Prehistoric animal (The distribution of mammals) P: 741
 Rain forest (Australia and the Pacific Islands) R: 126c *with map*
 People
 Australia (Population and ancestry) A: 900 *with pictures*
 Aborigines, Australian A: 13
 Immigration (Australia and New Zealand) I: 85
 Installment plan (How the plan works) I: 304
 Races, Human (Climatic adaptations) R: 58
 Physical features
 Australia (The land) A: 908 *with pictures*
 Australian Desert A: 927
 Great Barrier Reef G: 336
 Outback O: 879
 Recreation and sports
 Australia (Recreation) A: 904 *with pictures*
 Baseball (Baseball around the world) B: 131-132
 Boomerang B: 475
 Cricket (History) Ci: 1134-1135
 Social and cultural life
 Circus (The circus goes international) Ci: 563
 Remembrance Day R: 229
 Trade
 International trade (Why nations trade) I: 348
 Transportation
 Railroad (In other countries) R: 113-114
Australia II [boat]
 America's Cup A: 431
Australia-New Zealand Closer Economic Relations Trade Agreement
 Common market Ci: 875
Australian, The [newspaper]
 Murdoch, Rupert M: 930
Australian Aborigines See Aborigines, Australian in this index
Australian Alps
 Australia (Mountains) A: 909 *with map*
Australian-Antarctic Basin
 Southern Ocean (The ocean floor) So: 688a
Australian ballot
 Ballot (In the United States) B: 63
Australian beak [insect]
 Butterfly picture on B: 737
Australian bonito [fish]
 Bonito B: 460
Australian Broadcasting Corporation
 Australia (Communication) A: 921
Australian Capital Territory
 Canberra C: 166
Australian cattle dog A: 926
 Dog picture on D: 276
Australian crawl
 Swimming (History) So: 1048
Australian Desert [region, Australia] A: 927
 Desert picture on D: 154
Australian Grand Prix [race]
 Melbourne (The city) M: 388
Australian heeler [dog]
 Australian cattle dog A: 927
Australian Labor Party
 Australia (Political parties) A: 900, (History) A: 922-924
 Hawke, Robert James Lee H: 113
Australian National Gallery
 Australia (Painting) A: 906-907 *with picture*
Australian nut See Macadamia nut in this index
Australian pelican [bird]
 Pelican (Kinds) P: 231
Australian-pine [tree] See Beefwood in this index
Australian race [theory]
 Races, Human (The geographical-race theory) R: 54
Australian shepherd [dog] A: 927 *with picture*
Australian terrier [dog] A: 927

- Dog picture on D: 272
- Australopithecus** [anthropology] A: 927
- Broom, Robert B: 641
- Human being (Prehuman ancestors) H: 415
- Prehistoric people (Prehuman ancestors) P: 744 with picture; (table) P: 752 with map; pictures on P: 748
- Australopithecus afarensis** [hominid]
- Australopithecus* A: 927
- Johanson, Donald Carl J: 131
- Prehistoric people (Types of australopithecines) P: 744 with picture; picture on P: 748
- Australopithecus africanus** [hominid]
- Australopithecus* A: 927
- Prehistoric people (Types of australopithecines) P: 744, pictures on P: 748
- Australopithecus anamensis** [hominid]
- Australopithecus* A: 927
- Leakey, Meave Gillian L: 161
- Prehistoric people (Types of australopithecines) P: 744, (table) P: 752
- Australopithecus boisei** [hominid]
- Australopithecus* A: 927
- Leakey, Mary Douglas L: 161
- Leakey, Richard Erskine Frere L: 161
- Prehistoric people (Types of australopithecines) P: 744
- Australopithecus robustus** [hominid]
- Australopithecus* A: 927
- Prehistoric people (Types of australopithecines) P: 744; picture on P: 748
- Australorp** [breed]
- Chicken (table) C: 443
- Austrasia** [former region]
- Charlemagne map on C: 379
- Austria** A: 928 with pictures and maps
- Air force (History) A: 184-185
- Austerlitz, Battle of A: 892
- Christmas picture on C: 530
- Euro E: 378
- Flag F: 194; picture on F: 205
- German language G: 137
- German literature G: 138
- Germany (The Revolution of 1848) G: 165; (East Germany) G: 170
- Habsburg, House of H: 3
- Poland (The partitions) P: 612 with maps
- Revolution of 1848 R: 269
- Russo-Turkish wars R: 566
- Saint-Germain, Treaty of S: 34
- Seven Weeks' War S: 324b
- Seven Years' War S: 328
- Succession wars (The War of the Austrian Succession) So: 950
- Thirty Years' War (The Swedish-French period) T: 260
- Tyrol T: 542 with map
- Ukraine (Russian rule) U: 12
- World War II (table: Military casualties) W: 497
- See also the list of Related Articles in the Austria article
- Austria** [ship]
- Shipwreck (table: Major shipwrecks) S: 428
- Austria-Hungary** [European history] A: 940
- Austria (Austria-Hungary) A: 939 with map
- Bosnia-Herzegovina (History) B: 492-493
- Croatia (History) Ci: 1148a-1148b
- Czech Republic (Habsburg rule) Ci: 1213
- Flag picture on F: 217
- Francis Joseph F: 481
- Germany (The unification of Germany) G: 165 with map
- Hungary (Austria-Hungary) H: 446
- Saint-Germain, Treaty of S: 34
- Slovakia (History) S: 508d-509
- Vienna V: 362
- World War I W: 452; (The rise of nationalism) W: 452-453; (A system of military alliances) W: 454-455; (Beginning of the war) W: 455; (The fighting ends) W: 463
- Yugoslavia (The movement for Slavic unity) Y: 579
- Austrian pine** [tree]
- Pine (Other pines) P: 470
- Austrian Succession, War of the** See Succession wars in this index
- Austrian Tyrol** [region, Austria]
- Tyrol T: 542 with map
- Austro-Hungarian Monarchy** See Austria-Hungary in this index
- Austro-Prussian War** See Seven Weeks' War in this index
- Austro-Sardinian War** [1859]
- Italy (Italy united) I: 515
- Authentic cadence** [music]
- Music (Harmony) M: 951-952 with diagram
- Author**
- American Society of Composers, Authors and Publishers A: 430
- Copyright Ci: 1046
- Writing W: 511
- Authoritarianism** [political science] A: 941
- President (Unlimited presidency) P: 756b
- World (Forms of government) W: 408
- Authority**
- Power (Forms of power) P: 727
- Religion (Chief characteristics of religion) R: 215
- Authorized strike**
- Strike (Kinds of strikes) So: 928
- Authorized Version** [Bible] See King James Version in this index
- Autism** [disorder] A: 941
- Autistic Children: New Hope for a Cure** [book by Tinbergen]
- Tinbergen, Nikolaas T: 295
- Auto** See Automobile in this index
- Autoantibody** [physiology]
- Anemia (Excessive destruction of red blood cells) A: 458
- Immune system (The autoimmune response) I: 88c
- Autobahn** [road, Germany]
- Automobile picture on A: 946
- Germany (Transportation) G: 162
- Road (Modern roads) R: 362
- Autobiography** [book by Cellini]
- Cellini, Benvenuto C: 339
- Autobiography** [book by Franklin]
- American literature (Philadelphia) A: 415
- Autobiography A: 942
- Autobiography** [book by Wright]
- Wright, Frank Lloyd W: 507
- Autobiography** [literature] A: 942
- See also Biography in this index
- Pulitzer Prizes (table) P: 895
- Autobiography of Alice B. Toklas, The** [book by Stein]
- Stein, Gertrude So: 884
- Autobiography of an Ex-Colored Man, The** [book by Johnson]
- Johnson, James Weldon J: 143
- Autobiography of Malcolm X, The** [book by Malcolm X]
- Malcolm X M: 103
- Autobiography of Values** [book of Lindbergh's writings]
- Lindbergh, Charles Augustus (After the war) L: 331-332
- Autocephalous Orthodox Church** [religion]
- Ukraine (Religion) U: 8
- Autochrome**
- Lumière brothers L: 522
- Autoclave** [machine]
- Nylon (How nylon is made) N: 632
- Autocracy** [political science] A: 942
- Autocrat of the Breakfast-Table, The** [book by Holmes]
- Holmes, Oliver Wendell (His writings) H: 294-295
- Autocue** [machine]
- Television (Producing television programs) T: 110c-111
- Autoexposure** [photography] See Automatic exposure control in this index
- Autofocus** [photography] See Automatic focusing in this index
- Autofretage** [industrial process]
- Artillery (The mono-block process) A: 763
- Autogiro** [aircraft] A: 942 with picture
- V/STOL V: 452
- Autograft** [medicine]
- Skin grafting S: 494
- Autograph** A: 943 with picture
- Autohypnosis** [psychology]
- Hypnotism (Dangers of hypnotism) H: 478-479
- Autoignition** [engineering]
- Gasoline (Gasoline octane ratings) G: 61
- Autoimmune response** [medicine]
- Diabetes (Causes) D: 178-179
- Disease (Disorders of the immune system) D: 229-230
- Immune system (The autoimmune response) I: 88c
- Autoimmunity** [physiology] See Autoimmune response in this index
- Automated clearinghouse**
- Bank (Electronic banking) B: 89-90
- Automated external defibrillator** [device]
- Defibrillator D: 88
- Automated teller machine** A: 944
- Bank (Electronic banking) B: 89 with picture
- Smart card S: 513
- Automatic** [gun]
- Handgun (Types of handguns) H: 43 with picture
- Rifle (Kinds of rifles) R: 338 with picture
- Automatic block system** [railroad]
- Railroad (Automatic block signal systems) R: 111 with pictures
- Automatic caller identification** [service]
- Telephone (Residential services) T: 98-99
- Automatic exposure control**
- Camera (Automatic controls) C: 80
- Automatic flight control system** [aviation] A: 944
- Airplane (Engineering improvements) A: 237; (The controls and instruments) A: 217
- Gyroscope G: 453
- Servomechanism S: 320
- Sperry, Elmer Ambrose So: 779
- Automatic focusing**
- Camera (Automatic controls) C: 80-81
- Automatic Frequency Control**
- Radio (table) R: 84
- Automatic gearshift** See Automatic transmission in this index
- Automatic nailer** [tool]
- Nail N: 3
- Automatic pilot** [navigation]
- See also Automatic flight control system in this index
- Ship (Navigating a ship) S: 423
- Automatic teller machine** See Automated teller machine in this index
- Automatic train control** [safety device]
- Railroad (Other train controls) R: 112
- Automatic train stop** [safety device]
- Railroad (Other train controls) R: 112
- Automatic transmission**
- Transmission (How an automatic transmission works) T: 376 with diagrams
- Automobile (The transmission) A: 952-953
- Automatic typewriter**
- Typewriter (History) T: 539
- Automatic valve** [mechanics]
- Valve V: 267 with diagram
- Automatic washer**
- Washing machine W: 45 with diagrams
- Automation** [industry] A: 944 with diagram
- Electronics (Automation) E: 207
- Farm and farming pictures on F: 37, F: 38
- Machine tool (Numerical control of machine tools) M: 19
- Robot R: 369
- Ship (Automation aboard ships) S: 424
- Technology (Challenges of technology) T: 76-77
- See also the list of Related Articles in the Automation article
- Automatism** [art]
- Masson, André M: 296
- Painting (Surrealism) P: 81
- Automobile** A: 946 with pictures
- See also Automobile racing; Sports car in this index
- Environment and safety**
- Air bag A: 175 with picture
- Air pollution (Control of air pollution) A: 199
- Driving while intoxicated D: 348
- Global warming (Limiting global warming) G: 232a
- Safety (Safety in transportation) S: 14
- Traffic (Traffic problems) T: 366
- History**
- City (Metropolitan cities) Ci: 588-589
- Detroit (The mid-1900's) D: 171 with picture
- Duryea brothers D: 390
- Flint F: 235
- Ford, Henry F: 379
- Horse (Horses and people) H: 360-362 with picture
- Indiana (Progress as a state) I: 216 with picture
- Invention (The early and middle 1900's) I: 363
- Mass production M: 269
- Roaring Twenties (Rising prosperity) R: 363 with picture
- Transportation (Land transportation) T: 383; (The beginnings of modern transporta-

- tion) **T**: 390 *with picture*; (Private transportation) **T**: 392 *with picture*
 United States, History of the (Development of new products) **U**: 177 *with picture*; (Technology) **U**: 187 *with picture*; (A new life style) **U**: 191
- Parts and maintenance**
 Air conditioning (Air conditioners for vehicles) **A**: 179
 Brake (Mechanical brakes) **B**: 560; (Hydraulic brakes) **B**: 560-561
 Lacquer **L**: 23
 Machine (Efficiency) **M**: 14
 Paint (Industrial paints) **P**: 24; *picture on P*: 23
 Plastics (To replace metals) **P**: 555; (Growth of the plastics industry) **P**: 560
 Radio (Broadcasting today) **R**: 94
 Torsion bar suspension **T**: 341 *with diagram*
 Transmission **T**: 375 *with diagrams*
- Production**
 Asia *picture on A*: 788
 Brazil (Manufacturing) **B**: 581 *with picture*
 Computer *picture on C*: 918
 Europe (Industry) **E**: 402 *with picture*
 Japan *picture on J*: 50
 Mexico *picture on M*: 467
 Michigan (Manufacturing) **M**: 504-505
 Ontario (Manufacturing) **O**: 780
Technological improvements
 Electric car **E**: 165 *with pictures*
 See also the list of Related Articles in the Automobile article
- Automobile, Model** [hobby] **A**: 974 *with pictures*
- Automobile Club de France**
 Automobile racing (Growth of organized automobile racing) **A**: 979
- Automobile Competition Committee for the United States**
 Automobile racing (Formula One racing) **A**: 976-977
- Automobile insurance**
 Insurance (Automobile insurance) **I**: 313
 No-fault insurance **N**: 438
- Automobile mechanic** [career]
 Automobile (Servicing) **A**: 960
 Industrial arts (Industrial arts courses) **I**: 242
- Automobile model** See Automobile, Model in this index
- Automobile racing** [sport] **A**: 975 *with pictures*
 Hot rod **H**: 374a
 Le Mans **L**: 187
 Tire (Low profile tires) **T**: 297
- Automobile show**
 Automobile *picture on A*: 947
- Automobile Workers, United** See United Automobile Workers in this index
- Automotive Engineers, Society of**
 Horsepower (S.A.E. horsepower) **H**: 367
- Autonomic nervous system**
 Nervous system (The autonomic nervous system) **N**: 133 *with diagram*
 Allergy (Emotional factors) **A**: 373
 Biofeedback **B**: 311
 Emotion (Early theories about emotions) **E**: 261
 Heart **H**: 132; (Regulating the heart rate) **H**: 135-136
 Human body (The autonomic nervous system) **H**: 426
 Hypothalamus **H**: 481
 Muscle (Smooth muscles) **M**: 934-935
- Autonomous community**
 Spain (Local government) **S**: 733
- Autonomous oblast** [government unit]
 Russia (Local government) **R**: 531
- Autonomous underwater vehicle**
 Ocean (Submersibles) **O**: 663
- Autopilot** See Automatic flight control system; Automatic pilot in this index
- Autopsy** [medicine] **A**: 981
 Pathology **P**: 196
- Autos sacramentales** [play by Calderón de la Barca]
 Calderón de la Barca, Pedro **C**: 27
 Drama (Religious plays) **D**: 333
 Spanish literature (The 1600's) **S**: 759-760
- Autotroph** [botany]
 Plant (How plants grow) **P**: 536
- Autotrophic bacteria**
 Bacteria (How bacteria obtain food) **B**: 21
- Autry, Gene** [American singer] **A**: 981
- Autumn** [season] **A**: 982
 Indian summer **I**: 189
- Autumn adonis** [plant]
 Adonis **A**: 66 *with picture*
- Autumn crocus** [flower]
 Colchicum **C**: 760 *with picture*
- Autumn Sonata** [book by Valle-Inclán]
 Spanish literature (The Generation of 1898) **S**: 762
- Autumnal equinox** [astronomy]
 Equinox **E**: 348 *with diagram*
 Harvest moon **H**: 81
 Season **S**: 271
- AUV** [vehicle] See Autonomous underwater vehicle in this index
- Auxiliary ship**
 Navy (Auxiliary ships) **N**: 78
 Navy, United States (Auxiliary ships) **N**: 84
- Auxiliary verb** [grammar]
 Grammar (Function words) **G**: 303
 Tense **T**: 170
 Verb (Auxiliary verbs) **V**: 314
- Auxin** [hormone] **A**: 982
 Hormone (Plant hormones) **H**: 337
 Plant (Factors affecting plant growth) **P**: 538
 Tropism **T**: 452
- Auyutitqu National Park** [Northwest Territories]
 Canada (table: National parks and national park reserves) **C**: 110-113
 Nunavut (Economy) **N**: 609-610
- AV-8B Harrier II** [airplane]
 Bomber *picture on B*: 453
- A-V materials** See Audio-visual materials in this index
- A-V node** [anatomy]
 Heart (Regulating the heart rate) **H**: 135-136
- AV valve** [anatomy] See Atrioventricular valve in this index
- Ava** [shrub] See Kava in this index
- Available light** [photography] See Natural light in this index
- Avalanche** **A**: 982
 Landslide **L**: 59
- Avalée des avalés, L'** [book by Aquin]
 Canadian literature (Modern literature: 1945 to the present) **C**: 160
- Avalokitesvara** [religion]
 Bodhisattva **B**: 434
- Avalon, Frankie** [American singer]
 Rock music (Artistic decline) **R**: 378
- Avalon Peninsula** [Newfoundland]
 Newfoundland and Labrador (Population) **N**: 364; (Land regions) **N**: 370 *with map*
 Saint John's (Description) **S**: 36
- Avant-garde** **A**: 982
 Performance art **P**: 285
- Avars** [people]
 Russia (Early days) **R**: 547
- Avarua** [city, Cook Islands]
 Cook Islands **C**: 1026
- Avatar** [Hinduism]
 Vishnu **V**: 429
- AVC** [organization]
 Veterans' organizations (In the United States) **V**: 344-345
- Ave Maria Grotto** [Alabama]
 Alabama (Places to visit) **A**: 266
- Avenida 9 de Julio** [road]
 Buenos Aires (The city) **B**: 672 *with picture*
- Aventine Hill**
 Rome **R**: 429
- Avenue of Flags** [Columbus, Ohio]
 Columbus (The city) **C**: 854
- Avenue of the Americas** [New York City]
 New York *picture on N*: 291
- Avenue of the Arts**
 Philadelphia (Downtown Philadelphia) **P**: 359
- Average** [statistics] **A**: 982
 Mean **M**: 345
 Median **M**: 361
 Mode **M**: 684
 Statistics (Probability) **S**: 868-869
- Averill, Earl** [American baseball player]
 Baseball (table: Hall of Fame) **B**: 134
- Averroës** [Arabian philosopher] **A**: 982
- Avery, Oswald T.** [American geneticist]
 Cell (The 1900's) **C**: 337-338
- Avery, Tex** [American animator]
 Animation (Animation in the mid-1900's) **A**: 514a
- Avery, Weightstill** [American lawyer]
 Jackson, Andrew (Lawyer) **J**: 8
- Avery, William H.** [American political leader]
 Kansas (table) **K**: 234
- Avery Island** [Louisiana]
 Louisiana (Places to visit) **L**: 488 *with picture*
- Aves**
 Bird (A classification of birds) **B**: 371
- Avesta** [religious book]
 Persia, Ancient (Religion) **P**: 297
 Zoroastrianism (Beliefs) **Z**: 611
- Aviation** **A**: 983 *with pictures and maps*
 See also Aircraft, Military; Airline; Airplane in this index
 Air force **A**: 182
 Air Force, United States **A**: 188
 Air turbulence **A**: 200
 Army, United States (Army aviation) **A**: 734
 Fourth dimension **F**: 438
 Great-circle route **G**: 338
 Jet stream **J**: 115
 Radar (In aviation) **R**: 64
 September 11 terrorist attacks (The aftermath) **S**: 310-310a
 See also the list of Related Articles in the Aviation article
- Aviation and Missile Command**
 Redstone Arsenal **R**: 192
- Aviation industry**
 Aviation **A**: 983; (The aviation industry) **A**: 984
- Aviation medicine**
 Aerospace medicine **A**: 89
- Avicenna** [Arab philosopher] **A**: 993
 Geology (The Romans) **G**: 98
 Medicine (During the Middle Ages) **M**: 373
 Science (The Middle Ages) **S**: 197
- Avignon** [France] **A**: 993 *with picture*
 France (Growth of royal power) **F**: 472-473
- Avignon Papacy**
 Pope (The troubles of the papacy) **P**: 664
 Roman Catholic Church (The Avignon papacy) **R**: 408
- Ávila Camacho, Manuel** [Mexican political leader] **A**: 993
 Mexico (The mid-1900's) **M**: 473
- Avildsen, John** [American director]
 Motion picture (Best achievement in directing: 1976) **M**: 862
- Avionics** [electronics]
 Automatic flight control system (How an AFCS works) **A**: 944
- Avison, Margaret** [Canadian poet]
 Canadian literature (Modern Canadian poets) **C**: 160
- Aviz, Housa of** [Portuguese history]
 Portugal (Founding the Portuguese nation) **P**: 693
- AVLIS** [industrial method] See Atomic vapor laser isotope separation in this index
- Avocado** [fruit] **A**: 993 *with picture*
 Rain forest (Scientific value) **R**: 126c
- Avocet** [bird] **A**: 994 *with picture*
- Avogadro, Amedeo** [Italian physicist] **A**: 994
 Chemistry (Development of physical chemistry) **C**: 404
 Gas [physics] (Gas laws) **G**: 48-49
- Avogadro constant** [physics]
 Gas (Avogadro's law) **G**: 49
 Mole **M**: 691
- Avogadro's law** [chemistry]
 Avogadro, Amedeo **A**: 994
 Chemistry (Development of physical chemistry) **C**: 404
 Gas [physics] (Gas laws) **G**: 48-49
- Avoirdupois** **A**: 994
 Weights and measures (table: Weight and mass) **W**: 187
- Avoirdupois pound** [unit of measure]
 Pound **P**: 721
- Avon, Earl of** [British political leader] See Eden, Sir Anthony in this index
- Avon, River** [England] **A**: 994
- Avondale Shipyard** [Louisiana]
 New Orleans (Industry) **N**: 283 *with picture*
- Avril, Prosper** [Haitian political leader]
 Haiti (History) **H**: 15-17
- Avro Vulcan bomber**
 Aircraft, Military *picture on A*: 205
- Avvakum** [Russian author]
 Russian literature (Western influences) **R**: 559
- Avventura, L'** [film]
 Antonioni, Michelangelo **A**: 561
- AWACS** [defense] See Airborne Warning and Control System in this index
- Awake and Sing!** [play by Odets]
 Odets, Clifford **O**: 674
- Awakening, The** [novel by Chopin]
 American literature (Women writers) **A**: 420
 Chopin, Kate **C**: 521

Awakening Land, The [trilogy by Richter]

Richter, Conrad R: 334

Awami League [political party]

Bangladesh (East Pakistan) B: 85; (Recent developments) B: 86

Award [labor]

Arbitration A: 592

Awards and prizes

Caldecott Medal C: 26

FFA (Awards) F: 85

Literature for children (Awards) L: 366

Medals, decorations, and orders M: 355 *with pictures*

Motion picture (Festivals and awards) M: 861

Newbery Medal N: 358

Nobel Prizes N: 439

Pulitzer Prizes P: 887

Regina Medal R: 206

Spingarn Medal So: 793

Television (Television awards) T: 116;

(International television awards) T: 117

AWOL [military law]

Amnesty (Since the early 1900's) A: 437

Desertion D: 157

Ax [tool] A: 994

Fire department (Fire trucks) F: 125-126 *with picture*

Prehistoric people *picture on* P: 750

Tomahawk T: 324

Axel

Ice skating *diagram on* I: 12

Axel, Gabriel [Danish director]

Denmark (Arts) D: 136

Axelrod, Julius [American physiologist]

Nobel Prizes (Physiology or medicine: 1970) N: 445

Axel's Castle [book by Wilson]

Wilson, Edmund W: 316

Axial-flow compressor

Jet propulsion (Turbojet) J: 111

Axial-flow pump

Pump (Axial-flow pumps) P: 899

Axial rib [zoology]

Shell *diagram on* S: 385

Axial skeleton [anatomy]

Mammal (Skeleton) M: 118

Skeleton (The axial skeleton) S: 479 *with diagrams*

Axillary artery [anatomy]

Human body *diagram on* H: 422

Axiom [geometry] A: 994

Geometry (Axiomatic organization) G: 102

Axion [physics]

Dark matter D: 38

Axis [alliance] A: 994

Germany (Nazi Germany) G: 167-168

World War II W: 468; (table: The Axis) W: 471

Axis [botany]

Germination G: 173

Axis [mathematics]

Geometry (Analytic geometry) G: 104 *with diagrams*

Parabola P: 141 *with diagram*

Axis deer

Animal *picture on* A: 481 See Chital *in this index*

Axis of rotation [astronomy]

Climate (Changes in the earth's orbit) Ci: 677 *with diagram*

Earth (How Earth moves) E: 17 *with diagram*

Gyroscope (Gyroscopic inertia) G: 453 *with diagram*

Moon (The movements of the moon) M: 783

Planet (Rotation) P: 510; *diagram on* P: 509

Axis of symmetry

Symmetry So: 1066 *with diagram*

Axis Sally [American public figure]

World War II (Propaganda) W: 493

Axle

Gear G: 75

Wheel and axle W: 278

Axminster

Rugs and carpets (Weaving) R: 515-516; (History) R: 517

Axon [anatomy]

Brain (Brain cells) B: 551; (The brain's chemical messengers) B: 556

Nervous system (Parts of a neuron) N: 133; *diagrams on* N: 134

Axson, Ellen Louise [wife of Woodrow Wilson]

See Wilson, Ellen Axson *in this index*

Axum See Aksum [ancient country] *in this index*

Ay [king of ancient Egypt]

Tutankhamen T: 525

Ayacucho, Battle of [1824]

Sucre, Antonio José de So: 951

Ayala, Francisco [Spanish author]

Spanish literature (Spanish literature today) So: 763

Ayatollah [title]

Khomeini, Ruhollah K: 308b

Ayckbourn, Alan [British playwright] A: 995

Aycock, Charles Brantley [American educator]

A: 995

North Carolina (Schools) N: 476-477; (table)

N: 490; (The early 1900's) N: 493

Aye-aye [animal] A: 995 *with picture*

Primate (Aye-ayes) P: 778 *with picture*

Ayer & Son, N. W. [agency]

Advertising (The development of advertising agencies) A: 79-80

Ayers, Roy E. [American political leader]

Montana (table) M: 757

Ayers Rock [Australia]

Australia (Mountains) A: 909-910 *with picture*

Seven Natural Wonders of the World (Ayers Rock) S: 324 *with picture*

Ayllón, Lucas Vázquez de [Spanish settler]

A: 995

Georgia (Exploration) G: 131

Hispanic Americans (Exploration and settlement) H: 250

North Carolina (Exploration and settlement)

N: 490

South Carolina (Exploration and settlement) So: 659

Ayllu [family group]

Inca (Family and social life) I: 96

Aylwin, Patricio [Chilean political leader]

Chile (Crisis and democracy) C: 470

Aymara Indians [American Indians]

Bolivia (Language) B: 443; (History) B: 446

La Paz L: 73 *with picture*

Ayodhya [kingdom]

Rama R: 132

Ramayana R: 133

Ayodhya [town, India]

India (Religious and ethnic unrest) I: 134

Ayolas, Juan de [Spanish explorer]

Paraguay (Early days) P: 149

Ayrshire [cattle]

Cattle (Ayrshire) C: 310 *with picture*; (table) C: 313

Dairying (Dairy cattle) D: 5-6

Ayub Khan, Mohammad [Pakistani political leader]

India (India under Indira Gandhi) I: 133

Pakistan (Independence) P: 99

Ayuntamiento [building]

Manila (History) M: 143

Ayurvedic medicine

India (The golden age) I: 129

Medicine (China and India) M: 372

Ayutthaya [ancient city]

Thailand (Early kingdoms) T: 226

Ayutthaya [kingdom]

Thailand (Early kingdoms) T: 226

Ayyubid dynasty [Egyptian history]

Cairo (History) C: 17-18

Egypt (Muslim rule) E: 130

Azadirachtin [compound]

Neem tree N: 119

Azalea [plant] A: 995 *with picture*

Flower (Garden perennials) F: 281 *with picture*

Poisonous plant (Some poisonous plants)

P: 602

Azalea Trail [Mobile, Alabama]

Alabama (Visitor's guide) A: 266

Azali Assoumani [Comoran political leader]

Comoros (History) Ci: 901

Azande [people]

Sudan (People) So: 952

Azariah, Prayer of [Bible]

Bible (Development of the Christian Old Testament) B: 282

Azarian, Mary [American illustrator]

Caldecott Medal (table: 1999) C: 26

Azathioprine [drug]

Transplant (Preventing rejection) T: 380-381

Azazel [Biblical figure]

Scapegoat S: 172

Azerbaijan [country, Caucasus] A: 996 *with picture and map*

Armenia (History) A: 718b-719

Caucasus C: 317

Flag *picture on* F: 202

Azerbaijani [language]

Azerbaijan (People) A: 996

Azerbaijanis [people]

Armenia (History) A: 718b-719

Azerbaijan (People) A: 996

Union of Soviet Socialist Republics (People) U: 31

Azimuth [navigation] A: 998

Azimuth circle

Navigation (Piloting) N: 71

Azimuthal mount [astronomy]

Telescope (Controlling a telescope) T: 105

Azinger, Paul [American golfer]

Golf (PGA Championship) G: 265

Azithromycin [drug]

Antibiotic (table) A: 551

Aznar, José María [Spanish political leader]

Spain (Recent developments) So: 752

Azon [weapon]

Guided missile (The first guided missiles) G: 427

Azores [islands, Atlantic] A: 998 *with maps*

Portugal P: 686

Azorin [Spanish author]

Spanish literature (The Generation of 1898) So: 762

Azov, Port of [Black Sea]

Peter I, the Great (Foreign policy) P: 324

Azov, Sea of [Russia] A: 998

Black Sea B: 390 *with map*

AZT [drug] See Zidovudine *in this index*

Aztec [American Indians] A: 999 *with pictures and maps*

Architecture (Pre-Columbian architecture) A: 614

Chocolate (History) C: 519

Cortés, Hernando (Arrival in Mexico) Ci: 1073 *with picture and map*

Exploration (Spain's conquests in the New World) E: 445 *with picture*

Hieroglyphics (Other hieroglyphic writing) H: 226-227

Hispanic Americans (In Mexico) H: 247

Indian, American I: 136 *with picture*; (Empires and states) I: 144; (Weapons) I: 144; (Why the Indians fought) I: 144-145; (Religion)

I: 146-147 *with picture*; (Trading centers) I: 149 *with picture*; (Writing) I: 150;

(Indians of Middle America) I: 169 *with pictures*; *pictures on* I: 140, I: 178a

Latin America (The first inhabitants) L: 104; (The conquest of the Indians) L: 106 *with picture*

Manuscript *picture on* M: 173

Mexico (The Toltec and the Aztec) M: 468-469 *with picture and map*; (The Spanish conquest) M: 469

Mexico City (City of the Aztec) M: 478

Mixtec Indians M: 680

Montezuma II M: 764b *with picture*

Mythology (American Indian mythology)

M: 985 *with picture*; *picture on* M: 973

Tarascan Indians T: 42

Tenochtitlan T: 170

Teotihuacán T: 172

Toltec Indians T: 323

World, History of the (Civilizations in the Americas) W: 437

Aztec Calendar Stone [sculpture]

Aztec (Arts and crafts) A: 1001 *with picture*

Aztec Eagle, Order of the

Medals, decorations, and orders (table) M: 359 *with picture*

Aztec Ruins National Monument [New Mexico] A: 1004

National Park System (table: National monuments) N: 50

Aztec-Tanoan [language group]

Indian, American (Language groups) I: 149-150

Aztlan [Aztec region]

Aztec (The Aztec migration) A: 1003

Aztreonam [drug]

Antibiotic (Antibacterial antibiotics) A: 550

Azucena [opera character]

Opera (*Trovatore*, II) O: 808

Azueta, Mariano [Mexican author]

Latin-American literature (The early 1900's) L: 113

Azul [book by Darío]

Darío, Rubén D: 36

Latin-American literature (Modernism) L: 112

Azure [color]

Heraldry (Expansion) H: 194 *with picture*

Azurite [mineral] A: 1004

Mineral *picture on* M: 569

Azusa Street Mission [Los Angeles]

Pentecostal churches (Major Pentecostal churches) P: 276

B

B [letter] **B**: 1 *with pictures*

B [symbol]

Boron **B**: 490

B-1 [airplane]

Air Force, United States (Bombers) **A**: 191

Carter, Jimmy (Early programs) **C**: 257

B-1B [airplane]

Aircraft, Military (Bombers) **A**: 202 *with picture*

B2B transaction See Business-to-business transaction *in this index*

B-2 bomber [airplane]

Air Force, United States (Bombers) **A**: 191; *picture on A*: 192

Aircraft, Military (Bombers) **A**: 202

Bomber **B**: 454

B-17 [airplane]

Airplane *picture on A*: 234

Bomber (History) **B**: 453

World War II (The air war) **W**: 481 *with picture*; (Weapons of World War II) *picture on W*: 485

B-29 [airplane]

Bomber (History) **B**: 453

B-52 [airplane]

Air Force, United States (Bombers) **A**: 191

Vietnam War (The opposing forces) **V**: 375 *with picture*

B-58 Hustler [airplane]

Airplane (Supersonic airplanes) **A**: 238; *picture on A*: 237

B call [physiology]

Blood (Protecting against disease) **B**: 410; (Formation of new blood components) **B**: 411

Disease (Immune responses) **D**: 231-232

Epstein-Barr virus **E**: 345

Immune system (Parts of the immune system) **I**: 87; (The immune response) **I**: 88 *with diagram*

Monoclonal antibody **M**: 730

Thymus **T**: 274

B. F. Goodrich Company See Goodrich Company, B. F. *in this index*

B horizon [geology]

Soil *diagram on So*: 574

B lymphocyte [physiology] See **B cell** *in this index*

B quark [physics] See Bottom quark *in this index*

Ba [symbol]

Barium **B**: 110

Baal [Canaanite god] **B**: 2

Phoenicia (Religion) **P**: 394

Ba'al Shem Tov [Jewish religious leader] **B**: 2
Jews (Eastern European religious movements) **J**: 123

Baalbek [Lebanon]

Lebanon (Ancient times) **L**: 172

Baalzebub [Biblical figure]

Beelzebub **B**: 211

Baath Party [political party]

Hussein, Saddam **H**: 457

Iraq (National government) **I**: 409; (The republic) **I**: 413-414

Baath Party [political party]

Syria (National government) **So**: 1070

Báb [Iranian religious leader]

Bahá'ís **B**: 27

Bahá'u'lláh **B**: 28

Bab Ballads [poems by Gilbert]

Gilbert, Sir William Schwenck **G**: 189

Gilbert and Sullivan **G**: 190

Babangida, Ibrahim Badamosi [Nigerian political leader]

Nigeria (Recent developments) **N**: 418

Babar [Mughal emperor] See Babur *in this index*

Babb, Belle Aurelia [American educator]

Mansfield, Arabella Babb **M**: 166

Babbage, Charles [British mathematician] **B**: 2

Computer (Early punched-card computing devices) **Ci**: 924a-924b

Mathematics (In the 1800's) **M**: 307

Babbine Chief [painting by Kane]

Indian, American *picture on I*: 162

Babbitt [book by Lewis]

American literature (Satirists) **A**: 422

Lewis, Sinclair **L**: 221

Babbitt, Bruce E. [American political leader]

Arizona (table) **A**: 687

Clinton, Bill (table) **Ci**: 682d

Interior, Department of the (table) **I**: 325

Babbitt, George F. [literary figure]

Lewis, Sinclair **L**: 221

Babbitt, Isaac [American inventor]

Babbitt metals **B**: 2

Babbitt, Milton [American composer]

Classical music (Atonal music) **Ci**: 649-650

Babbitt metals B: 2

Bearing (Plain bearings) **B**: 188

Lead (Uses) **L**: 149

Babbler [bird] **B**: 2 *with picture*

Babcock, Alphaus [American inventor]

Piano (History) **P**: 447-448

Babcock, Orville [American government official]

Grant, Ulysses S. (Government frauds) **G**: 317; (Foreign relations) **G**: 316

Babcock, Stephen Moulton [American chemist]

Milk (History of the milk industry) **M**: 549

Babcock, Tim M. [American political leader]

Montana (table) **M**: 757

Babcock State Park [West Virginia]

United States *picture on U*: 120

Babe [fictional animal]

Bunyan, Paul **B**: 701

Minnesota (Places to visit) **M**: 594

Babe Ruth See Ruth, Babe *in this index*

Babe Ruth League

Baseball (Amateur leagues) **B**: 131

Babel, Isaak Emanuilovich [Russian author]

Russian literature (The period of rebirth) **R**: 564

Babel, Tower of [Babylon] See Tower of Babel *in this index*

Babenberg [European history]

Austria (Early years) **A**: 937

Babes in Toyland [opera by Herbert]

Herbert, Victor **H**: 197

Babatta's Feast [film]

Denmark (Arts) **D**: 136

"Babi Yar" [poem by Yevtushenko]

Yevtushenko, Yevgeny **Y**: 565

Babi Yar [Soviet Union] **B**: 3

Babies'-breath [plant] See Baby's-breath *in this index*

Babies'-slippers [plant] See Bird's-foot trefoil *in this index*

Babine Lake

British Columbia (Rivers, waterfalls, and lakes) **B**: 624

Babirusa [animal] **B**: 3 *with picture*

Baboon [animal] **B**: 3 *with picture*

Monkey (Group life) **M**: 728-729; (Communication) **M**: 729; *picture on M*: 726

Primate (Old World monkeys) **P**: 778a

Baboucha [clothing]

Shoe *picture on S*: 432

Babur [Mughal emperor] **B**: 3

Akbar **A**: 253

India (The Mughal Empire) **I**: 129; *picture on I*: 131

Mongol Empire (Breakup) **M**: 721

Mughal Empire **M**: 910

Muslims (The Mughal Empire) **M**: 964d; *picture on M*: 965

Babuti [people]

Congo (Kinshasa) (Ancestry) **Ci**: 940

Baby B: 4 *with pictures*

Apgar, Virginia **A**: 564

Apgar score **A**: 565

Blue baby **B**: 419

Cerebral palsy **C**: 361

Colic **C**: 772

Gonorrhea **G**: 268

Heart (Birth defects) **H**: 140

Herpes, Genital **H**: 214

Incubator (Incubators for babies) **I**: 106

Infant mortality **I**: 264

Infanticide **I**: 264

Neonatology **N**: 124

Pregnancy (Prenatal care) **P**: 734b

Reproduction, Human **R**: 244 *with picture*; (The newborn infant) **R**: 249 *with picture*

Sexuality (Before birth) **S**: 338

Shaken baby syndrome **S**: 343

Sleep (Human sleep patterns) **S**: 506

Sudden infant death syndrome **So**: 957

Thalidomide **T**: 229

Toy (Toys for infants) **T**: 351

"Baby, It's Cold Outside" [song by Loesser]

Loesser, Frank **L**: 420

Baby and Child Care [book by Spock]

Spock, Benjamin McLane **So**: 797

Baby boom generation [U.S. history] **B**: 11

Education (Development of U.S. education)

E: 102-104

Family (Changes) **F**: 23-24

Population (United States population) **P**: 673

Social security (Developments since 1970)

So: 556-557

Teaching (Job opportunities) **T**: 68

United States (Population) **U**: 108-109

Beby box [psychology]

Skinner, B. F. **S**: 495

Baby doll

Doll (Wax dolls) **D**: 290; (Porcelain dolls)

D: 290-291

Baby house

Dollhouse **D**: 296

Baby Snooks [stage role]

Brice, Fanny **B**: 597

Baby teeth

Teeth (Deciduous teeth) **T**: 79 *with picture*

Babylon [ancient city] **B**: 11 *with picture*

Alexander the Great (Return westward) **A**: 343

Communication *picture on Ci*: 880

Employment agency **E**: 263

Bebylon, Hanging Gardens of See Hanging

Gardens of Babylon *in this index*

Babylonia [ancient civilization] **B**: 13 *with map*

Architecture (Mesopotamian architecture)

A: 611

Army (Ancient armies) **A**: 726

Asia (The Tigris-Euphrates Valley) **A**: 804-805

Astrology (History) **A**: 827

Astronomy (History) **A**: 846-847

Book (Early books) **B**: 465

Calendar (History) **C**: 30

Chaldea **C**: 370

Clothing (Ancient times) **Ci**: 696-697

Fraction (History) **F**: 450

Geometry (History) **G**: 105

Hammurabi **H**: 35

Jerusalem (Ancient times) **J**: 100

Law (Early developments in the East) **L**: 133

Map (Ancient maps) **M**: 181

Mathematics (Early civilization) **M**: 303

Numeration systems (The Babylonian numeral system) **N**: 607

Palestine (Invasions and conquests) **P**: 104

Phoenicia (Foreign control) **P**: 394

Pythagorean theorem (Origins) **P**: 921

Science (Early civilizations) **S**: 196

Sennacherib **S**: 300

See also the list of Related Articles in the Babylonia article

Babylonian Captivity [papal history]

Pope (The troubles of the papacy) **P**: 664

Reformation (Religious causes) **R**: 196

Babylonian Captivity of the Church, The [book by Luther]

Luther, Martin (The break with the Roman Catholic Church) **L**: 528

Babylonian Exile [Jewish history]

Ezekiel, Book of **E**: 470

Ezra, Book of **E**: 470

Isaiah, Book of **I**: 462

Jews (Foreign domination) **J**: 121

Joel, Book of **J**: 130

Kings, Books of **K**: 330

Nebuchadnezzar II **N**: 116

Old Testament (Development) **O**: 741

Babylonian Gamara [religious book]

Talmud **T**: 21

Baby's Bouquet, The [book]

Crane, Walter **Ci**: 1120

Literature for children (The rise of illustration)

L: 363

Baby's-breath [plant] **B**: 14 *with picture*

Baby's Opera [book]

Literature for children (The rise of illustration)

L: 363

BAC [measure] See Blood alcohol concentration;

Breath alcohol concentration

- Mythology (table) M: 980
- Bach, Anna Magdalena** [wife of]
 Bach, Johann Sebastian (His life) B: 15-16
- Bach, Carl Philipp Emanuel** [German composer] B: 15
- Bach, Johann Christian** [German composer] B: 15
- Bach, Johann Sebastian** [German composer]
 B: 15 *with portrait*
 Buxtehude, Dietrich B: 745
 Canon C: 182
 Cantata C: 183
 Classical music (The Baroque period) Ci: 647;
picture on Ci: 648
 Couperin, François Ci: 1100
 Mendelssohn, Felix M: 399
 Passion music P: 191
 Schweitzer, Albert (His life) S: 190
 Vivaldi, Antonio V: 433
- Bach, Maria Barbara** [wife of]
 Bach, Johann Sebastian (His life) B: 15
- Bach, Wilhelm Friedemann** [son of]
 Bach, Johann Sebastian (His life) B: 15
- Bachelor hard** [zoology]
 Impala I: 90
- Bachelor's-button** [flower] B: 17
 Flower *picture on F: 276*
- Bachelor's degree**
 Caps and gowns (Bachelor's degree) C: 199
with picture
 Degree, College (The bachelor's degree) D: 91
 Universities and colleges (Degrees) U: 209
- Bachianas Brasileiras** [music by Villa-Lobos]
 Brazil (The arts) B: 576-577
- Bachman, John** [American naturalist]
 Audubon, John James (His works) A: 884
- Bacillary dysentery** [disease] See Shigellosis *in this index*
- Bacilli** [bacteriology]
 Bacteria (The structure of bacteria) B: 20 *with picture*
- Bacillus anthracis** [bacteria]
 Anthrax A: 545
 Bacteriology (History) B: 22
- Back** [anatomy] B: 17
 Human body *diagram on H: 422*
- Back Bay** [district, Boston]
 Boston (Back Bay) B: 497 *with picture*
- Back bench** [politics]
 Parliament (How the House of Commons works) P: 173
- Back crawl**
 Swimming (The basic strokes) So: 1043; *pictures on So: 1044*
- Back-formation** [language]
 Slang (Shortened or lengthened words) S: 499
- Back Home** [book by Pinkney]
 Literature for children *picture on L: 370*
- Back Home, April 1865** [painting by Leal]
 Reconstruction *picture on R: 176*
- Back judge**
 Football (The officials) F: 362
- Back-lift**
 Cricket (The batting side) Ci: 1133
- Back lot**
 Motion picture (Filming on location) M: 852
- Back stroke**
 Cricket (The batting side) Ci: 1133-1134 *with picture*
- Back swamp**
 River (Flood plains) R: 353
- Back-to-Africa movement** [U.S. history]
 Garvey, Marcus G: 47
- Back to basics** [education]
 Curriculum (Curriculum changes) Ci: 1197
- Back to Before** [book by Slepian]
 Literature for children *picture on L: 377*
- "Back to Normalcy"** [slogan]
 Harding, Warren Gamaliel H: 56
- Backacha B: 17**
 Back B: 17
- Backband** [harness]
 Harness *diagram on H: 63*
- Backboard** [basketball]
 Basketball (The court) B: 143 *with diagrams*
- Backbone** [anatomy] See Spine *in this index*
- Backbone Mountain** [Maryland]
 Maryland (Land regions) M: 250
- Backcombing**
 Hairdressing (The 1900's) H: 12
- Backcourt** [basketball]
 Basketball (Basketball terms) B: 145
- Backfield** [football]
 Football (The offensive team) F: 356 *with diagrams*
- Backfire**
 Forestry (Fire and forests) F: 407
- Backgammon** [game] B: 17 *with picture*
- Background**
 Reading (Comprehending what is perceived) R: 157
- Background artist**
 Animation (Cel animation) A: 511
- Background dose** [radiology]
 Radiation (Dose) R: 79-80
- Background extinction** [zoology]
 Prehistoric animal (Evolution and extinction) P: 742
- Backhand drive** [tennis]
 Tennis (The ball in play) T: 163; *pictures on T: 164*
- Backing**
 Rugs and carpets (Materials used in rugs and carpets) R: 513; (Tufting) R: 515
- Backing fabric**
 Embroidery (Materials) E: 256
- Backpack** [equipment]
 Camping *picture on C: 93*
- Backpacking** [sport]
 Hiking H: 230
- Backplate** [electronics]
 Telephone (The transmitter) T: 95
- Backsaw** [tool]
 Saw (Handsaws) S: 166 *with picture*
 Woodworking (Cutting) W: 397 *with picture*
- Backstroke** [swimming]
 Swimming (The basic strokes) So: 1043; *pictures on So: 1044*
- Backswimmer** [insect]
 Insect *picture on I: 281*
 Water bug W: 133
- Backwoods brag**
 Crockett, Davy (The legends) Ci: 1148d
- Bacon's preacher**
 Circuit rider C: 559
- Bacon** [food] B: 18
- Bacon, Francis** [English philosopher] B: 18 *with portrait*
 Age of Reason (Influence of the Age of Reason) A: 139
 Essay (Formal essays) E: 359
 Philosophy (Modern philosophy) P: 387
 Prose P: 828
 Science (The scientific revolution) S: 198
 Shakespeare, William (The anti-Stratfordians) S: 349
- Bacon, Francis** [British painter] B: 18
- Bacon, Henry** [American architect]
 Lincoln Memorial L: 328 *with picture*
- Bacon, Nathaniel** [American colonial leader] B: 18
 Bacon's Rebellion B: 19
 Virginia (Westward expansion) V: 418 *with picture; picture on V: 420*
- Bacon, Robert** [American government official]
 Roosevelt, Theodore (table) R: 470
 State, Department of (table) So: 860
- Bacon, Roger** [English philosopher] B: 19
 Airplane (Early experiments and ideas) A: 229-230
 Ornithopter O: 858
 Physics (The Middle Ages) P: 438
- Bacon, Roger S.** [Canadian political leader]
 Nova Scotia (table) N: 567
- Bacon, Walter W.** [American political leader]
 Delaware (table) D: 109
- Bacon's Rebellion** [U.S. history] B: 19
 Bacon, Nathaniel B: 18
 Berkeley, Sir William B: 259
 House of Burgesses H: 384
 Jamestown J: 29
 Virginia *picture on V: 420*
- Bacteria** [biology] B: 19 *with pictures*
 Bacteriology B: 22
 Campylobacter C: 97
 Cell (Shapes of cells) C: 328; (Bacteria) C: 330
 Deep sea (Invertebrates) D: 82a-82b
 E. coli E: 2
 Environmental pollution (Water pollution) E: 334
 Eutrophication (How eutrophication occurs) E: 421
 Food preservation (How food spoils) F: 341
 Magnetism (Magnets in living things) M: 60c *with picture*
 Ocean (The food cycle) O: 655-658
 Prokaryote P: 817
 Saprophyte S: 122
- Sexually transmitted disease S: 338b
 Streptococcus So: 926
 Toxin T: 351
 Virus (Viruses that attack bacteria) V: 428
- Diseases and pathology**
 Antibiotic A: 550
 Blood (Protecting against disease) B: 410 *with pictures*
 Brucellosis B: 648
 Cephalosporin C: 359
 Disease (Bacterial diseases) D: 227;
 (Fighting disease) D: 231; (Medical treatment) D: 232; *picture on D: 229*
 Food poisoning F: 340
 Gonorrhea G: 268
 Heart (Inflammatory heart disease) H: 142
 Human body *picture on H: 417*
 Immune system I: 87
 Legionnaires' disease L: 184
 Leprosy (Causes) L: 203
 Listeria L: 349
 Lyme disease L: 533
 Meningitis (How meningitis develops) M: 401
 Parasite (Parasites that feed on plants) P: 155
 Plant (Diseases) P: 543 *with picture*
 Pneumonia (How pneumonia develops) P: 586
 Spore (Bacterial spores) So: 802 *with diagram*
 Stomach (Peptic ulcers) So: 908
 Strep throat So: 925
 Tuberculosis T: 477 *with pictures*
- Divisions**
 Ampicillin A: 443
 Penicillin P: 240
 Sterilization So: 894
 Streptomycin So: 926
- History**
 Koch, Robert K: 360
 Lister, Sir Joseph L: 349
 Pasteur, Louis P: 193
- Uses**
 Cheese (Separating the curd) C: 393
 Decay D: 67
 Drug (Genes and bacteria) D: 355
 Fermentation F: 73
 Genetic engineering (Uses of genetic engineering) G: 84a
 Legume L: 185
- Bacterial endocarditis** [disorder]
 Heart (Inflammatory heart disease) H: 142
- Bacterial meningitis** [disease]
 Meningitis M: 401
- Bacterial pustule** [disease]
 Soybean (Diseases and pests) So: 692
- Bacterial spore** [biology]
 Bacteria (Where bacteria live) B: 20-21
- Bacteriological warfare** See Chemical-biological-radiological warfare *in this index*
- Bacteriology B: 22**
 Biology (table) B: 317
 Koch, Robert K: 360
- Bacteriophage** [biology]
 Virus (Viruses that attack bacteria) V: 428, *picture on V: 427*
- Bactria** [ancient region]
 Afghanistan (Early invasions) A: 95
- Bactrian camel** [animal]
 Camel C: 76; (People and camels) C: 77 *with picture*
 Camel's-hair cloth C: 79
- Bad Aachen** [Germany]
 Aachen A: 2
- Bad Child's Book of Beasts, The** [book by Belloc]
 Belloc, Hilaire B: 244
- Bad conduct discharge**
 Military discharge M: 543
- Bad Day at Black Rock** [film]
 Tracy, Spencer T: 361
- Bad Godesberg** [district, Germany]
 Bonn (The city) B: 460-461
- Bad Seed, The** [play by Anderson]
 Anderson, Maxwell A: 452
- Baddeleyite** [mineral]
 Zirconium Z: 600
- Baden-Baden** [Germany] B: 23
- Baden-Powell, Agnes** [British social reformer]
 Baden-Powell, Lord B: 23
 Girl Guides G: 195
- Baden-Powell, Lord** [British social reformer] B: 23

- Boy Scouts B: 536
 Girl Guides G: 195
 Girl Scouts (History) G: 200
- Baden-Powell, Olave** [British social worker]
 Girl Scouts (History) G: 200
- Baden-Powell, Robert Stephenson Smyth**
See Baden-Powell, Lord in *this index*
- Badge** [emblem]
 Air Force, United States *pictures on* A: 189
 Boy Scouts *pictures on* B: 538
 Flag (table) F: 193
 Girl Scouts *pictures on* G: 198
 Knighthood, Orders of (Honorary orders) K: 347 *with pictures*
- Badge of Military Merit** *See* Purple Heart in *this index*
- Badger** [animal] B: 23 *with picture*
- Badger, George Edmund** [American government official]
 Harrison, William Henry (table) H: 76
 Tyler, John (table) T: 534
- Badger, William** [American political leader]
 New Hampshire (table) N: 223
- Badger State** [name for]
 Wisconsin W: 347
- Badi II Abu Daqin** [sultan of Funj]
 Funj Sultanate F: 560
- Badlands** [book by Kroetsch]
 Canadian literature (Modern English-Canadian fiction) C: 160
- Badlands** [geology] B: 24
 Alberta (Places to visit) A: 320 *with picture*
 North Dakota *picture on* N: 508
 South Dakota (Land regions) So: 674
- Badlands National Park** [South Dakota] B: 24
 National Park System (table: National parks) N: 48
 South Dakota *picture on* So: 673
- Badminton** [game] B: 24 *with pictures*
 Olympic Games (Summer Olympic Games) O: 746e
- Badoglio, Pietro** [Italian political leader]
 Italo-Ethiopian War I: 495
- Badwater** [region, California]
 Death Valley D: 62 *with picture*
- Baede** *See* Bede, Saint in *this index*
- Baekeland, Leo Hendrik** [American chemist]
 B: 25
 Phenolic P: 356
 Plastics (The invention of Bakelite) P: 559
- Baer, Karl Ernst von** [German scientist] B: 25
- Baer, Max** [American boxer]
 Braddock, James J. B: 544
- Baeyer, Adolph von** [German chemist]
 Indigo I: 223
 Nobel Prizes (Chemistry: 1905) N: 442
- Baez, Joan** [American singer] B: 25
 Rock music (Expanding styles and sounds) R: 378-379
- Baffin, William** [English explorer] B: 25
- Baffin Island** [Northwest Territories] B: 25 *with map*
 Nunavut (Land and resources) N: 608 *with picture and map*
- Bag** [packaging]
 Packaging P: 18
 Paper bag P: 138
- Bag ammunition**
 Ammunition (Artillery ammunition) A: 435-436
- Bag of Bones** [book by King]
 King, Stephen K: 323
- Bag wig**
 Hairdressing (The 1700's) H: 12
- Baganda** [people] *See* Ganda in *this index*
- Bagasse** [fiber]
 Sugar (Uses of sugar) So: 959
- Bagaza, Jean-Baptiste** [Burundi political leader]
 Burundi (History) B: 713-714
- Bagby, Arthur P.** [American political leader]
 Alabama (table) A: 274
- Baggage**
 Airplane *picture on* A: 218
 Airport (Airline passenger services) A: 246
- Baggage handler** [occupation]
 Airport (Airline passenger services) A: 246
- Baghdad** [Iraq] B: 26 *with picture*
 Iraq I: 408 *with picture, pictures on* I: 411
 Muslims (The Abbasids) M: 964c
 Persian Gulf War (The air war) P: 300c *with picture*
 World, History of the (The Islamic world) W: 434-435
- Baghdad Pact** [1955]
 Cold War (The death of Stalin) Ci: 764
- Iraq (The 1950's) I: 413
- Baghouse** [device]
 Incinerator I: 100
- Bagley, John J.** [American political leader]
 Michigan (table) M: 507
- Bagnell Dam** [Osage River, Missouri]
 Lake of the Ozarks L: 42 *with map*
 Missouri (Electric power) M: 667; (Progress as a state) M: 671
- Bagpipe** [musical instrument] B: 26 *with pictures*
 Nova Scotia *picture on* N: 561
 Scotland (The arts) S: 215-217; *picture on* S: 214
- Baguio City** [Philippines] B: 27
- Baguirmi**
 Chad (History) C: 367
- Bahadur, Jung** [Nepalese political leader]
 Nepal (History) N: 126-127
- Bahá'í House of Worship** [Wilmette, Illinois]
 Bahá'ís *picture on* B: 27
- Bahá'ís** [religious group] B: 27 *with picture*
 Bahá'u'lláh B: 27
 Iran (Religion) I: 402
- Bahamas** [islands] B: 28 *with picture and map*
 Columbus, Christopher (The first landing) Ci: 860
 Flag *picture on* F: 200
 West Indies W: 200
- Bahamonde, Francisco Franco** [Spanish political leader]
 Franco, Francisco (His early life) F: 483
- Bahasa Indonesia** [language]
 Indonesia I: 226; (People) I: 227
- Bahasa Malaysia** [language]
 Malaysia (People) M: 98b-98c
- Bahá'u'lláh** [Persian religious leader] B: 27
 Bahá'ís B: 27
- Bahia** [Brazil]
 Brazil *picture on* B: 573
 Salvador S: 76b
- Bahia wood** [tree]
 Brazilwood B: 587
- Bahnhof Zoo** [railway station]
 Berlin (The downtown areas) B: 260-261
- Bahr al Jabal** [river, Sudan]
 Sudan (Land and climate) So: 954
- Bahrain** [Asia] B: 29 *with picture and map*
 Flag *picture on* F: 202
- Bahram Gur Hunting the Wild Ass** [painting]
 Painting (Islamic painting) P: 48 *with picture*
- Bahutu** [people] *See* Hutu in *this index*
- Baikal, Lake** [Siberia] *See* Lake Baikal in *this index*
- Baikal-Amur Mainline** [railroad]
 Siberia (History) S: 446
- Baikal Mountains**
 Russia (The Central Siberian Plateau) R: 541 *with picture*
- Baikal seal** [sea animal]
 Seal S: 265
- Bail** [cricket]
 Cricket Ci: 1131
- Bail** [law] B: 31
 Arrest A: 743
 Criminal justice system (Pretrial procedures) Ci: 1143
- Bail bond** [insurance]
 Bail B: 31
 Bonding B: 455
 Insurance (Other kinds of property and liability insurance) I: 313-314
- Bailey** [courtyard]
 Castle (Structure) C: 280 *with picture*
- Bailey, Carl E.** [American political leader]
 Arkansas (table) A: 712
- Bailey, Carolyn Sherwin** [American author]
 Newbery Medal (table) N: 359
- Bailey, Frederick Augustus Washington** *See* Douglass, Frederick in *this index*
- Bailey, James A.** [American businessman]
 Barnum, P. T. B: 115
 Circus (The circus goes international) Ci: 563-564
- Bailey, Liberty Hyde** [American botanist] B: 31
 4-H (History) F: 436
- Bailey, Mildred** [American singer]
 Jazz (The swing era) J: 71
- Bailey, Nathan** [English publisher]
 Dictionary (Early English dictionaries) D: 194
- Bailey, Thomas L.** [American political leader]
 Mississippi (table) M: 640
- Bailey, Willis Joshua** [American political leader]
 Kansas (table) K: 234
- Bailiff** [office]
 Affidavit A: 91
- Baily, Francis** [British astronomer]
 Baily's beads B: 31
- Baily's beads** [astronomy] B: 31
- Bain, Alexander** [Scottish physicist]
 Fax machine (History) F: 58
- Bainter, Fay** [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1938) M: 863
- Baird, John Logie** [Scottish engineer] B: 31
 Television (Early development) T: 125
- Baird, Spencer F.** [American naturalist]
 National Museum of Natural History N: 41
- Baird's beaked whale**
 Whale *picture on* W: 257
- Bairro Alto** [district, Portugal]
 Lisbon *picture on* L: 348
- Bait** [fishing]
 Fishing (Bait) F: 177 *with pictures*
- Bait** [tool]
 Glass (Glass terms) G: 222
- Bait-and-switch selling**
 Consumerism (The right to information) Ci: 1018
- Bait-casting reel**
 Fishing (Reels) F: 176 *with picture*
- Bait fishing**
 Fishing industry (Hooks) F: 185
- Bait insecticide**
 Insecticide (Spraying and dusting) I: 303
- Baixa** [district, Portugal]
 Lisbon (The city) L: 348
- Baja California Norte** [state, Mexico]
 Mexicali M: 445
- Bajer, Fredrik** [Danish statesman]
 Nobel Prizes (Peace: 1908) N: 447
- Bejio** [region]
 Mexico (The Plateau of Mexico) M: 460-461
- Bake kettle** [container]
 Colonial life in America (Food and drink) Ci: 802
- Bakelite** [plastic]
 Baekeland, Leo Hendrik B: 25
 Phenolic P: 356
 Plastics (The invention of Bakelite) P: 559
- Baker** [occupation]
 Careers *picture on* C: 229
- Baker, Augusta** [American editor]
 Regina Medal (table: 1981) R: 206
- Baker, Buck** [American race car driver]
 Automobile racing (table: NASCAR Winston Cup champions, 1956, 1957) A: 981
- Baker, Conrad** [American political leader]
 Indiana (table) I: 214
- Baker, Florence** [British explorer]
 Exploration (The exploration of Africa) E: 449
- Baker, George** [American religious leader]
 Divine, Father D: 241
- Baker, Sir Herbert** [English architect]
 New Delhi (History) N: 203
- Baker, Home Run** [American baseball player]
 Baseball (table: Hall of Fame) B: 134
- Baker, Howard Henry, Jr.** [American political leader] B: 32
- Baker, James Addison, III** [American government official] B: 32 *with portrait*
 Reagan, Ronald Wilson (table) R: 169
- Baker, Josephine** [American entertainer] B: 32 *with portrait*
- Baker, Joshua** [American political leader]
 Louisiana (table) L: 496
- Baker, Nathaniel B.** [American political leader]
 New Hampshire (table) N: 223
- Baker, Newton Diehl** [American statesman]
 Wilson, Woodrow (table) W: 323
- Baker, Norma Jean** *See* Monroe, Marilyn in *this index*
- Baker, Ray Stannard** [American social reformer]
 Muckrakers M: 908
- Baker, Sam A.** [American political leader]
 Missouri (table) M: 668
- Baker, Sir Samuel White** [British explorer] B: 32
 Exploration (The exploration of Africa) E: 449
- Baker, Terry** [American football player]
 Football (table) F: 363
- Baker Library**
 Dartmouth College D: 39
- Baker v. Carr** [U.S. history] B: 32
 Apportionment A: 574
 Supreme Court of the United States (Election issues) So: 1001; (table) So: 1002
 Tennessee (The mid-1900's) T: 156
- Baker's yeast**

- Yeast (How yeast is used) Y: 554; (How yeast is made) Y: 555
- Bakery**
Bread (How yeast bread is made) B: 588 *with picture*
Conveyor belt (Uses) Ci: 1024-1025
- Bakery, Confectionery and Tobacco Workers' International Union**
Labor movement (table) L: 8
- Bakewell, Robert** [British farmer]
Cattle (Beginning of breeding) C: 315
- Baking**
Bread B: 588
Cooking (Baking) Ci: 1028
- Baking chocolate**
Chocolate (Chocolate products) C: 518
- Baking powder** B: 32
- Baking soda** See Bicarbonate of soda *in this index*
- Bakke, Allan** [American public figure]
Bakke case B: 33
- Bakke case** [U.S. history] B: 33
Supreme Court of the United States (table) So: 1002
- Baku** [city, Azerbaijan] B: 33
Azerbaijan A: 996 *with picture*
- Bakunin, Mikhail** [Russian author]
Anarchism A: 448
- Baky** [Azerbaijan] See Baku *in this index*
- Balabhadra** [Hind deity]
Juggernaut J: 185
- Balaguer, Joaquín** [Dominican political leader]
Dominican Republic (History) D: 304-305
- Balak** [king of Moab]
Mount Pisgah M: 886
- Balaklava, Battle of** [1854] B: 33
Nightingale, Florence (Service in Crimea) N: 420
- Balalaika** [musical instrument] B: 33 *with picture*
- Balance** [design]
Design (Harmony) D: 157 *with pictures*
- Balance** [equilibrium]
Ear (The sense of balance) E: 11
Gravity, Center of G: 333
Lever L: 217
Posture P: 710
- Balance** [instrument] B: 34 *with picture*
Scale, Weighing (Balances) S: 169
- Balance beam** [sports]
Gymnastics (Women's events) G: 449 *with picture*
- Balance of nature** [biology] B: 34
Bird (In nature) B: 330
Carnivore C: 243
Ecology (Changes in ecosystems) E: 56
Endangered species E: 269
Eutrophication (How eutrophication occurs) E: 421
Fish (Fish in the balance of nature) F: 147 *with diagram*
Mammal (Mammals in the balance of nature) M: 118
Plant (Plants and the cycle of nature) P: 518
- Balance of payments** [economics] B: 35 *with diagram*
Devaluation D: 173
Economics (World finance) E: 64
Inflation (Severe inflation) I: 267
Money (The balance of payments) M: 716
- Balance of power** [diplomacy] B: 36
International relations (History) I: 345
Peace (From the 1400's to the 1700's) P: 206
- Balance of trade** [economics]
Balance of payments B: 35
Japan (International trade) J: 50-51
Mercantilism M: 412
- Balance sheet**
Accounting (Financial reports) A: 23
- Balance spring**
Watch (Mechanical watches) W: 114
- Balance wheel**
Clock (Mechanical clocks) Ci: 683
Watch (Mechanical watches) W: 114 *with picture*
- Balanced budget** [economics]
National debt (Debt policy) N: 33-34
- Balanced diet**
Diet (Normal diet) D: 200
Nutrition (Eat a balanced diet) N: 626
- Balanced fund**
Mutual fund M: 969
- Balanced Rock** [Colorado]
Garden of the Gods G: 29
- Rock (table) R: 374
- Balanchine, George** [American choreographer] B: 36
Ballet (Ballet in the United States) B: 53
Kirstein, Lincoln Edward K: 337
Tallchief, Maria T: 20
- Balancing Agriculture With Industry** [government program]
Mississippi (Economic development) M: 644
- Balancing selection** [biology]
Evolution (Balancing or diversifying selection) E: 429
- Balaneshty, Mount** [Moldova]
Moldova (Land and climate) M: 690-690a
- Balard, Antoine J.** [French chemist]
Bromine B: 636
- Balaton, Lake** [Hungary]
Hungary *picture on* H: 442
- Balbinus** (Roman emperor)
Rome, Ancient (table) R: 447
- Balboa, Vasco Núñez de** [Spanish explorer] B: 37 *with picture and map*
Exploration (Exploring the New World) E: 444 *with map*
Latin America (European discovery and exploration) L: 104-106 *with map*
Pacific Ocean P: 14
Panama (The Spanish colonial period) P: 120
Panama Canal (Early efforts) P: 125
- Balboa Park**
San Diego (Cultural life) S: 90 *with picture*
- Balch, Emily Greene** [American economist] B: 38
Nobel Prizes (Peace: 1946) N: 447
- Balch Institute**
Philadelphia (Libraries and museums) P: 364
- Balchen, Bernt** [Norwegian-American aviator] B: 38
Airplane (Fliers of the golden age) A: 237
- Bald eagle**
Eagle E: 3 *with picture*; (Food) E: 5; (Kinds of eagles) E: 5
Alaska (Interesting facts) A: 283 *with picture*
Bird (Endangered species) B: 370 *with picture*
- Bald face** [marking]
Horse (Coat and skin) H: 348-349
- Bald Soprano, The** [play by Ionesco]
Ionesco, Eugène I: 372
- Baldcypress** [tree] B: 38
Cypress Ci: 1205
Evolution *picture on* E: 427
Tree *pictures on* T: 424
United States *picture on* U: 121
- Balder** [Norse mythology] B: 38
Loki L: 426
Mythology (The construction of the world) M: 984-985; (The end of the world) M: 985
- Bald-faced hornet**
Hornet H: 340
Insect *picture on* I: 283
- Baldness** B: 38 *with diagram*
Hair (Disorders of the hair and scalp) H: 10
- Baldpate** [bird] See Wigeon *in this index*
- Baldrige, H. C.** [American political leader]
Idaho (table) I: 42
- Baldrige, Malcolm, Jr.** [American government official]
Commerce, Department of (table) Ci: 871
Reagan, Ronald Wilson (table) R: 169
- Baldwin, Abraham** [American political leader] B: 39
- Baldwin, Anna** [American inventor]
Milking machine M: 550
- Baldwin, Henry** [American jurist]
Supreme Court of the United States (table) So: 1000
- Baldwin, Henry P.** [American political leader]
Michigan (table) M: 507
- Baldwin, James** [American author] B: 39 *with portrait*
African American literature (The 1900's) A: 136a
African Americans (The growing movement) A: 136m-136n *with picture*
American literature (Fiction and other prose) A: 424, (Drama) A: 425
Novel (After World War II) N: 574
- Baldwin, Matthias William** [American inventor] B: 39 *with picture*
- Baldwin, Ralph B.** [American astronomer]
Moon (Describing lunar evolution) M: 794
- Baldwin, Raymond E.** [American political leader]
- Connecticut (table) Ci: 967
- Baldwin, Robert** [Canadian political leader] B: 40
- Baldwin, Roger S.** [American political leader]
Connecticut (table) Ci: 967
- Baldwin, Simeon E.** [American political leader]
Connecticut (table) Ci: 967
- Baldwin, Stanley** [British political leader] B: 40
United Kingdom (The rise of the Labour Party) U: 70
- Baldwin Locomotive Works**
Baldwin, Matthias William B: 40
- Baldwin of Flanders** [Byzantine emperor]
Crusades (The Fourth Crusade) Ci: 1161
- Bale** [industry]
Cotton (Ginning and baling) Ci: 1090-1091 *with picture*
Hay H: 115 *with picture*
Rubber (Manufacturing rubber products) R: 504
- Balearic Islands** [province, Spain] B: 40
Spain (The Balearic Islands) So: 740 *with map*
- Baleen** [zoology]
Animal (Filtering mechanisms) A: 490-491 *with picture*
Blue whale B: 421
Bowhead whale B: 520
Bryde's whale B: 656
Fin whale F: 103
Gray whale G: 335
Humpback whale H: 436
Whale (Kinds of baleen whales) W: 255 *with picture*
- Baleen whale**
Animal (Filtering mechanisms) A: 490-491 *with picture*
Humpback whale H: 436
Whale (Kinds of baleen whales) W: 255 *with pictures*; (Group life) W: 261
- Baler** [machine]
Hay H: 115 *with picture*
- Balewa, Sir Abubakar Tafawa** [Nigerian statesman]
Nigeria (Independence) N: 417
- Balfour, Arthur James** [British statesman] B: 40
Balfour Declaration B: 40
- Balfour, Earl of** See Balfour, Arthur James *in this index*
- Balfour Declaration** [1917] B: 40
Arab-Israeli conflict (Historical background) A: 582
Balfour, Arthur James B: 40
Israel (Beginnings of a new state) I: 486
Jerusalem (British rule) J: 101
Jews (The Zionist movement) J: 123-124
Jordan (The Palestinian conflict) J: 165
Palestine (World War I and the Balfour Declaration) P: 105
Weizmann, Chaim W: 188
Zionism (The Balfour Declaration) Z: 599
- Balfour Report** [1926]
Balfour, Arthur James B: 40
King, William Lyon Mackenzie *picture on* K: 326
- Bali** [island, Indonesia]
Indonesia (The Lesser Sunda Islands) I: 234
Asia (The arts) A: 785
Bird *picture on* B: 331
Dance (Asian theatrical dance) D: 30
- Bali-Hinduism** [religion]
Indonesia (Religion) I: 232
- Baliles, Gerald L.** [American political leader]
Virginia (table) V: 417
- Baline, Israel** See Berlin, Irving *in this index*
- Balinese cat**
Cat (Long-haired breeds) C: 292; *picture on* C: 289
- Balinese dancing**
Dance *picture on* D: 29
Indonesia (The arts) I: 232 *with picture*
- Baling machine** [farming]
Cotton (Ginning and baling) Ci: 1090
- Balintawak** [clothing]
Philippines (Way of life) P: 374-375
- Balk**
Baseball (Baseball terms) B: 124
- Balkan Mountains** [Europe]
Balkans (Location, size, and description) B: 41-42
Bulgaria (The land) B: 691 *with map*
- Balkan Peninsula**
Greece G: 352
- Balkan wars** [European history]

- Bulgaria (The Balkan wars) **B**: 692
 Macedonia [historic region] **M**: 12
 World War I (Beginning of the war) **W**: 455
The First Balkan War (1912-1913)
 Balkans (The First Balkan War) **B**: 42
 Albania (Independence) **A**: 307
 Greece (George I) **G**: 362
The Second Balkan War (1913)
 Balkans (The Second Balkan War) **B**: 42
 Greece (George I) **G**: 362
 London, Treaties of (The Treaty of 1913)
L: 444
- Balkans** [region, Europe] **B**: 41 *with map*
 Berlin, Congress of **B**: 266
 Bulgaria **B**: 688 *with map*
 World War I (The rise of nationalism) **W**: 452-453; (Beginning of the war) **W**: 455
- Balkhash, Lake** [Kazakhstan] See Lake Balkhash *in this index*
- Bali, George** [American diplomat]
 United Nations (table) **U**: 86
- Bali, Hugo** [German poet]
 Dadaism **D**: 2
- Bali, Lucille** [American actress] **B**: 43 *with portrait*
 Television (Early programs) **T**: 119
- Ball-and-socket joint** [anatomy]
 Joint **J**: 155 *with diagram*
 Hip **H**: 238 *with diagram*
 Shoulder **S**: 439 *with picture*
- Ball bearing**
 Bearing (Rolling element bearings) **B**: 189 *with diagram*
- Ball bullet**
 Bullet **B**: 694
- Ball lightning**
 Lightning (Appearance) **L**: 300
- Ball mill** [machine]
 Cement and concrete (Crushing and grinding)
C: 344
 Copper (Milling) **Ci**: 1042; *picture on Ci*: 1041
 Gold (Exposing the gold) **G**: 253
 Paint (Grinding) **P**: 24-25
- Ball of the foot** [anatomy]
 Foot (The bones) **F**: 352
- Ball peen hammer** [tool]
 Hammer **H**: 34 *with picture*
- Ball python, African** [snake]
 Snake *picture on S*: 525
- Balla, Giacomo** [Italian painter]
 Futurism **F**: 589
- Ballad** [poetry] **B**: 43
 Country music (The roots of country music)
Ci: 1098a
 Folk music (Kinds of folk music) **F**: 321
 Literature for children (Folk literature) **L**: 357
 Poetry (Narrative poetry) **P**: 591
 Spanish literature (The 1400's) **So**: 758
- Ballad of Baby Doe, The** [opera by Moore]
 Moore, Douglas Stuart **M**: 796
- Ballad of Reading Gaol, The** [poem by Wilde]
 Wilde, Oscar **W**: 302
- Ballad of the Sad Café, The** [book by McCullers]
 McCullers, Carson **M**: 335
- Ballad opere**
 Drama (England) **D**: 335
- Ballade** [art form] **B**: 43
- "Ballade of Dead Ladies"** [poem by Villon]
 Ballade **B**: 43
- Belladur, Edouard** [French political leader]
 France (Socialists win power) **F**: 478
- Bellard, J. G.** [British author]
 Science fiction (Growing popularity) **S**: 205-206
- Ballard, Robert Duane** [American oceanographer]
B: 43
 Titanic **T**: 300
 Exploration (Deep-sea exploration) **E**: 451-452
- Bellast** [construction]
 Railroad (Tracks) **R**: 108-109 *with picture*
- Bellast** [electricity]
 Fluorescent lamp **F**: 305 *with diagram*
- Bellast** [weight]
 Airship (Control) **A**: 251
 Balloon (Gas balloons) **B**: 58-59
 Ruffe **R**: 509
 Ship (Nautical terms) **S**: 416; (The chief parts of a ship) **S**: 424
- Bellerina** [dance]
 Ballet (table) **B**: 45
- Ballet** [dance] **B**: 44 *with pictures*
 Art and the arts *picture on A*: 748
 Dance (European and American theatrical dance) **D**: 31
- Diaghilev, Sergei Pavlovich **D**: 180
 Russia (Ballet) **R**: 537; *picture on R*: 526
 United States *picture on U*: 119
 See also the list of Related Articles in the Ballet article
- Ballet Comique de la Reine**
 Ballet (The birth of ballet) **B**: 50-51; *picture on B*: 52
- Ballet d'action** [style]
 Ballet (History) **B**: 50-51; *picture on B*: 52
- Ballet Folklórico de Mexico** [dance company]
 Dance *picture on D*: 26
 Latin America *picture on L*: 101
 Mexico *picture on M*: 460
 Mexico City (Cultural life and recreation)
M: 477
- Ballet shoe**
 Ballet *picture on B*: 47
- Ballets Russes** [dance company] **B**: 55
 Ballet (Ballet in Russia) **B**: 52
 Diaghilev, Sergei Pavlovich **D**: 180
 Picasso, Pablo (Picasso as a designer) **P**: 448b
- Balli, Nicolás** [Spanish settler]
 Padre Island **P**: 20
- Balli Kombetar** [political group]
 Albania (World War II) **A**: 307-308
- Ballinger, Richard A.** [American government official]
 Interior, Department of the (table) **I**: 325
 Taft, William Howard (Legislative defeats)
T: 10-11; (table) **T**: 11
- Ballinger-Pinchot controversy** [U.S. history]
 Taft, William Howard (Legislative defeats)
T: 10-11
- Balliol, John de** [king of Scotland]
 Bruce, Robert **B**: 648
 Edward I **E**: 112
 Scotland (Fight for independence) **S**: 219
- Ballistic missile**
 Guided missile (Ballistic missiles) **G**: 425 *with pictures*
- Ballistic Missile Early Warning System**
 Air Force, United States (Defense and deterrence) **A**: 190
 Radar (In the military) **R**: 65; *map on R*: 66
- Ballistic missile submarine**
 Submarine (Ballistic missile submarines)
So: 941 *with diagram*
 Warship (Submarines) **W**: 41; (Warships in the nuclear age) **W**: 42-43
- Ballistics** [engineering] **B**: 56 *with picture*
- Ballonet** [aerodynamics]
 Airship (Ballonets) **A**: 251 *with diagram*
- Balloon** **B**: 57 *with pictures*
 Air force (History) **A**: 184-185 *with picture*
 Aircraft, Military (The first military aircraft)
A: 204 *with picture*
 Airplane **A**: 209; (First human flights) **A**: 230; *picture on A*: 229
 Bomb (History) **B**: 452 *with picture*
 Helium (Uses) **H**: 176
 Montgolfier brothers **M**: 766
 Piccard, Jean **P**: 450
 Radiosonde **R**: 99
 Transportation (Air transportation) **T**: 385
 Weather (Weather balloons, airplanes, and ships) **W**: 163; *picture on W*: 164
- Balloon angioplasty** [surgery]
 Angioplasty **A**: 461 *with picture*
 Disease (Medical treatment) **D**: 232-233
- Balloon barrage**
 Balloon (Balloons in war) **B**: 61 *with picture*
- Balloon flower**
 Flower *picture on F*: 279
- Balloon-payment mortgage**
 Mortgage **M**: 821
- Balloon tire**
 Tire (History) **T**: 298
- Ballooning** [entomology]
 Spider (Spiderlings) **So**: 790-791 *with picture*
- Bellot** [voting] **B**: 63
 Voting (Methods of voting) **V**: 450
- Bellpoint pen**
 Ink (Writing inks) **I**: 273
 Pen **P**: 233 *with picture*
- Bellroom dancing** **B**: 63
 Dance (Social dances) **D**: 29 *with pictures*
- Belm** [plant] **B**: 63 *with picture*
- Balm in Gilead** [play by Wilson]
 Wilson, Lanford **W**: 317
- Balm of Gilead** [tree] **B**: 64
 Poplar **P**: 668
- Balmaceda, José Manuel** [Chilean political leader]
 Chile (Era of changes) **C**: 469
- Balmat, Jacques** [French mountain climber]
 Alps (Climbing the Alps) **A**: 386
 Mont Blanc **M**: 741
- Balsa** [wood] **B**: 64 *with pictures*
 Airplane, Model (Indoor models) **A**: 241
- Balsam** [plant]
 Flower (Garden annuals) **F**: 276 *with picture*,
F: 300 *with picture*
 Impatiens **I**: 91
- Balsam, Martin** [American actor]
 Motion picture (Best performance by an actor in a supporting role: 1965) **M**: 863
- Balsam fir** [tree] **B**: 64 *with pictures*
 Fir **F**: 119
 Tree *pictures on T*: 424
- Balsam Mecca** [fragrance] See Balm of Gilead *in this index*
- Balsam poplar** [tree]
 Poplar **P**: 668 *with picture*
- Balthasar** [Biblical figure]
 Magi **M**: 49
- Balthazer** [book by Durrell]
 Durrell, Lawrence **D**: 389
- Balthus** [French artist] **B**: 64 *with picture*
- Baltic languages**
 Language (Indo-European) **L**: 64
- Baltic Sea** [Europe] **B**: 65 *with map*
- Baltic States** **B**: 65
 See also Estonia; Latvia; Lithuania *in this index*
 Bush, George Herbert Walker (International affairs) **B**: 721-722
 Union of Soviet Socialist Republics (World War II) **U**: 37; (Threats to unity) **U**: 40-41
- Baltimore** [Maryland] **B**: 66 *with pictures and maps*
 United States, History of the *picture on U*: 154
 United States capitals **U**: 199
- Baltimore, David** [American physiologist]
 Nobel Prizes (Physiology or medicine: 1975)
N: 445
- Baltimore, Lord**
 See Calvert, Cecilius; Calvert, Charles;
 Calvert, George *in this index*
- Baltimore and Ohio Railroad**
 Railroad (Developments in the United States)
R: 115; (Expansion in the United States)
R: 115
 Locomotive (History) **L**: 417
- Baltimore clipper** [ship]
 Clipper ship **Ci**: 682h
- Baltimore Harbor**
 Baltimore **B**: 66
 Maryland *picture on M*: 254
- Baltimore Museum of Art**
 Maryland (Museums) **M**: 244
- Baltimore oriole** [bird] **B**: 70
 Bird (Birds of forests and woodlands) **B**: 334
with picture
- Baltimore Orioles**
 Baseball (table) **B**: 130
- Baltimore Ravens**
 Football (National Football League) **F**: 364
- Baltimore Sun** [newspaper]
 Mencken, H. L. **M**: 397
- Baltimore-Washington International Airport**
 [Maryland]
 Washington, D.C. (Transportation) **W**: 84-85
- Baltoscandia** [region, Europe]
 Scandinavia **S**: 171
- Baluchi** [people]
 Pakistan (Cultural groups and languages) **P**: 93
 Oman (People) **O**: 757-758
- Baluchistan** [province, Pakistan]
 Pakistan (Land and climate) **P**: 96-97 *with map*
- Balzac** [sculpture by Rodin]
 France *picture on F*: 463
- Balzac, Honoré de** [French author] **B**: 70 *with portrait*
 French literature (Romantic fiction) **F**: 521
 Novel (France) **N**: 573
- Balzer, Fred B.** [American political leader]
 Nevada (table) **N**: 173
- Bam** [tile]
 Mah-jongg **M**: 64 *with picture*
- Bam i Dunye** [region, Asia]
 Pamirs **P**: 112
- Bemeko** [Mali] **B**: 71
 Mali **M**: 106 *with picture and map*
- Bambara** [people]
 Mali (People) **M**: 106
- Bambare, Toni Cade** [American author]
 Novel (The novel today) **N**: 575

- Bamberger, Simon** [American political leader]
Utah (table) U: 245
- Bambi** [film]
Disney, Walt (Full-length movies) D: 236
- Bamboo** [plant] B: 71 *with pictures*
Grass (Woody grasses) G: 326
Panda (Protecting pandas) P: 129
- Bamboula** [music by Gottschalk]
Gottschalk, Louis Moreau G: 280
- Bamiléké** [people]
Cameroon (People) C: 85
- Banaba** [island, Pacific Ocean]
Kiribati K: 335
- Banana** [plant] B: 72 *with pictures*
Plantain P: 550
- Banana bird**
Oriole O: 856
- Banana poka** [plant]
Conservation (Biodiversity conservation)
Ci: 976-977
- Banana republic**
Honduras (Independence) H: 312-313
- Bananier, Le** [music by Gottschalk]
Gottschalk, Louis Moreau G: 280
- Banaras** *See Varanasi in this index*
- Banat** [region]
Romania (Land regions) R: 420 *with map*,
(World War I) R: 424
- Banbury mixer** [machine]
Tire (Preliminary operations) T: 296
- Bancroft, Anne** [American actress]
Motion picture (Best performance by an actress: 1962) M: 862
- Bancroft, Dave** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Bancroft, George** [American historian] B: 73
Polk, James Knox P: 640; (Election of 1844) P: 642
United States Naval Academy (History) U: 204
- Bancroft, John Sellers** [American inventor]
Monotype (History) M: 733
- Band** [economics]
European Monetary System E: 418
- Band** [music] B: 73 *with picture*
Country music (The instruments) Ci: 1098
Drum and bugle corps D: 368
- Band** [radio]
Radio (How radio programs are received) R: 88
- Band** [sociology]
Indian, American (Bands) I: 143
- Band clutch** [engine]
Transmission (Clutches) T: 377-378
- Band saw** [tool]
Lumber *picture on* L: 520
Saw (Power saws) S: 167 *with picture*
- Band-tailed pigeon**
Pigeon (Wild pigeons) P: 460
- Banda, Hastings Kamuzu** [Malawi political leader] B: 75
Malawi (History) M: 98
- Bandage** B: 75
First aid (Burns) F: 139; (Frostbite) F: 141
- Bandama River**
Côte d'Ivoire (The land) Ci: 1084b-1085 *with map*
- Bandanna** [clothing]
Cowboy (His clothing) Ci: 1108-1109
- Bandar Seri Begawan** [city, Brunei]
Brunei B: 650 *with map*
- Bandaranaike, S. W. R. D.** [Sri Lankan political leader]
Bandaranaike, Sirimavo B: 75
Sri Lanka (History) So: 819
- Bandaranaike, Sirimavo** [Sri Lankan political leader] B: 75 *with portrait*
Sri Lanka (History) So: 819-820
- Banded garden spider**
Spider (table) So: 790
- Banded gecko** [reptile]
Gecko *picture on* G: 75
- Banded iguana**
Iguana I: 50
- Banded krait** [snake]
Snake *picture on* S: 534
- Banded sea snake**
Snake *picture on* S: 529
- Banded woollybear**
Insect *picture on* I: 282
Woollybear W: 402
- Bandeirantes** [South American history]
São Paulo (History) S: 119
- Bandelier National Monument** [New Mexico]
National Park System (table: National monuments) N: 50
New Mexico *picture on* N: 273
- Banderilla** [bullfighting]
Bullfighting (The order of the bullfight) B: 695-696
- Banderillero** [bullfighting]
Bullfighting (The order of the bullfight) B: 695-696 *with picture*
- Bandicoot** [animal] B: 75 *with picture*
Animal (Introduction of new species) A: 505
Mammal *picture on* M: 128
Marsupial (Kinds of marsupials) M: 232
- Bandilor top** [toy]
Top (History of tops) T: 331-332
- Banding** [conservation]
Bird (Birdbanding) B: 368 *with picture*
- Bandipur National Park** [India]
National park (table) N: 42f
- Bandit** B: 76
See also the list of Related Articles in the Bandit article
- Bandjarmasin** [Indonesia]
Bandjarmasin B: 87
- Bandung** [city, Indonesia] B: 76
- Bandura** [musical instrument]
Ukraine (The arts) U: 9
- Bandy** [sport]
Norway (Recreation) N: 540
- Banff** [Alberta] B: 76
Lake Louise L: 39
Rocky Mountains *picture on* R: 396
- Banff Museum** [Alberta]
Canada (table: National historic sites) C: 114
- Banff National Park** [Alberta, Canada] B: 76 *with picture*
Canada (table: National parks and national park reserves) C: 113
Lake Louise L: 39
National park (Canada) N: 42c; *picture on* N: 42a
- Bangalore** [city, India] B: 76
India *pictures on* I: 108, I: 109, I: 116
- Bangers and mash** [food]
England (Food and drink) E: 295-296
- Bangerter, Norman H.** [American political leader]
Utah (table) U: 245
- Banghazi** [Libya]
Benghazi B: 249
- Bangkok** [city, Thailand] B: 76 *with pictures*
Family *picture on* F: 22
Thailand T: 221 *with picture*
- Bangkok International Airport** (Bangkok)
Thailand (Transportation) T: 226
- Bangladesh** B: 78 *with pictures and maps*
Asia (Other struggles) A: 810
Bengal B: 248
Dhaka D: 178
Flood (River floods) F: 236-237; (Seacoast floods) F: 237
India (India under Indira Gandhi) I: 133-134
Pakistan P: 92; (Civil war) P: 99-100
Tornado T: 333
- Bangladesh Nationalist Party**
Bangladesh (The new nation) B: 86
- Bangladeshis** [people]
Bangladesh B: 78; (Population and ancestry) B: 80 *with pictures*
- Bangor** [Maine] B: 87
- Bangui** [city, Central African Republic] B: 87
Central African Republic C: 352 *with picture*
- Bangweulu, Lake** [Zambia]
Lake Bangweulu L: 36
- Banian** *See Banyan tree in this index*
- Banim, John** [Irish author]
Irish literature (Prose and poetry) I: 431
- Banim, Michael** [Irish author]
Irish literature (Prose and poetry) I: 431
- Banishment**
Deportation D: 149
Exile E: 436
- Bandjarmasin** [city, Indonesia] B: 87
Indonesia (The Greater Sunda Islands) I: 233
- Banjo** [musical instrument] B: 87 *with pictures*
Jazz (The guitar) J: 69 *with picture*
Popular music (1840's to the Civil War) P: 669
West Virginia *picture on* W: 210
- Banjo Lesson, The** [painting by Tanner]
Tanner, Henry Ossawa T: 29 *with picture*
- Banjul** [Gambia] B: 87
Gambia G: 18
- Bank** B: 88 *with pictures*
Automated teller machine A: 944
Clearinghouse Ci: 659
- Federal Deposit Insurance Corporation F: 63
Federal Reserve System F: 65
Great Depression (The farm depression of the 1920's) G: 339; (Economic breakdown) G: 340 *with picture*
Industrial Revolution (The role of capital) I: 251
Investment I: 366
Switzerland (Banking) So: 1058
Treasury, Department of the (Department functions) T: 407-408
United States, History of the (Investment and banking) U: 178
See also the list of Related Articles in the Bank article
- Bank** [river]
River (Channels) R: 352
- Bank account** *See Savings account in this index*
- Bank balance**
Check (How the checking system works) C: 390
- Bank charter**
Bank (Regulation of U.S. banks) B: 92
- Bank discount**
Discount (Bank discount) D: 224
- Bank for International Settlements** B: 95
- Bank holding company**
Bank (Regulation of U.S. banks) B: 92
- Bank Holding Company Act** [1956]
Bank (Diversification and mergers) B: 95
- Bank holiday** [U.S. history] B: 96
Bank (The crisis of 1933) B: 93-94
New Deal (Helping savers and investors) N: 200
Roosevelt, Franklin Delano (The banking crisis) R: 456
- Bank note** [money]
Bank (The First Bank of the United States) B: 93 *with picture*
Money (The development of paper money) M: 706; (The rebirth of paper money) M: 709 *with pictures*
- Bank of America** B: 96
- Bank of America Plaza**
Dallas (Landmarks) D: 11
- Bank of Canada** B: 96
Canada, Government of (Money and taxation) C: 138
- Bank of China** [Hong Kong]
Hong Kong (Hong Kong) H: 316
Skyscraper (table) S: 498
- Bank of Credit and Commerce International** SA
Clifford, Clark McAdams Ci: 674
- Bank of England** B: 96
Bank (Central banks) B: 91
- Bank of Japan**
Tokyo (Finance) T: 317
- Bank of the United States** [U.S. history] B: 96
First Bank of the United States
Bank of the United States (The First Bank of the United States) B: 96
Bank (The First Bank of the United States) B: 93
Jefferson, Thomas (Secretary of state) J: 81
Money (The rebirth of paper money) M: 709
United States, History of the (Solving financial problems) U: 162
Second Bank of the United States
Bank of the United States (The Second Bank of the United States) B: 96
Bank (The Second Bank of the United States) B: 93
Biddle, Nicholas B: 295
Jackson, Andrew (The Bank of the United States) J: 11
Money (The rebirth of paper money) M: 709
Taney, Roger Brooke T: 25
United States, History of the (Jackson as President) U: 170
Wildcat bank W: 301
Washington, George (Constitutional debate) W: 103
- Bank statement**
Check (How the checking system works) C: 390
- Bank swallow** [bird]
Swallow So: 1014 *with picture*
- BankAmerica Corporation**
Bank of America B: 96
- Banker's bill** [economics]
Bill of exchange B: 301
- Bankhead, Tallulah** [American actress] B: 97
- Bankhead Tunnel** [Alabama]
Mobile (History) M: 681-682

- Banking** [aviation]
Airplane (The wing) A: 213; (Changing direction) A: 222
- Banking Act** [1933]
Bank (The crisis of 1933) B: 93-94
Bank holiday B: 96
- Bankruptcy** [law] B: 97
Receiver R: 174
- Bankruptcy Act** [1898]
Bankruptcy (In the United States) B: 97
- Bankruptcy Code** [1978]
Bankruptcy (In the United States) B: 97
- Banks, Dennis** [American social reformer]
American Indian Movement A: 412
- Banks, Ernie** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Banks, Nathaniel P.** [Union general]
Massachusetts (table) M: 288
- Banks for Cooperatives System** [economics]
Farm Credit System (Organization) F: 45-46
- Bann** [river, Ireland]
Lough Neagh L: 474
Northern Ireland (Lakes, rivers, and bays) N: 523 *with map*
- Banneker, Benjamin** [American mathematician] B: 97 *with portrait*
Washington, D.C. (Building the city) W: 85-86
- Banner** [flag]
Flag (Interesting facts about flags) F: 193
- Benner** [journalism]
Newspaper (table) N: 383
- Banner ad**
Advertising (Internet) A: 76
- Bannerstone** [sculpture]
Sculpture (Early sculpture) S: 242-243
- Bannister, Sir Roger** [British runner] B: 98 *with picture*
Track and field (Track and field today) T: 357
- Bannock** [Montana]
Montana (Places to visit) M: 750 *with picture*
- Bannock Indians** [American Indians] B: 98
Idaho (Indian fighting) I: 44
- Bannock War** [1878]
Bannock Indians B: 98
- Bannockburn, Battle of** [1314] B: 98
Bruce, Robert B: 648
England (The beginnings of Parliament) E: 306
Scotland (Fight for independence) S: 219
- Banns** [custom]
Marriage (Laws concerning marriage) M: 220
- Banquet, The** [poems by Dante]
Dante Alighieri (His works) D: 34-35
- Banquet of Officers of the Civic Guard of Saint George at Haarlem, 1616** [painting by Hals]
Painting (The Dutch masters) P: 62 *with picture*
- Banqueting House** [London]
Architecture (Later Renaissance architecture) A: 621-622
Jones, Inigo J: 158 *with picture*
London (Palaces) L: 435
- Banquo** [literary figure]
Shakespeare, William (*Macbeth*) S: 363
- Banshee** [Irish legend] B: 99
Fairy (What fairies look like) F: 10
- Bantam** [bird] B: 99
- Bantamweight**
Boxing (table) B: 530
- Banting, Sir Frederick Grant** (Canadian doctor) B: 99
Drug (The drug revolution) D: 359
Insulin (History) I: 308
- Banto faro** [geography]
Gambia (Land) G: 19
- Bantu** [people] B: 99 *with picture*
Africa (Languages) A: 104-105; (Southward migrations) A: 130
Bemba B: 246
Cameroon (History) C: 86
South Africa (Languages) So: 609-611, (History) So: 617
- Banu Hashim** [clan]
Muslims (Muhammad) M: 964-964a
- Banu Umayyeh** [clan]
Muslims (Muhammad) M: 964-964a
- Bañuelos, Romana Acosta** [American government official] B: 100 *with portrait*
- Banyan tree** [tree] B: 100 *with picture*
- Banzer Suarez, Hugo** [Bolivian political leader]
Bolivia (Recent developments) B: 447
- Bao Dai** [emperor of Vietnam]
Indochina (World War II) I: 225
Vietnam (The First Indochina War) V: 371
- Bao Ninh** [Vietnamese author]
Vietnam (The arts) V: 366-368
- Baobab** [tree] B: 100 *with pictures*
Africa *picture on* A: 123
Tree (Interesting facts about trees) T: 411 *with picture; picture on* T: 426
- Baphaeon, Battle of** [1310]
Osman I O: 865
- Baptism** [religion] B: 101 *with picture*
Baptists B: 101
Bath (Religious bathing) B: 164
Eastern Orthodox Churches (Sacraments) E: 46-47
Luther, Martin (The break with the Roman Catholic Church) L: 528
Lutherans (Doctrine) L: 529
Mormons (Church doctrines) M: 806-807
Pentecostal churches (Beliefs and practices) P: 275
Protestantism (Belief in sacraments) P: 834
Religion *picture on* R: 218
Roman Catholic Church (Worship) R: 404
- Baptism of Christ** [painting by Piero della Francesca]
Jesus Christ *picture on* J: 105
- Baptism of Christ, The** [painting by Verrocchio and Leonardo]
John the Baptist, Saint *picture on* J: 135
Leonardo da Vinci (Paintings) L: 200b
- Baptism of the King of Cashel by St. Patrick, The** [painting by Barry]
Patrick, Saint *picture on* P: 197
- Baptist Federation of Canada** [religious group]
Baptists (Baptists in America) B: 101
- Baptist Missionary Association of Texas** [religious group]
American Baptist Association A: 408
- Baptist World Alliance**
Baptists B: 101
- Baptistery** [Florence]
Ghiberti, Lorenzo G: 181
Sculpture (Kinds of sculpture) S: 230
- Baptists** [religious group] B: 101
American Baptist Association A: 408
American Baptist Churches in the U.S.A. A: 408
Protestantism (The free church movements [the 1500's and 1600's]) P: 835
- Bar** [law] B: 102
Inns of Court I: 276
Law (Licensing of lawyers) L: 139
- Bar** [music]
Music (Indicating time values) M: 953-954
- Bar** [unit of measure]
Air (Weight and pressure) A: 168
Barometer B: 115
Pascal P: 189
- Bar Association, American** *See* American Bar Association *in this index*
- Bar at the Folies Bergère** [painting by Manet]
Manet, Edouard M: 139 *with picture*
- Bar code sorter** [machine]
Postal services (Sorting) P: 703; *picture on* P: 704
- Bar coding** B: 102
Laser (Scanning) L: 82; *picture on* L: 81
- Bar graph**
Graph (Bar graphs) G: 322 *with pictures*
- Bar-headed goose**
Bird *picture on* B: 329
- Bar Kokhba** [Jewish warrior]
Akiva ben Joseph A: 254
Jerusalem (Roman rule) J: 101
- Bar magnet**
Magnetism (Magnetic fields) M: 59 *with picture; picture on* M: 60d
- Bar mill**
Iron and steel (Rolling) I: 447
- Bar mitzvah** [religion] B: 102
Judaism (Special occasions) J: 181; *picture on* J: 179
- Bar sheet**
Animation (Preliminary steps in animation) A: 511
- Bar soap**
Detergent and soap (Bar soaps) D: 164 *with picture*
- Bar steel**
Iron and steel (Rolling) I: 447 *with pictures*
- Barabbas** [Biblical figure] B: 102
Jesus Christ (The trial) J: 107-108
- Barajas International Airport**
Airport (table) A: 245
- Barak** [Israeli leader] B: 102 *with portrait*
Israel (Recent developments) I: 489
Sharon, Ariel S: 377
- Baraka, Amiri** [American author] B: 103 *with portrait*
American literature (The black experience) A: 423-424; (Drama) A: 425
- Barangay** [village]
Philippines (Local government) P: 373
- Baranof, Alexander** [Russian businessman]
Alaska (The Russian era) A: 301
- Baranof Island** [Alaska]
Sitka S: 477
- Bárány, Robert** [Austrian physiologist]
Nobel Prizes (Physiology or medicine: 1914) N: 444
- Baratynsky, Yevgeny** [Russian poet]
Russian literature (Early romanticism) R: 560-561
- Barb** [entomology]
Bee (Sting) B: 202
- Barb** [feather]
Bird (Feathers) B: 362
- Barbados** B: 103 *with picture and map*
Flag *picture on* F: 200
West Indies *picture on* W: 201
- Barbados aloe** [plant]
Aloe A: 380 *with picture*
- Barbados cherry** [fruit]
Acerola A: 24 *with picture*
- Barbara, Saint** [early Christian]
Madonna and Child (Painters of the Madonna) M: 37-38
- "Barbara Allen"** [song]
Allen, Barbara A: 371
Folk music (Kinds of folk music) F: 321
- "Barbara Frietchie"** [poem by Whittier]
Frietchie, Barbara F: 533
- Barbara Fritchie House and Museum**
Maryland *picture on* M: 248
- Barbarian** B: 104
Greece, Ancient G: 366
Middle Ages (The Germanic invasions) M: 523; (The Germanic kingdoms) M: 523
Theodoric T: 252
Vandals V: 278
World, History of the (Medieval Europe) W: 432
- Barbarossa** [Barbary pirate] B: 105
Algeria (Ottoman rule) A: 364
- Barbarossa** [Holy Roman emperor] *See* Frederick I [Holy Roman emperor] *in this index*
- Barbary ape** [animal] B: 105 *with picture*
Macaque M: 3
- Barbary pirates**
Barbary States B: 105
Libya (Early days) L: 267
Tripoli T: 448
- Barbary States** [North African history] B: 105 *with map*
Jefferson, Thomas (War with Tripoli) J: 84
- Barbasco** [drug]
Jivaro Indians J: 128
- Barbé-Marbois, François de** [French government official]
Louisiana Purchase (Napoleon's decision) L: 503
- Barbeeu, Mount** [Nunavut]
Nunavut (Land and resources) N: 608-609 *with map*
- Barbecue** [cooking] B: 106
Cooking (Broiling and grilling) Ci: 1028
- Barbed wire** B: 106
Cowboy (On the ranch) Ci: 1110
- Barbel** [zoology]
Bullhead B: 697 *with picture*
Catfish C: 300 *with pictures*
Loach L: 403
- Barbell** [weight]
Weightlifting W: 183 *with picture*
- Barber** B: 106
See also Hairdressing *in this index*
Careers (Personal services) C: 228
Scissors *picture on* S: 208
Surgery (History) So: 1007
- Barber, Amos W.** [American political leader]
Wyoming (table) W: 532
- Barber, John** [British engineer]
Turbine (History) T: 498-499
- Barber, Samuel** [American composer] B: 106
- Barber of Seville, The** [opera by Rossini]

- Opera (*Barber of Seville, The*) O: 801 *with picture*; (*Marriage of Figaro, The*) O: 805-806
Rossini, Gioacchino Antonio R: 484
Barber of Seville, The [play by Beaumarchais]
French literature (The Age of Reason) F: 520-521
Opera (*Marriage of Figaro, The*) O: 805-806
Barbera, Joseph [American animator]
Animation (Animation in the mid-1900's)
A: 514a
Barberry [shrub] B: 106 *with picture*
Rust R: 567
Barbershop harmony [music]
Barbershop quartet singing B: 107
Barbershop quartet singing B: 107
Barbican Centre [London]
London (The arts) L: 433 *with picture*
Barbie doll
Doll (Modern dolls) D: 292
Barbier, Charles [French military leader]
Braille B: 550
Barbier, Jules [French librettist]
Opera (*Faust*) O: 804
Barbirolli, Sir John [British conductor] B: 107
Barbital [drug]
Barbiturate B: 107
Barbiturate [drug] B: 107
Depressant D: 150
Drug (Antianxiety and hypnotic drugs) D: 352;
(The drug revolution) D: 359
Drug abuse (table: Some commonly abused
drugs) D: 363
Poison (Kinds of poisons) P: 601
Thiopental T: 258
Barbizon [France]
Barbizon School B: 107
Barbizon School [art] B: 107 *with picture*
Corot, Camille Ci: 1070
Inness, George I: 274
Millet, Jean François M: 555
Painting (Romanticism) P: 68
Barbon, Nicholas [English businessman]
Insurance (The growth of insurance) I: 316
Barbour, James [American political leader]
Adams, John Quincy (table) A: 43
Virginia (table) V: 417
Barbour, Philip P. [American jurist]
Supreme Court of the United States (table)
So: 1000
Barbs See *Barbiturate in this index*
Barbuda [island, West Indies]
Antigua and Barbuda A: 555 *with map*
Barbule
Feather (Kinds and parts of feathers) F: 59
with diagram
Barcarole [music] B: 108
Barcelona [Spain] B: 108 *with picture*
International trade *picture on* I: 348
Olympic Games (The recent games) O: 753
Barcelona chair
Bauhaus *picture on* B: 174
Furniture (The Bauhaus) F: 582-583 *with picture*
Barchester Towers [book by Trollope]
Trollope, Anthony T: 449
Bard [minstrel] B: 109
Homer (The Homeric question today) H: 303
Irish literature (Early Irish literature) I: 430
Minstrel M: 611
Bard, Philip [American physiologist]
Emotion (Early theories about emotions)
E: 261
"Bard, The" [poem by Gray]
Gray, Thomas G: 335
Bard of Stratford-upon-Avon, The See
Shakespeare, William *in this index*
Bardeen, John [American physicist] B: 109
Electricity (The electronic age) E: 198
Electronics (The solid-state revolution) E: 215;
picture on E: 216
Superconductivity So: 993
Bardiya [king of Persia]
Darius I D: 37
Bare-knuckle boxing [sports]
Boxing (The beginning of modern boxing)
B: 533 *with picture*
Bareback riding [sport]
Rodeo R: 397
Barefoot doctor
China (Health care) C: 485
Barefoot in the Park [play by Simon]
Simon, Neil S: 466
Barenboim, Daniel [Israeli musician] B: 109
with portrait
Barents, Willem [Dutch navigator] B: 109
Exploration (The search for a northern pas-
sage) E: 446
Barents Island [Arctic]
Svalbard So: 1013
Barents Sea [Arctic] B: 109
Baret, Jeanne [French explorer]
Exploration (Exploring the Pacific) E: 448
Barge [boat] B: 109 *with picture*
Inland waterway I: 273
Ship (Egyptian ships) S: 403-404; (Dry bulk
carriers) S: 420-421
Transportation (Water transportation) T: 384-
385; (Freight transportation) T: 394-395
with picture
Barge dog See *Schipperke in this index*
Bargello
Needlepoint N: 118
Barges on the Thames [painting by Derain]
Derain, André *picture on* D: 152
Bari [Italy] B: 110
Bari throne [sculpture]
Sculpture (The 1000's) S: 249 *with picture*
Barisan Mountains [volcanoes]
Indonesia (The Greater Sunda Islands) I: 233
Barite [mineral]
Barium B: 110
Crystal (Classifying crystals) Ci: 1166-1167
with picture
Barito River
Borneo (The land and its resources) B: 489
Baritone [music] B: 110
Opera (The singers) O: 792
Singing (Voice classification) S: 472
Baritone horn [musical instrument]
Music (Wind instruments) M: 949-950; *picture on* M: 949
Barium [element] B: 110
Barium carbonate [chemical]
Barium B: 110
Barium ferrite [chemical]
Barium B: 110
Barium nitrate [chemical]
Barium B: 110
Saltpeter S: 76a
Barium oxide [chemical]
Barium B: 110
Saltpeter S: 76a
Barium sulfate [chemical]
Barium B: 110
Barium test [medicine]
Barium B: 110
Barium titanate [chemical]
Titanium (Uses) T: 300
Bark [botany] B: 110 *with diagram*
Birch B: 327 *with pictures*
Cork (The tree) Ci: 1054
Lentical L: 196b
Tree (Trunk and branches) T: 416 *with diagram*
Bark beetle [insect]
Dutch elm disease D: 392 *with picture*
Elm (Diseases) E: 245
Forestry (Diseases and pests) F: 407
Bark grafting
Grafting (Kinds of grafting) G: 298 *with picture*
Bark painting [art]
Australia (Painting) A: 906 *with picture*
Barker, Pat [British author]
English literature (Recent English fiction)
E: 323
Barkerville Historic Park
British Columbia (Places to visit) B: 620 *with picture*
Barking
Dog (Behavior) D: 277
Barking deer [animal] See *Muntjac in this index*
Barking frog [animal]
Frog (Other frogs) F: 540
Barking Sands [Hawaii]
Hawaii (Places to visit) H: 98
Barkla, Charles [British physicist]
Nobel Prizes (Physics: 1917) N: 440
Barkley, Alben William [American political leader] B: 111 *with portrait*
Truman, Harry S. (Election of 1948) T: 470
Vice President of the United States V: 349
with portrait
Barkley, Charles [American basketball player]
B: 111 *with portrait*
Barlach, Ernst Heinrich [German sculptor]
B: 112
Barleeia snail
Shell (Gastropods) S: 385-388
Barley [plant] B: 112 *with pictures*
Alcoholic beverage (Beer) A: 336
Brewing (Malting) B: 595
Malt M: 112
Barlick, Al [American baseball player]
Baseball (table: Hall of Fame) B: 134
Barlow's disease
Scurvy S: 261
Barm [yeast]
Yeast (How yeast is made) Y: 555
Barn B: 113 *with picture*
Cattle *picture on* C: 307
Dairying (Housing) D: 6-7
"Barn Dance" [radio program]
Country music (Early commercial success)
Ci: 1098b
Barn-door skate [sea animal]
Skate S: 479
Barn owl [bird]
Owl (Important owls) O: 884 *with picture*
Barn swallow [bird]
Swallow So: 1014 *with picture*
Barnabas [Biblical figure] B: 113
Mark, Saint M: 213
Paul, Saint (Missionary career) P: 200
Barnaby Rudge [book by Dickens]
Dickens, Charles (The first phase) D: 188
Barnacle [sea animal] B: 113 *with pictures*
Crustacean *picture on* C: 1163
Larva L: 78
Ocean *picture on* O: 656
Barnard, Christian Neethling [South African doctor] B: 114
Heart (The first heart transplants and artificial hearts) H: 145
Surgery (History) So: 1007-1008
Barnard, Edward Emerson [American astronomer] B: 114
Barnard, Frederick Augustus Porter [American educator] B: 114
Barnard, George Grey [American sculptor]
Sculpture (American sculpture) S: 255-256
Barnard College
Barnard, Frederick Augustus Porter B: 114
Columbia University (Affiliated institutions)
Ci: 853
Barnard's Star [star]
Star (table: The 10 known stars nearest Earth)
So: 843
Barnburners [U.S. history] B: 114
Free Soil Party F: 499
Barnegat Lighthouse
New Jersey (Places to visit) N: 240
Barnes, Julian [British author]
Novel (The novel today) N: 575
Barnes, Roy [American political leader]
Georgia (table) G: 130
Barnes icecap
Icecap I: 19
Barnet, Battle of [1471]
Henry VI [of England] H: 187
Barnett, Ross R. [American political leader]
Mississippi (table) M: 640
Barnett, William [British inventor]
Gasoline engine (Development of the gasoline engine) G: 66
Barney's Version [book by Richler]
Richler, Mordecai R: 331
Barnstorming [aviation]
Airplane (The golden age) A: 235
Barnum, P. T. [American businessman] B: 115
with portrait
Bridgeport B: 606
Circus (The Greatest Show on Earth) Ci: 563
Stratton, Charles Sherwood So: 921
United States, History of the (Cultural change)
U: 169-170
Barnum & Bailey Circus
Barnum, P. T. B: 115
Circus (The circus goes international) Ci: 563-564
Ringling brothers R: 343
Barnum and Bailey's Favorite [song by King]
King, Karl K: 320
Barnum Museum [Connecticut]
Circus (Places to visit and annual events)
Ci: 566
Barograph [measuring device]
Barometer (Kinds of barometers) B: 115-116
Baroja, Pio [Spanish author]
Spanish literature (The Generation of 1898)
So: 762
Barometer [measuring device] B: 115 *with diagrams*

Air (Weight and pressure) **A: 168**
 Hydraulics (Use of hydrostatic principles)
H: 463
 Weather (Land-based observation stations)
W: 162

Barometer Rising [book by MacLennan]
 MacLennan, Hugh **M: 25**

Baron [title] **B: 116**
 Magna Carta (Reasons for the charter) **M: 53**
 Nobility (In the United Kingdom) **N: 450**

Baron Munchausen's Narrative [book]
 Munchausen, Baron **M: 926**

Baron Scarpia [opera character]
 Opera (*Tosca*) **O: 807**

Baroness [title]
 Baron **B: 116**
 Lady **L: 25**
 Nobility (In the United Kingdom) **N: 450**

Baronet [title]
 Baron **B: 116**

Barong tagalog [clothing]
 Philippines (Way of life) **P: 374-375**

Baroque [arts] **B: 116**
 Architecture (Baroque architecture) **A: 622**
 Austria (The arts) **A: 932-933**
 Bach, Johann Sebastian **B: 15**
 Bernini, Gian Lorenzo **B: 271**
 Borromini, Francesco **B: 491**
 Classical music (The Baroque period) **Ci: 647**
 Europe (Art since the Renaissance) **E: 393**
 German literature (Baroque literature) **G: 140**
 Italian literature (The baroque period and the Age of Reason) **I: 494**
 Italy (Arts) **I: 504 with picture**
 Latin America (Architecture) **L: 101 with picture**
 Latin American literature (Colonial literature)
L: 111
 Opera (Baroque opera) **O: 797**
 Painting (The 1600's and 1700's) **P: 58 with pictures**
 Rococo **R: 396**
 Sculpture (European sculpture) **S: 253 with picture**
 Spanish literature (The 1600's) **So: 759**

Baroque pearl
 Pearl (Shape) **P: 217**

Barossa Valley [region, Australia] **B: 117**

Barotrauma [disorder]
 Diving, Underwater (Dangers of underwater diving) **D: 246**

Barquisimeto [city, Venezuela] **B: 117**

Barr, Joseph W. [American government official]
 Treasury, Department of the (table) **T: 407**

Barr, William P. [American government official]
 Justice, Department of (table) **J: 203**

Barrack-Room Ballads [book by Kipling]
 Kipling, Rudyard (Early literary success) **K: 334**

Barracuda [fish] **B: 117 with picture**
 Fish picture on **F: 153**

Barrage balloon
 Balloon (Balloons in war) **B: 61 with picture**

Barranca del Cobre [canyon, Mexico]
 Mexico (The Plateau of Mexico) **M: 460-462**

Barras, Vicomte de [French political leader]
 Josephine **J: 168**

Barraclough, I. (The "whiff of grapeshot") **N: 15**

Barrett's Chapel
 Delaware (Places to visit) **D: 102 with picture**

Barraut, Jean-Louis [French actor] **B: 118**

Barre [ballet]
 Ballet (The ballet studio) **B: 46 with picture**

Barre
 Vermont (Places to visit) **V: 326, (Mining)**
V: 332 with picture

Barre, Mohamed Sied [Somalian military leader]
 Somalia (History) **So: 589**

Barred antshrike [bird]
 Bird (Birds of Central and South America)
B: 345 with picture

Barred feather
 Chicken (Kinds of chickens) **C: 441**

Barred owl [bird]
 Owl (Important owls) **O: 884**

Barred spiral galaxy [astronomy]
 Milky Way (Shape of the galaxy) **M: 550**

Barrel [container] **B: 118 with diagrams**

Barrel [gun]
 Firearm (Mechanism) **F: 132 with diagrams**
 Handgun (Parts of a handgun) **H: 43 with pictures**

Barrel [unit of measure]
 Rifle (The parts of a rifle) **R: 338 with diagram**

Barrel [unit of measure]
 Barrel **B: 118**

Petroleum (table) **P: 331**

Weights and measures (Miscellaneous weights and measures) **W: 184**

Barrel burnishing [industrial process]
 Aluminum (Mechanical finishes) **A: 396**

Barrel cactus [plant]
 Cactus (Kinds of cactuses) **C: 10 with picture**

Barrel organ [musical instrument]
 Hand organ **H: 41**

Barrel racing
 Rodeo (Barrel racing) **R: 397 with picture**

Barrel sponge [animal]
 Deep sea (Invertebrates) **D: 82a with picture**

Barrel vault [architecture]
 Vault **V: 291**

Barren ground caribou [animal]
 Caribou **C: 237**

Barren ground caribou [animal]
 Mammal picture on **M: 125**

Barren Lives [book by Ramos]
 Latin-American literature (The early 1900's)
L: 113

Barrera
 Bullfighting (The bullring) **B: 695**

Barrett, David [Canadian political leader]
 British Columbia (table) **B: 627; (The late**

1900's) **B: 630**

Barrett, Elizabeth See Browning, Elizabeth
 Barrett in this index

Barrett, Frank A. [American political leader]
 Wyoming (table) **W: 532**

Berrette, Antonio [Canadian political leader]
 Quebec (table) **Q: 29**

Berrie, J. M. [Scottish author] **B: 118**

Berrier beach
 Beach **B: 178**

Berrier island
 Island (Kinds of islands) **I: 471 with diagram**

Berrier reef [Australia] See Great Barrier Reef in this index

Berrier reef [geology]
 Coral reef (Kinds of coral reefs) **Ci: 1048a**

Berringer, Daniel M. [American engineer]
 Meteor Crater **M: 432**

Barringer Crater See Meteor Crater in this index

Berrio [district]
 Hispanic Americans (Conflict) **H: 251-252**

Berrio [district]
 Los Angeles (East Los Angeles) **L: 461-462**

Barrios, Justo Rufino [Guatemalan political leader] **B: 118**

Barrios, Justo Rufino [Guatemalan political leader] **B: 118**

Barrister [law]
 Lawyer **L: 147**

Barron, James [American military leader] **B: 119**

Barron, James [American military leader] **B: 119**

Barron, William Wallace [American political leader]
 West Virginia (table) **W: 225**

Barrow [Alaska]
 Alaska (table) **A: 295**

Barrow [animal]
 Hog (table) **H: 284**

Barrow, Edward G. [American sportsman]
 Baseball (table: Hall of Fame) **B: 134**

Barrow, Errol W. [Barbadian political leader]
 Barbados (History) **B: 104**

Barrow, Joe Louis See Louis, Joe in this index

Barrows, Lewis O. [American political leader]
 Maine (table) **M: 87**

Barry [design]
 Heraldry picture on **H: 195**

Barry, Sir Charles [British architect]
 Architecture (The Gothic Revival) **A: 626**

Barry, James [British artist]
 Patrick, Saint picture on **P: 197**

Berry, John [American military leader] **B: 119**

Berry, John S. [American political leader]
 Michigan (table) **M: 507**

Berry, Marion S., Jr. [American political leader]
 Kelly, Sharon Pratt **K: 257**

Berry, Philip [American dramatist] **B: 119**

Berry, William T. [American government official]
 Jackson, Andrew (table) **J: 11**

Barrymore [family] **B: 119 with picture**

Barrymore, Diana [American actress]
 Barrymore **B: 119**

Barrymore, Drew [American actress]
 Barrymore **B: 119**

Barrymore, Ethel [American actress] **B: 119**
 with picture
 Motion picture (Best performance by an

actress in a supporting role: 1944) **M: 863**

Barrymore, John [American actor] **B: 119 with picture**

Barrymore, Lionel [American actor] **B: 119 with picture**

Motion picture (Best performance by an actor: 1930-31) **M: 862**

Barrymore, Maurice [American actor]
 Barrymore **B: 119**

"Bars Fight" [poem by Terry]
 African American literature (Early works)
A: 136a

"Bersetshire Novels" [books by Trollope]
 Trollope, Anthony **T: 449**

Berstow, John L. [American political leader]
 Vermont (table) **V: 333**

Bartow, William A. [American political leader]
 Wisconsin (table) **W: 365**

BART See Bay Area Rapid Transit System in this index

Barter [economics] **B: 120**

Colonial life in America (Money) **Ci: 811**

Egypt, Ancient (Work of the people) **E: 138**

Money **M: 704; (How money developed)**
M: 705

Trade (The use of money) **T: 362**

Trading post **T: 366**

Barter sale [transaction]
 Television (Commercial stations) **T: 114-115**

Barth, John [American author] **B: 120**

American literature (Experimental styles)
A: 424

Barth, Karl [Swiss theologian] **B: 120**

Bartheleme, Donald [American author]
 American literature (Experimental styles)
A: 424

Bartholdi, Auguste-Charlotte [French model]
 Statue of Liberty picture on **So: 874**

Bartholdi, Frédéric Auguste [French sculptor]
 B: 120

Statue of Liberty (History) **So: 876; picture on**
So: 874

Bartholomew, Saint [apostle] **B: 120**

Bartholomew Fair [English history]
 Doll (The Middle Ages) **D: 288**

Bartholomew's Day Massacre See Saint
 Bartholomew's Day, Massacre of in this index

Bartle Frere, Mount [mountain]
 Queensland (Location, size, and surface features) **Q: 39**

Bartleson, John [American pioneer]
 California (American settlement) **C: 60**

Bartlett, Dewey F. [American political leader]
 Oklahoma (table) **O: 730**

Bartlett, Edward Lewis [American political leader] **B: 120**

Bartlett, Jennifer [American artist]
 Painting (New image painting) **P: 87**

Bartlett, John [American publisher] **B: 120**

Bartlett, John H. [American political leader]
 New Hampshire (table) **N: 223**

Bartlett, Josiah [American patriot] **B: 121**

Bartlett, Robert Abram [Canadian-American explorer] **B: 121**

Bartlett, Washington [American political leader]
 California (table) **C: 59**

Bartlett Square
 Oklahoma picture on **O: 716**

Bartley, Mordecai [American political leader]
 Ohio (table) **O: 699**

Bartley, Thomas W. [American political leader]
 Ohio (table) **O: 699**

Bartók, Béla [Hungarian composer] **B: 121**

Classical music (The 1900's) **Ci: 649**

Hungary (The arts) **H: 442**

Kodály, Zoltán **K: 360**

Bartoletti, Bruno [Italian conductor]
 Opera picture on **O: 793**

Bartolo, Doctor [literary figure]
 Opera (*Barber of Seville, The*) **O: 801 with picture**

Barton, Andrew [American composer]
 Yankee Doodle **Y: 552**

Barton, Bruce [American author]
 Roaring Twenties (Rising prosperity) **R: 363**

Barton, Clara [American nurse] **B: 121 with portrait**

Civil War (Hospitals) **Ci: 630-631**

Red Cross (In the United States) **R: 187**

Barton, Sir Derek [British chemist]
 Nobel Prizes (Chemistry: 1969) **N: 443**

Barton, Edmund [Australian political leader]

- Australia (table) A: 925
- Barton, George E.** [American architect]
Occupational therapy (History) O: 649
- Barton, Otis** [American diver]
Exploration (Deep-sea exploration) E: 451
- Barton, William** [American heraldist]
Great Seal of the United States G: 348
- Barton, William H.** [Canadian statesman]
United Nations (table) U: 86
- Bartram, John** [American botanist]
Colonial life in America (Science) Ci: 808-809
- Barú, Volcán** [mountain, Panama]
Panama (The Central Highland) P: 119
- Baruch** [Old Testament]
Bible (Development of the Christian Old Testament) B: 282
- Baruch, Bernard Mannes** [American government official] B: 122
World War I (The United States enters the war) W: 462
- Barya saltpeper** See Barium nitrate in *this index*
- Barycenter** [astronomy]
Earth (Earth and its moon) E: 18
Solar system (Our solar system) So: 580
- Barye, Antoine Louis** [French artist] B: 122
Minotaur picture on M: 611
- Baryon** [physics] B: 122
Hadron H: 4
Quark Q: 7
Subatomic particle (Composite particles) So: 937
- Baryonyx** [dinosaur] B: 122
- Baryshnikov, Mikhail** [Soviet-born dancer]
B: 122 with picture
Ballet (Ballet in Russia) B: 52-53 with picture
- Barzun, Jacques** [American educator] B: 123
Baseball (The 1900's) B: 135
- Bas-relief** [art]
Assyria picture on A: 821
Cameo C: 80
Drama picture on D: 327
Relief R: 213
- Basal cell** [anatomy]
Skin (Epidermis) S: 489 with picture
- Basal cell cancer** [disease]
Skin cancer (Nonmelanoma skin cancer) S: 492
- Basal ganglia** [anatomy]
Brain (In controlling movement) B: 553; (In vertebrates) B: 559
Lesch-Nyhan syndrome L: 205
- Basal metabolic rate** [physiology]
Metabolism (Control of metabolism) M: 424
- Basal reader** [textbook]
Reading (The developmental method) R: 157
- Basalt** [china]
Wedgwood ware W: 179
- Basalt** [geology] B: 123
Earth (The lithosphere) E: 20
Giant's Causeway picture on G: 184
Igneous rock I: 48
Mars (Crust) M: 225
Moon (Origin and evolution of the moon) M: 788; picture on M: 790
Ocean (How the sea floor was formed) O: 662
Rock (Extrusive rock) R: 371; (table) R: 373 with picture
- Basaltic glass** [mineral]
Sand S: 106
- Basaltic magma** [material]
Moon (Mantle) M: 791
- Basarwa** [people] See San in *this index*
- Basaseachic Falls** [waterfall, Mexico]
Waterfall (table: Famous waterfalls of North America) W: 142
- Bascarsija** [area]
Bosnia-Herzegovina picture on B: 494
- Basch, Samuel Siegfried von** [Austrian physician]
Heart (Invention of new medical instruments) H: 144
- Bascio, Matteo da** [Italian religious leader]
Capuchins C: 200
- Bascule bridge** [construction]
Bridge (Moveable bridges) B: 602 with diagram
- Base** [baseball]
Baseball (The infield) B: 126 with diagrams
- Base** [chemistry] B: 123
Heredity (The flow of genetic information) H: 205
Hydroxide H: 473
Litmus L: 391
Molecular biology (The beginning of molecular biology) M: 691-692
Neutralization N: 154
pH P: 353
- Base** [electronics]
Transistor (How transistors work) T: 373 with diagram
- Base** [genetics]
DNA D: 258
Genetic engineering (How genes are reintroduced into cells) G: 84a
Genetic testing (How genes carry information) G: 85
Heredity (The structure of DNA) H: 205
Human Genome Project H: 427
- Base** [geometry]
Cylinder Ci: 1204 with picture
- Base** [mathematics]
Numeration systems N: 605
Logarithms L: 424
Power P: 728
- Base ball** [name for]
Baseball (From rounders to baseball) B: 132
- Base-burner shell**
Ammunition (Artillery ammunition) A: 435
- Base charge** [explosives]
Detonator D: 167
- Base community** [religion]
Liberation theology L: 228
- Base data** [cartography]
Map (Observation and measurement) M: 180
- Base exchange** [store]
Post exchange P: 699
- Base hit** [baseball]
Baseball (Reaching base) B: 129; (table: Modern major league records) B: 137
- Base line** [surveying]
Public lands (Management of public lands) P: 858
- Base metal**
Alloy A: 377
- Base on balls** [baseball]
Baseball (Reaching base) B: 129; (Rule changes) B: 133
- Base pairs** [genetics]
DNA D: 258
Genetic engineering (How genes are reintroduced into cells) G: 84a with diagram
Heredity (The structure of DNA) H: 205-206
Watson, James Dewey W: 147
- Base period** [economics]
Parity [economics] P: 167
- Base quantity** [measurement]
Metric system (Structure of the metric system) M: 437
- Base running** [baseball]
Baseball (Base running) B: 128; (Base runners—advancing and outs) B: 129 with picture
- Base-ten system** [mathematics]
See also Decimal system in *this index*
Decimal system D: 70
Numeration systems (Kinds of numeration systems) N: 605; (The Egyptian numeral system) N: 607; (The Greek numeral system) N: 607; (The Hindu-Arabic numeral system) N: 607
- Base-twenty system** [mathematics]
Numeration systems (The Maya numeral system) N: 607
- Base unit** [measurement]
Metric system (Kinds of metric units) M: 436
- Base word** [language]
Spelling (Base words) So: 776
- Baseball** [ball]
Baseball (Equipment) B: 125 with diagram
- Baseball** [sport] B: 124 with pictures
Cuba (Recreation) Ci: 1171 with picture
Doubleday, Abner D: 312
Glove picture on G: 235
Indiana (Interesting facts) I: 197
Little League Baseball L: 391
Shoe (Kinds of shoes) S: 431
Softball So: 571
United States picture on U: 115
See also the list of Related Articles in the Baseball article
- Baseball Congress, National**
Baseball (Amateur leagues) B: 131
- Baseball Hall of Fame** [Cooperstown, New York]
Baseball (table: Hall of Fame) B: 134
Cooperstown Ci: 1037 with picture
Hall of fame (Sports halls of fame) H: 22, picture on H: 24
- New York (Places to visit) N: 302; picture on N: 296
- Baseball Players Association, Major League**
Labor movement (table) L: 8
- Baseburner** [range]
Range (History) R: 138 with picture
- Basel** [city, Switzerland] B: 140
- Baselitz, Georg** [German artist]
Painting (Neoclassicism) P: 87 with picture
- Basement** [architecture]
House (The foundation) H: 380; diagram on H: 383
- Basenji** [dog] B: 140
Dog picture on D: 271
- BASF** [company]
Manufacturing (table) M: 170
- Bashford, Coles** [American political leader]
Wisconsin (table) W: 365; (Statehood) W: 366
- BASIC** [computer language]
Computer (Using programming languages) Ci: 923
- Basic chemical** [industry]
Chemistry (The chemical industry) C: 405
- Basic Exchange Telephone Radio Service**
Telephone (Wireless telephone equipment) T: 97
- Basic exemption** [economics]
Flat tax F: 228
- Basic Law** [1997]
Hong Kong (Government) H: 319; (The return to Chinese rule) H: 320
- Basic oxygen process** [manufacturing]
Iron and steel (The basic oxygen process [BOP]) I: 443 with diagrams
Oxygen (Other uses of oxygen) O: 889
- Basic training** [military]
Air Force, United States (Recruit training) A: 188
Army, United States (Training a soldier) A: 731 with picture
Coast Guard, United States (Training a recruit) Ci: 736
Marine Corps, United States (Training a Marine) M: 206
Navy, United States (Training a sailor) N: 83
- Basic Training of Pavlo Hummel, The** [play by Rabe]
American literature (Drama) A: 425
- Basic transport airport**
Airport (General aviation airports) A: 243
- Basic utility airport**
Airport (General aviation airports) A: 243
- Basidium** [botany]
Mushroom (Parts of a mushroom) M: 941; pictures on M: 942
- Basie, Count** [American bandleader] B: 140
Jazz picture on J: 68
- Basil** [plant] B: 140
- Basil I** [Byzantine emperor]
Byzantine Empire (Invasion and conquest) B: 754
- Basil II** [Byzantine emperor]
Bulgaria (The first Bulgarian kingdom) B: 692
Byzantine Empire (Invasion and conquest) B: 754
- Basil, Saint** [early Christian] B: 140
Monasticism (Christian monasticism) M: 700-701
Religious life (Religious life in early Christianity) R: 226
- Basilar membrane** [anatomy]
Ear (The inner ear) E: 8-9 with diagram; diagram on E: 10
- Basilica** [architecture] B: 140
Architecture (Medieval architecture) A: 617 with picture
Church C: 541
- Basilica Aemilia** [ruins]
Forum, Roman F: 420 with picture
- Basilica Julia** [ruins]
Forum, Roman F: 420 with picture
- Basilica of ...**
Basilicas appear under their key words, as in Constantine, Basilica of
- Basilique Notre-Dame**
Quebec (Churches) Q: 36
Montreal picture on M: 775
- Basin** [geography] B: 140
Moon (Basins) M: 789; (Determining the origin of craters) M: 793-794
River R: 351
- Basin Head Fisheries Museum** [Prince Edward Island]

Prince Edward Island (Places to visit) P: 788

Basin irrigation [agriculture]

Egypt (Agriculture) E: 128

Basin Park Hotel [Eureka Springs]

Arkansas (Interesting facts about Arkansas)
A: 695

Basinger, Kim [American actress]

Motion picture (Best performance by an actress in a supporting role: 1997) M: 863

Basis of Union [document]

United Church of Canada (Doctrine and organization) U: 46

Baskerville [type face]

Baskerville, John B: 141

Type pictures on T: 536

Baskerville, John [British printer] B: 141

Book (The 1600's and 1700's) B: 467

Basket See Basket making in this index

Basket [sports]

Basketball (The court) B: 143 with picture

Basket Makers [people]

Nevada (Indian days) N: 173

Basket making B: 141 with pictures

Indian, American (Basketry) I: 145; (Before European contact) I: 163-164; pictures on I: 138, I: 139, I: 140, I: 145

Weaving (The plain weave) W: 173

Willow W: 314

Basket stitch

Knitting picture on K: 354

Basket willow [plant]

Osier O: 863

Basketball [sport] B: 143 with pictures

China picture on C: 486

Indian, American (Recreation) I: 142

Knight, Bob K: 346

Luisetti, Hank L: 516

Naismith, James N: 4

Olympic Games (The recent games) O: 753

Shoe (Kinds of shoes) S: 431

Basketball Hall of Fame [Massachusetts]

Basketball (Basketball today) B: 155

Hall of fame (Sports halls of fame) H: 22

Springfield (Description) So: 807-808

Basketry See Basket making in this index

Basketweave stitch

Needlepoint N: 118

Baskin, Leonard [American artist] B: 155

Basking shark [fish]

Shark (Kinds of sharks) S: 375

Basmachis [people]

Tajikistan (History) T: 18b

Besophil [cell]

Blood (Protecting against disease) B: 410

Immune system (Allergies) I: 88c

Basotho [people]

Lesotho (People) L: 206

Basotho Congress Party

Lesotho (History) L: 207-208

Basov, Nikolai Gennadievich [Russian physicist] B: 155

Laser (History) L: 86

Prokhorov, Alexander Mikhailovich P: 817

Basques [people] B: 156

Boise B: 440

Charlemagne (Military conquests) C: 378-379

Gascony G: 60

Spain (Language) picture on So: 733, (Growth and discontent) So: 751, (Political changes) So: 751

Whale (The Basque people) W: 262

Basquiat, Jean-Michel [American artist]

Painting (Recent painting) P: 87-88 with picture

Basra [Iraq] See Al Basrah in this index

Bass [fish] B: 156 with pictures

Fish F: 153

Bass [singing]

Opera (The singers) O: 792

Singing (Voice classification) S: 472

Bass [musical instrument] B: 157 with picture

Jazz (The bass) J: 69 with picture

Music (Stringed instruments) M: 948-949 with picture

Bass, George [British explorer]

Australia (Exploring the new land) A: 922 with map

Victoria (History) V: 357

Bass, Robert P. [American political leader]

New Hampshire (table) N: 223

Bass, Sam [American bandit] B: 157

Texas (Conquering the frontier) T: 207

Western frontier life in America (Crime)
W: 238-239

Bass-bar [music]

Violin (Parts of the violin) V: 389

Bass clef [music]

Music (Indicating pitch) M: 953 with picture

Bass drum [musical instrument]

Drum D: 367

Bass flute [musical instrument]

Flute F: 307

Jazz (New directions) J: 73

Bass Strait [Australia-Tasmania]

Tasmania (Location, size, and description)

T: 49

Bass trombone [musical instrument]

Trombone T: 450

Bass viol [musical instrument] See Bass in this index

Bassa [people]

Liberia (People) L: 229

Basse-taille [art]

Enamel (Techniques) E: 265

Basse-Terre [city, Guadeloupe] B: 157

Basse-Terre [island, West Indies]

Guadeloupe G: 408

Basset hound [dog] B: 157

Dog picture on D: 271

Basseterre [city, West Indies]

Saint Kitts and Nevis S: 38 with picture

Bassett, Richard [American political leader]

B: 158

Delaware (table) D: 109

Basso buffo [music]

Opera (The singers) O: 792

Basso cantante [music]

Opera (The singers) O: 792

Basso continuo [music]

Bach, Johann Sebastian (His works) B: 16

Classical music (The Baroque period) Ci: 647

Orchestra (Beginnings) O: 822

Basso Narak [former name]

Lake Turkana L: 47

Bassoon [musical instrument] B: 158 with pictures

Music (Wind instruments) M: 949 with picture

Basswood [tree] See Linden in this index

Bast [Egyptian mythology]

Cat (History) C: 296

Bast [fiber] B: 158

Bastarache, Michel [Canadian jurist]

Supreme Court of Canada (table) So: 997 with portrait

Baste [cooking]

Cooking (table) Ci: 1029

Bastet [Egyptian mythology]

Cat (History) C: 296

Bastia [city, Corsica]

Corsica (Size and description) Ci: 1073 with map

Bastian, Adolf [German anthropologist]

Anthropology (Development of field research)
A: 548

Bastidas, Rodrigo de [Spanish explorer]

Panama (The Spanish colonial period) P: 120

Santa Marta S: 115

Bastille [French history] B: 158 with picture

France (The French Revolution) F: 474 with picture

French Revolution (The revolution begins)
F: 525

World, History of the picture on W: 443

Bastille Day [holiday] B: 158 with picture

France (Holidays) F: 460 with picture

Basting [stitch]

Sewing (Hand stitches) S: 332

Basuto [people]

Lesotho (People) L: 206

Basutoland

Lesotho (History) L: 207-208

Basutoland National Party [political party]

Lesotho (History) L: 207-208

Bat [animal] B: 159 with pictures

Animal pictures on A: 483, A: 492

Ear (The ears of animals) E: 12 with picture

Hand (Animal hands) H: 40

Mammal (In the air) M: 122 with diagram;
(table) M: 128 with picture; picture on
M: 117

Vampire bat V: 268 with picture

Bat [sports]

Baseball (Equipment) B: 125

Cricket (Equipment) Ci: 1131-1132 with picture

Bat [weapon]

Guided missile (The first guided missiles)
G: 427

Bat-eared fox [animal]

Fox (Bat-eared foxes) F: 441

Bat mitzvah [religion] B: 162

Judaism (Special occasions) J: 181

Bataan Death March [World War II]

World War II (The war in Asia and the Pacific)

W: 486 with picture

Bataan Peninsula [region, Philippines] B: 162

with maps

MacArthur, Douglas (World War II) M: 3

World War II (The war in Asia and the Pacific)

W: 486

Batak [people]

Indonesia (Rural life) I: 229

Batalha [Portugal]

Portugal picture on P: 690

Batavia [former name]

Jakarta (History) J: 22-23

Batavian Republic [Dutch history]

Netherlands (The 1700's) N: 149

Batch freezer [machine]

Ice cream (How ice cream is made) I: 8

Batch furnace [machine]

Furnace (Heating the charge) F: 567

Batchelder, Nahum J. [American political leader]

New Hampshire (table) N: 223

Bate, William B. [American political leader]

Tennessee (table) T: 152

"Bateau ivre, Le" [poem by Rimbaud]

Rimbaud, Arthur R: 341

Bateau Lavoir [building]

Picasso, Pablo (The Blue Period) P: 448a

Batéké [people]

Congo (Brazzaville) (People) Ci: 939

Batéké Plateau [region]

Congo (Brazzaville) (Land) Ci: 939 with map

Bates, Daisy [American social reformer]

Spingarn Medal (table: 1958) So: 793

Bates, Edward [American government official]

Emancipation Proclamation picture on E: 254

Justice, Department of (table) J: 203

Lincoln, Abraham (table) L: 323

Bates, Frederick [American political leader]

Missouri (table) M: 668

Bates, Henry Walter [British naturalist] B: 162

Animal (Camouflage) A: 493-496

Bates, John L. [American political leader]

Massachusetts (table) M: 288

Bates, Katharine Lee [American poet] B: 163

America the Beautiful A: 407

Bates, Kathy [American actress]

Motion picture (Best performance by an actress: 1990) M: 862

Batesian mimicry [zoology]

Animal (Camouflage) A: 493-496

Protective coloration P: 831

Bates, Henry Walter B: 162

Bath [England] B: 163

Georgian architecture G: 136

Bath [North Carolina]

North Carolina (Colonial days) N: 492

Bath [hygiene] B: 163 with pictures

Baby (Bathing the baby) B: 10 with picture

Dog (Grooming) D: 278

Hydrotherapy H: 472 with picture

Indus Valley civilization picture on I: 241

Rome (Baths) R: 433

Sauna S: 163

Space exploration (Meeting basic needs in space) So: 703

Turkish bath T: 514

Bath, Order of the [award] B: 165

Knighthood, Orders of (Honorary orders)
K: 347 with pictures

Bath, The [painting by Cassatt]

Cassatt, Mary picture on C: 275

Painting (New visual sources) P: 72

Bath Iron Works [Maine]

Maine (Transportation) M: 86 with picture

Bath sponge

Sponge So: 799; (Skeleton) So: 799

Bathurs [painting by Fragonard]

Painting (Rococo painting) P: 65-66 with picture

Bathing See Bath in this index

Bathroom

Safety (In the bathroom) S: 10 with picture

Baths of Caracalla [ruins]

Architecture

David (King of Israel) D: 45
Solomon So: 584

Bathtub
Bath (History) B: 164-165 *with pictures*

Bathurst [Gambia]
Banjul B: 87

Bathyscaph [diving vessel] B: 165
Diving, Underwater (Diving in vehicles) D: 246
Exploration (Deep-sea exploration) E: 451
Pacific Ocean (Scientific research) P: 15
Piccard, Auguste P: 450

Bathysphere [diving vessel]
Diving, Underwater (Diving in vehicles) D: 246
Exploration (Deep-sea exploration) E: 451

Batik [craft] B: 165 *with picture*
Indonesia (The arts) I: 232-233
Malaysia (Clothing) M: 98d
Thailand (Way of life) T: 222

Bating [industrial process]
Leather (Preparing the hides) L: 167

Batista y Zaldivar, Fulgencio [Cuban political leader] B: 166
Castro, Fidel C: 283
Cuba Ci: 1168; (History) Ci: 1175-1177 *with picture*

Batle, Jorge [Uruguayan political leader]
Uruguay (Recent developments) U: 228-229

Battle y Ordóñez, José [Uruguayan political leader]
Uruguay (Reforms in the early 1900's) U: 228

Batman, John [Australian pioneer]
Melbourne (History) M: 389

Batoche National Historic Site [Saskatchewan]
Canada (table: National historic sites) C: 114

Baton [sports]
Baton twirling B: 167

Baton Rouge [Louisiana] B: 166 *with picture*
Louisiana L: 478; *picture on* L: 479

Baton twirling B: 167 *with picture*

Batsman
Cricket Ci: 1131; (The batting side) Ci: 1133-1134 *with picture*

Batt, Phil [American political leader]
Idaho (table) I: 42

Batt insulation
Insulation (In buildings) I: 306 *with picture*

Battalion
Fire Department (Paid departments) F: 128

Battalion [military]
Army (The organization of armies) A: 724-725
Army, United States (table) A: 737
Infantry (Divisions) I: 265

Battelle Memorial Institute [Ohio] B: 167
Columbus (Economy) Ci: 855

Batten [scenery]
Theater (Kinds of scenery) T: 239-240

Battenberg [German history] B: 167

Batter [sports]
Baseball (Batting) B: 128 *with pictures*

Battered child syndrome
Child abuse C: 455

Battering ram [munitions] B: 167 *with picture*

Batter's box [baseball]
Baseball (The infield) B: 126 *with diagram*

Battersea Park
London (Parks) L: 435-436

Battery [baseball]
Baseball (Player positions) B: 127

Battery [device] B: 168 *with pictures*
See also Solar cell *in this index*
Automobile (The electrical system) A: 954; (The electric car) A: 963; *diagram on* A: 951
Clock (Electric clocks) Ci: 683
Edison, Thomas Alva (Primary and storage batteries) E: 80
Electric car E: 165
Electricity (Sources of current) E: 194 *with diagram*
Electrode E: 200
Fuel cell F: 551
Hydrometer H: 471
Ignition (Parts of an ignition system) I: 49 *with diagram*
Lead (Uses) L: 149 *with picture*
Physics (Developments in the 1800's) P: 440

Battery [law]
Assault and battery A: 817

Battery [military]
Army (The organization of armies) A: 724-725
Army, United States (table) A: 737

Battery ignition [engine]
Ignition (Parts of an ignition system) I: 49 *with diagrams*

Battery Park [New York]
Statue of Liberty (Visiting the Statue of Liberty) So: 876

Batting [cricket]
Cricket (The batting side) Ci: 1133 *with picture*

Batting average [baseball]
Baseball (Baseball terms) B: 124; (table: Modern major league records) B: 137

Batting helmet
Baseball (Equipment) B: 125

Batting order
Baseball (The game) B: 128

Battle
Historical battles appear under their key words, as in Blenheim, Battle of. *See also* War and the list of related articles in the Army and Navy articles

Battle, John S. [American political leader]
Virginia (table) V: 417

Battle Above the Clouds *See* Chattanooga, Battle of *in this index*

"Battle Beyond the Don, The" [poem]
Russian literature (The literature of Tatar captivity) R: 559

Battle Born State [nickname]
Nevada N: 157

Battle Creek [Michigan] B: 172 *with picture*
Michigan (Interesting facts) M: 489; (Manufacturing) M: 504-505

Battle Creek Sanitarium
Michigan (Interesting facts) M: 489

Battle efficiency pennant [U.S.]
Flag *picture on* F: 194

Battle fatigue [psychology] *See* Post-traumatic stress disorder *in this index*

Battle flag
Flag (Military flags) F: 195-196

Battle group [military unit]
Navy (The organization of navies) N: 77

"Battle Hymn of the Republic" [hymn] B: 172
Civil War (The home front) Ci: 622
Howe, Julia Ward H: 401

Battle Monument [Maryland]
Baltimore (Other interesting places to visit) B: 69

Battle Monument [New Jersey]
Trenton (Description) T: 435-436

Battle of ...
Historical battles appear under their key words, as in Bulge, Battle of the

Battle of Anghiari [painting by Leonardo]
Leonardo da Vinci (Return to Florence) L: 199

Battle of Junin [painting by Tovar y Tovar]
Latin America *picture on* L: 108

Battle of Lepanto, The [painting by Vicentino]
Navy *picture on* N: 80

Battle of San Romano, The [painting by Uccello]
Uccello, Paolo U: 2 *with picture*

Battle of the Amazons [painting by Rubens]
Painting (Baroque) P: 58-61 *with picture*

Battle of the Books, The [book by Swift]
Swift, Jonathan (Swift's other works) So: 1040-1041 *with picture*

Battle of the Châteauguay National Historic Site [Quebec]
Canada (table: National historic sites) C: 114

Battle of the Gods and Giants [sculpture]
Sculpture (Archaic sculpture) S: 245 *with picture*

Battle of the Restigouche National Historic Site [Quebec]
Canada (table: National historic sites) C: 114

Battle of the sexes [tennis]
Tennis (Tennis today) T: 168

Battle streamer
Flag (Military flags) F: 195-196

Battleground National Cemetery [Washington, D.C.] B: 172

Battlement [architecture]
Castle (Structure) C: 280

Battleship B: 172 *with picture*
Navy (The history of navies) N: 79
Navy, United States (Combat ships) N: 84
Warship (The birth of the modern battleship) W: 41; *pictures on* W: 43
Washington Conference W: 109
World War I (A build-up of military might) W: 453-454

Battleship North Carolina Memorial [Wilmington]
North Carolina (Places to visit) N: 482

Battleship Potemkin, The [film]
Eisenstein, Sergei Mikhailovich E: 156

Motion picture *picture on* M: 847; (Filmmaking in Europe) M: 866-867

Batting Bob [nickname]
La Follette, Robert Marion, Sr. L: 29

Batu [Mongol warrior]
Russia (Mongol rule) R: 548

Batutsi [people] *See* Tutsi *in this index*

Batyushkov, Konstantin [Russian poet]
Russian literature (Preromanticism) R: 560

Baudelaire, Charles [French poet] B: 173
American literature (Poetry) A: 418-419
French literature (Symbolism) F: 522
Poetry (Beginnings of modern poetry) P: 597
Symbolism So: 1066

Baudot, Émile [French telegrapher]
Telegraph (Service expansion and improvement) T: 91-92

Baudouin [king of Belgium] B: 173
Belgium (After World War II) B: 235

Bauhaus [art] B: 173
Architecture (Walter Gropius) A: 630 *with picture*
Breuer, Marcel Lajos B: 595
Feininger, Lyonel F: 68
Furniture (The Bauhaus) F: 582
Germany *picture on* G: 155
Gropius, Walter G: 397

Baum, L. Frank [American author] B: 174 *with portrait*

Baum, William Wakefield Cardinal [American religious leader] B: 174

Bauman Peak [mountain]
Togo (Land) T: 310

Baumfree, Isabella [American social reformer]
Truth, Sojourner T: 474

Bauxite [mineral] B: 174
Alumina A: 390
Aluminum (Sources of aluminum) A: 392 *with map*; (How aluminum is produced) A: 393
Guinea (Economy) G: 430-431 *with picture*
Jamaica J: 23

Bavandra, Timoci [Fijian political leader]
Fiji (History) F: 98-99

Bavaria [state, Germany] B: 175 *with map*
Germany *picture on* G: 145; (The breakup of Charlemagne's empire) G: 162
Palatinate P: 101

Bavarian Alps [mountains, Germany]
Germany (The Bavarian Alps) G: 157 *with picture and map*

Bavarian Folk Costume Day [festival]
Folk dancing *picture on* F: 320

Bavarian Succession, War of the See
Succession wars *in this index*

BAWI [government program]
Mississippi (Economic development) M: 644

Baxter, Anne [American actress]
Motion picture (Best performance by an actress in a supporting role: 1946) M: 863

Baxter, Elisha [American political leader]
Arkansas (table) A: 712; (Reconstruction) A: 714

Baxter, John B. M. [Canadian political leader]
New Brunswick (table) N: 196

Baxter, Percival P. [American political leader]
Maine (table) M: 87

Baxter, Warner [American actor]
Motion picture (Best performance by an actor: 1928-29) M: 862

Bay [color]
Horse (Coat and skin) H: 348-349

Bay [geography] B: 175
Ocean (The world ocean) O: 651
Seashore (Life on muddy shores) S: 270

Bay Area Rapid Transit system [San Francisco]
Oakland (Economy) O: 637
San Francisco (Transportation) S: 97

Bay Area style [architecture]
Morgan, Julia M: 804

Bay Bridge *See* San Francisco-Oakland Bay Bridge *in this index*

Bay Colony *See* Massachusetts Bay Colony *in this index*

Bay leaves [cooking herb]
Laurel L: 121 *with picture*

Bay of Bengal [Indian Ocean] B: 175 *with map*

Bay of Biscay [Atlantic Ocean] B: 176 *with map*

Bay of Fundy [Atlantic Ocean] B: 176 *with map*
Atlantic Ocean (Tides) A: 866
Moncton M: 702
New Brunswick (Interesting facts) N: 181; (Coastline) N: 190-192 *with picture*
Tide (Tidal patterns) T: 282

Bay of Naples [Italy] See Naples, Bay of *in this index*

Bay of Pigs [U.S. history]

Cold War (The Bay of Pigs) Ci: 766

Cuba (The Bay of Pigs invasion) Ci: 1178

Kennedy, John Fitzgerald (Cuba) K: 265

Bay of Silence, The [book by Mallea]

Latin-American literature (The mid-1900's) L: 113

Bay Psalm Book [book] B: 176

Book (The 1600's and 1700's) B: 467 *with picture*

Daye, Stephen D: 54

Massachusetts (Communication) M: 287

Bay shilling [money]

Pine-tree shilling P: 471 *with pictures*

Bay State [name for]

Massachusetts Ms: 271

Bay window

Window W: 334

Baya weaver [bird]

Weaver W: 173

Bayar, Celâl [Turkish political leader]

Turkey (The 1950's and 1960's) T: 511

Bayard, Thomas Francis [American political leader]

Cleveland, Grover (table) Ci: 671

State, Department of (table) So: 860

Bayberry [tree] B: 176 *with pictures*

Bayberry wax [tree product]

Bayberry B: 176

Baye St. Laurens [bay]

Gulf of Saint Lawrence G: 437

Bayer, Karl Joseph [Austrian chemist]

Aluminum (Refining the bauxite) A: 393; (The growth of the aluminum industry) A: 397

Bayer process [industry]

Aluminum (Refining the bauxite) A: 393; (The growth of the aluminum industry) A: 397

Bayerischer Wald National Park [Germany]

National park (table) N: 42f

Bayeux Tapestry [artwork] B: 177 *with picture*

England *picture on* E: 305

Norman Conquest *picture on* N: 456

Bayezit II [sultan of the Ottoman Empire]

Turkey (The rise of the Ottoman Empire) T: 510

Bayh, Birch Evans, Jr. [American political leader] B: 177

Bayh, Evan [American political leader]

Indiana (table) I: 214

Baykal, Lake [Siberia] See Lake Baikal *in this index*

Baykonur Cosmodrome [Kazakhstan]

Kazakhstan (Economy) K: 250b

Bayle, Pierre [French philosopher]

Biography (The 1700's) B: 313

Bayley, Elizabeth Ann See Seton, Saint

Elizabeth Ann *in this index*

Baylor, Elgin [American basketball player]

B: 177

Basketball (The history of professional basketball) B: 155; *picture on* B: 153

Baylor College of Dentistry

Texas A&M University T: 210

Bayon [temple]

Angkor A: 462

Bayonet [weapon] B: 177 *with picture*

Army (The rise of modern armies) A: 727

Revolutionary War in America (Weapons and tactics) R: 279 *with picture*

Bayonne Bridge [New Jersey]

Bridge (table: Steel arch) B: 603

New York City (Transportation) N: 334

Bayou [waterway] B: 177

Louisiana (Rivers, bayous, and lakes) L: 490

Bayou Folk [book by Chopin]

Chopin, Kate C: 521

Bayou Goule Indians [American Indians]

Baton Rouge (Government and history) B: 166

Bayou State [name for]

Louisiana L: 478

Bayreuth [Germany] B: 177

Bayreuth Festival

Germany G: 154

Bayreuth B: 178

Bayta lehm [Jordan]

Bethlehem B: 274

Bazaar [market] B: 178

Asia (City life) A: 779-780

Iran (City life) I: 401 *with picture*

Tehran *picture on* T: 88

Bezaine, François A. [French general]

Franco-Prussian War (Progress of the war) F: 483

Bazardyzyu [mountain, Azerbaijan]

Azerbaijan (Land and climate) A: 997 *with map*

Bazooka [weapon] B: 178 *with picture*

Rocket (Military use) R: 386

BBC See British Broadcasting Corporation *in this index*

B.C. [calendar] B: 178

Calendar (Some calendars today) C: 29

"B.C." [comic strip]

Cartoon *pictures on* C: 267

B.C. Place Stadium [Vancouver, British Columbia]

British Columbia (Places to visit) B: 620

B.C.C.I. [organization] See Bank of Credit and Commerce International SA *in this index*

B.C.E. [calendar]

B.C. B: 178

BCG [medication] B: 178

Tuberculosis (Prevention of tuberculosis) T: 479

BCS theory [physics]

Superconductivity So: 993

Bē [symbol]

Beryllium B: 273

Beach B: 178

Los Angeles (Recreation) L: 467 *with picture*

Ocean (Waves) O: 659

Beach Boys [musical group] B: 178

Rock music (Expanding styles and sounds) R: 378-379

Beach hopper

Crustacean (Growth and development) C: 1164 *with picture*

Beach of Falesá, The [book by Stevenson]

Stevenson, Robert Louis (Novels) So: 898

Beach plum [shrub] B: 179

Beach volleyball [sport] B: 179 *with picture*

Beachey, Lincoln [American aviator]

Aviation *picture on* A: 988

Beachhead [military]

Amphibious warfare (Steps in amphibious operations) A: 442

Beaching

Whale (Life span) W: 261-262 *with picture*

Beacon B: 179

Beacon Hill [Boston]

Boston (Beacon Hill) B: 497 *with picture*

Beaconsfield, Earl of See Disraeli, Benjamin *in this index*

Bead

Beadwork B: 179 *with pictures*

Rosary R: 477

Wampum W: 22 *with picture*

Bead [tire]

Tire (Assembling a tire) T: 297

Bead lightning

Lightning (Appearance) L: 300

Bead mill [machine]

Paint (Grinding) P: 24-25

Beaded lizard [reptile]

Lizard (Defenses) L: 400

Beadle, George Wells [American geneticist]

B: 179

Cell (The 1900's) C: 337-338

Beadle, William Henry Harrison [American educator] B: 179

Beadwork [handicraft] B: 179 *with pictures*

Beagle [dog] B: 180 *with picture*

Dog *picture on* D: 271

Beagle [ship]

Darwin, Charles Robert (Darwin's life) D: 40

Evolution (Darwin's theory) E: 432

Beak

See also Bill [zoology]; (Geographic distribution of species) E: 430-431 *with picture*

Beaked whale

Whale (Beaked whales) W: 258; *picture on* W: 257

Beaker folk [ancient people]

Scotland (History) S: 218

"Beale Street Blues" [song]

Memphis (The city) M: 394

Beam [construction]

Building construction (Beams, girders, and columns) B: 682-683

House (The frame) H: 382 *with diagram*

Skyscraper (Building skyscrapers) S: 497

Beam [measurement]

Ship (Nautical terms) S: 416

Beam-riding guidance

Guided missile (Beam-riding guidance) G: 426

with diagram

Beam scale [instrument]

Scale, Weighing (Mechanical scales) S: 169

Beam system [communications]

Marconi, Guglielmo (Short-wave radio) M: 196-197

Beamon, Bob [American athlete]

Olympic Games (The 1968 games) O: 752

Bean [plant] B: 180 *with pictures*

See also Soybean *in this index*

Nutrition (Carbohydrates) N: 625

Bean, Alan LaVern [American astronaut]

Space exploration (Returning to the earth) So: 718

Bean, Judge Roy [American frontiersman]

B: 182 *with picture*

Western frontier life in America (Law enforcement) W: 239

Bean beetle [insect] B: 182 *with picture*

Bean curd [food]

Tofu T: 308

Bean of history See Broad bean *in this index*

Beanbag chair

Furniture (Radical modern design) F: 585 *with picture*

Beanes, William [American public figure]

Key, Francis Scott K: 307

Beantown [nickname]

Boston (Early settlement) B: 503

Bear [animal] B: 182 *with pictures*

Animal *pictures on* A: 478, A: 484, A: 485, A: 507

Bear [rank]

Boy Scouts (Cub Scouting) B: 536-537

Bear Dance, Preparing for a Bear Hunt [painting by Catlin]

Dance *picture on* D: 27

Bear Driver [constellation]

Boötes B: 480

Bear Flag [U.S. history]

Flag *picture on* F: 210

Bear Flag Revolt [U.S. history]

California (The Mexican War) C: 60-62

Mexican War (The occupation of New Mexico and California) M: 446

Bear garden [arena]

Bearbaiting B: 186

Bear Lake [Utah-Idaho]

Utah (Rivers and lakes) U: 242

Bear market [economics]

Bears and bulls B: 189

Bear Mountain Bridge [Hudson River]

New York *picture on* N: 290

Bear River

Wyoming (Rivers and lakes) W: 528

Bear River, Battle of [1863]

Bannock Indians B: 98

Bearbaiting [sport] B: 186

Bear (Brown bears) B: 184

Beard [botany]

Wheat (Structure) W: 267-268 *with diagram*

Beard [hair] B: 186

Burnside, Ambrose Everett B: 710 *with picture*

Beard, Charles and Mary [American historians]

B: 187

Beard, Daniel Carter [American naturalist]

B: 187

Beard, Mary Ritter [American historian]

Beard, Charles and Mary B: 187

Bearded bellbird

Bellbird B: 243

Bearded collie [dog] B: 187 *with picture*

Bearded Mille Fleur [chicken]

Chicken *picture on* C: 442

Bearden, Romare [American artist] B: 187 *with pictures*

Beardsley, Aubrey Vincent [British artist]

B: 188 *with picture*

Art nouveau A: 750

Beardsley, William S. [American political leader]

Iowa (table) I: 391

Beardtongue [plant] B: 188 *with picture*

Bearing [industry] B: 188 *with diagrams*

Bearing [navigation]

Navigation (Piloting) N: 71

Bearing-wall construction

Building construction (Types of construction) B: 683 *with picture*

House (The frame) H: 382

Bears, Chicago See Chicago Bears *in this index*

- Montana (Land regions) M: 752 *with map*
- Bearskin Neck**
Massachusetts (Places to visit) M: 280
- Beartooth Highway**
Montana (Places to visit) M: 750
- Beartooth Mountains**
Montana (Land regions) M: 752
- Beasley, David** [American political leader]
South Carolina (table) So: 658
- Beast Butler** [nickname] See Butler, Benjamin Franklin [American general] *in this index*
- Beast of burden**
Transportation (Land transportation) T: 383-384 *with picture*
- Beat** [cooking]
Cooking (table) Ci: 1029
- Beat** [journalism]
Newspaper (Gathering information) N: 382
- Beat** [physics]
Sound (Beats) So: 604 *with diagram*
- Beat** [police]
Police (Police activities) P: 620
- Beat frequency** [sound]
Sound (Beats) So: 604
- Beat movement** [cultural history] B: 189
American literature (Literature since 1945) A: 423
Ferlinghetti, Lawrence F: 73
Ginsberg, Allen G: 192
Kerouac, Jack K: 306
Poetry (Poetry of the 1900's) P: 597
Rexroth, Kenneth R: 288
- Beater** [tool]
Weaving (How a loom works) W: 174 *with picture*
- Beatification** [religion]
Saint (Roman Catholic saints) S: 30
- Beating to windward**
Sailing (Basic sailing maneuvers) S: 26 *with diagram*
- Beatitudes** [New Testament] B: 189
- Beatlemania**
Rock music (The Beatles and the British Invasion) R: 378
- Beatles** [musical group] B: 189 *with picture*
Hairdressing (The 1900's) H: 12-13
Lennon, John L: 195
McCartney, Paul M: 332
Rock music (British Invasion and rock's revival) R: 378-379 *with picture*
- Beetnik**
Beat movement B: 189
- Beaton, David Cardinal** [Scottish religious leader]
Knox, John (Early years) K: 358
- Beatrice** [literary figure]
Shakespeare, William (*Much Ado About Nothing*) S: 360 *with picture*
- Beatrice** [literary figure]
Dante Alighieri (His life) D: 34
Divine Comedy D: 242
- Beatrix** [queen of The Netherlands] B: 190 *with portrait*
Netherlands (Political changes) N: 150
- Beatty, Warren** [American actor] B: 190 *with portrait*
Motion picture (Best achievement in directing: 1981) M: 862
- Beau Brummell** See Brummell, George Bryan *in this index*
- Beaubear's Island National Historic Site** [New Brunswick]
Canada (table: National historic sites) C: 114
- Beauceron** [dog]
Dog (Kinds of dogs) D: 265-266
- Beauchamp, Kathleen Mansfield** [British author] See Mansfield, Katherine *in this index*
- Beauchamps, Pierre** [French dance teacher]
Ballet (The rise of professional ballet) B: 51
- Beaufort, Duke of** [British nobleman]
Badminton B: 24
- Beaufort, Sir Francis** [British admiral]
Wind (The Beaufort wind scale) W: 330
- Beaufort, Margaret** [mother of Henry VII]
Tudor, House of T: 481
- Beaufort scale** [meteorology]
Wind (The Beaufort wind scale) W: 330
- Beauharnais, Eugène de** [son of]
Josephine J: 168
- Beauharnais, Hortense de** [daughter of]
Josephine J: 168
- Beauharnais, Josephine de** See Josephine *in this index*
- Beauharnais, Vicomte Alexandre de** [French nobleman]
Josephine J: 168
- Beaujoyeux, Balthasar de** [Italian musician]
Ballet (The birth of ballet) B: 50-51
- Beaulieu, Edict of** [1576]
Henry III [king of France] H: 186
- Beaulieu, Priscilla** [wife of]
Presley, Elvis P: 772
- Beaulieu, Victor-Lévy** [Canadian author]
Canadian literature (Modern literature: 1945 to the present) C: 160
- Beaulne, Yvon** [Canadian diplomat]
United Nations (table) U: 86
- Beaumarchais, Pierre Augustin Caron de** [French dramatist] B: 191
French literature (The Age of Reason) F: 520-521
Opera (*Marriage of Figaro, The*) O: 805-806
- Beaumont** [Texas] B: 191
- Beaumont, Francis** [English dramatist] B: 191
English literature (Jacobean drama) E: 317
Fletcher, John F: 234
- Beaumont, John** [English nobleman]
Viscount V: 429
- Beaumont, William** [American doctor] B: 191
Michigan (Interesting facts) M: 489
- Beauport**
Quebec, Battle of Q: 37
- Beauregard, Pierre Gustave Toutant** [Confederate general] B: 191
Civil War (Fort Sumter) Ci: 625
Lincoln, Abraham (Fort Sumter and war) L: 321
- Beautician** [career]
Hairdressing H: 11; (Careers in hairdressing) H: 13 *with picture*
- Beautiful Mind, A** [film]
Motion picture (Best picture: 2001) M: 861
- Beauty**
Aesthetics A: 90
Art and the arts (Beauty) A: 746-747
"Beauty is truth, truth beauty" [quotation]
Keats, John (His work) K: 253-254
- Beauty with Fan and Parasol** [print by Utamaro]
Japanese print *picture on* J: 63
- Beauvais, Armand** [American political leader]
Louisiana (table) L: 496
- Beauvoir** [estate]
Davis, Jefferson (His last years) D: 48
Mississippi (Places to visit) M: 632 *with picture*
- Beauvoir, Simone de** [French author] B: 191 *with portrait*
French literature (Existentialism) F: 523
- Beaux-Arts, École des** [school, Paris] See École des Beaux-Arts *in this index*
- Beaux' Stratagem, The** [play by Farquhar]
Farquhar, George F: 47
- Beeven, Robert** [Canadian political leader]
British Columbia (table) B: 627
- Beaver** [animal] B: 192 *with pictures*
Animal *picture on* A: 478
Fur (table) F: 561; *picture on* F: 562
Fur trade F: 564
Mammal *diagram on* M: 121
Trapping *picture on* T: 403
- Beaver** [rank]
Scouts Canada (Age groups) S: 224
- Beaver, James Addams** [American political leader]
Pennsylvania (table) P: 263
- Beaver Dam, Battle of** [1813]
Secord, Laura Ingersoll S: 278
- Beaver Island** [Lake Michigan]
Michigan (Islands) M: 500
- Beaver State** [name for]
Oregon O: 826
- Beaver-tail cactus**
Flower *picture on* F: 291
- Beaverbrook, Lord** [British publisher] B: 196
- Beaverhead Mountains**
Montana (Land regions) M: 752
- Beavers Bend State Park**
Oklahoma *picture on* O: 713
- Beban, Gary** [American football player]
Football (table) F: 363
- Bebb, William** [American political leader]
Ohio (table) O: 699
- Bebbie, Bert** [American sports figure]
Little League Baseball L: 391
- Bebbie, George** [American sports figure]
Little League Baseball L: 391
- Bébé** [doll]
Doll (Porcelain dolls) D: 290-291 *with picture*
- Bebel, August** [German political leader] B: 196
- Bebop** [music]
Jazz (Bebop) J: 72 *with picture*
Davis, Miles D: 49
Gillespie, Dizzy G: 190
Monk, Thelonious M: 725
Parker, Charlie P: 169
- BEC** See Bose-Einstein condensate *in this index*
- Beccaria, Cesare** [Italian criminologist] See Beccaria, Marchese di *in this index*
- Beccaria, Marchese di** [Italian criminologist]
Criminology (History) Ci: 1145
Italian literature (The baroque period and the Age of Reason) I: 494-495
- Bêche-de-mer** [food]
Trepang T: 436
- Bechet, Sidney** [American musician] B: 196
Jazz (Early jazz) J: 70
- Bechuanaland Protectorate**
Botswana (History) B: 512
Rhodes, Cecil John (Gains Rhodesia) R: 317
- Becker, Boris** [German tennis player] B: 196
- Becker, Gary Stanley** [American economist]
Nobel Prizes (Economics: 1992) N: 449
- Becker muscular dystrophy** [disease]
Muscular dystrophy (Other muscular dystrophies) M: 937
- Becket** [play by Anouilh]
Anouilh, Jean A: 519
- Becket, Saint Thomas** [English religious leader] B: 196
England (Struggles for power) E: 305-306
Henry II [of England] H: 185
- Beckett, Samuel Barclay** [Irish-French author] B: 196
Drama (Theater of the absurd) D: 340
Irish literature (Drama) I: 432
Novel (After World War II) N: 574
- Beckham, J. C. W.** [American political leader]
Kentucky (table) K: 290; (The early 1900's) K: 293-294
- Beckley, Jake** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Beckley Exhibition Coal Mine** [Beckley]
West Virginia (Places to visit) W: 216
- Beckmann, Max** [German painter] B: 197 *with picture*
Germany (Painting and sculpture) G: 155
- Becknell, William** [American frontiersman]
New Mexico (Mexican rule) N: 273
Santa Fe Trail S: 115
Westward movement in America (The Santa Fe Trail) W: 249
- Beckwourth, James Pierson** [American frontiersman] B: 197
Bannock Indians B: 98
- Beckwourth Pass** [Sierra Nevada Mountains]
Beckwourth, James Pierson B: 197
- Becque, Henri François** [French dramatist]
French literature (Naturalism) F: 522
- Bécquer, Gustavo Adolfo** [Spanish poet]
Spanish literature (The 1800's) So: 761
- Becquerel** [unit of measure]
Curie Ci: 1194
- Becquerel, Alexandre Edmond** [French physicist]
Becquerel, Antoine César B: 197
Solar energy (The development of photovoltaic cells) So: 577
- Becquerel, Antoine César** [French physicist] B: 197
- Becquerel, Antoine Henri** [French physicist] B: 197
Curie, Marie Skłodowska Ci: 1194
Nuclear energy (Early developments) N: 590
Physics (The beginning of modern physics) P: 440-441
Radiation (Discovery of radioactivity) R: 80
Uranium (History of the use of uranium) U: 216
- Becquerel, Louis Alfred** [French physicist]
Becquerel, Antoine César B: 197
- Bécu, Marie Jeanne** [French public figure]
Du Barry, Madame D: 370 *with portrait*
- Bed** [agriculture]
Cotton (Planting) Ci: 1090
- Bed** [furniture] B: 197 *with pictures*
Colonial life in America (Furnishings) Ci: 797
Furniture (Ancient Egypt) F: 570
Petate P: 323
Pioneer life in America (Furniture and household utensils) P: 481

Bed [geology]Coal (How coal was formed) **Ci**: 717Ore **O**: 825**Bed** [painting by Rauschenberg]Painting (The revival of subject matter) **P**: 86
*with picture***Bed** [printing]Printing (Letterpress printing) **P**: 799-800**Bed** [river]River (Channels) **R**: 352**Bed** [zoology]Oyster (Young) **O**: 891**Bed bug** [insect] **B**: 198 *with picture*Insect *picture on* **I**: 281**Bed-wetting**Child (Other special problems) **C**: 452**Bedchamber, Lady of the** [title]Royal Household of the United Kingdom
R: 498**Bede, Saint** [English historian] **B**: 199English literature (Old English prose) **E**: 315
Jutes **J**: 204**Bedford, Gunning, Sr.** [American political

leader]

Delaware (table) **D**: 109**Bedford, Gunning, Jr.** [American politicalleader] **B**: 199**Bedford Flag** [U.S. history]Flag *picture on* **F**: 210**Bedford-Stuyvesant** [district, New York City]New York City (Brooklyn) **N**: 326-328**Bédié, Henri Konan** [Côte d'Ivoire political

leader]

Côte d'Ivoire (History) **Ci**: 1085**Bedlam** [place]Mental illness (Early attitudes) **M**: 408**Bedle, Joseph D.** [American political leader]New Jersey (table) **N**: 249**Bedlington terrier** [dog] **B**: 199Dog *picture on* **D**: 273**Bedloe, Isaac** [American landowner]Statue of Liberty (Description) **So**: 873**Bedloe's Island** [New York City]Liberty Island **L**: 233Statue of Liberty (Description) **So**: 873**Bednorz, Johannes Georg** [German physicist]Nobel Prizes (Physics: 1987) **N**: 441Superconductivity **So**: 993**Bedouins** [people] **B**: 199Africa (Rural life) **A**: 107 *with picture*Arabs (Life in the Arab world) **A**: 586Egypt (People) **E**: 123Jordan (Way of life) **J**: 162Saudi Arabia (Rural life) **S**: 157Syria (People) **So**: 1071**Bedrock** [geology]Glacier (How glaciers shape the land) **G**: 204-
205 *with diagrams***Bedsore** [disorder] **B**: 199Ulcer **U**: 15**Bedstead** [furniture]Bed (Types of beds) **B**: 197**Bedstraw** [plant] **B**: 199**Bee** [insect] **B**: 200 *with pictures*See also Bumble bee; Honey bee *in this index*First aid (Injected poisons) **F**: 138Flower (Cross-pollination) **F**: 295Frisch, Karl von **F**: 534Insect (Wings) **I**: 288, (Family life) **I**: 294-295*with picture; pictures on* **I**: 283-284Pollen (Cross-pollination) **P**: 645 *with pictures***Bee, Bernard E.** [Confederate general]Jackson, Stonewall **J**: 16**Bee assassin** [insect]Bee (Enemies) **B**: 205**Bee-eater** [bird] **B**: 208Bird (Birds of Europe and Asia) **B**: 346 *with picture***Bee fly** [insect] **B**: 208 *with picture***Bee hummingbird** [bird]Animal *picture on* **A**: 469Bird *picture on* **B**: 329Hummingbird (Size) **H**: 433, *picture on* **H**: 434**Bee martin** See Kingbird *in this index***Bee tree** See Linden *in this index***Beebe, William** [American naturalist] **B**: 208*with portrait*Exploration (Deep-sea exploration) **E**: 451**Beebread** [biology]Bee (From egg to adult) **B**: 202-203**Beech** [tree] **B**: 208 *with pictures*Tree *pictures on* **T**: 420**Beech marten**Marten **M**: 233**Beecham, Sir Thomas** [British conductor]**B**: 209**Beechcraft Super King Air** [airplane]Jet propulsion *picture on* **J**: 113**Beecher, Catharine Esther** [American educator]**B**: 209Home economics (History) **H**: 300Stowe, Harriet Beecher (Her life) **So**: 916**Beecher, Henry Ward** [American religiousleader] **B**: 209Stowe, Harriet Beecher (Her life) **So**: 916**Beecher, Lyman** [American religious leader]**B**: 209Stowe, Harriet Beecher (Her life) **So**: 916**Beeches, The** [estate]Coolidge, Calvin (Later years) **Ci**: 1033-1034**Beechnut**Beech **B**: 208 *with picture***Beechwood**Beech **B**: 209Wood *picture on* **W**: 389**Beckman, R. Livingston** [American political

leader]

Rhode Island (table) **R**: 311**Beef** [food] **B**: 209 *with diagrams*Cattle **C**: 306; (Beef cattle) **C**: 308; (Dual-pur-
pose cattle) **C**: 311Creutzfeldt-Jakob disease **Ci**: 1129Meat (Kinds of meat) **M**: 347; *pictures on*
M: 349

Meat packing (Slaughtering and dressing)

M: 351Veal **V**: 291**Beefalo** [animal]Buffalo (Protection of bison) **B**: 675**Beefeater** [nickname]Yeoman **Y**: 564**Beefmaster**Cattle (Beefmaster) **C**: 308 *with picture; (table)*
C: 312**Beefwood** [tree] **B**: 211 *with picture***Beehive** [nest] See Hive *in this index***Beehive House** [Salt Lake City]Utah (Places to visit) **U**: 238**Beehive State** [name for]Utah **U**: 231**Beehive tomb**Architecture (Mycenaean architecture) **A**: 615**Beekeeping**Bee (Beekeeping) **B**: 206-207 *with diagram***Beelzebub** [Biblical figure] **B**: 211**Beeper** [machine] See Pager *in this index***Beer** **B**: 211Alcoholic beverage (Beer) **A**: 336Brewing **B**: 595Coal (Developments in England) **Ci**: 731-732England (Food and drink) **E**: 295-296Germany (Food and drink) **G**: 150Hop **H**: 332Indian, American (Food) **I**: 136dYeast **Y**: 554**Beer Hall Putsch** [German history]Hitler, Adolf (The Beer Hall Putsch) **H**: 266Ludendorff, Erich Friedrich Wilhelm **L**: 515Munich **M**: 927**Beerbohm, Max** [British author] **B**: 211**Beernaert, Auguste Marie François** [Belgian

statesman]

Nobel Prizes (Peace: 1909) **N**: 447**Beers, Clifford Whittingham** [American socialreformer] **B**: 212**Beers, George** [Canadian lacrosse player]Lacrosse (History) **L**: 25**Beersheba** [Israel] **B**: 212**Beery, Wallace** [American actor]

Motion picture (Best performance by an actor:

1931-1932) **M**: 862**Beeswax** **B**: 212Bee (Making wax) **B**: 204Candle **C**: 175**Beet** [plant] **B**: 212 *with picture*Asia *picture on* **A**: 801Sugar beet **So**: 961**Beet sugar**Sugar (Sugar from sugar beets) **So**: 961Sugar beet **So**: 961**Beet yellows** [disease]Sugar beet (Raising sugar beets) **So**: 962**Beethoven, Johann van** [brother of]

Beethoven, Ludwig van (Beethoven's life)

B: 213**Beethoven, Johann van** [father of]

Beethoven, Ludwig van (Beethoven's life)

B: 213**Beethoven, Karl van** [brother of]

Beethoven, Ludwig van (Beethoven's life)

B: 213**Beethoven, Ludwig van** [German composer]**B**: 213 *with picture*Autograph *picture on* **A**: 943Classical music (The Classical period) **Ci**: 647-648 *with picture; (The Romantic era)***Ci**: 648Germany **G**: 153Liszt, Franz (His works) **L**: 350Music (Melody) **M**: 951Scherzo **S**: 174Symphony **So**: 1067**Beethoven-House**Bonn (Education and cultural life) **B**: 461**Beetle** [automobile]Automobile *picture on* **A**: 969Volkswagen **V**: 444**Beetle** [insect] **B**: 214 *with pictures*Animal *picture on* **A**: 507Insect (Wings) **I**: 288; *pictures on* **I**: 283, **I**: 285**Beetleweed** [plant]Coltsfoot **Ci**: 851**Beezus and Ramona** [book by Cleary]Cleary, Beverly **Ci**: 660**Befana, La** [legendary figure]Christmas (In Italy) **C**: 531; (Gift giving) **C**: 534Folklore (Holidays) **F**: 325**Begay, Harrison** [American painter]Indian, American *picture on* **I**: 168**Beggar on Horseback** [play by Connelly and

Kaufman]

Connelly, Marc **Ci**: 972**Beggar-ticks** [plants] **B**: 219 *with picture***Beggar's-button** [plant] See Burdock *in this**index***Beggar's Opera, The** [opera by Gay]Gay, John **G**: 71Hogarth, William **H**: 288**Beggarweed** [plant] **B**: 219**Bégin, Louis N. Cardinal** [Canadian religious

leader]

Cardinal (table: Canadian cardinals) **C**: 211**Begin, Menachem** [Israeli political leader]**B**: 219 *with portrait*

Arab-Israeli conflict (The Camp David Accords)

A: 582aCarter, Jimmy (Foreign affairs) **C**: 257-258*with picture*Egypt (Renewed warfare and peace) **E**: 133*with picture*Israel (The Camp David Accords) **I**: 488Sadat, Anwar el- **S**: 7**"Begin the Beguine"** [song by Porter]Porter, Cole **P**: 682**Begley, Ed** [American actor]

Motion picture (Best performance by an actor

in a supporting role: 1962) **M**: 863**Begole, Josiah W.** [American political leader]Michigan (table) **M**: 507**Begonia** [plant] **B**: 219 *with picture*Flower (Garden perennials) **F**: 280 *with picture; F: 300 *with picture; picture on*
F: 292***Behaim, Martin** [German navigator]Globe **G**: 233

Map (Advances in European cartography)

M: 183-184**Behan, Brendan** [Irish author] **B**: 220 *with por-**trait*Irish literature (Drama) **I**: 432**Behavior** **B**: 220

Animal behavior

Animal (How animals protect themselves)

A: 493; (Courtship behavior) **A**: 497*with pictures; (How animals raise their*young) **A**: 498 *with pictures; (Animal*migration) **A**: 502Bird (How birds live) **B**: 350 *with pictures*Comparative psychology **Ci**: 902a

Dog (Why dogs do the things they do)

D: 263 *with pictures; (Behavior) **D**: 277*Dominance **D**: 301Estivation **E**: 361Ethology **E**: 373Hibernation **H**: 221Instinct **I**: 304</

- Abnormal psychology A: 11
Age of Reason (The orderliness of nature) A: 139
Aggression A: 141
Child (Special problems of childhood) C: 451; (Motivating the child's behavior) C: 453
Clothing (Communication) Ci: 688-689
Collective behavior Ci: 774
Culture Ci: 1186
Displacement behavior D: 237
Ergonomics E: 349
Etiquette E: 373
Freud, Sigmund (On behavior) F: 530
Fromm, Erich F: 541
Habit (How we learn habits) H: 2
Hull, Clark Leonard H: 412
Industry (Industrial organization) I: 261
Kinesics K: 319
Learning L: 162
Merton, Robert King M: 419
Morale M: 800
Personality (Personality and environment) P: 303
Psychoanalysis P: 846
Psychology P: 847
Socialization So: 562
Sociology So: 564
- Behavior modification** [psychology]
See also Behavioral intervention *in this index*
Attention deficit disorder A: 879
Behavior (Behaviorism) B: 221
Education (How people learn) E: 96
Learning (Theories of learning) L: 163-164
- Behavioral genetics**
Psychology (Modern psychology) P: 850
- Behavioral intervention**
See also Behavior modification *in this index*
Autism (Treatment) A: 942
- Behavioral psychotherapy**
Chronic fatigue syndrome C: 539
Mental illness (Psychotherapy) M: 407
Phobia P: 392
Psychiatry (Psychotherapy) P: 845
Psychotherapy (Behavioral psychotherapy) P: 852
- Behavioral sciences** *See* Anthropology; Psychology; Sociology *in this index*
- Behaviorism** [psychology]
Abnormal psychology (Behavioral theories) A: 12
Behavior (Behaviorism) B: 221
Gestalt psychology G: 175
Psychology (Behaviorism) P: 849; (Modern psychology) P: 850
Skinner, B. F. S: 495
Watson, John Broadus W: 147
- Beheading** [execution]
Guillotine G: 429 *with picture*
- Behistun Rock** [Iran]
Cuneiform Ci: 1192
- Behn, Aphra** [English author] B: 221
- Behrens, Peter** [German architect] B: 221
Architecture (Early modern architecture in Europe) A: 627-629 *with picture*
- Behring, Emil von** [German bacteriologist]
Immune system (Early discoveries) I: 88d
Nobel Prizes (Physiology or medicine: 1901) N: 444
- Behrman, S. N.** [American dramatist] B: 221
- Beiderbecke, Bix** [American musician] B: 222
Jazz (The 1920's) J: 70 *with picture*
- Beihan** [emirate]
South Arabia, Federation of So: 639
- Beijerinck, Martinus Willem** [Dutch botanist]
Virus V: 426
- Beijing** [city, China] B: 222 *with pictures and maps*
Architecture *picture on* A: 612
China *pictures on* C: 475, C: 477, C: 504
Tianjin T: 275
- Beijing opere** [drama]
China (Theater) C: 491 *with picture*
Dance (Asian theatrical dance) D: 30
Drama (China) D: 336 *with picture*
Music (Chinese music) M: 956
- Beinecke Rare Book and Manuscript Library**
Library *picture on* L: 246
- Being** [philosophy]
Existentialism E: 436
Idealism I: 46
Santayana, George S: 115
Sartre, Jean-Paul S: 127
- Being and Having** [book by Marcel]
- Marcel, Gabriel M: 193
- Being and Nothingness** [book by Sartre]
Sartre, Jean-Paul S: 127
- Beirut** [Lebanon] B: 224
Lebanon L: 170 *with picture*; (War and terrorism) L: 173 *with picture*
- Beja** [people]
Sudan (People) So: 952
- Bejart, Maurice** [French-born choreographer]
Ballet (Ballet in Europe) B: 54
- Bekaa** [valley, Lebanon]
Lebanon (Land and climate) L: 172
- Békésy, Georg von** [American physiologist]
Nobel Prizes (Physiology or medicine: 1961) N: 445
- Bel** [unit of measure]
Decibel D: 70
- Bel-Ami** [book by De Maupassant]
De Maupassant, Guy D: 119
- Bel and the Dragon** [Bible]
Bible (Development of the Christian Old Testament) B: 282
- Bel canto** [music]
Opera (table) O: 791; (Opera seria and opera buffa) O: 797
Horne, Marilyn H: 340
- Belafonte, Harry** [American entertainer] B: 224 *with portrait*
- Belaney, Archibald Stansfeld** [Canadian naturalist]
Grey Owl G: 392
- Belarus** [country, Europe] B: 224a *with pictures and map*
Flag *picture on* F: 205
Russia (The new nation) R: 555
Strategic Arms Reduction Treaty So: 919
- Belarusian** [language]
Belarus (People) B: 224a
- Belarusians** [people]
Belarus (People) B: 224a
Union of Soviet Socialist Republics (People) U: 31
- Belasco, David** [American dramatist] B: 224d
- Belau** [Pacific] *See* Palau *in this index*
- Belaúnde Terry, Fernando** [Peruvian political leader]
Peru (The rise of APRA) P: 315; (Socialistic reforms) P: 315-316
- Belay device** [tool]
Climbing (Technical climbing) Ci: 680
- Belaying** [technique]
Climbing (Technical climbing) Ci: 680 *with picture*
Mountain climbing (Basic mountaineering equipment and methods) M: 897
- Belch, Sir Toby** [literary figure]
Shakespeare, William (*Twelfth Night*) S: 360
- Belding's yellowthroat** [bird]
Yellowthroat Y: 560
- Belém** [Brazil] B: 224d *with picture*
- Bélep Islands** [Pacific]
New Caledonia N: 200
- Belfast** [Northern Ireland] B: 224d *with picture*
Northern Ireland *picture on* N: 521
United Kingdom *picture on* U: 48
- Belfry of Bruges and Other Poems, The** [poems by Longfellow]
Longfellow, Henry Wadsworth (Author and world celebrity) L: 450
- Belgae** [people]
Belgium (History) B: 232
- Belgian Congo** [African history]
Belgium (Independence) B: 233-234
Congo (Kinshasa) (Belgian rule) Ci: 940d
- Belgian hare**
Rabbit R: 46 *with picture*
- Belgian horse**
Horse (table: Some types and breeds of horses) H: 343; (Draft horses) H: 346 *with picture*
- Belgian Malinois** [dog] B: 225 *with picture*
- Belgian sheepdog** B: 225 *with picture*
- Belgian Tervuren** [dog] B: 225 *with picture*
- Belgica** [ship]
Amundsen, Roald (Other achievements) A: 446
- Belgium** B: 226 *with pictures and maps*
Benelux B: 248
Christmas (In The Netherlands, Belgium, and Luxembourg) C: 531
Colonialism (Later colonialism) Ci: 814
Congo (Kinshasa) (Belgian rule) Ci: 940d
Euro E: 378
Euthanasia (Active and passive euthanasia) E: 421
- Industrial Revolution (Belgium) I: 253
London, Treaties of (The Treaty of 1839) L: 444
Mercier, Désiré Joseph Cardinal M: 413
New Year's Day (Modern customs) N: 289
Rwanda (History) R: 571-572
Walloons W: 18
World War I (The Western Front) W: 455-456
World War II (table: The Allies) W: 471; (The invasion of the Low Countries) W: 473; (table: Military casualties) W: 497
See also the list of Related articles in the Belgium article
- Belgium, Commission for Relief in** [Belgian history]
Hoover, Herbert Clark (Food administrator) H: 328
- Belgrade** [city, Yugoslavia] B: 236 *with picture*
Serbia *picture on* S: 314
Yugoslavia Y: 576 *with picture*
- Belief**
Culture Ci: 1186
Hume, David (Hume's thought) H: 432
Pragmatism P: 729
Religion (Belief in a deity) R: 215
"Believe It or Not" [cartoon]
Ripley, Robert LeRoy R: 350
- Belinsky, Vissarion** [Russian author]
Russian literature (The age of realism) R: 562
- Belize** B: 236 *with pictures and map*
Flag *picture on* F: 200
- Belize City** B: 238
Belize B: 236 *with picture*
- Belknap, William Worth** [American government official]
Grant, Ulysses S. (table) G: 316; (Government frauds) G: 317
Impeachment (History) I: 91-92
- Bell** B: 238 *with pictures*
Carillon C: 238 *with picture*
Electric bell E: 165 *with diagram*
Jazz (The brass) J: 69
Orchestra bells O: 823
See also the list of Related Articles in the Bell article
- Bell** [zoology]
Moose (The body of a moose) M: 798 *with picture*
- Bell, Acton** *See* Brontë, Anne *in this index*
- Bell, Alexander** [British actor]
Bell, Alexander Graham (His early life) B: 240
- Bell, Alexander Graham** [Scottish-born American inventor] B: 240 *with picture*
Autograph *picture on* A: 943
Communication (The telephone) Ci: 882 *with picture*; (Famous first words) Ci: 884
Dolbear, Amos E. D: 284
Gray, Elisha G: 334
Hydrofoil (History) H: 468 *with picture*
Keller, Helen Adams K: 255
Kite (History) K: 340-341
Telephone (History) T: 99
- Bell, Alexander Melville** [Scottish educator]
Bell, Alexander Graham (His early life) B: 240
- Bell, Allen** [American inventor]
Lie detector L: 271
- Bell, Sir Charles** [British physician]
Bell's palsy B: 245
- Bell, Charles H.** [American political leader]
New Hampshire (table) N: 223
- Bell, Charles J.** [American political leader]
Vermont (table) V: 333
- Bell, Chichester A.** [American inventor]
Phonograph (History) P: 401-402
- Bell, Cool Papa** [American baseball player]
Baseball (table: Hall of Fame) B: 134; (Postwar baseball) B: 137
- Bell, Currer** *See* Brontë, Charlotte *in this index*
- Bell, Elisa Symonds** [Scottish artist]
Bell, Alexander Graham (His early life) B: 240
- Bell, Ellis** *See* Brontë, Emily *in this index*
- Bell, Frank** [American political leader]
Nevada (table) N: 173
- Bell, Griffin Boyette** [American government official]
Justice, Department of (table) J: 203
- Bell, John** [American political leader]
New Hampshire (table) N: 223
- Bell, John** [American political leader] B: 241
Lincoln, Abraham (Election of 1860) L: 318
- Bell, John C., Jr.** [American political leader]
Pennsylvania (table) P: 263
- Bell, John H.** [Canadian political leader]
Prince Edward Island (table) P: 791

Bell, Joseph [Scottish doctor]
Holmes, Sherlock H: 296

Bell, Mabel Hubbard [wife of]
Bell, Alexander Graham (The Boston teacher)
B: 240

Bell, P. Hansborough [American political leader]
Texas (table) T: 203

Bell, Samuel [American political leader]
New Hampshire (table) N: 223

Bell, Susan Jocelyn See Bell Burnell, Jocelyn in *this index*

Bell, Terrel H. [American government official]
Education, Department of (table) E: 111
Reagan, Ronald Wilson (table) R: 169

Bell, The [book by Murdoch]
Murdoch, Iris M: 930

Bell Aircraft Company
Airplane (During World War II [1939-1945])
A: 238

Bell Burnell, Jocelyn [British astronomer]
B: 242
Astronomy (Finding quasars and pulsars)
A: 849
Pulsar P: 898

Bell curve
Statistics (Probability) So: 868-869 with *diagram*

Bell for Adano, A [book by Hersey]
Hersey, John H: 216

Bell Jar, The [book by Plath]
Plath, Sylvia P: 566

Bell Laboratories
Invention (Research laboratories) I: 357

Bell-lyra [musical instrument]
Glockenspiel G: 234

Bell metal
Bell (How bells are made) B: 238

Bell of Saint Patrick's Will [Belfast]
Bell (History) B: 239

Bell pepper [plant]
Pepper P: 278

Bell ringer
Bell (Uses of bells) B: 239

Bell Rock [reef, Scotland]
Inchcape Rock I: 99

Bell Rock Lighthouse [North Sea]
Stevenson, Robert So: 897

"Bell Song" [music by Delibes]
Delibes, Léo D: 116

Bell System
AT&T Corp. A: 852
Telephone (The Bell System) T: 100

Bell Telephone Company
Bell, Alexander Graham (The telephone)
B: 241
Telephone (The Bell System) T: 100

Bell Telephone Laboratories See Bell Laboratories in *this index*

Bell tower See Campanile in *this index*

Bell Tower of Ivan the Great
Kremlin K: 387

Bell X-1 [aircraft]
Airplane (Supersonic airplanes) A: 238; *picture on A: 235*
Jet propulsion (Development of jet propulsion)
J: 114-115
Sonic boom So: 593
Yeager, Charles Elwood Y: 554

Bell X-1A [aircraft]
Yeager, Charles Elwood Y: 554

Bella Coola Indians B: 242

Belledonna [plant] B: 242
Atropine A: 878
Nightshade N: 421 with *picture*
Poison (Kinds of poisons) P: 601

Belladonna lily [plant]
Amaryllis A: 401 with *picture*

Bellamy, Edward [American author] B: 242

Bellemey, Francis [American editor]
Pledge of Allegiance P: 572

Bellermino, Saint Robert Francis Romulus
[Italian religious leader] B: 242

Bellas Artes, Palacio de
Mexico City (Cultural life and recreation)
M: 477 with *picture*

Bellay, Joachim du [French poet] See Du Bellay, Joachim in *this index*

Bellbird B: 243 with *picture*

Belle Boyd in Camp and Prison [book by Boyd]
Boyd, Belle B: 541

Belle Isle [park]
Detroit (Parks) D: 170

Belle Isle, Strait of [Labrador-Newfoundland]
Gulf of Saint Lawrence G: 437

Belleau Wood, Battle of [1918]
World War I (The last campaigns) W: 463

Bellecourt, Clyde [American social reformer]
American Indian Movement A: 412

Bellefontaine, Evangeline [literary figure]
Longfellow, Henry Wadsworth (Narrative poems) L: 450

Bellerophon [Greek mythology]
Chimera C: 471
Pegasus P: 229

Bellevue [Nebraska]
Nebraska (Places to visit) N: 102

Bellevue Hospital [New York City]
Ambulance A: 406

Bellevue House [Ontario]
Canada (table: National historic sites) C: 114

Bellflower [plant] B: 243
Flower F: 300 with *picture*

Belligerent [warfare]
Neutrality N: 153

Bellingrath Gardens [Alabama]
Alabama (Places to visit) A: 266 with *picture*

Bellingshausen, Fabian von [Russian explorer]
Antarctica (Early exploration) A: 535-536
Exploration (The exploration of Antarctica)
E: 450 with *map*

Bellingshausen Abyssal Plain
Southern Ocean (The ocean floor) So: 688a

Bellini, Gentile [Italian painter] B: 243

Bellini, Giovanni [Italian painter] B: 243 with *picture*
Francis of Assisi, Saint *picture on F: 481*
Titian T: 301

Bellini, Jacopo [Italian artist] B: 243

Bellini, Vincenzo [Italian composer] B: 244

Bellino, Joe [American football player]
Football (table) F: 363

Bellman, Carl Michael [Swedish author]
Scandinavian literature (The 1700's) S: 171

Bellmon, Henry [American political leader]
Oklahoma (table) O: 730; (The mid-1900's)
O: 734

Bello, Andrés [Venezuelan poet]
Latin-American literature (Romanticism) L: 112

Belloc, Hilaire [British author] B: 244
Biography (Modern biography) B: 314

Bellot Strait [Canada]
Northwest Passage N: 529

Bellow, Saul [American author] B: 244
American literature (Fiction and other prose)
A: 424 with *portrait*
Novel (After World War II) N: 574

Bellows B: 244 with *diagrams*

Bellows, George Wesley [American artist]
B: 245 with *picture*

Bells, Orchestra [musical instrument]
Orchestra bells O: 823

Bells, The [music by Rachmaninoff]
Rachmaninoff, Sergei Vassilievich R: 61

Bells and Grass [poems by De la Mare]
Regina Medal R: 207

Bells of Christmas, The [book by Hamilton]
Literature for children *picture on L: 376*

Bell's palsy [disease] B: 245

BellSouth [company]
Telephone (In the United States) T: 99

BellSouth Building [Nashville]
Nashville (The city) N: 23

Belly of Paris, The [book by Zola]
Zola, Émile Z: 602

Belmont Stakes [horse racing]
Horse racing (Types of horse races) H: 364-365
Kentucky Derby K: 296

Belmopan [city, Belize] B: 245

Belo, Carlos Felipe Ximenes [Timorese political leader]
East Timor (History) E: 41
Nobel Prizes (Peace: 1996) N: 449

Belo Horizonte [city, Brazil] B: 245

Belorussia See Belarus in *this index*

Beloved [book by Morrison]
African Americans (Achievements) A: 136p
Morrison, Toni M: 817

Belovezha Forest [Belarus-Poland]
Belarus (Land) B: 224b with *picture*

Below
Ship (Nautical terms) S: 416

Beloye More [Russia]
White Sea W: 292

Belsen [concentration camp] See Bergen-Belsen in *this index*

Belshazzar [Babylonian leader]
Handwriting on the wall H: 50

Belshazzar's Feast [music by Walton]
Walton, Sir William W: 22

Belt [astronomy]
Jupiter (Physical features of Jupiter) J: 198 with *picture*

Belt cities
Washington, D.C. (Metropolitan area) W: 80-81

Belt conveyor See Conveyor belt in *this index*

Beltane [festival]
May Day M: 322
Witchcraft (Witchcraft as a religion) W: 371-372

Belted kingfisher [bird]
Bird (Birds of inland waters and marshes)
B: 340 with *picture*

Kingfisher K: 329 with *picture*

Beltsville [Maryland]
Washington, D.C. (Metropolitan area) W: 80-81

Beltsville Small White [turkey]
Turkey (Domestic turkeys) T: 513

Beltway [road]
Road (Bypasses) R: 358

Beluga [sea animal]
Aquarium, Public *picture on A: 579*
Whale (Belugas and narwhals) W: 258; *picture on W: 257*

Beluga sturgeon [fish]
Sturgeon So: 934
Caviar C: 322

Belukha [mountain, Russia]
Altai Mountains A: 388

Belváros [district]
Budapest (City) B: 666

Belvedere Courtyard [Vatican City]
Bramante, Donato B: 562

Belvedere Palace
Vienna (The city) V: 362

Bely, Andrey [Russian author]
Russian literature (Symbolism) R: 563

Belyayev, Pavel I. [Soviet cosmonaut]
Space exploration (Voskhod and Gemini: The first multiperson space flights) So: 714 with *picture*

Belzec [concentration camp]
Concentration camp (Nazi concentration camps) Ci: 927

Bemba [language and culture] B: 246

Bembo, Pietro [Italian author]
Italian literature (Humanism and the Renaissance) I: 494

Bemelmans, Ludwig [American author] B: 246 with *picture*

Bémont, M. Gustave [French physicist]
Curie, Pierre Ci: 1194
Radium R: 100

Ben Ali, Zine El-Abidine [Tunisian political leader]
Tunisia (History) T: 489-490

Ben and Me [book by Lawson]
Lawson, Robert L: 147

Ben Bella, Ahmed [Algerian political leader]
B: 246
Algeria (Independence) A: 365

Ben-Gurion, David [Israeli political leader]
B: 246
Israel (Independence and conflict) I: 487
Jews *picture on J: 124*

Ben-Hur [book by Wallace]
Wallace, Lew W: 16

Ben-Hur [film]
Motion picture (Best picture: 1959) M: 861

Ben Matthias, Joseph [Jewish historian]
Josephus, Flavius J: 169

Ben Nevis [mountain] B: 247
Scotland (Recreation) S: 214-215; (Land regions) S: 217 with *picture*

Ben-Yehuda Street
Jerusalem *picture on J: 97*

Benecerref, Baruj [American doctor]
Nobel Prizes (Physiology or medicine: 1980)
N: 445

Benares [India] See Varanasi in *this index*

Benavente, Jacinto [Spanish dramatist]
B: 247
Spanish literature (Drama) So: 763

Bench, Johnny [American baseball player]
Baseball (table: Hall of Fame) B: 134

Bench mark [surveying] B: 247

Bench press [weightlifting]
Weightlifting W: 183

Bench show
Dog (Dog competitions) D: 280

- Bench trial** [law]
Court (How courts work) Ci: 1101-1102
- Bench warrant** [law]
Warrant W: 37
- Bend** [knot]
Knots, hitches, and splices K: 355
- Bend on** [flag]
Flag (table) F: 193
- Benday dot** [art]
Painting (Pop art) P: 86 *with picture*
- Bender, Chief** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Bending magnet**
Magnetism (In science and medicine) M: 60a
- Bending the Bow** [poems by Duncan]
Duncan, Robert D: 384
- Bendix, Vincent** [American inventor] B: 247
- Bendjedid, Chadli** [Algerian political leader]
Algeria (Recent developments) A: 365
- Bends** [disorder] B: 247
Caisson C: 18
Diving, Underwater (Dangers of underwater diving) D: 246
Hyperbaric oxygen chamber H: 475
- Bendy** [heraldry]
Heraldry picture on H: 195
- Benedetti, Count** [French diplomat]
Franco-Prussian War (Events leading up to the war) F: 483
- Benedick** [literary figure]
Shakespeare, William (*Much Ado About Nothing*) S: 360 *with picture*
- Benedict X** [antipope]
Pope (table) P: 666
- Benedict XI** [pope]
Pope (table) P: 666
- Benedict XIII** [pope]
Pope (table) P: 666
- Benedict XIII** [antipope]
Pope (table) P: 666
- Benedict XIV** [pope]
Pope (The 1700's and 1800's) P: 665 *with picture*
- Benedict XV** [pope] B: 247
- Benedict, Ruth Fulton** [American anthropologist] B: 247
- Benedict, Saint** See Benedict of Nursia, Saint *in this index*
- Benedict, Zadoc** [American businessman]
Hat (History) H: 84-85
- Benedict of Nursia, Saint** [Italian religious leader] B: 247
Benedictines B: 248
Monasticism (Christian monasticism) M: 700-701
Monte Cassino M: 762
Religious life (Religious life in the Middle Ages) R: 226
Roman Catholic Church (The early Middle Ages) R: 407
- Benedictines** [religious group] B: 248
Monasticism *picture on M*: 700
Monte Cassino M: 762
Pope (The early Middle Ages) P: 663
Religious life (Religious life in the Middle Ages) R: 226
- Benedictus, Edouard** [French chemist]
Glass (table) G: 218
- Benedum Center for the Performing Arts**
Pittsburgh (The arts) P: 500c
- Benefactor, The** [book by Sontag]
Sontag, Susan So: 594
- Beneficiary**
Insurance (Life insurance) I: 309
Trust fund (How a trust fund works) T: 474
- Beneficiation engineering**
Mining (The mining industry) M: 577-578
- Benefit** [compensation] See Fringe benefit *in this index*
- Benefit** [insurance]
Insurance I: 309
- Benefit** [pension]
Pension P: 272
Sex discrimination (Changes in laws) S: 335-336
- Benefit** [philosophy]
Ethics (Modern ethics) E: 366
- Benefit-cost analysis** See Cost-benefit analysis *in this index*
- Benefit society**
Fraternal organization F: 495
- Benelux** [alliance] B: 248
Luxembourg (History) L: 531
- Benelux Treaty** [1958]
Benelux B: 248
- Beneš, Eduard** [Czech political leader] B: 248
- Czech Republic** (The creation of Czechoslovakia) Ci: 1213
Czechoslovakia (The formation of Czechoslovakia) Ci: 1215; (The Munich Agreement) Ci: 1215
- Benét, Stephen Vincent** [American author] B: 248
- Benét, William Rose** [American author] B: 248
Wylie, Elinor W: 515
- Bénévent, Prince de** See Talleyrand *in this index*
- Benevolent and Protective Order of Elks** See Elks, Benevolent and Protective Order of *in this index*
- Benga** [people]
Equatorial Guinea (History) E: 347
- Bengal** [region, Asia] B: 248
Bangladesh B: 78
India (Rise of Indian nationalism) I: 131; (World War II [1939-1945]) I: 132
- Bengal, Bay of**
Bay of Bengal B: 175 *with map*
- Bengali** [language]
India (Languages) I: 114
- Bengali literature**
Bangladesh (The arts) B: 82
Tagore, Rabindranath T: 13
- Bengalis** [people]
Bangladesh (Population and ancestry) B: 80
- Bengals, Cincinnati** See Cincinnati Bengals *in this index*
- Benghazi** [city, Libya] B: 249
Libya (Strained relations with the United States) L: 268
- Benguela Current**
Atlantic Ocean (Moving ocean waters) A: 866
- Benign prostatic hyperplasia** [disorder]
Prostate gland P: 830
- Benign tumor**
Cancer (Conclusive diagnosis) C: 171
Skin (Tumors) S: 491
Tumor T: 484
- Benigni, Roberto** [Italian actor/director]
Motion picture (Best performance by an actor: 1998) M: 863
- Benin** [country] B: 249 *with picture and map*
Flag *picture on F*: 198
French West Africa F: 527 *with map*
- Benin** [former kingdom] B: 250 *with map*
Nigeria (Early kingdoms) N: 417
Pottery (Early pottery) P: 718
- Benjamin** [Biblical figure] B: 251
Joseph (The prime minister) J: 167-168
- Benjamin, Joel** [American chess player]
Chess (United States chess champions) C: 414
- Benjamin, Judah Philip** [Confederate statesman] B: 251
- Benjamin, Tribe of** [Old Testament]
Benjamin B: 251
- Benjamin Franklin** [book by Van Doren]
Van Doren, Carl V: 280
- Benjamin Harrison Memorial Home**
Indianapolis (Recreation) I: 222 *with map*
- Benjamites** [ancient people]
Benjamin B: 251
- Bennett, Arnold** [British author] B: 251
English literature (Literature before World War I) E: 322
- Bennett, Caleb P.** [American political leader]
Delaware (table) D: 109
- Bennett, Comet** [astronomy]
Comet (table) Ci: 868
- Bennett, Floyd** [American aviator] B: 251
Airplane (Fliers of the golden age) A: 237
Exploration (Arctic exploration) E: 449-450
- Bennett, James Gordon** [1795-1892, American editor] B: 251
Journalism (The growth of U.S. newspapers) J: 174
- Bennett, James Gordon, Jr.** [1841-1918, American journalist] B: 251 *with map*
Mackay, John William M: 20
- Bennett, Michael** [American choreographer]
Musical comedy (The modern musical emerges) M: 960
- Bennett, Richard Bedford** [Canadian statesman] B: 252 *with pictures*
Canada, History of (The Great Depression) C: 150
Great Depression (In Canada) G: 342
King, William Lyon Mackenzie (Second term as prime minister) K: 327
- New Brunswick N: 180
Progressive Conservative Party P: 812
- Bennett, Robert Foster** [American political leader]
Kansas (table) K: 234
- Bennett, Thomas** [American political leader]
South Carolina (table) So: 658
- Bennett, Viscount** See Bennett, Richard Bedford *in this index*
- Bennett, William Andrew Cecil** [Canadian political leader]
British Columbia (table) B: 627; (The mid-1900's) B: 630
- Bennett, William J.** [American government official]
Education, Department of (table) E: 111
Reagan, Ronald Wilson (table) R: 169
- Bennett, William R.** [Canadian political leader]
British Columbia (table) B: 627
Campbell, Kim (Provincial legislator) C: 90c
- Bennington** [Vermont]
Vermont (Places to visit) V: 326 *with picture*
- Bennington, Battle of** [1777]
Revolutionary War in America (table) R: 276; (Victory at Saratoga) R: 282
Vermont (The Revolutionary War in America) V: 334; *picture on V*: 336
- Bennington Battle Monument**
Vermont (Places to visit) V: 326 *with picture*
- Bennington Museum**
Vermont (Museums) V: 322
- Bennu** [mythology]
Phoenix P: 399
- Benny, Jack** [American entertainer] B: 254
- Benso, Camillo** [Italian political leader] See Cavour, Count di *in this index*
- Benson, Elmer A.** [American political leader]
Minnesota (table) M: 602
- Benson, Ezra Taft** [American political leader]
Agriculture, Department of (table) A: 161
Eisenhower, Dwight David (table) E: 152
- Benson, Frank W.** [American political leader]
Oregon (table) O: 845
- Benson, George** [American musician]
Jazz (Fusion) J: 73
- Benson, William S.** [American admiral]
Navy, United States ("The Great White Fleet") N: 88
- Bent** [grass] See Bentgrass *in this index*
- Bent, Charles** [American political leader]
Taos T: 36
- Bent, William** [American pioneer]
Colorado (Exploration and settlement) Ci: 845
- Benteen, Frederick W.** [American soldier]
Custer, George Armstrong (The battle) Ci: 1200
- Bentgrass** [grass] B: 254
Lawn (Planting the grass) L: 142
- Bentham, Jeremy** [British philosopher] B: 254
Dickens, Charles (The second phase) D: 188
Ethics (Bentham and Mill) E: 367
Mill, James M: 552
Political science (Liberalism) P: 639
Radicalism (In Europe) R: 82
Utilitarianism U: 251
- Benthic fish**
Fishing (Fishing tips) F: 179
- Benthos** [biology]
Ocean (The benthos) O: 655; *pictures on O*: 656, O: 657
- Benthoscope** [diving vessel]
Diving, Underwater (Diving in vehicles) D: 246
- Benton, Robert** [American director]
Motion picture (Best achievement in directing: 1979) M: 862
- Benton, Thomas Hart** [American painter] B: 254
Painting (Regionalism) P: 83
Western frontier life in America *picture on W*: 239
- Benton, Thomas Hart** [American political leader] B: 254
- Benton Lake National Wildlife Refuge**
Montana (Interesting facts) M: 743
- Bentonite** [earth]
Clay Ci: 658
- Bentonville** [North Carolina]
North Carolina (The Civil War and Reconstruction) N: 493
- Bentonville Battlefield**
North Carolina (Places to visit) N: 482
- Bent's Fort**
Colorado (Exploration and settlement) Ci: 845; *picture on Ci*: 846

Bent's Old Fort National Historic Site [La Junta]

Colorado (Places to visit) **Ci**: 836

National Park System (table: National historic sites) **N**: 52

Bentsen, Lloyd Millard, Jr. [American political leader] **B**: 254 *with portrait*

Dukakis, Michael Stanley (Political career)

D: 379-380

Benz, Karl [German engineer] **B**: 255

Automobile (The gasoline car) **A**: 963 *with picture*

Gasoline engine (Development of the gasoline engine) **G**: 66

Invention (The late 1800's) **I**: 362

Benz & Company

DaimlerChrysler AG **D**: 6

Benzedrine [medication]

Amphetamine **A**: 439

Drug abuse (table: Some commonly abused drugs) **D**: 363

Benzene [chemical] **B**: 255 *with diagram*

Benzene ring [chemistry]

Benzene **B**: 255 *with diagram*

Toluene **T**: 324

Benzocaine [drug] **B**: 255

Benzodiazepine [drug] **B**: 255

Alcoholism (Treatment) **A**: 338

Sedative **S**: 279

Benzoic acid [chemical]

Toluene **T**: 324

Benzol [chemical] *See* Benzene *in this index*

Beograd [Yugoslavia]

Belgrade **B**: 236 *with picture*

Beothuk Indians [American Indians] **B**: 256

Newfoundland and Labrador (Early European exploration) **N**: 375

Beowulf [poem] **B**: 256

English literature (Old English poetry) **E**: 314-315; *picture on* **E**: 316

BeppoSAX [satellite]

Telescope (Gamma-ray telescopes) **T**: 109

Bequest [law]

Will **W**: 306

Berber [language]

Egypt (Language) **E**: 123

Berbers [people] **B**: 256

Africa (Peoples of Africa) **A**: 104; *pictures on* **A**: 99, **A**: 109

Algeria (Ancestry) **A**: 361; (History) **A**: 364

Barbary States **B**: 105

Ghana Empire **G**: 181 *with map*

Libya (People) **L**: 265; (Early days) **L**: 267

Morocco (Arab conquest) **M**: 814

Sahara (History) **S**: 22

Berbice [river, Guyana]

Guyana (Land) **G**: 446

Berceo, Gonzalo de [Spanish poet]

Spanish literature (Early medieval literature) **S**: 757-758

Berck, Judith [American author]

Literature for children (Information books) **L**: 360

Berdyaev, Nicolas [Russian philosopher] **B**: 256

Bérégovoy, Pierre [French political leader]

France (Socialists win power) **F**: 478

Beresford, Tommy and Tuppence [literary figures]

Christie, Agatha **C**: 527

Beret

Hat *picture on* **H**: 84

Beretta [firearm]

Handgun (Double-action semiautomatic pistols) **H**: 44

Berezhnaya, Elena [Russian athlete]

Olympic Games (The recent games) **O**: 753-754

Berg, Alban [Austrian composer] **B**: 256

Classical music (Atonal music) **Ci**: 649-650

with picture

Opera (The search for new forms) **O**: 799-800; (*Wozzeck*) **O**: 808

Berg, Otto [German chemist]

Rhenium **R**: 290

Berg, Patty [American golfer]

Golf (U.S. Women's Open) **G**: 265; (Women's golf) **G**: 266 *with picture*

Berg, Paul [American chemist]

Nobel Prizes (Chemistry: 1980) **N**: 443

Sanger, Frederick **S**: 110

Bergamot [plant] **B**: 257 *with picture*

Bergamot orange [tree]

Bergamot **B**: 257

Bergelson, David [Russian author]

Yiddish literature **Y**: 566

Bergen [Norway] **B**: 257

Europe *picture on* **E**: 380

Bergen [U.S. history]

New Jersey (Settlement) **N**: 250

Bergen, Edgar [American ventriloquist]

Ventriloquism *picture on* **V**: 309

Bergen-Belsen [concentration camp] **B**: 257

Berger, Oscar [British cartoonist]

Caricature *picture on* **C**: 238

Berger, Victor L. [American political leader]

B: 257

Socialism (Moderate socialism) **So**: 561

Bergerac, Cyrano de *See* Cyrano de Bergerac,

Savinien *de in this index*

Bergeson, Ole [American settler]

Saint Cloud **S**: 32

Bergh, Henry [American philanthropist]

Humane society **H**: 430

Society for the Prevention of Cruelty to

Animals **So**: 563

Bergius, Friedrich [German chemist]

Nobel Prizes (Chemistry: 1931) **N**: 442

Bergland, Robert S. [American government official]

Agriculture, Department of (table) **A**: 161

Carter, Jimmy (table) **C**: 257

Bergman, Ingmar [Swedish director] **B**: 257

Motion picture (The art film revival) **M**: 870

with picture

Sweden (Motion pictures) **So**: 1027-1028

Bergman, Ingrid [Swedish actress] **B**: 257 *with*

portrait

Motion picture (Best performance by an actress: 1944, 1956) **M**: 862; (Best performance by an actress in a supporting role:

1974) **M**: 863

Bergson, Henri [French philosopher] **B**: 258

Bergström, Sune Karl [Swedish chemist]

Nobel Prizes (Physiology or medicine: 1982)

N: 445

Bergybit [oceanography]

Iceberg (North Atlantic icebergs) **I**: 17

Beria, Lavrenti Pavlovitch [Soviet political leader]

Stalin, Joseph (Rule by terror) **So**: 826-827

Beriberi [disease] **B**: 258

Bread (History) **B**: 589

Bering, Vitus [Danish navigator] **B**: 258

Alaska (European exploration) **A**: 300-301; *picture on* **A**: 302

Exploration (The Russians in Siberia) **E**: 447;

map on **E**: 451

Bering Island [Bering Sea]

Bering, Vitus **B**: 258

Commander Islands **Ci**: 870

Bering Land Bridge National Preserve [Alaska]

National Park System (table: National preserves) **N**: 58

Bering Sea [North Pacific] **B**: 258 *with map*

Bering, Vitus **B**: 258

Bering Sea Arbitration [1893]

Thompson, Sir John Sparrow David (Prime minister) **T**: 264

Bering Sea controversy [Britain-U.S.] **B**: 258

Harrison, Benjamin (Foreign affairs) **H**: 73

Bering Strait [Alaska-Siberia]

Bering, Vitus **B**: 258

Exploration (Exploring the Pacific) **E**: 448

Indian, American (Early days) **I**: 151

Berio, Luciano [Italian composer] **B**: 259

Berisha, Sali [Albanian political leader]

Albania (End of Communist rule) **A**: 308-309

Berkeley [California] **B**: 259

Berkeley [estate]

Harrison, William Henry *picture on* **H**: 75

Virginia (Places to visit) **V**: 408

Berkeley, Busby [American director/choreographer]

Motion picture (Movies in the 1930's) **M**: 868

with picture

Berkeley, George [Irish philosopher] **B**: 259

Idealism **I**: 46

Philosophy (Modern philosophy) **P**: 387-388

Psychology (Beginnings) **P**: 849

Berkeley, Lord John [English colonial official]

New Jersey (English control) **N**: 250

Berkeley, Sir William [English colonial official]

B: 259

Bacon, Nathaniel **B**: 18

Bacon's Rebellion **B**: 19

House of Burgesses **H**: 384

Virginia (Royal governors and Cromwell) **V**: 418

with picture; picture on **V**: 420

Berkeley Plantation [U.S. history]

Thanksgiving Day (The first Thanksgiving observance in America) **T**: 230

Berkelium [element] **B**: 259

Element, Chemical (Names and symbols of elements) **E**: 219

Transuranium element **T**: 401

Berkman, Alexander [Russian-American social reformer]

Goldman, Emma **G**: 258

Berkshire [hog]

Hog (Kinds of hogs) **H**: 285 *with pictures;*

table **H**: 286

Berkshire Hathaway Inc. [company]

Buffett, Warren Edward **B**: 680

Berkshire Hills [Massachusetts]

Green Mountains **G**: 381

Massachusetts (Land regions) **M**: 282; *picture on* **M**: 284

Berkshire Valley

Massachusetts (Land regions) **M**: 282

Berlage, Hendrik Petrus [Dutch architect]

Architecture (Early modern architecture in Europe) **A**: 627-628; *picture on* **A**: 627

Berle, Milton [American comedian]

Television (Early programs) **T**: 119; *picture on*

T: 120

Berlin [Germany] **B**: 260 *with pictures and maps*

Berlin Airlift **B**: 266

Berlin Wall **B**: 267

Bonn (History) **B**: 461

Cold War (The Cold War in the 1970's)

Ci: 769-770

Germany (East Germany) **G**: 170; (The unification of East and West Germany) **G**: 171;

pictures on : 145, **G**: 152, **G**: 171

Kennedy, John Fitzgerald (Berlin) **K**: 265

Olympic Games (Between the wars) **O**: 751

Union of Soviet Socialist Republics (History)

U: 35-37

World War II (Peace with Germany) **W**: 497

Berlin, Congress of [1878] **B**: 266

Bulgaria (Ottoman rule) **B**: 692

Congress **Ci**: 941

Berlin, Irving [American composer] **B**: 266

"God Bless America" **G**: 244

Berlin, University of *See* Humboldt University *in this index*

Berlin Airlift [1948-1949] **B**: 266

Air Force, United States (Peacetime emergencies) **A**: 190; (The Berlin airlift) **A**: 195

Berlin (The Soviet blockade) **B**: 264

Clay, Lucius Dubignon **Ci**: 659

Cold War (The Berlin blockade) **Ci**: 764; *picture on* **Ci**: 767

Germany (The division of Germany) **G**: 169-

170

Berlin Conference [1884-1885] **B**: 266

Berlin Decree [French history]

Continental System **Ci**: 1022

Milan Decree **M**: 541

Napoleon I (Fall from power) **N**: 17

Berlin Exhibition [1879]

Electric railroad *picture on* **E**: 188

Berlin Wall **B**: 267

Berlin **B**: 260; (Economy) **B**: 262-263; (The

Berlin Wall) **B**: 265; (A united Berlin)

B: 265 *with picture*

Cold War (The Berlin Wall) **Ci**: 767

Germany (People) **G**: 147-150; (East Germany)

G: 170, **G**: 145

Berlin Zoo [Germany]

Bermúdez, Juan de [Spanish explorer]
Bermuda (History) **B**: 268

Bern [city, Switzerland] **B**: 269 *with picture*
Postal Union, Universal **P**: 708
Switzerland **So**: 1050

Bernadette, Saint [French religious leader]
B: 269
Lourdes **L**: 507

Bernadotte, Folke [Swedish statesman]
Bunche, Ralph Johnson **B**: 699

Bernadotte, Jean Baptiste Jules [French general] **B**: 269
Sweden (The Napoleonic Wars) **So**: 1034

Bernard, Claude [French physiologist] **B**: 270
Biology (Materialistic physiology and the cell theory) **B**: 319
Curare **Ci**: 1193

Bernard, Henriette-Rosine *See* Bernhardt, Sarah *in this index*

Bernard, Réseau Jean [cave, France]
Cave (table) **C**: 320

Bernard of Clairvaux, Saint [French religious leader] **B**: 270
Crusades (The Second Crusade) **Ci**: 1160
Eugene III **E**: 376
Knights Templars **K**: 353

Bernard of Menthon, Saint [Italian religious leader]
Saint Bernard Passes (Great St. Bernard) **S**: 32

Bernardin, Joseph Louis [American religious leader] **B**: 270

Bernardo [pope] *See* Eugene III *in this index*

Berne *See* Bern *in this index*

Berne Convention [1989]
Copyright (International copyright) **Ci**: 1048

Berners-Lee, Tim [British computer scientist] **B**: 270
Internet (The World Wide Web) **I**: 350e *with picture*
World Wide Web **W**: 499

Bernese Alps [mountains]
Switzerland (The Swiss Alps) **So**: 1055-1056

Bernese mountain dog **B**: 270
Dog *picture on* **D**: 267

Bernese Oberland [area]
Bern (The Bernese Oberland) **B**: 269

Bernhard [prince of The Netherlands]
Juliana **J**: 187

Bernhard, Thomas [Austrian author]
German literature (German literature after 1945) **G**: 142

Bernhardt, Sarah [French actress] **B**: 270

Bernheim, Hippolyte [French doctor]
Hypnotism (Scientific studies) **H**: 479

Bernier, Joseph Elzéar [Canadian explorer] **B**: 271

Bernini, Gian Lorenzo [Italian sculptor] **B**: 271
Architecture (Baroque architecture) **A**: 622; *picture on* **A**: 620
Baroque (Baroque sculpture) **B**: 117
Borromini, Francesco **B**: 491
Italy *picture on* **I**: 505
Saint Peter's Basilica (The exterior) **S**: 53; (The interior) **S**: 53
Sculpture (European sculpture) **S**: 253 *with picture*

Bernolák, Anton [Slovak linguist]
Slovakia (Hungarian rule) **S**: 509

Bernoulli, Daniel [Swiss mathematician]
Aerodynamics (Lift) **A**: 85
Bernoulli's principle **B**: 271
Hydraulics (Laws of hydrodynamics) **H**: 464
Mathematics (Developments in the 1700's) **M**: 307
Sound (The study of waves) **So**: 605

Bernoulli, Jakob [Swiss mathematician]
Mathematics (Developments in the 1700's) **M**: 307

Bernoulli, Johann [Swiss mathematician]
Mathematics (Developments in the 1700's) **M**: 307

Bernoulli's principle [physics] **B**: 271
Aerodynamics (Lift) **A**: 85
Hydraulics (Laws of hydrodynamics) **H**: 464 *with diagrams*

Bernstein, Carl [American journalist]
Watergate (The break-in and cover-up) **W**: 144

Bernstein, Eduard [German political leader]
Socialism (Moderate socialism) **So**: 561

Bernstein, Leonerd [American musician] **B**: 271
Musical comedy (The modern musical emerges) **M**: 960

Berosus [Babylonian author]
Seven Wonders of the Ancient World (The

Hanging Gardens of Babylon) **S**: 325

Berra, Yogi [American baseball player]
Baseball (table: Hall of Fame) **B**: 134

Berrien, John M. [American government official]
Jackson, Andrew (table) **J**: 11; (Split with Calhoun) **J**: 11
Justice, Department of (table) **J**: 203

Berry [fruit] **B**: 271
Coffee (From bean to cup) **Ci**: 753-754 *with pictures*
Fruit (Simple fruits) **F**: 548; *pictures on* **F**: 547
See also the list of Related Articles in the Berry article

Berry, Chuck [American singer] **B**: 271 *with portrait*
Rock music (The emergence of rock 'n' roll) **R**: 377 *with picture*

Berry, Duc de [French nobleman]
Middle Ages *picture on* **M**: 522
Painting (Gothic painting) **P**: 50-51

Berry, Halle [American actress] **B**: 272
Motion picture (Best performance by an actress: 2001) **M**: 862

Berry, James [American author]
Literature for children (Fiction) **L**: 358

Berry, James Henderson [American political leader]
Arkansas (table) **A**: 712

Berry, Marcellus F. [American businessman]
Traveler's check **T**: 405

Berry, Martha McChesney [American educator] **B**: 272

Berry, Nathaniel S. [American political leader]
New Hampshire (table) **N**: 223

Berry, Thomas [American political leader]
South Dakota (table) **So**: 680

Berry, William F. [American businessman]
Lincoln, Abraham (Search for a career) **L**: 314

Berry College
Berry, Martha McChesney **B**: 272

Berryman, John [American poet] **B**: 272
American literature ("Confessional" poetry) **A**: 423

Berserkers [Norse mythology]
Vikings (Warfare) **V**: 381

Bersanik, Louky [Canadian poet]
Canadian literature (Modern Canadian poets) **C**: 160-161

Bertelli, Angelo [American football player]
Football (table) **F**: 363

Bertha, Queen [queen of France]
Mother Goose (Who was Mother Goose?) **M**: 842

Berthelot, Marcelin [French chemist]
Acetylene **A**: 25

Berthollet, Claude L. [French chemist]
Proust, Joseph Louis **P**: 838

Bertillon, Alphonse [French statistician]
Bertillon system **B**: 272

Bertillon system [criminology] **B**: 272
Crime laboratory (History) **Ci**: 1141-1142
Fingerprinting (History) **F**: 107

Bertin, Jean [French inventor]
Air cushion vehicle (History) **A**: 181

Bertoia, Harry [American sculptor]
Furniture (The retro style) **F**: 584; *picture on* **F**: 583

Bertolucci, Bernardo [Italian director]
Motion picture (Best achievement in directing: 1987) **M**: 862

Berton, Pierre [Canadian author] **B**: 272

Bertram [literary figure]
Shakespeare, William (*All's Well That Ends Well*) **S**: 362

Bertrand, Jean-Jacques [Canadian political leader]
Quebec (table) **Q**: 29

Berwanger, Jay [American football player]
Football (table) **F**: 363

Beryl [mineral] **B**: 272
Emerald **E**: 257
Gem (Color) **G**: 77

Berylliosis [disease]
Beryllium **B**: 273

Beryllium [element] **B**: 273
X rays (Penetrating power) **X**: 541

Berzelius, Jöns Jakob [Swedish chemist] **B**: 273
Chemistry (Dalton's atomic theory) **C**: 402
Selenium **S**: 289
Silicon **S**: 458

Besançon, Diet of
Adrian IV **A**: 67

Besant, Annie Wood [British social reformer] **B**: 273

Besh barmak [food]
Kazakhstan (People) **K**: 250a-250b

Besht *See* Ba'al Shem Tov *in this index*

Beside the Sea [paintings by Motherwell]
Motherwell, Robert **M**: 843

Bess [opera character]
Opera (*Porgy and Bess*) **O**: 806

Bessarabia [region, Europe] **B**: 273
Moldova (History) **M**: 690a
Union of Soviet Socialist Republics (World War II) **U**: 37

Bessborough, Earl of [British statesman] **B**: 273

Bessel, Friedrich Wilhelm [German astronomer] **B**: 273

Bessemer, Sir Henry [British inventor] **B**: 273
Iron and steel (The birth of modern steelmaking) **I**: 451

Bessemer process [steelmaking]
Bessemer, Sir Henry **B**: 273
Iron and steel (The birth of modern steelmaking) **I**: 451 *with picture*

Best, Charles Herbert [Canadian physiologist] **B**: 274
Banting, Sir Frederick Grant **B**: 99
Insulin (History) **I**: 308

Best Friend of Charleston, The [locomotive]
Charleston (Government and history) **C**: 383-384
Locomotive (History) **L**: 417
Railroad (Developments in the United States) **R**: 115

Best Man, The [play by Vidal]
Vidal, Gore **V**: 359

Best Years of Our Lives, The [film]
Motion picture (Best picture: 1946) **M**: 861

Bestiary [literature]
Manuscript (European manuscripts of the Middle Ages) **M**: 173-174

Bestla [Norse mythology]
Mythology (The creation of life) **M**: 984

Beta [letter]
Alphabet (The Greeks) **A**: 383

Beta [recording system]
Videotape recorder (History) **V**: 361

Beta-blocker [drug] **B**: 274
Angina pectoris **A**: 461
Heart (Treatment) **H**: 138; (Progress in treatment and prevention) **H**: 145
Migraine **M**: 538

Beta-carotene [chemical]
Antioxidant **A**: 557

Beta cells
Pancreas **P**: 128

Beta chain [genetics]
Thalassemia **T**: 228

Beta decay [physics]
Force (The weak force) **F**: 371
Transmutation of elements **T**: 379

Beta-endorphin [physiology]
Endorphin **E**: 272

Beta-hemolytic streptococcus [bacteria]
Strep throat **So**: 925
Streptococcus **So**: 926

Beta interferon [drug]
Interferon **I**: 324

Beta particle [physics] **B**: 274
Atom (Radioactivity) **A**: 873
Nuclear energy (The beginning of nuclear physics) **N**: 590
Nuclear weapon (Residual nuclear radiation) **N**: 599
Radiation (Particle radiation) **R**: 76; (Discovery of radioactivity) **R**: 80-81; *picture on* **R**: 78
Wu, Chien-shiung **W**: 514

Beta Persei [star] *See* Algol *in this index*

Beta Pictoris [star]
Solar system (Other solar systems) **So**: 581

Beta ray [physics]
Nuclear energy (The beginning of nuclear physics) **N**: 590

Beta thalassemia [disease]
Thalassemia **T**: 228

Betancourt, Rómulo [Venezuelan political leader]
Venezuela (The road to democracy) **V**: 305

Betatron [machine]
Illinois, University of (History) **I**: 77

Betel [food] **B**: 274

Betelgeuse [star] **B**: 274 *with diagram*
Orion **O**: 856
Star *picture on* **So**: 842

Bethe, Hans Albrecht [American physicist]

Astronomy (Advances in astrophysics) A: 848
 Nobel Prizes (Physics: 1967) N: 441
Bethel African Methodist Episcopal Church [religious group]
 Allen, Richard A: 371
Bethel Bible College
 Pentecostal churches (Major Pentecostal churches) P: 275
Bethesda [Maryland]
 National Naval Medical Center N: 41
 Washington, D.C. *picture on* W: 81
Bethlehem [Jordan] B: 274 *with picture*
Bethlehem [Pennsylvania]
 Easter (Other customs) E: 44
Bethlehem Steel Corporation B: 275
Bethsaida [ancient city]
 Galilee G: 10
Bethune, Mary McLeod [American educator]
 B: 275 *with portrait*
 African Americans (The Great Depression) A: 1361
Béthune, Maximilien de [French government official]
 France (The age of absolutism) F: 473
Bethune, Norman [Canadian surgeon] B: 275
Bethune-Cookman College
 Bethune, Mary McLeod B: 275
Betjeman, John [British poet] B: 275
Betrayal of Christ, The
 Stained glass *picture on* So: 822
Betrothed, The [book by Manzoni]
 Italian literature (Romanticism) I: 495
 Manzoni, Alessandro M: 174
BETRS [telephone service] See Basic Exchange
 Telephone Radio Service *in this index*
Betsy Ross House
 Philadelphia (Downtown Philadelphia) P: 359
Betta [fish]
 Fightingfish F: 96 *with picture*
Bette Peak [mountain]
 Libya (Land and climate) L: 266
Bettelheim, Bruno [American psychiatrist]
 B: 276
Better business bureau B: 276
 Consumerism (The right to safety) Ci: 1018
 Sales (Regulation of selling) S: 64
Better Homes and Gardens
 Magazine (table) M: 45
Betti, Ugo [Italian dramatist]
 Drama (Italian drama) D: 339
Betting
 England (Recreation) E: 296-297
 Gambling G: 20
 Horse racing (Betting) H: 365
Bettong [animal]
 Kangaroo (Other macropods) K: 215
Betts v. Brady [U.S. history]
 Gideon v. Wainwright G: 188
Betty lamp
 Lamp (Fat or oil lamps) L: 52
Between Rounds [painting by Eakins]
 Eakins, Thomas *picture on* E: 6
Between Scylla and Charybdis [expression]
 Scylla S: 261
Beuel [district]
 Bonn (The city) B: 460-461
Bevel gear
 Gear G: 75
Beverage
 See *specific beverages, such as* Alcoholic beverage, Coffee, Soft drink *in this index*
Beverage truck [vehicle]
 Truck (Kinds of trucks) T: 457
Beveridge, John L. [American political leader]
 Illinois (table) I: 71
Beverly, Robert [American historian]
 American literature (Virginia) A: 414
Beverly Hills [California] B: 276
 California *picture on* C: 37
 Los Angeles (Metropolitan area) L: 462; *picture on* L: 460
Beverwyck [former village]
 Albany (Government and history) A: 309-310
Bevilacqua, Anthony Joseph Cardinal
 [American religious leader] B: 276
Bewick, Thomas [British naturalist] B: 276
Bewick's wren [bird]
 Wren W: 504, *picture on* W: 503
Bey [title]
 Egypt (Ottoman and French control) E: 130
 Tunisia (History) T: 489
Boyle, Marie Henri See *Stendhal in this index*
Beyond Good and Evil [book by Nietzsche]
 Nietzsche, Friedrich (Nietzsche and reli-

gion) N: 406-407
Beyond the Horizon [play by O'Neill]
 O'Neill, Eugene Gladstone O: 762
 Realism (In drama) R: 172
Beyond the Hundredth Meridian [book by Stegner]
 Stegner, Wallace So: 883
Bezalel [Israelite craftworker]
 Ark of the Covenant A: 693
Bezer [ancient city]
 Cities of refuge Ci: 568
Bezoar goat
 Goat (Wild goats) G: 239; *picture on* G: 240
Bhagavad-Gita [religious book] B: 276
 Hinduism (Sacred writings) H: 236
 India (Literature) I: 120
 Krishna K: 388
 Mahabharata M: 65
 Vishnu V: 429
Bhagavad-Purana [religious book]
 Krishna K: 388
Bhakti cults [Buddhism]
 India (Literature) I: 120
 Sculpture (India) S: 236
Bhangra [dance]
 India (Music and dance) I: 120-121
Bherel
 Sheep (Wild sheep) S: 380
Bheret Ganarejye See *India in this index*
Bhareta [Indian author]
 Drama (India) D: 336
Bherata [legendary figure]
 Mahabharata M: 64
Bherata natyam [dance]
 Dance (Asian theatrical dance) D: 30
 India (Music and dance) I: 120-121
Bheretiya Janeta Party [political party]
 India (Politics) I: 111
 Vajpayee, Atal Bihari V: 260
Bhese [Indian dramatist]
 Sanskrit literature (The Classical period) S: 112
Bhopal [city, India]
 Environmental pollution (Hazardous waste) E: 334-335
Bhumibol Adulyadej [king of Thailand]
 Thailand (Opposition to Communism) T: 227
Bhuten B: 276 *with picture and map*
 Asia *picture on* A: 783
 Flag *picture on* F: 202
Bhutias [people]
 Sikkim (People) S: 456
Bhutto, Benazir [Pakistani political leader]
 B: 278 *with portrait*
 Pakistan (Struggle for democracy) P: 100
Bhutto, Zulfikar Ali [Pakistani political leader]
 Pakistan (Civil war) P: 99-100; (Struggle for democracy) P: 100
Bi [symbol]
 Bismuth B: 383
Bi Sheng [Chinese printer]
 Invention (China) I: 359
 Printing (The invention of movable type) P: 803
 Type (History) T: 537
BIA See Indian Affairs, Bureau of *in this index*
Bia, Mount [Laos]
 Laos (Land and climate) L: 71
Biafra [region]
 Nigeria (Civil war) N: 418
 Famine (Other causes) F: 26
 Igbo I: 48
Biafran War [1967-1970]
 Nigeria (Civil war) N: 418
Bialik, Chaim Nechman [Hebrew author] B: 278
 Hebrew literature (Modern Hebrew literature) H: 162-163
Bielowieza Forest [Belarus-Poland]
 Belarus (Land) B: 224b *with picture*
Bielowieza National Park [Poland]
 National park (table) N: 42f
Bianca e Gerardo [opera by Bellini]
 Bellini, Vincenzo B: 244
Bianchi, Pietro [Italian architect]
 Architecture (Neoclassical architecture) A: 623-624
Bias [electronics]
 Electronics (Diodes) E: 210-211 *with diagram*
Bias [point of view]
 Prejudice P: 755
 History (The interpretation) H: 261
Bias [sewing]
 Sewing (Laying out the pattern) S: 332
Bias belted tire
 Tire (Types of tires and tread patterns) T: 297

Bias tire
 Tire (Types of tires and tread patterns) T: 297
Biathlon [sport] B: 278
 Olympic Games (Winter Olympic Games) O: 746d
 Skiing (Nordic competitions) S: 487
Bibb, George M. [American government official]
 Treasury, Department of the (table) T: 407
 Tyler, John (table) T: 534
Bibb, Thomas [American political leader]
 Alabama (table) A: 274
Bibb, William Wyatt [American political leader]
 Alabama (table) A: 274
Bibb lettuce [plant]
 Lettuce (Kinds of lettuce) L: 214 *with picture*
Bible B: 279 *with pictures*
 Ark of the Covenant A: 693
 Book (The development of printed books) B: 466
 Creationism Ci: 1123
 Dead Sea Scrolls D: 56
 Eastern Orthodox Churches (Doctrines) E: 46
 Education (The Reformation) E: 100
 Eliot, John E: 237
 English literature (Prose writings) E: 317
 Evolution (Acceptance of evolution) E: 433
 Fundamentalism F: 557
 Hampton Court Conference H: 36
 History (The Bible and post-Roman history) H: 262
 Illuminated manuscript I: 78
 Literacy (The spread of literacy in the West) L: 351
 Jerome, Saint J: 93
 Judaism (The Bible) J: 180
 Mormons (Church doctrines) M: 806
 New Testament N: 287
 Old Testament O: 740
 Parable P: 141
 Protestantism (The authority of the Bible) P: 834
 Red Sea R: 190
 School prayer S: 186
 Scribe S: 226
 Talmud T: 21
 Tyndale, William T: 535
 Vatican Council II (The work of the council) V: 289
 Vulgate V: 453
 Wales (The arts) W: 11
 Wycliffe, John W: 515
 Yiddish literature Y: 566
 See also *the list of Related Articles in the Bible article*
Bible: An American Translation
 Bible (Modern English translations) B: 286
Bible Society, American B: 288
Bible Society Record, American [magazine]
 Bible Society, American B: 288
Bibliography [reference] B: 288
 Book (Inside a book) B: 464-465
 Literature for children (Booklists) L: 367
 A Guide to Writing Skills Research Guide: 16;
 A Guide to Research Skills Research Guide: 33
Bibliometrics [library science]
 Information science I: 269
Bibliothèque Nationale de France [Paris]
 B: 289
 France (Museums and libraries) F: 461
 Library (Libraries of the 1600's and 1700's) L: 260-261
Biotherapy [psychology]
 Language arts L: 67
Bicameral legislature
 Legislature L: 184
 Apportionment A: 574
Bicarbonate [chemistry]
 Carbonate C: 208
Bicarbonate ion
 Respiration (Gas transport between the lungs and tissues) R: 261
Bicarbonate of soda B: 289
 Baking powder B: 32
 Soda So: 569
 Sodium (Uses) So: 569
Bicentennial Celebration, American B: 289
 United States, History of the (Celebrating the bicentennial) U: 194
Biceps [anatomy]
 Arm A: 717 *with diagram*
 Human body *diagram on* H: 422
 Muscle (Skeletal muscles) M: 933

Bichat, Marie François Xavier [French doctor] B: 289

Bichon frise [dog] B: 289 *with picture*

Bickerdyke, Mary Ann Ball [American social worker] B: 289

Bickerstaff Papers [book by Swift]
Swift, Jonathan (Swift's other works)
So: 1040-1041

Bickett, Thomas W. [American political leader]
North Carolina (table) N: 490

Bicolor gourd
Gourd *picture on G: 281*

Bicolor stone
Tourmaline T: 348

Bicorne [hat]
Clothing (The 1700's) Ci: 701-702

Biculturalism [anthropology]
Hispanic Americans (Hispanic influences on American culture) H: 248

Bicuspid
Teeth (Permanent teeth) T: 79-80 *with pictures*

Bicuspid aortic valve [disorder]
Heart (Blockage of blood flow) H: 141

Bicycle B: 290 *with pictures*
See also Unicycle in this index
Bicycle racing B: 293 *with pictures*
Netherlands (Holidays and recreation) N: 141
with picture, (Transportation) N: 147
Safety (Safety in transportation) S: 14
Tire (History) T: 298
Transportation (Land transportation) T: 383-384; (The beginnings of modern transportation) T: 390

Bicycle motocross
Bicycle (Juvenile bikes) B: 290
Bicycle racing (Bicycle motocross races) B: 294

Bicycle racing [sport] B: 293 *with pictures*
France (Recreation) F: 460 *with picture*
Olympic Games (Summer Olympic Games) O: 746e-746f
Tour de France T: 346

Bicycle Thieves, The [film]
De Sica, Vittorio D: 157
Motion picture (Postwar realism) M: 869 *with picture*

Bicycle tire pump
Pump (Reciprocating pumps) P: 900 *with diagram*

Bicycle Wheel [sculpture by Duchamp]
Sculpture (Assemblages) S: 257-258 *with picture*

Bid [economics]
Building trade (The contracting system) B: 685

Bid [fraternity]
Fraternity (Membership) F: 496

Bidding [cards]
Bridge B: 604; (Bidding) B: 604

Biddle, Francis [American government official]
Justice, Department of (table) J: 203
Roosevelt, Franklin Delano (table) R: 458
Truman, Harry S. (table) T: 469

Biddle, John [English religious leader]
Unitarians (History) U: 42

Biddle, Nicholas [American businessman] B: 295
Bank of the United States (The Second Bank of the United States) B: 96
Jackson, Andrew (The Bank of the United States) J: 11-12

Bidet [bath fixture]
Bath (Bathing for cleanliness) B: 163

Bidirectional microphone
Microphone M: 516

Bidonville [slum]
Morocco (Way of life) M: 811

Bidwell, John [American pioneer]
California (American settlement) C: 60

B.I.E. [organization]
World's fair W: 500

Bieber, Owen Frederick [American labor leader] B: 295

Biedermeier [art] B: 295
Furniture (The Biedermeier and Restauration styles) F: 580 *with picture*

Biel's comet [astronomy]
Comet (table) Ci: 868

Biencourt de Poutrincourt, Jean de [French colonist] *See Poutrincourt, Jean de Biencourt de in this index*

Biennial [botany] B: 295
Flower (Garden flowers) F: 275; (Garden biennials) F: 277 *with pictures*

Gardening (Planning the garden) G: 31-32
Plant (Germination) P: 536-537
Weed (How weeds grow) W: 179

Bienvenu [French inventor]
Helicopter (Early designs and experiments) H: 173

Bienville, Sieur de [French-Canadian explorer] B: 295
Iberville, Sieur d' I: 2
Le Moyne, Charles L: 189
Louisiana (Exploration and early settlement) L: 497-498
Mississippi (Exploration and early settlement) M: 641
Mobile (History) M: 681
Natchez N: 26
New Orleans (French and Spanish rule) N: 284

Bierce, Ambrose Gwinett (American author) B: 295

Bierstedt, Albert [American painter] B: 295 *with picture*
Painting (Light and shade) P: 35
Pioneer life in America *picture on P: 486*

Bifilar pendulum
Pendulum (Other pendulums) P: 237-238

Bifocals [lens]
Franklin, Benjamin (Other studies) F: 489; *picture on F: 490*
Glasses (Prescription glasses) G: 224-225 *with diagrams*

Big and Little Dippers [constellation] B: 296

Big Apple [nickname]
New York City N: 322

Big Apple Circus
Circus (The circus today) Ci: 564-565

Big band jazz
Jazz (The sound of jazz) J: 68 *with picture*
Popular music (Other new styles of popular music) P: 671

Big bang [astronomy] B: 296
Antimatter A: 557
Astronomy (Ultraviolet astronomy) A: 844
Cosmology (Radio waves in space) Ci: 1078
Galaxy (Origin of galaxies) G: 8b
Universe (Changing views of the universe) U: 205-206

Big Belt Mountains
Montana (Land regions) M: 752

Big Ben [London] B: 297 *with picture*
London (The Houses of Parliament) L: 435

Big Bend National Park (Texas) B: 297
National Park System (table: National parks) N: 48
Texas picture on T: 184

Big Bend State
Tennessee T: 134

Big Bend Tunnel [West Virginia]
Henry, John H: 189

Big Bertha [gun]
Artillery (History) A: 763
Krupp K: 389
World War I (The last campaigns) W: 463

Big Bonanza [U.S. history]
Comstock Lode Ci: 926

Big Bonanza Mine [Nevada]
Mackay, John William M: 20

Big Boy [locomotive]
Locomotive (History) L: 417 *with picture*

Big Brothers/Big Sisters of America [organization] B: 297

Big Cypress National Preserve [Florida]
National Park System (table: National preserves) N: 58

Big Cypress Swamp (Florida)
Everglades National Park E: 424
Florida (Land regions) F: 254

Big D [nickname]
Dallas D: 11

Big Dig [project]
Boston (Building boom) B: 504

Big Diomed Island [Alaska]
Alaska (Coastline) A: 294

Big Dipper [constellation]
Astronomy *picture on A: 834*
Big and Little Dippers (The Big Dipper) B: 296
North Star *picture on N: 519*

Big-eared fox *See Fox in this index*

Big Five [UN] B: 297

Big Foot [American Indian chief]
Indian wars (The Sioux wars) I: 194
South Dakota (Territorial days) So: 681-683

Big Foot [legendary creature] *See Bigfoot in this index*

Big Four [California history]
California (Early statehood) C: 62

Big Four [World War I]
Versailles, Treaty of V: 340
World War I (The Paris Peace Conference) W: 465

Big Four [World War II]
Germany (Occupied Germany) G: 169

Big game [hunting]
Game G: 21
Hunting (Kinds of hunting) H: 450

Big Hole, Battle of
Montana (Indian fighting) M: 758-760

Big Hole National Battlefield [Montana]
National Park System (table: National battlefields) N: 55

Big Island, The
Hawaii (Hawaii) H: 100

Big Knives [U.S. history]
Illinois (Early national period) I: 72

Big-leaf magnolia [tree]
Magnolia M: 63 *with picture*

Big League
Little League Baseball L: 391

Big Lick [former name]
Roanoke R: 362

Big Manitou Falls
Wisconsin (Rivers, waterfalls, and lakes) W: 358-360

Big Money, The [book by Dos Passos]
Dos Passos, John D: 311

Big Muddy
Missouri River M: 674

Big Ole [legendary figure]
Bunyan, Paul B: 701

Big Rock Candy Mountain, The [book by Stegner]
Stegner, Wallace So: 883

Big Room
Carlsbad Caverns National Park C: 239

Big Saint Joseph Station
South Bend So: 639

Big Sandy River [Kentucky-West Virginia]
Kentucky (Rivers, waterfalls, and lakes) K: 286
Ohio River O: 705

Big Self-Portrait [painting by Close]
Painting (People) P: 31-32 *with picture*

Big Sioux River
South Dakota *picture on So: 676*

Big Sisters of America [organization]
Big Brothers/Big Sisters of America B: 297

Big skate [sea animal]
Skate S: 479

Big Sleep, The [film]
Hawks, Howard H: 113

Big Snowy Mountains
Montana (Land regions) M: 752

Big South Fork National River and Recreation Area [Kentucky-Tennessee]
National Park System (table: National parkways and other national parklands) N: 55

Big Spring [Michigan]
Michigan (Places to visit) M: 498

Big Springs
Missouri (Springs and caves) M: 664

Big stick [U.S. history]
Monroe Doctrine (The Roosevelt Corollary) M: 740
Roosevelt, Theodore (Governor of New York) R: 467; (Friction with Japan) R: 471

Big Thicket National Preserve [Texas]
National Park System (table: National preserves) N: 58
Texas (Rivers and lakes) *picture on T: 198*

Big Thompson River
Colorado (The mid-1900's) Ci: 847; (The late 1900's) Ci: 847

Big Three [manufacturers]
Automobile (Major producing countries and companies) A: 958-959; (The rise of the Big Three) A: 968

Big Three [World War II]
Churchill, Sir Winston Leonard Spencer (The Big Three) C: 549 *with picture*
Cold War (The alliance breaks up) Ci: 763
Roosevelt, Franklin Delano (The Big Three) R: 461; *picture on R: 462*
Stalin, Joseph (World War II) So: 827
United Nations (The San Francisco Conference) U: 95
World War II (The Allies attack in Europe and Northern Africa) W: 478

Big top *See Circus in this index*

Big tree
Sequoia (The giant sequoia) S: 310b *with picture*

Big Unit [nickname]

Johnson, Randy J: 153

Big Whack [theory]

Moon (Origin and evolution of the moon)

M: 788 *with picture***Big Wood River**

Idaho (Interesting facts about Idaho) I: 27

Bigamy [law] B: 298

Marriage (Laws concerning marriage) M: 220

Bigelow, Erastus B. [American inventor]

Rugs and carpets (History) R: 517

Bigelow, Hobart B. [American political leader]

Connecticut (table) Ci: 967

Bigeye tuna [fish]

Tuna T: 485

Bigfoot B: 298*See also* Abominable Snowman *in this index***Bigger, Samuel** [American political leader]

Indiana (table) I: 214

Bigger Splash, A [painting by Hockney]Hockney, David *picture on* H: 282**Bigger Thomas** [literary figure]

Wright, Richard W: 508

Biggest Bear, The [book by Ward]

Ward, Lynd Kendall W: 36

Biggs, Benjamin T. [American political leader]

Delaware (table) D: 109

Bighorn [animal] B: 298 *with picture**Animal picture on* A: 474**Bighorn Canyon National Recreation Area**

[Montana-Wyoming]

National Park System (table: National recreation areas) N: 49

Bighorn Crags [mountains]

Idaho (Mountains) I: 36

Bighorn Mountains

Wyoming (Land regions) W: 526

Bighorn sheepNevada (Plant and animal life) N: 168 *with picture***Bight** [knot]

Knots, hitches, and splices (The language of knots) K: 356

Bigleaf maple [tree]

Maple (Bigleaf maple) M: 187

Bigler, John [American political leader]

California (table) C: 59

Bigler, William [American political leader]

Pennsylvania (table) P: 263

Biglow Papers, The [book by Lowell]

Lowell, James Russell (Literary success) L: 510

Bigmouth buffalo fishBuffalo B: 676 *with picture***Bignonia** [botany] B: 299 *with picture***Bigordi, Domenico di Tommaso** [Italian painter]

Ghirlandajo, Domenico G: 182

Bigtooth aspen [tree]

Aspen A: 815

Biha, Leopold [Burundi political leader]

Burundi (History) B: 713-714

Bihor MountainsRomania (Surface features) R: 419 *with map***Bihzad, Kamal ad-Din** [Persian painter] B: 299*with picture*

Islamic art (Books) I: 470

Bijagós Islands

Guinea-Bissau G: 432

BikeBicycle B: 290 *with pictures*Motorcycle M: 877 *with pictures***Bikini Atoll** [islands, Pacific] B: 299**Biko, Steve** [South African political leader]

B: 299

Bilandic, Michael A. [American political leader]

Byrne, Jane Margaret B: 747

Bilateral acoustic neurofibromatosis [disorder]

Neurofibromatosis N: 152

Bilateral aid

Foreign aid (Kinds of foreign aid) F: 383

Bilateral kinship [sociology]

Family (Non-Western families) F: 24

Bilateral symmetry [form]

Flower (The parts of a flower) F: 293

Bilateral trade agreement

Reciprocal trade agreement R: 175

Bilateral treaty

Fishing industry (International commissions and treaties) F: 187-188

International relations (Treaties) I: 344

Bilbao [city, Spain]Gehry, Frank G: 76 *with picture***Bilbo, Theodore Gilmore** [American political leader]

Mississippi (table) M: 640

Bild Zeitung [newspaper]

Germany (Communication) G: 162

Bilderdijk, Willem [Dutch author]

Netherlands (Arts) N: 142-144

Bile [physiology] B: 300

Digestive system (In the small intestine)

D: 203

Gallbladder G: 14

Human body (The small intestine and large intestine) H: 420

Liver L: 393

Nutrition (How the body uses food) N: 624

Bile duct [anatomy]Liver (Structure of the liver) L: 393; *picture on* L: 394**Bile salts** [physiology]

Bile B: 300

Bilge board [boat]

Sailing (Hull) S: 23; (Controlling direction) S: 25

Bilharziasis [disease]

Schistosomiasis S: 176

Bilingual education B: 300

Bill of rights (Canada's Constitution) B: 301-302

Education (Education for whom?) E: 107 *with picture*Hispanic Americans (Education) H: 256 *with picture*

Reading (Causes of reading difficulties)

R: 161-162

Sánchez, George Isidore S: 106

Bilingualism

Hispanic Americans (Hispanic influences on American culture) H: 248

Bilirubin [pigment]

Hepatitis H: 192; H: 192

Jaundice J: 65

Liver (Purification of the blood) L: 394; (Diseases of the liver) L: 394

Bill [document] B: 300

Amendment A: 406

Canada, Government of (How a bill becomes law in Canada) C: 134 *with diagrams*

Congress of the United States (How Congress makes laws) Ci: 944

Constitution of the United States (Article I, Section 7) Ci: 1006

Senate (Considering legislation) S: 295

United States, Government of the (How a bill becomes law in the United States) U: 141 *with diagrams***Bill** [zoology]*See also* Beak *in this index*Bird (Bills) B: 362 *with pictures*Duck (The features of a duck) D: 374 *with pictures***Bill and Melinda Gates Foundation** *See* Gates Foundation *in this index***Bill Haley and the Comets** [musical group]

Rock music (The emergence of rock 'n' roll)

R: 377

Bill of attainder [law] *See* Attainder *in this index***Bill of credit**

Money (History of United States currency)

M: 707

Bill of exchange [banking] B: 301

Bill (In bookkeeping) B: 300

Money (History of United States currency)

M: 707

Bill of goods [commerce]

Bill (In commerce) B: 300

Bill of health [shipping] B: 301**Bill of indictment** [law]

Bill (In law) B: 301

Bill of lading [commerce]

Bill (In transportation) B: 301

Negotiable instrument (Forms) N: 119

Bill of rights B: 301

Democracy (Constitutional government)

D: 121

Freedom (During the Age of Reason) F: 503

Human rights (The development of human rights) H: 428

Liberalism (Early liberalism) L: 228

Bill of Rights [Canada]*See also* Rights and Freedoms, Canadian Charter of *in this index*

Civil rights (Civil rights in Canada) Ci: 610

Diefenbaker, John George (Member of Parliament) D: 197

Bill of Rights [England]

Bill of rights (English Bill of Rights) B: 302

England (The Restoration) E: 309

Glorious Revolution G: 234

Parliament (Parliament gains strength) P: 174

Petition of Right P: 327

William III W: 309

Bill of Rights [France]

Bill of rights (French Bill of Rights) B: 302

Bill of Rights [U.S.]

Bill of rights (The United States Constitution) B: 301

Civil rights (Civil rights in the United States) Ci: 608

Constitution of the United States (The Bill of Rights) Ci: 1001; (Amendments to the Constitution) Ci: 1011

Government (Individual rights) G: 286; (Interpreting the states' rights) G: 287

Henry, Patrick (Career as governor) H: 190

Jefferson, Thomas (National statesman) J: 80-81

Mason, George (His constitutional views) M: 265-266

Trial (The criminal defendant's rights) T: 437

United States, History of the (The Bill of Rights) U: 162

*See also specific amendments, such as First Amendment, in this index***Bill of Rights Day** [custom] B: 305

Bill of rights (The United States Constitution) B: 301

Bill of sale [law] B: 305**Bill 170** [law]

Montreal (Recent developments) M: 779

Billboard

Advertising (Outdoor signs) A: 75

Poster P: 708

Billbug [insect] *See* Weevil *in this index***Billet** [metal]

Aluminum (Casting the molten aluminum) A: 394-395

Brass (Making brass) B: 565

Extrusion E: 459 *with diagram*Iron and steel (Ingot casting) I: 445-447 *with pictures*

Wire (How wire is made) W: 343

Billfish [fish]Gar G: 28 *with picture***Billiards** [game] B: 305 *with pictures*

Chaos C: 376

Billiards at Half-Past Nine [book by Böll]

Böll, Heinrich B: 448

Billings [Montana] B: 307**Billings, Franklin S.** [American political leader]

Vermont (table) V: 333

Billings, Josh [American author] B: 307**Billings, William** [American composer] B: 307

Popular music (Popular music before recording) P: 669

Schuman, William S: 188

Billion [number] B: 307**Bills, Buffalo**

Football (National Football League) F: 364

Billy Budd [book by Melville]

Melville, Herman (His later life) M: 391

Billy goat

Goat G: 239

Billy the Kid [American bandit] B: 307

Garrett, Pat G: 45

New Mexico (Territorial days) N: 275

Western frontier life in America (An American tradition) W: 239-240

Billy Yank

Civil War (The enlisted men) Ci: 620

Biloxi [Mississippi] B: 308**Biloxi Blues** [play by Simon]

Simon, Neil S: 467

Biloxi Shrimp FestivalMississippi (Visitor's guide) M: 632 *with picture***Biltmore Estate**North Carolina (Places to visit) N: 482 *with picture***Biltong** [food]

Pemmican P: 233

Bimetal plate [printing]

Photoengraving and photolithography (Offset plates) P: 406

Bimetallic standard [economics]

Money (The first United States currency) M: 708

Bimetallic stripThermostat (How thermostats work) T: 256 *with diagram*

Bimetallic thermometer

Thermometer (Thermal expansion thermometers) T: 254 *with diagram*

Bimini [legendary island]

Ponce de León, Juan (Florida expeditions) P: 655

Bin Laden, Osama [Saudi-born Muslim leader]

B: 308 *with portrait*
Afghanistan (Recent developments) A: 97
Clinton, Bill (International affairs) Ci: 682f
Os'ida, Al-Q: 2
September 11 terrorist attacks S: 310
Taliban T: 19
Terrorism (History of terrorism) T: 179

Binary arithmetic [mathematics]

Numeration systems (The binary system)
N: 606 *with pictures*; (The binary system) N: 607

Binary code [computer]

Digital technology D: 203
Electronics (Digital circuits) E: 213

Binary fission [reproduction]

Bacteria (How bacteria reproduce) B: 21 *with picture*
Reproduction (Through asexual reproduction) R: 242-243 *with picture*

Binary form [music]

Classical music (Sectional form) Ci: 644

Binary numeration system [mathematics]

Arithmetic A: 665
Computer (Computer code) Ci: 911

Binary operation code [electronics]

Computer (Microprocessors) Ci: 912

Binary pulsar [astronomy]

Arecibo Observatory A: 644

Binary star B: 308

Black hole (Galactic black holes) B: 388
Gravitation (Predictions of general relativity) G: 332
Lyra L: 537
Nova N: 553
Star So: 840; (Binary stars) So: 852 *with picture*
Struve, Otto So: 930
Supernova So: 994
Telescope (X-ray telescopes) T: 109

Binaural hearing

Ear (How sounds reach the brain) E: 10-11

Binder

Painting (Materials and techniques) P: 36 *with picture*; (Pastel) P: 39; (Synthetic resins) P: 40

Binder [machine]

Reaper R: 173

Binding [printing]

Bookbinding B: 470

Binding arbitration [labor]

Strike (Strike settlements) So: 928

Binding out [custom]

Colonial life in America (Education) Ci: 803

Bindings

Skiing (Ski bindings) S: 485 *with diagram*

Bindusara [emperor of India]

Mauryan Empire M: 318

Bindweed [plant] B: 308

Binet, Alfred [French psychologist] B: 309

Graphology G: 323
Intelligence (Theories of intelligence) I: 318

Binet-Simon intelligence test

Binet, Alfred B: 309

Binge [eating disorder]

Mental illness (Eating disorders) M: 406

Bingen [Germany]

Mouse Tower M: 902

Bingham, George Caleb [American painter]

B: 309 *with picture*
United States, History of the picture on U: 170

Bingham, Hiram [American explorer]

Connecticut (table) Ci: 967

Bingham, Kinsley S. [American political leader]

Michigan (table) M: 507

Bingham, Tom [American pioneer]

Wind Cave National Park W: 331

Binnacle

Compass (Deviation) Ci: 903
Ship (Nautical terms) S: 416

Binnie, Ian [Canadian jurist]

Supreme Court of Canada (table) So: 997 *with portrait*

Binnig, Gerd Karl [German physicist]

Nobel Prizes (Physics: 1986) N: 441

Binns, Patrick G. [Canadian political leader]

Prince Edward Island (table) P: 791; (Recent developments) P: 793

Binoche, Juliette [French actress]

Motion picture (Best performance by an actress in a supporting role: 1996) M: 863

Binocular tube

Microscope (Using an optical microscope) M: 519

Binocular vision

Eye (Depth perception) E: 463-464

Binoculars B: 309 *with diagram*

Bird (Bird watching) B: 367

Binomial [mathematics]

Algebra (Other definitions) A: 354
Binomial theorem B: 310

Binomial nomenclature [biology]

Classification, Scientific (The language of classification) Ci: 654
Botany (The development of modern botany) B: 509

Binomial theorem [mathematics] B: 310

Bioanthropology

Anthropology (Physical anthropology) A: 546 *with picture*

Biochemistry B: 310

Biology (table) B: 317
Careers (Life, physical, and social sciences) C: 225
Chemistry (Current research) C: 405
Physiology P: 445

Bioclip [process]

Wool (Processing of wool) W: 400

Bioconversion [chemical process]

Energy supply (Solid and liquid wastes) E: 279

Biodegradable materials

Packaging (The packaging industry) P: 18-19
Plastics (Plastics and the environment) P: 560-561

Biodiversity [ecology] B: 311

Animal (Destruction of habitat) A: 504
Conservation (To maintain the quality of life) Ci: 976; (Biodiversity conservation) Ci: 976 *with picture*
Coral reef (Coral reefs and the environment) Ci: 1049
National park N: 42a

Biodiversity conservation

Conservation (Biodiversity conservation) Ci: 976 *with picture*

Bioelectrochemistry

Electrochemistry E: 200

Biofeedback B: 311

Motion sickness M: 874

Bioflavonoid [enzyme] See Flavonoid in this index

Biogenesis [biology] B: 312

Huxley, Thomas Henry H: 459

Biogenetic theory [biology]

Biogenesis B: 312

Biogenic rock [geology]

Earth (Sedimentary rocks) E: 21

Biogeography

Evolution (Geographic distribution of species) E: 430
Geography (Physical geography) G: 93
Wilson, Edward Osborne W: 316

Biographer [author]

Biography B: 312

Biographia Literaria [book by Coleridge]

Coleridge, Samuel Taylor (His writing) Ci: 772

Biographical dictionary

Dictionary (Specialized dictionaries) D: 192

Biography [literature] B: 312

See also Autobiography in this index
Literature for children (Biography) L: 359
Pulitzer Prizes (table) P: 895

"Biography of the Life of Manuel" [books by Cabell]

Cabell, James Branch C: 3

Bioinformatics [science]

Biomedical engineering (Developing) B: 325
Molecular biology (Molecular biology today) M: 692

Bioinstrumentation

Biomedical engineering (Specialty areas of biomedical engineering) B: 324

Bioko [island, Equatorial Guinea]

Equatorial Guinea E: 346 *with map*

Biological anthropology

Anthropology (Physical anthropology) A: 546 *with picture*

Biological chemistry

Biochemistry B: 310

Biological child

Family (Family relationships) F: 21

Biological clock [biology] B: 314

Biological diversity See Biodiversity in this index

Biological drug

Pure food and drug laws (Biological drugs) P: 908

Biological environment

Life (The biological environment) L: 275

Biological materials

Materials (Biological materials) M: 300d

Biological oceanography

Marine biology (Biological oceanographers) M: 205
Ocean (Careers in oceanography) O: 666

Biological parent

Parent P: 156

Biological psychology

Psychology (Major fields of psychology) P: 848

Biological resource

Natural resources (Uses and importance) N: 64

Biological response modifier [medicine]

Cancer (Biological response modifiers) C: 172

Biological rhythms

Biological clock (Importance of biological clocks) B: 315

Biological science

Science (The life sciences) S: 193; (Scientific advances of the 1800's) S: 200

Biological weapon

Anthrax A: 545
Biological Weapons Convention B: 315
Chemical-biological-radiological-warfare (Biological) C: 396
Civil defense (Recent developments) Ci: 606
Peace (Arms control) P: 207
Smallpox S: 513
Technology (Challenges of technology) T: 76-77
Terrorism (Biological attacks) T: 178

Biological Weapons Convention [1972] B: 315

Arms control (History of arms control) A: 721-722

Biologist

Biology B: 316 *with pictures*

Biology B: 316 *with pictures*

See also Botany; Zoology in this index

Classification, Scientific Ci: 654

Ecology E: 53

Exobiology E: 437

Life L: 274

Molecular biology M: 691

Psychology (Psychology and other sciences) P: 847

Science (The life sciences) S: 193; (The Age of Reason) S: 199

Sociobiology So: 563

See also the list of Related articles in the Biology article

Biology, Marine See Marine biology in this index

Bioluminescence [biochemistry] B: 322

Beetle (Fireflies) B: 217
Deep sea (Invertebrates) D: 82a-82b
Firefly (Body) F: 134
Lanternfish L: 69
Light (Other sources of light) L: 283
Luminescence L: 522
Phosphorescence P: 403

Biomass B: 322

Fuel F: 550; (Solid fuels) F: 550
Synthetic fuel So: 1068

Biomass, Pyramid of

Ecology (Energy flow) E: 54-55

Biomaterials

Biomedical engineering (Specialty areas of biomedical engineering) B: 324

Biome [botany] B: 322 *with map*

Ecology (Communities) E: 54
Plant (Where plants live) P: 522 *with map*
See also the list of Related Articles in the Biome article

Biomechanics

Biomedical engineering (Specialty areas of biomedical engineering) B: 324

Biomedical engineering B: 324 *with pictures*

Engineering (Biomedical engineering) E: 284 *with picture*

Medicine (The medical revolution) M: 376-377

Biomedical ethics

Medical ethics M: 361

Biometric entry system

Lock (Electric locks) L: 412

Biomimetic carbon-monoxide detector [instrument]

- Carbon-monoxide detector C: 207
Bionics [biology] B: 325
Biophile element
 Geochemistry G: 91
Biophysical theory [psychology]
 Abnormal psychology (Theories of abnormal psychology) A: 12
Biophysics B: 325
 Biology (table) B: 317
Bioplasma
 Kirlian photography K: 336
Biopsy [medicine] B: 326
 Cancer (Conclusive diagnosis) C: 171-172
 Lung cancer L: 525
 Oncology O: 761
 Ovarian cancer O: 880
 Pap test P: 132
Bioremediation [waste disposal]
 Hazardous wastes (Disposal of hazardous wastes) H: 122
Biorhythm B: 326
Biosphere [geography]
 Earth (Earth's spheres) E: 18-20 *with picture*
 Life (Living things and their environment) L: 275
Biosynthesis [biochemistry] B: 326
Biotechnology B: 326
 Biomedical engineering (Developing) B: 325
 Technology (Emerging technologies) T: 75
Biterrorism
 Terrorism (Biological attacks) T: 178
Biotic environment
 Environment (Biotic environment) E: 329
Biotin [vitamin]
 Nutrition (Vitamins) N: 626
 Vitamin (Vitamin B complex) V: 430-431
Biotite [mineral]
 Glauconite G: 226
 Mica M: 482
Biotransformation
 Drug (Action in the body) D: 353-354
Bip [clown]
 Marceau, Marcel M: 193
Biped [zoology]
 Dinosaur D: 206
 Skeleton (Animal skeletons) S: 480
Biplane
 Aircraft, Military (The first military aircraft) A: 204 *with pictures*
 Airplane (The Wright brothers) A: 231 *with pictures*
BIPM [organization] See Weights and Measures, International Bureau of *in this index*
Bipolar disorder [psychiatry] B: 326
 Brain (Brain chemistry and mental illness) B: 556
 Depression D: 151
 Lithium L: 386
 Mental illness (Mood disorders) M: 405
 Mood M: 780
 Psychiatry (Somatic therapy) P: 845
Bipolar junction transistor [electronic component]
 Electronics (Transistors) E: 212; *diagram on* E: 211
 Transistor (How transistors work) T: 373 *with diagram*
Bipolar system [political science]
 Balance of power B: 36
Birch [tree] B: 327 *with pictures*
 Tree *pictures on* T: 420, T: 426
 Wood *picture on* W: 389
Birchbark
 Birch (Paper birch) B: 327 *with pictures*
Bird B: 328 *with pictures*
 Animal (table: Length of life of animals) A: 473, (A table of animal intelligence) A: 493, (Incubation) A: 498 *with picture*
 Archaeopteryx A: 601
 Brain (In vertebrates) B: 559 *with diagram*
 Dinosaur *picture on* D: 206a
 Earth (The Mesozoic Era) E: 27
 Egg (Birds' eggs) E: 116, (How embryos develop) E: 117
 Gizzard G: 203 *with diagram*
 Hand (Animal hands) H: 40
 Heart (Birds and mammals) H: 146
 Molting M: 697
 Pet (Pets for the home) P: 319, (Housing) P: 322 *with picture*
 Prehistoric animal (Birds) P: 738, (The study of prehistoric animals) P: 741-742
 Reproduction (How reproduction has evolved) R: 243
 Skin (Animal skin) S: 491
See also the list of Related articles in the Bird article
Bird, Larry [American basketball player] B: 373
 Basketball *picture on* B: 154
Bird cage
 Pet (Housing) P: 322 *with picture*
Bird dog
 Dog (Sporting dogs) D: 268 *with pictures*
 Hunting (Kinds of hunting) H: 450
Bird in Space [sculpture by Brancusi]
 Sculpture (As artistic expression) S: 229, (Cubism and futurism) S: 257 *with picture*
Bird migration
 Bird (Bird migration) B: 360 *with pictures*
Bird-of-paradise [bird] B: 373 *with pictures*
 Animal (Courtship behavior) A: 497
 Bird *picture on* B: 328
Bird-of-paradise flower [plant] B: 374
 Flower *picture on* F: 292
Bird refuge
 Bird (Bird refuges) B: 368
 Miner, Jack M: 565
Bird sanctuary See Bird refuge *in this index*
Bird shot [ammunition]
 Hunting (Kinds of hunting) H: 450
 Shotgun S: 438
Bird Singing in the Moonlight [painting by Graves]
 Graves, Morris *picture on* G: 331
Bird snare
 Indian, American *picture on* I: 140
Bird spider
 Tarantula T: 42
Bird watching
 Bird (Bird watching) B: 367
Bird Week
 May M: 321
Bird Woman See Sacagawea *in this index*
Birdbanding
 Bird (Birdbanding) B: 368 *with picture*
Birdhouse
 Bird (Bird watching) B: 367 *with diagrams*
Birdie
 Golf (table) G: 261
Birdlime [tree product]
 Banyan tree B: 100
 Holly H: 293
Birds [play by Aristophanes]
 Aristophanes A: 663
Bird's eye maple [tree]
 Maple (Sugar maple) M: 186
Bird's-foot trefoil [plant] B: 374
 Trefoil T: 435
Bird's-foot violet [plant]
 Violet V: 388
Bird's-nest soup [food] B: 375
 Food (Why diets differ around the world) F: 331
Birds of America [book by Audubon]
 Audubon, John James (His works) A: 884
Birds of prey
 Bird (Kinds of food) B: 350 *with picture*
Birdseye, Clarence [American inventor] B: 375
 Food, Frozen F: 338
 Food preservation (Modern food preservation) F: 344
Birdseye, Debbie Holsclaw [American author]
 Literature for children (Information books) L: 359-360
Birdseye, Tom [American author]
 Literature for children (Information books) L: 359-360
Birdstone [sculpture]
 Sculpture (Early sculpture) S: 242-243
Birdwhistell, Ray L. [American anthropologist]
 Communication (The study of communication) C: 887
 Kinesics K: 319
Bireme [ship]
 Galley G: 15
Birendra [king of Nepal]
 Nepal (History) N: 126-127
Birgitta, Saint See Bridget, Saint [Swedish public figure] *in this index*
Birkenau [concentration camp]
 Auschwitz A: 892
Birkenhead [ship]
 Shipwreck (table: Major shipwrecks) S: 428
Birling [sport] B: 375 *with picture*
Birman cat
 Cat (Long-haired breeds) C: 292, *picture on* C: 289
Birmingham [city, Alabama] B: 375 *with picture*
 Alabama (Average monthly weather) A: 270, *picture on* A: 257
 King, Martin Luther, Jr. (The growing movement) K: 321
Birmingham [city, England] B: 376
Birmingham [ship]
 Navy, United States ("The Great White Fleet") N: 88
Birnbaum, Nathan [American comedian] See Burns, George *in this index*
Birney, Alice Josephine McLellan [American social reformer] B: 377
Birney, James G. [American political leader]
 Abolition movement (In the United States) A: 12-13
 Liberty Party L: 233
Birth
See also Childbirth; Reproduction, Human *in this index*
 Sex ratio S: 336
 Whale *picture on* W: 261
Birth and death rates B: 377 *with diagram*
 Baby boom generation B: 11
 Birth control (The birth control movement) B: 378
 Infant mortality I: 264
 Population P: 672
 Sex ratio S: 336
 Teaching (Job opportunities) T: 68
 Vital statistics (Using vital statistics) V: 429
Birth canal [anatomy]
 Childbirth C: 456
 Vagina V: 259
Birth certificate B: 377
 Footprinting *picture on* F: 369
 Pennsylvania Dutch *picture on* P: 270
 Vital statistics (Collecting and publishing vital statistics) V: 429
Birth chart [astrology] See Horoscope *in this index*
Birth control B: 378
 Abortion (In other countries) A: 16
 Famine (Fighting famine) F: 26-27
 Parent (Changes in parenthood) P: 156
 Planned Parenthood Federation of America P: 515
 Population (Population control) P: 674
 Sanger, Margaret S: 110
 Sex discrimination (Changes in attitudes) S: 335
 Vasectomy V: 287
 Women's movements (Birth control) W: 385
Birth control pill
 Birth control (Methods of birth control) B: 378
 Estrogen E: 364
 Hormone (Medical uses) H: 337
Birth defect B: 380
 Apgar, Virginia A: 565
 Genetic counseling (Reasons for seeking genetic counseling) G: 84
 Genetic engineering (Uses of genetic engineering) G: 84a
Causes
 Brain (Genetic disorders) B: 557
 Mutation M: 969
 Rh factor R: 289
 Rubella R: 506
 Syphilis S: 1069
 Thalidomide T: 229
 Toxoplasmosis T: 351
Disorders
 Blindness B: 401
 Blue baby B: 419
 Cerebral palsy C: 361
 Cleft palate C: 661
 Clubfoot C: 714
 Cretinism C: 1128
 Deafness (Birth defects) D: 57
 Dislocation D: 235
 Down syndrome D: 316
 Ear (Birth defects) E: 11
 Gaucher's disease G: 68
 Heart (Birth defects) H: 140
 Huntington's disease H: 451
 Mental retardation (Causes) M: 410
 Phenylketonuria P: 357
 Spastic paralysis S: 767
 Spina bifida S: 792
 Tay-Sachs disease T: 56
 Thalassemia T: 228
Birth of a Nation, The [film]
 Gish, Lillian G: 202
 Griffith, D. W. G: 393
 Motion picture (D. W. Griffith) M: 865-866 *with picture*

- Birth of Tragedy, The** [book by Nietzsche]
Nietzsche, Friedrich (Classical scholarship) N: 406
- Birth of Venus** [painting by Botticelli]
Botticelli, Sandro B: 513
Painting (The 1400's) P: 52-53 *with picture*
- Birth parent**
Adoption A: 66; (Rights of adoptive parents and adoptees) A: 66-67
- Birth rate** *See* Birth and death rates in this index
- Birthday Party, The** [play by Pinter]
Pinter, Harold P: 475
- Birthdays of famous people**
See the tables of events in the articles on specific months of the year
- Birthing room**
Childbirth (Methods of childbirth) C: 456-457
- Birthmark B: 380**
Mole M: 691
- "Birthmark, The"** [story by Hawthorne]
Hawthorne, Nathaniel (His stories and sketches) H: 114
- Birthplace of Canada** [Charlottetown]
Prince Edward Island (Places to visit) P: 788
- Birthstone** [gem] B: 380
- Biscay, Bay of** *See* Bay of Biscay in this index
- Biscayne National Park** [Florida] B: 381
National Park System (table: National parks) N: 48
- Biscoe, John** [British navigator]
Antarctica (Early exploration) A: 535-536
Enderby Land E: 272
- Biscuit** [manufacturing]
Phonograph (How phonograph records are made) P: 401
- Bisection** [mathematics]
Geometry (Some basic geometric constructions) G: 103 *with diagrams*
- Bisexual**
AIDS (How HIV is transmitted) A: 163
Gay rights movement G: 73
Homosexuality H: 307
Sexuality (Sexual orientation) S: 338b
- Bisguier, Arthur B.** [American chess player]
Chess (United States chess champions) C: 414
- Bishkek** [city, Kyrgyzstan] B: 381
Kyrgyzstan (Economy) K: 399-400
- Bishop** [chess]
Chess (The board and the men) C: 412 *with diagram*; (The moves) C: 413
- Bishop** [title] B: 381
Address, Forms of (Members of the clergy) A: 54
Eastern Orthodox Churches (Clergy) E: 46
Hat *picture on* H: 85
Vatican Council II (The work of the council) V: 289-290
- Bishop, Billy** [Canadian flier] B: 381
Ace A: 24
World War I (The war in the air) W: 460-461
- Bishop, Elizabeth** [American poet] B: 381
American literature (Poetry) A: 423
Poetry (Imagery) P: 595
- Bishop, Henry** [American composer]
Popular music (Revolutionary War to 1840) P: 669
- Bishop, J. Michael** [American physiologist]
Nobel Prizes (Physiology or medicine: 1989) N: 445
- Bishop, Maurice** [Grenada political leader]
Grenada (History and government) G: 389
- Bishop, Richard M.** [American political leader]
Ohio (table) O: 699
- Bishop, William Avery** *See* Bishop, Billy in this index
- Bishop Hill** [former town]
Illinois (Places to visit) I: 62
- Bishop Museum**
Hawaii (Museums) H: 95 *with picture*
Honolulu (Cultural life) H: 321
- Bishop of Rome** [title]
Pope P: 660
- "Bishop Orders His Tomb at Saint Praxed's Church, The"** [poem by Browning]
Browning, Robert (Browning's poems) B: 646
- Bislama** [language]
Vanuatu (People) V: 284
- Bismarck** [North Dakota] B: 382
Exploration (Crossing North America) E: 447
- Bismarck** [ship] B: 382
World War II (The Battle of the Atlantic) W: 477
- Bismarck, Otto von** [Prussian statesman]
B: 382 *with portrait*
Franco-Prussian War (Events leading up to the war) F: 493
Germany (The unification of Germany) G: 165; (The German Empire) G: 166; (Foreign policy) G: 166
Napoleon III (His defeat) N: 20
Prussia (German empire) P: 843
Seven Weeks' War S: 324b
World War I (A system of military alliances) W: 454-455
- Bismarck Archipelago** [islands, Pacific]
B: 382
- Bismarck-Schönhausen, Prince** *See* Bismarck, Otto von in this index
- Bismuth** [element] B: 383
- Bismuth chloride** [chemical]
Salt, Chemical S: 75
- Bison** [animal]
Buffalo B: 674 *with pictures*
Conservation (Conservation in the United States) Ci: 985 *with picture*
Indian, American (Indians of the Plains) I: 158, *picture on* I: 136a
- Bison, European** [animal] *See* Wisent in this index
- Bison with turned head, A** [prehistoric art]
Sculpture (Prehistoric sculpture) S: 233 *with picture*
- Bisque doll**
Doll (Porcelain dolls) D: 290 *with picture*
- Bissagos Islands**
Guinea-Bissau G: 432
- Bissau** [capital, Guinea-Bissau] B: 383
Guinea-Bissau G: 432 *with picture*
- Bissell, Clark** [American political leader]
Connecticut (table) Ci: 967
- Bissell, Emily P.** [American artist]
Delaware (Interesting facts about Delaware) D: 97
- Bissell, M. R.** [American businessman]
Michigan (Interesting facts) M: 489
- Bissell, William H.** [American political leader]
Illinois (table) I: 71
- Bissell, Wilson S.** [American government official]
Cleveland, Grover (table) Ci: 672
- Bister** [pigment]
Soot So: 595
- Bit** [computer]
Computer (Computer code) Ci: 911
Computer chip (Word length) Ci: 924e
Electronics (Digital circuits) E: 213
Information theory I: 269
- Bit** [money]
Money (History of United States currency) M: 707; *picture on* M: 708
Piece of eight P: 452
- Bit** [riding equipment]
Horse (table: Riding equipment) H: 351; (The bridle) H: 352 *with pictures*
- Bit** [tool]
Drill (Metal drills) D: 348
Woodworking (Drilling) W: 398 *with pictures*
- Bitch** [dog]
Dog (table: Dog terms) D: 263
- Bite** [injury]
First aid (Animal bites or stings) F: 138; (Snakebite) F: 141
- Biting midge** [insect]
Midge M: 535
- Bitmap** [electronics]
Type T: 536
- Bits per second** [computing]
Modem M: 686
- Bitter, Francis** [American physicist]
Magnetism (Modern research in magnetism) M: 61
- Bitter beer**
England (Food and drink) E: 295-296
- Bitter Bierce**
Bierce, Ambrose Gwinett B: 295
- Bitter cassava** [plant]
Cassava C: 276
- Bitter orange** [tree]
Orange (Sour or bitter oranges) O: 815
Petitgrain oil P: 327
- Bitter root** [plant] B: 383
Flower *picture on* F: 289
- Bitter rot** [plant disease]
Rot R: 485
- Bitter Sweet** [operetta by Coward]
Coward, Noël Ci: 1107
- Bittern** [bird] B: 383 *with picture*
Bird (Birds of Central and South America) B: 345 *with picture*; *picture on* B: 355
- Bitternut hickory** [tree] B: 384 *with picture*
Hickory H: 224
- Bitterroot Range** [mountains]
Bitter root B: 383
Coeur d'Alene Mountains Ci: 753
Idaho (Mountains) I: 36
Lewis and Clark expedition (West to the Rockies) L: 223
Montana (Land regions) M: 752
- Bitters** [extract] B: 384
- Bittersweet** [plant] B: 384 *with picture*
- Bitterweed** [plant]
Ragweed R: 103
- Bitumen** [mineral] B: 384
Bituminous sands B: 385
Road (Paving) R: 359 *with picture*
Synthetic fuel So: 1068
- Bituminous coal**
Bitumen B: 384
Coal (How coal was formed) Ci: 717; (Location of U.S. and Canadian reserves) Ci: 718 *with map*; (The uses of coal) Ci: 719
Fuel (Solid fuels) F: 550
Heating (Coal) H: 160
Illinois (Natural resources) I: 67
Indiana (Natural resources) I: 211
- Bituminous macadam** [building material]
Road (Paving) R: 359
- Bituminous sands B: 385**
Alberta (Natural resources) A: 325
Energy supply (Fossil fuels) E: 277-278
Fuel (Synthetic liquid fuels) F: 550
Petroleum (table) P: 331, (The United States and Canada) P: 333-334 *with picture*
Synthetic fuel So: 1068
- Bivalve** [zoology]
Mollusk (Bivalves) M: 695 *with picture*
Shell (Kinds of mollusk shells) S: 385-388 *with diagram*; *diagrams on* S: 385; *pictures on* S: 387
- Biwa** [musical instrument]
Japan (Music) J: 43
- Bixby, Horace** [American riverboat captain]
Twain, Mark (Travels) T: 528
- Bizet, Georges** [French composer] B: 385
Opera (*Carmen*) O: 802 *with picture*
- Bizzozero, Giulio** [Italian biologist]
Blood (History of blood research) B: 414
- Bjerknes, Vilhelm** [Norwegian physicist] B: 385
Meteorology (History) M: 433
- Bjoerling, Jussi** [Swedish singer] B: 385
- Björnson, Bjørnstjerne** [Norwegian author]
B: 385
- Bk** [symbol]
Berkelium B: 259
- Black** [people] *See* African Americans; Blacks in this index
- Black** [turkey]
Turkey (Domestic turkeys) T: 513
- Black, Charles A.** [husband of]
Temple, Shirley T: 131
- Black, Clint** [American musician]
Country music (Modern country music) Ci: 1098c-1098d *with picture*
- Black, Davidson** [Canadian anthropologist]
B: 385
Peking fossils P: 230
Prehistoric people (table) P: 752
- Black, Frank Sweet** [American political leader]
New York (table) N: 313
- Black, G. V.** [American dentist]
Dentistry (Modern dentistry) D: 145
- Black, Hugo Lafayette** [American jurist] B: 385
- Black, James** [American blacksmith]
Bowie knife B: 520
- Black, Sir James** [British pharmacologist]
Nobel Prizes (Physiology or medicine: 1988) N: 445
- Black, James D.** [American political leader]
Kentucky (table) K: 290
- Black, Jeremiah S.** [American government official]
Buchanan, James (table) B: 661
Justice, Department of (table) J: 203
State, Department of (table) So: 860
- Black, Joseph** [Scottish chemist] B: 386
Chemistry (The phlogiston theory) C: 401
- Black, Shirley Temple** [American actress] *See* Temple, Shirley in this index
- Black alder** [shrub] *See* Winterberry in this index

Black Americans See African Americans *in this index*

Black and tan coonhound [dog] B: 386
Dog picture on D: 271

Black and Tans [Irish history]
Ireland (The Irish Free State) I: 427
United Kingdom (Postwar problems) U: 70

Black-and-white film
Photography (Exposing the film) P: 410;
(Developing black-and-white film) P: 420

Black-and-white negative film
Photography (Film) P: 417-418

Black-and-white warbler [bird]
Warbler W: 35 *with picture*

Black Angus cattle See Aberdeen-Angus *in this index*

Black Arts movement
American literature (The black experience)
A: 423-424

Black ash [tree]
Ash A: 767

Black Ball Line
Ship (Packet ships) S: 409-410

Black bass [fish]
Bass (Black bass) B: 156 *with pictures*

Black bear
Bear (Kinds of bears) B: 184 *with picture*

Black Beauty [book by Sewell]
Literature for children (Masterpieces of fiction)
L: 362
Sewell, Anna S: 331

Black-bellied plover [bird]
Plover P: 574

Black Belt [region]
Alabama (Land regions) A: 268
Mississippi (Land regions) M: 634, *picture on*
M: 623

Black Bass [horse]
Turpin, Dick T: 519

Black-billed cuckoo [bird]
Cuckoo C: 1182 *with picture*

Black birch [tree]
Birch (Sweet birch) B: 327

Black blizzard [weather]
South Dakota (Boom-and-bust economy)
So: 684

Black body [physics]
Planck, Max Karl Ernst Ludwig P: 507

Black Book, The [book by Durrell]
Durrell, Lawrence D: 389

Black Box [book by Oz]
Hebrew literature (A new generation of
Hebrew writers) H: 163

Black Boy [book by Wright]
Wright, Richard W: 508

Black brant [bird]
Brant B: 564 *with picture*

Black bread mold
Fungi picture on F: 559
Mold M: 689

Black buck See Blackbuck *in this index*

Black Canyon of the Gunnison National Park
[Colorado] B: 386
National Park System (table: National parks)
N: 48

Black-capped capuchin [monkey]
Capuchin C: 200

Black-capped chickadee
Chickadee C: 439 *with picture*

Black Caribs [people]
Honduras (Ancestry) H: 309

Black Caucus, Congressional [organization]
B: 386
Mfume, Kweisi M: 479

Black codes [U.S. history] B: 386
African Americans (The first years of freedom)
A: 136h
Reconstruction (The black codes) R: 177

Black Consciousness Movement [South
African history]
Biko, Steve B: 299

Black Corinth Raisin
Raisin (Varieties of raisins) R: 130

Black cottonwood [tree]
Cottonwood C: 1095

Black crappie [fish]
Fish picture on F: 159

Black Creek Pioneer Village [Toronto]
Ontario (Places to visit) O: 774

Black cricket [insect]
Cricket C: 1130 *with picture*

Black Crook, The [musical]
Musical comedy (The first musicals) M: 959
with picture

Black Death [disease]

Cat (History) C: 296
Europe (The Middle Ages) E: 409-410
Middle Ages (A halt in progress) M: 528
Painting (The 1300's) P: 51-52
Plague (History of plague) P: 506

Black Dragon Society [Japanese history]
Assassination A: 817

Black drama
Drama (Later United States drama) D: 340
with picture

Black drum [fish]
Drum D: 367 *with picture*

Black dwarf star [astronomy]
Star (Black-dwarf phase) So: 849
Sun So: 975; (Evolution of the sun) So: 982
White dwarf W: 285

Black Eagle [award]
Knighthood, Orders of (Honorary orders)
K: 347

Black Earth Belt [region]
Russia (Agriculture) R: 543-545

Black Elk Speaks [book by Neihardt]
Neihardt, John N: 121

Black English
African Americans (Developments in educa-
tion) A: 136g
Dialect D: 180

Black-eyed pea [plant]
Cowpea C: 1113

Black-eyed Susan [plant] B: 386 *with picture*

Black-faced spoonbill [bird]
Spoonbill So: 801

Black fever [disease]
Kala-azar K: 210

Black-figure style
Painting (Greek painting) P: 42 *with picture*

Black fly [insect]
Gnat G: 237

Black-footed ferret [animal]
Ferret F: 76 *with picture*
Endangered species (table) E: 270

Black Forest [region, Germany] B: 386
Europe picture on E: 401
Germany (The Black Forest) G: 156 *with pic-
ture*

Black fox
Fox (Kinds of foxes) F: 440

Black friars [religious group]
Friar F: 532

Black Friday [U.S. history] B: 387
Fisk, James F: 189
Gould, Jay G: 280
Grant, Ulysses S. (Political corruption) G: 315-
316

Black George [nickname] See Petrović, Djordje
in this index

Black giant squirrel [animal]
Squirrel picture on So: 816

Black gold [petroleum]
Petroleum P: 330

Black ground beetle
Beetle picture on B: 218

Black Hand [organization]
World War I (Beginning of the war) W: 455

Black Hawk [Sauk Indian chief] B: 387 *with pic-
ture*

Sauk Indians S: 163
Wisconsin (Territorial days) W: 366

Black Hawk [Ute Indian chief]
Utah (Indian relations) U: 246

Black Hawk [sculpture by Taft]
Illinois (Places to visit) I: 62

Black Hawk Purchase [U.S. history]
Iowa I: 374; (Territorial days) I: 393

Black Hawk War [1832]
Black Hawk B: 387
Indian wars (Other Midwestern conflicts)
I: 192-193 *with map*

Iowa I: 374; (Territorial days) I: 393, *picture on*
I: 394

Lincoln, Abraham (The Black Hawk War)
L: 314

Sauk Indians S: 163
Wisconsin (Territorial days) W: 366

Black Hawk War [1865-1867]
Utah (Indian relations) U: 246

Black Heritage Trail
Massachusetts (Places to visit) M: 280

Black Hills [mountains, South Dakota-Wyoming]
B: 387
Indian wars (The Sioux wars) I: 194

South Dakota So: 664; (Land regions) So: 674
with picture

Wyoming (Land regions) W: 526; (Indian and
settler conflicts) W: 534

Black Hills National Forest
South Dakota (Places to visit) So: 672

Black Hills Passion Play [South Dakota]
Passion play picture on P: 191

South Dakota picture on So: 673

Black History Month B: 388

Black hole [astronomy] B: 388
Binary star B: 308
Einstein, Albert (The general theory of relati-
ty) E: 146b

Galaxy (Emissions from galaxies) G: 8b
Hawking, Stephen William H: 113
Milky Way (The center of the galaxy) M: 551-
552

Relativity (Gravitational waves) R: 212
Star (Black holes) So: 851

Supernova So: 594
Telescope (X-ray telescopes) T: 109

Universe (Size of the universe) U: 205
X rays (In astronomy) X: 541

Black Hole of Calcutta [history of India] B: 388

Black Horse [New Testament]
Horse (table: Famous horses in history and
legend) H: 361

Black huckleberry [shrub]
Huckleberry H: 404 *with picture*

Black humor [literature] B: 389
Novel (The middle and late 1900's) N: 575

Satire S: 150h

Black Iris [painting by O'Keeffe]
Painting (Georgia O'Keeffe) P: 83 *with picture*

Black Jack [nickname]
Logan, John Alexander L: 423
Pershing, John Joseph (Mexican campaign)
P: 296

Black Kettle [American Indian chief] B: 389
Indian wars (The Southern Plains) I: 194

Black Lamb and Gray Falcon [book by West]
West, Rebecca W: 199

Black-legged kittiwake [bird]
Kittiwake K: 341 *with picture*

Black letter type [printing]
Type (Classes of type) T: 537

Black-latter writing
Handwriting (Later writing styles) H: 50
Paleography P: 103

Black Lines [painting by Kandinsky]
Painting (Expressionism) P: 78-79 *with picture*

Black locust [plant]
Locust L: 418 *with pictures*

Tree pictures on T: 422

Black lung [disease] B: 389
Coal (Mine safety) C: 729

Dust (Influence on human health) D: 390

Black Madonna and Child [painting]
Bearden, Romare picture on B: 187

Black magic
Magic (Kinds of magic) M: 49

Black Magic [boat]
America's Cup A: 431

Black mamba [snake]
Snake (Methods of movement) S: 529, *picture
on* S: 525

Black Mansion [Ellsworth]
Maine (Places to visit) M: 78 *with picture*

Black Maria [Edison's film studio]
Edison, Thomas Alva (Motion pictures) E: 80

Black market [crime] B: 389
Rationing R: 148

Black market adoption
Adoption (Black market adoptions) A: 66

Black marlin [fish]
Marlin M: 215

Black Mask [magazine]
Detective story (History) D: 163

Hammett, Dashiell H: 35

Black Mass
Devil worship D: 175

Black medic [plant]
Shamrock S: 371

Black Mesa [Oklahoma]
Oklahoma (Land regions) O: 724-727

Black Monday [English history]
Monday M: 702

Black Mountain [Kentucky]
Kentucky (Land regions) K: 285

Black Mountain Collage [North Carolina]
Olson, Charles O: 745

Black Mountain poets
American literature (Poetry) A: 423

Creeley, Robert C: 1126

Duncan, Robert D: 384

- Black mulberry** [plant]
Mulberry M: 913 *with picture*
- Black Muslims** [organization] B: 389
See also Nation of Islam *in this index*
African Americans (Black militancy) A: 136o
with picture
Farrahkhan, Louis F: 48
Malcolm X M: 103
Muhammad, Elijah M: 911
- Black nationalism**
Minority group (African Americans) M: 610
Nation of Islam N: 27
- Black-necked stilt** [bird]
Stilt So: 901
- Black-necked swan** [bird]
Swan (Kinds) So: 1015-1016 *with picture*
- Black nightshade** [plant]
Belladonna B: 242
- Black oak** [tree]
Oak (Red oaks) O: 635
- Black olive** [fruit]
Olive (Harvesting and preparation for market) O: 743-744
- Black opal** [gem]
Opal O: 788
- Black Panther Party** [organization] B: 390
African Americans (Black militancy) A: 136o
Carmichael, Stokely C: 241
- Black Panther Party for Self-Defense**
Black Panther Party B: 390
- Black Patch** [region]
Kentucky (Agriculture) K: 289
- Black pearl**
Pearl (Color) P: 217
- Black pepper** [spice]
Pepper P: 277 *with picture*
- Black phosphorus** [mineral]
Phosphorus P: 403
- Black pine** [tree]
Pine (Other pines) P: 470
- Black plate**
Printing (Process color printing) P: 802 *with picture*
- Black powder** [ammunition]
Gunpowder (Kinds of gunpowder) G: 441
Rocket (Early rockets) R: 390
- Black Power**
African Americans (Black militancy) A: 136o
Carmichael, Stokely C: 241
Cleaver, Eldridge C: 660
King, Martin Luther, Jr. (Later years) K: 322
Minority group (African Americans) M: 610
Student Nonviolent Coordinating Committee So: 932
- Black Prince** [English history] *See* Edward [the Black Prince] *in this index*
- Black racer** [snake]
Racer R: 51
- Black rat** [animal]
Rat (The body of a rat) R: 146 *with picture*
- Black rat snake**
Snake *picture on* S: 532
- Black rhinoceros** [animal]
Endangered species (table) E: 270
Poaching *picture on* P: 587
Rhinoceros (Kinds of rhinoceroses) R: 294-295 *with picture*
- Black Riders and Other Lines, The** [poems by Crane]
Crane, Stephen C: 1120
- Black right whale**
Whale (Right whales) W: 255; *picture on* W: 256
- Black root rot** [plant disease]
Tobacco (Diseases and pests) T: 306
- Black rot** [plant disease]
Rot R: 485
- Black Sea** B: 390 *with map*
Dardanelles D: 36
Romania (Recreation) R: 418 *with picture*;
(Land and climate) R: 419 *with map*
Russia (Early days) R: 547
- Black sea bass** [fish]
Blackfish B: 393 *with picture*
Fish *picture on* F: 153
- Black Seminole** [U.S. history] B: 391 *with picture*
- Black shank** [plant disease]
Tobacco (Diseases and pests) T: 306
- Black Shirt** [fascism]
Mussolini, Benito (Fascist dictator) M: 967
- Black-shouldered kite** [bird]
Kite K: 338
- Black Skin, White Masks** [book by Fanon]
Fanon, Frantz Omar F: 27
- Black smoker** [oceanography]
Hot vent H: 376
Ocean (Discoveries) O: 664
- Black snakeroot**
Snakeroot S: 537 *with picture*
- Black Soul, The** [book by O'Flaherty]
O'Flaherty, Liam O: 679
- Black Sox Scandal**
Baseball (The Black Sox Scandal) B: 136
- Black spruce** [tree]
Spruce (Kinds) So: 809
Tree *pictures on* T: 425
- Black stem rust** [plant disease]
Barberry B: 107
Plant *pictures on* P: 543
Rust R: 567
- Black Stone** [religion]
Islam (The Five Pillars of Islam) I: 463-464
Kaaba K: 208
Mecca (The city) M: 352
Muslims (Before Muhammad) M: 964
- Black stork** [bird]
Stork So: 911
- Black studies programs** [education]
African Americans (Achievements) A: 136p
- Black swallower** [fish]
Fish *picture on* F: 145
- Black swallowtail butterfly**
Butterfly (Swallowtails) B: 736
Insect *picture on* I: 282
- Black swan** [bird]
Swan (Kinds) So: 1015-1016 *with picture*
- Black-tailed deer** *See* Mule deer *in this index*
- Black-tailed jack rabbit**
Jack rabbit J: 3 *with picture*
- Black-tailed prairie dog**
Prairie dog P: 732 *with picture*
- Black-tailed rattlesnake**
Snake *picture on* S: 533
- Black tea**
Tea (Processing tea) T: 62
- Black Thunder** [book by Bontemps]
Bontemps, Arna Wendell B: 463
- Black tupelo** [tree]
Tree *pictures on* T: 424
Tupelo T: 492
- Black turnstone** [bird]
Turnstone T: 519
- Black Virgin** [sculpture]
Montserrat M: 780
- Black Volta** [river, Burkina Faso]
Burkina Faso (Land) B: 706
- Black vulture** [bird]
Vulture (New World vultures) V: 453 *with picture*
- Black walnut** [tree]
Leaf *picture on* L: 154
Nut (Kinds of nuts) N: 621
Tree *pictures on* T: 424
Walnut W: 18
- Black Warrior River**
Tombigbee River T: 326
- Black Warrior-Tombigbee-Mobile river system**
[waterway, U.S.]
Alabama (Transportation) A: 273
Inland waterway (Other systems) I: 274
- Black Water** [book by Oates]
Oates, Joyce Carol O: 639
- Black widow** [spider] B: 391 *with picture*
Spider So: 782 *with picture*; (Tangled-web weavers) So: 788; (table) So: 790
- Black willow** [tree]
Tree *pictures on* T: 424
Willow W: 315
- Black-winged damselfly**
Insect *picture on* I: 280
- Blackback** [fish]
Flounder F: 267
- Blackball** [voting]
Ballot (Older customs) B: 63
- Blackbeard** [English pirate] B: 391
Pirate (Pirates of the Caribbean and other areas) P: 495
South Carolina *picture on* So: 659
- Blackberry** [Plant] B: 392 *with picture*
Dewberry D: 176
- Blackbird** B: 392 *with picture*
- Blackbird** [slavery]
Pacific Islands (Missionaries, traders, and settlers) P: 11-12
- Blackboard**
Chalkboard C: 370
- Blackboard Jungle, The** [book by McBain]
McBain, Ed M: 331
- Blackboard Jungle, The** [motion picture]
Rock music (The emergence of rock 'n' roll) R: 377
- Blackbuck** [animal] B: 392 *with picture*
Animal *picture on* A: 476
Antelope (Habits and appearance) A: 542
- Blackburn, Luke P.** [American political leader]
Kentucky (table) K: 290
- Blackburnian warbler**
Bird (Birds of forests and woodlands) B: 334 *with picture*
Warbler W: 35 *with picture*
- Blackdamp** [gas]
Damp D: 24
- Blackdevil deep-sea angler**
Fish *picture on* F: 156
- Blackett, Patrick Maynard Stuart** [British physicist]
Nobel Prizes (Physics: 1948) N: 440
- Blackfeet Indians** B: 392
Alberta (History) A: 328
Indian, American (Indians of the Plains) I: 158-159
- Blackfish** [fish] B: 393 *with picture*
- Blackfish** [see animal]
Dolphin (Other species) D: 297
Pilot whale P: 464
- Blackfish, Chief** [American Indian leader]
Boone, Daniel (Indian captivity) B: 478;
(Escape and battle) B: 478
- Blackfoot Indians** *See* Blackfeet Indians *in this index*
- Blackfriars Theatre** [English history]
Shakespeare, William (The King's Men) S: 348
- Blackgum** [tree]
Tupelo T: 492
Tree *pictures on* T: 424
- Blackhawk UH-60 helicopter**
Aircraft, Military *picture on* A: 202
- Blackhawks, Chicago**
Hockey (table: National Hockey League) H: 281
- Blackhead** [disorder]
Acne A: 28
Pimple P: 466
Pore P: 678
- Blackjack oak** [tree]
Oak (Red oaks) O: 635-636
- Blackleg** [disease]
Cattle (Diseases) C: 313
- Blacklist** B: 393
Blockade B: 406
Labor movement (Opposition to unions) L: 10
Un-American Activities Committee U: 19
- Blackmail** [crime] B: 394
Extortion E: 457
- Blackmail** [film]
Hitchcock, Alfred H: 263
- Blackmouth salmon** *See* Chinook salmon *in this index*
- Blackmun, Harry Andrew** [American jurist] B: 394
Nixon, Richard Milhous (The national scene) N: 433-434
Roe v. Wade R: 399
- Blackout** [electricity]
California (The beginning of the 2000's) C: 64
Electric power (Providing reliable service) E: 185
- Blackpoll warbler** [bird]
Bird (Bird migration) B: 360
- Blacks** [people]
See also African Americans *in this index*
Africa (Peoples of Africa) A: 104 *with picture*
African National Congress A: 136t
Races, Human (The three-race theory) R: 53;
(The social significance of race) R: 59
Racism (History) R: 62
Segregation (Segregation in other countries) S: 286
Slavery (The Middle Ages) S: 501-502
South Africa So: 608; (People) So: 609; (Ways of life) So: 611; (History) So: 617
- Blacksmith**
Forging (Hand forging) F: 409 *with picture*
Pioneer life in America *picture on* P: 481
West Virginia *picture on* W: 210
- Blackstone, Harry** [American magician]
Magician (Illusions) M: 51-52
- Blackstone, William** [American settler]
Boston (Early settlement) B: 503

- Blackstone, Sir William** [British jurist] B: 394 *with portrait*
Magna Carta (The charter after 1215) M: 53
- Blackstone Canal** [Massachusetts]
Worcester W: 403
- Blackstone School of Law**
Correspondence school Ci: 1072
- Blackstrap molasses** [food]
Molasses M: 689
- Blacktail** [animal]
Mule deer M: 914
- Blackton, J. Stuart** [American artist]
Animation (Early animation) A: 514
- Blacktop** [building material]
Asphalt (Paving with asphalt) A: 815
Road (Paving) R: 359; *picture on* R: 361
- Blackwell, Antoinette Brown** [American religious leader] B: 394 *with portrait*
- Blackwell, Elizabeth** [American doctor] B: 395
- Blackwell, Emily** [sister of]
Blackwell, Elizabeth B: 395
- Blackwell, Henry** [American social reformer]
Woman suffrage (Growth of the movement) W: 380
- Blackwood** [tree product]
Rosewood R: 482
- Blackwood, Frederick Temple** [British statesman]
Dufferin and Ava, Marquess of D: 379
Mackenzie, Alexander (The Pacific Railway dispute) M: 22
- Blackwood, Ibra C.** [American political leader]
South Carolina (table) So: 658
- Bladder** [anatomy] B: 395 *with diagram*
Cancer (Classification by primary body site) C: 167-168
Frog picture on F: 537
Human body *diagram on* H: 422
Incontinence I: 105
Kidney (How the kidneys produce urine) K: 311-312 *with diagram*
Prostate cancer P: 829
Saccharin S: 4
- Bladder, Gall** See Gallbladder *in this index*
- Bladderwort** [plant] B: 395 *with picture*
- Blade**
Knife K: 345 *with pictures*
Razor R: 153
Scissors S: 208
Sword So: 1061 *with pictures*
- Blade** [botany]
Grass (The grass plant) G: 324 *with picture*
Leaf (The blade) L: 153 *with pictures*
Plant (Leaves) P: 530 *with picture*
- Bladensburg, Battle of** [1814]
Maryland (The War of 1812 and industrial development) M: 258
War of 1812 (Campaigns of 1814) W: 31
- Blaine, James Gillespie** [American statesman] B: 396
Cleveland, Grover (Election of 1884) Ci: 670
Garfield, James Abram (table) G: 42
Grant, Ulysses S. (Government frauds) G: 317
Harrison, Benjamin (Election of 1888) H: 72, (table) H: 72
Hayes, Rutherford Birchard (Campaign of 1876) H: 120
Mugwumps M: 910
- Blaine, John J.** [American political leader]
Wisconsin (table) W: 365
- Blair, Andrew G.** [Canadian political leader]
New Brunswick (table) N: 196
- Blair, Anthony Charles Lynton** [British political leader] See Blair, Tony *in this index*
- Blair, Austin** [American political leader]
Michigan (table) M: 507
- Blair, Bonnie** [American skater] B: 396
Olympic Games (The recent games) O: 753-754
- Blair, Eric Arthur** [British author] See Orwell, George *in this index*
- Blair, Francis Preston, Sr.** [American editor]
Kitchen Cabinet K: 337
- Blair, Francis Preston, Jr.** [American political leader] B: 396
Grant, Ulysses S. (Election of 1868) G: 315
- Blair, James T., Jr.** [American political leader]
Missouri (table) M: 668
- Blair, John** [American jurist] B: 396
- Blair, Montgomery** [American political leader]
Emancipation Proclamation *picture on* E: 254
Lincoln, Abraham (table) L: 323
- Blair, Tony** [British political leader] B: 397 *with portrait*
Labour Party (Recent developments) L: 16
United Kingdom (Political changes) U: 74 *with picture*
- Blair House** [Washington, D.C.]
Truman, Harry S. (Life in the White House) T: 471
Washington, D.C. (White House) W: 74-75; *map on* W: 76
- Blake** [book by Delany]
African American literature (The 1800's) A: 136a
- Blake, Edward** [Canadian political leader]
Laurier, Sir Wilfrid (The execution of Louis Riel) L: 124-125
Ontario (table) O: 783
- Blake, Francis J.** [American inventor]
Telephone (The Bell System) T: 100
- Blake, Nicholas** [pen name]
Day-Lewis, Cecil D: 53
- Blake, W. S.** [American glassmaker]
Glass (Types of art glass) G: 220
- Blake, William** [British poet] B: 397
English literature (The Preromantics) E: 319-320
Puck picture on P: 870
- Blakelock, Ralph Albert** [American painter] B: 397 *with picture*
- Blakely Mountain Dam** [Ouachita River, Arkansas]
Lake Ouachita L: 44 *with map*
- Blakeney, Allan E.** [Canadian political leader]
Saskatchewan (table) S: 144
- Blakey, Art** [American musician]
Jazz (Hard bop) J: 72
- Blalock, Alfred** [American doctor]
Tausig, Helen Brooke T: 52
- Blanc, Louis** [French political leader]
Socialism (Early socialist ideas) So: 560
- Blanc, Mont** See Mont Blanc *in this index*
- Blanchard, Doc** [American football player]
Football (table) F: 363
- Blanchard, Hiram** [Canadian political leader]
Nova Scotia (table) N: 567
- Blanchard, James** [American political leader]
Michigan (table) M: 507
- Blanchard, Jean-Pierre** [French balloonist] B: 397
Balloon (The growth of ballooning) B: 61
- Blanchard, Newton C.** [American political leader]
Louisiana (table) L: 496
- Blanchard, Terence** [American musician]
Jazz (Recent developments) J: 74 *with picture*
- Blanchard Springs Caverns**
Arkansas (Places to visit) A: 704 *with picture*
- Blanche of Castile** [queen of France]
Louis IX L: 474
- Blanche of Lancaster** [wife of]
John of Gaunt J: 134
Lancaster L: 55
- Blanching** [food]
Cooking (table) Ci: 1029
Dehydrated food D: 93
Food preservation (Freezing) F: 342
- Blanco, Salvador Jorge** [Dominican political leader]
Dominican Republic (History) D: 304-305
- Blanco Party** [political party]
Uruguay (Politics) U: 223; (Civil war) U: 227-228; (Struggles for power) U: 228
- Blancs, Les** [play by Hansberry]
Hansberry, Lorraine H: 54
- Bland, James A.** [American composer] B: 398
- Bland-Allison Act** [1878]
Cleveland, Grover (The currency and the tariff) Ci: 671
Hayes, Rutherford Birchard (Money problems) H: 121
- Blenes, Juan Manuel** [Uruguayan artist]
Uruguay (The arts) U: 225
- Blenk**
Money (Minting coins) M: 713 *with picture*
- Blenk, Maria Aleksandrovna** [mother of]
Lenin, V. I. (Boyhood) L: 191
- Blank cartridge** [ammunition]
Cartridge C: 268
- Blank verse** [poetry] B: 398
Drama (Elizabethan playwrights) D: 331
Poetry (table) P: 594; (Forms) P: 595
- Blankers-Koen, Fanny** [Dutch athlete]
Olympic Games (The postwar games) O: 751
- Blanket, Indian** See Indian blanket *in this index*
- Blanket bond**
Insurance (Other kinds of property and liability insurance) I: 313-314
- Blanket cylinder** [printing]
Newspaper (Printing the newspaper) N: 385 *with picture*
Printing (Offset lithography) P: 798 *with diagram*
- Blanket fidelity bond** [economics]
Bonding B: 455
- Blanket insulation**
Insulation (In buildings) I: 306 *with picture*; (In industry) I: 306 *with picture*
- Blanket-to-blanket press**
Printing (Offset presses) P: 798-799 *with diagram*
- Blanket toss** [game]
Inuit (Recreation) I: 354f
- Blanketflower** [plant]
Gaillardia G: 6 *with picture*
- Blanton, Leonard Ray** [American political leader]
Tennessee (table) T: 152
- Blarney Castle** [Ireland]
Blarney Stone B: 398
- Blarney Stone** [Ireland] B: 398 *with picture*
- Blasco Ibáñez, Vicente** [Spanish author] B: 398
Spanish literature (The 1800's) So: 761-762
- Blasdel, Henry Goode** [American political leader]
Nevada (table) N: 173; (Statehood) N: 174-176
- Blasis, Carlo** [Italian ballet teacher]
Ballet (Romantic ballet) B: 51
- Blassie, Michael** [American serviceman]
Unknown soldier U: 212
- Blast furnace**
Colonial life in America (Ironmaking) Ci: 811
Iron and steel (How iron is made) I: 440-441 *with diagram*; (The Iron Age) I: 450-451
Lead (Production) L: 149-150
Metallurgy (Smelting) M: 426
Michigan *picture on* M: 504
Smelting S: 515
- Blast wave**
Nuclear weapon (Blast wave) N: 597
- Blasting**
Dynamite D: 397 *with picture*
Explosive E: 454
- Blasting cap** [explosive]
Detonator D: 167
Dynamite D: 397
Fuse F: 589
- Blastocoele** [embryology]
Coelom Ci: 753
- Blastocyst** [physiology]
Stem cell So: 889
- Blastomycosis** [disease]
Fungal disease (In people) F: 558
- Blastula** [biology]
Coelom Ci: 753
- Blatch, Harriot Eaton Stanton** [American social reformer] B: 398 *with portrait*
Woman suffrage (Growth of the movement) W: 380-381
- Blatchford, Samuel** [American jurist]
Supreme Court of the United States (table) So: 1000
- Blattaria** [entomology]
Insect (table) I: 299
- Blau, Eugene Ormandy** [American conductor]
Ormandy, Eugene O: 857
- Blaue Reiter, Der** [art]
Expressionism (Expressionist painting) E: 455
Germany *picture on* G: 155
Kandinsky, Wassily K: 213
Painting (Expressionism) P: 78 *with picture*
- Blavatsky, Elena Petrovna** [American philosopher]
Theosophy T: 253
- Blaze** [marking]
Horse (Coat and skin) H: 348-349
- Blaze** [trail]
Road (The first roads) R: 361
- Blazing star** [plant] B: 398
Flower (Flowers of prairies and dry plains) F: 286 *with picture*
- Blazonry**
Heraldry (Expansion) H: 194 *with pictures*
- Bleach B:** 399
Chlorine (Uses of chlorine) C: 516-517
Hydrogen peroxide H: 470
Hypochlorous acid H: 480
- Bleaching**
Coral reef (Coral reefs and people) Ci: 1049
Cotton (Finishing) Ci: 1091
Global warming (Harm to ocean life) G: 232
- Bleak House** [book by Dickens]

- Dickens, Charles (The second phase) D: 188
English literature (Early Victorian literature) E: 321
- Blease, Coleman L.** [American political leader]
South Carolina (table) So: 658
- Blechynden, Richard** [British businessman]
Tea (History) T: 63-64
- Bleda** [brother of]
Attila A: 879
- Bleeding B:** 399
See also Bloodletting in this index
Artery A: 750
Blood (Controlling bleeding) B: 411; (Bleeding disorders) B: 414; *picture on* B: 412
First aid (First aid for bleeding) F: 136 *with pictures*; (Nosebleed) F: 141
Hemophilia H: 182
Hemorrhage H: 183
Laser (Heating) L: 83
Menstruation M: 404 *with diagrams*
Nosebleed N: 549
Tourniquet T: 348
- Bleeding heart** [plant] B: 399 *with picture*
Flower F: 279 *with picture*
- Bleeding-heart pigeon**
Pigeon (The body of a pigeon) P: 458-459 *with picture*
- Bleeding heart tetra** [fish]
Tetra T: 183
- Bleeding Kansas** [U.S. history]
African Americans (The deepening division over slavery) A: 136f-136g *with picture*
Kansas K: 216; ("Bleeding Kansas") K: 235
- Blegen, Carl** [American archaeologist]
Messenia M: 423
Troy (The archaeological Troy) T: 455
- Bleiberg, Germán** [Spanish poet]
Spanish literature (The Generation of 1927) So: 763
- Blemish**
Pimple P: 466
- Blend** [language]
Language (Linguistic terms) L: 63
Slang (Blends) S: 500
- Blend** [plastics]
Plastics (The chemistry of plastics) P: 556
- Blended family** [sociology]
Family (Varieties of families) F: 20
- Blended whiskey**
Alcoholic beverage (Whiskey) A: 336
Whiskey W: 282
- Blending** [industrial process]
Cotton (Cleaning and blending) Ci: 1091
- Blending inheritance** [theory]
Evolution (Acceptance of evolution) E: 433
- Blenheim, Battle of** [1704] B: 400
- Blenheim Palace** [estate, England]
Architecture (Baroque architecture) A: 622
Churchill, Sir Winston Leonard Spencer (Boyhood and education) C: 545 *with picture*
Vanbrugh, Sir John V: 269
- Blennerhassett Island**
West Virginia (Places to visit) W: 216
- Blenny** [fish]
Fish *picture on* F: 144
- Blériot, Louis** [French aviator] B: 400
Airplane (Other pioneer planes and fliers) A: 233-234; *picture on* A: 232
- Blériot XI** [airplane]
Airplane (Other pioneer planes and fliers) A: 233-234; *picture on* A: 232
- Blessing of the fleet** [ceremony]
Connecticut *picture on* Ci: 960
- Blessing of the Waters** [ceremony]
Twelfth Night T: 531
- Blessing Way, The** [book by Hillerman]
Hillerman, Tony H: 232
- Blest Gana, Alberto** [Chilean author]
Latin-American literature (Realism) L: 112
- Bligh, William** [British sea captain] B: 400
Tonga T: 327
- Blight** [plant disease] B: 400
Apple (Pests and diseases) A: 571-572
Cotton (Diseases) Ci: 1090
Fungicide F: 560
Great Irish Famine G: 343
Lily L: 304
Pea (Diseases and pests) P: 205
Pear (Diseases) P: 216
Potato (Diseases and insect pests) P: 713
Soybean (Diseases and pests) So: 692
- Blimp** [airship] B: 400
Advertising *picture on* A: 73
- Airship (Nonrigid airships) A: 250 *with picture*
- Blind**
Hunting (Kinds of hunting) H: 450
- Blind, American Foundation for the** *See*
American Foundation for the Blind in this index
- Blind, National Federation of the**
Disabled (table) D: 222
- Blind, The** [play by Maeterlinck]
Maeterlinck, Maurice M: 41
- Blind Assassin, The** [book by Atwood]
Atwood, Margaret A: 880
- Blind snake**
Snake S: 525; (Blind snakes) S: 534; *picture on* S: 526
- Blind spot** [vision] B: 400
Eye (The retina) E: 462
- Blindfish** *See* Cavefish in this index
- Blinding of Samson** [painting by Rembrandt]
Rembrandt (Early Amsterdam years) R: 229
- Blindness** B: 401 *with pictures*
AIDS (Opportunistic illnesses) A: 163
Braille B: 550
Diabetes (Complications of diabetes) D: 179
Disabled D: 218
Dog guide D: 282 *with picture*
Glaucoma G: 226
Keller, Helen Adams K: 255
Trachoma T: 353
- Blindness Information Center, National**
Blindness (Education and training) B: 403
- Blindstitch**
Sewing (Hand stitches) S: 332
- Blindworm** [animal] B: 403 *with picture*
- Bliss, Aaron T.** [American political leader]
Michigan (table) M: 507
- Bliss, Cornelius N.** [American government official]
Interior, Department of the (table) I: 325
McKinley, William (table) M: 342
- Bliss, Mary Elizabeth** [daughter of]
Taylor, Zachary (Life in the White House) T: 60 *with portrait*
White House hostesses W: 291
- Bliss, William W. S.** [American government official]
Taylor, Zachary (Life in the White House) T: 60
- Blister**
Glass (Glass terms) G: 222
- Blister** [disorder] B: 403
- Blister copper**
Copper (Smelting) Ci: 1043
- Blister gas**
Chemical-biological-radiological warfare (Chemical) C: 396
- Blithe Spirit** [play by Coward]
Coward, Noël Ci: 1107
- Blithedale Romance, The** [book by Hawthorne]
Hawthorne, Nathaniel (His novels) H: 115
- Blithewold Gardens and Arboretum** [Bristol]
Rhode Island (Places to visit) R: 304
- Blitz**
Football (table) F: 356
- Blitz, The** [World War II]
Blitzkrieg B: 403
London (The Blitz) L: 442 *with picture*
World War II (The Battle of Britain) W: 475 *with pictures*
- Blitzkrieg** [World War II] B: 403
Army (Armies in the two world wars) A: 728
Germany (World War II) G: 168
World War II (The invasion of Poland) W: 472
- Blitzstein, Marc** [American composer] B: 403
- Blixen-Finecke, Karen** *See* Dinesen, Isak in this index
- Blizzard** [weather] B: 404
- Bloat**
Cattle (Diseases) C: 313
- Blöbel, Günter** [German-born biologist]
Nobel Prizes (Physiology or medicine: 1999) N: 445
- Bloc Québécois** [political party] B: 404
Bouchard, Lucien B: 515
Campbell, Kim (The 1993 election) C: 90d
Canada, Government of (Political parties) C: 138-139
Canada, History of (The 1993 national election) C: 154
Chrétien, Jean (The 1993 election) C: 522c
Political party (Other parties) P: 636-637
- Bloch, Ernest** [Swiss-American composer] B: 404
Sessions, Roger S: 320
- Bloch, Felix** [Swiss-American physicist] B: 404
- Bloch, Konrad Emil** [American chemist] B: 404
- Block** [mechanics]
Block and tackle B: 405 *with diagrams*
- Block, Adriaen** [Dutch explorer]
Connecticut (Dutch exploration) Ci: 968
New York City (Settlement) N: 341
Rhode Island (Exploration) R: 312
- Block, Herbert Lawrence** [American cartoonist] B: 404 *with picture*
- Block, John R.** [American government official]
Agriculture, Department of (table) A: 161
Reagan, Ronald Wilson (table) R: 169
- Block and tackle** [machine] B: 405 *with diagrams*
Crane Ci: 1119 *with pictures*
- Block anesthesia** [medicine]
Anesthesia (Local anesthesia) A: 459
- Block caving**
Mining (Underground mining methods) M: 576
- Block excavation**
Archaeology (Excavating sites) A: 597
- Block form**
Letter writing (The form) L: 211 *with picture*
- Block grant**
City government (Sources of revenue) Ci: 597
Urban renewal (History) U: 220
- Block Island**
Rhode Island (Islands) R: 306; (table: Average monthly weather) R: 308; (Places to visit) R: 304 *with picture*
- Block printing** [printing method] B: 405 *with pictures*
Book (The development of printed books) B: 466
Communication (The rise of printing) Ci: 879
Printing (History) P: 802
Woodcut W: 392 *with pictures*
World, History of the (China) W: 435 *with picture*
Printing (The invention of movable type) P: 803
Technology (Technological advances) T: 75
- Block signal**
Railroad (Traffic control) R: 110; (Automatic block signal systems) R: 111 *with pictures*
- Block train**
Railroad (Freight operations) R: 109-110
- Blockade** [warfare] B: 406
Civil War (Battle of Mobile Bay) Ci: 632
Neutrality (Rights and duties) N: 153
World War I (The war at sea) W: 460; (The fighting ends) W: 463
- Blockhouse** [fortification] B: 406
Pioneer life in America (Defending a settlement) P: 485
- Blocking** [industrial process]
Fur (Cutting and sewing) F: 563
- Blocking** [sports]
Boxing *picture on* B: 529
- Blocking** [staging]
Motion picture (Shooting the movie) M: 853-854
Theater (Rehearsing) T: 236-237 *with picture*
- Bloembergen, Nicolaas** [American physicist]
Nobel Prizes (Physics: 1981) N: 441
- Bloemfontein** [city, South Africa] B: 406
- Blok, Alexander** [Russian poet]
Russian literature (Symbolism) R: 563
- Blomdahl, Karl-Birger** [Swedish composer]
Opera (Opera today) O: 800
- Blondie** [musical group]
Rock music (Disco and punk) R: 380
- Blood B:** 407 *with pictures*
See also Bleeding; Blood clot; Circulation in this index
Blood transfusion B: 416
Bone marrow transplant B: 457
Cancer (table) C: 170
Coagulant Ci: 715
Death (Medical aspects of death) D: 61
Galen G: 9
Heart H: 132; (The work of the heart) H: 135
Human body (The circulatory system) H: 421 *with picture*; (The blood) H: 421 *with picture*
Triglycende T: 442
- Blood grouping**
Blood (Blood groups) B: 412
Races, Human (The clinal approach) R: 55-56
Rh factor R: 289
- Disorders**
Blood (Blood disorders) B: 414
Anemia A: 458

- Hypoglycemia H: 480
 Leukemia L: 215
 Nutrition (Heart disease) N: 630
 Sickle cell anemia S: 448 *with picture*
 Von Willebrand's disease V: 448
- Physiology**
 Cell *picture on C*: 328
 Cholesterol C: 520
 Circulatory system (The blood) Ci: 559
 Gamma globulin G: 23
 Hemoglobin H: 182
 Iron (How bodies use iron) I: 435
 Kidney (How the kidneys produce urine) K: 311-312
 Liver (Purification of the blood) L: 394
 Plasma P: 551 *with picture*
 Respiration (Gas transport between the lungs and tissues) R: 261
 Serum S: 319
 Spleen So: 797
 See also the list of *Related Articles* in the *Blood article*
- Blood, Council of** [Spanish history]
 Alba, Duke of A: 305
- Blood, Henry H.** [American political leader]
 Utah (table) U: 245
- Blood, Robert O.** [American political leader]
 New Hampshire (table) N: 223
- Blood alcohol concentration** [measure]
 Breath testing B: 591
 Driving while intoxicated D: 348
- Blood and Sand** [book by Blasco Ibáñez]
 Blasco Ibáñez, Vicente B: 398
- Blood bank**
 Blood (Blood transfusions) B: 413
 Blood transfusion B: 416
 Drew, Charles Richard D: 347
- Blood blister** [disorder]
 Blister B: 403
- Blood-brain barrier**
 Brain (How the brain is protected) B: 552
- Blood cell separator** [machine]
 Blood transfusion (How blood is collected) B: 416-417
- Blood clot**
 Blood (Controlling bleeding) B: 411; *pictures on B*: 412
 Circulatory system (Disorders of the circulatory system) Ci: 561
 Coagulant Ci: 715
 Embolism E: 256
 Fibrin F: 90
 Heart (Causes) H: 137; (Heart attack) H: 138 *with diagrams*
 Phlebitis P: 391
 Stroke So: 929
- Blood count** [medicine] B: 415
 Blood (Blood tests) B: 413
- Blood donor**
 Blood (Blood groups) B: 412
 Blood transfusion B: 416
- Blood doping** [crime] B: 415
- Blood fluke**
 Flatworm F: 229 *with diagram*
- Blood group**
 Blood (Blood groups) B: 412
- Blood Indians**
 Blackfeet Indians B: 393
- Blood Knot, The** [book by Fugard]
 Fugard, Athol F: 553
- Blood libel** [Jewish history]
 Jews (Jews in Christian Europe) J: 122
- Blood on the Fields** [music by Marsalis]
 Marsalis, Wynton M: 227
- Blood orange** [tree]
 Orange (Sweet oranges) O: 815
- Blood plasma** See *Plasma in this index*
- Blood platelet** See *Platelet in this index*
- Blood poisoning** B: 416
- Blood pressure** B: 416
 See also *Hypertension in this index*
 Heart (Regulating blood pressure) H: 136
- Blood purge** [German history]
 Himmler, Heinrich H: 234
- Blood sugar** [physiology]
 Carbohydrate (Kinds of carbohydrates) C: 203
 Diabetes D: 179
 Glucose G: 236
- Blood test**
 AIDS (Medical care for HIV infection and AIDS) A: 164
 Allergy (Diagnosis and treatment) A: 374
 Blood (Blood tests) B: 413, B: 413
 Blood count B: 415
- Marriage (Laws concerning marriage) M: 220
- "Blood, toil, tears, and sweat"** [quotation]
 Churchill, Sir Winston Leonard Spencer (World War II begins) C: 547
- Blood transfusion** B: 416
 AIDS (How HIV is transmitted) A: 163-164, (Prevention) A: 164a
 Blood (Blood groups) B: 412; (Blood transfusions) B: 413 *with picture*
 Blood doping B: 415
 Hepatitis (Hepatitis B) H: 192
 Intravenous injection I: 353
 Red Cross (Biomedical services) R: 185
 Rh factor R: 289
- Blood Transfusion Service, National**
 Red Cross (Health services) R: 186
- Blood type**
 Blood (Blood groups) B: 412 *with picture*
 Blood transfusion (How blood is collected) B: 416-417
 Races, Human (The clinal approach) R: 55-56
- Blood vessel** [anatomy]
 Blood (What blood does in the body) B: 408
 Aneurysm A: 459
 Angiography A: 461
 Artery A: 750
 Calcium channel blocker C: 21
 Capillary C: 192
 Circulatory system (The blood vessels) Ci: 559 *with pictures*
 First aid (First aid for bleeding) F: 136-137 *with picture*
 Heart (Blood vessels) H: 135 *with picture*
 Human body (The blood vessels) H: 421; *diagrams on H*: 422
 Vein V: 295
- Blood Wedding** [play by Garcia Lorca]
 Spanish literature (Drama) So: 763
- Bloodhound** B: 417
 Dog *picture on D*: 271
 Hound H: 379 *with picture*
- Bloodletting** [history of medicine] B: 417
 Blood (History of blood research) B: 414; *picture on B*: 407
 Pioneer life in America (Health) P: 483
 Surgery (History) So: 1007
- Bloodroot** [plant] B: 418 *with picture*
 Flower (Flowers of woodlands and forests) F: 284-285 *with picture*
- Bloods Moor Romance, A** [book by Oates]
 Oates, Joyce Carol O: 639
- Bloodstone**
 Gem *picture on G*: 78
- Bloodsucker**
 Leech L: 180 *with picture*
- Bloodworm** [insect]
 Midge M: 535
- Bloody Bill** [1833]
 Force bill F: 371
- Bloody Marsh, Battle of** [1742]
 Georgia (Colonial period) G: 132
 Oglethorpe, James Edward O: 679
- Bloody Mary** See *Mary I in this index*
- Bloody nose** See *Nosebleed in this index*
- Bloody Sunday** [Russian history]
 Lenin, V. I. (Revolt) L: 192
 Russia (The Revolution of 1905) R: 552
 Saint Petersburg [Russia] (History) S: 55
- Bloom** [industry]
 Iron and steel (Making iron products) I: 441-442; (Ingot casting) I: 445-447 *with pictures*
- Bloom** [oceanography]
 Atlantic Ocean (Pollution) A: 867
 Pacific Ocean (Offshore pollution) P: 17
- Bloom, Jane Ira** [American musician]
 Jazz (Recent developments) J: 74
- Bloom, Leopold** [literary figure]
 Joyce, James J: 177
- Bloomer, Amelia Jenks** [American social reformer] B: 418 *with picture*
- Bloomer, Dexter C.** [husband of]
 Bloomer, Amelia Jenks B: 418
- Bloomer, Elizabeth "Betty"** [wife of Gerald Ford] See *Ford, Betty in this index*
- Bloomers** [clothing]
 Bloomer, Amelia Jenks B: 418 *with picture*
- Bloomfield, Joseph** [American political leader]
 New Jersey (table) N: 249
- Bloomfield, Leonard** [American linguist] B: 418
- Blomsbury Group** [British history] B: 418
 English literature (Literature before World War I) E: 322
 Strachey, Lytton So: 917
- Woolf, Virginia W: 401
- Blos, Joan** [American author]
 Newbery Medal (table) N: 359
- Blossom**
 Flower F: 270
- Blossom Time** [operetta by Romberg]
 Romberg, Sigmund R: 427
- Cloudy Tenent of Persecution, The** [pamphlet by Williams]
 Williams, Roger (In Rhode Island) W: 310-311
- Blount, Edward** [English publisher]
 Shakespeare, William (Folios) S: 368
- Blount, William** [1749-1800, American political leader] B: 418
 Impeachment (History) I: 91
- Blount, Willie** [1768-1835, American political leader]
 Jackson, Andrew (Jackson the soldier) J: 8-9
 Tennessee (table) T: 152
- Blount, Winton M.** [American government official]
 Nixon, Richard Milhous (table) N: 433
- Blount House**
 Knoxville (Description) K: 359
- Blow** [zoology]
 Whale (Respiratory system) W: 259-260 *with picture*
- Blow chair**
 Furniture (Radical modern design) F: 585 *with picture*
- Blow fly** [insect] B: 419 *with picture*
 Larva *picture on L*: 79
- Blow molding**
 Antique (Glass) A: 558
 Doll (The doll industry today) D: 293
 Plastics (Making plastic products) P: 557; *picture on P*: 558
 Polystyrene P: 651
- Blow-over**
 Glass (Glass terms) G: 222
- Blow-Up** [film]
 Antonioni, Michelangelo A: 561
- Blowback system**
 Machine gun (Operation) M: 15
- Blowgun** [weapon] B: 419
 Indian, American *picture on I*: 140
 Jivaro Indians *picture on J*: 128
- Blowhole** [zoology]
 Blue whale B: 421
 Dolphin (The bodies of dolphins) D: 297 *with pictures*
 Mammal (Internal organ systems) M: 119-120
 Whale (Respiratory system) W: 259-260 *with picture*
- "Blowin' in the Wind"** [song]
 Dylan, Bob D: 397
- Blowing** [industrial process]
 Bottle B: 513
- Blowing adder** [snake]
 Adder A: 47
- Blowout** [geology]
 Nebraska (Land regions) N: 104
- Blowpipe** [musical instrument]
 Bagpipe B: 26 *with picture*
- Blowpipe** [tool]
 Glass (Blowing) G: 215; *picture on G*: 216; (Early times) G: 217-218
- Blowpipe** [weapon] See *Blowgun in this index*
- Bloxham, William D.** [American political leader]
 Florida (table) F: 260
- BLS** [agency] See *Labor Statistics, Bureau of in this index*
- Blubber** [fat] B: 419
 Cetacean C: 364
 Dolphin (The bodies of dolphins) D: 297
 Seal (The body of a seal) S: 266
 Whale (Skin and blubber) W: 259; (The Basque people) W: 262; (Processing whale products) W: 263
- Blücher** [locomotive]
 Stephenson, George So: 891
- Blücher, Gebhard Leberecht von** [Prussian general] B: 419
 Napoleon I (The Hundred Days and Waterloo) N: 18
 Prussia (Napoleonic period) P: 843
 Waterloo, Battle of (The battle) W: 145
- Blue** [color]
 Color *diagrams on Ci*: 821
 Indigo I: 223
- Blue** [entomology]
 Butterfly (Blues, coppers, and hairstreaks) B: 734 *with pictures*
- Blue, Robert D.** [American political leader]

- Iowa (table) I: 391
- Blue Angel, The** [film]
Dietrich, Marlene D: 201
Von Sternberg, Josef V: 448
- Blue Angels**
Airplane picture on A: 212
- Blue baby** B: 419
- Cyanosis Ci: 1203
- Heart (Blockage of blood flow) H: 141
- Taussig, Helen Brooke T: 52
- Blue bear** [animal]
Bear (American black bears) B: 184
- Blue beech** [tree]
Ironwood I: 454
Leaf picture on L: 153
- Blue belly** See Swift in this index
- Blue Bird, The** [play by Maeterlinck]
Maeterlinck, Maurice M: 41
- Blue Bombers, Winnipeg** See Winnipeg Blue Bombers in this index
- Blue Book, Project**
Unidentified flying object U: 27
- Blue Boy, The** [painting by Gainsborough]
Gainsborough, Thomas G: 7 with picture
- Blue cedar** [tree]
Tree picture on T: 426
- Blue cheese**
Cheese (Semisoft cheese) C: 392
- Blue chip stock** [investment]
Dow Jones average D: 316
- Blue chromis** [fish]
Fish picture on F: 155
- Blue crab** [sea animal] B: 419 with picture
Crab Ci: 1115 with diagram
Crustacean picture on Ci: 1164
- Blue crew**
Submarine (Life aboard a submarine) So: 941
- Blue Cross and Blue Shield** [organization]
B: 420
Hospital (The 1900's) H: 374
- Blue Cross and Blue Shield of Michigan**
Insurance (table) I: 315
- Blue earth**
Amber A: 404
- Blue Fairy Book, The** [book by Lang]
Literature for children (Collections of tales)
L: 362
- "Blue flu"** [boycott]
Labor movement (Handling labor disputes)
L: 6
- Blue-footed booby** [bird]
Booby B: 464 with picture
- Blue grama** [plant]
Grass picture on G: 325
- Blue Grass Boys** [band]
Country music (Bluegrass music) Ci: 1098a with picture
Monroe, Bill M: 733
- Blue-green algae**
Algae (Blue-green algae) A: 349 with picture
Prokaryote P: 817
- Blue Grotto** [Capri, Italy]
Capri C: 198
Cave (table) C: 320
- Blue gum** [tree]
Eucalyptus E: 376
- Blue heeler** [dog]
Australian cattle dog A: 927
- "Blue Hotel, The"** [story by Crane]
Crane, Stephen Ci: 1120
- Blue huckleberry** [shrub]
Huckleberry H: 404
- Blue Jackets, Columbus** [team]
Hockey (table: National Hockey League)
H: 281
- Blue jay** B: 420 with picture
Bird (Birds of urban areas) B: 333 with picture
Jay J: 66
- Blue Jays, Toronto** See Toronto Blue Jays in this index
- Blue Lake** [New Mexico]
Pueblo Indians (Contact with other peoples)
P: 871
- Blue laws** [U.S. history] B: 420
Colonial life in America (Religion) Ci: 804-805
Sunday So: 989
- Blue Lodge**
Masonry (Organization) M: 267; (The lodges and degrees of Masonry) M: 267
- Blue marlin** [fish]
Marlin M: 215
- Blue Men of the Desert**
Tuareg T: 476
- Blue mold**
- Mold M: 689
- Blue Monday**
Monday M: 702
- Blue moon** B: 420
- Blue Mosque** [Istanbul, Turkey]
Istanbul (The city) I: 490-491
- Blue Mountains**
Jamaica (Land and climate) J: 24
- Blue Mountains National Park** [Australia]
National park (table) N: 42f
- Blue Nile** [river, Ethiopia-Sudan]
Lake Tana L: 46
Nile River (The course of the Nile) N: 422 with picture and map
- Blue Period**
Picasso, Pablo (The Blue Period) P: 448a
- Blue peter**
Flag (Flags that talk) F: 208
- Blue Rider** [art] See Blaue Reiter, Der in this index
- Blue Ridge** [region, U.S.]
See also Blue Ridge Mountains in this index
Georgia (Land regions) G: 124
South Carolina (Land regions) So: 652
- Blue Ridge Mountains** [U.S.] B: 421 with picture
Luray Caverns L: 526
Maryland (Land regions) M: 250
North Carolina picture on N: 472
South Carolina (Land regions) So: 652 with picture; (Rivers, waterfalls, and lakes) So: 652-654
Tennessee (Land regions) T: 146; picture on T: 134
United States (The Appalachian Highlands) U: 120
Virginia (Land regions) V: 410; picture on V: 398
West Virginia (Land regions) W: 218
- Blue Ridge Parkway** [road]
Blue Ridge Mountains B: 421 with picture
National Park System (table: National parkways and other national parklands) N: 55; (History) N: 58-59
Virginia (Visitor's guide) V: 408
- Blue Room**
White House (Public rooms) W: 286 with picture; picture on W: 289
- Blue sheep**
Sheep (Wild sheep) S: 380
- Blue Shield** [insurance] See Blue Cross and Blue Shield in this index
- Blue shift** [astronomy] See Blueshift in this index
- Blue-sky laws** [economics] B: 421
- Blue spiny lizard**
Swift picture on So: 1039
- Blue spruce** [tree]
Spruce (Kinds) So: 809 with picture
- Blue supergiant** [star]
Deneb D: 130
- Blue tang surgeonfish**
Fish picture on F: 154
- Blue thistle** [plant]
Viper's bugloss V: 391
- Blue vitriol** [chemical]
Hydrate H: 462
Sulfate So: 966
- Blue whale** [animal] B: 421
Animal (Animal travelers) A: 502; picture on A: 469
Endangered species (table) E: 270
Mammal picture on P: 117
Whale (Rorquals) W: 255 with picture
- Blue-winged teal** [bird]
Bird (Birds of inland waters and marshes) B: 340 with picture
- Blue yodel** [music]
Country music (The roots of country music) Ci: 1098a-1098b
- Blueback** See Sockeye salmon in this index
- Bluebell** [plant] B: 421 with picture
Lungwort L: 525
- Blueberry** [shrub] B: 422 with picture
Plant picture on P: 542
- Bluebird** B: 422 with picture
- Bluebonnet** [plant] B: 423
- Bluebottle** [plant]
Bachelor's-button B: 17
- Bluebottle fly** [insect]
Blow fly B: 419
Fly (The body of a fly) F: 309
Insect picture on I: 285
- Bluebuck** [animal]
- Antelope (Habits and appearance) A: 542
- Bluefin tuna** [fish]
Fish picture on F: 153
Tuna T: 485
- Bluefish** [fish] B: 423 with picture
Fish picture on F: 152
- Bluegill** [fish]
Fish picture on F: 158
Sunfish So: 990
- Bluegrass** [music]
Country music (Bluegrass music) Ci: 1098a with picture
- Bluegrass** [plant] B: 423
Grass picture on G: 325
Lawn (Planting the grass) L: 142
- Bluegrass Louisville American Music Fest**
Kentucky picture on K: 283
- Bluegrass Region**
Kentucky (Land regions) K: 285; (Natural resources) K: 287
Ohio (Land regions) O: 692
- Bluegrass State**
Kentucky K: 272
- Bluehead wrasse** [fish]
Fish picture on F: 155
- Bluejacket** [sailor]
Navy, United States (A typical day) N: 83
- Bluenose** [boat] B: 423 with picture
- Bluenose II** [boat]
Bluenose B: 424
Nova Scotia (Places to visit) N: 560 with picture
- Bluenosers** [people]
Nova Scotia N: 555
- Blueprint** [construction] B: 424
- Blues** [music] B: 424
Country music (The roots of country music) Ci: 1098a-1098b
Gaye, Marvin G: 73
Jazz (The roots of jazz) J: 70
King, B. B. K: 319
Popular music (Ragtime, jazz, and blues) P: 670-671; (The recording era) P: 671
Rock music (Musical roots) R: 377
- Blues, Father of the**
Handy, W. C. H: 50
- Blues, Saint Louis**
Hockey (table: National Hockey League) H: 281
- Blues for Mister Charlie** [play by Baldwin]
American literature (Drama) A: 425
Baldwin, James B: 39
- Blueshift** [physics]
Astronomy (Optical astronomy) A: 838-841; (Radio astronomy) A: 843 with picture
Redshift R: 192
- Bluestem grass** [plant]
Grass picture on G: 325
- Bluestone Scenic River National Parkway**
[West Virginia]
National Park System (table: National parkways and other national parklands) N: 55
- Bluestriped grunt** [fish]
Fish picture on F: 155
- Bluet** [plant] B: 425
- Bluford, Guion Stewart, Jr.** [American astronaut] B: 425 with portrait
Astronaut (table) A: 830
- Blumberg, Baruch Samuel** [American physiologist]
Nobel Prizes (Physiology or medicine: 1976) N: 445
- Blume, Judy** [American author] B: 425
- Blumenthal, W. Michael** [American government official]
Carter, Jimmy (table) C: 257
Treasury, Department of the (table) T: 407
- Blundell, James** [British physician]
Blood transfusion (History) B: 417
- Blunderbuss** [gun] B: 425 with picture
- Blunt point nail**
Nail (The parts of a nail) N: 3
- Bluntnose stingray** [animal]
Animal picture on A: 487
- Bly, Nellie** [American journalist] B: 425 with portrait
- Bly, Robert** [American poet] B: 426
- Blythe, Virginia Cassidy** [mother of]
Clinton, Bill (Early life) Ci: 682a
- Blythe, William Jefferson, III** [father of]
Clinton, Bill (Early life) Ci: 682a
- Blythe, William Jefferson, IV** See Clinton, Bill in this index
- BMEWS** See Ballistic Missile Early Warning

System in this index

BMI [measurement]

Weight control W: 181

BMR See Basal metabolic rate in this index

BMT [subway]

New York City (Transportation) N: 334-335

BMW [company]

Manufacturing (table) M: 170

BMX See Bicycle motocross in this index

B'nai B'rith [organization] B: 426 with picture

Bo Juyi [Chinese poet]

Chinese literature (Poetry) C: 511-512

Boa [snake] B: 426 with picture

Boa constrictor [snake] B: 427

Animal picture on A: 480

Boa B: 426 with picture

Snake picture on S: 534

Boa Vista [island]

Cape Verde C: 189 with map

Boabdil [king of Granada] B: 427

Boadicea [queen of the Iceni] B: 427

Boar [animal]

Hog (table) H: 284

Boar, Wild [animal] B: 427

Animal picture on A: 479

Hog (Wild hogs) H: 286

Board foot [unit of measure]

Lumber (table) L: 518

Board game

Artificial intelligence (Planning and problem solving) A: 760

Game (Board games) G: 21

Board of chosen freeholders

New Jersey (Local government) N: 249

Board of commissioners [government]

County (Forms of county governments)

Ci: 1099

Board of directors

Corporation (Business corporations) Ci: 1070

Board of education See Education, Board of in this index

Board of Education of Oklahoma City v. Dowell [1991]

Education (Education for whom?) E: 107

Board of Estimate

New York City (Government) N: 339-340

Board of Foreign Scholarships

Fulbright Scholarship F: 554

Board of governors

Federal Reserve System (Organization) F: 65

Board of health [U.S.]

Health, Board of H: 127

Board of Public Works [Washington, D.C.]

Washington, D.C. (Territorial government abolished) W: 86

Board of supervisors [government]

County (Forms of county governments)

Ci: 1099

Board of Tax Appeals [U.S. history]

Tax Court, United States T: 52

Board of trade [economics] See Commodity exchange in this index

Board of War and Ordnance [U.S. history]

Army, United States (The Continental Army)

A: 738

Boarding around [custom]

Pioneer life in America (Education) P: 484

Boarding bridge

Airport (The passenger terminal) A: 244

Boards [hockey]

Hockey (The rink) H: 274

Boardwalk

Atlantic City A: 862 with picture

New York City (Brooklyn) N: 326-328

Boardwalk Hall

Atlantic City A: 863

Boas, Franz [American anthropologist] B: 427

Anthropology (Development of field research)

A: 548

Boat See Boating, Ship in this index

Boat-Building near Flatford Mill [painting by Constable]

Painting (Romanticism) P: 68 with picture

Boat orchid [plant]

Orchid picture on O: 824

Boat people

Vietnam (Postwar Vietnam) V: 371-372

Boat racing

See also Rowing in this index

America's Cup A: 431

Bluenose B: 423 with picture

Iceboating (Iceboat races) I: 19 with pictures

Motorboat racing M: 876 with pictures

Sailing (Sailboat racing) S: 27 with pictures;

Yachting in this index

Boat song [music]

Barcarole B: 108

Boat-tailed grackle [bird]

Grackle G: 297

Boating B: 428 with pictures

Bolivia picture on B: 445

Canoing C: 180 with pictures

Iceboating I: 18 with pictures

Rowing R: 493

Safety (In water sports) S: 13

Sailing S: 23 with pictures

See also Ship in this index and the list of

Related Articles in the Boating article

Boatswain [bird]

Tropicbird T: 451

Boaz [Biblical figure]

Ruth, Book of R: 568

Bob [hair style]

Hairdressing (The 1900's) H: 12

Bob [weight]

Pendulum (Clock pendulums) P: 237

Bob Jones University B: 432

Bobadilla, Francisco de [Spanish government official]

Columbus, Christopher (Columbus in disgrace)

Ci: 862

Bobber

Fishing (Floats) F: 177; picture on F: 178

Bobbin

Sewing machine pictures on S: 334

Weaving (How a loom works) W: 174

Bobbin lace

Lace L: 22 with picture; pictures on L: 21

Bobbsy Twins [literary figures]

Stratemeyer, Edward So: 920

Bobby [police]

Peel, Sir Robert P: 228

Police (Early law enforcement in England)

P: 624 with picture

Scotland Yard S: 221

Bobcat [runk]

Boy Scouts (Cub Scouting) B: 536-537

Bobcat [wildcat] B: 432 with picture

Animal picture on A: 483

Wildcat W: 301

Bobo [people]

Burkina Faso (People) B: 706

Bobolink B: 433

Bird picture on B: 361

Bobsledding [sport] B: 433 with picture

Olympic Games (Winter Olympic Games)

O: 746d

Sled S: 505

Tobogganing T: 308

Bobwhite [bird]

Bird (In nature) B: 330 with picture, (Birds of

brushy areas) B: 338 with picture

Partridge P: 188

Quail Q: 4

Boca, La [district, Buenos Aires]

Buenos Aires (The city) B: 672

Boccaccio, Giovanni [Italian author] B: 433 with

portrait

Italian literature (Humanism and the

Renaissance) I: 494

Renaissance (Humanism) R: 233-234

Short story S: 434

Boccherini, Luigi [Italian composer] B: 434

Boccie

Bowling (Other kinds of bowling) B: 525

Boccioni, Umberto [Italian sculptor] B: 434

Futurism F: 589 with picture

Sculpture (Form and treatment) S: 230-231

with picture

Bock, Jerry [American composer]

Musical comedy (The modern musical

emerges) M: 960

Bock beer [drink]

Beer B: 211

Bodark [tree] See Osage orange in this index

Bode, Johann E. [German astronomer]

Bode's law B: 434

Bode Museum

Berlin (Libraries and museums) B: 262

Bodega y Quadra, Juan Francisco de la

[Spanish explorer]

Washington (Discovery and exploration) W: 66

Bodegone [art]

Painting (The Spanish masters) P: 64

Bodensee [lake, Europe]

Lake Constance L: 37

Bode's law [astronomy] B: 434

Bodhidharma [Chinese religious leader]

Zen Z: 593

Bodhisattva [religion] B: 434

Buddhism (The Mahayana) B: 669

God (Personal Gods) G: 243

Sculpture (China) S: 238 with picture

Bodleian Library [Oxford University] B: 434

Bodley, Sir Thomas [English diplomat]

Bodleian Library B: 434

Bodmer, Karl [Swiss artist]

Buffalo picture on B: 675

Indian, American pictures on I: 158, I: 159, I: 161

Bodo [people]

India (Religious and ethnic unrest) I: 134

Bodoni, Giambattista [Italian printer] B: 434

Book (The 1600's and 1700's) B: 467

Bodwell, Joseph R. [American political leader]

Maine (table) M: 87

Body, Human See Human body in this index

"Body and Soul" [song]

Hawkins, Coleman H: 113

Body cavity [anatomy]

Hernia H: 212

Body cell [biology] See Somatic cell in this index

Body check [sports]

Lacrosse (Men's lacrosse) L: 24

Body gripper [trap] See Conibear in this index

Body language B: 435

Communication (The study of communication)

Ci: 887

Dog (Behavior) D: 277

Kinesics K: 319

Body louse [insect]

Louse L: 507 with picture

Body mass index [measurement]

Weight control W: 181

Body odor

Skin (Hair, nails, and glands) S: 489-490

Body stalk [anatomy]

Reproduction, Human (Development of the

embryo) R: 247 with diagram

Body temperature See Temperature, Body in this index

Bodybuilders, International Federation of

Bodybuilding B: 435

Bodybuilding [sport] B: 435

Weightlifting W: 183

Bodysurfing [sport]

Surfing So: 1004

Boe, Nils [American political leader]

South Dakota (table) So: 680

Boehm, Thaobald [German flutist]

Flute F: 307

Boehmaria [botany] B: 435

Boehmite [mineral]

Bauxite (How bauxite forms) B: 174

Boeing, William Edward [American business-

man] B: 435

Aviation (World War I [1914-1918]) A: 987-988

Boeing 314 Clipper [airplane]

Airplane (Engineering improvements) A: 237

Aviation picture on A: 990

Boeing 707 [airplane]

Airplane (The jet age) A: 238; picture on

A: 236

Boeing 747 [airplane]

Airplane (Commercial transport planes) A: 210

with picture; (The jet age) A: 238; pictures

on A: 216, A: 237

Aviation (A new age of flight) A: 990-991

Jet propulsion (Power in a jet engine) J: 111;

picture on J: 113

Boeing 777 [airplane]

Airplane (Commercial transport planes) A: 210;

pictures on A: 208, A: 218

Boeing Air Transport

Boeing, William Edward B: 435

Boeing Company

- Boer War** [1899-1902] B: 435
Canada, History of (Foreign relations) C: 148
Kimberley K: 317
Kitchener, Horatio Herbert K: 338
Laurier, Sir Wilfrid (Relations with Britain) L: 126
Quebec (Early years as a province) Q: 30
South Africa (Discovery of diamonds and gold) So: 618
United Kingdom (Gladstone and Disraeli) U: 69
- Boers** [people] See *Afrikaners in this index*
- Boesman and Lena** [book by Fugard] Fugard, Athol F: 553
- Boethius, Anicius Manlius Severinus** [Roman philosopher] B: 436
- BOF** [furnace]
Iron and steel (The basic oxygen process [BOP]) I: 443 *with diagrams*
- Bog** [swamp] B: 436 *with diagram*
Cranberry Ci: 1116
Ice age (Evidence of ice ages and their climates) I: 6-7
Peat P: 225
Pond (Kinds of ponds) P: 656
Wetland W: 253
- Bog cranberry** [fruit]
Lingonberry L: 335 *with picture*
- Bog iron ore**
Limonite L: 308
- Bog onion** See *Jack-in-the-pulpit in this index*
- Bog spavin** [disease]
Spavin So: 767
- Bog turtle**
Turtle T: 520
- Boganda, Barthelémy** [Central African political leader]
Central African Republic (History) C: 353
- Bogart, Humphrey** [American actor] B: 436 *with portrait*
Huston, John H: 457
Motion picture (Best performance by an actor: 1951) M: 862
- Bogey**
Golf (table) G: 261
- Bogeyman**
Fairy F: 10
- Boggs, J. Caleb** [American political leader]
Delaware (table) D: 109
- Boggs, Lilburn W.** [American political leader]
Missouri (table) M: 668
- Boggs, T. Hale** [American political leader]
Warren Report W: 37
- Bogong moth** B: 437
- Bogong** [Moth (Migration)] M: 839
- Bogotá** [Colombia] B: 437 *with picture*
Colombia *picture on* Ci: 778
- Bohème, La** [opera by Puccini]
Opera (*Bohème, La*) O: 801; *picture on* O: 802
Puccini, Giacomo P: 869
- Bohemia** [region, Czech Republic] B: 437 *with map*
Czech Republic Ci: 1209; (History) Ci: 1213
Czechoslovakia Ci: 1215
Moravia M: 801
- Bohemian Basin** [Czech Republic]
Czech Republic (Land and climate) Ci: 1211 *with map*
- Bohemian Forest** [Czech Republic]
Czech Republic (Land and climate) Ci: 1211 *with map*
- Bohemian glass**
Glass (Types of art glass) G: 220
- Bohemian Lights** [book by Valle-Inclán]
Spanish literature (The Generation of 1898) So: 762
- Bohemien-Moravian Highlands** [region, Czech Republic]
Czech Republic (Land and climate) Ci: 1211 *with map*
- Bohemian Mountains** [Czech Republic]
Czech Republic (Land and climate) Ci: 1211 *with map*
- Bohemian waxwing** [bird]
Bird *picture on* B: 351
Waxwing W: 154
- Bohemond of Taranto** [French crusader]
Crusades (The First Crusade) Ci: 1160 *with map*
- Bohío** [dwelling]
Cuba (Way of life) Ci: 1170-1171
- Böhl de Faber, Cecilia** See *Caballero, Fernán in this index*
- Bohnenberger, G. C.** [German inventor]
Gyroscope (History) G: 454
- Bohol** [island, Philippines]
Philippines (The main islands) P: 376-378 *with map*
- Bohr, Aage Niels** [Danish physicist]
Nobel Prizes (Physics: 1925) N: 441
- Bohr, Niels** [Danish physicist] B: 438
Atom (The first descriptions of atomic structure) A: 875-876; *diagram on* A: 875
Chemistry (Development of physical chemistry) C: 404-405
Physics (Quantum theory) P: 441; (Uncovering the secrets of the atom) P: 442
Quantum mechanics (Quantized orbits) Q: 6
Radiation (The quantum theory) R: 81
Science (Science in the early 1900's) S: 201
Spectrum So: 772
- Bohrium** [element] B: 438
Transuranium element T: 401
- Boiardo, Matteo Maria** [Italian poet]
Italian literature (Humanism and the Renaissance) I: 494
- Boid** [zoology]
Snake (Boids) S: 534
- Boies, Horace** [American political leader]
Iowa (table) I: 391
- Boii** [people]
Bohemia B: 437
- Boil** [disorder] B: 438 *with diagrams*
Pore P: 678
Skin (Infections) S: 490
- Boileau-Despréaux, Nicolas** [French poet] B: 439
French literature (Classical poetry) F: 520
- Boiler** B: 439
Bismuth B: 383
Distillation D: 238
Heating (Steam and hot-water heating systems) H: 159
Locomotive (Steam locomotives) L: 417
Steam engine (How steam engines work) So: 880
- Boiling**
Cooking (Boiling) Ci: 1028
- Boiling off**
Silk (Boiling off and weighting) S: 460
- Boiling point** B: 439
Evaporation (How evaporation occurs) E: 422-423
Gas [physics] (How gases behave) G: 48
Heat (Changes in state) H: 153 *with diagram*
Pressure P: 773
Steam So: 879
- Boiling Spring Lake** [California]
Lassen Volcanic National Park L: 87
- Boiling water reactor**
Nuclear energy (Steam production) N: 587; *picture on* N: 584
- Bois Blanc Island Lighthouse** [Ontario]
Canada (table: National historic sites) C: 114
- Bois d'arc** [tree] See *Osage orange in this index*
- Bois de Boulogne** [park]
Paris (Gardens, squares, and parks) P: 162-163 *with map*
- Bois de Vincennes** [park]
Paris (Gardens, squares, and parks) P: 162-163
- Boise** [Idaho] B: 440
Idaho I: 26 *with pictures*
- Boito, Arrigo** [Italian composer] B: 440
Verdi, Giuseppe V: 316
- Bojangles**
Robinson, Bill R: 367
- Bojaxhiu, Agnes Gonxha** See *Teresa, Mother in this index*
- Bok, Derek C.** [American educator]
Harvard University (History) H: 80-81
- Bok, Edward William** [American editor]
Bell (Uses of bells) B: 239
Magazine (History) M: 43-45
- Bokassa, Jean-Bedel** [Central African political leader]
Central African Republic (History) C: 353
- Bokmål**
Norway (Language) N: 539
- Bola** [weapon]
Indian, American (Before European contact) I: 177 *with picture*; *picture on* I: 140
Sling S: 508a
- Boleck, Tom** [American political leader]
New Mexico (table) N: 272
- Bolaños Geyer, Enrique** [Nicaraguan political leader]
Nicaragua (Recent developments) N: 400-401
- Bolas spider**
Spider So: 782 *with picture*; (table) So: 790
- Bold Forbes** [horse]
Kentucky Derby (table) K: 296
- Bolden, Buddy** [American musician]
Jazz (Early jazz) J: 70
- Boldface** [printing]
Proofreading (Proofreaders' marks) P: 822
- Boldrewood, Rolf** [Australian author]
Australia (Literature) A: 906
- Bolero** [dance] B: 440
Ballroom dancing B: 63
- Bolesław I** [king of Poland]
Poland (The early Polish state) P: 611
- Bolesław II** [king of Poland]
Stanislas, Saint So: 836
- Bolete** [fungus]
Mushroom (Kinds of mushrooms) M: 943 *with pictures*
- Boleyn, Anne** [wife of Henry VIII] B: 440 *with portrait*
Catherine of Aragon C: 303
Henry VIII (of England) H: 188
Wolsey, Thomas Cardinal W: 379
- Bolger, Jim** [New Zealand political leader] B: 441
- Bolger, Ray** [American actor]
Garland, Judy *picture on* G: 44
- Bolide** [astronomy]
Fireball F: 133
- Bolin, Wesley** [American political leader]
Arizona (table) A: 687
- Bolingbroke** [literary figure]
Shakespeare, William (*Richard II*) S: 358
- Bolingbroke, Henry** See *Henry IV [king of England] in this index*
- Bolingbroke, Lord** [British philosopher]
Freethinker F: 509
- Bolívar, Simón** [Venezuelan general] B: 441 *with portrait*
Bolivia (Independence) B: 446
Colombia (Independence) Ci: 783
Flag *picture on* F: 217
Latin America (The wars of independence) L: 107 *with picture*
Pan-American conferences (The original Pan-Americanism) P: 113
Peru (The war of independence) P: 314
San Martín, José de S: 105
Sucre, Antonio José de So: 951
Venezuela (The struggle for independence) V: 304
- Bolívar City** See *Ciudad Bolívar in this index*
- Bolivia** B: 442 *with pictures and maps*
Bolívar, Simón B: 441
Flag *picture on* F: 200
Guerrilla warfare (History) G: 420-421
Indian, American (Indians of the Andes) I: 173; (Indians of the Tropical Forest) I: 175
Latin America (Border disputes) L: 108
Peru (The War of the Pacific) P: 315
Standard of living (table) So: 834
World War II (table: The Allies) W: 471
See also *the list of Related Articles in the Bolivia article*
- Bolivian coca** [plant]
Coca Ci: 742
- Bolkiah, Sultan Haji Hassanal** [Brunei political leader]
Brunei (Government) B: 650
- Boll**
Cotton Ci: 1086 *with pictures*; (The cotton plant) Ci: 1087; *picture on* Ci: 1088
Boll weevil B: 448 *with pictures*
- Böll, Heinrich** [German author] B: 448
German literature (German literature after 1945) G: 142
- Boll weevil** [insect] B: 448 *with pictures*
Alabama (Interesting facts) A: 257
Cotton (Insects) Ci: 1090; (The boll weevil) Ci: 1093
Insect *picture on* I: 285
Weevil W: 180
- Bolling, Edith** [wife of Woodrow Wilson] See *Wilson, Edith Bolling in this index*
- Bollworm** [insect]
See also *Corn earworm in this index*
Cotton (Insects) Ci: 1090 *with picture*
- Bologne** [Italy] B: 448
- Bologna, University of** [Italy] B: 448
Education (The rise of the universities) E: 99-100
Italy (Education) I: 504
Law (The Middle Ages) L: 134-135

Universities and colleges (European universities) U: 210

Bolometer [instrument] B: 448
Telescope (Infrared telescopes) T: 108

Bolshheviks (Russian history) B: 449
Communism (Before 1917) Ci: 892
Cossacks Ci: 1079
Kerensky, Alexander Feodorovich K: 306
Lenin, V. I. (Beginnings of revolution) L: 192
Russia (Nicholas II) R: 551-552
Stalin, Joseph (Young revolutionist) So: 825;
(Rise to power) So: 826
Union of Soviet Socialist Republics (History) U: 35

Bolshoi Ballet [Moscow] B: 449
Ballet (Ballet in Russia) B: 52-53
Moscow (Arts) M: 825 *with picture*
Russia (Ballet) R: 537

Bolt [firearms]
Firearm (Mechanism) F: 132-133
Bolt [hardware] B: 449 *with pictures*
Bolt [lock]
Lock (Types of locks) L: 410 *with pictures*
Bolt [unit of measure]
Clothing (Ready-to-wear clothes) Ci: 704-705
Bolt-action rifle [gun]
Rifle (Kinds of rifles) R: 338 *with pictures*
Bolt cutters [tool]
Fire department *picture on* F: 127
Bolton, Guy [British author]
Kern, Jerome K: 306
Boltzmann, Ludwig [Austrian physicist] B: 449
Boltzmann distribution [physics]
Boltzmann, Ludwig B: 449
Bolyai, Janos [Hungarian mathematician]
Geometry (Rise of non-Euclidean geometry) G: 105
Mathematics (In the 1800's) M: 307

Bolyeriidae [zoology]
Snake (Round Island boas) S: 535

Bomarc Missile [weapon]
Canada, History of (The return of the Liberals) C: 152

Bomazzo [opera by Ginastera]
Opera (Opera today) O: 800 *with picture*

Bomb [weapon] B: 450 *with pictures*
See also Atomic bomb; Hydrogen bomb *in this index*
Ballistics B: 56
Computer *pictures on* Ci: 918
Fragmentation F: 451
Terrorism (Types of terrorism) T: 178

Bomb bay
Bomber B: 453

Bomb squad
Police (Other activities) P: 621-622 *with picture*

Bombachas [clothing]
Brazil (Clothing) B: 574
Paraguay (Clothing) P: 146

Bombardier beetle
Beetle (Ground beetles) B: 217, *picture on* B: 215

Bombarding particle
Nuclear energy (Nuclear fission) N: 582

Bombay [city, India] *See* Mumbai *in this index*

Bombay cat
Cat (Short-haired breeds) C: 290

Bomber [airplane] B: 453 *with pictures*
Air force (Aircraft and missiles) A: 183
Air Force, United States (Bombers) A: 191
with picture, (World War II) A: 194
Aircraft, Military (Bombers) A: 202 *with pictures*
Airplane (Military planes) A: 212, (World War I [1914-1918]) A: 234, (During World War II [1939-1945]) A: 238
Vietnam War (The opposing forces) V: 375
World War II (The air war) W: 481 *with picture*

Bombing system
Bomber B: 453

Bomblet [weapon]
Bomb (Fragmentation bombs) B: 450

Bombyx mori [insect]
Moth (The importance of moths) M: 839-840
with picture
Silk (Cultivated silk) S: 459

Bomi Hills
Liberia (Land and climate) L: 230

Bomoh [healer] B: 454

Bomoseen Lake
Vermont (Rivers and lakes) V: 328-330

Bon Festival
July J: 188

Bon Homme
South Dakota (Schools) So: 668

Bon Marché [Paris]
Department store D: 149

Bon Pays [region]
Luxembourg (Land) L: 531

Bonaire [island, Netherlands Antilles]
Netherlands Antilles N: 151

Bonampak [Maya ruins]
Maya (The Maya heritage) M: 326

Bonanza Creek [Yukon Territory]
Klondike K: 344

Bonanzaville, USA [West Fargo]
North Dakota (Places to visit) N: 504 *with picture*

Bonaparte, Carlo [Corsican lawyer]
Napoleon I (Boyhood) N: 15

Bonaparte, Charles Joseph [American political leader]
Federal Bureau of Investigation (History) F: 62
Roosevelt, Theodore (table) R: 470

Bonaparte, Joseph [king of Spain]
Latin America (The wars of independence) L: 107

Bonaparte, Louis [king of The Netherlands]
Napoleon III (Early life) N: 19

Bonaparte, Napoleon *See* Napoleon I *in this index*

Bonaventure, Saint [Italian religious leader] B: 454

Bonaventure Island
Quebec (Places to visit) Q: 20

Bond [bricklaying]
Brick (Bonds) B: 599

Bond [chemistry] B: 454
Cell (Producing energy) C: 332-333
Materials M: 300b; (The role of bonds) M: 301
Matter (Structure of matter) M: 310-311
Mineral (Chemical bonds) M: 570 *with diagram*
Molecule (Individual molecules) M: 692
Valence V: 260
Water (How water is held together) W: 131

Bond [economics] B: 454
Commodity exchange (Forward and futures contracts) Ci: 873
Interest I: 321
Investment (Indirect investments) I: 367
Investment banking I: 369
Savings bond S: 166
Stock exchange So: 903

Bond [law]
Bail B: 31
Bonded warehouse B: 455

Bond, Carrie Jacobs [American composer] B: 455

Bond, Christopher Samuel [American political leader]
Missouri (table) M: 668

Bond, Edward [British dramatist]
English literature (Recent English drama) E: 323

Bond, James [literary figure]
Fleming, Ian Lancaster F: 233

Bond, Julian [American political leader] B: 455
Georgia (The mid-1900's) G: 134

Bond, Laura [wife of]
Borden, Sir Robert Laird (Early life) B: 483

Bond, Shadrach [American political leader]
Illinois (table) I: 71; (Early statehood) I: 74

Bond trader [finance]
Bank (Careers in banking) B: 95

Bondage of the Will, The [book by Luther]
Luther, Martin (Reformation leader) L: 528

Bondar, Roberta [Canadian astronaut] B: 455
with portrait
Astronaut (table) A: 830

Bondarenko, Valentin V. [Soviet cosmonaut]
Astronaut (Accidents in space) A: 830
Space exploration (Vostok and Mercury: The first human beings in space) So: 711-712

Bonded fabric
Textile (Other textiles) T: 215

Bonded warehouse [storage facility] B: 455

Bonderizing [industrial process] B: 455

Bondfield, Margaret Grace [British political leader] B: 455

Bonding [insurance] B: 455

Bondman *See* Peasant, Serf *in this index*

Bondone, Giotto di *See* Giotto *in this index*

Bonds, Barry [American baseball player] B: 456
Baseball (table. Modern major league records) B: 137

Bonds of Interest, The [play by Benavente]

Benavente, Jacinto B: 247

Bondsman [law]
Bail B: 31

Bone [anatomy] B: 456 *with diagrams*
Bone bank B: 457
Cartilage C: 263
Collagen Ci: 773
First aid (Fractures and dislocations) F: 140
Fracture F: 451 *with diagrams*
Human body (The skeletal system) H: 418
Nutrition (Other diseases) N: 631
Orthopedics O: 860
Osteomyelitis O: 866
Osteoporosis O: 867 *with pictures*
Osteosclerosis O: 868
Rheumatology R: 291
Rickets R: 335 *with picture*
Space exploration (Living in space) So: 701-703
Tendon T: 132
Transplant (Tissue transplants) T: 379
See also Skeleton *and the names of specific bones such as* Collarbone *in this index*

Bone, Henry [English artist]
England *picture on* E: 308

Bone ash
Porcelain (Bone china) P: 676

Bone bank [medicine] B: 457

Bone bruise [injury]
Bruise B: 650

Bone china
Porcelain (Bone china) P: 676

Bone conduction
Ear (How sounds travel to the inner ear) E: 9-10

Bone-conduction aid
Hearing aid (Types of hearing aids) H: 130 *with picture*

Bone gelatin
Gelatin G: 76

Bone glue
Glue G: 236

Bone marrow [anatomy]
Anemia (Insufficient production of red blood cells) A: 458
Antibiotic (Damage to organs and tissues) A: 551
Biopsy B: 326
Blood (Formation of new blood components) B: 411; (Blood transfusions) B: 413
Bone (Structure of the bones) B: 456
Bone marrow transplant B: 457
Cancer (Classification by primary body site) C: 167-168
Human body (The skeletal system) H: 418
Immune system (Parts of the immune system) I: 87; *diagram on* I: 88
Iron (How bodies use iron) I: 435
Leukemia L: 215
Osteomyelitis O: 866
Osteosclerosis O: 868
Radiation sickness R: 82
Stem cell So: 889
Thymus T: 274

Bone marrow transplant [medicine] B: 457
with picture
Sickle cell anemia S: 448
Thalassemia T: 228
Transplant (Tissue transplants) T: 379

Bone meal
Gardening (Planning the garden) G: 31-34

Bone spavin [disease]
Spavin So: 767

Bone turnover *See* Remodeling *in this index*

Boneblack
Ivory black I: 521

Bonefish [fish] B: 458 *with picture*

Bones, Helen Woodrow [cousin of Woodrow Wilson]
White House hostesses W: 291

Bonesana, Cesare [Italian criminologist]
Criminology (History) Ci: 1145

Boneset [plant] B: 458

Boneyard
Dominos D: 306

Bonfils, Frederick Gilmer [American editor] B: 458

Bonfire [custom]
Halloween (Halloween symbols) H: 24b-24c

Bonfire of the Vanities, The [book by Wolfe]
American literature (Essays) A: 425

Bong, Richard I. [American aviator]
Ace A: 24

Bong Range

- Liberia (Land and climate) L: 230
- Bongo**
Animal picture on A: 481
Antelope A: 541
- Bongo, El Hadj Omar** [Gabonese political leader]
Gabon (History) G: 3-4
- Bongo drums B: 458 with picture**
- Bonham, Milledge L.** [American political leader]
South Carolina (table) So: 658
- Bonheur, Rosa** [French painter] B: 459 with picture
Buffalo Bill picture on B: 679
Painting (Women artists) P: 73-74
- Bonheur d'occasion** [book by Roy]
Canadian literature (Modern literature: 1945 to the present) C: 160
Roy, Gabrielle R: 494
- Bonhoeffer, Dietrich** [German theologian]
B: 459
- Bonhomme Richard** [ship]
Jones, John Paul (Defeat of the *Serapis*) J: 158
Navy, United States picture on N: 90
Revolutionary War in America (Fighting at sea) R: 283, picture on R: 284
- Boniface IV, Saint** [pope]
All Saints' Day A: 370
- Boniface VII** [antipope]
Pope (table) P: 666
- Boniface VIII** [pope] B: 459
Church and state (The Middle Ages) C: 542
Philip IV P: 370
Pope (The peak of papal power) P: 663-664
Roman Catholic Church (Boniface VIII) R: 408
Rome, University of R: 449
- Boniface, Saint** [English-born religious leader]
B: 459
Charles Martel C: 383
- Bonifacio, Andrés** [Filipino patriot]
Philippines (Revolt against the Spaniards) P: 379-380
- Bonifácio, José** See Andrada e Silva, José
Bonifácio de in this index
- Bonifacio, Strait of**
Sardinia S: 124
- Bonin Islands** [Japan] B: 460
Japan (The Ryukyu and Bonin islands) J: 48
Tokyo (The Tokyo Metropolitan Prefecture) T: 313-314
- Boning knife**
Knife (Types of knives) K: 345
- Bonington, Richard Parkes** [British painter]
B: 460
- Bonito** [fish] B: 460 with picture
- Bonn** [Germany] B: 460 with picture
- Bonn, University of** [Germany]
Bonn (The city) B: 460
- Bonnard, Pierre** [French painter] B: 461
France picture on F: 463
- Bonne Chanson, La** [music by Fauré]
Fauré, Gabriel Urbain F: 56
- Bonnefoy, Yves** [French poet]
French literature (Recent French literature) F: 523
- Bonner, John W.** [American political leader]
Montana (table) M: 757
- Bonner, Yelena** [Soviet activist]
Sakharov, Andrei Dmitriyevich S: 59
- Bonnet** [hat]
Tartan T: 48
- Bonnet, Stede** [British pirate] B: 462
- Bonnet Carré Spillway** [waterway]
Louisiana (Rivers, bayous, and lakes) L: 490
New Orleans (Civic improvements) N: 285
- Bonnet doll**
Doll (Porcelain dolls) D: 290-291
- Bonnethead** [fish]
Hammerhead shark H: 35
- Bonneville, Benjamin de** [American explorer]
B: 462
Bonneville Dam B: 462
Oregon Trail O: 850
Wyoming (Exploration) W: 533
- Bonneville, Lake** [former lake]
Great Salt Lake G: 348
Utah (Rivers and lakes) U: 242
- Bonneville Dam** [Columbia River, Oregon-Washington] B: 462
Oregon (Places to visit) O: 836; (The late 1900's) O: 849 with picture
- Bonneville Salt Flats**
Great Salt Lake Desert G: 348
Utah (Interesting facts) U: 231; (Places to visit) U: 238 with picture
- Bonneville Salt Flats International Speedway**
Great Salt Lake Desert G: 348
- Bonney, William H.** See Billy the Kid in this index
- Bonnie and Clyde** [film]
Beatty, Warren B: 190
- Bonnie Prince Charlie** [Scottish pretender] See Stuart, Charles Edward in this index
- Bonny, Anne** [English pirate]
Pirate (Pirates of the Caribbean and other areas) P: 495
- Bono** [Irish singer]
Rock music picture on R: 380
U2 U: 2
- Bonobo** [animal] B: 462 with picture
Ape (Way of life) A: 563
Chimpanzee C: 471
Primate (Great apes) P: 778a
- Bonsack, James A.** [American inventor]
Cigarette Ci: 553
- Bonsai** [gardening] B: 463 with picture
- Bonspiel** [contest]
Curling (The rink) Ci: 1196
- Bontebok** [animal]
Antelope (Habits and appearance) A: 542
- Bontemps, Arna Wendell** [American author]
B: 463
Cullen, Countee Ci: 1185
- Bonus** [income] B: 463
Trading stamps T: 366
- Bonus Army March** [U.S. history]
Hoover, Herbert Clark (The "Bonus Army") H: 330
- Bonus bill** [1932]
Hoover, Herbert Clark (The "Bonus Army") H: 330
- Bony fish** [zoology]
Fish (Kinds of fish) F: 147; pictures on F: 149
- Bony labyrinth**
Ear (The inner ear) E: 8
- Bonyng, Richard** [Australian conductor]
Sutherland, Joan So: 1013
- Booby** [bird] B: 463 with picture
Bird (Birds of the ocean and the Antarctic) B: 344 with picture
- Booby trap**
Mine warfare (Land mines) M: 564
- Boogie-woogie** [music]
Blues B: 425
Jazz (The swing era) J: 71
- Book B: 464 with pictures**
Bible B: 279 with pictures
Book collecting B: 468
Bookbinding B: 470
Braille B: 550 with picture
Communication (The rise of printing) Ci: 879
Hornbook H: 339 with picture
Illuminated manuscript I: 78 with picture
Indian, American picture on I: 172
International standard book number I: 347
Islamic art (Books) I: 470
Library (Paper, printing, and libraries) L: 260
Microfilm M: 514
Mildew M: 542
Scroll S: 227 with picture
Writing W: 511
- Book** [Bible]
New Testament (Books) N: 287
- Book** [cards]
Bridge (Scoring) B: 605
- Book** [unit of measure]
Silk (Reeling) S: 460
- Book account** [finance]
Colonial life in America (Money) Ci: 811
- Book collecting B: 468**
- Book hands** [writing]
Paleography P: 103
- Book lung** [zoology]
Arachnid A: 590
Spider (Respiratory system) So: 785 with diagram
- Book match**
Match (Safety matches) M: 299; (The invention of book matches) M: 300a with pictures
Ohio (Interesting facts) O: 681
- Book of Changes**
I Ching I: 2
- Book of Common Prayer**
Anglicans (Doctrines) A: 463
Church of England (Doctrines) C: 542
Ridley, Nicholas R: 337
- Book of Concord** [religious book]
Lutheran Church-Missouri Synod L: 529
- Book of Conquests** [book]
Mythology (Celtic mythology) M: 983
- Book of Daniel, The** [book by Doctorow]
Doctorow, E. L. D: 260
- Book of Delight** [book by Zabar]
- Hebrew literature (Medieval works) H: 162
- Book of Documents** [speeches]
Chinese literature (Beginnings) C: 511
- Book of Good Love** [book by Ruiz]
Ruiz, Juan R: 519
Spanish literature (Early medieval literature) So: 757-758
- Book of Hours** [prayer book]
Illuminated manuscript I: 78
- Book of Kells** [manuscript] B: 469
Book (The Middle Ages) B: 466
Manuscript picture on M: 173
Painting (Early medieval painting in the West) P: 49
- Book of Kings** [Islam] See Sha-Namah in this index
- Book of Kings** [Old Testament] See Kings, Books of in this index
- Book of Margery Kempe, The**
Early English drama (Early English drama) E: 316
- Book of Martyrs, The** [book by Foxe]
Biography (The Renaissance) B: 313
- Book of Mormon** [religious book]
Mormons (Church doctrines) M: 806; (Revelations) M: 808
Smith, Joseph (Early life) S: 517
- Book of Nonsense, A** [book by Lear]
Limerick L: 307
- Book of Roger, The** [geography]
Exploration (Muslim exploration) E: 442 with picture
- Book of sentences** [philosophy]
Scholasticism (The scholastic method) S: 179
- Book of Snobs, The** [book by Thackeray]
Thackeray, William Makepeace (Early career) T: 220
- Book of Songs** [poems]
Chinese literature (Beginnings) C: 511
- Book of Songs** [poems by Heine]
Heine, Heinrich H: 167
- Book of Songs** [poems by Petrarch]
Petrarch P: 327
- Book of Splendor** [religious book]
Hebrew literature (Medieval works) H: 162
- Book of the Courtier, The** [book by Castiglione]
Castiglione, Baldassare C: 279
Italian literature (Humanism and the Renaissance) I: 494
Renaissance (Humanism) R: 233-234
- Book of the Covenant** [Old Testament]
Exodus E: 438
- Book of the Dead** [religious book]
Egypt, Ancient (The afterlife) E: 137-138
Manuscript (Illustrated manuscripts) M: 174
- Book of the Duchess, The** [poem by Chaucer]
Chaucer, Geoffrey (Poetry) C: 388
- Book report B: 469**
A Guide to Writing Skills Research Guide: 12
- Book review B: 469**
Literature for children (Book reviews) L: 366
- Book trade** See Publishing in this index
- Book Week** [custom] B: 470 with picture
- Bookbinding B: 470**
Islamic art (Books) I: 470
- Booker T. Washington commemorative half dollar**
Coin collecting picture on Ci: 758
- Booker T. Washington National Monument**
[Virginia] B: 472
National Park System (table: National monuments) N: 50
- Booking**
Modeling (Model agencies) M: 685
- Bookkeeping** [economics] B: 472 with pictures
Accounting A: 23
Office work O: 677
- Booklist, The** [magazine]
American Library Association A: 413
- Bookmaker**
Gambling (The popularity of gambling) G: 20
Horse racing (Betting) H: 365
- Bookmaking** [betting]
Horse racing (Betting) H: 365
- Bookmarking** [computing]
Internet (How the Internet works) I: 350c-350d
- Bookmobile** [library] B: 474
Library (Active community service) L: 237,

- (Spreading the service) L: 242 *with picture*
 Truck (Special uses) T: 457
Bookplate [label] B: 474 *with picture*
Books of Chronicles See *Chronicles, Books of in this index*
Books on tape
 Book (Modern books) B: 468
Boole, George [British mathematician]
 Boolean algebra B: 474
 Computer (History) Ci: 924a
 Logic (Modern logic) L: 425
 Set theory (History) S: 322
Boolean algebra [mathematics] B: 474 *with diagrams*
 Computer (History) Ci: 924a
Boolean logic
 Computer (History) Ci: 924a
Boolean operator [research]
 A Guide to Research Skills
 Research Guide: 29
 Information retrieval (How information retrieval works) I: 268b
Boom [economics]
 Economics (Economic stability) E: 63
 South Dakota (Boom-and-bust economy) So: 684
Boom [machine]
 Crane Ci: 1119 *with picture*
 Fire department (Fire trucks) F: 125-126 *with picture*
 Mining (Surface mining methods) M: 574-575 *with picture*
Boom [microphone]
 Microphone M: 516 *with picture*
 Television (Putting a show on the air) T: 111-112
Boom [ship]
 Sailing (Spars) S: 23-24 *with diagram*
Boom box [electronics]
 Stereophonic sound system (Types of systems) So: 892
Boom town [U.S. history] B: 474
 Western frontier life in America (Frontier towns) W: 236
Boomer [animal]
 Mountain beaver M: 897
Boomer [demography] See *Baby boom generation in this index*
Boomer [U.S. history]
 Oklahoma (The great land rushes) O: 732
Boomer state [nickname]
 Oklahoma O: 712
Boomerang [weapon] B: 475 *with pictures*
 Indian, American (Hunting, gathering, and fishing) I: 141; *picture on* I: 139
Boomsnake [snake]
 Snake *picture on* S: 534
Boon, Ratliff [American political leader]
 Indiana (table) I: 214
Boone, Daniel [American pioneer] B: 476 *with picture and map*
 Charleston (Government and history) C: 384
 Frankfurt F: 484
 Kentucky (Exploration and early settlement) K: 291; *picture on* K: 292
 Missouri (Exploration and settlement) M: 669
 Tennessee (Early settlement) T: 153
 Westward movement in America (Crossing the Appalachians) W: 246
Boone, Jamima [daughter of]
 Boone, Daniel (The Wilderness Road) B: 477-478
Boone, Pat [American singer]
 Rock music (Artistic decline) R: 378
Boone, Rebecca [wife of]
 Boone, Daniel (Marriage) B: 477
 Frankfurt F: 484
Boone and Seenic Valley Railroad
 Iowa (Places to visit) I: 384
Boonesborough [Kentucky]
 Boone, Daniel (The Wilderness Road) B: 477-478; (Indian captivity) B: 478; (Escape and battle) B: 478
 Kentucky (Exploration and early settlement) K: 291
Booster line
 Fire department (Fire trucks) F: 125-126
Booster rocket
 Rocket (Multistage rockets) R: 385
 Space exploration (Getting into space and back) So: 698; (Space shuttles) So: 723; *picture on* So: 700
Booster shot [medicine]
 Immune system (Active immunity) I: 88b-88c
 Immunization (Active immunization) I: 89
Boot
 Shoe S: 430 *with picture*
 Skiing (Ski boots) S: 485 *with diagram*
Boot camp
 Coast Guard, United States (Training a recruit) Ci: 736
 Marine Corps, United States (Training a Marine) M: 206
 Navy, United States (Training a sailor) N: 83
Boot Hill
 Dodge City D: 260
 Kansas (Places to visit) K: 226
Boötes [constellation] B: 480
Booth, Edwin Thomas [American actor] B: 480 *with portrait*
Booth, Evangeline Cory [British social reformer] B: 480
Booth, Sir Felix [British merchant]
 Boothia Peninsula B: 481
Booth, John Wilkes [American assassin] B: 480 *with portrait*
 Lincoln, Abraham (Assassination) L: 326
 Mudd, Samuel Alexander M: 909
Booth, Junius Brutus [British-American actor] B: 480
Booth, Newton [American political leader]
 California (table) C: 59
Booth, Shirley [American actress]
 Motion picture (Best performance by an actress: 1952) M: 862
Booth, William [British social reformer] B: 480
 Salvation Army (History) S: 77
Boothia Peninsula [region, Canada] B: 481
Boothworm
 Animal *picture on* A: 506
 Worm *picture on* W: 501
Bootleg record
 Recording industry (Releasing the recording) R: 182
Bootlegging [crime]
 Prohibition (Life during prohibition) P: 815
BOP See *Basic oxygen process in this index*
Bop [music]
 Jazz (Bebop) J: 72 *with picture*
 Gillespie, Dizzy G: 190
 Herman, Woody H: 211
Bopp, Franz [German linguist]
 Language (The science of language) L: 66
Bopple nut See *Macadamia nut in this index*
Bor [Norse mythology]
 Mythology (The creation of life) M: 984
Bora [wind]
 Croatia (Land and climate) Ci: 1148a
Bora, Katherina von [wife of Martin Luther]
 Luther, Martin (Reformation leader) L: 528
Bora Indians
 Indian, American *picture on* I: 176
Borach, Fannia [American actress]
 Brice, Fanny B: 597 *with portrait*
Borage family [botany]
 Flower F: 300 *with picture*
Borah, William Edgar [American political leader] B: 481
 Idaho (Early statehood) I: 44; *picture on* I: 43
Borah Peak [mountain, Idaho]
 Idaho (Mountains) I: 36
 Rocky Mountains (Chief ranges of the Rockies) R: 395
Borex [chemical] B: 481 *with picture*
 Death Valley D: 62
 Sodium (Uses) So: 569
Borazon [crystal] B: 481
Borbeck Castle
 Essen E: 359
Borchardt [gun]
 Handgun (Rapid-fire handguns) H: 45
Borchert, Wolfgang [German dramatist]
 German literature (German literature after 1945) G: 142
Bordaberry, Juan M. [Uruguayan political leader]
 Uruguay (Military government) U: 228
Bordeaux [region, France] B: 482 *with picture*
 Wine (Wines from France) W: 337
Borden [city, Prince Edward Island] B: 482
Borden, Andrew [father of]
 Borden, Sir Robert Laird (Early life) B: 483
Borden, Eunice Jane Laird [mother of]
 Borden, Sir Robert Laird (Early life) B: 483
Borden, Gail [American inventor]
 Milk (History of the milk industry) M: 549
Borden, Laura Bond [wife of]
 Borden, Sir Robert Laird (Early life) B: 483
Borden, Lizzie [American public figure] B: 482 *with portrait*
Borden, Sir Robert Laird [Canadian statesman] B: 483 *with pictures*
 Borden B: 482
 Canada, History of (The conscription issue) C: 149
 Laurier, Sir Wilfrid (The conscription crisis) L: 126
 Progressive Conservative Party P: 812
Border
 Theater (Kinds of scenery) T: 239
Border collie [dog] B: 487 *with picture*
Border decoration [art]
 Illuminated manuscript I: 78 *with picture*
Border Patrol, United States B: 487
 Immigration and Naturalization Service I: 86
Border State [U.S. history]
 Civil War (How the states lined up) Ci: 617
 Confederate States of America (The border states) Ci: 932
Border terrier [dog] B: 487 *with picture*
Borderlight
 Theater (Lighting methods) T: 240-241
Bordet, Jules-Jean-Baptiste-Vincent [Belgian physiologist]
 Nobel Prizes (Physiology or medicine: 1919) N: 444
Borduas, Paul-Émile [Canadian poet]
 Canadian literature (Modern Canadian poets) C: 160
Bore [gun]
 Artillery (Parts of a gun) A: 762
 Shotgun S: 438
Bore [tide]
 Amazon River (The course of the Amazon) A: 403
 Moncton M: 702
 New Brunswick (Rivers and lakes) N: 192-193
 Reversing Falls of Saint John R: 268
Bore [tool] See *Drill in this index*
Boré, Étienne de [American inventor]
 Louisiana (Spanish rule) L: 498
Bore VI [ship]
 Ship (Multipurpose ships) S: 421-422
Boreal chickadee [bird]
 Chickadee C: 439
Boreal forest
 Biome (table) B: 323 *with map*
 Forest (Kinds of forests) F: 392-394 *with map*; (Boreal forests) F: 396 *with map*; *picture on* F: 391
 Plant (Forests) P: 522
Borecole See *Kale in this index*
Borehole
 Seismograph S: 288
Borel, Jean [Swiss immunologist]
 Cyclosporine Ci: 1204
Borelli, Giovanni A. [Italian mathematician]
 Airplane (Early experiments and ideas) A: 229-230
Boreman, Arthur I. [American political leader]
 Pierpont, Francis Harrison P: 457
 West Virginia (table) W: 225
Boren, David L. [American political leader]
 Oklahoma (table) O: 730
Borer [insect]
 See also *Corn borer in this index*
 Beetle *picture on* B: 218
Borg, Bjorn [Swedish tennis player] B: 487
 Tennis (Tennis today) T: 168-169 *with picture*
Borges, Jorge Luis [Argentine author] B: 487
 Argentina (The arts) A: 651-652
 Fiction (History) F: 90-91
 Latin-American literature (The mid-1900's) L: 113
 Novel (The novel today) N: 575
Borgia, Cesare [Italian political leader] B: 487
 Borgia, Lucrezia B: 488
Borgia, Lucrezia [Italian public figure] B: 488
Borgia, Rodrigo See *Alexander VI in this index*
Borglum, Gutzon [American sculptor] B: 488
 Mount Rushmore National Memorial M: 887
 Stone Mountain So: 909
Borglum, Lincoln [American sculptor]
 Mount Rushmore National Memorial M: 887
Borglum, Solon [American sculptor]
 Borglum, Gutzon B: 488
Borgnine, Ernest [American actor]
 Motion picture (Best performance by an actor: 1955) M: 862
Borie, Adolph E. [American government official]
 Grant, Ulysses S. (table) G: 316

- Boring** [excavation]
See also *Drilling in this index*
Tunnel (How tunnels are built) T: 490 *with diagram*
Coal (Auger mining) Ci: 722
Mining (Kinds of mining) M: 574
Subway So: 949
- Boring machine**
Industrial Revolution (The steam engine) I: 249
- Boring sponge** [animal]
sponge (Kinds of sponges) So: 800
- Boris Godunov** [ruler of Russia] See *Godunov, Boris in this index*
- Boris Godunov** [opera by Mussorgsky]
Mussorgsky, Modest M: 967
Opera (*Boris Godunov*) O: 801-802 *with picture*
- Boris Godunov** [play by Pushkin]
Pushkin, Alexander (His works) P: 911-912
Russian literature (Early romanticism) R: 560-561
- Bork, Robert H.** [American government official]
Watergate (The tape controversy) W: 144
- Borlaug, Norman Ernest** [American biologist]
B: 488
Plant (How people have changed plants) P: 542
Wheat (Breeding new varieties of wheat) W: 277 *with picture*
- Borman, Frank** [American astronaut] B: 488
Astronaut (Achievements in space) A: 829-830
Space exploration (Voskhod and Gemini: The first multiperson space flights) So: 714; (Orbiting the moon) So: 715
- Bormann, Martin** [Nazi leader] B: 488
Nuremberg Trials (The trials) N: 612-613
- Born, Bertrand de** [French troubadour]
Knights and knighthood (Knighthood in literature) K: 351
- Born, Max** [German physicist] B: 489
- "Born again"** [religion]
Pentecostal churches (Major Pentecostal churches) P: 275
- Born Free** [book by Adamson]
Adamson, Joy A: 45
- Born Guilty** [book by Rojas]
Latin-American literature (The mid-1900's) L: 113
- Born in the U.S.A.** [recording by Springsteen]
Springsteen, Bruce So: 809
- Born on the Fourth of July** [film]
Stone, Oliver So: 908
- Borneo** [island, East Indies] B: 489 *with pictures and map*
Brunei B: 650
Indonesia (The Greater Sunda Islands) I: 233 *with map*; (Climate) I: 234
Malaysia M: 98a
Rain forest (Asia) R: 126b; (Scientific value) R: 126c
- Bornholm** [island]
Denmark (Land regions) D: 137-138
- Bornite**
Mineral *picture on M*: 568
Copper (Copper ores) Ci: 1042
- Bornu** [African history]
Kanem K: 213
- Borobudur** [monument]
Indonesia (The arts) I: 232-233; *picture on I*: 237
Sculpture (The Indian influence) S: 237 *with picture*
- Borodin, Alexander** [Russian composer] B: 490
Rimsky-Korsakov, Nikolai R: 342
- Borodino, Battle of** [1812]
Napoleon I (Disaster in Russia) N: 18
- Boron** [element] B: 490
California (Mining) C: 57
Gay-Lussac, Joseph Louis G: 71
Semiconductor (Doped crystals) S: 291
- Boron, Robert** [English author]
Excalibur E: 435
- Bororo Indians**
Brazil *picture on B*: 572
- Borosilicate glass**
Glass (Borosilicate glass) G: 213
- Borough** [political unit] B: 490
Alaska (Local government) A: 300
County Ci: 1099
Local government (Units of local government) L: 407
London (Residential areas and housing) L: 432; (Borough governments) L: 439
Metropolitan area M: 442
- New York City (The city) N: 323; (Government) N: 339-340
- Borrelia burgdorferi** [bacteria]
Lyme disease L: 533
- Borrelly** [comet]
Comet (Composition) Ci: 868
- Borromini, Francesco** [Italian architect] B: 491
Architecture (Baroque architecture) A: 622
Italy (Architecture) I: 504 *with picture*
- Borrowing** See *Loan in this index*
- Borrowing** [mathematics]
Subtraction (How to borrow) So: 946
- Bors** [legendary figure]
Holy Grail (The search for the Grail) H: 298
- Borsch** [food]
Ukraine (Food and drink) U: 8
- Borst, Lyle** [American physicist]
Szilard, Leo *picture on So*: 1077
- Borzage, Frank** [American director]
Motion picture (Best achievement in directing: 1927-28, 1931-32) M: 862
- Borzoï** [dog] B: 491
Dog *picture on D*: 270
Wolfhound W: 378
- Bos** [biology]
Cattle (Early cattle) C: 315
- Boscán, Juan** [Spanish poet]
Spanish literature (The 1500's) So: 758
- Bosch, Carl** [German chemist]
Haber process H: 2
Nobel Prizes (Chemistry: 1931) N: 442
- Bosch, Hieronymus** [Dutch painter] B: 491 *with picture*
- Bosch, Juan** [Dominican political leader]
Dominican Republic (History) D: 304-305
- Boscovich, Rudjer Josip** [Croatian mathematician]
Atom (The birth of the modern atomic theory) A: 875
- Bose, Nandlal** [Indian painter]
India (Painting) I: 119-120
- Bose, Satyendra Nath** [Indian physicist]
Boson B: 494
- Bose-Einstein condensate**
Matter (States of matter) M: 311
- Bosley, Freeman R., Jr.**, [American political leader]
Saint Louis (The 1900's) S: 49-50
- Bosnia and Hercegovina** See *Bosnia-Herzegovina in this index*
- Bosnia-Herzegovina** B: 491 *with pictures and map*
Air Force, United States (The Balkans) A: 196
Austria-Hungary A: 941
Berlin, Congress of B: 266
Clinton, Bill (International affairs) Ci: 682e
Concentration camp (Other concentration camps) Ci: 927
Croatia (History) Ci: 1148a-1148b
Culture (Culture and society) Ci: 1188
Flag *picture on F*: 205
International relations (The Balkan conflicts) I: 346
North Atlantic Treaty Organization (History) N: 471
Peter I P: 323
Serbia (History) S: 314-315
United States, History of the (Keeping peace in the Balkans) U: 195
War (Recent developments) W: 24-25
Yugoslavia Y: 576; (History) Y: 579; (Ethnic tensions) Y: 580-581
- Boson** [physics] B: 494
Fermion F: 74
- Bosporus** [strait, Turkey] B: 494 *with map*
Dardanelles D: 36
Istanbul (The city) I: 490
- Bosporus Bridge** [Turkey]
Bridge (table: Suspension) B: 603
- Boss, The**
Springsteen, Bruce So: 808
- Bossa nova** [music]
Getz, Stan G: 177
- Bossuet, Jacques Bénigne** [French religious leader]
French literature (Classical prose) F: 520
- Boston** [Massachusetts] B: 495 *with pictures and maps*
Architecture *picture on A*: 624
Colonial life in America (Commercial expansion) Ci: 790 *with picture*
Massachusetts (The early 1900's) M: 293; (The mid-1900's) M: 293
Old North Church *picture on O*: 740
- Boston Academy of Music**
Mason, Lowell M: 266
- Boston Adventure** [book by Stafford]
Stafford, Jean So: 820
- Boston African American National Historic Site** [Massachusetts]
National Park System (table: National historic sites) N: 52
- Boston Brahmins** [literature]
Boston (People) B: 500
- Boston Bruins**
Hockey (table: National Hockey League) H: 281; (Professional hockey) H: 281
Orr, Bobby O: 859
- Boston Celtics** [basketball team]
Auerbach, Red A: 885
Basketball (table) B: 150
- Boston Common** [park]
Boston (Downtown Boston) B: 496-497; *picture on B*: 500
Park (History) P: 168-169
- Boston English High School**
Massachusetts M: 270
- Boston fern** [plant]
Gardening (Some popular house plants) G: 37 *with picture*
- Boston Harbor**
Massachusetts *picture on M*: 292
- Boston Harbor Islands National Recreation Area**
National Park System (table: National recreation areas) N: 49
- Boston ivy** [plant]
Ivy I: 522
- Boston Latin School**
Boston (Education) B: 501
Massachusetts M: 270; (Schools) M: 274
- Boston lettuce** [plant]
Lettuce (Kinds of lettuce) L: 214 *with picture*
- Boston Lighthouse**
Lighthouse (History) L: 295 *with picture*
- Boston Marathon**
Boston (Recreation) B: 502
United States *picture on U*: 115
- Boston Massacre** [U.S. history] B: 505 *with picture*
Adams, John (In New England) A: 35-36
Adams, Samuel (The patriot) A: 44
African Americans (Colonial times) A: 136d-136e *with picture*
Attucks, Crispus A: 880
Boston (Resistance and revolution) B: 503
Revolutionary War in America (The Townshend Acts) R: 272-273 *with picture*
United States, History of the (Renewed conflict) U: 157
- Boston Mountains**
Arkansas (Land regions) A: 706
- Boston Museum of Science** [Massachusetts]
Boston (Libraries and museums) B: 502
- Boston National Historical Park** [Massachusetts]
National Park System (table: National historical parks) N: 56
- Boston News-Letter** [newspaper]
Advertising (The impact of printing) A: 79
Massachusetts (Communication) M: 287
Colonial life in America (Communication) Ci: 806
Journalism (Early American journalism) J: 174
- Boston Pilgrims**
Massachusetts (Interesting facts) M: 271
- Boston Pops Orchestra**
Fiedler, Arthur F: 91
Boston (The arts) B: 501 *with picture*
- Boston Port Act** [1774] B: 505
Intolerable Acts I: 353
Maryland (The Revolutionary War) M: 258
- Boston Post Road** [New York-Boston] B: 505
- Boston Public Library**
Boston (Libraries and museums) B: 502
- Boston Red Sox**
Baseball (table) B: 130
- Boston shilling** [money]
Pine-tree shilling P: 471 *with pictures*
- Boston Stock Exchange**
Computer *picture on Ci*: 908
- Boston Tea Party** [U.S. history] B: 506 *with picture*
Adams, John (In New England) A: 35-36
Adams, Samuel (The patriot) A: 44
Boston (Resistance and revolution) B: 503
Boston Port Act B: 505
Franklin, Benjamin (A delegate in London) F: 490

130 Boston terrier

Massachusetts (Pre-Revolutionary days) M: 291
 New Jersey (The Revolutionary War) N: 250
 Tea (History) T: 63-64
 United States, History of the (Renewed conflict) U: 157-158
Boston terrier [dog] B: 506
 Dog picture on D: 275
Boswell, James [Scottish author] B: 506 with portrait
 Biography (The 1700's) B: 313
 English literature (The Johnson circle) E: 319 with picture
 Johnson, Samuel J: 153
Bosworth Field [English history]
 England (The Wars of the Roses) E: 306-307
 Henry VII [of England] H: 187
Bot [parasite]
 Bot fly B: 507
Bot fly [insect] B: 507 with picture
 Insect (Family life) I: 294-295
Botanic Garden, United States [Washington, D.C.] B: 507
 Washington, D.C. (United States Botanic Garden) W: 71; map on W: 76
Botanical garden B: 507 with picture
 Arboretum A: 592
 Gardening G: 30
 Kingstown K: 332
 Plant picture on P: 517
Botanical Garden [Montreal] See Botanical Garden in this index
Botanical Gardens [Buffalo]
 Buffalo (Other interesting places to visit) B: 678
Botany B: 508 with pictures
 See also Plant in this index
 Arboretum A: 592
 Biology (table) B: 317
 Botanical garden B: 507
 Fruit (How botanists classify fruits) F: 546
 Herbarium H: 196
 Horticulture H: 369
 Life L: 274
 Plant (Kinds of plants) P: 519
 See also the list of Related Articles in the Botany article
Botany Bay [Australia] B: 510
Botany Bay kino [tree product]
 Eucalyptus E: 376
Botero, Fernando [Colombian painter]
 Colombia (The arts) C: 781
Botetourt, Lord [British colonial official]
 Washington, George (The coming revolution) W: 96
Botev, Khristo [Bulgarian poet]
 Bulgaria (The arts) B: 690-691
Botev Peak [Bulgaria]
 Bulgaria (The land) B: 691 with map
Both Members of This Club [painting by Bellows]
 Bellows, George Wesley B: 245
Botha, Louis [South African political leader] B: 510
 Boer War B: 435
 South Africa (The Union of South Africa) So: 618-619
Botha, Pieter Willem [South African political leader] B: 510
 De Klerk, Frederik Willem D: 94
 South Africa (The dismantling of apartheid) So: 620
Bothe, Walther [German physicist]
 Nobel Prizes (Physics: 1954) N: 441
Bothnia, Gulf of
 Baltic Sea B: 65 with map
Bothwell, Earl of [Scottish nobleman] B: 510
 Mary, Queen of Scots (Her reign) M: 239
Botrange Mountain
 Belgium (The Ardennes) B: 231
Botrytis blight [plant disease]
 Lily L: 304
Botswana B: 510 with pictures and maps
 Flag picture on F: 198
 Rhodes, Cecil John (Gains Rhodesia) R: 317
Böttger, Johann Friedrich [German chemist] B: 512
 Dresden china D: 346
 Porcelain (German porcelain) P: 677
 Pottery (Pottery of the 1700's and 1800's) P: 718
Botticelli, Sandro [Italian painter] B: 512 with picture
 Graces G: 296 with picture

Leonardo da Vinci (Return to Florence) L: 199
 Painting (The 1400's) P: 52-53 with picture
Bottle B: 513 with diagram
 Glass (Glass containers) G: 212; diagram on G: 214
 Packaging P: 18
Bottle gourd [plant]
 Gourd G: 281 with picture
Bottle Houses [Cape Egmont]
 Prince Edward Island (Interesting facts) P: 783 with picture
Bottle-nosed dolphin [sea animal]
 Dolphin (Bottle-nosed dolphins) D: 297 with picture
 Whale picture on W: 261
Bottle of Banyuls, The [painting by Gris]
 Cubism picture on C: 1181
 Painting (Still-life paintings) P: 33; (Cubism) P: 77-78
Bottle tree [tree] B: 514 with picture
 Tree picture on T: 426
Bottlebrush [tree]
 Flower picture on F: 294
Bottler truck
 Truck (Kinds of trucks) T: 457; picture on T: 459
Bottoffsen, C. A. [American political leader]
 Idaho (table) I: 42
Bottom [literary figure]
 Shakespeare, William (A Midsummer Night's Dream) S: 357
Bottom [tool]
 Plow (The tractor plow) P: 575 with pictures
Bottom line [business]
 Accounting (Financial reports) A: 23
Bottom quark [physics]
 Quark Q: 7
 Subatomic particle (Elementary particles) So: 937; (Theoretical research) So: 938
Bottom waters [oceanography]
 Atlantic Ocean (The ocean depths) A: 864
Bottomless Lakes [New Mexico]
 New Mexico (Land regions) N: 266-268
Bottomley, Jim [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Botulism [disease] B: 514
 Bacteria (Harmful bacteria) B: 19-20
 Food poisoning F: 340
 Food preservation (How food spoils) F: 341
Botvinnik, Mikhail [Soviet chess player]
 Chess (World chess champions) C: 414
Bou Regreg [river, Morocco]
 Rabat R: 46
Boubou [clothing]
 Senegal (People) S: 297-298
Bouchard, Lucien [Canadian political leader] B: 515
 Bloc Québécois B: 404
 Campbell, Kim (The 1993 election) C: 90d
 Chrétien, Jean (The 1993 election) C: 522c
 Quebec (Recent developments) Q: 32-33
Bouchard, Michel Marc [Canadian playwright]
 Canadian literature (Modern Canadian drama) C: 161
Bouchard, Thomas J. [American psychologist]
 Intelligence (The roles of heredity and environment) I: 318
Boucher, François [French painter] B: 515 with picture
 Fragonard, Jean Honoré F: 451
 Painting (Rococo painting) P: 65
 Rococo R: 396 with picture
Boucherville, C.-B. de [Canadian political leader]
 Quebec (table) Q: 29
Boucicault, Dion [Irish-American dramatist] B: 515
 Irish literature (Drama) I: 431
Boucicaut, Aristide [French merchant]
 Department store D: 149
Bouck, William C. [American political leader]
 New York (table) N: 313
Boudicca [queen of the Iceni]
 Boadicea B: 427
Boudreau, Lou [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Bouffant
 Hairdressing (The 1900's) H: 12
Bougainville [island, Solomon Islands] B: 515
 Papua New Guinea (History) P: 141
Bougainville, Louis-Antoine Comte de [French explorer]
 Exploration (Exploring the Pacific) E: 448
 Society Islands So: 563
 Tahiti T: 14

Bougainvillea [plant] B: 515 with picture
Boughton, George H. [British painter]
 Pilgrims picture on P: 463
Bouguereau, William [French painter]
 Painting (The art world, 1850-1900) P: 73
Bouillabaisse [food]
 France (Food and drink) F: 459-460
Boulder Canyon Project [conservation]
 Hoover Dam H: 332
Boulder Dam See Hoover Dam in this index
Bouldering [sport]
 Climbing C: 679
Boulding, Kenneth Ewart [American economist] B: 516
Boulez, Pierre [French composer] B: 516
Bouille, André Charles [French cabinetmaker]
 Furniture (Louis XIV furniture) F: 575; (The Régence style) F: 576 with picture
Boulton, Matthew [British businessman]
 Watt, James W: 148
Boumediene, Houari [Algerian political leader]
 Algeria (Independence) A: 365
Bound East for Cardiff [play by O'Neill]
 O'Neill, Eugene Gladstone (His life) O: 762
Bound peasant [Tibetan history]
 Tibet (The people and their work) T: 276-277
Boundary [sports]
 Cricket (Scoring) C: 1132
Boundary layer
 Aerodynamics (Friction drag) A: 87
Boundary Peak [mountain]
 Nevada (Land regions) N: 166
Boundary Waters Treaty [1909]
 Great Lakes G: 344
 International Joint Commission I: 340
Bounty [reward]
 Civil War (Building the armed forces) Ci: 618
Bounty [ship]
 Bligh, William B: 400
 Pitcairn Island P: 498
 Tonga T: 327
Bounty jumper [U.S. history]
 Civil War (Building the armed forces) Ci: 618
Bourassa, Henri [Canadian political leader] B: 516
 Laurier, Sir Wilfrid (Relations with Britain) L: 126; (The conscription crisis) L: 126
Bourassa, Robert [Canadian political leader]
 Quebec (table) Q: 29; (Recent developments) Q: 32
Bourbaki, Nicolas [pen name]
 Mathematics (Philosophies of mathematics) M: 307
Bourbon [drink]
 Alcoholic beverage (Whiskey) A: 336
 Whiskey W: 282
Bourbon [French history] B: 516
 France (Religious wars) F: 473
 Spain (Bourbon reforms) So: 748
Bourbon Democrat [U.S. history]
 South Carolina (Industrial growth) So: 660-662
Bourbon Red turkey
 Turkey (Domestic turkeys) T: 513 with picture
Bourbon Reforms [French history]
 Charles III C: 381
Bourdon tube
 Gauge (Pressure gauges) G: 69
Bourgeois, Léon Victor-Auguste [French statesman]
 Nobel Prizes (Peace: 1920) N: 447
Bourgeois Poet, The [book by Shapiro]
 Shapiro, Karl Jay S: 373
Bourgeoisie [sociology]
 Communism (The ideas of Marx) Ci: 890
 Marx, Karl (Das Kapital) M: 237
 Middle class M: 529
Bourges Cathedral [France]
 Architecture picture on A: 619
Bourget, Le [airport, Paris]
 Paris (Economy) P: 165
Bourgmont, Étienne Veniard de [French explorer]
 Nebraska (Exploration) N: 111
Bourguiba, Habib [Tunisian political leader] B: 517
 Tunisia (History) T: 489
Bourke, Mary Terese Winifred [Irish political leader] See Robinson, Mary in this index
Bourke-White, Margaret [American photographer] B: 517
 Photography (The photographic revolution) P: 427-428
Bourn, Augustus O. [American political leader]

- Rhode Island (table) R: 311
- Bournonville, August** [Danish choreographer]
Ballet (Romantic ballet) B: 51-52
Denmark (Arts) D: 136
- Bousoño, Carlos** [Spanish poet]
Spanish literature (Spanish literature today)
So: 763
- Boussance** (people)
Burkina Faso (People) B: 706
- Boussaphedon** [writing]
Greek language (Alphabet) G: 376
- Boutefflika, Abdelaziz** [Algerian political leader]
Algeria (Recent developments) A: 365
- Bouthillier de Rancé, Armand-Jean le** [French monk]
Trappists T: 404
- Boutros-Ghali, Boutros** [Egyptian diplomat]
B: 517
United Nations (The secretary-general) U: 83
with *portrait*
- Boutwell, George S.** [American political leader]
Grant, Ulysses S. (Political corruption) G: 315-316; (table) G: 316
Johnson, Andrew (Impeachment) J: 140
Massachusetts (table) M: 288
Treasury, Department of the (table) T: 407
- Bouvier, Jacqueline Lee** [American public figure] See Onassis, Jacqueline Kennedy in *this index*
- Bouvier des Flandres** [dog] B: 517 with *picture*
- Bouyssonie, Amédée** [French anthropologist]
Prehistoric people (table) P: 752
- Bouyssonie, Jean** [French anthropologist]
Prehistoric people (table) P: 752
- Bouzouki** [musical instrument]
Greece (Arts) G: 356
- Bovay, Alvan E.** [American political leader]
Republican Party (Origin) R: 253
- Bovet, Daniel** [Swiss chemist]
Nobel Prizes (Physiology or medicine) (1957) N: 444
- Bovine growth hormone** See Bovine somatotropin in *this index*
- Bovine somatotropin**
Hormone (Agricultural uses) H: 337-338
Milk (History of the milk industry) M: 549
- Bovine spongiform encephalopathy** See Mad cow disease in *this index*
- Bovine tuberculosis** (disease)
Veterinary medicine (On farms and ranches) V: 345
- Bow** [musical instrument]
Bass B: 157 with *picture*
Cello C: 339 with *picture*
Violin (The bow) V: 389 with *pictures*
- Bow** [ship]
Sailing (Hull) S: 23 with *diagram*
Ship (Nautical terms) S: 416 with *diagram*
- Bow and arrow**
See also Archery in *this index*
Archery A: 601
Arrowhead A: 743 with *pictures*
Crossbow C: 1156 with *picture*
Indian, American (Weapons) I: 144 with *picture*; *pictures* on I: 138, I: 140, I: 144, I: 160
- Bow hunting**
Archery A: 601
- Bow Lake** [Alberta]
Banff National Park B: 76
- Bow saw** [tool]
Saw *picture* on S: 167
- Bow shock** [physics]
Heliosphere (Shock waves) H: 175
- Bow Street Runners** [English history]
Fielding, Henry (His life) F: 94
Police (Early law enforcement in England) P: 624
- Bow stroke** [canoeing]
Canoeing (Paddling and steering) C: 181
- Bow thruster** [propeller]
Ship (The propellers) S: 425
- Bow tie**
Necktie N: 117
- Bow window**
Window W: 334
- Bowditch, Nathaniel** [American astronomer]
B: 517
- Bowdoin, James** [American political leader]
Massachusetts (table) M: 288
- Bowed kite**
Kite (Types of kites) K: 339 with *picture*
- Bowel** See Intestine in *this index*
- Bowell, Sir Mackenzie** [Canadian political leader] B: 518 with *pictures*
Tupper, Sir Charles (Prime minister) T: 494
- Bowen, Elizabeth** [British author] B: 519
- Bowen, Otis R.** [American political leader]
Health and Human Services, Department of (table) H: 128
Indiana (table) I: 214
- Bowen's Wharf** [Newport]
Rhode Island *picture* on R: 297
- Bower** [nest]
Bowerbird B: 519 with *picture*
- Bowerbird** [bird] B: 519 with *picture*
Animal (Courtship behavior) A: 497
- Bowere, A. D. O.** [American artist]
Westward movement in America *picture* on W: 250
- Bowering, George** [Canadian author]
Canadian literature (Modern English-Canadian fiction) C: 160
- Bowerman, Jay** [American political leader]
Oregon (table) O: 845
- Bowers Mansion**
Nevada (Places to visit) N: 164
- Bowers v. Hardwick** [U.S. history]
Homosexuality (Attitudes toward homosexuality) H: 307
- Bowery** [district, New York City]
Stuyvesant, Peter So: 935
- Bowes-Lyon, Elizabeth Angela Marguerite**
See Elizabeth, the Queen Mother in *this index*
- Bowfin** [fish] B: 520 with *picture*
Dogfish D: 284
Fish (Bony fish) F: 147-148
- Bowhead whale** [animal] B: 520
Whale (Right whales) W: 255; *picture* on W: 257
- Bowie, David** [British musician]
Rock music (Rock goes pop) R: 379
- Bowie, James** [American frontiersman] B: 520 with *picture*
Alamo (Early days) A: 280
Texas (The Texas revolution) T: 206
- Bowie, Oden** [American political leader]
Maryland (table) M: 255
- Bowie, Robert** [American political leader]
Maryland (table) M: 255
- Bowie knife** B: 520 with *picture*
- Bowing ectoprost** [animal]
Animal *picture* on A: 506
- Bowl** [container]
Lapis lazuli *picture* on L: 73
Sculpture *picture* on S: 243
- Bowl-and-dolly spider**
Spider (table) So: 790; *picture* on So: 788
- Bowl game** [football]
Football (College competition) F: 364
- Bowl refill tube**
Plumbing (How toilets work) P: 579-580 with *diagram*
- Bowles, Chester** [American government official]
Connecticut (table) C: 967
- Bowline knot**
Knots, hitches, and splices (Useful knots) K: 356 with *diagram*
- Bowling** [skill]
Cricket (The fielding side) C: 1134 with *pictures*
- Bowling** [sport] B: 521 with *pictures*
American Bowling Congress A: 408
- Bowling ball**
Bowling (The ball) B: 523
Lawn bowling L: 144 with *picture*
- Bowling Congress, American** See American Bowling Congress in *this index*
- Bowling crease**
Cricket (The field) C: 1131
- Bowling Federation, International**
Bowling (The 1900's) B: 525
- Bowling green**
Lawn bowling L: 144
- Bowling pin**
Bowling (The pins) B: 523 with *pictures*
- Bowls** [lawn bowling]
England (Recreation) E: 296-297
Lawn bowling L: 144 with *picture*
- Bowman's capsule** [anatomy]
Kidney (How the kidneys produce urine) K: 311-312 with *diagram*
- Bowser, William J.** [Canadian political leader]
British Columbia (table) B: 627
- Bowsight**
Archery (Other equipment) A: 602 with *diagrams*
- Bowwood** [tree] See Osage orange in *this index*
- Box** [container]
Packaging P: 18
- Box** [tree] B: 525
- Box girder bridge**
Bridge (Girder bridges) B: 600-601
- Box kite**
Kite (Types of kites) K: 339 with *picture*; (History) K: 340-341
- Box seat**
Opera O: 791
- Box set** [theater]
Drama (Early realism) D: 338
- Box trap**
Trapping (Kinds of traps) T: 403 with *picture*
- Box turtle**
Turtle (Pond and marsh turtles) T: 522 with *picture*
- Boxelder** [tree] B: 526 with *pictures*
Maple (Boxelder) M: 187
Tree *pictures* on T: 420
- Boxelder bug** [insect] B: 526 with *picture*
- Boxer** [dog] B: 526
Dog *picture* on D: 267
- Boxer Protocol** [1901]
Boxer Rebellion B: 526
- Boxer Rebellion** [1900] B: 526
Beijing (History) B: 223-224
China (The fall of the Manchus) C: 503; *picture* on C: 504
Hay, John Milton H: 116
Hoover, Herbert Clark (Engineer and businessman) H: 328
McKinley, William (America becomes a world power) M: 341
- Boxing** [sport] B: 527 with *pictures*
See also Kickboxing in *this index*
Olympic Games (Summer Olympic Games) O: 746a-746f
Queensberry Rules Q: 39
Sculpture *picture* on S: 247
Thailand (Recreation) T: 224 with *picture*
- Boxing Day** [custom] B: 535
- Boxing gloves**
Boxing (Equipment) B: 528
- Boxwood** [tree] See Box in *this index*
- Boy**
See also Male in *this index*
Adolescent (Physical development) A: 60-61
Baby B: 4
Child C: 448
Sexuality (Biological factors) S: 337
- Boy actress**
Shakespeare, William (Dramatic conventions) S: 354
- Boy of the Three-Year Nap, The** [book by Snyder]
Literature for children *picture* on L: 378
- Boy Pioneers** [organization]
Beard, Daniel Carter B: 187
- Boy Scout Handbook**
Boy Scouts (Boys Scouts of America) B: 536
- Boy Scout knife**
Knife (Types of knives) K: 345-346 with *picture*
- Boy Scouts B: 536 with pictures**
Baden-Powell, Lord B: 23
Beard, Daniel Carter B: 187
Clothing (Communication) C: 688 with *picture*
Seton, Ernest Thompson S: 323
- Boy Scouts of Canada** [former name]
Scouts Canada (History) S: 224
- Boy with a Squirrel** [painting by Copley]
Copley, John Singleton C: 1040
- Boyar** [Russian history]
Russia (The rise of Moscow) R: 548
- Boyce, William D.** [American businessman]
Boy Scouts B: 536
- Boycott B: 541**
Chavez, Cesar Estrada C: 389
Hanseatic League H: 54
International relations (Nonmilitary sanctions) I: 345
Labor movement (Handling labor disputes) L: 6
Olympic Games (The postwar games) O: 751-752; (Boycotts) O: 753
Parks, Rosa Louise P: 171
Sanctions, Economic S: 106
- Boycott, Charles C.** [English businessman]
Boycott B: 541
- Boyd, Alan Stephenson** [American government official]
Johnson, Lyndon Baines (table) J: 151
Transportation, Department of (table) T: 400

- Boyd, Alfred** [Canadian political leader]
Manitoba (table) M: 159; (The Red River Rebellion) M: 160
- Boyd, Belle** [Confederate spy] B: 541
- Boyd, James E.** [American political leader]
Nebraska (table) N: 110
- Boyd Orr, Lord** [British nutritionist]
Nobel Prizes (Peace: 1949) N: 447
- Boyden, Seth** [American inventor]
Newark (History) N: 358
- Boyé, Jean** [French aviator]
Airplane (Notable airplane flights) A: 236
- Boyer, Jean-Pierre** [Haitian political leader]
Haiti (History) H: 15-16
- Boyer, Joe** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Boyer, Paul Delos** [American chemist]
Nobel Prizes (Chemistry: 1997) N: 443
- Boynhood** [book by Tolstoy]
Tolstoy, Leo (Early life and works) T: 322
- Boyle, Emmet D.** [American political leader]
Nevada (table) N: 173
- Boyle, Robert** [Irish chemist] B: 541
Chemistry (Alchemy) C: 400-401
Gas [physics] (Gas laws) G: 48
Pressure P: 773
Science (The scientific revolution) S: 198
Sound (The study of waves) So: 605
- Boyle's law** [chemistry]
Gas [physics] (Gas laws) G: 48 *with pictures*
Boyle, Robert B: 541
Pressure P: 773
- Boymans-Van Beuningen Museum**
Rotterdam R: 489
- Boyne, Battle of the** [1690] B: 541
Ireland (Religious persecution) I: 426
Northern Ireland (Protestant settlement) N: 524
- Boynton, James S.** [American political leader]
Georgia (table) G: 130
- Boys & Girls Clubs of America** [organization]
B: 541 *with picture*
- Boys' Brigade** [organization] B: 542
- Boys' Festival**
Doll (Doll festivals and customs) D: 287
- Boy's King Arthur, The** [book by Malory and Lanier]
Literature for children *picture on* L: 364
- Boys Nation** [meeting]
Boys State B: 543
- Boys State** [meeting] B: 542
American Legion (Activities) A: 412
- Boys Town** [film]
Tracy, Spencer T: 361
- Boys Town** [organization] *See* Girls and Boys Town *in this index*
- Boysenberry** [plant] B: 543 *with picture*
Dewberry D: 176
- Bozeman, John M.** [American frontiersman]
Bozeman Trail B: 543
- Bozeman Trail** [U.S. history] B: 543
Bridger, Jim B: 607
Red Cloud R: 185
Wyoming (Indian and settler conflicts) W: 534
- BP** [corporation] B: 543
Manufacturing (table) M: 170
- BP Amoco** [company] *See* BP *in this index*
- BPS** [computing] *See* Bits per second *in this index*
- Brabançon** [dog]
Brussels griffon B: 653
- Brabant, Duke of** [Belgian nobleman]
Belgium (The Middle Ages) B: 232-233
- Brabant Revolution** [Belgian history]
Belgium (The Brabant Revolution) B: 233
- Brabham, Jack** [Australian race driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Brace, Charles Loring** [American social reformer] B: 543
- Brace root** [botany]
Corn (How the plant develops) Ci: 1057-1058 *with picture*
- Bracebridge Hall** [book by Irving]
Irving, Washington (Years in Europe) I: 460
- Bracelet**
Jewelry J: 116 *with picture*
- Bracero** [U.S. history]
Hispanic Americans (Effects of World War II) H: 252
- Braces** [dentistry]
Dentistry (Orthodontics) D: 143-144 *with picture*
Orthodontics O: 860
- Teeth (Malocclusion) T: 84-85
- Brachial artery** [anatomy]
Human body *diagram on* H: 422
- Brachial vein** [anatomy]
Human body *diagram on* H: 422
- Brachialis** [anatomy]
Arm A: 717
- Brachiopoda** [zoology]
Animal (A classification of the animal kingdom) A: 506 *with picture*
Prehistoric animal (The earliest animals) P: 736
- Brachioradialis** [anatomy]
Human body *diagram on* H: 422
- Brachiosaurus** [extinct animal] B: 543
Dinosaur (True dinosaurs) D: 206b-209; *pictures on* D: 206d, D: 210
- Brachytherapy** [medicine]
Cancer (Radiation therapy) C: 172
- Brack, Kenny** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Bracken** [plant]
Fern (Kinds of ferns) F: 75 *with picture*
- Bracken, John** [Canadian political leader]
Manitoba (table) M: 159; (Political developments) M: 162
- Brackenridge Park**
San Antonio (Recreation) S: 86
- Bracket creep** [economics]
Income tax (Effects of inflation) I: 103
- Bracket fungi**
Mushroom (Mushroomlike fungi) M: 945
- Brackets**
Punctuation (Brackets) P: 902
- Brackatt, John Q. A.** [American political leader]
Massachusetts (table) M: 288
- Braconid wasp** [insect]
Ichneumon wasp I: 24
- Bract** [botany]
Banana (How bananas grow) B: 72
Bunchberry B: 698
Flower (Variations in flower structure) F: 294 *with picture*
Inflorescence I: 268a
Leaf (Bracts) L: 157 *with picture*
Pineapple (The pineapple plant) P: 472
Raceme R: 51
- Brad**
Nail (How nails are made) *picture on* N: 4
- Bradbury, Ray** [American author] B: 544
Science fiction (The early 1900's) S: 205
- Braddock, Edward** [English general] B: 544 *with picture*
Boone, Daniel (Tales of a hunter's paradise) B: 477
Braddock's Road B: 545
Franklin, Benjamin (The Plan of Union) F: 489
French and Indian wars (The French and Indian War) F: 512-513
Washington, George (Braddock's defeat) W: 94 *with picture*
- Braddock, James J.** [American boxer] B: 544
Louis, Joe L: 477
- Braddock's Defeat** [painting by Deming]
Braddock, Edward *picture on* B: 544
- Braddock's Road** [U.S. history] B: 545
- Bradford** [city, England] B: 545
- Bradford, Andrew** [American editor]
Pennsylvania (Interesting facts) P: 245
- Bradford, Augustus W.** [American political leader]
Maryland (table) M: 255
- Bradford, John** [American journalist]
Kentucky (Communication) K: 289
- Bradford, Roark** [American author] B: 545
- Bradford, Robert F.** [American political leader]
Massachusetts (table) M: 288
- Bradford, William** [1590-1657, American colonial official] B: 545
Mayflower Compact M: 327
Plymouth Colony (The first year) P: 583
Thanksgiving Day (The first Thanksgiving in New England) T: 229-230
- Bradford, William** [1663-1752, American printer] B: 545
- Bradford, William** [1755-1795, American government official]
Justice, Department of (table) J: 203
Washington, George (table) W: 102
- Bradford, William, III** [1722-1791, American publisher] B: 546
- Bradley, A.C.** [British literary critic]
Shakespeare, William (Romantic criticism) S: 369
- Bradley, Bill** [American political leader] B: 546 *with portrait*
- Bradley, Francis Herbert** [British philosopher] B: 546
- Bradley, James** [English astronomer] B: 546
- Bradley, Joseph P.** [American jurist]
Supreme Court of the United States (table) So: 1000
- Bradley, Lewis R.** [American political leader]
Nevada (table) N: 173
- Bradley, Omar Nelson** [American general] B: 546
- Bradley, Owen** [American record producer]
Country music *picture on* Ci: 1098c
- Bradley, Thomas** [American political leader] B: 546 *with portrait*
African Americans (Achievements) A: 136p
Los Angeles (Recent developments) L: 470
- Bradley, W. C.** [American businessman]
Columbus Ci: 854
- Bradley, William O.** [American political leader]
Kentucky (table) K: 290
- Bradley Center**
Milwaukee (The city) M: 558-559
- Bradstreet, Anne** [American poet] B: 547
American literature (New England) A: 414
- Bradwell v. State** [U.S. history]
Supreme Court of the United States (Civil rights) So: 1001
- Brady, Alice** [American actress]
Motion picture (Best performance by an actress in a supporting role: 1937) M: 863
- Brady, Diamond Jim** [American businessman] B: 547
- Brady, James Buchanan** [American businessman] *See* Brady, Diamond Jim *in this index*
- Brady, James H.** [American political leader]
Idaho (table) I: 42
- Brady, Matthew B.** [American photographer] B: 547 *with picture*
Civil War (The home front) Ci: 622
Photography (The beginnings of modern photography) P: 426-427 *with picture*
Photographs
Barton, Clara *picture on* B: 121
Davis, Jefferson *picture on* D: 48
Douglas, Stephen Arnold *picture on* D: 312
Johnson, Andrew *picture on* J: 136
Lincoln, Abraham *pictures on* L: 322, L: 325
White House *picture on* W: 290
- Brady, Nicholas Frederick** [American political leader] B: 547
Reagan, Ronald Wilson (table) R: 169
- Brady bill** [1994]
Clinton, Bill (National affairs) Ci: 682d
Gun control (Approaches to gun control) G: 440
- Brady Commission**
Brady, Nicholas Frederick B: 547
- Bradycardia** [disorder]
Heart (Abnormal heart rhythms) H: 142
- Braemar** [Scotland]
Scotland (Recreation) S: 214
- Braga** [Portugal] B: 547
- Braganza, House of** [Portuguese history]
Portugal (Spanish conquest) P: 694
- Bragg, Braxton** [Confederate general] B: 547
Civil War (Battle of Perryville) Ci: 629-630; (Battle of Chickamauga) Ci: 630
- Bragg, Thomas** [American political leader]
North Carolina (table) N: 490
- Bragg, Sir William Henry** [British physicist] B: 548
- Bragg, Sir William Lawrence** [British physicist]
Bragg, Sir William Henry B: 548
Nobel Prizes (Physics: 1915) N: 440
- Bragi** [Norse mythology]
Mythology (The construction of the world) M: 984-985
- Brahe, Tycho** [Danish astronomer] B: 548
Astronomy (Sun-centered theories) A: 835; (Developing the modern view) A: 847 *with picture*
Kepler, Johannes K: 305
- Brahma**
Brahman B: 548
- Brahma** [breed]
Chicken (Asiatic class chickens) C: 441; (table) C: 443
- Brahman** [animal]
Cattle (Other beef cattle) C: 309
- Brahman** [Hindu god] B: 548
Asia (Religions) A: 781-782

- Hinduism (Divinities) H: 236
Polytheism P: 651
- Brahmanas** [religious books]
Hinduism (Sacred writings) H: 236
Sanskrit literature (The Vedic period) S: 112
Vedas V: 291
- Brahmans** [sociology]
Aryans A: 764
Caste C: 279
Dravidians D: 342
Hinduism (Caste) H: 236-237
Priest P: 776
Religion (How the major religions are organized) R: 218
- Brahmaputra River** [Asia] B: 548
Ganges River G: 27
India (The Northern Plains) I: 121
- Brahmi number system**
Decimal system (Invention of the decimal system) D: 73
- Brahmo Samaj** [organization]
Roy, Ram Mohan R: 494
- Brahms, Johannes** [German composer] B: 548
with portrait
Dvořák, Antonín D: 394
Schumann, Clara S: 188
- Braid, James** [British doctor]
Hypnotism (Scientific studies) H: 479
- Braided rug**
Rugs and carpets (Other methods) R: 516;
(History) R: 517
- Braiding** [handicraft] B: 549 *with pictures*
- Braidwood, Thomas** [Scottish educator]
Speech therapy (History) So: 773
- Braille** [alphabet] B: 550 *with pictures*
Blindness (Aids for blind people) B: 402
Braille, Louis B: 550
Disabled *picture* on D: 219
- Braille, Louis** [French inventor] B: 550
Braille B: 550
- Braillewriter** [machine]
Braille B: 550
- Brain** [anatomy] B: 550a *with pictures*
Allergy (Emotional factors) A: 373
Anticonvulsant A: 553
Attention deficit disorder A: 878
Autism (Causes) A: 942
Bird (The nervous system) B: 366 *with diagram*
Cancer (Radiation therapy) C: 172
Cerebrospinal fluid C: 362
Color (The roles of the eyes and brain)
Ci: 818-819
Death (Medical aspects of death) D: 61
Depression D: 151
Disease (Diseases associated with aging)
D: 230-231
Dopamine D: 309
Dream (The biology of dreams) D: 344
Ear (The sense of balance) E: 11
Ecstasy E: 66
Electroencephalograph E: 200
Endorphin E: 272
Eye (Depth perception) E: 463
Human being H: 412
Human body *picture* on H: 417; *diagram* on H: 422
Learning (Theories of learning) L: 163-164
Mammal M: 117
Nervous system N: 132 *with diagrams*
Pain (How the body feels pain) P: 21-22
Penfield, Wilder Graves P: 238
Phrenology P: 430
Positron emission tomography P: 697 *with picture*
Prehistoric people (Prehuman ancestors)
P: 744; (Three species) P: 745; (The multiple origins theory) P: 746
Reading (How we read) R: 156-157; (Physical disabilities) R: 162
Reproduction, Human (Development of organs and organ systems) R: 248
Ritalin R: 350
Schizophrenia S: 176
Senility S: 300
Stroke So: 929
Weight control (Causes of obesity) W: 181
See also the list of Related articles in the Brain article
- Brain damage**
Brain (The work of the brain) B: 552;
(Disorders of the brain) B: 556
Causes
Cerebral hemorrhage C: 361
Concussion Ci: 929
Inhalant I: 271
Learning disabilities (Causes) L: 165
Mental illness (Physical changes in the brain) M: 406
Mental retardation (Causes) M: 410
Disorders
Alzheimer's disease A: 398
Aphasia A: 565
Cerebral palsy C: 361
Epilepsy E: 343
Paralysis (Paralysis of central nervous system origin) P: 152
Shaken baby syndrome S: 343
Spastic paralysis So: 767
Speech therapy (Types and causes of speech defects) So: 773
Tay-Sachs disease T: 56
- Brain death**
Death (Defining death) D: 61
Organ donation O: 852
Transplant (Sources of donor organs) T: 380
- Brain Games Network** [company]
Chess (History) C: 415
Kasparov, Garry K: 248
- Brain hemisphere** *See* Cerebral hemisphere *in this index*
- Brain pacemaker** [medicine]
Spastic paralysis So: 767
- Brain stem** [anatomy]
Brain (The parts of the brain) B: 550b; *diagrams* on B: 553; (In controlling movement) B: 553-554; (In regulating body processes) B: 554
Nervous system (The central nervous system) N: 132-133 *with diagram*
Serotonin S: 318
- Brain Trust** [U.S. history]
New Deal (The Hundred Days) N: 200
Roosevelt, Franklin Delano (The "Hundred Days") R: 457
- Brain wave** [physiology]
Sleep (What happens during sleep) S: 506;
(Sleep among animals) S: 506
- Braine, John** [British author]
English literature (Literature after World War II) E: 322-323
- Brainwashing** [psychology] B: 560
Prisoner of war P: 808a
Propaganda P: 823
- Braising** [cooking]
Cooking (table) Ci: 1029
- Braithwaite, W. S.** [American author]
Spingarn Medal (table: 1918) So: 793
- Braka** [clothing]
Cyprus (People) Ci: 1206
- Brake** [mechanics] B: 560 *with diagrams*
Automobile (The brake system) A: 954 *with diagram*
Bicycle (Steering and stopping) B: 291 *with diagrams*
- Brake fluid**
Brake (Hydraulic brakes) B: 560
- Brake horsepower**
Horsepower H: 367
- Brake pad**
Brake (Mechanical brake) B: 560 *with diagram*
- Brake shoe** [mechanics]
Bicycle (Steering and stopping) B: 291 *with diagrams*
Brake (Mechanical brakes) B: 560 *with diagram*
- Brakeman**
Railroad (Railroad systems) R: 112-113
- Bramah, Joseph** [British cabinetmaker]
Plumbing (History) P: 580
- Bramante, Donato** [Italian architect] B: 562 *with picture*
Architecture (Later Renaissance architecture) A: 621
Saint Peter's Basilica (History) S: 54
- Bramble** (botany) B: 562
- Braminy blind snake**
Snake S: 525
- Bramlette, Thomas E.** [American political leader]
Kentucky (table) K: 290
- Brampton stock** [plant]
Stock So: 903
- Bran** [food] B: 562
Flour (How white flour is milled) F: 268-269
Oats O: 640
Wheat (Structure) W: 267-268 *with diagram*
- Bran layer** [botany]
- Rice (Structure) R: 323; (Other uses) R: 323;
(Removing the bran layers) R: 327
- Branca, Giovanni** [Italian engineer]
Turbine (History) T: 498
- Branch** [botany]
Pruning P: 841 *with picture*
Tree (Trunk and branches) T: 416 *with diagram*
- Branch, Emmett Forest** [American political leader]
Indiana (table) I: 214
- Branch, John** [American political leader]
Jackson, Andrew (table) J: 11; (Split with Calhoun) J: 11
North Carolina (table) N: 490
- Branch Davidians** [cult]
Cult (Modern cults) Ci: 1185
Reno, Janet R: 240
- Branch library**
Library (Active community service) L: 237
- Branch line**
Railroad (Tracks) R: 108
- Brancusi, Constantin** [Romanian sculptor] B: 563
Modigliani, Amedeo M: 686
Romania (The arts) R: 419
Sculpture (As artistic expression) S: 229;
(Cubism and futurism) S: 257 *with picture*
- Brand**
Ranching (Life on a cattle ranch) R: 134 *with picture*
- Brand** [play by Ibsen]
Ibsen, Henrik (His plays) I: 4
- Brand, Hennig** [German alchemist]
Phosphorus P: 404
- Brand, Vance D.** [American astronaut]
Astronaut (Achievements in space) A: 829-830
- Brand manager** [occupation]
Advertising (Advertising departments) A: 77
- Brand name** *See* Trademark *in this index*
- Brandeis, Louis Dembitz** [American jurist] B: 563
- Brandenberger, Jacques Edwin** [Swiss chemist]
Cellophane C: 340
- Brandenburg** [German history] B: 563
Berlin (History) B: 264
Germany (The rise of Prussia) G: 164
Prussia (Early history) P: 842
- Brandenburg Concertos** [music by Bach]
Bach, Johann Sebastian (His works) B: 16
- Brandenburg Gate**
Berlin (The downtown areas) B: 260-261 *with picture*
Germany *picture* on G: 145; G: 171
- Brandenburg v. Ohio** [U.S. history]
Supreme Court of the United States (Freedom of speech) So: 1001; (table) So: 1002
- Brandenburger Tor** [gate] *See* Brandenburg Gate *in this index*
- Branding** [ranching]
Cowboy (The roundup) Ci: 1111 *with picture*
Ranching (Life on a cattle ranch) R: 134 *with picture*
- Brando, Marlon** [American actor] B: 563 *with portrait*
Motion picture (Best performance by an actor: 1954) M: 862; (Best performance by an actor: 1972) M: 862-863, *picture* on M: 872
- Brandon** [city, Manitoba] B: 563
- Brandon, Gerard C.** [American political leader]
Mississippi (table) M: 640
- Brandon, William W.** [American political leader]
Alabama (table) A: 274
- Brandt, Georg** [Swedish chemist]
Cobalt Ci: 740
- Brandt, Willy** [German political leader] B: 563
Germany (West Germany) G: 170
- Brandy** [drink]
Alcoholic beverage (Brandy) A: 336
- Brandywine, Battle of** [1777]
Maryland (The Revolutionary War) M: 258
Revolutionary War in America (table) R: 276;
(Brandywine and Germantown) R: 282
- Bragus** [cattle]
Cattle (Other beef cattle) C: 309
- Branigin, Roger D.** [American political leader]
Indiana (table) I: 214
- Brann, Louis J.** [American political leader]
Maine (table) M: 87
- Brannan, Charles F.** [American government official]
Agriculture, Department of (table) A: 161
Truman, Harry S. (table) T: 469

- Branner, John** [American educator]
Hoover, Herbert Clark (Education) H: 326-327
- Bransfield, Edward** [British explorer]
Antarctica (Early exploration) A: 535-536
Exploration (The exploration of Antarctica) E: 450
- Branson** [Missouri] B: 564
Missouri (Places to visit) M: 660 *with picture*
- Branson, Richard** [British balloonist]
Balloon (Long-distance balloon flights) B: 62
- Branstad, Terry E.** [American political leader]
Iowa (table) I: 391
- Brant** [bird] B: 564 *with picture*
Goose (Kinds of geese) G: 270 *with picture*
- Brant, Isabella** [wife of]
Rubens, Peter Paul (His life) R: 506
- Brant, Joseph** [American Indian chief] B: 564
Iroquois Indians I: 455
- Branting, Karl Hjalmar** [Swedish statesman]
Nobel Prizes (Peace: 1921) N: 447
- Braque, Georges** [French painter] B: 564
Cubism Ci: 1181 *with picture*
Painting (Cubism) P: 77 *with picture*
Picasso, Pablo (Cubism) P: 448b
- Bras d'Or Lake** [lagoon, Nova Scotia]
Cape Breton Island C: 187
Nova Scotia (Rivers and lakes) N: 562
- Brasher doubloon** [coin]
Coin collecting *picture on* Ci: 758
- Brasileiro** [language]
Portuguese language P: 695
- Brasília** [city, Brazil] B: 564 *with picture*
Brazil B: 567, *picture on* B: 569
City (Future cities) Ci: 593
City planning (Building new communities) Ci: 601
Niemeyer, Oscar N: 406 *with picture*
- Brass** [metal] B: 565 *with pictures*
Alloy (Other alloys) A: 378
- Brass Center of the World**
Waterbury W: 141
- Brass instrument** [music]
Jazz (The brass) J: 69
Music (Wind instruments) M: 949 *with pictures*
Orchestra O: 820 *with pictures*
- Brass quintet**
Chamber music C: 371
- Brass section** [music]
Orchestra (The musicians) O: 820
- Bratislava** [Slovakia] B: 566
Slovakia S: 508b *with picture*
- Brattain, Walter Houser** [American physicist] B: 566
Electricity (The electronic age) E: 198
Electronics (The solid-state revolution) E: 215; *picture on* E: 216
- Braun, Carol Moseley** [American political leader] See Moseley-Braun, Carol *in this index*
- Braun, Eva** [mistress of Hitler] B: 566 *with portrait*
Hitler, Adolf (Death) H: 268
- Braun, Karl Ferdinand** [German physicist]
Marconi, Guglielmo M: 196
Nobel Prizes (Physics: 1909) N: 440
- Braun, Werner von** See Von Braun, Werner *in this index*
- Braunschweig** [Germany]
Brunswick B: 652
- Brava** [island]
Cape Verde C: 189 *with map*
- Brave Little Tailor, The** [book by Dugin]
Literature for children *picture on* L: 355
- Brave New World** [book by Huxley]
English literature (Fiction between the wars) E: 322
Huxley, Aldous Leonard H: 459
- Braveheart** [film]
Motion picture (Best picture: 1995) M: 861
- Braves, Atlanta** See Atlanta Braves *in this index*
- Brawne, Fanny** [British public figure]
Keats, John (His life) K: 253
- Braxton, Carter** [American patriot] B: 566
- Bray, John Randolph** [American cartoonist]
Animation (Pioneers of American animation) A: 514
- Bray, Thomas** [English missionary]
Library (Libraries in the United States) L: 261
Maryland (Libraries) M: 244
North Carolina (Libraries) N: 477
Rhode Island (Libraries) R: 300
- Brayer** [tool]
Block printing B: 405 *with picture*
- Brazil, Wayne** [American public figure]
Garrett, Pat G: 45
- Brazel, William W. (Mac)** [American public figure]
Roswell R: 485
- Brazil B: 567** *with pictures and maps*
Cabral, Pedro Álvares C: 8
Clothing *pictures on* Ci: 691, Ci: 695
Exploration (Exploring the New World) E: 444
Flag *picture on* F: 200
Immigration (Latin America) I: 84
International Space Station I: 346b
Latin America (The wars of independence) L: 107; (Border disputes) L: 108
Line of Demarcation L: 333
Palmares P: 110
Portugal (Empire and wealth) P: 693-694 *with map*; (A weakening monarchy) P: 694
Portuguese language P: 695
Rio de Janeiro (History) R: 346
Textile (In Latin America) T: 218
World War II (table: The Allies) W: 471
Yanomami Indians Y: 552
See also the list of Related Articles in the Brazil article
- Brazil Current**
Atlantic Ocean (Currents) A: 866
- Brazil nut B: 587** *with picture*
- Brazilian Democratic Movement Party**
Brazil (Politics) B: 569
- Brazilian Highlands** [mountains, Brazil]
South America So: 628
- Brazilian literature**
Latin-American literature (Colonial literature) L: 111-112
- Brazilian Social Democracy Party**
Brazil (Politics) B: 569
- Brazils** [coffee]
Coffee (Kinds of coffee) Ci: 754
- Brazilwood** [tree] B: 587
- Brazing** [soldering]
Welding (Brazing and soldering) W: 190
- Brazos River** [Texas]
Waco W: 2
- Brazza, Pierre Savorgnan de** [French explorer]
Brazzaville B: 587
Congo (Brazzaville) (History) Ci: 939
- Brazzaville** [city, Congo] B: 587
Congo (Brazzaville) Ci: 938 *with picture*
- BRCA1 locus** [genetics]
Genetic testing (Genes associated with disease) G: 85-86
- Breach of contract** [law]
Contract Ci: 1023
- Breach of promise** [law] B: 587
- Breach of the peace** [law] B: 587
- Breach of warranty** [law]
Product liability suit P: 810
- Breaching** [zoology]
Whale *picture on* W: 260
- Bread B: 588** *with pictures*
Air conditioning (In business and industry) A: 176-177
Colonial life in America (Food and drink) Ci: 802
Flour F: 267 *with diagram*
Food (Food from plants) F: 329
Nutrition (Carbohydrates) N: 625
Passover P: 192
Rye (Uses) R: 573
Yeast Y: 554 *with diagrams*
- Bread** [cooking]
Cooking (table) Ci: 1029
- Bread and Butter State**
Minnesota M: 584
- Bread mold**
Mold M: 689
- Breadbasket of America** [nickname]
Kansas K: 216; (The nation's breadbasket) K: 237
- Breadbasket of Europe** [nickname]
Ukraine (Agriculture) U: 11
- Breadfruit** [food] B: 589
- Breadth** [measurement]
Flag (Manufacturing flags) F: 222
- Break-away roping**
Rodeo (All-girl rodeos) R: 398
- "Break, Break, Break"** [poem by Tennyson]
Poetry P: 591
Tennyson, Lord (His poems) T: 169-170
- Break of Noon** [play by Claudel]
French literature (The four masters) F: 522
- Breakaway**
Hockey (Hockey terms) H: 275
- Breakbone fever** See Dengue *in this index*
- Breaker cam**
Ignition (Development of ignition systems) I: 50
- Breaker points** [electricity]
Ignition (Development of ignition systems) I: 50
- Breakers, The** [estate]
Hunt, Richard Morris H: 450 *with picture*
Rhode Island *picture on* R: 296
- Braakeven level** [physics]
Nuclear energy (Experimental fusion devices) N: 592-593
- Breakfast cereal** [food]
Cereal C: 361
Kellogg, W. K. K: 256
Oatmeal O: 640
Wheat (Food for people) W: 266-267 *with picture*
- Breakfast of Champions** [book by Vonnegut]
Vonnegut, Kurt V: 448
- Breekfast piece** [art]
Painting (Still-life paintings) P: 33; (The Dutch masters) P: 62-63 *with picture*
- Breakfast Table** [painting by Heda]
Painting (Still-life paintings) P: 33; (The Dutch masters) P: 62-63 *with picture*
- Breaking the flag**
Flag (Raising and lowering the flag) F: 219
- Breakspear, Nicholas** [pope] See Adrian IV *in this index*
- Breakwater** [harbor] B: 589 *with picture*
Harbor H: 55
- Bream** [fish] B: 590
- Brearley, David** [American jurist] B: 590
- Breast** [anatomy] B: 590 *with diagram*
Amazons A: 404
Mammography M: 130
Mastectomy M: 296
Plastic surgery (Methods of plastic surgery) P: 553
Pregnancy (Changes in breasts) P: 734b
Prosthetics P: 830
Sexuality (Biological factors) S: 337-338
- Breast cancer** [disorder] B: 591
Breast B: 590
Cancer (Classification by primary body site) C: 167-168; (table) C: 170; (Surgery) C: 172, *picture on* C: 167
Hormone replacement therapy H: 338
Mammography M: 130
Mastectomy M: 296
Tamoxifen T: 23
Taxol T: 56
Thermography T: 254
- Breast-feeding**
Baby (The first month) B: 6; (Feeding procedures) B: 9
Hormone (Other hormones) H: 336
Immune system (Passive immunity) I: 88c
Kwashiorkor K: 398
La Leche League International L: 49
- Breastbone** See Sternum *in this index*
- Breasted, James Henry** [American archaeologist] B: 591
Chicago, University of (Research program) C: 438
- Breastplate** [armor]
Armor *picture on* A: 720
- Breastplate** [harness]
Harness *diagram on* H: 63
- Breaststroke**
Swimming (The basic kicks) So: 1043; (The basic strokes) So: 1043; *pictures on* So: 1044
- Breath control** [music]
Singing (Training the voice) S: 472
- Breath-hold diving** [sport]
Diving, Underwater (Ambient diving) D: 245
Skin diving S: 492 *with pictures*
- Breath testing** [law enforcement] B: 591
Driving while intoxicated D: 348
- Breathalyzer** [machine]
Breath testing B: 591
- Breathing** [physiology]
See also Respiration *in this index*
Animal (Adaptations for breathing) A: 491 *with pictures*
Diaphragm D: 184
Diving, Underwater (Dangers of underwater diving) D: 246
Dolphin (The bodies of dolphins) D: 297
First aid (Restoring breathing) F: 138
Hyperventilation H: 476

- Iron lung I: 453
Lung L: 523
Nose *diagram* on N: 549
Respiration (External respiration) R: 260 *with diagrams*
Sleep apnea S: 507
Space exploration (Meeting basic needs in space) So: 703
Whale (Respiratory system) W: 259 *with pictures*
- Breathing Lessons** [book by Tyler]
Tyler, Anne T: 531
- Breathitt, Edward T.** [American political leader]
Kentucky (table) K: 290
- Breathitt, John** [American political leader]
Kentucky (table) K: 290
- Breathless** [film]
Godard, Jean-Luc G: 244
Motion picture (The New Wave in France) M: 870-871 *with picture*
- Brèbeuf, Saint Jean de** [French missionary]
B: 591
- Breccia** [rock]
Rock (table) R: 373 *with picture*; (Clastic sediments) R: 372
Moon (Basins) M: 789
- Brecht, Bertolt** [German dramatist] B: 591
Drama (Epic theater) D: 339
German literature (Expressionism) G: 142
Weill, Kurt W: 188
- Brecker, Michael** [American musician]
Jazz (Recent developments) J: 74
- Brecker, Randy** [American musician]
Jazz (Recent developments) J: 74
- Breckinridge, John** [American government official]
Jefferson, Thomas (table) J: 83
Justice, Department of (table) J: 203
- Breckinridge, John Cabell** [Confederate general] B: 592
Lincoln, Abraham (Election of 1860) L: 318
- Breckinridge, Sophonisba** [American social reformer] B: 592
Chicago, University of (Research program) C: 438
- Breda** [city, Netherlands] B: 592
- Breda, Treaty of** [1667]
Breda B: 592
New Brunswick (French rivals) N: 196
New York (Under English rule) N: 314-315
- Breech** [gun]
Firearm (Mechanism) F: 132 *with diagrams*
- Breech birth**
Childbirth (The birth process) C: 456
- Breechblock** [gun]
Artillery (Parts of a gun) A: 762
- Breechcloth** [clothing]
Colonial life in America (Clothing) Ci: 799-802
Indian, American (Clothing) I: 136d
- Breeches**
Clothing (The Renaissance) Ci: 700; (The 1600's) Ci: 701 *with picture*; (The 1800's) Ci: 702-703
- Breeding**
Harness *diagram* on H: 63
- Breed** [biology]
See also Breeding *in this index*
Races, Human R: 53
- Breed standard**
Dog (Dog competitions) D: 280
- Breeder reactor**
Energy supply (Nuclear energy) E: 278
Nuclear energy (Nuclear fission) N: 582-583; (Advanced fission reactors) N: 594
- Breeders' Cup** [race]
Horse racing (Stakes races) H: 364-365
- Breeding** [genetics] B: 592
See also Captive breeding *in this index*
Agriculture (The Middle Ages) A: 155-156; (Plant and livestock breeding) A: 159
Cat (Breeds of cats) C: 290
Cattle (Breeding) C: 311
Estrous cycle E: 364
Eugenics E: 377
Evolution (Artificial selection) E: 432
Farm and farming (Livestock breeding) F: 39
Flower (Flower breeding) F: 298
Frog (Mating) F: 538
Fruit (Developing new varieties of fruit) F: 546
Genetics (Molecular genetics) G: 86-87
Grafting (Uses of grafting) G: 298
Horse (Breeding horses) H: 358
Hybrid H: 460
Livestock (Breeding livestock) L: 398
Mammal (Mating) M: 122
Mutation M: 969
Pedigree P: 228
Plant (Control of diseases and pests) P: 545
- Breeding competition**
Horse (Horse shows) H: 356
- Breeding cycle** *See* Estrous cycle *in this index*
- Breeding season** [biology]
Estrous cycle E: 364
- Breedlove, Craig** [American race driver] B: 593
- Breedlove, Sarah** [American businesswoman]
See Walker, Madam C. J. *in this index*
- Breed's Hill**
Bunker Hill, Battle of B: 699
- Breeze**
Wind (table) W: 330
- Breezing Up** [painting by Homer]
Homer, Winslow *picture* on H: 304
- Bréguet, Louis** [French inventor]
Helicopter (Development of the helicopter) H: 173 *with picture*
- Breit, Gregory** [American physicist]
Radar (The first uses of radar) R: 71
- Breitenfeld, Battle of** [1631]
Thirty Years' War (The Swedish period) T: 260
- Bremen** [city, Germany] B: 593
- Bremer, Arthur H.** [American public figure]
Wallace, George Corley W: 16
- Bremsstrahlung** [physics]
Radiation (Causes of radiation) R: 78-79
X rays (How X rays are produced) X: 542
- Brennan, Francis Cardinal** [American religious leader]
Cardinal (table: American cardinals) C: 211
- Brennan, Joseph E.** (American political leader)
Maine (table) M: 87
- Brennan, Peter J.** [American government official]
Ford, Gerald Rudolph (table) F: 378
Labor, Department of (table) L: 2
- Brennan, Walter** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1936, 1938, 1940) M: 863
- Brennan, William Joseph, Jr.** [American jurist] B: 593
- Brenner Pass** [Austria-Italy] B: 593
Alps (Alpine travel) A: 386
- Brenston, Jackie** [American musician]
Rock music (The emergence of rock 'n' roll) R: 377
- Brent goose** *See* Brant *in this index*
- Brentano, Clemens** [German author]
Lorelei L: 454
- Brer Rabbit** [literary figure]
Harris, Joel Chandler H: 68
- Breslau** *See* Wrocław *in this index*
- Bresnahan, Roger** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Brest** [city, France] B: 593
- Brest-Litovsk, Treaty of** [1918]
Lenin, V. I. (Lenin the dictator) L: 194
Union of Soviet Socialist Republics (The October Revolution) U: 35
World War I (The Russian Revolution) W: 462
- Bretagne**
Brittany B: 633
- Brethren** [religious group] B: 593
Moravian Church M: 801
- Brethren, Church of the** [religious group] B: 594
- Brethren of Purity** [group]
Encyclopedia (The first reference works) E: 268a
- Brétigny, Treaty of** [1360]
Hundred Years' War H: 437
- Breton** [language]
Brittany (Culture) B: 633
- Breton, André** [French poet] B: 594
Painting (Surrealism) P: 81; (Europeans in America) P: 84
Surrealism So: 1010
- Breton, Jules Adolphe** [French painter] B: 594 *with picture*
- Bretón de los Herreros, Manuel** [Spanish author]
Spanish literature (The 1800's) So: 761
- Bretons** [people]
Brittany B: 633
- Brett, George** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Brett, Jacob** [British engineer]
Cable (Telegraph cables) C: 6
- Brett, John** [British engineer]
Cable (Telegraph cables) C: 6
Bretton Woods [conference] B: 594
Morgenthau, Henry, Jr. M: 805
New Hampshire (The mid-1900's) N: 226-227
- Breuckelen** [former spelling]
Brooklyn B: 640
- Breuer, Marcel Lajos** [Hungarian architect] B: 594
Furniture (The Bauhaus) F: 582-583 *with picture*; (Recent developments) F: 584
Meier, Richard M: 384
- Brevet** [rank]
Rank, Military R: 139
- Brewer, Albert P.** [American political leader]
Alabama (table) A: 274
- Brewer, David J.** [American jurist]
Supreme Court of the United States (table) So: 1000
- Brewer, Earl L.** [American political leader]
Mississippi (table) M: 640
- Brewers, Milwaukee** *See* Milwaukee Brewers *in this index*
- Brewer's yeast**
Yeast (How yeast is used) Y: 554-555
- Brewing** [industrial process] B: 595 *with pictures*
- Brewster, Benjamin H.** [American government official]
Arthur, Chester Alan (table) A: 756
Justice, Department of (table) J: 203
- Brewster, Sir David** [Scottish physicist]
Kaleidoscope K: 211
- Brewster, Harlan C.** [Canadian political leader]
British Columbia (table) B: 627
- Brewster, Ralph Owen** [American political leader]
Maine (table) M: 87
- Brewster, William** [American colonial leader] B: 596
- Breyer, Stephen Gerald** [American jurist] B: 596
Supreme Court of the United States *picture* on So: 999
- Brezhnev, Leonid Ilyich** [Soviet political leader] B: 596
Cold War (The great blocs split) Ci: 768; (The Cold War in the 1970's) Ci: 769-770
Communism (Under Stalin's successors) Ci: 893
Kosygin, Aleksei Nikolaevich K: 385
Russia (The Cold War) R: 554 *with picture*
Union of Soviet Socialist Republics (History) U: 35-39 *with picture*
United States, History of the (Improved U.S.-Soviet relations) U: 195
- Brian Boru** [Irish king] B: 596
Ireland (The Viking raiders) I: 425
- Briand, Aristide** [French statesman] B: 596
Kellogg-Briand Pact K: 256
Nobel Prizes (Peace: 1926) N: 447
- Briard** [dog] B: 597
Dog *picture* on D: 276
- Briarwood**
Heath H: 157
- Bribery** [crime] B: 597
Extortion E: 457
- Brice, Fanny** [American actress] B: 597 *with portrait*
- Brice, James** [American political leader]
Maryland (table) M: 255
- Brice's Cross Roads, Battle of** [1864]
Forrest, Nathan Bedford F: 410
- Brices Cross Roads National Battlefield Site** [Mississippi]
National Park System (table: National battlefields) N: 55
- Brick** B: 597 *with pictures*
Adobe A: 59 *with picture*
Ceramics (Kinds of ceramic products) C: 359
House (Building materials) H: 380
Sound (table) So: 601
- Brick cutter**
Brick (Forming bricks) B: 597-598 *with picture*
- Brick masonry**
Brick (Bricklaying) B: 598-599
- Bricker, John William** [American political leader] B: 599
Eisenhower, Dwight David (Challenges from the Old Guard) E: 152
Ohio (table) O: 699
- Bricklayer** [career]
Building trade (Career opportunities) B: 686
- Bricklayers and Allied Craftsmen, International Union of**
Labor movement (table) L: 8

Bricklayer's hammer

Hammer picture on H: 34

Bricklaying

Brick (Bricklaying) B: 598

Brickwork

Brick (Bricklaying) B: 598-599

Bridal Cave

Missouri (Springs and caves) M: 664

Bridal veil

Marriage (Wedding ceremonies and customs) M: 221

Bridal wreath [shrub] B: 599

Flower picture on F: 281

Spiraea So: 795

Bridalveil Fall [waterfall, Yosemite National Park] B: 599

Waterfall (table: Famous waterfalls of North America) W: 142

Yosemite National Park (Waterfalls) Y: 570

Bride

Marriage (Wedding ceremonies and customs) M: 221

Bride, Saint [Irish nun]

Bridget, Saint B: 607

Bride of Lammermoor, The [book by Scott]

Opera (*Lucia di Lammermoor*) O: 804

Bride price

Marriage (Marriage in other cultures) M: 222

Brideshead Revisited [book by Waugh]

Waugh, Evelyn W: 149

Bridewealth

Africa (Marriage and the family) A: 113

Bridge [engineering] B: 600 *with pictures*

Brooklyn Bridge picture on B: 640

Telford, Thomas T: 129

See also the list of Related Articles in the Bridge [engineering] article

Bridge [game] B: 604 *with pictures***Bridge** [musical instrument]

Guitar G: 435; *diagrams on* G: 436

Violin (Parts of the violin) V: 389 *with diagram*

Bridge [platform]

Ship (Nautical terms) S: 416 *with diagram*; (General cargo ships) S: 417

Bridge [zoology]

Turtle (Shell) T: 520-521

Bridge, Dental

Dentistry (General dentistry) D: 143

Teeth (Dental decay) T: 82-84

Bridge, Structural, Ornamental, and Reinforcing Iron Workers, International Association of

Labor movement (table) L: 8

Bridge, The [art] *See* Brücke, Die *in this index***Bridge, The** [poem by Crane]

Crane, Hart Ci: 1120

Bridge dialect

Pidgin English P: 452

Bridge grafting

Grafting (Other kinds of grafting) G: 299

Bridge of San Luis Rey, The [book by Wilder]

Wilder, Thornton Niven W: 303

Bridge of Sighs [Venice, Italy] B: 606 *with picture***Bridge on the River Kwai, The** [film]

Lean, David L: 162

Motion picture (Best picture: 1957) M: 861

Bridge to Terabithia [book by Paterson]

Paterson, Katherine P: 195

Bridgeport [Connecticut] B: 606 *with picture***Bridgeport** [neighborhood]

Chicago (The South Side) C: 424-425

Bridger, Jim [American frontiersman] B: 606 *with portrait*

Bannock Indians B: 98

Salt Lake City (History) S: 76a

Utah (Early exploration) U: 246

Wyoming (Exploration) W: 533; (Territorial progress) W: 534

Bridger Mountains

Montana (Land regions) M: 752

Bridges, Alfred Renton

Bridges, Harry B: 607

Bridges, Calvin B. [American biologist]

Heredity (The birth of genetics) H: 208

Bridges, Harry [American labor leader] B: 607**Bridges, Robert Seymour** [British poet]

Poet laureate (table: Poets laureate of the United Kingdom) P: 590

Bridges, Styles [American political leader]

New Hampshire (table) N: 223

Bridget, Saint [Irish nun] B: 607**Bridget, Saint** [Swedish public figure]

Bridget, Saint B: 607

Bridgetown [Barbados] B: 607

Barbados B: 103 *with picture*

Bridging [scouting]

Girl Scouts (Brownie Girl Scouts) G: 197

Bridgman, Laura Dewey [American public figure] B: 607**Bridgman, Percy Williams** [American physicist] B: 607**Bridle** [kite]

Kite (How kites fly) K: 339 *with diagram*

Bridle [riding equipment]

Harness H: 63 *with diagram*

Horse (table: Riding equipment) H: 351; (The bridle) H: 352 *with pictures*

Brie [cheese]

Cheese (Soft cheese) C: 392 *with picture*

Brief [law] B: 607

Supreme Court of the United States (Deciding cases) So: 999

Trial (The criminal defendant's rights) T: 437-438

Brief Lives [book by Aubrey]

Biography (The 1600's) B: 313

Brief Moment [play by Behrman]

Behrman, S. N. B: 222

Briefing room

Airport (The passenger terminal) A: 244

Brier [plant] B: 608 *with picture*

Pipe P: 469 *with picture*

Brieux, Eugène [French dramatist] B: 608**Brig** [prison]

Brig B: 608

Brig [ship] B: 608 *with picture***Brigade** [military] B: 608**Brigadier general**

General G: 82

Rank, Military (table) R: 140

Briggs, Ansel [American political leader]

Iowa (table) I: 391; (Statehood) I: 395

Briggs, Frank A. [American political leader]

North Dakota (table) N: 513

Briggs, George N. [American political leader]

Massachusetts (table) M: 288

Briggs, Henry [English mathematician]

Logarithms (History) L: 424

Briggs-Vlacq tables [mathematics]

Logarithms (History) L: 424

Brigham, Paul [American political leader]

Vermont (table) V: 333

Brigham City [Utah] B: 608**Brigham Young University** B: 608

Mormons (Church organization) M: 807-808

Bright [tobacco]

Tobacco (Kinds of tobacco) T: 305-306

Bright, Richard [British doctor] B: 609**Bright, Timothy** [British educator]

Shorthand (History) S: 437

Brightness [color]

Color (Characteristics of color) Ci: 824

Brightness measurement [astronomy]

Magnitude M: 62

Brighton-Allston [district, Boston]

Boston (Brighton-Allston) B: 500

Brighton and Hove [England] B: 609**Brighton Beach Memoirs** [play by Simon]

Simon, Neil S: 467

Bright's disease

Bright, Richard B: 609

Kidney (Kidney diseases) K: 312

Nephritis N: 127

Brigitta, Saint [Swedish public figure]

Bridget, Saint B: 607

Brill-Zinsser disease

Typhus (Epidemic typhus) T: 540

Brilliance [physical property]

Gem (Index of refraction) G: 77; (Value of gems) G: 79

Brilliant cut

Diamond (How diamonds are cut to make jewels) D: 182

Gem (Cutting and polishing) G: 79 *with pictures*

Brimfield

Massachusetts picture on M: 270

Brin, David [American author]

Science fiction (Growing popularity) S: 205-206

Brindled gnu [animal]

Gnu G: 239 *with picture*

Brine [salt water]

See also Seawater *in this index*

Mining (Pumping methods) M: 576-577

Olive (Harvesting and preparation for market) O: 743-744

Salt S: 72

Brine shrimp

Crustacean picture on Ci: 1164

Shrimp picture on S: 441

Brinegar, Claude S. [American government official]

Ford, Gerald Rudolph (table) F: 378

Transportation, Department of (table) T: 400

Bringing Them Home [report]

Stolen Generation So: 907

Bringing Up Baby [film]

Motion picture (Movies in the 1930's) M: 868 *with picture*

Brink, Carol Ryrie [American author] B: 609**Brinkmanship** [international relations]

Cold War (The spirit of Geneva) Ci: 765

Briosco, Andrea [Italian sculptor]

Sculpture (Early Renaissance) S: 252

Brisbane [Australia] B: 609 *with picture***Brisbane, Arthur** [American editor] B: 610**Brisbane, Sir Thomas** [Australian political leader]

Brisbane B: 610

Briscoe, Dolph [American political leader]

Texas (table) T: 203

Brisket

Meat picture on M: 349

Brissot de Warville, Jacques-Pierre [French political leader]

Girondists G: 201

Bristle [hair] B: 610

Hair H: 9

Bristlecone pine [tree] B: 610 *with pictures*

California (Natural resources) C: 53

Pine (Western pines) P: 469; *picture on* P: 470

Wildlife conservation (Lower-risk species) W: 304

Bristlemouth [fish]

Fish (Saltwater environments) F: 150; *picture on* F: 156

Bristol [England] B: 610**Bristol board**

Cardboard C: 209

Bristol Channel [England-Wales] B: 611

Tide (Tidal patterns) T: 282

Bristow, Benjamin Helm [American government official]

Grant, Ulysses S. (Government frauds) G: 317

Treasury, Department of the (table) T: 407

Whiskey Ring W: 282

Britain *See* United Kingdom *in this index***Britain, Battle of** [1940]

Air force (World War II) A: 185

Churchill, Sir Winston Leonard Spencer (The

Battle of Britain) C: 548 *with picture*

World War II (The Battle of Britain) W: 475 *with picture*

Britannia [English history]

England (The Roman conquest) E: 303

Britannia metal [metal] B: 611

Pewter P: 352

British Aerospace

Aviation (Aircraft manufacturing) A: 984

United Kingdom (Manufacturing) U: 63-64

British America B: 611**British and Foreign Unitarian Association**

Unitarians (History) U: 42

British Antarctic Territory [region, Antarctica]

Falkland Islands F: 15

British Art Center [Yale University]

Architecture picture on A: 633

British Association for the Advancement of Science

Metric system (Evolution of the metric system) M: 441

British Broadcasting Corporation B: 611 *with picture*

Baird, John Logie B: 31

Communication picture on Ci: 885

London (Communication) L: 438

Radio (Government regulation of radio) R: 91

Television (In Europe) T: 116; (The start of

broadcasting) T: 118-119

United Kingdom (Communication) U: 66

British Cameroons [former colony] B: 611

Cameroon (History) C: 86

British Civil Service Department

Civil service (Civil service in other lands)

Ci: 613

British Columbia B: 612 *with pictures and maps*

Canada (British Columbia) C: 104

Canada, Government of picture on C: 133

Mackenzie, Alexander (The Pacific Railway dis-

pute M: 22
 Queen Charlotte Islands Q: 39
 See also the list of Related Articles in the
 British Columbia article

British Columbia, University of B: 631

British Columbia Liberal Party
 British Columbia (Politics) B: 628

British Columbia Lions
 Football (Canadian Football League) F: 364
 Vancouver (Sports) V: 277

British Commonwealth of Nations See
 Commonwealth of Nations in this index

**British Commonwealth Trans-Antarctic
 Expedition [1957-1958]**
 Fuchs, Sir Vivian Ernest F: 549

British East Africa
 Kenya (British rule) K: 303

British East India Company [European history]
 East India Company E: 40
 Bangladesh (The East India Company) B: 85
 India (The rise of the East India Company)
 I: 130
 Indonesia (The coming of the Europeans)
 I: 237
 Kolkata (History) K: 363
 Raffles, Sir Stamford R: 101
 Straits Settlements So: 918
 United States, History of the (Renewed con-
 flict) U: 157

British Empire
 See also Commonwealth of Nations in this
 index
 Kipling, Rudyard K: 333
 Rhodes, Cecil John R: 317
 United Kingdom (History) U: 67; (Decline of
 the empire) U: 71 with map
 Victoria (Events of her reign) V: 355 with map

British Empire, Order of the [title]
 Knighthood, Orders of (Honorary orders)
 K: 347

British Guiana
 Guyana G: 445; (History) G: 446

British Honduras [former name] See Belize in
 this index

British India [history of India]
 Bangladesh (British India) B: 85
 India (British India) I: 130; (Rise of Indian
 nationalism) I: 131; map on I: 132
 Pakistan (Colonialism) P: 99

British Indian Ocean Territory [colony] B: 632
 Diego Garcia D: 198

British Interplanetary Society
 Space exploration (The first space rockets)
 So: 706-707

British-Irish Council B: 32
 Northern Ireland (Government) N: 521-522
 United Kingdom (Regional government) U: 50

British Isles B: 632
 United Kingdom (The land) U: 58 with map

British Library [London] B: 632
 Library picture on L: 235
 London (Museums and libraries) L: 434

British Medical Association
 Medicine (Medical organizations) M: 370

British Museum [London] B: 632
 Architecture (The Greek Revival) A: 625-626
 London picture on L: 433; (Museums and
 libraries) L: 434
 Museum (Museums of the 1700's) M: 939

British North America Act [1867] B: 632
 Canada, Government of (The constitution)
 C: 131
 Canada, History of (Confederation) C: 146;
 (Constitutional changes) C: 153
 Confederation of Canada (Approval of confed-
 eration) Ci: 934-935
 Education (Development of Canadian educa-
 tion) E: 101-102
 Law (The development of Canadian law)
 L: 136
 Macdonald, Sir John Alexander (Forming the
 Dominion) M: 7
 Ontario (Confederation) O: 786
 Privy Council P: 808b
 Quebec (Early years as a province) Q: 30
 School (History of Canadian schools) S: 185

British Open [tournament]
 Golf (British Open) G: 264

British Open University
 Distance learning D: 238

British Overseas Airways Corporation
 Aviation (A new age of flight) A: 990

British Petroleum Company
 BP B: 543

British Raj [government] See British India in this
 index

British shorthair
 Cat (Short-haired breeds) C: 290

British Somaliland [Somali history]
 Somalia (History) So: 589

British South Africa Company
 Rhodes, Cecil John (Gains Rhodesia) R: 317
 Zambia (History) Z: 589

British thermal unit [unit of measure] B: 632
 Air conditioning (Capacity of air conditioners)
 A: 179-180
 Calorie C: 70
 Heat (Temperature and heat) H: 150

British Togoland [former colony]
 Togo (History) T: 310-311

British Union Flag See Union Jack in this index

British Virgin Islands
 Virgin Islands, British V: 397
 Virgin Islands V: 392 with map

British West Indies [islands, Atlantic] B: 633

Britons [people]
 England (The Germanic invasions) E: 304

Brittany [dog] B: 633 with picture
 Dog picture on D: 268

Brittany [region, France] B: 633 with picture and
 map
 France (The land) F: 464 with picture and map

Brittany spaniel See Brittany in this index

Britten, Benjamin [British composer] B: 634

Brittle star [sea animal] B: 634 with picture
 Deep sea picture on D: 82

Brittlebush
 Flower (Flowers of the desert) F: 290 with pic-
 ture

Brixham [England]
 United Kingdom picture on U: 61

Brno [Czech Republic] B: 634

Broaching [industrial process]
 Machine tool (Metal removal) M: 18 with pic-
 ture

Broad and Alien Is the World [book by Alegria]
 Latin-American literature (The mid-1900's)
 L: 113

Broad-banded copperhead [snake]
 Snake picture on S: 533

Broad bean B: 634
 Vetch V: 343

Broad-Breasted White [turkey]
 Turkey (Domestic turkeys) T: 513

Broad Church [religion]
 Anglicans (Episcopalians) A: 463-464

Broad jump [sport]
 Track and field (Jumping events) T: 355 with
 picture

Broad-spectrum antibiotic
 Antibiotic (Antibacterial antibiotics) A: 550

Broad spectrum penicillin [drug]
 Penicillin (Forms of penicillin) P: 240

Broad-winged hawk [bird]
 Buzzard B: 746
 Hawk (Migration) H: 111

Broadband connection [electronics]
 Internet (How the Internet works) I: 350c

Broadbent, Jim [British actor]
 Motion picture (Best performance by an actor
 in a supporting role: 2001) M: 863

Broadcast band [electronics]
 Radio (How radio programs are received)
 R: 88
 Television (Broadcasting) T: 122

Broadcast frequency
 Radio (From electric waves to radio waves)
 R: 86

Broadcast meteorologist
 Weather (Careers in weather) W: 170

Broadcasting
 Radio (Broadcasting) R: 84 with picture; (How
 radio programs are broadcast) R: 86 with
 diagrams; (History) R: 91
 Television T: 110; (Broadcasting) T: 122
 Antenna (Transmitting antennas) A: 543
 Frequency modulation F: 528
 Journalism (Television journalism) J: 175

Broadcasting, Bureau of See International
 Broadcasting Bureau in this index

Broadcloth [fabric] B: 634

Broadleaf tree
 Tree (Broadleaf trees) T: 414; (Trees around
 the world) T: 428; (Broadleaf forests)
 T: 428 with picture; pictures on T: 413,
 T: 420
 Leaf L: 151 with pictures
 Plant (Temperate deciduous forests) P: 523

Broadloom carpet
 Rugs and carpets R: 513

Broadside [music]
 Popular music (Popular music before record-
 ing) P: 669

Broadtail [fur]
 Karakul K: 245

Broadway [New York City]
 New York City (Manhattan) N: 323-324; (The
 arts) N: 336
 Theater (The producer) T: 235; (New York City)
 T: 244 with picture

Broadway Bound [play by Simon]
 Simon, Neil S: 467

Broadway Melody, The [film]
 Motion picture (Best picture: 1928-29) M: 861

Broadwood, John [British businessman]
 Piano (History) P: 447-448

Broddingnag [fictional place]
 Gulliver's Travels G: 439

Swift, Jonathan (Gulliver's Travels) So: 1040

Broca, Pierre Paul [French surgeon]
 Brain (In the use of language) B: 554

Brocade [fabric] B: 634

Broca's area [anatomy]
 Brain (In the use of language) B: 554

Brocette [fabric]
 Brocade B: 635

Broccoli [plant] B: 635 with picture
 Cabbage C: 2
 Evolution (Artificial selection) E: 432 with pic-
 ture

Brock, Sir Isaac [British general] B: 635
 War of 1812 (Land campaign of 1812) W: 31;
 (Queenston Heights) W: 33

Brock, Lou [American baseball player]
 Baseball (table: Hall of Fame) B: 134; (Recent
 developments) B: 137-138

Brock, William E., III [American government
 official]
 Labor, Department of (table) L: 2

Brocket deer
 Deer (table) D: 85 with picture; (Central and
 South American deer) D: 85-86

Brockhaus, Friedrich Arnold [German publish-
 er]
 Encyclopedia (Today's encyclopedias) E: 268b

Brockhouse, Bertram Neville [Canadian physi-
 cist]
 Nobel Prizes (Physics: 1994) N: 442

Brod, Max [Hungarian author]
 Kafka, Franz K: 209

Brodsky, Joseph [Soviet-born poet] B: 635
 Nobel Prizes (Literature: 1987) N: 446
 Poet laureate (table: Poets laureate of the
 United States) P: 590

Brog, Ehud [Israeli political leader] See Barak,
 Ehud in this index

Brogden, C. H. [American political leader]
 North Carolina (table) N: 490

Brogie, Louis Victor de [French physicist] See
 De Broglie, Louis Victor in this index

Brogue [language]
 Ireland (Language) I: 418

Brogue [shoe]
 Tartan T: 48

Broiler [food]
 Chicken (Producing meat) C: 445 with pictures
 Poultry (Raising poultry) P: 720

Broiling
 Cooking (Broiling and grilling) Ci: 1028

Broken Blossoms [film]
 Griffith, D. W. G: 393

Broken grades
 Tea (Grades of tea) T: 63

Broken Heart, The [play by Ford]
 Ford, John F: 381

Broken Jug, The [play by Kleist]
 Kleist, Heinrich von K: 344

Broken Soil [play by Colum]
 Colum, Padraic Ci: 851

"Broken Vase, The" [poem by Sully
 Prudhomme]
 Sully Prudhomme So: 971

Broken wind [disease]
 Heaves H: 161

Broker [economics]
 Bank picture on B: 94
 Commodity exchange Ci: 873
 Cotton (Selling) Ci: 1091
 Investment (How investors buy stocks) I: 369
 Real estate R: 171
 Stock exchange So: 903

Broker [insurance]

Insurance (How insurance is sold) I: 315

Brome [grass] B: 635

Grass picture on G: 325

Bromeliad [plant] B: 635

Bromfield, Louis [American author] B: 636

Bromide [chemistry] B: 636

Anticonvulsant A: 553

Bromine [element] B: 636

Element, Chemical (Names and symbols of elements) E: 219

Halogen H: 27

Bronc See *Bronco in this index*

Bronc riding

Rodeo R: 397

Bronchial circulation

Lung (Parts of the lungs) L: 523

Bronchial pneumonia [disorder]

Pneumonia (How pneumonia develops) P: 586

Bronchial tube [anatomy]

Bronchitis B: 636

Lung (Parts of the lungs) L: 523; *diagram on* L: 524

Bronchiole [anatomy]

Bronchodilator B: 636

Emphysema *diagram on* E: 262

Human body (The air passages) H: 420-421

Lung (Parts of the lungs) L: 523; *diagram on* L: 524

Bronchitis [disease] B: 636

Bronchodilator B: 636

Emphysema E: 262

Bronchodilator [drug] B: 636

Asthma (Treatment) A: 825

Bronchoscope [instrument] B: 637

Lung cancer L: 525

Surgery (Instruments) So: 1005

Bronchus [anatomy]

Asthma A: 824

Cancer *diagram on* C: 168

Disease (Natural barriers) D: 231

Human body *diagram on* H: 422

Lung (Parts of the lungs) L: 523

Lung cancer L: 525

Bronck, Jonas [New York settler]

New York City (Settlement) N: 341

Bronco [animal] B: 637

Cowboy (His horse) Ci: 1109

Horse (table: Horse terms) H: 343

Bronco Buster [sculpture by Remington]

Remington, Frederic picture on R: 230

Broncos, Denver [football team] See *Denver*

Broncos in this index

Bronstein, Lev Davidovich See *Trotsky, Leon in this index*

Brontë, Anne [British author]

Brontë sisters B: 637 *with portrait*

Brontë, Charlotte [British author]

Brontë sisters B: 637 *with portrait*

English literature (Early Victorian literature) E: 321

Novel (Britain) N: 573

Brontë, Emily [British author]

Brontë sisters B: 637 *with portrait*

English literature (Early Victorian literature) E: 321

Novel (Britain) N: 573

Brontë, Patrick [father of]

Brontë sisters (Their lives) B: 637

Brontë sisters [British authors] B: 637 *with portrait*

Brontes [legendary figure]

Cyclops Ci: 1204

Brontosaurus [extinct animal] See *Apatosaurus in this index*

Bronx [borough, New York City]

New York City (The city) N: 323; (The Bronx) N: 328 *with picture*

Bronx Zoo

New York City (The Bronx) N: 328; (Parks) N: 338

Bronze [metal] B: 637 *with pictures*

Alloy (The first alloys) A: 377

China (Sculpture and pottery) C: 489 *with picture*

Copper (Early civilizations) Ci: 1044

Sculpture (China) S: 238 *with picture*

Bronze Age [anthropology] B: 638

Aegean civilization A: 82

Bronze (History) B: 638

Iron Age I: 435

Prehistoric people (The end of prehistoric times) P: 753

Tool (History of tools) T: 331

Bronze Bow, The [book by Speare]

Speare, Elizabeth George So: 768

"Bronze Horseman, The" [poem by Pushkin]
Russian literature (Early romanticism) R: 560-561

Bronze Star

Medals, decorations, and orders (table) M: 357

Bronze turkey

Turkey (Domestic turkeys) T: 513 *with picture*

Bronzeville [former district, Chicago]

Illinois (The early 1900's) I: 75

Brooch

Pin P: 466 *with pictures*

Brood [biology]

Duck (Ducklings) D: 375 *with picture*

Brood nest [entomology]

Bee (The honey bee colony) B: 201

Brood parasite [bird]

Bird (Foster parents) B: 359

Brooder

Chicken picture on C: 444

Brook

River (Tributaries) R: 351-352; *diagram on* R: 353

Brook Farm [commune] B: 639

Hawthorne, Nathaniel (Life) H: 114

Brook lamprey [animal]

Lamprey (Body) L: 54

Brook stickleback [fish]

Stickleback So: 899

Brook trout [fish]

Fish picture on F: 159

Trout (Other trout) T: 454

Brooke, Alan Francis [British general] See

Alanbrook, Lord in this index

Brooke, Edward William [American political leader] B: 639

Brooke, Frances [Canadian author] B: 639

Canadian literature (Early English-Canadian literature) C: 157

Brooke, Sir James [rajah of Sarawak]

Borneo (History) B: 490

Malaysia (Coming of the Europeans) M: 101

Brooke, John [husband of]

Brooke, Frances B: 639

Brooke, Leonard Leslie [British painter] B: 639

Brooke, Robert [American political leader]

Virginia (table) V: 417

Brooke, Rupert [British poet] B: 639

English literature (Literature before World War I) E: 322

Brookfield [Vermont]

Vermont (Libraries) V: 322

Brookfield Zoo

Chicago (Places to visit) C: 430

Illinois (Places to visit) I: 62 *with picture*

Brookgreen Gardens [Georgetown]

South Carolina (Places to visit) So: 650

Brookhaven National Laboratory [Long Island]

B: 639

Brookings, Robert S. [American businessman]

Brookings Institution B: 640

Brookings Institution [Washington, D.C.]

B: 640

Brooklyn Industrial Complex [Mobile]

Mobile (History) M: 681-682

Brooklyn [borough, New York City] B: 640

New York City (The city) N: 323; (Brooklyn)

N: 326 *with picture*

Brooklyn [bowling]

Bowling (table) B: 521

Brooklyn Bridge [New York City] B: 640 *with picture*

Arthur, Chester Alan picture on A: 755

Bridge (table: Suspension) B: 603

New York City (Brooklyn) N: 326

Brooklyn Dodgers [baseball team]

Brooklyn B: 640

Robinson, Jackie R: 368

Brooklyn Heights [district]

New York City (Brooklyn) N: 326-328

Brooklyn-Manhattan Transit Company

New York City (Transportation) N: 334-335

Brooks, Bryant B. [American political leader]

Wyoming (table) W: 532

Brooks, Garth [American singer] B: 641

Country music (Modern country music)

Ci: 1098c-1098d; *picture on* Ci: 1098

Brooks, Gwendolyn [American poet] B: 641

African American literature (The 1900's)

A: 136a

American literature (The black experience)

A: 423 *with portrait*

Brooks, James [American political leader]

Credit Mobilier of America Ci: 1125

Brooks, James L. [American director]

Motion picture (Best achievement in directing: 1983) M: 862

Brooks, John [American political leader]

Massachusetts (table) M: 288

Brooks, Joseph [American political leader]

Arkansas (Reconstruction) A: 714

Brooks, Mark [American golfer]

Golf (PGA Championship) G: 265

Brooks, Preston Smith [American political leader]

Civil War (The Kansas-Nebraska Act) Ci: 616

Sumner, Charles So: 973

Brooks, Ralph G. [American political leader]

Nebraska (table) N: 110

Brooks, Van Wyck [American author] B: 641

American literature (The study of American literature) A: 426

Brooks Range [mountains, Alaska]

Alaska (The Rocky Mountain System) A: 294

Rocky Mountains (Chief ranges of the

Rockies) R: 395

Broom [shrub] B: 641

Broom [tool]

Curling (The rink) Ci: 1196 *with diagrams*

Broom, Jacob [American political leader] B: 641

Broom, Robert [Scottish-born paleontologist]

B: 641

Prehistoric people (table) P: 752

Broomcorn [plant]

Sorghum (Broomcorn) So: 596

Broome, James E. [American political leader]

Florida (table) F: 260

Brossard, Nicole [Canadian poet]

Canadian literature (Modern Canadian poets) C: 160-161

Broth [food]

Bread (How yeast bread is made) B: 588-589

Brothel

Prostitution P: 830

Brother

Fraternity (Membership) F: 496

"Brother, Can You Spare a Dime?" [song]

Great Depression (Economic breakdown) G: 340

Brother-in-law

Family (Family relationships) F: 21

Brother Jonathan [U.S. history] B: 641

Connecticut (The Revolutionary War) Ci: 970

Brotherhood of ...

Brotherhoods appear under their key words, as in Locomotive Engineers, Brotherhood of

Brotherhood/Sisterhood Week [custom] B: 642

Brothers, The [play by Terence]

Terence T: 172

Brothers Karamazov, The [book by

Dostoevsky]

Dostoevsky, Fyodor D: 311

Nihilism N: 421

Russian literature (The 1860's and 1870's) R: 562

Brothers of the Christian School, Institute of the [religious order]

Jean Baptiste de la Salle, Saint J: 75

Broutiid fish

Fish picture on F: 156

Brough, Charles Hillman [American political leader]

Arkansas (table) A: 712

Brough, John [American political leader]

Ohio (table) O: 699

Broughton, J. Melville [American political leader]

North Carolina (table) N: 490

Broughton, Jack [British boxer]

Boxing (The beginning of modern boxing) B: 533

Broughton, William [English explorer]

Mount Hood M: 885

Oregon (Exploration and settlement) O: 846

Broun, Heywood Campbell [American journalist] B: 642

Brout, Robert [Belgian physicist]

Higgs, Peter Ware H: 227

Brothers, Dan [American baseball player]

Baseball (table: Hall of Fame) B: 134

Brouwer, Luitzen [Dutch mathematician]

Mathematics (Philosophies of mathematics) M: 307

Broward, Napoleon B. [American political leader]

- Brower, Edna May** [wife of]
Diefenbaker, John George (Young lawyer)
D: 197
- Brown** [color]
Umber U: 18
- Brown** [cooking]
Cooking (table) Ci: 1029
- Brown, A. R. Redcliffe-**
Radcliffe-Brown, A. R. R: 73
- Brown, Aaron V.** [American government official]
Tennessee (table) T: 152
- Brown, Albert G.** [American political leader]
Mississippi (table) M: 640
- Brown, Albert O.** [American political leader]
New Hampshire (table) N: 223
- Brown, Sir Arthur Whitten** [British aviator]
Alcock and Brown A: 334
- Brown, Benjamin Gratz** [American political leader] B: 642
Missouri (table) M: 668
- Brown, Charles Brockden** [American author]
B: 642
Novel (The United States) N: 573
- Brown, Charlie** [cartoon character]
Schulz, Charles Monroe S: 187 *with picture*
- Brown, Claude** [American author]
American literature (Works by minority writers) A: 425
- Brown, D. Russell** [American political leader]
Rhode Island (table) R: 311
- Brown, Denise Scott** [American author]
Venturi, Robert V: 310
- Brown, Edmund Gerald** [American political leader]
California (table) C: 59
Nixon, Richard Milhous (Defeat in California) N: 432
- Brown, Edmund Gerald, Jr.** [American political leader] B: 642
California (table) C: 59
Clinton, Bill (The Democratic nomination) Ci: 682c
- Brown, Ethan Allen** [American political leader]
Ohio (table) O: 699
- Brown, Fether** [literary figure]
Detective story (The pattern) D: 162-163
- Brown, Frank** [American political leader]
Maryland (table) M: 255
- Brown, Fred H.** [American political leader]
New Hampshire (table) N: 223
- Brown, George** [Canadian patriot] B: 642
Confederation of Canada (Moves toward confederation) Ci: 933; (Fathers of Confederation) Ci: 935 *with picture*
Macdonald, Sir John Alexander (Forming the Dominion) M: 7
Macdonald, John Sandfield M: 10
Mackenzie, Alexander (Member of the Reformers) M: 21
- Brown, George S.** [American military leader]
Joint Chiefs of Staff (table) J: 156
- Brown, H. Rap** [American social reformer]
African Americans (Black militancy) A: 136o
Student Nonviolent Coordinating Committee So: 932
- Brown, Harold** [American government official]
B: 642
- Brown, Helen Gurley** [American editor]
Magazine (History) M: 43-45
- Brown, Helen Hayes** See Hayes, Helen *in this index*
- Brown, Henry B.** [American jurist]
Supreme Court of the United States (table) So: 1000
- Brown, Herbert Charles** [American chemist]
Nobel Prizes (Chemistry: 1979) N: 443
- Brown, Jacob Jennings** [American general]
War of 1812 (Campaigns of 1814) W: 31; (Lundy's Lane) W: 32-33
- Brown, James** [American singer] B: 643
- Brown, Jerry** See Brown, Edmund Gerald, Jr. *in this index*
- Brown, Jesse** [American government official]
B: 643
- Brown, Jim** [American football player] B: 643
Payton, Walter P: 204
- Brown, John** [American social reformer] B: 643 *with portrait*
African Americans (The deepening division over slavery) A: 136f-136g
Civil War (Raid at Harpers Ferry) Ci: 616
Harpers Ferry H: 66
Kansas ("Bleeding Kansas") K: 235
Lee, Robert Edward (Other duties) L: 177
Marine Corps, United States (The 1800's) M: 208-209
Ontario *picture on* O: 785
Treason T: 406
United States, History of the (Social disorder) U: 174
West Virginia (The Civil War and statehood) W: 226 *with picture*
- Brown, John C.** [American political leader]
Tennessee (table) T: 152
- Brown, John W.** [American political leader]
Ohio (table) O: 699
- Brown, John Y., Jr.** [American political leader]
Kentucky (table) K: 290
- Brown, John Young** [American political leader]
Kentucky (table) K: 290
- Brown, Joseph E.** [American political leader]
Georgia (table) G: 130
- Brown, Joseph M.** [American political leader]
Georgia (table) G: 130
- Brown, Joshua Purdy** [American performer]
Circus (The circus grows) Ci: 562b
- Brown, Laurene Krasny** [American author]
Literature for children *picture on* L: 383
- Brown, Lee P.** [American political leader]
Houston (Recent developments) H: 399
- Brown, Linda** [American public figure]
African Americans (The civil rights movement) A: 136m *with picture*
Brown v. Board of Education of Topeka B: 645
- Brown, Marc** [American author]
Literature for children *picture on* L: 383
- Brown, Marcia Joan** [American artist] B: 644
Regina Medal (table: 1977) R: 206
- Brown, Mather** [American painter]
Adams, John *picture on* A: 36
- Brown, Michael Stuart** [American physiologist]
Nobel Prizes (Physiology or medicine: 1985) N: 445
- Brown, Mordecai** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Brown, Moses** [American businessman]
Rhode Island (Industrial growth) R: 313
- Brown, Mount** [British publisher]
Stamp collecting (Origins) So: 829-830
- Brown, Neill S.** [American political leader]
Tennessee (table) T: 152
- Brown, Oliver** [American public figure]
Brown v. Board of Education of Topeka B: 645
- Brown, Robert** [Scottish biologist] B: 644
- Brown, Ronald Harmon** [American government official] B: 644
- Brown, Sterling A.** [American author]
American literature (The Harlem Renaissance) A: 422
- Brown, Thomas** [American political leader]
Florida (table) F: 260
- Brown, Tim** [American football player]
Football (table) F: 363
- Brown, Tina** [British-born editor]
Magazine (History) M: 43-45
- Brown, Walter F.** [American government official]
Hoover, Herbert Clark (table) H: 330
- Brown, William** [British sea captain]
Honolulu (History) H: 322
- Brown, William Wells** [American author]
African American literature (The 1800's) A: 136a
- Brown, Willie** [American political leader]
San Francisco (Recent developments) S: 99
- Brown algae**
Algae (Brown algae) A: 349
Seaweed (Kinds) *picture on* S: 277
- Brown and Sharpe gauge** [measurement]
Wire (Sizes of wire) W: 343
- Brown bat** [animal]
Bat (Some kinds of bats) B: 161
- Brown bear**
Animal *picture on* A: 478
Bear (Brown bears) B: 184; *picture on* B: 183
Grizzly bear G: 397 *with picture*
Mammal *picture on* M: 124
- Brown coal** See Lignite *in this index*
- Brown County craft shops** [Indiana]
Indiana (Places to visit) I: 206
- Brown creeper**
Creeper Ci: 1126
Bird *picture on* B: 363
- Brown dwarf** [astronomy] B: 644
Planet (The first discoveries) P: 512-513
- Brown fat** [anatomy]
Warm-blooded animal W: 36
- Brown-headed cowbird**
Bird (Birds of grasslands) B: 336 *with picture;* (Foster parents) B: 359
- Brown-headed nuthatch** [bird]
Nuthatch N: 623
- Brown hyena** [animal]
Hyena H: 473
- Brown lung** [disease] B: 644
Dust (Influence on human health) D: 390
- Brown mustard**
Mustard M: 968
- Brown patch** [plant disease]
Lawn (Controlling diseases, pests, and weeds) L: 144
- Brown pelican** [bird]
Pelican (Kinds) P: 231 *with picture*
- Brown power** [social movement]
Hispanic Americans (The Chicano movement) H: 255
- Brown rat** [animal]
Rat R: 146; *picture on* R: 146
- Brown recluse** [spider] B: 644 *with picture*
Spider So: 782
- Brown rice** [food]
Rice (Food) R: 323
- Brown rot** [fungus]
Peach (Diseases) P: 211
Rot R: 485
- Brown shirts** [German history]
Hitler, Adolf (Birth of the Nazi Party) H: 266
- Brown sugar**
Sugar (Uses of sugar) So: 959
- Brown Swiss** [cattle]
Cattle (Brown Swiss) C: 311 *with picture;* (table) C: 313
Dairying (Dairy cattle) D: 6
- Brown thrasher** [bird] B: 645
Bird *picture on* B: 338
Thrasher T: 268 *with picture*
- Brown towhee** [bird]
Towhee T: 349
- Brown tree snake**
Invasive species (How invasive species affect habitats) I: 354j
- Brown trout** [fish]
Trout *picture on* T: 453
- Brown University** B: 645
Rhode Island *picture on* R: 301
Universities and colleges (The oldest U.S. universities and colleges) U: 210
- Brown v. Board of Education National Historic Site** [Kansas]
National Park System (table: National historic sites) N: 52
- Brown v. Board of Education of Topeka** [U.S. history] B: 645
African Americans (The civil rights movement) A: 136m
Education (The federal government and education) E: 92; (Education for whom?) E: 107
Fourteenth Amendment F: 438
Marshall, Thurgood M: 230
National Association for the Advancement of Colored People N: 29
Supreme Court of the United States (table) So: 1002
United States, Government of the (The Supreme Court) U: 145
- Brown widow** [spider]
Black widow B: 391
Spider So: 782
- Browne, Anthony** [British author]
Literature for children *picture on* L: 354
- Browne, Charles Farrar** [American humorist]
Ward, Artemus W: 35
- Browne, Hablot Knight** [British artist]
Dickens, Charles *picture on* D: 189
- Browne, Sir Thomas** [English physician]
English literature (Prose writings) E: 317
Prose P: 828
- Browne, Thomas Alexander** [Australian author]
Australia (Literature) A: 906
- Browne, Walter S.** [American chess player]
Chess (United States chess champions) C: 414
- Brownell, Herbert, Jr.** [American government official]
Eisenhower, Dwight David (table) E: 152
Justice, Department of (table) J: 203
- Brownian motion** [physics]
Brown, Robert B: 644
Einstein, Albert (Famous theories) E: 146-146a
Fractal F: 443
Ion (Behavior of ions) I: 371-372
Suspension So: 1012
- Brownie Girl Scout**

Girl Scouts (Brownie Girl Scouts) G: 197 *with picture*; (Brownies) G: 199

Browning, Elizabeth Barrett [British poet]
B: 646 *with portrait*

Browning, Robert (Browning's life) B: 646
Sonnet So: 593

Browning, Gordon [American political leader]
Tennessee (table) T: 152

Browning, John Moses [American inventor]
B: 646

Handgun (Rapid-fire handguns) H: 45

Browning, Orville H. [American government official]
Interior, Department of the (table) I: 325

Browning, Robert [British poet] B: 646 *with portrait*

Browning, Elizabeth Barrett B: 646

English literature (Later Victorian literature)
E: 321

Pied Piper of Hamelin P: 452

Browning automatic [gun]

Handgun (Rapid-fire handguns) H: 45

Brownlee, John E. [Canadian political leader]
Alberta (table) A: 328

Brownlow, William G. [American political leader]
Tennessee (table) T: 152

Brownout [electricity]
Electric power (Providing reliable service)
E: 185

Browns, Cleveland
Football (American Football Conference)
F: 364

Brownson, Nathan [American political leader]
Georgia (table) G: 130

Brownstone

Sandstone S: 110

Brownsville [city, Texas]

Rio Grande (Lower course) R: 347

Brownsville [district]

New York City (Brooklyn) N: 326-328

Browtail moth [insect] B: 647 *with picture*

Tussock moth T: 525

Browridge [anatomy]

Gorilla *picture on* G: 276

Prehistoric people (Three species) P: 745; (The development of *Homo sapiens*) P: 746

Browser [computing] See Web browser *in this index*

Broz, Josip [Yugoslav political leader] See Tito, Josip Broz *in this index*

Brubeck, Dave [American musician] B: 647

Jazz *picture on* J: 73

Bruce, Ailsa Mellon [American philanthropist]
Mellon Foundation M: 389

Bruce, Blanche Kelso [American political leader]
B: 647 *with portrait*

Bruce, Sir David [British doctor] B: 647

Bruce, James [British statesman] See Elgin, Earl of *in this index*

Bruce, James [Scottish explorer]
Exploration (The exploration of Africa) E: 449 *with map*

Bruce, Robert [king of Scotland] B: 647

Bannockburn, Battle of B: 98

Edward I E: 112

Scotland (Fight for independence) S: 219; *picture on* S: 220

Bruce, Stanley [Australian political leader]
Australia (table) A: 925

Bruce Peninsula National Park [Ontario]
Canada (table: National parks and national park reserves) C: 113

Brucella [bacteria]

Brucellosis B: 648

Brucellosis [disease] B: 648

Bruce, Sir David B: 647

Cattle (Diseases) C: 313

Veterinary medicine V: 345

Bruch, Max [German composer] B: 648

Bruchac, Joseph [American author]

Literature for children *picture on* L: 360

Brücke, Die [art]

Expressionism (Expressionist painting) E: 455

Painting (Expressionism) P: 78

Brucker, Wilber M. [American political leader]
Michigan (table) M: 507

Bruckner, Anton [Austrian composer] B: 648

Bruderhof [sociology]

Hutterites H: 458

Bruegel, Jen, the Elder [Flemish painter]

Bruegel, Pieter, the Elder B: 649

Bruegel, Pieter, the Elder [Flemish painter]
B: 648 *with picture*

Folklore *picture on* F: 322

Painting (The northern Renaissance) P: 57 *with picture*

Tower of Babel *picture on* T: 349

Bruegel, Pieter, the Younger [Flemish painter]

Bruegel, Pieter, the Elder B: 649

Bruges [Belgium] B: 649

City *picture on* Ci: 583

Bruhn, Erik [Danish dancer] B: 649

Ballet (Ballet in Canada) B: 54

Bruin [animal]

Bear (Brown bears) B: 184

Bruins, Boston

Boston (Recreation) B: 502

Hockey (table: National Hockey League)
H: 281; (Professional hockey) H: 281

Bruise [injury] B: 650

Arnica A: 741

Brulé, Etienne [French explorer] B: 650

Michigan (French exploration and settlement)
M: 508

Ontario (Exploration) O: 784; *picture on* O: 785

Brumbaugh, Martin Grove [American political leader]
Pennsylvania (table) P: 263

Brumidi, Constantino [Italian artist]

Capitol, United States C: 196

Brummell, Beau See Brummell, George Bryan *in this index*

Brummell, George Bryan [British public figure]
B: 650

Bruneau River

Nevada (Rivers and lakes) N: 166

Brunei [country, Asia] B: 650 *with picture and map*

Borneo B: 489 *with map*

Flag *picture on* F: 202

Brunel, Isambard Kingdom [English engineer]
B: 651

Ship (Ships of iron) S: 412

Brunelleschi, Filippo [Italian architect] B: 651

with picture

Architecture (Early Renaissance architecture)
A: 620 *with picture*

Italy (Architecture) I: 504

Perspective P: 304

Renaissance (The fine arts) R: 235-236 *with picture*

Brunhild [legendary figure] B: 652

Nibelungenlied N: 395

Brünn [Czech Republic] See Brno *in this index*

Brünnhilde [literary figure]

Brunhild B: 652

Brünnlitz [Germany]

Schindler, Oskar S: 175

Bruno, Frank [British boxer]

Tyson, Mike T: 542

Bruno, Giordano [Renaissance philosopher]
B: 652

Bruno of Cologne, Saint [German religious leader]
Carthusians C: 261

Brunsdale, C. Norman [American political leader]
North Dakota (table) N: 513

Brunswick [German history] B: 652

Brunswick International Tournament of Champions

Bowling (table) B: 524

Brunswick-Lüneburg [German history]

Brunswick B: 652

Brunswick-Wolfenbüttel [German history]
Brunswick B: 652

Bruny Island [Australia]

Tasmania (Location, size, and description)
T: 49

Brush [mechanics]

Electric motor (The commutator) E: 180 *with diagram*

Brush [tool] B: 652

See also Paint brush *in this index*

Teasel T: 73

Brush foot [entomology]

Insect (Legs) *picture on* I: 287

Brush-footed butterfly

Butterfly (Brush-footed butterflies) B: 734 *with pictures*

Brush-tailed possum [possum]

Possum P: 698

Brush wolf [animal]

Coyote Ci: 1114 *with picture*

Brusilov, Alexei [Russian general]

World War I (Eastern Europe) W: 459-460

Brussels [Belgium] B: 652 *with picture*

Belgium B: 226 *with picture*; (Regions and language communities) B: 227 *with picture*; *picture on* B: 229

Brussels griffon [dog] B: 653

Dog *picture on* D: 274

Brussels lace [fabric]

Lace *picture on* L: 21

Brussels Satellite Convention [1985]

Copyright (International copyright) Ci: 1048

Brussels sprouts [plant] B: 653 *with picture*

Cabbage C: 2

Evolution (Artificial selection) E: 432

Brut [legendary figure] B: 654

Brut [wine]

Champagne C: 373

Brut, The [poem by Layamon]

Round Table (Origin) R: 490-491

Brutalists [architecture]

Architecture (Architecture today) A: 632

Brute-force attack [cryptology]

Codes and ciphers (Unbreakable ciphers)
Ci: 751

Bruton, John [Irish political leader]

Ireland (table) I: 428

Bruton Parish Church [Williamsburg]

Virginia (Places to visit) V: 408

Brutus [book by Cicero]

Cicero, Marcus Tullius (His works) Ci: 552

Brutus [literary figure]

Shakespeare, William (*Julius Caesar*) S: 360

Brutus, Marcus Junius [Roman general] B: 654

Caesar, Julius (Assassination) C: 13

Cassius Longinus, Gaius C: 277

Bruxelles See Brussels *in this index*

Bruyère, Jean de la [French author]

La Bruyère, Jean de L: 19

Bryan, Ashley [American author]

Literature for children *picture on* L: 356

Bryan, Charles Wayland [American political leader] B: 654

Nebraska (table) N: 110

Bryan, George [American political leader]

Pennsylvania (table) P: 263

Bryan, Jimmy [American race driver]

Automobile racing (table: Indianapolis 500 winners) A: 980

Bryan, John Neely [American trader]

Dallas (History) D: 15

Bryan, Rebecca [wife of] See Boone, Rebecca *in this index*

Bryan, Richard Hudson [American political leader]
Nevada (table) N: 173

Bryan, William Jennings [American statesman]
B: 654 *with portrait*

Cleveland, Grover (Saving the gold standard)
Ci: 673

Democratic Party (After the Civil War) D: 125-127

McKinley, William (Crisis and triumph) M: 340

Populism (The People's Party) P: 674-675

Scopes trial S: 209 *with picture*

Tennessee (The early 1900's) T: 154-156

Wilson, Woodrow (Presidential candidate)
W: 322

Bryant, C. Farris [American political leader]
Florida (table) F: 260

Bryant, Kobe [American basketball player]
B: 655

Bryant, Louise [American journalist]
Reed, John R: 194

Bryant, Paul [American football coach] B: 655

Bryant, William Cullen [American poet] B: 655 *with portrait*

American literature (Literature of a young nation [1788-1830]) A: 415; (Poetry)
A: 418

February (Quotations) F: 61

March (Quotations) M: 195

Bryaxis [Greek sculptor]

Seven Wonders of the Ancient World (The Mausoleum at Halicarnassus) S: 325

Bryce, Ebenezer [American public figure]

Bryce Canyon National Park B: 656

Bryce, James [British historian] B: 656

Bryce Canyon National Park [Utah] B: 656
National Park System (table: National parks)
N: 48

Utah *picture on* U: 238

Bryde's whale B: 656

Whale (Rorquals) W: 255-258

Bryn Mawr College

Philadelphia (Education) P: 362-363

Thomas, Martha Carey T: 261

Bryndzo'va halušky [food]
Slovakia (Food and drink) S: 508c

Brynild See *Brunild in this index*

Brynnner, Yul [American actor]
Motion picture (Best performance by an actor: 1956) M: 862

Bryophyte [botany] B: 656
Plant (Bryophytes) P: 522 *with pictures*; (Parts of plants) P: 529; (Classification of plants) P: 546 *with pictures*

Bryozoan [animal] B: 656 *with picture*
Animal (A classification of the animal kingdom) A: 506 *with picture*

Brzezinski, Zbigniew Kazimierz [American government official] B: 657

BST [synthetic hormone] See Bovine somatotropin *in this index*

BT Tower
London (Rebuilding) L: 442

Btu See British thermal unit *in this index*

Buade, Louis de See Frontenac, Comte de *in this index*

Bubble chamber [physics]
Particle detector (Bubble chambers) P: 186

Bubble gum B: 657
Chewing gum (Ingredients) C: 416

Bubble tower
Petroleum (Refining petroleum) P: 343-344

Buber, Martin [German-Israeli philosopher] B: 657

Bubi [people]
Equatorial Guinea (People) E: 346; (History) E: 347

Bubian [island, Kuwait]
Kuwait (Land and climate) K: 395 *with map*

Buboes [disorder]
Plague (Forms of plague) P: 506

Bubonic plague [disease]
London (War, plague, and fire) L: 441
Plague (Forms of plague) P: 506
Races, Human (The clinal approach) R: 55-56

Bucaram Ortiz, Abdalá [Ecuadorian political leader]
Ecuador (The 1900's) E: 73-74

Buccaneer [pirate]
Pirate P: 494; (Pirates of the Caribbean and other areas) P: 495
Haiti (History) H: 15-16

Buccaneers, Tampa Bay See Tampa Bay *Buccaneers in this index*

Bucephala [ancient city]
Alexander the Great (His youth) A: 342

Buccephalus [horse]
Alexander the Great (His youth) A: 342
Horse (table: Famous horses in history and legend) H: 361

Bucar, Martin [German theologian]
Calvin, John (His life) C: 70-71

Buch, Leopold von [German geologist]
Geology (The rock dispute) G: 98-99

Buchan, John [British statesman] B: 657
Governor General's Literary Awards G: 295

Buchanan, James, Sr. [father of]
Buchanan, James (Early life) B: 658

Buchanan, James [U.S. President] B: 658 *with pictures*
Civil War (Developments in the political party system) Ci: 616
Frémont, John Charles F: 510
Ostend Manifesto O: 866
Young, Brigham (Settles in Utah) Y: 571

Buchanan, James McGill [American economist]
Nobel Prizes (Economics: 1986) N: 449

Buchanan, James P. [American political leader]
Johnson, Lyndon Baines (Election to the House) J: 146

Buchanan, John [Canadian political leader]
Nova Scotia (table) N: 567

Buchanan, John P. [American political leader]
Tennessee (table) T: 152

Buchanan plaid
Tartan *picture on* T: 47

Bucharest [city, Romania] B: 662 *with picture*
Romania *pictures on* R: 417, R: 418

Bucharest, Treaty of [1913]
Balkans (The Second Balkan War) B: 42

Bûche de Noël
Christmas (Christmas feasting) C: 534-535

Buchanwald [concentration camp] B: 663
Holocaust *picture on* H: 296a

Buchla, Donald [American inventor]
Synthesizer So: 1068

Buchner, Eduard [German chemist]
Nobel Prizes (Chemistry: 1907) N: 442

Büchner, Georg [German author] B: 663
Opera (*Wozzeck*) O: 808

Buchtal, Henry A. [American political leader]
Colorado (table) Ci: 844

Buchwald, Art [American journalist] B: 663

Buck [animal]
Deer D: 82d *with picture*
Goat G: 239

Buck, C. Douglass [American political leader]
Delaware (table) D: 109

Buck, Frank [American hunter] B: 663

Buck, Pearl S. [American author] B: 663

Buck Island Reef National Monument [Virgin Islands] B: 663
National Park System (table: National monuments) N: 50

Buck teeth [disorder]
Teeth (Malocclusion) T: 84 *with picture*

Buckboard [vehicle]
Carriage C: 248
Wagon *picture on* W: 5

Bucker [career]
Lumber (Cutting down trees) L: 518

Bucket brigade
Fire department (Fire protection in North America) F: 128

Buckeye [bird]
Chicken (table) C: 443

Buckeye [tree]
Horsechestnut H: 366

Buckeye State [nickname]
Ohio O: 680

Buckhorn [weed]
Lawn *picture on* L: 143

Bucking [logging]
Lumber *picture on* L: 520

Bucking bar [tool]
Riveting R: 356

Bucking bronco See Bronco *in this index*

Buckingham, Duke of [1592-1628, English general] B: 663

Buckingham, Duke of [English nobleman]
Buckingham Palace B: 664

Buckingham, William A. [American political leader]
Connecticut (table) Ci: 967

Buckingham Memorial Fountain [Chicago]
Chicago (Places to visit) C: 430 *with picture*

Buckingham Palace [London] B: 664 *with picture*
London (Palaces) L: 435; (Ceremonies) L: 437 *with picture*
United Kingdom *picture on* U: 63

Buckland, William [British scholar]
Dinosaur (Dinosaur discoveries) D: 213

Buckland Abbey [estate]
Drake, Sir Francis (Voyage around the world) D: 322

Buckler [armor]
Gladiator G: 206
Shield S: 400

Buckley, James L. [American political leader]
Buckley, William F., Jr. B: 664

Buckley, William F., Jr. [American journalist] B: 664

Buckminsterfullerene [molecule]
Carbon (Fullerenes) C: 206 *with diagram*
Superconductivity So: 993

Buckner, Simon Bolivar [Confederate general] B: 664
Civil War (Battles of Fort Henry and Fort Donelson) Ci: 629
Kentucky (table) K: 290

Bucks, Milwaukee
Basketball (table) B: 150

Buckshot [ammunition]
Musket M: 962
Shotgun S: 438

Buckskin [leather] B: 664
Indian, American (Clothing) I: 136d

Buckson, David P. [American political leader]
Delaware (table) D: 109

Bucktails [U.S. history] B: 664

Buckthorn [shrub] B: 664 *with picture*

Buckwheat [plant] B: 665 *with picture*

Buckyball [molecule] See Buckminsterfullerene *in this index*

Buckytube [molecule] See Carbon nanotube *in this index*

Bucolics [poems by Virgil]
Virgil (His works) V: 391

Bucur [Romanian legendary figure]
Bucharest B: 663

București See Bucharest *in this index*

Bud [botany] B: 665 *with pictures*
See also Budding *in this index*

Bulb B: 686
Leaf (A leaf begins its life) L: 152 *with pictures*
Plant (Stems) P: 530; (Germination) P: 536 *with picture*
Tree (How trees grow taller) T: 418

Bud grafting
Grafting (Other kinds of grafting) G: 299

Bud scale [botany]
Leaf (A leaf begins its life) L: 152; (Protective leaves) L: 156
Plant (Stems) P: 530 *with picture*
Tree (How trees grow taller) T: 418

Buda [former city, Hungary]
Budapest B: 666

Budapest [city, Hungary] B: 666 *with picture*
Hungary H: 438 *with pictures*; *pictures on* H: 441, H: 442

Budd, James H. [American political leader]
California (table) C: 59

Budd, Lanny [literary figure]
Sinclair, Upton S: 469

Buddenbrooks [book by Mann]
Mann, Thomas M: 164

Buddha [Indian religious leader] B: 667
Buddhism B: 667 *with picture*
China *pictures on* C: 490
Dharma D: 178
India (The Aryans) I: 128
Monasticism (Non-Christian monasticism) M: 701
Nepal (People) N: 125
Religion (Buddhism) R: 220 *with picture*; *picture on* R: 214
Sculpture (As a record of history) S: 228-229; (India) S: 236-237 *with picture*

Buddhism [religion] B: 667 *with pictures*
Asia *picture on* A: 771; (Religions) A: 784
Bodhisattva B: 434
Buddha B: 667
China (Religion) C: 486; *pictures on* C: 490
Dalai Lama D: 9
Dance (Asian theatrical dance) D: 30
Dharma D: 178
Exploration (Chinese exploration) E: 442
Feasts and festivals (In Buddhism) F: 58
God G: 243
Heaven H: 161
India (Buddhism) I: 117
Japan (Religion) J: 40; *picture on* J: 42
Karma K: 247
Korea (Religion) K: 371 *with picture*; (Early years) K: 375-376
Kushan Empire K: 394
Lamaism L: 49
Laos (People) *picture on* L: 70
Meditation M: 380
Missionary M: 620
Monasticism (Non-Christian monasticism) M: 701
New Age movement N: 178
Painting (Indian painting) P: 44; (Japanese painting) P: 47
Religion (Buddhism) R: 220
Saint (Non-Christian saints) S: 29
Sculpture (India) S: 236 *with pictures*
Sri Lanka (People) So: 817-818
Thailand (Religion) T: 224
Tokyo (Ethnic groups and religion) T: 314
Vietnam (Religion) V: 366
World, History of the (The Mauryan Empire in India) W: 430
Zen Z: 593

Budding [grafting]
Grafting (Other kinds of grafting) G: 299

Budding [reproduction]
See also Bud *in this index*
Animal (Asexual reproduction) A: 496 *with diagram*
Coral (Stony corals) Ci: 1048
Fungi (How a fungus lives) F: 559
Hydra H: 462 *with picture*
Jellyfish J: 90
Protozoan (Reproduction) P: 837
Reproduction (Through asexual reproduction) R: 242
Sea anemone S: 262
Sponge (Asexual reproduction) So: 800

Budge, Don [American tennis player] B: 669
Tennis (Tennis tournaments) T: 165; (The spread of tennis) T: 165-166

Budgerigar [bird]
Bird (As pets) B: 331 *with picture*

Parakeet P: 151 *with pictures*
 Parrot (Kinds of parrots) P: 179
Budget [economics] B: 669
 City government (City finances) Ci: 597
 School (Public school operation) S: 183
Budget, Bureau of the [U.S. history] B: 672
Budget, Household
 Budget (Personal and family budgets) B: 669
 Income *diagram on I*: 101
Budget, National *See National budget in this index*
Budget deficit [economics]
 Budget (Economic effects of the national budget) B: 671
 National debt N: 32
Budget motel
 Motel M: 836
Budgie [bird]
 Parakeet P: 151 *with pictures*
Budi Utomo [organization]
 Indonesia (The rise of nationalism) I: 237
Budo [sport]
 Martial arts (Japanese martial arts) M: 234
Buell, Don Carlos [Union general]
 Civil War (The war in the West—1862-1864) Ci: 629
Buena Vista, Battle of [1847]
 Davis, Jefferson (His political career) D: 47-48
 Mexican War (Principal battles) M: 447
 Mexico (War with Texas and the United States) M: 471
 Taylor, Zachary (Mexican War) T: 58-59 *with picture*
Buenos Aires [Argentina] B: 672 *with pictures*
 Argentina A: 646 *with pictures*; (City life) A: 650; (Colonial days) A: 656
 World *picture on W*: 418
Buenos Aires, University of
 Argentina (Education) A: 651
Buenos Aires Convention [1910]
 Copyright (International copyright) Ci: 1048
Buffalo [city, New York] B: 676 *with pictures*
 New York (table: Average monthly weather) N: 307
Buffalo [animal] B: 674 *with pictures*
 See also Bison; Carabao; Water buffalo;
 Wisent in this index
Buffalo [fish] B: 676 *with picture*
Buffalo, Port of [New York]
 Buffalo (Economy) B: 677
Buffalo Bayou [river, Texas]
 Houston (Commercial city) H: 398
Buffalo Bill [American frontiersman] B: 679 *with picture*
 Nebraska (Places to visit) N: 102 *with picture*
 Western frontier life in America W: 232
Buffalo Bill Historical Center [Cody, Wyoming]
 Wyoming (Libraries and museums) W: 520-521
Buffalo Bills
 Football (National Football League) F: 364
Buffalo Bill's Grave
 Colorado (Places to visit) Ci: 836
Buffalo Bill's Wild West Show
 Oakley, Annie O: 638
Buffalo bur [plant]
 Solanum So: 576
Buffalo ceremonials [American Indians] B: 679
Buffalo dance
 Indian, American (Ceremonies) I: 148
 North Dakota *picture on N*: 514
Buffalo Germans
 Basketball (The history of professional basketball) B: 153
Buffalo grass [plant]
 Grass *picture on G*: 325
 Lawn (Planting the grass) L: 142-144
Buffalo Horn [American Indian chief]
 Idaho (Indian fighting) I: 44
Buffalo National River
 Arkansas *picture on A*: 694
 National Park System (table: National parkways and other national parklands) N: 55
Buffalo nickel [money]
 Fraser, James Earle F: 494
 Nickel N: 404
Buffalo rifle [gun]
 Rifle *picture on R*: 339
Buffalo Sabres
 Hockey (table: National Hockey League) H: 281
Buffalo Soldiers [U.S. history] B: 680
Buffalo treehopper
 Insect *picture on I*: 281

Buffaloberry [shrub] B: 680 *with picture*
Buffett, Warren Edward [American businessman] B: 680
Buffett Partnership [company]
 Buffett, Warren Edward B: 680
Buffing
 Grinding and polishing (Polishing) G: 395
Buffon, Georges-Louis Leclerc, Comte de [French naturalist]
 Evolution (Early theories) E: 432
Buffoonery
 Humor (The types of humor) H: 435-436
Bug [computer]
 Computer (Compiling or assembling a program) Ci: 923
Bug [electronic device]
 Radio (Special uses) R: 85
Bug [entomology] B: 680
 See also Insect *in this index*
Buganda [area]
 Ganda G: 24
Buganda [former kingdom]
 Uganda (History) U: 4
Bugbane [plant] B: 680 *with picture*
 Snakeroot S: 537
Bugging [electronics]
 Wiretapping W: 345
Buggy [vehicle]
 Carriage C: 248
Bugle [musical instrument] B: 681 *with picture*
 Drum and bugle corps D: 368
Bugmouth [fish]
 Menhaden M: 400
Bui Xuan Phai [Vietnamese artist]
 Vietnam (The arts) V: 366
Buick, David Dunbar [American businessman] B: 681
 Automobile (William Crapo Durant) A: 965
Buick Motor Company
 Automobile (William Crapo Durant) A: 965
 Buick, David Dunbar B: 681
 Durant, William Crapo D: 387
 Flint F: 235
 Nash, Charles William N: 22
Build [actng]
 Theater (Conservation and build) T: 238
Builder [chemical]
 Detergent and soap (The kettle method) D: 164
Builder's level [tool]
 Level L: 217
Builder's trials
 Ship (Launching and outfitting a ship) S: 425
Building and loan association *See Savings and Loan Association in this index*
Building Arts, National Museum of the
 Washington, D.C. *map on W*: 76
Building code [law]
 Building permit B: 684
 Fire department (Fire prevention and fire safety) F: 124-125
 House (Building a house) H: 380
 Housing (Local housing controls) H: 391
Building construction B: 681 *with pictures*
 Architecture A: 606
 Building permit B: 684
 Building trade B: 685
 Careers (Construction, maintenance, and repair) C: 221 *with picture*
 Crane Ci: 1119 *with pictures*
 Earthquake (Reducing earthquake damage) E: 35 *with diagram*
 Engineering (Civil engineering) E: 285
 Helicopter (For transportation and construction work) H: 170
 House (Building a house) H: 380
 Inca (Arts and crafts) I: 97
 Pyramids P: 916 *with pictures*
 United States *picture on U*: 131
 See also the list of Related articles in the Building construction article
Building material
 Adobe A: 59 *with picture*
 Brick B: 597 *with pictures*
 Building stone B: 685
 Cement and concrete (Uses of cement and concrete) C: 342
 Ceramics (Kinds of ceramic products) C: 359
 House (Building materials) H: 380
 Lumber L: 517 *with pictures*
 Plastics (To replace metals) P: 555
 Shelter (Why shelters differ around the world) S: 392
 See also the Building Materials section of the

list of Related Articles in the Building construction article

Building of the Trojan Horse, The [painting by Tiepolo]
 Mythology *picture on M*: 979
Building paper [building construction]
 House (The frame) H: 382
Building permit [law] B: 684
Building society *See Savings and loan association in this index*
Building stone B: 685 *with picture*
 Marble (Uses) M: 192
 Quarrying Q: 7
Building trade B: 685
Buisson, Ferdinand-Édouard [French statesman]
 Nobel Prizes (Peace: 1927) N: 447
Bujumbura [city, Burundi] B: 686
Bujutsu [sport]
 Martial arts (Japanese martial arts) M: 234
Bukoba [ship]
 Shipwreck (table: Major shipwrecks) S: 428
Bukovina
 Romania (Land regions) R: 420 *with map*;
 (World War I) R: 424
Bulawayo [city, Zimbabwe] B: 686
Bulb [botany] B: 686 *with diagram*
 Flower (Garden perennials) F: 280 *with pictures*
 Gardening (Starting the garden) G: 34-35
 Vegetable (Bulbs) V: 292 *with picture*
Bulb scale [botany]
 Leaf (Storage leaves) L: 156 *with picture*
Bulbar paralysis [disease]
 Poliomyelitis (Kinds of poliomyelitis) P: 626
Bulbourethral gland
 Gland (table) G: 209
Bulbul [bird] B: 687 *with picture*
Bulfinch, Charles [American architect] B: 687
 Architecture (Neoclassical architecture) A: 623-624 *with picture*
Bulfinch, Thomas [American historian] B: 687
Bulganan, Nikolai Aleksandrovich [Soviet political leader] B: 687
 Malenkov, Georgi Maximilianovich M: 105
 Union of Soviet Socialist Republics (The rise of Khrushchev) U: 38
Bulgaria B: 688 *with pictures and maps*
 Balkans (The First Balkan War) B: 42; (The Second Balkan War) B: 42
 Flag *picture on F*: 205
 Macedonia (historic region) M: 12
 Music *picture on M*: 955
 Warsaw Pact W: 39
 World War I (Eastern Europe) W: 459-460
 World War II (table: The Axis) W: 471; (table: Military casualties) W: 497
Bulgarian Macedonia [province, Bulgaria]
 Macedonia (historic region) M: 11 *with map*
Bulgarian Orthodox Church
 Bulgaria (Religion) B: 691
Bulgarian Socialist Party [political party]
 Bulgaria (Government) B: 688
Bulgars [people]
 Bulgaria (People) B: 689
Bulge, Battle of the [1944]
 Luxembourg (History) L: 531
 World War II (The drive to the Rhine) W: 483-484
Bulimia [disorder] B: 694
 Adolescent (Eating disorders) A: 63-64
 Mental illness (Eating disorders) M: 406
Bulk blend fertilizer
 Fertilizer (Production and sale) F: 80
Bulk carrier
 Ship (Dry bulk carriers) S: 420; *pictures on S*: 422
Bulk-oil carrier [ship]
 Tanker (Kinds of tankers) T: 28
Bulk plant
 Herbal medicine H: 196
Bulkeley, Morgan G. [American political leader]
 Baseball (table: Hall of Fame) B: 134
 Connecticut (table) Ci: 967
Bulkhead [wall]
 Ship (Nautical terms) S: 416 *with diagram*;
 (The chief parts of a ship) S: 424
Bull [animal]
 Bullfighting B: 694 *with pictures*
 Cattle C: 306; (Breeding) C: 311-312
 Elephant (Kinds of elephants) E: 227
 Spain (Religious holidays) So: 738; *picture on So*: 731
Bull [religion] B: 694

- Bull, Henryk Johan** [Norwegian businessman]
Antarctica (Early exploration) A: 535-536
- Bull, John**
John Bull J: 133 *with picture*
- Bull, William** [American engineer]
Savannah S: 165
- Bull market** [economics]
Bears and bulls B: 189
- Bull moose** [animal]
Moose (The body of a moose) M: 798 *with picture*
- Bull Moose Party** See *Progressive Party in this index*
- Bull pen**
Baseball (Foul territory) B: 127
- Bull riding**
Rodeo R: 397
- Bull Run, Battle of** [1861]
Civil War (table) Ci: 624, (First Battle of Bull Run) Ci: 626
Jackson, Stonewall J: 16
Lincoln, Abraham (Building the army) L: 321
- Bull Run, Battle of** [1862]
Civil War (table) Ci: 624, (Second Battle of Bull Run) Ci: 627
Lee, Robert Edward (Opening campaigns) L: 178
Porter, Fitz-John P: 682
- Bull shark**
Fish *picture on F*: 152
Shark (Kinds of sharks) S: 375
- Bull snake**
Snake *picture on S*: 532
- "Bull Tales"** [comic strip]
Trudeau, Garry T: 460
- Bull terrier** [dog] B: 694
Dog *picture on D*: 272
Miniature bull terrier M: 573
Pit bull P: 498
- Bull thistle** [plant]
Thistle T: 260
- Bull trout**
Trout (Other trout) T: 454, *picture on T*: 453
- Bulla** [ornament]
Clothing (Ancient times) Ci: 696-698 *with picture*
- Bulla** [seal]
Bull B: 694
- Bulbat** [bird] See *Nighthawk in this index*
- Bullboat** [boat]
Indian, American (Transportation) I: 142
- Bulldog** [dog] B: 694
Dog *pictures on D*: 275
French bulldog F: 514
Pit bull P: 498
- Bulldog ant**
Ant (Protection against enemies) A: 525
- Bulldog pickerel** [fish]
Pickerel P: 450
Pike P: 461
- Bulldogging**
Rodeo (Steer wrestling) R: 397
- Bulldozer** [machine] B: 694
- Bulle Rock**
Horse (table: Famous horses in history and legend) H: 361
- Buller's shearwater** [bird]
Shearwater S: 379
- Bullet** [ammunition] B: 694
Ammunition (Small-arms ammunition) A: 435 *with pictures*
Ballistics B: 56 *with picture*
Pioneer life in America (Tools) P: 483
- Bullet-resisting glass**
Glass (Specialty glasses) G: 212
- Bullet train** [train]
Electric railroad (History) E: 189
Japan *picture on J*: 32
Railroad (In other countries) R: 113-114
Tokyo (Transportation) T: 318
Transportation (Improvements in public transportation) T: 398-399
- Bulletin board service** [information system]
Internet (Glossary of Internet terms) I: 350a
Online service O: 763
- Bulletproof vest**
Armor (Later developments) A: 720-721 *with picture*
- Bullfighting** [sport] B: 694 *with pictures*
Mexico (Recreation) M: 457-458 *with picture*
Portugal P: 689 *with picture*
- Bullfinch** [bird] B: 696
- Bullfrog** [animal] B: 696 *with picture*
Frog (Adult frogs) F: 539, (True frogs) F: 540, (Other frogs) F: 540
- Bullhead** [fish] B: 696 *with picture*
Catfish C: 301
Fish *picture on F*: 158
- Bullins, Ed** [American playwright]
African American literature (The 1900's) A: 136a
- Bullion** [metal]
Gold (Money) G: 251 *with picture*
- Bullion stitch**
Crochet Ci: 1148d
- Bullmastiff** [dog] B: 697 *with picture*
Pit bull P: 498
- Bullock, Alexander H.** [American political leader]
Massachusetts (table) M: 288
- Bullock, Rufus B.** [American political leader]
Georgia (table) G: 130
- Bullock, William A.** [American inventor]
Printing (New presses and typesetting machines) P: 803
- Bullock's oriole** [bird]
Oriole O: 856
- Bulls, Chicago**
Basketball (table) B: 150
- Bull's-eye**
Darts D: 39 *with picture*
- Bullwhacker** [U.S. history]
Western frontier life in America (Transportation) W: 238
- Bülw, Cosima von** [wife of]
Wagner, Richard (Later career) W: 4
- Bulw, W. J.** [American political leader]
South Dakota (table) So: 680
- Bulrush** [plant] B: 697
- Bulwark**
Ship (Nautical terms) S: 416
- Bulwer, Sir Henry** [British diplomat]
Clayton-Bulwer Treaty Ci: 659
- Bulwer-Lytton, Edward George Earle Lytton** [British author] B: 697
- Bumble bee** [insect] B: 697 *with pictures*
Animal *picture on A*: 484
Bee (Social bees) B: 205
Insect *picture on I*: 283
- Bumblebee sphinx moth**
Moth *picture on M*: 837
- Bump skiing** See *Mogul skiing in this index*
- Bumpers, Dale Leon** [American political leader]
Arkansas (table) A: 712
- Bumppo, Natty** [literary figure]
Cooper, James Fenimore Ci: 1034
- Buna N** [synthetic material]
Rubber (Development of synthetic rubbers) R: 501
- Buna S** [synthetic material]
Rubber (Development of synthetic rubbers) R: 501
- Bunau-Varilla, Philippe** [French businessman]
Panama Canal (The United States and the canal) P: 125
- Bunchberry** [plant] B: 698
Flower *picture on F*: 284
- Bunche, Ralph Johnson** [American statesman] B: 698
- Bund, The** [road]
Shanghai (The city) S: 371-372
- Bundesrat** [government]
Austria (The Parliament) A: 929
Germany (Parliament) G: 147, (The German Empire) G: 166
- Bundesrepublik Deutschland** See *Germany in this index*
- Bundestag** [government]
Germany (Parliament) G: 147, (The German Confederation) G: 165
- Bundler**
Clothing (Ready-to-wear clothes) Ci: 704-705
- Bundschuh** [flag]
Peasants' War P: 224
- Bung**
Barrel B: 118 *with picture*
- Bunin, Ivan** [Russian author] B: 699
Russian literature (Symbolism) R: 563
- Bunion** [disorder] B: 699
- Bunker**
Golf (Hazards) G: 261
- Bunker** [fish]
Menhaden M: 400
- Bunker Hill, Battle of** [1775] B: 699
Gage, Thomas G: 5
Prescott, William P: 756b
Revolutionary War in America (Bunker Hill) R: 274-275 *with map*, (table) R: 276, *picture on R*: 270
- Salem, Peter S: 61
- Bunkhouse**
Ranching (History) R: 135
- Bunny ears cactus** [plant]
Gardening (Some popular house plants) G: 37 *with picture*
- Bunraku** [drama]
Puppet (Rod puppets) P: 905 *with picture*
- Bunratty Castle**
Ireland *picture on I*: 420
- Bunsen, Robert Wilhelm** [German chemist] B: 699
Cesium C: 364
Optics (History) O: 813
Range (History) R: 138
Rubidium R: 507
Satellite (History of satellite study) S: 150c
- Bunsen burner** B: 699 *with diagram*
Bunsen, Robert Wilhelm B: 699
- Bunshaft, Gordon** [American architect] B: 699 *with picture*
- Bunt**
Baseball (Outs by batters) B: 128-129 *with pictures*
- Bunting** [bird] B: 700
Bird *pictures on B*: 336, B: 338
Indigo bunting I: 223 *with picture*
- Bunting** [fabric]
Flag (Hanging the flag indoors) F: 219;
(Manufacturing flags) F: 222
- Bunting, Eve** [author]
Regina Medal (table: 1997) R: 206
- Buñuel, Luis** [Spanish director] B: 700
Motion picture (Postwar realism) M: 869-870
Spain (Motion pictures) So: 739
- Buñuelos**
Christmas (Christmas feasting) C: 534-535
- Bunyan, John** [English author] B: 700
English literature (Restoration prose) E: 318
- Bunyan, Paul** [legendary figure] B: 700
Minnesota (Places to visit) M: 594
- Buon fresco**
Painting (Fresco painting) P: 38
- Buonaparte**
See *Bonaparte and Napoleon in this index*
- Buonarroti, Michelangelo** See *Michelangelo in this index*
- Buoy** [navigation] B: 701 *with pictures*
Beacon B: 179
Boating (Buoys and other safety aids) B: 430, *picture on B*: 429
Coast Guard, United States *picture on Ci*: 738
Ocean (Research ships) O: 662-663
Weather (Weather balloons, airplanes, and ships) W: 163
- Buoy boat**
Whale (Hunting techniques) W: 263
- Buoyancy** [physics]
Archimedes (His discoveries) A: 605
Fish (Special organs) F: 163
- Buoyancy compensator**
Skin diving (Kinds of skin diving) S: 493 *with pictures*
- Bur** [botany]
Cocklebur Ci: 744
Cotton (The cotton plant) Ci: 1087
- Bur grass** [plant]
Sandbur S: 107
- Bur oak** [tree]
Oak (White oaks) O: 635
- Bur Said** [Egypt]
Port Said P: 681
- Burakumin** [people]
Japan (Ancestry) J: 35-38
- Buran** [space shuttle]
Space exploration (The Soviet space shuttle) So: 726
- Burano** [Italy]
Venice (Economy) V: 307-308
- Buraq** [legendary creature]
Muslims *picture on M*: 964b
- Burbage, Cuthbert** [English actor]
Globe Theatre G: 233
- Burbage, James** [English producer]
English literature (Elizabethan drama) E: 317
Shakespeare, William (Theater buildings) S: 352
- Burbage, Richard** [English actor]
Shakespeare, William (Acting companies) S: 353-354
- Burbank** [California] B: 701
- Burbank** [potato]
Burbank, Luther (His achievements and methods) B: 702

Burbank, Luther [American horticulturist] B: 701
Prickly pear P: 776

Burbidge, Geoffrey [British astronomer]
Astronomy (Advances in astrophysics) A: 848

Burbridge, Margaret [British astronomer]
Astronomy (Advances in astrophysics) A: 848

Burchard, Samuel D. [American religious leader]
Cleveland, Grover (Election of 1884) Ci: 670

Burchfield, Charles Ephraim [American painter]
B: 702 *with picture*

Burden of proof [law]
Evidence (Burden of proof) E: 426

Burdick, Quentin N. [American political leader]
North Dakota (Politics) N: 513

Burdock [plant] B: 702 *with picture*

Bureau of ...
Bureaus appear under their key words, as in Reclamation, Bureau of

Bureaucracy [government] B: 703
Red tape R: 190
Weber, Max W: 176

Bureaucratic Sonata [music by Satie]
Satie, Erik S: 150h

Burford, Anne [American government official]
Environmental Protection Agency E: 340

Burgee
Flag (table) F: 193

Burgee, John [American architect]
Architecture (Architecture today) A: 632-633
Johnson, Philip Cortelyou J: 153

Burger, Warren Earl [American jurist] B: 703
with portrait

Bürgerschaft [government]
Hamburg (Hamburg State) H: 29

Burgess [U.S. history]
House of Burgesses H: 384

Burgess, Anthony [British author] B: 703

Burgess, Ernest W. [American sociologist]
Collective behavior Ci: 774

Burgess, Thornton Waldo [American author]
B: 703

Burgesses, House of See House of Burgesses
in this index

Burghers [people]
Sri Lanka (People) So: 817-818

Burghers of Calais, The [play by Kaiser]
Kaiser, Georg K: 210

Burghers of Calais, The [sculpture by Rodin]
Philadelphia picture on P: 364
Rodin, Auguste R: 399

Burghley, Lord [English government official]
B: 703

Bürgi, Jobst [Swiss mathematician]
Logarithms (History) L: 424

Burglar alarm B: 704

Burglary [crime] B: 704
Crime (table) Ci: 1137

Burgoynne, John [British general] B: 704 *with picture*
Revolutionary War in America (Victory at Saratoga) R: 282 *with picture*

Burgraves, The [play by Hugo]
Hugo, Victor Marie (Political activity) H: 410

Burgtheater
Vienna picture on V: 362

Burgundians [people]
Joan of Arc, Saint (Joan sees the king) J: 128
Nibelungenlied (The background) N: 395
Switzerland (Early days) So: 1058-1059

Burgundy [region, France] B: 705
Grape picture on G: 319
Maximilian I M: 319
Wine (Wines from France) W: 337

Buri [Norse mythology]
Mythology (The creation of life) M: 984, *picture on M: 975*

Burial [custom]
Catacombs C: 297
Funeral customs (The funeral) F: 557
Indian, American (Current issues) I: 182
Prehistoric people (Neanderthals) P: 747-750
with picture
Necropolis N: 117
Pyramids (Egyptian pyramids) P: 916
Sarcophagus S: 124
Tomb T: 326

Burial at Ornans, A [painting by Courbet]
Courbet, Gustave Ci: 1100 *with picture*

Burial mask
Mask (Burial masks and death masks) M: 265
with picture

Burial mound
Mound builders M: 881 *with picture*

Burial of Count Orgaz, The [painting by El Greco]
Greco, El G: 351

Buried Child [play by Shepard]
Shepard, Sam S: 396

Burin [tool]
Engraving (Engraving the plate) E: 325; *picture on E: 326*
Van Leyden, Lucas V: 284

Burin Peninsula
Newfoundland and Labrador (Land regions) N: 370 *with map*

Burka [clothing] See Burqa *in this index*

Burke, Andrew H. [American political leader]
North Dakota (table) N: 513

Burke, Edmund [British political leader] B: 705
English literature (The Johnson circle) E: 319
Hastings, Warren H: 83

Burke, John [American political leader] B: 705
North Dakota (table) N: 513

Burke, John [Irish publisher]
Burke's *Peerage* B: 705

Burke, Robert O'Hara [Irish explorer]
Australia (Exploring the interior) A: 924; *map on A: 923*
Exploration (Exploring Australia's interior) E: 448 *with map; map on E: 448*

Burke, Thomas [American political leader]
North Carolina (table) N: 490

Burke's Peerage [book] B: 705

Burkett, Jesse [American baseball player]
Baseball (table: Hall of Fame) B: 134

Burkina Faso [country, Africa] B: 705 *with picture and map*
Côte d'Ivoire (History) Ci: 1085
Flag picture on F: 198

Burkitt, Denis P. [British physician]
Health food (History) H: 129

Burkitt's lymphoma
Epstein-Barr virus E: 345

Burl [botany]
Redwood R: 193

Burlap [fabric] B: 707
Jute J: 204

Burleigh, A. Peter [American diplomat]
United Nations (table) U: 86

Burleigh, Edwin C. [American political leader]
Maine (table) M: 87

Burleigh, Harry Thacker [American musician]
B: 707

Burleigh, Lord
Burghley, Lord B: 703

Burlesque B: 707

Burlesque [literature]
Drama (England) D: 335
Humor (The types of humor) H: 435-436

Burley Griffin, Lake [Australia]
Canberra picture on C: 166

Burlingame Treaty [1868]
Oriental exclusion acts O: 855

Burlington [Vermont] B: 707
Vermont picture on V: 319

Burlington, Lord [English architect]
Architecture (The Palladian Revival) A: 623
with picture

Burlington Northern Santa Fe Corporation
Railroad (Railroad systems) R: 112

Burlington Zephyr
Locomotive (History) L: 417 *with picture*
Railroad (The 1920's and the Great Depression) R: 118

Burma [country] See Myanmar *in this index*

Burma Road [Myanmar-China] B: 708
World War II (The China-Burma-India theater) W: 489

Burma Socialist Programme Party
Myanmar (Socialist republic) M: 970e

Burmeister's porpoise
Porpoise P: 680

Burmese cat
Cat (Short-haired breeds) C: 290; *picture on C: 288*

Burmese glass
Glass (Types of art glass) G: 220 *with picture*

Burmese Way to Socialism, The [document]
Myanmar (Socialist republic) M: 970e

Burn [injury] B: 708
First aid (Burns) F: 139
Skin (Burns) S: 490
Sunburn So: 989

Burn This [play by Wilson]
Wilson, Lanford W: 317

Burne-Jones, Sir Edward [British artist] B: 708
Knights and knighthood picture on K: 348

Painting (The Pre-Raphaelite Brotherhood) P: 71

Burnell, Jocelyn Bell [British astronomer] See Bell Burnell, Jocelyn *in this index*

Burner
Bunsen burner B: 699 *with diagram*
Heating (Oil) H: 160
Range (Gas ranges) R: 138

Burnet, David G. [American political leader]
Texas (The Texas revolution) T: 206

Burnet, Sir Macfarlane [Australian doctor]
B: 708

Burnett, Frances Hodgson [American author]
B: 708

Burnett, Ivy Compton-
Compton-Burnett, Ivy Ci: 907

Burnett, Peter H. [American political leader]
California (table) C: 59; (Early statehood) C: 62

Burney, Dwight W. [American political leader]
Nebraska (table) N: 110

Burney, Fanny [British author] B: 708

Burney, Frances See Burney, Fanny *in this index*

Burnham, Daniel Hudson [American architect]
B: 709 *with picture*
Architecture (Early modern architecture in America) A: 629 *with picture*
Baguio City B: 27
Chicago (A city reborn) C: 435
Root, John Wellborn R: 475

Burnham, Forbes [Guyana political leader]
Guyana (History) G: 446-447

Burnham Tavern [Machias]
Maine (Places to visit) M: 78

Burning See Combustion *in this index*

Burning, Flag See Flag burning *in this index*

Burning in
Painting (Encaustic painting) P: 36-38
Photography (Printing black-and-white photographs) P: 421-422

Burning Water [book by Bowering]
Canadian literature (Modern English-Canadian fiction) C: 160

Burnley, James H. [American government official]
Transportation, Department of (table) T: 400

Burnoose [garment]
Algeria (Clothing) A: 361
Morocco (Way of life) M: 811-812

Burnquist, Joseph A. A. [American political leader]
Minnesota (table) M: 602

Burns, Arthur Frank [American economist]
B: 709

Burns, George [American actor] B: 709
Motion picture (Best performance by an actor in a supporting role: 1975) M: 863
Radio (The Golden Age of Broadcasting) R: 92-93 *with picture*

Burns, John A. [American political leader]
Hawaii (table) H: 105

Burns, Lucy [American social reformer]
Woman suffrage (Growth of the movement) W: 380-381

Burns, Robert [Scottish poet] B: 709 *with portrait*
"Auld Lang Syne" A: 890
Bannockburn, Battle of B: 99
English literature (The Preromantics) E: 319-320

Burns, W. Haydon [American political leader]
Florida (table) F: 260

Burnside, Ambrose Everett [Union general]
B: 710 *with portrait*
Civil War (Battle of Fredericksburg) Ci: 627
Lincoln, Abraham (Building the army) L: 321-322
Rhode Island (table) R: 311; (The late 1800's) R: 313

Burnsides
Burnside, Ambrose Everett B: 710 *with picture*

"Burnt Norton" [poem by Eliot]
Eliot, T. S. (His works) E: 237-238

Burnt umber [pigment]
Umber U: 18

Burpee, Lawrence Johnston [Canadian historian]
B: 710

Burqa [clothing]
Afghanistan (Way of life) A: 92a-93 *with picture*

Burr [art]
Engraving (Dry point) E: 326

Burr, Aaron [American political leader] **B:** 710
with *portrait*

Hamilton, Alexander (Political disputes) **H:** 33
Jefferson, Thomas (Election of 1800) **J:** 82;
(Election of 1804) **J:** 85; (The Burr conspiracy) **J:** 86

Mississippi *picture on* **M:** 643
Vice President of the United States (Early days) **V:** 352-353

Burrard Inlet

Vancouver **V:** 274 with *map*

Burro See *Donkey in this index*

Burroughs, Edgar Rice [American author]
B: 711

Burroughs, John [American naturalist] **B:** 711

Burroughs, John [American political leader]
New Mexico (table) **N:** 272

Burroughs, William [American inventor] **B:** 711

Burroughs, William S. [American author]

Burroughs, William **B:** 712

Burroughs Wellcome Company

Elion, Gertrude Belle **E:** 236

Burrow [animal home]

Chipmunk **C:** 513 with *picture*

Muskrat **M:** 964

Prairie dog (Habits) **P:** 732

Rabbit (Homes) **R:** 48

Spider (Tarantulas) **So:** 787

Trap-door spider **T:** 402 with *picture*

Woodchuck **W:** 392

Burrowing asp [snake]

Snake (Burrowing asps) **S:** 534

Burrowing owl

Bird (Birds of grasslands) **B:** 336 with *picture*

Owl (Important owls) **O:** 884-886 with *picture*

Burrows, Abe [American composer]

Loesser, Frank **L:** 420

Bursa [anatomy]

Bursitis **B:** 712

Bursch, Daniel [American astronaut]

Astronaut (table) **A:** 830

Bursitis [disorder] **B:** 712

Rheumatism **R:** 291

Burst [painting]

Gottlieb, Adolph **G:** 279 with *picture*

Burstyn, Ellen [American actress]

Motion picture (Best performance by an actress: 1974) **M:** 862

Burt, Francis [American government official]

Nebraska (Territorial days) **N:** 112

Burton, H. G. [American political leader]

North Carolina (table) **N:** 490

Burton, Harold H. [American jurist]

Supreme Court of the United States (table)
So: 1000

Burton, Richard [British actor]

Taylor, Elizabeth **T:** 57 with *picture*

Burton, Sir Richard Francis [British explorer]

B: 712
Exploration (The exploration of Africa) **E:** 449
with *map*

Lake Tanganyika **L:** 46

Burton, Robert [British author]

English literature (Prose writings) **E:** 317

Burton, William [American political leader]

Delaware (table) **D:** 109

Buru [island]

Indonesia (The Molucca Islands) **I:** 234

Burundi [country, Africa] **B:** 712 with *picture and map*

Flag *picture on* **F:** 198

Ruanda-Urundi **R:** 499

Rwanda **R:** 570

Burushaski [language]

Hunza **H:** 452

Burying beetle [insect] **B:** 714

Insect *picture on* **I:** 283

Burying the hatchet

Tomahawk **T:** 325

Bus [vehicle] **B:** 714 with *pictures*

Air conditioning (Air conditioners for vehicles)
A: 179

Careers (Transportation) **C:** 235

Transit **T:** 374

Transportation (Land transportation) **T:** 383
with *picture; picture on* **T:** 391

Bus boycott

Alabama (The mid-1900's) **A:** 278 with *picture*

Bus Stop [play by Inge]

Inge, William **I:** 270

Busbee, George D. [American political leader]

Georgia (table) **G:** 130

Busch Gardens [Virginia]

Virginia (Places to visit) **V:** 408

Busch Gardens Tampa Bay [Tampa]

Florida (Places to visit) **F:** 252

Buschmann, Friedrich [German inventor]

Harmonica **H:** 62

Bush [botany] **B:** 715

Shrub **S:** 443

Bush, Barbara [daughter of George W. Bush]

Bush, George Walker (Bush's family) **B:** 722d
with *picture*

Bush, Barbara Pierce [wife of George H. W. Bush]

Bush, George Herbert Walker (Bush's family)

B: 717 with *picture; pictures on* **B:** 719, **B:** 722

Bush, George Walker (Family background)

B: 722b-722c with *picture*

First ladies (table) **F:** 142

Bush, Dorothy Walker [mother of]

Bush, George Herbert Walker (Early life)

B: 716-717

Bush, George Herbert Walker [U.S. President]

B: 716 with *pictures*

Bush, George Walker **B:** 722b; (Family background) **B:** 722b with *picture*; (Governor of Texas) **B:** 722e

Cheney, Richard Bruce **C:** 407

Clinton, Bill (Election as president) **Ci:** 682c-

682d

Cold War (The Cold War after 1980) **Ci:** 770

Iran-contra affair (Charges and court actions)

I: 407

Noriega, Manuel Antonio **N:** 455

Panama (The Noriega years) **P:** 121

Persian Gulf War (The world's reaction)

P: 300b-300c

Quayle, Dan **Q:** 9

Reagan, Ronald Wilson (The Iran-contra affair)

R: 170

Republican Party (Victories in the 1980's)

R: 257

United Nations (table) **U:** 86

United States, History of the (Improved U.S.-Soviet relations) **U:** 195; (The Persian Gulf War) **U:** 195

Vice President of the United States (table)

V: 351; (Growth of the vice presidency)

V: 353-354

Vice president **V:** 349 with *portrait*

Bush, George Walker [U.S. president] **B:** 722b

with *pictures*

Baker, James Addison, III **B:** 32

Bush v. Gore **B:** 723

Cheney, Richard Bruce **C:** 407

Democratic Party (Mixed results) **D:** 128

Election of 2000 **E:** 161

Executive order **E:** 436

Global warming (Approving the agreement)

G: 232b

Gore, Al (Political career) **G:** 274

Homeland Security, Office of **H:** 301

Political convention *picture on* **P:** 628

President of the United States *picture on*

P: 767

Republican Party (Mixed results) **R:** 257

Ridge, Tom **R:** 336

September 11 terrorist attacks **S:** 310

Stem cell **So:** 889

Terrorism (The war against terrorism) **T:** 179

Texas (table) **T:** 203; (Recent developments)

T: 208

United States, History of the (Recent events)

U: 195

Bush, Jeb [American political leader]

Florida (table) **F:** 260

Bush, George Herbert Walker (Bush's family)

B: 717

Bush, George Walker (Governor of Texas)

B: 722e

Bush, Jenna [daughter of George W. Bush]

Bush, George Walker (Bush's family) **B:** 722d

with *picture*

Bush, John [American political leader] See

Bush, Jeb in *this index*

Bush, Jonathan [brother of]

Bush, George Herbert Walker (Early life)

B: 716-717

Bush, Laura Welch [wife of]

Bush, George Walker (Bush's family) **B:** 722d

with *picture*

First ladies (table) **F:** 142

President of the United States *picture on* **P:** 767

Bush, Nancy [sister of]

Bush, George Herbert Walker (Early life)

B: 716-717

Bush, Prescott, Jr. [brother of]

Bush, George Herbert Walker (Early life)

B: 716-717

Bush, Prescott Sheldon [father of]

Bush, George Herbert Walker (Early life)

B: 716-717

Bush, Robin [daughter of George H. W. Bush]

Bush, George Herbert Walker (Bush's family)

B: 717

Bush, George Walker (Early life) **B:** 722b-

722c

Bush, William [brother of]

Bush, George Herbert Walker (Early life)

B: 716-717

Bush ballad [poetry]

Australia (Literature) **A:** 906

Bush clover [plant]

Lespedeza **L:** 208

Bush elephant

Elephant (Kinds of elephants) **E:** 227

Bush nut See *Macadamia nut in this index*

Bush pilot

Alaska (Transportation) **A:** 298

Bush slipperwort [plant]

Slipperwort **S:** 508a

Bush v. Gore [2000] **B:** 723

Election of 2000 (Bush v. Gore) **E:** 161

Supreme Court of the United States (Election issues) **So:** 1001; (table) **So:** 1002

Bushbaby [animal] See *Galago in this index*

Bushel [unit of measure] **B:** 723

Bushell, John [Canadian printer]

Printing (Early printing in North America)

P: 803

Bushfield, Harlen J. [American political

leader]

South Dakota (table) **So:** 680

Bushmaster [snake] **B:** 723 with *picture*

Viper **V:** 391

Bushman [people] See *San in this index*

Bushnell, Asa S. [American political leader]

Ohio (table) **O:** 699

Bushnell, David [American inventor]

Mine warfare (History) **M:** 565

Submarine (Early submarines) **So:** 942

Torpedo (History) **T:** 340c

Bushnell, E. W. [American manufacturer]

Ice skating (History) **I:** 16

Bushrangers [Australian history]

Kelly, Ned **K:** 257

Bushy Run, Battle of [1763]

Pennsylvania (Colonial wars) **P:** 264-265

Busia, Kofi [Ghanaian political leader]

Ghana (History) **G:** 179-180

Busiel, Charles A. [American political leader]

New Hampshire (table) **N:** 223

Business **B:** 724

See also *Industry in this index*

Antitrust laws **A:** 560

Capital **C:** 192

Cooperative **Ci:** 1035

Economics (Business and profits) **E:** 60

Environmental pollution (Business and industry) **E:** 336

Inflation (Effects on business) **I:** 268

Investment (Direct investments) **I:** 367

Law (Private law) **L:** 130

Marketing **M:** 214

Mathematics (In business) **M:** 302

State government (Business and labor)

So: 865

See also *the list of Related Articles in the*

Business income

Income (Types of income) I: 100

Business law

Law (Private law) L: 130

Business letterLetter writing (Business letters) L: 211 *with pictures***Business management**

Industrial relations I: 245

Business plane

Airplane (General aviation planes) A: 211-212

Business section [district]

City (Description) Ci: 589

Business-to-business transaction

E-commerce (Business-to-business transactions) E: 2

Internet (Business transactions) I: 350b

Business-to-consumer transaction

E-commerce (Business-to-consumer transactions) E: 2

Internet (Business transactions) I: 350b

Busing [education]

Education (Education for whom?) E: 107

Boston (Conflict over schools) B: 504

Charlotte (Government and history) C: 385

Louisville (Education) L: 505

Nixon, Richard Milhous (The national scene) N: 433-434

Segregation (The beginning of change) S: 285

Bussy, A. A. [French chemist]

Beryllium B: 273

Bussy D'Ambois [play by Chapman]

Chapman, George C: 377

Bustamante, José Luis [Peruvian political leader]

Peru (The rise of APRA) P: 315

Bustard [bird] B: 728 *with picture***Bustee** [slum]Kolkata (People) K: 363 *with picture***Bustle** [clothing]

Clothing (The 1600's) Ci: 701; (The 1800's) Ci: 702

Busy lizzy [plant]Impatiens I: 91 *with picture***Butadiene** [gas]

Furfural F: 566

Rubber (Development of synthetic rubbers) R: 501; (General-purpose synthetic rubbers) R: 504

Butane [gas]

Isomers I: 475

Molecule (Individual molecules) M: 692 *with diagram*

Natural gas liquids N: 64

Butane and propane [gas] B: 728

Gas [fuel] (Gas in the home) G: 51

Butare [city]

Rwanda (People) R: 571

Butchart Gardens [British Columbia]British Columbia (Places to visit) B: 620 *with picture*

Flower picture on F: 275

Landscape architecture picture on L: 59

Butcher [career]

Meat packing (Slaughtering and dressing) M: 351

Butcher, James [American political leader]

Maryland (table) M: 255

Butcherbird [bird]Bird (Birds of Australia and the Pacific Islands) B: 349 *with picture*

Shrike S: 440

Bute, Earl of [British political leader]

United Kingdom (table: British prime ministers) U: 72

Butenandt, Adolf Friedrich Johann [German chemist]

Nobel Prizes (Chemistry: 1939) N: 443

Buteo [bird]

Buzzard B: 746

Hawk H: 111

Buthelezi, Mangosuthu Gatsha [South African political leader]

Inkatha Freedom Party I: 273

Butler, Andrew P. [American political leader]

Sumner, Charles So: 973

Butler, Benjamin Franklin [American government official]

Jackson, Andrew (table) J: 11

Justice, Department of (table) J: 203

Van Buren, Martin (table) V: 273

Butler, Benjamin Franklin [American general] B: 728

Anti-Monopoly Party A: 557

Farragut, David Glasgow F: 47

Louisiana (The Civil War and Reconstruction) L: 498

Massachusetts (table) M: 288

Butler, David [American political leader]

Nebraska (table) N: 110; (Statehood) N: 112

Butler, Lady Elizabeth [British artist] *See*Thompson, Elizabeth *in this index***Butler, Ezra** [American political leader]

Vermont (table) V: 333

Butler, Frank E. [husband of]

Oakley, Annie O: 638

Butler, Nicholas Murray [American educator] B: 728

Nobel Prizes (Peace: 1931) N: 447

Teachers College, Columbia University (History) T: 64

Butler, Pierce [1744-1822, American political leader] B: 728**Butler, Pierce** [American jurist]

Supreme Court of the United States (table) So: 1000

Butler, Pierce M. [American political leader]

South Carolina (table) So: 658

Butler, R. Paul [American astronomer]

Planet (The first discoveries) P: 512

Butler, Rhett [literary figure]

Mitchell, Margaret M: 678

Butler, Samuel [1612-1680, English author]B: 729 *with portrait***Butler, Samuel** [1835-1902, British author] B: 729

Fillmore, Millard (Vice President) F: 101

Butler Library

Columbia University (Other facilities) Ci: 853

Butley [play by Gray]

Gray, Simon G: 334

Butor, Michel [French author]

French literature (The 1950's and 1960's) F: 523

Butte [Montana] B: 729

Montana (table: Average monthly weather) M: 754

Butte [geology] B: 729 *with picture*

Desert (Desert land and climate) D: 156

Butte County [South Dakota]

Geographic center of the United States G: 91

Butte Hill [region]

Montana (Statehood) M: 760

Butter [food] B: 729 *with diagram*

Cattle (Dairy cattle) C: 309-310

Churn C: 550

Dairying (History of dairying) D: 8

Margarine M: 198

Butter-and-eggs [plant] *See* Toadflax *in this index***Butter oil**

Butter B: 730

Buttercup [plant] B: 731 *with picture*

Cell picture on C: 327

Classification, Scientific picture on Ci: 654

Flower F: 300 *with picture*, picture on F: 287**Buttercup chicken**

Chicken (Mediterranean class chickens)

C: 441; (table) C: 443

Buttercup combChicken (Kinds of chickens) C: 441 *with picture***Butterfat** [food]

Butter B: 730; (Composition and food value)

B: 730

Cattle (Dairy cattle) C: 309-310

Dairying (Dairy cattle) D: 6

Butterfield, William [British architect]Architecture (The Gothic Revival) A: 626 *with picture***Butterfish** [fish] B: 731 *with picture***Butterfly** [insect] B: 732 *with pictures*

Animal (Animal travelers) A: 502-503

Caterpillar C: 300

Chrysalis C: 539

Flower (Cross-pollination) F: 295

Insect picture on I: 282; (Legs) I: 287-288;

(Wings) I: 288

Metamorphosis M: 428

Butterfly chairFurniture (The retro style) F: 584, *picture on*

F: 583

Butterfly collecting [hobby]

Butterfly (How to collect butterflies) B: 742

Butterfly lily [plant]Mariposa lily M: 212 *with picture***Butterfly stroke**Swimming (The basic strokes) So: 1043-1044 *with pictures***Butterfly weed** [plant]

Milkweed M: 551

Butterflyfish B: 743 *with picture*

Adaptation picture on A: 45

Animal picture on A: 487

Fish pictures on F: 155

Ocean picture on O: 656

Butterhead lettuceLettuce (Kinds of lettuce) L: 214 *with pictures***Buttermilk** [food] B: 744

Butter (Churning) B: 730

Buttermilk snake

Racer R: 51

Butternut [tree] B: 744

Tree pictures on T: 421

Walnut W: 18

Butternut squashSquash (Winter squashes) So: 813 *with picture***Butterprint** [plant] *See* Velvetleaf *in this index***Butterwort** [plant] B: 744 *with picture*

Leaf picture on L: 157

Button [botany]Mushroom (How a mushroom grows) M: 942 *with picture***Button** [clothing] B: 744 *with pictures*

Clothing (The Middle Ages) Ci: 698-699

Sewing (Fastenings) S: 333

Button, Dick [American skater]

Ice skating (History) I: 16

Olympic Games (The postwar games) O: 751-752

Button, Sir Thomas [English explorer]

Manitoba (Exploration) M: 160

Prairie Provinces (History) P: 733

Button mushroom *See* Table mushroom *in this index***Button snakeroot** [plant]

Blazing star B: 398

Snakeroot S: 537

Buttons, Red [American actor]

Motion picture (Best performance by an actor in a supporting role: 1957) M: 863

Buttonwood [tree]

Sycamore So: 1062

Buttonwood Agreement [former name]

New York Stock Exchange N: 345

Buttress [archery]

Archery (Target archery) A: 602

Buttress [architecture]*See also* Flying buttress *in this index*Architecture (Architectural terms) A: 608 *with pictures*; (Gothic architecture) A: 618-619 *with pictures***Buttress dam**

Dam (Masonry dams) D: 17

Butyl

Rubber (Special-purpose rubbers) R: 504

Butz, Earl Lauer [American government official]

Agriculture, Department of (table) A: 161

Nixon, Richard Milhous (table) N: 433

Buurgplatz [mountain]

Luxembourg (Land) L: 531

Buxtehude, Dietrich [Swedish-German composer]

B: 745

Bach, Johann Sebastian (His works) B: 16

Buy-back center

Recycling (Collecting materials) R: 184

Buy.com Tour [golf]

Golf (Golf today) G: 266-267

Buyer [career]

Clothing (Ready-to-wear clothes) Ci: 704-705

Buying *See* Consumption (economics) *in this index***Buying club** [economics]

Cooperative (History) Ci: 1036-1037

Buying committee [business]

Sales (Wholesaling) S: 62

Buyoya, Pierre [Burundi political leader]

Burundi (History) B: 713-714

Buzkashi [game]

Afghanistan (Recreation) A: 94

Buzzard [bird] B: 745 *with picture*

Balance of nature picture on B: 35

By, John [British military leader]

Ottawa (Bytown) O: 874

By-election [voting]

House of Commons H: 384

Parliament (How members are elected) P: 173

By-line [journalism]

Newspaper (table) N: 383

Writing (Preparing and submitting a manuscript) **W**: 512

By Love Possessed [book by Cozzens]
Cozzens, James Gould **Ci**: 1114

Byars, Betsy [American author] **B**: 746
Regina Medal (table: 1987) **R**: 206

Byatt, A. S. [British author]
English literature (Recent English fiction) **E**: 323

Bycatch
Conservation (Ocean conservation) **Ci**: 978-979
Fishing industry (Fishery conservation) **F**: 187

Bye
Cricket (Scoring) **Ci**: 1132

Bye-Lo Baby
Doll (After the war) **D**: 292 *with picture*

Byelarus [country] *See Belarus in this index*

Byelorussia [country] *See Belarus in this index*

Byelorussians [people] *See Belarusians in this index*

Byerly Turk [horse]
Horse racing (Thoroughbred horses) **H**: 363

Bylaws [parliamentary procedure] **B**: 746
Parliamentary procedure (Bylaws) **P**: 175

Byllinge, Edward [American colonial leader]
New Jersey (English control) **N**: 250

Bylot, Robert [English explorer]
Northwest Passage **N**: 528

Byng, Julian Hedworth George [British statesman] **B**: 746
Meighen, Arthur (Prime minister) **M**: 386

Bypass [road]
Road (Bypasses) **R**: 358

Bypass surgery [medicine] *See Coronary artery bypass graft surgery in this index*

Byrd, Donald [American musician]
Jazz (Fusion) **J**: 73

Byrd, Harry Flood [American political leader]
Kennedy, John Fitzgerald (The 1960 campaign) **K**: 263-264
Virginia (table) **V**: 417; (Progress in government and industry) **V**: 422

Byrd, Richard Evelyn [American explorer]
B: 746 *with picture*
Airplane (Fliers of the golden age) **A**: 237
Antarctica (Exploration by air) **A**: 537 *with picture*
Exploration (Arctic exploration) **E**: 449-450

Byrd, Robert Carlyle [American political leader]
B: 747
West Virginia (Recent developments) **W**: 229

Byrd, William [English composer] **B**: 747
Tallis, Thomas **T**: 21

Byrd, William, II [American government official]
B: 747
American literature (Virginia) **A**: 414
Diary **D**: 184

Byrne, Brendan T. [American political leader]
New Jersey (table) **N**: 249

Byrne, Frank M. [American political leader]
South Dakota (table) **So**: 680

Byrne, Jane Margaret [American political leader] **B**: 747 *with portrait*
Chicago (Political developments in the late 1900's) **C**: 436

Byrne, Joe [Australian outlaw]
Kelly, Ned **K**: 257

Byrne, Robert [American chess player]
Chess (United States chess champions) **C**: 414

Byrnes, James Francis [American statesman]
B: 747
South Carolina (table) **So**: 658
Truman, Harry S. (table) **T**: 469

Byron, Anne Isabella Milbanke [wife of]
Byron, Lord (Byron's life) **B**: 748

Byron, George Gordon *See Byron, Lord in this index*

Byron, Lord [British poet] **B**: 748 *with portrait*
English literature (Romantic poetry) **E**: 320

Byron, Red [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1949) **A**: 981

Byronic hero [literature]
Byron, Lord (Byron's poetry) **B**: 748

Byssinosis *See Brown lung in this index*

Byte
Computer (Computer code) **Ci**: 911

Bytown
Ottawa (Bytown) **O**: 874

Bytown, College of
Ottawa, University of **O**: 875

Byway

Road (The first roads) **R**: 361

Byzantine architecture
Architecture (Byzantine architecture) **A**: 617
Byzantine art (Architecture) **B**: 749 *with picture*
Italy (Architecture) **I**: 504
Russia (Architecture) **R**: 536 *with picture*
World, History of the (The Byzantine Empire) **W**: 434 *with picture*

Byzantine art **B**: 749 *with pictures*
Byzantine Empire (Cultural life) **B**: 753 *with pictures*
Cimabue, Giovanni **Ci**: 553 *with picture*
Mosaic **M**: 822
Painting (Early Christian and Byzantine art) **P**: 49 *with picture*
World, History of the *picture on* **W**: 430

Byzantine Empire **B**: 752 *with pictures and maps*
Bulgaria (The first Bulgarian kingdom) **B**: 692
Byzantine art (The development of Byzantine art) **B**: 749
Clothing (The Middle Ages) **Ci**: 698 *with picture*
Constantine the Great **Ci**: 993
Crusades (The Fourth Crusade) **Ci**: 1161
Cyprus (History) **Ci**: 1207
Europe (The Byzantine Empire) **E**: 410
Greece (Ottoman rule) **G**: 361
Greece, Ancient (Roman rule) **G**: 374
Greek language (Development of modern Greek) **G**: 376
Istanbul (History) **I**: 491
Law (The Middle Ages) **L**: 134
Osman I **O**: 865
Theodoric **T**: 252
World, History of the (The Byzantine Empire) **W**: 434

Byzantine rite [religion]
Eastern Catholic Churches **E**: 45
Liturgy **L**: 392

Byzantium
Byzantine Empire **B**: 752

C

C [letter] **C**: 1 *with pictures*

C [computer language]
Computer (Using programming languages) **Ci**: 923

C [symbol]
Carbon (Chemical properties) **C**: 204

C-5 [airplane]
Air Force, United States (Other aircraft) **A**: 191 *with picture*

C-5A Galaxy [airplane]
Airplane (Military planes) **A**: 212; *picture on* **A**: 211

C-17 Globemaster III [aircraft]
Aircraft, Military *picture on* **A**: 203

C₆₀ [molecule] *See Buckminsterfullerene in this index*

C-band [communications]
Communications satellite (How communications satellites work) **Ci**: 888b *with picture*

C clef [music]
Music (Indicating pitch) **M**: 953 *with picture*

C++ [computer language]
Computer (Using programming languages) **Ci**: 923

C horizon [geology]
Soil (Characteristics of soils) **So**: 574 *with diagram*

C quark [physics] *See Charm in this index*

C-reactive protein [medicine]
Heart (Risk factors) **H**: 137

C. Turner Joy [destroyer]
Vietnam War (The Gulf of Tonkin incident) **V**: 375

Ca [symbol]
Calcium **C**: 20

CA 125 [protein]
Ovarian cancer **O**: 880

Caaba *See Kaaba in this index*

Cab-over-engine [design]
Truck (Common features of trucks) **T**: 458

Cabal [conspiracy] **C**: 2
Washington, George (The army) **W**: 99

Cabala [religion] *See Kabbalah in this index*

Caballero, Fernán [Spanish author]
Spanish literature (The 1800's) **So**: 761-762

Caballo Reservoir [New Mexico]
Rio Grande (Upper course) **R**: 346-347 *with map*

Cabaret [café]
Berlin (The arts) **B**: 262

Cabbage [plant] **C**: 2 *with pictures*
Chinese cabbage **C**: 509 *with picture*
Evolution (Artificial selection) **E**: 432 *with picture*
Flower **F**: 300 *with picture*

Cabbage bug [insect]
Cabbage (Insects and diseases) **C**: 2 *with picture*

Cabbage butterfly
Butterfly (Sulfurs and whites) **B**: 734-736 *with picture*
Cabbage picture on **C**: 2

Cabbage palm [tree] **C**: 3

Cabbage Patch doll
Doll (Modern dolls) **D**: 292-293

Cabbage rose [plant]
Rose **R**: 477

Cabbage tree palm [tree]
Tree *picture on* **T**: 426

Cabbageworm [insect]
Insect (Quarantine systems) **I**: 285 *with picture*

Cabell, James Branch [American author] **C**: 3

Cabell, William H. [American political leader]
Virginia (table) **V**: 417

Caber [sports]
Nova Scotia (Visitor's guide) **N**: 560
Scotland (Recreation) **S**: 214

Cabeza de Vaca, Álvar Núñez [Spanish explorer] **C**: 3
New Mexico (Exploration and settlement) **N**: 273
Texas (Spanish exploration) **T**: 204

Cabildo [museum]
Louisiana (Museums) **L**: 483
New Orleans (Downtown New Orleans) **N**: 279

Cabin
Sailing picture on **S**: 25

Cabin, The [book by Blasco Ibáñez]
Spanish literature (The 1800's) **So**: 761-762

Cabin in the Cotton [painting by Pippin]
Pippin, Horace *picture on* **P**: 492

Cabin tent
Tent (Kinds of tents) **T**: 171

Cabinda [district, Angola] **C**: 3
Angola **A**: 464

Cabinet [government] **C**: 3
Address, Forms of (Officials of the United States) **A**: 53
Canada, Government of (The Cabinet) **C**: 132
Emancipation Proclamation *picture on* **E**: 254
Government (Parliamentary government) **G**: 288
Ministry **M**: 578
Parliament **P**: 172
President (Types of presidential government) **P**: 756b
Presidential assistant **P**: 770
Prime minister **P**: 778c
South Africa (National government) **So**: 608
United Kingdom (National government) **U**: 49; *picture on* **U**: 50; (The beginning of cabinet government) **U**: 67
United States, Government of the (Executive departments and agencies) **U**: 140
Washington, George (Cabinet) **W**: 102 *with picture*

Cabinet dollhouse
Dollhouse **D**: 296

Cabinet-Maker and Upholsterer's Drawing Book, The [book by Sheraton]
Sheraton, Thomas **S**: 396

Cabinet-Maker and Upholsterer's Guide, The [book by Hepplewhite]
Hepplewhite, George **H**: 193

Cabinat Mountains
Montana (Land regions) **M**: 752

Cabinet of Doctor Caligari, The [film]
Motion picture (Filmmaking in Europe) **M**: 866 *with picture*

Cabinet system [government] *See* Parliamentary system *in this index*

Cabinetmaker
Pioneer life in America *picture on* **P**: 481

Cable [communications] **C**: 4 *with pictures*
Coaxial cable **Ci**: 740 *with picture*

- Fiber optics picture on F: 88
 Field, Cyrus West F: 92
 Insulator, Electric I: 308 with picture
 Telegraph (Service expansion and improvement) T: 91
 Telephone (Transmitting the telephone signals) T: 96; (Improvements in telephone technology) T: 101
- Cable** [construction]
 Bridge (Suspension bridges) B: 601-602 with diagram; (Cable-stayed bridges) B: 602 with diagram
 Rope (Wire rope) R: 476-477
- Cable, George Washington** [American author] C: 7
 American literature (Realists) A: 419
- Cable car** C: 7
 San Francisco (Transportation) S: 97 with picture; (Continued prosperity) S: 97-98
- Cable modem** [electronic device]
 Computer (A modem or network interface card) Ci: 915
- Cable News Network** [television network]
 Turner, Ted T: 518
- Cable-stayed bridge**
 Bridge (Cable-stayed bridges) B: 602 with diagram
- Cable stitch**
 Knitting (Knitting the fabric) K: 354; picture on K: 354
- Cable television**
 Cable (Coaxial cables) C: 5
 Internet (How the Internet works) I: 350c
 Journalism (Television) J: 171; (Criticism of the press) J: 173
 Television (Cable television) T: 110b; (Cable and satellite systems) T: 115, (Tuner) T: 123
- Cable-tool drilling**
 Petroleum (Methods of drilling) P: 338
- Cablegram** [communication]
 Telegraph T: 90
- Cabochon** [design]
 Gem (Cutting and polishing) G: 79 with pictures
 Lapidary L: 73
- Caboclos** [people]
 Brazil (Ancestry) B: 572
- Caboet, Lord of** [Spanish nobleman]
 Andorra (History) A: 455
- Cabot, John** [Italian explorer] C: 7
 Canada, History of (Early European exploration) C: 140-141
 Exploration (Exploring the New World) E: 444 with map
 Flag picture on F: 215
 Labrador (History) L: 18
 Maine (Exploration and settlements) M: 89
 Newfoundland and Labrador N: 361; (Early European exploration) N: 375; picture on N: 376
 Nova Scotia (Exploration and settlement) N: 568
 Saint John's S: 36
- Cabot, Sebastian** [Italian explorer] C: 8
 Exploration (Spain's conquests in the New World) E: 445
 Rio de la Plata R: 346
- Cabot Strait** [Canada-Newfoundland]
 Gulf of Saint Lawrence G: 437
- Cabot Trail**
 Cape Breton Island C: 187
 Nova Scotia (Places to visit) N: 560 with picture; picture on N: 564
- Caboto, Giovanni** See Cabot, John in this index
- Cabral, Amílcar** [Portuguese Guinean political leader]
 Guinea-Bissau (History) G: 434
- Cabral, Gonzalo** [Portuguese navigator]
 Azores A: 998
- Cabral, Luis** [Guinea-Bissau political leader]
 Guinea-Bissau (History) G: 434
- Cabral, Pedro Álvares** [Portuguese explorer] C: 8
 Brazil (Portuguese rule) B: 583
 Dias, Bartolomeu D: 185
 Exploration (Exploring the New World) E: 444 with map
 Portugal (The age of exploration) P: 693
- Cabrera Infante, Guillermo** [Cuban author]
 Cuba (The arts) Ci: 1172
- Cabrillo, Juan Rodríguez** (Portuguese explorer) C: 8
 Cabrillo National Monument C: 8
 California (Spanish and English exploration) C: 60
- Cabrillo National Monument** [California] C: 8
 National Park System (table: National monuments) N: 50
 San Diego (The city) S: 88
- Cabrini, Saint Frances Xavier** [American social worker] C: 8 with portrait
- Cabrini-Green Homes** [Chicago]
 Chicago (The North Side) C: 423-424
- Cabrio**
 Furniture (China) F: 571 with picture
- Cacao** [tree] C: 9 with picture
 Chocolate (The cacao tree) C: 518; (History) C: 519
- Cacao bean**
 Chocolate (Harvesting the cacao beans) C: 518
- Cache** [computing]
 Computer (Microprocessors) Ci: 912
- Cachucha** [dance]
 Ballet (Romantic ballet) B: 51
- Cacomistle**
 Animal picture on A: 482
 Ringtail R: 344
- Cactus** [plant] C: 9 with pictures
 Arizona (Plant and animal life) A: 683 with picture
 Flower (Flowers of the desert) F: 290 with picture; F: 300 with picture
 Plant (Deserts) P: 525; (Water storage) P: 541 with pictures; pictures on P: 531, P: 549
 Saguro S: 19
 United States picture on U: 108
- Cactus wren** [bird]
 Animal picture on A: 483
 Bird (Birds of the desert) B: 339 with picture
 Wren W: 504
- CAD** [medicine] See Coronary artery disease in this index
- Cadalso, José** [Spanish author]
 Spanish literature (The 1700's) So: 760
- Cadaver**
 See also Corpse in this index
 Transplant (Sources of donor organs) T: 380
- CADD** [design] See Computer-aided design and drafting in this index
- Caddie Woodlawn** [book by Brink]
 Brink, Carol Ryrie B: 609
- Caddo Indians** [American Indians] C: 11
 Shreveport S: 440
 Texas (Indian days) T: 204
- Cadence** [rhythm] C: 11
 Music (Harmony) M: 951-952 with diagrams
- Cadency, Mark of**
 Heraldry (Elements of a coat of arms) H: 194-196 with pictures
- Cadenza** [music]
 Concerto Ci: 928
- Cadet** [military] C: 11
 Coast Guard, United States (Life in the Coast Guard) Ci: 736
 United States Air Force Academy U: 197 with picture
 United States Coast Guard Academy (Entrance requirements) U: 199 with pictures
 United States Military Academy U: 201 with picture
- Cadets** [scouts]
 Girl Scouts (Senior Branches) G: 199
- Cadette Girl Scouts**
 Girl Scouts (Cadette Girl Scouts) G: 197 with picture
- Cadillac**
 Automobile (The birth of the automobile industry) A: 963-964; picture on A: 967
- Cadillac, Antoine de Lamothe** [French colonial official] C: 11
 Detroit (Early settlement) D: 170
 Michigan (French exploration and settlement) M: 508
- Cadillac Automobile Company**
 Automobile (The birth of the automobile industry) A: 963-964
- Cadillac Mountain** [Maine]
 Acadia National Park A: 21
 Maine (Mountains) M: 82
- Cádiz** [Spain] C: 11
- Phoenicia (Language) P: 393
 Spanish Armada (The two fleets) So: 755
- Cadmium** [element] C: 12
- Cadmus** [Greek mythology] C: 12
 Mythology (Lévi-Strauss's theory) M: 988
- Cadorna, Luigi** [Italian general]
 World War I (The Italian Front) W: 459
- Cadre** [government]
 China (Government) C: 477
- Cadre** [military]
 Army, United States (World War II) A: 739
- Caduceus** [emblem]
 Mercury M: 417
- Cadwalader, Thomas** [American colonial leader]
 New Jersey (Libraries) N: 235
- Cady, Hamilton Perkins** [American scientist]
 Kansas (Interesting facts) K: 217
- Cady, Raymond Davis** [American inventor]
 Match (The invention of book matches) M: 300a
- CAE** [engineering] See Computer-aided engineering in this index
- Caecilian** [zoology]
 Amphibian (Kinds of amphibians) A: 440 with picture
- Caecus, Appius Claudius** [Roman government official]
 Appian Way A: 569
- Caedmon** [English poet] C: 12
 English literature (Old English poetry) E: 314
- Caelian Hill**
 Rome R: 429
- Caenolestid** [mammal]
 Mammal (table) M: 128 with picture
 Marsupial (Kinds of marsupials) M: 232
- Caenorhabditis elegans** [worm]
 Human Genome Project H: 427
- Caernarfon** [Wales]
 Wales (Revolts against England) W: 12-13
- Caesar** [title] C: 12
- Caesar, Augustus** See Augustus in this index
- Caesar, Julius** [Roman general] C: 12 with picture
 Antony, Mark A: 561
 Calendar (The Julian calendar) C: 31
 Cassius Longinus, Gaius C: 277
 Chartres C: 386
 Cicero, Marcus Tullius (His life) Ci: 552
 Cleopatra (Cleopatra and Caesar) Ci: 662a
 England (The Roman conquest) E: 303
 February F: 60
 History (The ancient Greeks and Romans) H: 261-262
 Julian calendar J: 187
 July J: 188
 Latin literature (The age of Cicero) L: 115
 Library (Ancient libraries of papyrus) L: 258
 Quirinal Hill Q: 43
 Rhine River (The Rhine in history) R: 293
 Rome, Ancient (Breakdown of the republic) R: 446
 Rubicon R: 507
 Triumvirate T: 448
- Caesar, Julius** [literary figure]
 Shakespeare, William (Julius Caesar) S: 360
- Caesarea Augusta**
 Saragossa S: 123
- Caesarean section** [childbirth] See Cesarean section in this index
- Caesarion** [son of]
 Cleopatra (Cleopatra and Caesar) Ci: 662a
- Caesarodunum**
 Tours T: 348
- Caesar's Palace**
 Nevada picture on N: 157
- Caesura**
 Poetry (Rhythm and meter) P: 591-593; (table) P: 594
- Caetano, Marcello** [Portuguese government official]
 Portugal (The Salazar dictatorship) P: 694
 Salazar, António de Oliveira S: 60
- Cafe** [restaurant]
 Greece picture on G: 356
 Paris picture on P: 161
 Sweden picture on So: 1024
- Café-au-lait spot** [disorder]
 Neurofibromatosis N: 152
- Cafeteria**
 Restaurant (Kinds of restaurants) R: 262
- Caffeine** [chemical] C: 14

- Coffee (Kinds of coffee) Ci: 754-755
Stimulant So: 901
Tea (Tea and health) T: 63
- Caftan** [clothing]
Morocco (Way of life) M: 811-812
- Cage**
Circus picture on Ci: 562a
- Cage, John** [American composer] C: 14
Aleatory music A: 339
Classical music (Experimental music) Ci: 650
Cunningham, Merce Ci: 1192
Performance art P: 285
Postmodernism P: 709
- Cage, Nicolas** [American actor]
Motion picture (Best performance by an actor: 1995) M: 863
- Cage trap**
Trapping (Kinds of traps) T: 403 *with picture*
- Cagliari** [city, Sardinia]
Sardinia S: 124
- Cagliari, Paolo** [Italian painter]
Veronese, Paolo V: 338
- Cagliostro, Allessandro di** [Italian magician]
Magic (From the 1500's to the 1700's) M: 50-51
- Cagnay, James** [American actor] C: 14 *with picture*
Motion picture (Best performance by an actor: 1942) M: 862
- Cahaba**
Alabama (Early statehood) A: 275
- Cahaya Bahari** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Cahill, Thaddeus** [American inventor]
Electronic music E: 204
- Cahill, William T.** [American political leader]
New Jersey (table) N: 249
- Cahokia** [Illinois]
Illinois (French and British control) I: 72
- Cahokia Mounds** [Illinois]
Illinois (Places to visit) I: 62
Mound builders (The Mississippian culture) M: 882 *with picture*
- Cahuchu** [tree]
Rubber (First uses) R: 500-501
- Cahuilla Indians**
Palm Springs P: 109
- Caicos Islands**
Turks and Caicos Islands T: 514b
- Caillabotte, Gustave** [French artist]
Painting (Edouard Manet and the impressionists) P: 71
- Caillié, René** [French explorer]
Exploration (The exploration of Africa) E: 449 *with map*
- Caifite** [legendary character]
Irish literature (Heroic tales, romances, and sagas) I: 430-431
- Caiman** [animal]
Alligator A: 375
Crocodile Ci: 1149
Reptile (Crocodilians) R: 251
- Cain** [Biblical figure] C: 15
Abel A: 10
- Cain, James M.** [American author] C: 15
- Caine, Michael** [British actor]
Motion picture (Best performance by an actor in a supporting role: 1986, 1999) M: 863
- Caine Mutiny, The** [book by Wouk]
Wouk, Herman W: 502
- Caine Mutiny Court-Martial, The** [play by Wouk]
Wouk, Herman W: 502
- Cairenes** [people]
Cairo (People) C: 16
- Cairn terrier** [dog] C: 15
Dog picture on D: 273
- Cairo** [Egypt] C: 15 *with pictures and map*
Egypt E: 120 *with picture*; (City life) E: 123; (Climate) E: 127; *picture on* E: 124
Fatimid dynasty F: 55
- Cairo Conference** [1943]
Chiang Soong Mei-ling C: 419
- Cairo University**
Cairo (Education and cultural life) C: 16
Egypt (Education) E: 124-125
- "Cairo Trilogy"** [books by Mahfouz]
Mahfouz, Naguib M: 65
- Caisson** [construction] C: 18 *with diagram*
Air lock A: 196
Building construction (Constructing a sky-scraper) B: 683-684
- Caisson** [munitions]
Artillery (Field artillery) A: 762
- Caisson disease** See Bends in *this index*
- Caius, John** [English scholar]
Dog (History) D: 281
- Caius, Saint** [pope]
Pope (table) P: 666
- Cajun music**
Country music (Cajun music) Ci: 1098a
- Cajuns** [people] C: 19
Acadia A: 21
Louisiana L: 478; (Population) L: 482 *with picture*; (Spanish rule) L: 498
- Cakes and Ale** [book by Maugham]
Maugham, W. Somerset M: 312
- Cakewalk** [dance]
Popular music (Ragtime, jazz, and blues) P: 670
- Cakobau** [Fiji chief]
Fiji (History) F: 98
- Calabash** [gourd] C: 19 *with picture*
- Calabash** [tree]
Calabash C: 19
- Caladium** [plant] C: 19 *with picture*
- Calais** [France] C: 19
Hundred Years' War H: 437
- Calamine** [mineral]
Zinc Z: 598
- Calamistrum**
Spider (How spiders make silk) So: 786
- Calamity Jane** [American frontierswoman]
C: 20 *with portrait*
South Dakota (Territorial days) So: 681
- Calamus** See Quill in *this index*
- "Calamus"** [poems by Whitman]
Whitman, Walt (His work) W: 294
- Calceolaria** [plant]
Figwort family F: 97
- Calceus** [shoe]
Toga T: 309
- Calciferol**
Vitamin (Vitamin D) V: 432
- Calcification** [medicine]
Mammography M: 130
- Calcimine** [paint] C: 20
- Calcination** [industrial process] C: 20
- Calcite** [mineral] C: 20
Alabaster A: 280
Dolomite D: 296
Limestone L: 307
Mineral picture on M: 569
Polarized light (Polarizing materials) P: 618
Rock (Chemical sediments) R: 372
Sand S: 106
Stalactite So: 824
- Calcitonin** [hormone]
Hormone (Blood composition hormones) H: 336
Thyroid gland T: 274
- Calcium** [element] C: 20
Milk (Minerals) M: 546
Nutrition (Minerals) N: 625-626
Osteoporosis (Prevention and treatment) O: 868
Rickets R: 335
- Calcium antagonist** [drug] See Calcium channel blocker in *this index*
- Calcium blocker** [drug] See Calcium channel blocker in *this index*
- Calcium carbide** [chemical] C: 21
- Calcium carbonate** [mineral] C: 21
Antacid A: 529
Calcite C: 20
Chalk C: 370
Coral (Stony corals) Ci: 1048
Coral reef (How coral reefs form) Ci: 1048b
Dolomite D: 296
Limestone L: 307
Rock (Chemical sediments) R: 372
Salt, Chemical S: 75
- Calcium channel blocker** [drug] C: 21 *with diagrams*
Angina pectoris A: 461
Heart (Treatment) H: 138; (Progress in treatment and prevention) H: 145
Migraine M: 538
- Calcium cyanamide** [chemical]
Calcium carbide C: 21
- Calcium fluoride** [chemical]
Fluorine F: 306
- Calcium hydroxide** [chemical]
Lime L: 306
- Calcium nitrate** [chemical]
Saltpeter S: 76a
- Calcium oxide** [chemical]
Glass (Soda-lime glass) G: 213
Lime L: 306
- Calcium phosphate** [chemical]
Rock (Chemical sediments) R: 372
- Calcium sulfate** [chemical]
Rock (Chemical sediments) R: 372
- Calculator** C: 21 *with pictures*
Abacus A: 3 *with picture*
Arithmetic A: 665 *with picture*; (Calculation tools) A: 669
Computer (History) Ci: 924a
Decimal system (Use of decimals smaller than one) D: 73
Electronics (How an electronic system works) E: 208 *with picture*
- Calculus** [dentistry]
Teeth (Dental checkups) T: 82; (Periodontal diseases) T: 85 *with picture*
- Calculus** [mathematics] C: 22 *with diagrams*
Archimedes (His mathematics) A: 605
Mathematics (Branches of mathematics) M: 303; (Mathematics and the scientific revolution) M: 306-307
Physics (Newton) P: 439
Science (The scientific revolution) S: 198
Square root (Finding square roots) So: 812
- Calcutta** [city, India] See Kolkata in *this index*
- Caldecott, Randolph** [British artist] C: 25 *with portrait*
Literature for children (The rise of illustration) L: 363 *with picture*
- Caldecott Medal** [award] C: 26 *with pictures*
Literature for children (Awards) L: 366
Melcher, Frederic Gershon M: 389
- Calder, Alexander** [American sculptor] C: 26 *with picture*
Chicago (Places to visit) C: 430-431
Mobile M: 682
Sculpture (Form and treatment) S: 230-231 *with picture*
- Calder Hall** [England]
Electric power (Growth of the electric power industry) E: 186
- Caldera** [geology]
Crater Ci: 1121
Moon (Determining the origin of craters) M: 793-794
Volcano (Composite volcanoes) V: 440-442 *with picture*
- Caldera, Rafael** [Venezuelan political leader]
Venezuela (Recent developments) V: 305
- Calderon, Sila Maria** [Puerto Rican political leader]
Puerto Rico (Puerto Rico today) P: 884
- Calderón de la Barca, Pedro** [Spanish dramatist] C: 27
Drama (Secular drama) D: 333
Spanish literature (The 1600's) So: 759-760
- Calderone, Mary Steichen** [American doctor] C: 27
- Caldwell, Erskine** [American author] C: 27
- Caldwell, Millard F.** [American political leader]
Florida (table) F: 260
- Caldwell, Sarah** [American conductor] C: 27 *with portrait*
- Caldwell, T. R.** [American political leader]
North Carolina (table) N: 490
- Calé** [people]
Gypsies G: 451
- Calèche** [vehicle]
Quebec (Recreation) Q: 36
- Caledonia** [Scottish history] C: 28
Scotland (The Roman invasion) S: 219
- Caledonia Argus** [newspaper]
Harding, Warren Gamaliel (Childhood) H: 56
- Caledonian Canal** [waterway, Scotland]
Scotland (Rivers and lakes) S: 217 *with map*
- Calendar** C: 28 *with pictures*
Aztec (Religion) A: 1000-1001 *with picture*
Christian Era C: 523
Egypt, Ancient (Sciences) E: 139
Indian, American (Writing) I: 150
Julian calendar J: 187
Maya (Communication and learning) M: 324
Month M: 767

150 Calendar

Universities and colleges (The calendar)
 U: 209
 Year (The calendar year) Y: 554
Calendar [government]
 Congress of the United States (Passing a bill)
 Ci: 945
Calendar month
 Month M: 767
Calendar Stone [sculpture]
 Aztec (Arts and crafts) A: 1001 *with picture*
Calendar year
 Leap year L: 162
Calender [machine]
 Paper (Sheet formation) P: 135-136
 Rubber (Shaping) R: 505
 Tire (Preliminary operations) T: 296
Calendering
 Plastics (Making plastic products) P: 557-558
with picture
 Polyvinyl chloride P: 652
 Rubber (Shaping) R: 505
 Textile (Finishing the fabric) T: 217
Calends [Roman calendar]
 Month M: 767
Calendula [plant] C: 32 *with picture*
Calf [anatomy]
 Leg (The leg) L: 182 *with diagram*
Calf [animal]
 Camel (Young) C: 78 *with picture*
 Cattle C: 306; (Breeding) C: 311-312
 Elephant (Elephant families) E: 229; *picture on*
 E: 231
 Meat (Kinds of meat) M: 347
 Meat packing (Slaughtering and dressing) M: 351
 Pet (Farm pets) P: 320
 Veal V: 291
 Whale (Reproduction) W: 260 *with picture*
Calf bone [anatomy]
 Human body *diagram on* H: 422
Calf roping
 Rodeo R: 397
Calfa, Marián [Czech political leader]
 Czechoslovakia (The Velvet Revolution)
 Ci: 1216
Calgary [Alberta] C: 32 *with pictures and map*
 Alberta (table: Average monthly weather)
 A: 324; *picture on* A: 313
Calgary, University of C: 35
Calgary Flames
 Hockey (table: National Hockey League)
 H: 281
Calgary Stampede [rodeo]
 Calgary (History) C: 34
Calgary Stampeders
 Football (Canadian Football League) F: 364
Calgary Tower
 Calgary (The city) C: 33 *with picture*
Calgary Zoo
 Alberta (Places to visit) A: 320
Calhoun, John Caldwell [American political
 leader] C: 35 *with portrait*
 Adams, John Quincy (table) A: 43
 Compromise of 1850 Ci: 907
 Jackson, Andrew (Election of 1828) J: 10;
 (Split with Calhoun) J: 11
 Nullification N: 603
 South Carolina (Nullification) So: 660
 United States, History of the (The War of
 1812) U: 164; (Jackson as President)
 U: 170; (Congressional views) U: 172
 Vice President of the United States (table)
 V: 351
Call [city, Colombia]
 Colombia (Recent developments) Ci: 784
Caliban [literary figure]
 Shakespeare, William (*The Tempest*) S: 365
with picture
Caliber [measurement]
 Ammunition (The bullet) A: 435 *with picture*
 Bullet B: 694
 Gun G: 440
 Rifle (Kinds of rifles) R: 338
Calicivirus [viral disease]
 Conservation (Australia) Ci: 989-990
Calico [fabric] C: 35
Calico [fish]
 Goldfish *picture on* G: 258
Calico Bush [book by Field]
 Field, Rachel F: 92
Calico Captive [book by Speare]
 Speare, Elizabeth George So: 769

Calico cat
 Cat (Coat) C: 287 *with picture*
Calico Jack [English pirate]
 Pirate (Pirates of the Caribbean and other
 areas) P: 495
Calico salmon See Chum salmon *in this index*
Calicut [India]
 Calico C: 35
 Exploration (The voyage around Africa) E: 444
Califano, Joseph Anthony, Jr. [American gov-
 ernment official] C: 35
California C: 36 *with pictures and maps*
 Asian Americans (History of Asian immigra-
 tion) A: 812d
 Divorce (No-fault divorce) D: 253
 Environmental pollution (Government action)
 E: 335
 Flag *picture on* F: 210
 Forty-Niners F: 420
 Gold rush (Gold rushes in the United States)
 G: 254
 Hispanic Americans (In the Southwest)
 H: 250-251; (Hispanic Americans in the
 late 1900's) H: 255-257
 Indian, American (Indians of California) I: 163
with picture and map
 Ladybug L: 25
 Mission life in America (Western missions)
 M: 618-619 *with picture*
 Pioneer life in America (Crossing the Plains)
 P: 485-486
 Plate tectonics (Transform plate boundaries)
 P: 563
 Polk, James Knox (The Mexican War) P: 643
 Raisin R: 130
 United States (Climate) U: 126 *with picture*;
picture on U: 125
 United States, History of the (Debate and
 compromise) U: 172
 Westward movement in America (California)
 W: 249
See also the list of Related Articles in the
California article
California, Gulf of See Gulf of California *in this*
index
California, University of C: 65
 California (Schools) C: 40; (Libraries) C: 40;
 (The mid-1900's) C: 62-63
 Los Alamos National Laboratory L: 455
 Los Angeles (Education) L: 463-464 *with pic-
 ture*
 Supreme Court of the United States (table)
 So: 1002
California condor [bird]
 Animal (Breeding in captivity) A: 505
 Bird (Endangered species) B: 370 *with picture*;
picture on B: 328
 Condor Ci: 929 *with picture*
 Endangered species (table) E: 270; *picture on*
 E: 271
 Vulture (New World vultures) V: 453-454
 Wildlife conservation (Endangered species)
 W: 304
California Electric Light Company
 Electric power (Early developments) E: 186
California gull
 Bird (Birds of inland waters and marshes)
 B: 340 *with picture*
 Gull (Their homes) G: 439
California Institute of Technology [Pasadena]
 C: 65
 Jet Propulsion Laboratory J: 115
 Palomar Observatory P: 112
California laurel [tree]
 Laurel L: 121
California live oak
 Oak (Red oaks) O: 635-636
California-Pacific International Exposition
 [1935-1936]
 California (Progress as a state) C: 62
California Palace of the Legion of Honor
 San Francisco (Libraries and museums) S: 96
California poppy [plant]
 Flower (Flowers of summer-dry regions) *pic-
 ture on* F: 288
 Poppy P: 668
California quail
 Quail Q: 4
California rattail [fish]
 Fish *picture on* F: 156
California red fir [tree]

Fir F: 120 *with picture*
California redwood [tree]
 Redwood R: 192
 Sequoia (The redwood) S: 310b
California scrub oak
 Oak (Red oaks) O: 635-636
California sea lion
 Seal (Seals and fishing crews) S: 268
California sheepshead [fish]
 Redfish R: 191
 Wrasse W: 503
California State Colleges [California]
 California State University C: 66
California State Railroad Museum
 California (Museums) C: 41 *with picture*
California State University C: 65
California State University and Colleges
 California (Schools) C: 40
California Suite [play by Simon]
 Simon, Neil S: 467
California Trail [U.S. history]
 Wyoming W: 517; (The great trails) W: 533
California white oak
 Oak (White oaks) O: 635
 Tree *pictures on* T: 423
Californian [newspaper]
 California (Communication) C: 58
Californios [people]
 Hispanic Americans (In the Southwest)
 H: 250-251
Californium [element] C: 66
 Transuranium element T: 401
Caligula [Roman emperor] C: 66
 Agrippina the Younger A: 162
Caligula [play by Camus]
 Camus, Albert C: 97
Calila e Dimna [book]
 Spanish literature (Early medieval literature)
 So: 757-758
Celiper [measuring device] C: 66 *with pictures*
 Divider D: 241
 Micrometer M: 514 *with picture*
 Vernier V: 338
Celiper brake
 Bicycle (Steering and stopping) B: 291 *with*
diagram
 Brake (Mechanical brakes) B: 560
Celiph [title]
 Arabs (The rise and spread of Islam) A: 588
 Egypt (Muslim rule) E: 130
 Muslims (The early caliphs) M: 964a
 Religion (Islam) R: 222-223
 Saudi Arabia (The rise of Islam) S: 160
 Shiites S: 400
 World, History of the (The Islamic world)
 W: 434
Calisthenics C: 66
Calisto [literary figure]
 Spanish literature (The 1400's) So: 758
Calistus I, Saint [pope]
 Pope (table) P: 666
Calistus II [pope]
 Pope (table) P: 666
Calistus III [pope]
 Pope (table) P: 666
Calistus III [antipope]
 Pope (table) P: 666
Call
 Square dancing So: 811
Call and response pattern [music]
 Folk music (American folk music) F: 321-322
Call blocking [service]
 Telephone (Residential services) T: 98-99
Call forwarding [service]
 Telephone (Residential services) T: 98
Call It Sleep [book by Roth]
 Roth, Henry R: 487
Call letters [communications]
 Radio (table) R: 84
Call Me Ishmael [book by Olson]
 Olson, Charles O: 745
Call number
 A Guide to Research Skills Research
 Guide: 28-30
Call of the Toad, The [book by Grass]
 Novel (The novel today) N: 575
Call of the Wild, The [book by London]
 London, Jack L: 444
Call option [investment]
 Commodity exchange (Options contracts)
 Ci: 874

- Call service**
Prostitution P: 830
- Call waiting** [service]
Telephone (Residential services) T: 98
- Calla** [plant] C: 66 *with picture*
- Calla lily** [plant]
Calla C: 67
- Callable bond**
Bond (Kinds of bonds) B: 454
- Callaghan, James** [British political leader] C: 67
United Kingdom (Economic recovery—and collapse) U: 72-73
- Callaghan, Morley** [Canadian author] C: 67
- Callahan, Harry** [American photographer]
Photography (Photography today) P: 428
- Callampa** [slum]
Chile (City life) C: 460
- Callao** [Peru] C: 67
- Callas, Maria** [Greek singer] C: 67 *with portrait*
- Callaway Gardens** [park, Pine Mountain]
Georgia (Places to visit) G: 122 *with picture*
- Callbeck, Catherine** [Canadian political leader]
Prince Edward Island (table) P: 791; (Recent developments) P: 793
- Calle Florida** [street]
Buenos Aires *picture on B*: 673
- Called strike**
Baseball (Outs by batters) B: 128; (Rule changes) B: 133
- Caller**
Square dancing So: 811
- Caller I.D.** [telephone service] See Automatic caller identification *in this index*
- Calles, Plutarco Elias** [Mexican political leader]
Ávila Camacho, Manuel A: 993
Mexico (Economic and social changes) M: 473
- Calley, William L., Jr.** [American soldier]
Vietnam War (Growing protest) V: 376
War crime (The Vietnam War) W: 27
- Callicrates** [Greek architect]
Parthenon P: 182
- Calligrammes** [poems by Apollinaire]
Apollinaire, Guillaume A: 566
- Calligraphy** [writing] C: 67 *with pictures*
China (Painting) C: 488 *with picture*
Handwriting H: 46; *picture on H*: 50
Islamic art (Calligraphy) I: 468
Painting (Chinese painting) P: 44; (Islamic painting) P: 48
- Callimachus** [Greek poet]
Greek literature (The Hellenistic Age) G: 378
Information retrieval (History) I: 269
- Calling hare** [animal]
Pika P: 461 *with picture*
- Calling Out to Yeti** [book by Szymborska]
Szymborska, Wislawa So: 1078
- Calling the Role After an Engagement, Crimes** [painting by Thompson]
Painting (Women artists) P: 73-74 *with picture*
- Calliope** [Greek mythology]
Muses M: 937
- Calliope** [musical instrument] C: 68 *with picture*
- Calliope hummingbird**
Hummingbird (Size) H: 433
- Calliopsis** [plant]
Coreopsis Ci: 1052
- Callisto** [Greek mythology]
Artemis A: 750
Big and Little Dippers (The Little Dipper) B: 296
Boötes B: 480
- Callisto** [satellite] C: 68 *with picture*
Galileo G: 13
Jupiter (Satellites) J: 200
Satellite (Inert satellites) S: 150a-150c
- Callot, Jacques** [French artist] C: 69 *with picture*
- Callous** See Callus *in this index*
- Callus** [disorder] C: 69
Bone (Broken bones) B: 456-457 *with diagram*
Keratin K: 305
- Calm** [weather]
Wind (table) W: 330
- Calm, No. 357** [painting by Kandinsky]
Kandinsky, Wassily *picture on K*: 213
- Calms, Regions of** [geography] C: 69
- Calomel** [medication]
Mercury (Compounds) M: 414
- Caloric** [fluid]
Heat (The caloric theory of heat) H: 154
Physics (Developments in the 1800's) P: 440
- Caloric restriction**
Aging (Overcoming aging) A: 142
- Calorie** [unit of measure] C: 70
Food supply (Calories) F: 346 *with picture*
Heat (Temperature and heat) H: 150; (Heat and energy) H: 155
Metric system (Non-SI metric units) M: 440
Nutrition (Kinds of nutrients) N: 625; (Deficiency diseases) N: 630
Weight control (Causes of obesity) W: 181; (table: Energy equivalents of calories in some foods) W: 182
- Calorimeter** [instrument]
Calorie C: 70
Particle detector (Sampling calorimeters) P: 187
- Calotype**
Communication (The 1800's) Ci: 881-882
Photography (Early developments) P: 425
Talbotype T: 19
- Calpolli**
Aztec (The Aztec empire) A: 999-1000
- Caltech**
California Institute of Technology C: 65
- Calumet** See Peace pipe *in this index*
- Calumet region** [Indiana]
Gary G: 47
- Calusa** [people]
Ponce de León, Juan (Florida expeditions) P: 655-656
- Calvary** [New Testament] C: 70
Jesus Christ (The Crucifixion) J: 108
- Calvary cross** [symbol]
Cross *picture on Ci*: 1155
- Calvert, Cecilius** [English colonial official] C: 70
Maryland M: 240; (Exploration and settlement) M: 256
United States, History of the (Virginia and Maryland) U: 152-153
- Calvert, Charles** [English colonial official] C: 70
- Calvert, George** [English political leader] C: 70
Maryland (Exploration and settlement) M: 256
Newfoundland and Labrador (Colonization) N: 375
- Calvert, Leonard** [British colonial official]
Calvert, Cecilius C: 70
Claiborne's Rebellion Ci: 636
Maryland (Colonial days) M: 256
United States, History of the (Virginia and Maryland) U: 152-153
- Calvert, Lorne** [Canadian political leader]
Saskatchewan (table) S: 144
- Calvin, John** [French-Swiss religious leader]
C: 70 *with portrait*
Christianity (The Reformation) C: 526
Classical music (The Reformation) Ci: 646-647
Foreordination F: 389
Geneva G: 87
Hymn (History) H: 474
Predestination P: 734
Presbyterians (Teaching and worship) P: 756a
Protestantism (The conservative reform movements [the 1500's]) P: 834
Puritans (Puritan beliefs) P: 910
Reformation (John Calvin) R: 198
Switzerland (Religious civil wars) So: 1060
- Calvin, Melvin** [American chemist]
Chemistry (Development of organic chemistry) C: 404 *with picture*
Nobel Prizes (Chemistry: 1961) N: 443
- Calvin and Hobbes** [comic strip]
Comics *picture on Ci*: 870
- Calving** [geography]
Antarctica (Coastal waters) A: 534
- Calvinism** [religion]
Calvin, John (Calvinism) C: 71
Edwards, Jonathan E: 114
Religious life (Religious life in the 1700's and 1800's) R: 227
Weber, Max W: 176
- Calvino, Italo** [Italian author]
Novel (The novel today) N: 575
- Calypso** [Greek mythology]
Odyssey (The Odyssey begins) O: 675
- Calypso** [music] C: 71 *with picture*
Trinidad and Tobago (People) T: 446
- Calypso** [ship]
Cousteau, Jacques-Yves Ci: 1106
- Calyx** [botany]
Flower (The calyx) F: 293 *with picture*
Plant (Flowers) P: 531 *with picture*
- Calyx** [zoology]
Sea lily S: 262
- Calzabigi, Ranieri di** [Italian poet]
Gluck, Christoph Willibald G: 235
- Calzone** [food]
Pizza P: 504
- Cam** [lock]
Lock *picture on L*: 410
- CAM** [manufacturing] See Computer-aided manufacturing *in this index*
- Camacho, Manuel Ávila** See Ávila Camacho, Manuel *in this index*
- Camargo, Marie Anne Cupis de** [French dancer]
Ballet (The rise of professional ballet) B: 51
- Cambaceres, Eugenio** [Mexican author]
Latin-American literature (Realism) L: 112
- Camber** [physics]
Aerodynamics (Lift) A: 85
- Cambest** [horse]
Harness racing (History) H: 64
- Cambiale di matrimonio, La** [opera by Rossini]
Rossini, Gioacchino Antonio R: 484
- Cambium** [botany]
Bark (Inner bark) B: 110 *with diagram*
Grafting (Kinds of grafting) G: 298-299 *with picture*
Plant (Germination) P: 536 *with picture*
Root (Secondary tissues) R: 474 *with diagram*
Rubber (The rubber tree) R: 502
Sap (Vascular sap) S: 121 *with diagram*
Stem (Herbaceous stems) So: 887
Tree (Trunk and branches) T: 416 *with diagram*
- Cambodia** C: 72 *with pictures and map*
Architecture (Indian architecture) A: 613 *with picture*
Cold War (The death of Stalin) Ci: 764; (The Vietnam War) Ci: 769
Communism (Expansion in Southeast Asia) Ci: 894
Dance (Asian theatrical dance) D: 30
Flag *picture on F*: 202
France (The Fourth Republic) F: 475-476
Geneva Accords G: 87
Immigration *picture on I*: 81
Indochina I: 224 *with map*
Nixon, Richard Milhous (Events at home) N: 435
Thailand (History) T: 226-227
United Nations *picture on U*: 90
Vietnam (Invasion of Cambodia) V: 372
Vietnam War *map on V*: 373; (The invasion of Cambodia) V: 376; (Other effects in Southeast Asia) V: 377
- Cambrai, Battle of** [1917]
Tank (History) T: 28
- Cambrian Mountains** [Wales]
United Kingdom (Wales) U: 59 *with map*
Wales (Surface features) W: 11 *with map*
- Cambrian Period** [geology]
Earth (The Paleozoic Era) E: 27; (table) E: 30
Prehistoric animal (The first animals with backbones) P: 737; (table) P: 738
- Cambridge** [England] C: 74
England (The beginnings of Parliament) E: 306
- Cambridge** [Massachusetts] C: 74
- Cambridge Flag** [U.S. history]
Flag (First United States flags) F: 208-210 *with picture*
- Cambridge Modern History** [book by Acton]
Acton, Lord A: 31
- Cambridge Platonists** [philosophers]
Plato (Plato's place in Western thought) P: 569
- Cambridge Shakespeare** [book]
Shakespeare, William (Editions of the 1700's and 1800's) S: 368
- Cambridge University** [England] C: 74 *with picture*
Cambridge C: 74
England (The beginnings of Parliament) E: 306
Extension programs E: 456
- Cambyes** [Persian ruler]
Persia, Ancient (The Achaemenid Empire) P: 298
World, History of the (Civilizations of southwest Asia) W: 426
- Camcorder** [electronic device] C: 75 *with diagram*
Camera (Motion-picture cameras) C: 84
Internet (Push technology) I: 350b-350c
Television (Other production methods) T: 113

- Videotape recorder (Types of videotape recorders) V: 360
- Camden** [New Jersey] C: 76
- Camden, Battle of** [1780]
Revolutionary War in America (table) R: 276;
(Camden) R: 284
- Camden, William** [English historian]
History (Antiquarian research and the philosophes) H: 262
- Came** [fine arts]
Stained glass (How stained-glass windows are made) So: 821-822
- Camel** [animal] C: 76 *with pictures*
Dromedary D: 348
- Camel, Battle of the** [A.D. 656]
Muslims (Ali) M: 964b
- Camel caravan** [transportation]
Caravan C: 202
- Camel cricket** [insect]
Cricket Ci: 1131
- Camel of the prairies** [nickname]
Conestoga wagon Ci: 931
- Camellia** [plant] C: 79 *with picture*
- Camelot** [legendary castle] C: 79
Arthur, King A: 757
- Camel's-hair cloth** [fabric] C: 79
Camel (People and camels) C: 77
- Camembert** [cheese]
Cheese (Soft cheese) C: 392 *with picture*
- Cameo** [gem] C: 80 *with picture*
- Camera** C: 80 *with pictures*
See also Camcorder; Television camera in this index
Charge-coupled device C: 378
Copying machine (Projection copying) Ci: 1046
Journalism (Television journalism) J: 175
Land, Edwin Herbert L: 56
Motion picture (Shooting the movie) M: 853-854, (The camera) M: 857 *with pictures*
Photography P: 408; (Photographic equipment) P: 417 *with picture*
Stereoscope So: 893
Terrorism (Security procedures) T: 179
Videotape recorder V: 360
- Camera lucida** [sketching device] C: 84 *with diagrams*
- Camera obscura** [sketching device] C: 84 *with diagram*
Photography (Early developments) P: 425
- Camera original**
Motion picture (Preliminary steps) M: 854
- Camera rehearsal** *See* Dress rehearsal in this index
- Camera Work** [magazine]
Steichen, Edward So: 884
- Camerata**
Opera (The development of opera) O: 797
- Cameron, Donald W.** [Canadian political leader]
Nova Scotia (table) N: 567
- Cameron, James** [American film director]
Motion picture (Best achievement in directing 1997) M: 862
- Cameron, James D.** [American government official]
Grant, Ulysses S. (table) G: 316
- Cameron, Julia Margaret** [British photographer] C: 84
Photography (The beginnings of modern photography) P: 426
- Cameron, Simon** [American government official]
Lincoln, Abraham (table) L: 323
- Cameron, William E.** [American political leader]
Virginia (table) V: 417
- Cameron pleid**
Tartan picture on T: 47
- Camerone, Battle of** [1863]
Foreign Legion F: 386
- Cameroon** C: 84 *with picture and map*
British Cameroons B: 611
Flag picture on F: 198
Nigeria (Independence) N: 417
Sculpture (Royal and public sculpture) S: 240 *with picture*
- Cameroon, Mount** [mountain, Cameroon]
Kingsley, Mary Henrietta K: 331
- Camille** [play by Dumas]
Dumas, Alexandre, fils D: 382
- Camino Real, El** *See* El Camino Real in this index
- Camisia**
- Clothing (Ancient times) Ci: 696-698
- Camisilla** [clothing]
Panama (Clothing) P: 118 *with picture*
- Cammarano, Salvatore** [Italian librettist]
Opera (*Lucia di Lammermoor*) O: 804;
(*Trovatore*, II) O: 808
- Camões, Luiz de** [Portuguese author]
Portugal (The arts) P: 689-690
Spanish literature (The 1500's) So: 758-759
- Camogie** [sport]
Ireland (Recreation) I: 420
- Camomile** [plant] C: 87 *with picture*
- Camorra** [Italian history]
Mafia M: 41
- Camouflage** [biology]
See also Protective coloration in this index
Animal (How animals protect themselves) A: 493 *with picture*
Plant picture on P: 545
- Camouflage** [warfare] C: 87 *with picture*
- Camp, Walter** [American football coach]
Football (The history of football) F: 365
- Camp David** [Maryland] C: 87
Cold War (The spirit of Camp David) Ci: 766
President of the United States (Recreation) P: 767 *with picture*
- Camp David Accords** [1978]
Arab-Israeli conflict (The Camp David Accords) A: 582a
Egypt (Renewed warfare and peace) E: 133 *with picture*
Israel (The Camp David Accords) I: 488
Middle East (Attempt at peace) M: 534
- Camp Dearborn** [park]
Dearborn D: 60
- Camp Dubois** [U.S. history]
Lewis and Clark expedition (Preparation) L: 222
- Camp Fire Boys and Girls** [organization] C: 88 *with pictures*
Gulick, Luther Halsey G: 439
- Camp H. M. Smith** [Hawaii] C: 90
- Camp Lejeune** [North Carolina] C: 90
- Camp McDowell** [U.S. history]
Phoenix (History) P: 398-399
- Camp meeting** [religion] C: 90
Pioneer life in America (Religion) P: 484
- Camp Pendleton** [California] C: 90
- Campa Indians**
Indian, American picture on I: 176
- Campaign** [advertising]
Advertising (Creating advertisements) A: 76a
- Campaign** [glassmaking]
Glass (Melting) G: 215
- "Campaign, The"** [poem by Addison]
Addison, Joseph A: 47
- Campaign funds** [politics]
Election campaign (Campaign funds) E: 160
Federal Election Commission F: 63
Political party (Raising funds) P: 633
Taft, William Howard (Legislative achievements) T: 11
- Campaign medal**
Medals, decorations, and orders (Military awards) M: 355
- Campanella, Roy** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Campanella, Tommaso** [Italian philosopher]
Italian literature (The baroque period and the Age of Reason) I: 494
- Campanile** [architecture] C: 90
Bell (Uses of bells) B: 239
Tower T: 348
- Campanile of Saint Mark**
Venice (The city) V: 306 *with picture and map*
- Campanula** [plant] C: 90a *with picture*
- Campeau, Louis** [American pioneer]
Grand Rapids G: 309
- Campbell, Alex B.** [Canadian political leader]
Prince Edward Island (table) P: 791
- Campbell, Alexander** [American religious leader]
Disciples of Christ D: 223
- Campbell, Alexander** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935 *with picture*
- Campbell, Andrew J.** [American explorer]
Luray Caverns L: 526
- Campbell, Avril Phaedra** *See* Campbell, Kim in this index
- Campbell, Ben Nighthorse** [American political leader] C: 90a *with portrait*
- Campbell, Bennett** [Canadian political leader]
Prince Edward Island (table) P: 791
- Campbell, Bill** [American political leader]
Atlanta (The late 1900's) A: 861
- Campbell, Carroll A., Jr.** [American political leader]
South Carolina (table) So: 658
- Campbell, Colen** [Scottish architect]
Architecture (The Palladian Revival) A: 623
- Campbell, David** [American political leader]
Virginia (table) V: 417
- Campbell, Donald** [British boat racer] C: 90a
- Campbell, Douglas L.** [Canadian political leader]
Manitoba (table) M: 159
- Campbell, Earl** [American football player]
Football (table) F: 363
- Campbell, George T.** (father of)
Campbell, Kim (Early life) C: 90b-90c *with picture*
- Campbell, George W.** [American government official]
Treasury, Department of the (table) T: 407
- Campbell, Gordon** [Canadian political leader]
British Columbia (table) B: 627
- Campbell, Jack M.** [American political leader]
New Mexico (table) N: 272
- Campbell, James** [American government official]
Pierce, Franklin (table) P: 456
- Campbell, James E.** [American political leader]
Ohio (table) O: 699
- Campbell, Jane L.** [American political leader]
Cleveland (Recent developments) Ci: 663
- Campbell, John** [American publisher]
Journalism (Early American journalism) J: 174
Printing (Early printing in North America) P: 803
- Campbell, John Allen** [American government official]
Wyoming (Territorial progress) W: 534
- Campbell, John Archibald** [American jurist]
Hampton Roads Conference H: 37
Supreme Court of the United States (table) So: 1000
- Campbell, John D.** [harness driver]
Harness racing (History) H: 64
- Campbell, John Douglas Sutherland** [Canadian statesman]
Lorne, Marquess of L: 455
- Campbell, John W., Jr.** [American editor]
Science fiction (The Golden Age) S: 205
- Campbell, Joseph** [American scholar] C: 90a
- Campbell, Kim** [Canadian political leader] C: 90b *with pictures*
Canada, History of (The 1993 national election) C: 154
Chrétien, Jean (The 1993 election) C: 522c
Mulroney, Brian (The constitutional crisis) M: 918
- Campbell, Sir Malcolm** [British boat racer]
Campbell, Donald C: 90a
- Campbell, Mrs. Patrick** [British actress] C: 90d
- Campbell, Phyllis Cook** [mother of]
Campbell, Kim (Early life) C: 90b-90c
- Campbell, Robert** [American businessman]
Wyoming (Exploration) W: 533
- Campbell, Robert** [British explorer]
Yukon Territory (History) Y: 585
- Campbell, Thane A.** [Canadian political leader]
Prince Edward Island (table) P: 791
- Campbell, Thomas** [American religious leader]
Disciples of Christ D: 223
- Campbell, Thomas E.** [American political leader]
Arizona (table) A: 687
- Campbell, Thomas M.** [American political leader]
Texas (table) T: 203
- Campbell, Wilfred** [Canadian poet]
Canadian literature (Poetry: 1850-1918) C: 157-158
- Campbell, William B.** [American political leader]
Tennessee (table) T: 152
- Campbell, William Wallace** [American astronomer] C: 91
- Campbell-Bannerman, Sir Henry** [British political leader] C: 91
- Campbell pleid**
Tartan picture on T: 47
- Campeachy** [former city]
Laffite, Jean L: 28

- Campeche** [state, Mexico] C: 91
Campeche [city, Mexico]
 Campeche C: 91
Camparella jonquil [plant]
 Jonquil J: 159
Campasino [people]
 Bolivia (Way of life) B: 443
 Colombia (People) Ci: 779
 Latin America (Rural life) L: 97
Campfire
 Camping (Building a campfire) C: 94 *with picture*
Campground
 Forestry (Recreation areas) F: 407 *with picture*
Camphor [chemical] C: 91 *with picture*
 Plastics (The invention of Celluloid) P: 559
Camphor [tree]
 Camphor C: 91 *with picture*
Campin, Robert [Belgian painter] C: 91 *with picture*
Campine [region, Belgium]
 Belgium (The Kempenland) B: 230
Camping C: 92 *with pictures*
 Canoeing (Canoe camping) C: 181
 Hiking H: 230
 National Park System (Camping) N: 47
 Recreational vehicle R: 183
 Tent T: 171 *with pictures*
Camping trailer [vehicle]
 Recreational vehicle (Folding camping trailers) R: 184; *picture on R: 183*
 Trailer (Recreational trailers) T: 368
Campion, Thomas [English poet]
 English literature (Elizabethan poetry) E: 316
Campo, Rafael Martín del [Mexican author]
 Literature for children *picture on L: 355*
Campoamor, Ramón de [Spanish poet]
 Spanish literature (The 1800's) So: 761
Campobello Island [island, New Brunswick]
 New Brunswick (Places to visit) N: 188 *with picture*
 Roosevelt, Franklin Delano (Tragedy strikes) R: 455
 Roosevelt Campobello International Park R: 473
Campoformio, Treaty of [1797]
 Napoleon I (Victories in Italy) N: 15-16
Cámpora, Héctor José [Argentine political leader]
 Argentina (New political problems) A: 658-659
Camptosaurus [dinosaur]
 Dinosaur *picture on D: 207*
Campus [education]
 Universities and colleges (School organization) U: 208
Campus design prison
 Prison (Prison buildings) P: 806
Campus Martius [ancient Rome]
 Rome (Other remains) R: 433
Campus Martius [fort, Ohio]
 Ohio Company (The second Ohio Company) O: 705
Campus Martius Museum [Marietta]
 Ohio (Places to visit) O: 690
Campus school
 Laboratory school L: 16
Campylobacter [bacteria] C: 97
 Antibiotic (History) A: 552
 Food poisoning F: 340
Campylobacteriosis [illness]
 Campylobacter C: 97
Camshaft
 Gasoline engine (Camshaft) G: 64
Camus, Albert [French author] C: 97
 French literature (Existentialism) F: 523
 Novel (Existentialism) N: 574
Can [container]
 Food preservation (Canning) F: 341 *with picture*
 Packaging P: 18
 Tin can T: 294
Can buoy [navigation]
 Buoy B: 701 *with picture*
Can line [manufacturing]
 Tin can T: 294
Canaan [ancient region]
 See also Canaanites in this index
 Abraham A: 16
 Jews (Beginnings) J: 120-121; (The Exodus) J: 121
 Joshua J: 169
 Moses (Journey to Canaan) M: 829
Canaan dog C: 97
 Dog *picture on D: 276*
Canaanites [ancient people] C: 97
 Baal B: 2
 Deborah D: 65
 Palestine (Early history and settlement) P: 104 *with map*
 Phoenicia (Way of life) P: 393
Canada C: 98 *with pictures and maps*
 Agriculture
 Canada (Agriculture) C: 124
 Agriculture (Canada) A: 152
 Cooperative (In Canada) Ci: 1036
 Nunavut N: 608
 Wheat (table) W: 274 *with map*
 Art and architecture
 Canada (The arts) C: 109 *with pictures*
 Group of Seven G: 402
 Communications and mass media
 Encyclopedia (Today's encyclopedias) E: 268b
 Newspaper (In Canada) N: 386
 Radio (Government regulation of radio) R: 91
 Television (In Canada) T: 117
 Theater (Canada) T: 247
 Defense
 Civil defense (Civil defense in other countries) Ci: 606
 See also Canada, Armed Forces of in this index
 Education
 Canada (Education) C: 107
 Community college (Two-year colleges in Canada) Ci: 899
 Education (Education in Canada) E: 94; (Development of Canadian education) E: 101
 High school (High schools in other countries) H: 228
 Literacy (Literacy in Canada) L: 352
 School S: 180 *with picture*
 Teaching (Becoming a teacher) T: 67
 Finance and banking
 Bank (Canada) B: 92
 Bank of Canada B: 96
 Bankruptcy (In Canada) B: 97
 Dollar (The dollar in other countries) D: 295 *with picture*
 Money (The development of paper money) M: 706
 Money order (Canadian postal money orders) M: 719 *with picture*
 Government
 See Canada, Government of in this index
 Health and welfare
 Health insurance, National H: 129
 Illegal alien I: 51
 Managed care plans (In other countries) M: 131
 Medicine (Canada) M: 367; (Financing advanced medical care) M: 377
 Pure food and drug laws (Food and drug laws in Canada) P: 909
 Red Cross (The Canadian Red Cross) R: 186
 Social security (Social security in Canada) So: 556
 Unemployment insurance (Canadian plan) U: 24
 Welfare (Welfare around the world) W: 191
 History
 See Canada, History of in this index
 Labor
 Child labor (Canadian laws) C: 456
 Labor movement (In Canada) L: 14
 Unemployment (Unemployment in Canada) U: 23
 Language and literature
 See Canadian literature in this index
 Manufacturing
 Canada (Manufacturing) C: 122
 Electric power (In Canada) E: 186
 Manufacturing (In Canada) M: 169
 Petroleum (In Canada) P: 346
 Textile (In the United States and Canada) T: 218
 Mining
 Canada (Mining) C: 124
 Aluminum (In Canada) A: 396
 Copper (Leading producers) Ci: 1042
 Gold (World gold production) G: 253
 Mining (The mining industry) M: 577
 Nickel (Mining nickel) N: 404
 Silver (Leading silver-mining states and provinces) S: 463
 Uranium (Sources of uranium) U: 214
 Natural resources
 Conservation (Canada) Ci: 988
 Fishing industry (Inland fisheries) F: 182
 Forest products (The forest products industry) F: 403
 Lumber (Buying lumber) L: 521; (History) L: 521
 Petroleum (The United States and Canada) P: 333
 Soil *map on So: 575*
 Parks and monuments
 Canada (table: National parks and national park reserves) C: 113
 National park (Canada) N: 42c
 Park (Kinds of parks) P: 168
 People
 Canada (Population) C: 104
 Adoption (The adoption process) A: 66
 Bella Coola Indians B: 242
 Census (Modern censuses) C: 350
 Citizenship (Canadian citizenship) Ci: 571
 Civil rights (Civil rights in Canada) Ci: 610
 Housing (Housing since 1900) H: 391-392
 Indian, American (Native Americans today) I: 179
 Indian reservation I: 188
 Inuit I: 354 *with map*; (History) I: 354g; (The Inuit today) I: 354h-354i
 Montagnais Indians M: 741
 "O Canada" O: 635
 Police (In Canada) P: 623 *with picture*
 Sex discrimination (Changes in laws) S: 335-336
 Sexual harassment S: 337
 Standard of living (table) So: 834
 Time (Time zones in the United States and Canada) T: 289 *with map*
 Physical features
 Canada (The land) C: 112 *with pictures*
 Great Lakes G: 344 *with maps*
 Inland waterway (Great Lakes-St. Lawrence Seaway System) I: 274
 Klondike K: 344 *with picture and map*
 Rocky Mountains R: 394 *with picture and map*
 Saint Lawrence River S: 41
 Saint Lawrence Seaway S: 42 *with map*
 Soo Canals (The Canadian canal) So: 595 *with map*
 Recreation and sports
 Football (Canadian football) F: 364
 Hockey H: 274; (Beginnings) H: 281
 Lacrosse (History) L: 25
 Ringette R: 343
 Religion
 Canada (Religion) C: 108
 United Church of Canada U: 46
 Social and cultural life
 Ballet (Ballet in Canada) B: 54
 Foundations (Canadian foundations) F: 431
 Girl Scouts (Girl Guides of Canada-Guides du Canada) G: 198
 Holiday (In Canada) H: 291
 Library (Canadian government libraries) L: 249
 Marriage (Laws concerning marriage) M: 220
 Museum (Early Canadian museums) M: 940
 Remembrance Day R: 229
 Thanksgiving Day (Thanksgiving Day in Canada) T: 230
 Valentine's Day (In the United States and Canada) V: 261
 Women's movements (In Western societies) W: 386
 Transportation
 Canada (Transportation) C: 125
 Automobile (The rise of international automaking) A: 972
 Aviation (Aviation agencies) A: 985-986
 Railroad (Intercity trains) R: 105; (In Canada) R: 113
 Trans-Canada Highway T: 370
 Transportation (Passenger and freight carriers) T: 396

Technology and science

Astronaut (A look at the astronauts) A: 831

International Space Station I: 346b

See also the list of Related articles in the
Canada article**Canada, Armed Forces of C: 128 with pictures**

Air force picture on A: 182

Canada, Government of (Armed forces) C: 139

NORAD N: 453

Royal Canadian Legion R: 495

Royal Military College of Canada R: 498

Veterans' organizations (In Canada) V: 345

Canada, Constitution of See Constitution Act
in this index**Canada, Dominion of** [Canadian history]

British North America Act B: 632

Canada, History of (Confederation) C: 146;

(Growth of the Dominion) C: 147-149

Confederation of Canada Ci: 933; (Approval of
confederation) Ci: 934-935Macdonald, Sir John Alexander (Forming the
Dominion) M: 7

Manitoba (The Red River Rebellion) M: 160

Prince Edward Island (Self-government) P: 791

Quebec (Early years as a province) Q: 30; (The
1800's) Q: 37

Saskatchewan (North West Territories) S: 146

Canada, Federal Court of

Canada, Government of (The courts) C: 138

Canada, Government of C: 130 with pictures

Abortion (In other countries) A: 16

Bank of Canada B: 96

Bankruptcy (In Canada) B: 97

Bill of rights (Canada's Constitution) B: 301

Canada, Armed Forces of C: 128

Civil service (Civil service in other lands)
Ci: 613Foreign policy (Historical and social traditions)
F: 387; (Economic factors) F: 387

Governor general G: 294

Handgun (Gun control) H: 45

House of Commons H: 384

Impeachment (Canada and Australia) I: 92

Liberal Party L: 227

National debt N: 32; (table) N: 34

Naturalization (Naturalization in Canada) N: 67

New Democratic Party N: 203

North American Free Trade Agreement N: 470

Political party (Political parties in Canada)
P: 636

Postal services (Canadian mail service) P: 707

Prime minister of Canada P: 778c

Progressive Conservative Party P: 812

Senate (Senates in other countries) S: 296

Supreme Court of Canada So: 996 with pic-
tures

Taxation (Taxation in Canada) T: 55

Territory (Territories in Canada) T: 177

See also the list of Related articles in the
Canada, Government of, article**Canada, History of C: 140 with pictures and
maps**

Civil rights (Civil rights in Canada) Ci: 610

Confederation of Canada Ci: 933

Exploration (The French and English in North
America) E: 446-447Flag (Flags of the United States and Canada)
F: 208; (Flags of Canada) pictures on
F: 214Franklin, Benjamin (A delegate in London)
F: 490

Fur trade F: 564

Governor general G: 294

Great Depression (In Canada) G: 342

Immigration (Canada) I: 84

Indian, American (Peoples of the Arctic) I: 152
with picture; (Indians of the Subarctic)
I: 153; (The destruction of Indian America)
I: 177-178; (Indians in the early and mid-
1900's) I: 178b; (Native Americans today)
I: 180Law (The development of Canadian law)
L: 136

Métis M: 435

New France N: 204 with picture

Northwest Passage N: 528

Prairie Provinces P: 733

Prime minister of Canada (History) P: 779

Quebec, Battle of Q: 37

Roman Catholic Church (In Canada) R: 411

School (History of Canadian schools) S: 185

Seigneurial system S: 287

Space exploration (Canada) So: 727

Torrens system (In Canada) T: 340d

Trading post T: 366

Tupper, Sir Charles T: 493

United Empire Loyalists U: 47

World War II (In the United States and
Canada) W: 494See also the list of Related Articles in the
Canada, History of article**Canada, Order of** [award]Medals, decorations, and orders (table) M: 359
with picture**Canada, Province of** [Canadian history]

Quebec Conference Q: 38

Canada, River of

Saint Lawrence River (History) S: 42

Canada, Supreme Court of

Canada, Government of (The courts) C: 138

Canada balsam [tree product]

Balsam fir B: 64

Canada Day [holiday] C: 156**"Canada First"** [Canadian history]

Mair, Charles M: 94

Canada goose [bird] C: 156

Bird (Birds of the Arctic) B: 343 with picture

Goose (Kinds of geese) G: 270 with picture

Canada hemp [plant]

Dogbane D: 283

**Canada Institute for Scientific and Technical
Information**

Library (Canadian government libraries) L: 249

Canada Mortgage and Housing Corporation

Housing (Housing since 1900) H: 391-392

Canada Pension PlanSocial security (Social security in Canada)
So: 556**Canada Post Corporation**

Postal services (Canadian mail service) P: 707

Canada Temperance Act [1878]

Prohibition (Prohibition in Canada) P: 816

Canada thistle [plant] C: 156

Thistle T: 260

Canada's Breadbasket

Saskatchewan S: 128

Canada's Sun Parlor [region]

Ontario (Visitor's guide) O: 774

Canadian Alliance [political party] C: 156Canada, Government of (Political parties)
C: 138-139Canada, History of (The 1997 and 2000 nation-
al elections) C: 154

Chrétien, Jean (Prime minister) C: 522c-522d

Day, Stockwell D: 52

Harper, Stephen Joseph H: 65

Political party (Other parties) P: 636-637

Canadian Armed Forces See Canada, Armed
Forces of in this index**Canadian Association of Rocketry**Rocket, Model (Model rocket clubs and com-
petition) R: 393**"Canadian Authors Meet, The"** [poem by
Scott]Canadian literature (Literature between the
world wars) C: 159**Canadian Automobile Sports Club**Automobile racing (Racing organizations)
A: 976**Canadian bacon** [food]

Bacon B: 18

Canadian Basin [geography]Arctic Ocean (Depth and the ocean floor)
A: 642 with map**Canadian Blood Services**

Red Cross (Health services) R: 186

Canadian Boating Federation

Motorboat racing M: 876

Canadian Boxing Federation

Boxing (Regulation) B: 532

Canadian Broadcasting Corporation C: 156

Canada (Television and radio) C: 126

Clarkson, Adrienne Ci: 642

Quebec (Communication) Q: 28-29

Radio (Government regulation of radio) R: 91

Television (In Canada) T: 117

Canadian Centre for Philanthropy [organiza-
tion]

Foundations F: 429

Canadian Charter of Rights and Freedoms[1982] See Rights and Freedoms, Charter of
in this index**Canadian content quota**

Canada (Communication) C: 126-127

Canadian Currency Act [1871]

Legal tender L: 183

Canadian Dental Association

Dentistry (Organizations) D: 145

Canadian Education Association C: 156

Teaching (Teachers organizations) T: 69

Canadian fivepins

Bowling (Canadian fivepins) B: 524

Canadian flagCanada, History of (The return of the Liberals)
C: 152 with picture

Flag (Displaying the flag) F: 218

Canadian Food and Drugs Act [1920]Pure food and drug laws (Food and drug laws
in Canada) P: 909**Canadian football**Football (Canadian football) F: 364 with dia-
gram

Grey Cup G: 391

Canadian Football Hall of Fame and Museum
[Ontario]

Hamilton (The city) H: 30 with map

Canadian Football League

Football (Canadian football) F: 364

Grey Cup G: 391

Canadian Forces Communication CommandCanada, Armed Forces of (Organization)
C: 128**Canadian Forces Europe**Canada, Armed Forces of (Organization)
C: 128**Canadian Forest Service**

Forestry (History) F: 408

Canadian 4-H Council

4-H (4-H sponsors) F: 435-436

Canadian Group of Painters [art]

Group of Seven G: 403

Canadian hemlock [tree]

Hemlock H: 182

Tree pictures on T: 425

Canadian heritage, Minister of [office]Canada, Government of (The Cabinet) C: 132;
diagram on C: 137**Canadian Hockey Association**Hockey (Amateur organization) H: 280;
(Amateur development) H: 281-282**Canadian Hockey League**

Hockey (Professional leagues) H: 279

Canadian Labour Congress [labor union]Labor movement (In Canada) L: 14
Union of Needletrades, Industrial and Textile
Employees U: 27**Canadian Legion, Royal** [organization]

Veterans' organizations (In Canada) V: 345

Canadian Library Association C: 156**Canadian literature** C: 157 with pictures
See also the list of Related Articles in the
Canadian literature article**Canadian Living**

Magazine (table) M: 45

Canadian lynx [wildcat]

Lynx L: 536

Wildcat W: 301

Canadian Marconi Company

Quebec (Communication) Q: 28-29

Canadian Medical Association

Medicine (Medical organizations) M: 370

Tupper, Sir Charles (Family background) T: 493

Canadian Mounted Police See Royal Canadian
Mounted Police in this index**Canadian National Exhibition**

Toronto (Landmarks) T: 336-337

Canadian National Railway Company

British Columbia (Transportation) B: 627

Canada (Transportation) C: 125-126

Montreal (Transportation) M: 775-776

Railroad (In Canada) R: 113

Canadian Northern Railway

Edmonton (History) E: 85

Canadian Pacific Railway Company

Canada (Transportation) C: 125-126

Greater Sudbury G: 350

Abbott, Sir John Joseph Caldwell (The Pacific
Scandal) A: 6British Columbia (Transportation) B: 627; pic-
ture on B: 629

Calgary (Economy) C: 34

Macdonald, Sir John Alexander (National pros-
perity) M: 10, pictures on M: 9

- Mackenzie, Alexander (The Pacific Railway dispute) M: 22
 Ontario (Progress as a province) O: 786
 Railroad (In Canada) R: 113; (The first transcontinental rail lines) R: 116
 Regina (History) R: 206
 Saskatchewan (North West Territories) S: 146
 Tupper, Sir Charles (Federal offices) T: 494
- Canadian Police College**
 Royal Canadian Mounted Police (Organization and duties) R: 495
- Canadian Radio-television and Telecommunications Commission**
 Canada (Television and radio) C: 126-127
 Radio (Government regulation of radio) R: 91
- Canadian Red Cross**
 Red Cross (The Canadian Red Cross) R: 186
- Canadian Reform Conservative Alliance** [political party] See *Conservative Alliance in this index*
- Canadian Rockies** [mountains, Canada]
 Canada (The Rocky Mountains) C: 115 *with picture*
 North America *picture on* N: 458
 Rocky Mountains R: 394 *with picture and map*; (Chief ranges of the Rockies) R: 395
- Canadian Shield** [region, Canada-U.S.] C: 161
 Alberta (Land regions) A: 322
 Canada (The Canadian Shield) C: 117 *with map*
 Manitoba (Land regions) M: 154; *picture on* M: 156
 Newfoundland and Labrador (Land regions) N: 370
 North America (Land regions) N: 462-464
 Ontario (Land regions) O: 776
 Quebec (Land regions) Q: 22; (Natural resources) Q: 26; *picture on* Q: 24
 Saskatchewan (Land regions) S: 138
- Canadian Soccer Association**
 Soccer (Soccer competition) So: 548; (History) So: 549
- Canadian transcontinental railroad**
 Abbott, Sir John Joseph Caldwell (Early political career) A: 5-6
- Canadian Transport Commission**
 Aviation (Aviation agencies) A: 985-986
 Railroad (In Canada) R: 113
- Canadian Union Catalogue**
 Library (Canadian government libraries) L: 249
- Canadian whisky**
 Whiskey W: 282
- Canadian Wildlife Service**
 Bird (Bird study and protection) B: 367; (Birdbanding) B: 368
- Canadian Youth Hostels**
 Youth hostel Y: 574
- Canadiana** [magazine]
 Library (Canadian government libraries) L: 249
- Canadiana Suite** [music by Peterson]
 Peterson, Oscar P: 325
- Canadiens, Montreal**
 Hockey (table: National Hockey League) H: 281
 Montreal (Sports) M: 775 *with picture*
- Canaima National Park** (Venezuela)
 National park (table) N: 42g
- Canal** [Mars]
 Mars (Observation from Earth) M: 226c
- Canal** [waterway] C: 162 *with pictures*
 Fulton, Robert (The inventor) F: 555
 Irrigation (Bringing irrigation water to farms) I: 457 *with picture and map*
 Transportation (Development of inland transport) T: 389
 United States, History of the (Expansion and the economy) U: 168-169
- Canal du Midi** [waterway, France]
 Canal (History) C: 164
- Canal Park Marine Museum** [Duluth]
 Minnesota (Museums) M: 589
- Canal Street**
 New Orleans (Downtown New Orleans) N: 279
- Canal Zone** See *Panama Canal Zone in this index*
- Canalized river**
 Canal C: 162
- Cananaean** [apostle] See *Simon, Saint in this index*
- Canarsie Indians**
 Brooklyn B: 640
- Canary** [bird] C: 164 *with picture*
 Bird (As pets) B: 331 *with picture*
 Pet (Pets for the home) P: 319-320
- Canary, Martha** [American frontierswoman] See *Calamity Jane in this index*
- Canary Current**
 Ocean (Circulation) O: 656
- Canary Islands** [islands, Atlantic] C: 165 *with picture*
 Columbus, Christopher (Sailing west) Ci: 860
 Spain (The Canary Islands) So: 741
- Canary Wharf** [district]
 London (Dealing with problems) L: 442-443
- Canasta** [game] C: 166
 Card game C: 208
- Canaveral, Cape** See *Cape Canaveral in this index*
- Canaveral National Seashore** (Florida)
 National Park System (table: National seashores) N: 57
- Canberra** [Australia] C: 166 *with picture*
 Australia *picture on* A: 897; (City life) A: 902 *with picture*
- Canby, E. R. S.** [Union general]
 Captain Jack C: 199
 Farragut, David Glasgow F: 47
- Canby, William J.** [grandson of Betsy Ross]
 Flag (First United States flags) F: 208-210
 Ross, Betsy R: 483
- Cancellation** [mail]
 Stamp collecting (Cancellations) So: 830
- Cancellation** [mathematics] C: 166
 Fraction (Calculations using fractions) F: 448
- Cancellation** [physics]
 Interference I: 324 *with diagram*
- Cancellation** [sports]
 Horseshoe pitching (Scoring) H: 369
- Cellulose tissue** [anatomy]
 Bone (Structure of the bones) B: 456 *with diagram*
- Cancer** [astrology] C: 174 *with picture*
 Zodiac (The zodiac in astrology) Z: 601 *with picture*
- Cancer** [constellation]
 Tropic of Cancer T: 450
- Cancer** [disease] C: 167 *with pictures*
 See also Breast cancer; Cervical cancer; Colon cancer; Hodgkin's disease; Leukemia; Ovarian cancer; Prostate cancer *in this index*
 AIDS (Opportunistic illnesses) A: 163
 Antibiotic (Other kinds of antibiotics) A: 550
 Artificial sweetener A: 761
 Biopsy B: 326
 Bladder B: 395
 Bone marrow transplant B: 457
 Brain (Tumors) B: 557
 Cell (Cancer) C: 336
 Chemotherapy C: 407
 Circumcision Ci: 561
 Clone Ci: 684
 DES D: 153
 Disease (Cancer) D: 229
 Epithelioma E: 345
 Eye (Diseases of the uveal tract) E: 467; (Diseases of the retina) E: 467-468
 Hormone replacement therapy H: 338
 Laetrile L: 26
 Malignancy M: 110
 Mastectomy M: 296
 Monoclonal antibody M: 731
 Monod, Jacques Lucien M: 731
 Nutrition (Cancer) N: 630
 Oncology O: 761
 Pap test P: 132
 Radon (How radon affects health) R: 100
 Skin cancer S: 491
 Smoking (Why smoking is dangerous) S: 520
 Taxol T: 56
 Teeth (Oral cancer) T: 86
 Thalidomide T: 229
 Tumor T: 484
 X rays X: 540
- Cancer, Tropic of** [geography] See *Tropic of Cancer in this index*
- Cancer Control Month**
 Cancer Society, American C: 174
- Cancer Society, American** C: 174
- Cancer Ward** [book by Solzhenitsyn]
 Solzhenitsyn, Alexander So: 587
- Cancha** [arena]
- Jai alai J: 21
- Cancionero de Baena** [poetry]
 Spanish literature (The 1400's) So: 758
- Cancionero de Stúñiga** [poetry]
 Spanish literature (The 1400's) So: 758
- Cancún** [city, Mexico] C: 174
- Candela** [unit of measure] C: 175
 Foot-candle F: 353
 Light (The brightness of light) L: 291 *with diagram*
 Metric system (Structure of the metric system) M: 437; (Light) M: 440
- Candela, Félix** [Mexican architect]
 Mexico (Architecture) M: 459
- Candida** [fungus]
 Fungal disease (In people) F: 558
 Vaginitis V: 260
- Candidate** [politics]
 Political convention P: 628
 Political party (Selecting candidates) P: 631
 Primary election P: 777
- Candidate primary** [election]
 Political convention (Delegate selection) P: 628-629
- Candide** [book by Voltaire]
 Voltaire V: 446
 French literature (The Age of Reason) F: 520
- Candide** [musical]
 Bernstein, Leonard B: 271
- Candiru** [fish]
 Catfish C: 301
- Candle C:** 175 *with picture*
 Easter (Easter symbols) E: 43
 Invention *picture on* I: 356
 Lamp (Fat or oil lamps) L: 52 *with picture*
 Tallowtree T: 21
- "Candle in the Wind"** [song]
 John, Elton J: 133
- Candle millet** [grain]
 Millet M: 555
- Candle power** [unit of measure]
 Candela C: 175
- Candlefish** [fish] See *Eulachon in this index*
- Candlemas Day** [custom] C: 175
- Candlepins** [game]
 Bowling (Other kinds of bowling) B: 525
- Candler, Allen D.** [American political leader]
 Georgia (table) G: 130
- Candler, Asa G.** [American businessman]
 Coca-Cola Company C: 742
- Candlestick**
 Colonial life in America *picture on* Ci: 808
- Candlewood** [shrub]
 Ocotillo O: 669 *with picture*
- Candling**
 Chicken (Producing eggs) C: 443-445 *with picture*
 Poultry (Marketing poultry and eggs) P: 721
- Candomblé** [religion]
 Brazil (Religion) B: 575
- CANDU heavy water reactor**
 Nuclear energy (Organization of the industry) N: 589
- Candy C:** 175 *with picture*
- Candytuft** [plant] C: 177 *with picture*
- Cane** [book by Toomer]
 American literature (The Harlem Renaissance) A: 422
 Toomer, Jean T: 331
- Cane Creek Falls** [Tennessee]
 Tennessee *picture on* T: 146
- Cane juice**
 Sugar (Making cane sugar) So: 960 *with diagram*
- Cane River Creole National Historical Park** (Louisiana)
 National Park System (table: National historical parks) N: 56
- Cane sugar**
 Sugar (Making cane sugar) So: 960 *with diagram*; (Sugar from sugar cane) So: 961
 Sugar cane So: 962
- Cane toad** [animal] C: 177
 Toad (Kinds of toads) T: 304
- Canebrake** [thicket]
 Bamboo B: 71
- Canebrake rattlesnake**
 Snake *picture on* S: 533
- Canella** [people]
 Gê Indians G: 75
- Canetti, Elias** [Bulgarian-born author]

Nobel Prizes (Literature: 1981) N: 446

Canfranc Tunnel [France-Spain]

Pyrenees P: 920

Canine See Dog in this index

Canine parvovirus [disease] C: 177

Canine teeth [anatomy]

See also Fang [zoology] in this index

Animal (Teeth and jaws) A: 491 with picture

Dog (Body structure) D: 264-265

Hippopotamus (The body of a river hippopotamus) H: 240 with picture

Lion (The body of a lion) L: 340-341 with picture

Mammal (What mammals eat) M: 121 with diagrams

Teeth (Deciduous teeth) T: 79; (Permanent teeth) T: 79 with pictures

Canio [opera character]

Opera (*Pagliacci*) O: 806; picture on O: 805

Canis Major [constellation]

Sirius S: 475

Canisius, Saint Peter [German religious leader] C: 177

Canister [medicine]

Bronchodilator B: 636

Cankar, Ivan [Slovenian author]

Slovenia (People) S: 511

Canker sore [disorder] C: 177

Cankerworm [insect] C: 177 with picture

Moth (Measuringworm moths) M: 841 with picture

Canna [plant] C: 178 with picture

Flower picture on F: 279

Cannabis [plant]

Marijuana M: 201

Cannae [ancient city]

Hannibal (His military campaigns) H: 52

Cannes [France] C: 178

Cannibal C: 178

Carib Indians C: 236

Pacific Islands (Religions) P: 5

Canning [food processing]

Food preservation (Canning) F: 341 with pictures

Beef (Grades of beef) B: 209

Botulism B: 514

Fishing industry (Methods of processing) F: 186

Salmon (Salmon fishing) S: 70

Canning, George [British diplomat]

Adams, John Quincy (Secretary of state) A: 42

Castlereagh, Viscount C: 282

Peel, Sir Robert P: 229

United Kingdom (table: British prime ministers) U: 72

Cannister cleaner

Vacuum cleaner V: 257 with picture

Cannizzaro, Stanislao [Italian chemist] C: 179

Cannon [weapon] C: 179 with picture

Army (Armies in the Middle Ages) A: 727

Army, United States picture on A: 730

Artillery (How artillery is made) A: 763 with picture

Revolutionary War in America (Weapons and tactics) R: 279 with picture

Cannon [zoology]

Horse (Legs and hoofs) H: 349

Cannon, Annie Jump [American astronomer] C: 179

Cannon, Billy [American football player]

Football (table) F: 363

Cannon, Joseph Gurney [American political leader] C: 179

Speaker (In the United States) So: 768

Taft, William Howard (Legislative defeats) T: 10-11

Cannon, Newton [American political leader]

Tennessee (table) T: 152

Cannon, Walter B. [American physiologist]

Emotion (Early theories about emotions) E: 261

Cannon, William [American political leader]

Delaware (table) D: 109

Cannon-ball tree C: 179 with picture

Cannon-Bard Theory of Emotions

Emotion (Early theories about emotions) E: 261

Cannon House Office Building [Washington, D.C.]

Washington, D.C. map on W: 76

Cannon Mountain

New Hampshire (Mountains) N: 220

Cannonball Express [train]

Jones, Casey J: 157

Canonism [U.S. history]

Taft, William Howard (Legislative defeats) T: 10-11

Cano, José Luis [Spanish poet]

Spanish literature (Spanish literature today) So: 763

Cano, Juan Sebastián del [Spanish explorer]

Exploration map on E: 443; (Magellan's globe-circling expedition) E: 445

Magellan, Ferdinand (The end of the voyage) M: 47

Canoe

Birch (Paper birch) B: 327

Boating (Types of boats) B: 428; (Early boats) B: 431 with picture

Canoeing (Canoes) C: 180 with picture

Frontenac, Comte de picture on F: 541

Indian, American (Transportation) I: 142;

(Before European contact) I: 162-163 with picture; picture on I: 154

Ohio (Interesting facts) O: 681 with picture

Outrigger O: 880

Pirogue P: 496

Transportation (Water transportation) T: 384-385

Canoe birch [tree]

Birch (Paper birch) B: 327 with pictures

Canoeing [sport] C: 180 with pictures

Kayak K: 250

Olympic Games (Summer Olympic Games) O: 746e-746f

Canola oil [vegetable oil] C: 182

Rape (plant) R: 142

Vegetable oil V: 294

Cañon See Canyon in this index

Canon [music] C: 182

Counterpoint C: 1097

Desprez, Josquin D: 161

Canon [religion]

Bible B: 279

New Testament (Books) N: 287

Saint (Christian saints) S: 29

Canon law [religion]

Law (The Middle Ages) L: 134

Canon of Medicine [book by Avicenna]

Avicenna A: 993

Medicine (During the Middle Ages) M: 373

Science (The Middle Ages) S: 197

Canonical hour [religion]

Hour H: 379

Canonicus [American Indian chief]

Rhode Island (Settlement) R: 312

Canonization [religion] C: 183

Saint (Christian saints) S: 29; (Roman Catholic saints) S: 30

Canons of Ethics of Engineers

Engineering (Professional organizations and standards) E: 289-290

Canopus

Star (table: The 10 brightest stars as seen from Earth) So: 842

Canopus in Argos: Archives [books by Lessing]

Lessing, Doris L: 208

Canopy

Parachute (Parts of a parachute) P: 142 with picture

Canopy [forest]

Amazon rain forest A: 401

Animal (Animals of the tropical forests) A: 480

Forest (The canopy) F: 391 with picture

Rain forest (Structure and growth) R: 126a

Canossa [Italy]

Gregory VII, Saint G: 387

Canova, Antonio [Italian sculptor] C: 183 with picture

Sculpture (European sculpture) S: 253-254

Canso Causeway

Nova Scotia (The early to middle 1900's) N: 570

Canso d'amor [poetry]

Troubadour T: 453

Cant [lumber]

Lumber picture on L: 520

Cantabile

Music (table) M: 954; (Indicating expression) M: 955

Cantabrian Mountains

Spain (The Northern Mountains) So: 740,

(Natural resources) So: 743

Cantabrian Sea

Bay of Biscay B: 176

Cantaloupe [fruit]

Muskmelon M: 963 with picture

Cantate [music] C: 183

Classical music (Oratorios) Ci: 644

Cantell, Kari J. [Finnish biologist]

Interferon I: 324

Canter [gait]

Horse (Gaits) H: 353

Canterbury [England] C: 183

England (The Germanic invasions) E: 304

Canterbury, Archbishop of See Archbishop of Canterbury in this index

Canterbury bell [plant] C: 183

Flower picture on F: 277

Canterbury Cathedral

England picture on E: 298

Canterbury Female Boarding School

Crandall, Prudence Ci: 1117

Canterbury Plains

New Zealand (The South Island) N: 351-352 with map

Canterbury Tales [stories by Chaucer] C: 183

with picture

Chaucer, Geoffrey (Life) C: 388; (Poetry) C: 388

English literature (The age of Chaucer) E: 316

Short story S: 434

Canth, Minna [Finnish dramatist]

Finland (The arts) F: 112

Cantharidin [chemical]

Spanishfly So: 764

"Cantic of the Sun" [poem by Francis of Assisi]

Francis of Assisi, Saint F: 482

Italian literature (The Middle Ages) I: 494

Canticles [Old Testament]

Song of Solomon So: 592

Cantilever [architecture] C: 184

Architecture (table) A: 608 with picture

Bridge (Cantilever bridges) B: 601 with diagram

Cantilever arm [architecture]

Bridge (Cantilever bridges) B: 601 with diagram

Cantilever bridge

Bridge (Cantilever bridges) B: 601 with diagram

Cantilever C: 184

Cantilever wing

Airplane (World War I [1914-1918]) A: 234-235; (The wing) A: 213; picture on A: 232

Cantiones sacrae [music by Byrd]

Tallis, Thomas T: 21

Cantle [riding equipment]

Cowboy (His saddle) Ci: 1109

Saddle S: 8 with pictures

Canto [poetry]

Divine Comedy D: 242

Canton [China] See Guangzhou in this index

Canton [Ohio] C: 184

Canton [flag]

Flag diagram on F: 194

Cantonment [city district]

India (City life) I: 115

Cantor [religion]

Judaism (The cantor) J: 180

Cantor, Georg [German mathematician]

Fractal F: 443

Mathematics (In the 1800's) M: 307

Set theory (History) S: 322

Cantoria [sculpture by Della Robbia]

Della Robbia, Luca D: 117

Cantos [poem by Pound]

American literature (Modernist poetry) A: 421

Pound, Ezra Loomis P: 722

Cantril, Hadley [American psychologist]

Communication (The effects of media) Ci: 887

Canuck, Janey [pen name]

Murphy, Emily Gowan M: 931

Canucks, Vancouver

Hockey (table: National Hockey League) H: 281

Vancouver (Sports) V: 277

Canute [king of England] C: 184

England (The Anglo-Saxon period) E: 304-305

Vikings (The Danish Vikings) V: 383

Canvas [fabric] C: 184

Needlepoint N: 118 with picture

- Painting (Supports) P: 36
Tent (Kinds of tents) T: 171
- Canvasback** [bird] C: 184 *with picture*
Bird (Birds of inland waters and marshes) B: 340 *with picture*
- Canvass** [voting]
Election campaign (Getting out the vote) E: 160-161
- Canyon** [natural feature] C: 185
Atlantic Ocean (The Atlantic seafloor) A: 864
Mars (Canyons) M: 226
Ocean (The continental slope) O: 662
River (Canyons) R: 352
Valley (Kinds of valleys) V: 265
- Canyon de Chelly National Monument** [Arizona] C: 185 *with picture*
Arizona (Places to visit) A: 678
Indian wars (Navajo conflicts) I: 195
National Park System (table: National monuments) N: 50
- Canyonlands National Park** [Utah] C: 185
National Park System (table: National parks) N: 48
Utah *picture on* U: 246
- Canzio, Michele** [Italian sculptor]
Genoa (The city) G: 89
- Canzona** [music]
Classical music (Instrumental music) Ci: 646
- Canzoniere** [poems by Petrarch]
Petrarch P: 327
Italian literature (Humanism and the Renaissance) I: 494
- Cão, Diogo** [Portuguese navigator]
Congo River C: 940f
- Cao Dai** [religion]
Vietnam (Religion) V: 366
- Cao Xueqin** [Chinese author]
Chinese literature (Drama and fiction) C: 512
- Caoutchouc**
Rubber (First uses) R: 500-501
- CAP** [aeronautics] See Civil Air Patrol *in this index*
- Cep** [botany]
Mushroom (Parts of a mushroom) M: 941 *with picture*; (How a mushroom grows) M: 942 *with pictures*
- Cep** [clothing]
Hat H: 83
- CAP** [policy] See Common Agricultural Policy *in this index*
- Cep-Haïtien** [Haiti] C: 185
Columbus, Christopher (The first landing) Ci: 860-861
- Capablanca, José R.** [Cuban chess player]
Chess (World chess champions) C: 414
- Capacitance** [electricity]
Capacitor (Capacitance) C: 186
- Capacitor** [electricity] C: 186 *with pictures*
Ceramics (Kinds of ceramic products) C: 359
Computer chip (Structure) Ci: 924e
Electronics (Passive components) E: 212
Microphone (Capacitor microphones) M: 517
Television (The television camera) T: 121-122
- Capacity-building assistance** [social work]
National Council of La Raza N: 32
- Capacity measure**
Metric system (The metric system at a glance) M: 438 *with pictures*; (Metric conversion table) M: 439 *with pictures*
Weights and measures (table: Volume and capacity) W: 186
- Cape** [geography] C: 186 *with picture*
- Cape Breton Development Corporation**
Nova Scotia (The early to middle 1900's) N: 570
- Cape Breton Highlands National Park** [Nova Scotia]
Canada (table: National parks and national park reserves) C: 113
Nova Scotia (Places to visit) N: 560
- Cape Breton Island** [Nova Scotia] C: 187 *with maps*
Nova Scotia (Rivers and lakes) N: 562; *picture on* N: 564; (The struggle in Acadia) N: 568; (The early to middle 1900's) N: 570
- Cape buffalo** [animal]
Animal *picture on* A: 494
Buffalo B: 674 *with picture*
Water buffalo W: 133
- Cape Canaveral** [region, Florida] C: 187
- Cape C: 186
Florida (The mid-1900's) F: 264 *with picture*
Kennedy Space Center K: 270 *with map*
Patrick Air Force Base P: 197
- Cape Cod** [region, Massachusetts] C: 188 *with map*
Cape C: 187
Massachusetts (Places to visit) M: 280 *with picture*
- Cape Cod Canal** [waterway, Massachusetts] C: 188
Canal (table) C: 164
- Cape Cod National Seashore**
Massachusetts (Places to visit) M: 280
National Park System (table: National seashores) N: 57
- Cape Colony** [South African history]
Rhodes, Cecil John (Gains Rhodesia) R: 317; (Conflict with the Boers) R: 317
South Africa (Arrival of Europeans) So: 617-618
- Cape Columbia** [Canada]
Peary, Robert Edwin ("The Pole at last!") P: 224
- Cape Diamond** [region, Quebec]
Quebec (The city) Q: 34
- Cape Eternity** [region, Quebec]
Saguenay River S: 20
- Cape Fear River**
North Carolina (Rivers, waterfalls, and lakes) N: 484
- Cape Foulweather** [region, Oregon]
Cape C: 186
- Cape Hatteras** [region, North Carolina] C: 188
North Carolina N: 472-473 *with picture*
- Cape Hatteras National Seashore** [North Carolina]
National Park System (table: National seashores) N: 57
- Cape Henlopen** [region, Delaware]
Delaware Bay D: 114
- Cape Horn** [region, Chile] C: 188 *with maps*
- Cape jasmine** [plant]
Gardenia G: 29
- Cape Kennedy** See Cape Canaveral *in this index*
- Cape Krusenstern National Monument** [Alaska]
National Park System (table: National monuments) N: 50
- Cape leadwort** [plant]
Plumbago P: 577
- Cape Lookout National Seashore** [North Carolina]
National Park System (table: National seashores) N: 57
- Cape May** [New Jersey]
New Jersey *picture on* N: 234
- Cape Morris Jesup** [region, Greenland]
Greenland G: 383 *with map*
- Cape Mountains** [South Africa]
South Africa (The Cape Mountains Region) So: 615 *with map*
- Cape of Good Hope** [region, South Africa] C: 188 *with maps*
Cape Province C: 189
Da Gama, Vasco D: 3
Dias, Bartolomeu D: 185
Exploration (Reaching the tip of Africa) E: 443-444
Portugal (The age of exploration) P: 693
- Cape of Storms**
Cape of Good Hope C: 188
- Cape Peninsula** [region, South Africa]
Cape of Good Hope C: 188
- Cape Point**
Cape of Good Hope C: 188
- Cape Province** [region, South Africa] C: 188
- Cape Puget** [region, Alaska]
Puget, Peter P: 886
- Cape Saint Mary's Ecological Reserve** [Newfoundland and Labrador]
Newfoundland and Labrador (Places to visit) N: 368 *with picture*
- Cape Saint Vincent, Battle of** [1797]
Nelson, Horatio (Wounded at Calvi) N: 122
- Cape Spear** [park, Newfoundland]
Canada (table: National historic sites) C: 114
- Cape Town** [South Africa] C: 189 *with picture*
South Africa (Government) So: 608 *with picture*
- Cape Trinity** [region, Quebec]
- Saguenay River S: 20
- Cape Verde** [Africa] C: 189 *with pictures and map*
Flag *picture on* F: 198
Guinea-Bissau (History) G: 434
Portugal (Empire and wealth) P: 693-694 *with map*
- Cape Verde Islands** See Cape Verde *in this index*
- Cape York** [region, Greenland] C: 191
- Čapek, Josef** [Czech author]
Čapek, Karel C: 191
- Čapek, Karel** [Czech author] C: 191
Science fiction (The early 1900's) S: 205
- Capelin** [fish] C: 191
- Capella** [star]
Star (table: The 10 brightest stars as seen from Earth) So: 842
- Caper** [plant] C: 191 *with picture*
- Caper bush** [plant]
Caper C: 191 *with picture*
- Capernaum** [ancient city]
Galilee G: 10
Jesus Christ (Ministry) J: 106
- Caperton, Gaston** [American political leader]
West Virginia (table) W: 225
- Capet, Hugh** See Hugh Capet *in this index*
- Capet, Widow**
Marie Antoinette (Downfall of the monarchy) M: 200
- Capetian dynasty** [French history] C: 191
France (The Capetian dynasty) F: 471 *with map*; (Growth of royal power) F: 472 *with map*
- Capillarity** [physics] C: 191 *with diagram*
Pen (Fountain pens) P: 233
Surface tension So: 1003
Water (The properties of water) W: 129-130
- Capillary** [anatomy] C: 192
Allergy (How an allergy develops) A: 373
Blood (What blood does in the body) B: 408 *with pictures*
Brain (How the brain is protected) B: 552
Circulatory system (The blood vessels) Ci: 559 *with picture*
Heart (Discovery of circulation) H: 144
Human body (The blood vessels) H: 421
Kidney (How the kidneys produce urine) K: 311-312 *with diagram*
Lung (Gas exchange in the lungs) L: 523-524 *with diagram*
Lymphatic system L: 533; *diagram on* L: 534
Respiration (Structures of breathing) R: 260
Vein V: 295
- Capistrano**
San Juan Capistrano S: 103
- Capital** [architecture]
Architecture (table) A: 608 *with picture*
Column Ci: 865 *with pictures*
- Capital** [economics] C: 192
Bank (Banks throughout the world) B: 91
Capitalism (How capitalism differs from central planning) C: 193-194
Economics (Making the economy grow) E: 59
Flat tax F: 228
Industrial Revolution (The role of capital) I: 251
Industry (Capital) I: 257
- Capital account** [economics]
Balance of payments (How the balance of payment is determined) B: 35
Capital C: 192
- Capital asset pricing model**
Capital C: 192
- Capital budget**
Budget (A capital budget) B: 671
- Capital gains** [economics]
Capital gains tax C: 192
Flat tax F: 228
Income tax (Defining taxable income) I: 102-103
Investment (Stocks) I: 368
- Capital gains tax** C: 192
- Capital goods**
Economics (Making the economy grow) E: 59
Industry (Capital) I: 257; (Other systems of classification) I: 261
Investment I: 366
Manufacturing (Kinds of manufacturing) M: 169
- Capital market**
Capital C: 192

Capital punishment [law] C: 193

Colonial life in America (Crime and punishment) Ci: 795-796

Electrocution E: 200

Gas chamber G: 60

Illinois (Recent developments) I: 76

Lethal injection L: 209

Supreme Court of the United States (Criminal law) So: 1001

Capital ship

Warship (The age of sailing ships) W: 41

Capital stock See Stock, *Capital in this index***Capitalism** [economics] C: 193See also Free enterprise system *in this index*

Communism (The ideas of Marx) Ci: 890

Economics (Capitalism) E: 59; (Government and the U.S. economy) E: 62

Industrial Revolution I: 246; (The role of capital) I: 251

Lenin, V. I. L: 191

Liberalism (Early liberalism) L: 228

Marx, Karl M: 236

Protestant ethic P: 833

Smith, Adam S: 515

Syndicalism So: 1067

Trade (Trade in the United States) T: 363

Weber, Max W: 176

Welfare state W: 192

World (Economic systems) W: 408-413

World, History of the (The Industrial Revolution) W: 444-445

Capitalism and Freedom [book by Friedman]

Friedman, Milton F: 533

Capitalism, Socialism, and Democracy [book by Schumpeter]

Schumpeter, Joseph Alois S: 189

Capitalist See Capitalism *in this index***Capitalization** C: 196**Capitals, Washington**

Hockey (table: National Hockey League) H: 281

Capitals of the states

United States (table: Facts in brief about the states) U: 104

Capitals of the United States See United States capitals *in this index***Capitate bone**

Hand (Parts of the hand) H: 40

Capitation tax See Poll tax *in this index***Capitol** [building] C: 196**Capitol, United States** [Washington, D.C.] C: 196

Architecture (Neoclassical architecture) A: 623-624

Congress of the United States *picture on* Ci: 945Latrobe, Benjamin Henry L: 117 *with picture*Senate *picture on* S: 294Statuary Hall So: 870 *with picture*

Trumbull, John T: 473

United States, Government of the *picture on* U: 136

Walter, Thomas Ustick W: 21

Washington, D.C. (United States Capitol) W: 71 *with picture; map on* W: 76**Capitol Hill** [Washington, D.C.]

Capitol, United States C: 196

Washington, D.C. (Capitol Hill) W: 71

Capitol Reef National Park [Utah] C: 197

National Park System (table: National parks) N: 48

Capitoline Hill [Rome]

Mythology (Roman divinities) M: 981

Rome R: 429

Capitoline triad

Juno J: 197

Jupiter J: 201

Mythology (Roman divinities) M: 981

Caplin, Alfred Gerald [American cartoonist]

Capp, Al C: 198

Caplock [gun]

Musket M: 962

Capodimonte [palace]

Naples (Way of life) N: 13-14

Capoeira [martial art]

Martial arts (Martial arts in other countries) M: 234

Capone, Al [American gangster] C: 197 *with portrait*

Illinois (Prohibition and the Great Depression) I: 75

Ness, Eliot N: 136

Prohibition (Life during prohibition) P: 815

Caporetto, Battle of [1917]

World War I (Allied failures) W: 461

Capote

Bullfighting (The order of the bullfight) B: 695-696

Capote, Truman [American author] C: 197 *with portrait*

American literature (Experimental styles) A: 424-425

Novel (The novel today) N: 575

Theater *picture on* T: 243**Capp, Al** [American cartoonist] C: 197**Cappadocia** [region, Turkey]Turkey *picture on* T: 507**Cappellatti, John** [American football player]

Football (table) F: 363

Capper, Arthur [American political leader]

Kansas (table) K: 234

Capper-Volstead Act [1922]

Cooperative (History) Ci: 1036

Capra, Frank [American director] C: 198

Motion picture (Best achievement in directing: 1934, 1936, 1938) M: 862

Capri [island, Italy] C: 198**Caprices, The** [etchings by Goya]

Goya, Francisco G: 295

Capricorn [astrology] C: 198 *with picture*Zodiac (The zodiac in astrology) Z: 601 *with picture***Capricorn** [constellation]

Tropic of Capricorn T: 450

Capricorn, Tropic of [geography] See Tropic of Capricorn *in this index***Caprifig** [fruit]

Fig F: 96

Caprine arthritic encephalitis [disease]

Goat (Disease) G: 241-242

Caprivi Strip

Namibia (People) N: 8

Caprolactam [chemical]

Nylon (History) N: 633

Caproni-Campini CC2 [aircraft]

Jet propulsion (Development of jet propulsion) J: 113-114

Caps and gowns C: 198 *with pictures*

Graduation G: 297

Caps lock light

Keyboard K: 308

Capsaicin [compound]

Pepper P: 277

CapstanTape recorder (How tape recorders work) T: 37 *with picture***Capsule** [anatomy]

Sprain So: 805

Capsule [biology]Bacteria (The structure of bacteria) B: 20 *with diagram***Capsule** [botany]

Moss (How mosses live) M: 834-835

Capsule [medication]Drug *picture on* D: 350**Captain** [rank]

Rank, Military (table) R: 140

Ship (Officers and crew) S: 423

Captain Hook [literary figure]

Peter Pan P: 325

Captain Jack [American Indian leader] C: 199 *with portrait*

Indian wars (The Modoc War) I: 194

Modoc Indians M: 686

Captain Nemo [literary figure]

Verne, Jules V: 338

Captains Courageous [book by Kipling]

Kipling, Rudyard (Kipling in America) K: 334

Captains Courageous [film]

Tracy, Spencer T: 361

Captain's Daughter, The [book by Pushkin]

Russian literature (Early romanticism) R: 560-561

Captains-Regent [office]

San Marino (Government) S: 103

Caption

Closed captioning Ci: 685

Deafness (Special devices) D: 58-59

Captioned Films for the Deaf [organization]

Deafness (Special devices) D: 58-59

Captive, The [book by Proust]

Proust, Marcel P: 838

Captive balloonBalloon B: 57; (Other uses) B: 60; (Balloons in war) B: 61 *with picture***Captive breeding** [conservation]Animal (Breeding in captivity) A: 505 *with picture*Bird (Endangered species) B: 370 *with picture*

Condor (Outlook for the California condor) Ci: 930

Conservation (Biodiversity conservation) Ci: 976-977

Endangered species (Protecting endangered species) E: 270-271

Panda (Protecting pandas) P: 129

Zoo (Wildlife conservation) Z: 604; (The evolution of zoos) Z: 609

Captive mine

Coal (Coal producers) Ci: 728

CAPTOR [mine]

Mine warfare (Naval mines) M: 565

Capture [chess]

Chess (The moves) C: 413

Capture and Death of Sitting Bull [lithograph by Kurz and Allison]Westward movement in America *picture on* W: 251**Capture of the Hessians at Trenton** [painting by Trumbull]Hessians *picture on* H: 219**Capuche** [clothing]

Capuchins C: 200

Capuchin [animal] C: 199 *with picture***Capuchins** [religious group] C: 200**Capulet**Shakespeare, William (*Romeo and Juliet*) S: 358**Capulin Volcano National Monument** [New Mexico] C: 200

National Park System (table: National monuments) N: 50

Capybara [animal] C: 200 *with picture*

Rodent R: 397

CarSee also Automobile *in this index*

Cable car C: 7

Elevator E: 233 *with diagram***Car bottom furnace**

Furnace (Heating the charge) F: 567

Car phone See Cellular telephone *in this index***Carabao** [animal]

Buffalo B: 674

Water buffalo W: 133

Carabiner [tool] See Karabiner *in this index***Caracal** [animal] C: 200 *with picture***Caracalla** [Roman emperor]

Rome, Ancient (table) R: 447

Caracara [bird] C: 201 *with picture***Caracas** [city, Venezuela] C: 201Venezuela V: 298 *with pictures*; (Education) V: 301 *with pictures***Caracul** [fur]

Karakul K: 245

Carafa, Gian Pietro [pope]

Paul IV P: 200

Carajá IndiansIndian, American *picture on* I: 176**Caramanlis, Constantine** [Greek political leader] C: 201

Greece (The 1950's) G: 364; (The restoration of democracy) G: 365

Caramel [food]

Candy (Chewy candies) C: 176

Caramuru [poem by Durão]

Latin-American literature (Colonial literature) L: 111-112

Carapace [zoology]

Crab Ci: 1115

Turtle (Shell) T: 520-521 *with picture***Carat** [unit of measure] C: 202See also Karat *in this index*Diamond (Where natural diamonds are found) D: 181-182 *with pictures*

Gem (Some famous gems) G: 79

Weights and measures (Miscellaneous weights and measures) W: 184

Caravaggio, Michelangelo Merisi da [Italian painter] C: 202 *with picture*

Baroque (Baroque painting) B: 117

Painting (Classicism) P: 61; (Baroque) P: 58 *with picture*; (The Spanish masters) P: 64**Caravan** [travel] C: 202

Caravel [ship] C: 202 *with picture*
Columbus, Christopher (The plan to sail westward) Ci: 858
Exploration (The great age of European exploration) E: 442-443 *with picture*

Caraway [plant] C: 203

Caraway, Hattie Ophelia Wyatt [American political leader] C: 203 *with portrait*
Arkansas (The early 1900's) A: 714; A: 713

Caraway, Thaddeus [American political leader]
Caraway, Hattie Ophelia Wyatt C: 203

Carbamate insecticide
Insecticide (Organic insecticides) I: 302

Carbamazepine [drug]
Anticonvulsant A: 553

Carbamide See Urea *in this index*

Carbarsone [medication]
Arsenical A: 745

Carbatine
Shoe *picture on S*: 432

Carberry, John Joseph Cardinal [American religious leader]
Cardinal (table: American cardinals) C: 211

Carbide [chemical] C: 203

Carbine [gun] C: 203

Carbohydrate [nutrition] C: 203 *with diagrams*
Fat substitute F: 53
Food (Producing energy) F: 330
Human body (Chemical elements and molecules) H: 417
Life (Carbohydrates) *diagram on L*: 277
Milk (Carbohydrates) M: 546
Nutrition (Kinds of nutrients) N: 625
Starch So: 855
Sugar So: 959

Carbolic acid [chemical]
Antiseptic (History) A: 559

Carboloy [metal]
Tungsten T: 486

Carbon [element] C: 204 *with diagrams*
Carbide C: 203
Charcoal C: 377
Chemistry (Development of organic chemistry) C: 404
Diamond (What diamonds are) D: 181
Fire (Gases) F: 121-122
Graphite G: 323
Life (The chemical basis of life) L: 277 *with diagram*
Organic chemistry O: 853
Radiocarbon R: 97
Rubber (The chemistry of rubber) R: 501
Star (Hydrogen fusion) So: 846-847

Carbon 14 See Radiocarbon *in this index*

Carbon aerogel
Carbon (Amorphous carbons) C: 206

Carbon black
Carbon (Amorphous carbons) C: 206
Ink I: 272
Petrochemicals (History) P: 329

Carbon chamber [electronics]
Telephone (The transmitter) T: 95 *with picture*

Carbon cycle [biology]
Carbon dioxide *diagram on C*: 207
See also Photosynthesis *in this index*

Carbon dating See Radiocarbon dating *in this index*

Carbon dioxide [gas] C: 206 *with picture*
Air (Changes in the atmosphere) A: 173
Animal (Pollution) A: 504
Baking powder B: 32
Blood (What blood does in the body) B: 408 *with diagram*
Climate Ci: 675; (Changes in CO₂ concentration) Ci: 677; (Human activity) Ci: 678
Damp D: 24
Dry ice D: 369
Fire (Gases) F: 121-122
Global warming (Causes of global warming) G: 232; (Limiting global warming) G: 232a
Greenhouse effect (The natural greenhouse effect) G: 382-383
Heart (The work of the heart) H: 135
Human body (The exchange of carbon dioxide and oxygen) H: 421 *with picture*
Leaf (Obtaining the raw materials) L: 155 *with diagram*
Lung (Gas exchange in the lungs) L: 523
Mars (Atmosphere) M: 226a
Molecule (Individual molecules) M: 692 *with diagram*

Photosynthesis P: 430
Plant (Plants and the cycle of nature) P: 518 *with diagram*
Refrigeration (Dry ice) R: 201
Respiration R: 260

Carbon dioxide cycle [biology] See Photosynthesis *in this index*

Carbon dioxide extinguisher
Fire extinguisher (Liquefied gas extinguishers) F: 130

Carbon disulfide [chemical]
Sulfide So: 966

Carbon-in-pulp [industrial process]
Gold (Leaching) G: 253

Carbon microphone
Microphone (Carbon microphones) M: 516

Carbon monoxide [gas] C: 207
Air pollution (Forms of transportation) A: 197
Carbon monoxide detector C: 207
Catalytic converter C: 298
Coal (Mine safety) Ci: 729
Damp D: 24
Parkinson disease (Causes) P: 170-171
Smoking (Why smoking is dangerous) S: 520

Carbon-monoxide detector [instrument] C: 207

Carbon monoxide poisoning [gas]
Fire (Gases) F: 121-122
Hyperbaric oxygen therapy H: 475
Poison (Kinds of poison) P: 601
Safety (Other precautions) S: 11

Carbon nanotube [molecule]
Carbon (Fullerenes) C: 206 *with diagram*

Carbon-nitrogen-oxygen cycle [physics]
Star (Hydrogen fusion) So: 846

Carbon sequestration
Global warming (Limiting global warming) G: 232a

Carbon steel
Alloy (Alloys of iron) A: 377-378
Iron and steel (Kinds of iron and steel) I: 437

Carbon tetrachloride [chemical] C: 207

Carbon tissue [printing]
Printing (Gravure cylinders) P: 800

Carbon transmitter [electronics]
Telephone (The transmitter) T: 95 *with picture*

Carbon-zinc battery [electricity]
Battery (Primary batteries) B: 168-169 *with picture*

Carbonari [Italian history]
Mazzini, Giuseppe M: 330
Sicilies, Kingdom of the Two S: 447

Carbonate [chemical] C: 207
Earth (The lithosphere) E: 20

Carbonate-silicate cycle [geology]
Earth (History of Earth) E: 25

Carbonated beverage
Brewing (Finishing) B: 595
Tartaric acid T: 48

Carbonated water
Soft drink (How soft drinks are made) So: 571

Carboniferous Period [geology]
Coal (How coal was formed) Ci: 717
Earth (The Paleozoic Era) E: 27; (table) E: 30
Forest (The first forests) F: 397-398 *with picture*
Plant (Early plants) P: 540
Prehistoric animal (table) P: 738

Carbonization
Coal (Coal as a raw material) Ci: 720
Fossil (Carbonization) F: 425 *with picture*

Carborundum [abrasive]
Gem (Cutting and polishing) G: 79
Silicon S: 458

Carboxymethyl cellulose [material]
Cellulose (Industrial uses) C: 341

Carbuncle [disorder] C: 208

Carburetor [engine] C: 208
Automobile (How an automobile works) A: 949-952
Fuel injection F: 552
Gasoline engine (Fuel system) G: 65

Carburizing [industrial process]
Metallurgy (Physical metallurgy) M: 427

Carcassonne [France] C: 208
Citadel Ci: 567

Carchemish [ancient city]
Hittites (History) H: 269

Carcinogen
Cancer C: 167; (Genes damaged by substances in the environment) C: 170; (Avoiding carcinogens) C: 171

Carcinoma [disease]
Cancer (Classification by tissue) C: 168
Tumor T: 484

Card [electronics]
Computer (Parts of computers) Ci: 911-912

Card, Andrew H., Jr. [American government official]
Transportation, Department of (table) T: 400

Card access system [lock]
Lock (Electric locks) L: 412 *with picture*

Card catalog [library]
Index I: 107
A Guide to Research Skills Research Guide: 27-29

Card game C: 208 *with pictures*
Game (Card games) G: 22

Card sliver [yarn]
Cotton (Making cotton into cloth) Ci: 1091

Card table
Colonial life in America *picture on Ci*: 808

Cardamom [fruit] C: 209

Cardan, Jerome [Italian mathematician] See Cardano, Girolamo *in this index*

Cardano, Girolamo [Italian mathematician]
Electricity (Early discoveries) E: 196

Cardboard C: 209

Cárdenas, García López de [Spanish explorer]
Grand Canyon (History) G: 307

Cárdenas, Lázaro [Mexican political leader] C: 209
Ávila Camacho, Manuel A: 993
Mexico (Economic and social changes) M: 473

Cardiac assist device [medicine]
Heart (Heart failure) H: 143

Cardiac catheterization
Heart (Symptoms and diagnosis) H: 137-138 *with picture*

Cardiac cyle
Heart (Regulating the heart rate) H: 135-136

Cardiac muscle [anatomy]
Heart (Outer lining and muscle) H: 133
Human body (Cardiac muscle) H: 419
Muscle (Cardiac muscle) M: 935; *diagram on M*: 933

Cardiac pacemaker [medicine]
Electronics (Transistors) E: 212

Cardiff [Wales] C: 209 *with picture*
United Kingdom *picture on U*: 48
Wales *picture on W*: 11

Cardigan, Mount
New Hampshire (Mountains) N: 220

Cardigan Welsh corgi [dog] C: 210 *with picture*
Pembroke Welsh corgi P: 233

Cardinal [bird] C: 211 *with picture*
Bird (Birds of urban areas) B: 333 *with picture*

Cardinal [Roman Catholic title] C: 210
Address, Forms of (Members of the clergy) A: 54
Pope (Early days) P: 662; (Present procedures) P: 662
Roman Catholic Church (Church organization) R: 405

Cardinal, Douglas [Canadian architect]
Canada (Architecture) C: 112

Cardinal flower [plant] C: 212
Lobelia L: 404

Cardinal number [mathematics]
Number and numeral N: 605

Cardinal points [navigation]
Compass Ci: 902b

Cardinal Secretary of State
Vatican City (Administration) V: 288

Cardinal tetra [fish]
Tetra T: 183

Cardinals, Arizona
Football (National Football League) F: 364

Cardinals, College of
Cardinal C: 210

Cardinals, Saint Louis See Saint Louis Cardinals *in this index*

Cardinal's bark
Cinchona Ci: 553

Carding [manufacturing]
Cotton (Cleaning and blending) Ci: 1091; *picture on Ci*: 1092
Textile (Making the yarn) T: 215; *picture on T*: 216
Thread (Making thread from natural fibers) T: 269
Wool (Making yarn) W: 400 *with picture*

Carding length fiber

- Wool (Processing of wool) **W**: 400
- Carding machine**
Cotton (Cleaning and blending) **Ci**: 1091; *picture on Ci*: 1092
- Cardini** [British magician]
Magician (Sleight of hand) **M**: 51
- Cardiogram** [medicine] See *Electrocardiogram in this index*
- Cardiograph** See *Electrocardiograph in this index*
- Cardiology** **C**: 212
Heart **H**: 132
Medicine (table) **M**: 369
- Cardiomyopathy** [disorder]
Heart (Cardiomyopathy) **H**: 142
- Cardiopulmonary resuscitation** **C**: 212 *with pictures*
Boy Scouts (First Class Scout) **B**: 539
First aid (Heart attack) **F**: 141
Heart (Symptoms) **H**: 139
Safety (In offices) **S**: 14
- Cardiotonic**
Drug (Cardiotonics) **D**: 351
- Cardiovascular disease**
See also *Coronary artery disease; Heart disease; Stroke in this index*
Disease (Diseases associated with aging) **D**: 230
Drug (Drugs that affect the heart and blood vessels) **D**: 351
- Carditis** [disorder]
Rheumatic fever **R**: 291
- Cardizem** [drug]
Calcium channel blocker **C**: 21
- Cardo** [area]
Jerusalem *picture on J*: 97
- Cardoso, Fernando Henrique** [Brazilian political leader]
Brazil (Return to civilian government) **B**: 586
- Cardozo, Benjamin Nathan** [American jurist]
C: 213
- Cards** [game]
Card game **C**: 208
- Cardsharp**
Western frontier life in America (Crime) **W**: 238
- Cerducci, Giosuè** [Italian poet] **C**: 213
Italian literature (Romanticism) **I**: 495
- CARE** [organization] **C**: 213
Eagles, Fraternal Order of **E**: 6
Foreign aid (Kinds of foreign aid) **F**: 383
- Career education** **C**: 213
Careers (Sources of information) **C**: 216
Vocational education **V**: 434
- Career exploration**
Cooperative education **Ci**: 1037
- Career guidance**
Guidance (Vocational or career guidance) **G**: 422
- Career ladder**
Careers (Chances for advancement) **C**: 216
- Careers** **C**: 214 *with pictures*
Adolescent (Career planning) **A**: 64
Career education **C**: 213
Culture (Forming patterns) **Ci**: 1187
Sex discrimination (Persistence of sex discrimination) **S**: 335
See also *the list of Related articles in the Careers article*
- Caretaker, The** (play by Pinter)
Pinter, Harold **P**: 475
- Carew, Rod** [American baseball player]
Baseball (table: Hall of Fame) **B**: 134
- Carew Tower** [building]
Cincinnati (The city) **Ci**: 554 *with map*
- Carey, G. R.** [American inventor]
Electronics (The vacuum tube era) **E**: 215
- Carey, Hugh L.** [American political leader]
New York (table) **N**: 313
- Carey, Joseph M.** [American political leader]
Wyoming (table) **W**: 532
- Carey, Mathew** [American journalist]
Magazine (History) **M**: 43
- Carey, Max** [American baseball player]
Baseball (table: Hall of Fame) **B**: 134
- Carey, Robert D.** [American political leader]
Wyoming (table) **W**: 532
- Carey, William** [English missionary]
Baptists (Early history) **B**: 101
- Cargo** [shipping]
Airplane *pictures on A*: 209, **A**: 218
Airport (Cargo handling) **A**: 246 *with picture*
Aviation (Airline operations) **A**: 984-985 *with picture*
Net *picture on N*: 137
Ship (General cargo ships) **S**: 417 *with picture*
Transportation (Water transportation) **T**: 384
- Cargo, David F.** [American political leader]
New Mexico (table) **N**: 272
- Cargo cult** [religion]
Pacific Islands (Religions) **P**: 5
- Cargo liner**
Ship (Classification of cargo ships) **S**: 417
- Cargo net**
Net *picture on N*: 137
- Cargo ship**
Greece, Ancient *picture on G*: 369
Ship **S**: 402 *with picture*; (Phoenician and Greek ships) **S**: 405 *with pictures*; (Roman ships) **S**: 406; (East Indians) **S**: 409 *with picture*; (Ships of today) **S**: 414; (Classification of cargo ships) **S**: 417; (General cargo ships) **S**: 417 *with pictures*
Transportation (Ancient Greece) **T**: 387
- Carias Andino, Tiburcio** [Honduran political leader]
Honduras (Revolutions and reforms) **H**: 313
- Carib Indians** [American Indians] **C**: 236
Barbados (History) **B**: 104
Cannibal **C**: 179
Canoeing (History) **C**: 182
Dominica (History) **D**: 302
Honduras (Ancestry) **H**: 309
Indian, American *pictures on I*: 140
Ponce de León (Florida expeditions) **P**: 655-656
Saint Lucia (History) **S**: 51
Saint Vincent and the Grenadines (History) **S**: 57
Virgin Islands (Exploration) **V**: 396
West Indies (Early days) **W**: 205
- Caribbean Community and Common Market** [organization] See *Caribbean Community and Common Market in this index*
- Caribbean Indians**
Indian, American (Indians of the Caribbean) **I**: 172 *with pictures and map; picture on I*: 146
- Caribbean Indies** [former name, West Indies]
East Indies **E**: 40
- Caribbean Sea** **C**: 237 *with map*
World, History of the *map on W*: 441
- Cariboo Mountains**
British Columbia (Land regions) **B**: 622
- Cariboo Road**
British Columbia (Transportation) **B**: 627
- Caribou** [city]
Maine (table: Average monthly weather) **M**: 83
- Caribou** [animal] **C**: 237 *with picture*
Animal *picture on A*: 485
Arctic (Animal life) **A**: 638
Inuit **I**: 354; (Clothing) **I**: 354b; (Hunting and fishing) **I**: 354d-354e
Mammal *picture on M*: 125
Nunavut (Land and resources) **N**: 608-609
Reindeer **R**: 208
- Caricature** **C**: 237 *with pictures*
Carpetbaggers *picture on C*: 247
Cartoon (Editorial cartoons) **C**: 263-265
- CARICOM** [organization]
West Indies (Trade) **W**: 205; (Trade) **W**: 205
- Caries** [dentistry]
Teeth (Diseases and defects of the teeth) **T**: 82 *with pictures*
- Carignane**
Grape (European grapes) **G**: 319
- Carillo, Felipe** [Mexican political leader]
Yucatán Peninsula **Y**: 575
- Carillon** [musical instrument] **C**: 238 *with pictures*
Bell (Chimes and carillons) **B**: 239; (Famous bells) **B**: 239-240
- Carillon Barracks National Historic Site** [Quebec]
Canada (table: National historic sites) **C**: 114
- Carinus** [Roman emperor]
Rome, Ancient (table) **R**: 447
- Carlocas** [people]
Rio de Janeiro (People) **R**: 345
- Carl XVI Gustaf** [king of Sweden] **C**: 239
- Carl D. Perkins Vocational Education Act** [1985]
Vocational education (The 1900's) **V**: 435
- Carl Sandburg Home National Historic Site** [North Carolina]
National Park System (table: National historic sites) **N**: 52
- Carl Vinson** [ship]
Aircraft carrier (The United States carrier fleet) **A**: 206 *with picture*
- Carl Zeiss** [firm]
Planetarium (Modern planetariums) **P**: 514a
- Carle, Eric** [American author]
Regina Medal (table: 1999) **R**: 206
- Carleton, Sir Guy** [British colonial official]
C: 239
Canada, History of (The Quebec Act) **C**: 143-144
Revolutionary War in America (The invasion of Canada) **R**: 275; (The campaign in New York) **R**: 280-281
- Carleton, Mount**
New Brunswick (Land regions) **N**: 190 *with picture*
- Carleton Martello Tower National Historic Site** [New Brunswick]
Canada (table: National historic sites) **C**: 114
- Carlin** [Nevada]
Gold (History of gold) **G**: 253
- Carlin, John W.** [American political leader]
Kansas (table) **K**: 234
- Carlin, Thomas** [American political leader]
Illinois (table) **I**: 71
- Carlisle, John G.** [American government official]
Cleveland, Grover (table) **Ci**: 672
Treasury, Department of the (table) **T**: 407
- Carlist War** [1835]
Foreign Legion **F**: 386
- Carlists** [Spanish history]
Spain (The reign of Isabella II) **So**: 749
- Carloman** [king of the Franks]
Charlemagne (Military conquests) **C**: 378-379
- Carlos** [king of Portugal]
Portugal (The first Portuguese republic) **P**: 694
- Carlos, John** [American runner]
Olympic Games (The 1968 games) **O**: 752; *picture on O*: 754
- Carlos, Juan** See *Juan Carlos I in this index*
- Carlota, Empress** [wife of]
Maximilian **M**: 319
- Carlsbad Caverns National Park** [New Mexico]
C: 239 *with picture*
Cave (table) **C**: 320
National Park System (table: National parks) **N**: 48
New Mexico (Places to visit) **N**: 264 *with picture*
- Carlson, Arne H.** [American political leader]
Minnesota (table) **M**: 602
- Carlson, Chester F.** [American physicist]
Copying machine (Electrostatic copying) **Ci**: 1045
Xerox Corporation **X**: 544
- Carlson, Frank** [American political leader]
Kansas (table) **K**: 234
- Carlson, George A.** [American political leader]
Colorado (table) **Ci**: 844
- Carlsson, Arvid** [Swedish biologist]
Nobel Prizes (Physiology or medicine: 2000) **N**: 445
- Carlton, Doyle E.** [American political leader]
Florida (table) **F**: 260
- Carlton, Steve** [American baseball player]
Baseball (table: Hall of Fame) **B**: 134
- Carlucci, Frank C.** [American government official]
Defense, Department of (table) **D**: 87
- Carlyle, Thomas** [Scottish author] **C**: 239 *with portrait*
Biography (The 1800's) **B**: 313
English literature (Early Victorian literature) **E**: 321
- Carmack, George W.** [American prospector]
Klondike **K**: 344
Yukon Territory (History) **Y**: 585
- Carman, Bliss** [Canadian poet] **C**: 240
Canadian literature (Poetry: 1850-1918) **C**: 157-158
May (Quotations) **M**: 321
October (Quotations) **O**: 671
- Carmel** [California] **C**: 240
- Carmelites** [religious group] **C**: 240
Friar **F**: 532

- Religious life (table) R: 227; (Religious life in the 1500's and 1600's) R: 227
Teresa, Saint T: 173
- Carmen** [ballet]
Petit, Roland P: 326
- Carmen** [opera by Bizet]
Opera (*Carmen*) O: 802 *with picture, picture on O*: 793
Bizet, Georges B: 385
Mérimée, Prosper M: 418
- "Carmen"** [story by Mérimée]
Mérimée, Prosper M: 418
Opera (*Carmen*) O: 802
- Carmichael, Franklin** [Canadian painter]
Group of Seven G: 402
- Carmichael, Hoagy** [American composer]
C: 240
- Carmichael, Stokely** [American social reformer]
C: 241
African Americans (Black militancy) A: 136o
Student Nonviolent Coordinating Committee So: 932
- Carmina Burana** [music by Orff]
Orff, Carl O: 851
- Carmine** [dye]
Dye (Natural dyes) D: 396
Lake L: 35
- Carnahan, Mel** [American political leader]
Missouri (table) M: 668
- Carnarvon, Lord** [British Egyptologist]
Archaeology *picture on A*: 599
- Carnassial teeth**
Lion (The body of a lion) L: 340-341 *with picture*
- Carnation** [plant] C: 241 *with picture*
- Carnauba palm** [tree]
Carnauba wax C: 241
Palm (Products of palms) P: 109
- Carnauba wax** C: 241
Wax (Vegetable wax) W: 153
- Carnaval** [custom]
France (Holidays) F: 460
- Carnaval** [music by Shumann]
Shumann, Robert (His works) S: 188
- Carnavalet Museum**
Paris (Museums and art galleries) P: 164-165
- Carneades** [Greek philosopher] C: 241
Skepticism S: 481
- Carnegie, Andrew** [American philanthropist]
C: 241 *with portrait*
Carnegie Corporation of New York C: 243
Carnegie Foundation for the Advancement of Teaching C: 243
Foundations (History) F: 431-432
Iron and steel (Growth of the steel industry) I: 451-452
Library (Libraries in the United States) L: 261-262
United States, History of the (Natural resources) U: 177
- Carnegie, Dale** [American author] C: 242
- Carnegie Corporation of New York** [foundation] C: 242
Foundations (Independent foundations) F: 430
- Carnegie Endowment for International Peace**
Butler, Nicholas Murray B: 728
- Carnegie Foundation for the Advancement of Teaching** C: 243
- Carnegie Hall** [New York City]
Carnegie, Andrew (Carnegie's contributions to society) C: 242
- Carnegie Hero Fund Commission**
Carnegie, Andrew (Carnegie's contributions to society) C: 242
- Carnegie Institute** [Pittsburgh]
Pittsburgh (Museums and libraries) P: 500c
- Carnegie Institution of Washington**
Carnegie, Andrew (Carnegie's contributions to society) C: 242
Mount Wilson Observatory M: 890
- Carnegie libraries**
Library (Libraries in the United States) L: 261-262
- Carnegie Library** [Pittsburgh]
Pennsylvania (Libraries) P: 248-249
Pittsburgh (Museums and libraries) P: 500c-500d
- Carnegie Medal**
Medals, decorations, and orders (Civilian awards) M: 355
- Carnegie Mellon University**
Carnegie, Andrew (Carnegie's contributions to society) C: 242
- Carnegie Science Center**
Pittsburgh (Museums and libraries) P: 500c-500d
- Carnegie Steel Company**
Carnegie, Andrew (Rise to wealth) C: 241-242
Homestead Strike H: 305
- Carnelian** [gem] C: 243
Gem *picture on G*: 78
- Carnero, Guillermo** [Spanish poet]
Spanish literature (Spanish literature today) So: 763
- Carney, Art** [American actor]
Motion picture (Best performance by an actor: 1974) M: 862-863
- Carney, Thomas** [American political leader]
Kansas (table) K: 234
- Carnival** [celebration] C: 243
Argentina (Recreation) A: 651
Brazil (Recreation) B: 575 *with picture*
Colombia *picture on Ci*: 779
Easter (Easter customs) E: 44
Rio de Janeiro (People) R: 345-346
- Carnival** [music by Dvořák]
Dvořák, Antonín D: 394
- Carnival of Harlequin** [painting by Miró]
Painting (Surrealism) P: 81-82 *with picture*
- Carnival of the Animals, The** [music by Saint-Saëns]
Saint-Saëns, Camille S: 56
- Carnivore** [zoology] C: 243
Animal (A table of animal intelligence) A: 493
Mammal (What mammals eat) M: 121 *with diagram*; (table) M: 128 *with picture*
- Carnivorous plant** [botany] C: 243
Butterwort B: 744 *with picture*
Leaf (Insect-capturing leaves) L: 157 *with picture*
Plant (Insect-eating plants) P: 542 *with pictures*
Venus's-flytrap V: 314
- Carnot, Lazare Nicolas Marguerite** [French political leader]
French Revolution (Terror and equality) F: 526-527
- Carnotite** [mineral] C: 244
Vanadium V: 269
- Carnutes** [people]
Chartres C: 386
- "Caro nome"** [aria]
Opera (*Rigoletto*) O: 806
- Carob** [tree] C: 244
- Carol** [dance]
Christmas (Christmas carols) C: 535
- Carol I** [king of Romania] C: 244
Romania (The origins of modern Romania) R: 424
- Carol II** [king of Romania] C: 244
Romania (Depression and fascism) R: 424
- Carolana, Province of** [U.S. history]
North Carolina (Exploration and settlement) N: 490
South Carolina (Exploration and settlement) So: 659
- Carolina** [U.S. history]
South Carolina (Exploration and settlement) So: 659
- Carolina chickadee** [bird]
Chickadee C: 439
- Carolina Cup Steeplechase**
South Carolina (Visitor's guide) So: 650
- Carolina hemlock** [tree]
Hemlock H: 182
- Carolina Hurricanes**
Hockey (table: National Hockey League) H: 281
- Carolina mantid**
Insect *picture on I*: 280
- Carolina Panthers**
Football (National Football League) F: 364
- Carolina parakeet** [bird]
Bird (Extinct birds) B: 369-370
Parakeet P: 151
Parrot (Kinds of parrots) P: 179
- Carolina poplar** [tree]
Poplar P: 668
- Carolina silverbell** [plant]
Silverbell S: 465
- Carolina wren** [bird]
- Bird (Birds of brushy areas) B: 338 *with picture*
Wren W: 504
- Caroline** [wife of]
George II G: 107
- Caroline** [princess of Monaco]
Rainier III R: 129
- Caroline** [ship]
Harrison, William Henry (The *Caroline* affair) H: 76
- Caroline drama**
Drama (Jacobean and Caroline drama) D: 332
- Caroline Islands** [Pacific Ocean] C: 244
Pacific Islands, Trust Territory of the P: 13
Palau P: 101
- Carolingian architecture**
Architecture (Carolingian architecture) A: 618 *with picture*
- Carolingian art** C: 244 *with picture*
Painting (Early medieval painting in the West) P: 49-50
Sculpture (Early medieval sculpture) S: 248
- Carolingian Empire**
Belgium (The Middle Ages) B: 232
France (The Carolingian dynasty) F: 471
Franks F: 494
Middle Ages (The Carolingian Empire) M: 524
- Carolingian minuscule** [handwriting]
Charlemagne (Administration and influence) C: 379
- Carolingian Renaissance** [European history]
Charlemagne (Administration and influence) C: 379-380
Middle Ages (The Carolingian Empire) M: 524
- Carolinians** [people]
Micronesia, Federated States of (People) M: 515
Northern Mariana Islands, Commonwealth of the (People) N: 526
- Carollo, Joe** [American political leader]
Miami (History) M: 480-481
- Carom billiards** [game]
Billiards (Carom billiards) B: 307
- Carotene**
Carrot C: 249
Leaf (The leaf changes color) L: 152
Milk (Fats) M: 546
Vitamin (Vitamin A) V: 430
- Carotenoid** [chemical]
Antioxidant A: 557
- Carothers, Wallace Hume** [American chemist]
Nylon (History) N: 633
- Carotid artery** [anatomy]
Artery (Principal arteries) A: 751
Human body *diagram on H*: 422
Stroke (Prevention) So: 930
- Carotid endarterectomy** [surgery]
Stroke (Prevention) So: 930
- Carousel**
Merry-go-round M: 419
- Carousel** [musical]
Molnár, Ferenc M: 696
Rodgers, Richard R: 398
- Carow, Edith Kermit** [wife of Theodore Roosevelt] *See* Roosevelt, Edith Carow *in this index*
- Carp** [fish] C: 245 *with picture*
Fish *picture on F*: 159
Goldfish G: 257 *with pictures*
- Carpaccio, Vittore** [Italian painter]
World, History of the *picture on W*: 438
- Carpal bone** [anatomy]
Frog *picture on F*: 537
Hand (Parts of the hand) H: 40 *with diagram*
Human body *diagram on H*: 422
Wrist W: 510 *with diagram*
- Carpal tunnel syndrome** [disorder] C: 245 *with diagram*
- Carpathia** [ship]
Titanic T: 300
- Carpathian Mountains** [Europe] C: 246
Galicia G: 10
Poland (The Western Carpathian Mountains) P: 609
Romania (Surface features) R: 419 *with map*
Slovakia (Land and climate) S: 508d
Ukraine (The Eastern Carpathian Mountains) U: 9 *with map*
- Carpeaux, Jean Baptiste** [French sculptor]
Sculpture (European sculpture) S: 253-255
- Carpenter** [career]

- Building trade (Career opportunities) B: 686
Carpentry C: 246
- Carpenter, C. C.** [American settler]
Oklahoma (The great land rushes) O: 732
- Carpenter, Cyrus C.** [American political leader]
Iowa (table) I: 391
- Carpenter, Francis** [American artist]
Emancipation Proclamation *picture on* E: 254
- Carpenter, M. Scott** [American astronaut]
C: 246
Space exploration (Vostok and Mercury: The first human beings in space) So: 711-712 *with picture*
- Carpenter ant**
Ant (Life in an ant colony) A: 523; *picture on* A: 521
- Carpenter bee** [insect]
Bee (Solitary bees) B: 205-206 *with picture*
- Carpenters and Joiners of America, United Brotherhood of** [labor union] C: 246
Labor movement (table) L: 8
- Carpenter's level** [tool]
Level L: 217 *with picture*
Tool (Woodworking tools) T: 330
- Carpentier, Alejo** [Cuban author]
Cuba (The arts) Ci: 1172
Latin-American Literature (The mid-1900's) L: 113
- Carpentier, Georges** [French boxer]
Boxing (The golden age of U.S. boxing) B: 533
- Carpentry C: 246**
- Carper, Tom** [American political leader]
Delaware (table) D: 109
- Carpet** *See* Rugs and carpets *in this index*
- Carpet beetle** [insect] C: 247 *with picture*
Insect *picture on* I: 285
- Carpet chameleon** [reptile]
Rain forest *picture on* R: 126c
- Carpet grass**
Lawn (Planting the grass) L: 142-144
- Carpet snake** [snake]
Snake *picture on* S: 534
- Carpet sweeper**
Michigan (Interesting facts) M: 489
- Carpetbaggers** [U.S. history] C: 247 *with picture*
Reconstruction (The Republicans in the South) R: 179
- Carpio, Lope Félix de Vega** [Spanish dramatist]
Vega, Lope de V: 292
- Carr, Elias** [American political leader]
North Carolina (table) N: 490
- Carr, Emily** [Canadian painter] C: 247
- Carr, Ralph L.** [American political leader]
Colorado (table) Ci: 844
- Carrà, Carlo** [Italian painter]
Futurism F: 589
- Carracci, Agostino** [Italian artist]
Painting (Baroque) P: 58-59
- Carracci, Annibale** [Italian painter]
Baroque (Baroque painting) B: 117
Painting (Baroque) P: 58-59
- Carracci, Lodovico** [Italian artist]
Painting (Baroque) P: 58-59
- Carrack**
Ship *picture on* S: 408
- Carrageen** *See* Irish moss *in this index*
- Carrageenin** [extract]
Food additive (Kinds of additives) F: 339
Seaweed (Uses) S: 277
- Carranza, Venustiano** [Mexican political leader]
C: 248
Mexico (The Revolution of 1910) M: 472, (The Constitution of 1917) M: 472-473
Obregón, Álvaro O: 643
Villa, Pancho V: 384
Wilson, Woodrow (Crisis in Mexico) W: 323
- Carrasquilla, Tomás** [Colombian author]
Latin-American literature (Realism) L: 112
- Carré, Ferdinand** [French engineer]
Refrigeration (Mechanical refrigeration) R: 201
- Carré, Michel** [French librettist]
Opera (*Faust*) O: 804
- Carrel, Alexis** [French biologist]
Lindbergh, Charles Augustus (Good-will ambassador) L: 330-331
- Carrara, Joás Miguel** [Chilean political leader]
Chile (Independence) C: 468
- Carrera, Rafael** [Guatemalan political leader]
El Salvador (Independence) E: 252
Guatemala (Independence) G: 417
- Carriacou** [island, West Indies]
Grenada G: 388
Grenadines G: 390
- Carriage** [machine]
Lumber (Sawing logs) L: 519; *picture on* L: 517
- Carriage** [vehicle] C: 248
- Carriaga at Louvenciennes** [painting by Pissarro]
Pissarro, Camille *picture on* P: 497
- Carriage bolt** [hardware]
Bolt B: 449 *with picture*
- Carrick** [region, Scotland]
Bruce, Robert B: 648
- Carrick bend**
Knots, hitches, and splices (Useful knots) K: 356 *with diagram*
- Carrier** [mechanics]
Transmission (Planetary gears) T: 377 *with diagrams*
- Carrier** [medicine]
Cystic fibrosis Ci: 1208
Genetic counseling (Reasons for seeking genetic counseling) G: 84
Genetic testing (Genes associated with disease) G: 85-86
Hemophilia (How hemophilia is inherited) H: 183 *with diagram*
Insect (Harmful insects) I: 284
- Carrier** [ship]
Aircraft carrier A: 206 *with pictures*
Warship (Aircraft carriers) W: 39; *picture on* W: 43
- Carrier, Common** *See* Common carrier *in this index*
- Carrier, Willis H.** [American engineer]
Air conditioning (History) A: 180
- Carrier element** [physics]
Radiochemistry R: 98
- Carrier phase GPS** [navigation]
Global Positioning System G: 232
- Carrier pigeon** [bird] C: 248 *with picture*
Pigeon (Domestic pigeons) P: 460
- Carrier projectile**
Ammunition A: 435
- Carrier rocket**
Rocket (Launching probes and satellites) R: 386; (Space travel) R: 386
- Carrier shell snail** [animal]
Shell *picture on* S: 386
- Carrier task force** [military]
Aircraft carrier A: 206
- Carrier wave** [communications]
Radio (From electric waves to radio waves) R: 86 *with diagram*
Television (Broadcasting) T: 122
Wireless communication (How wireless communication works) W: 345
- Carriers of Ladders, The** [book by Merwin]
Merwin, W. S. M: 420
- Carrillo, Braulio** [Costa Rican political leader]
Costa Rica (Independence) Ci: 1084
- Carrion** [animals]
Vulture V: 453
- Carrizo Plains** [region, California]
San Andreas Fault *picture on* S: 83
- Carroll, Beryl F.** [American political leader]
Iowa (table) I: 391
- Carroll, Charles** [American patriot] C: 248
- Carroll, Daniel** [American political leader] C: 248
- Carroll, John** [American religious leader] C: 248
Roman Catholic Church (In the United States) R: 412
- Carroll, John A.** [American author]
Freeman, Douglas Southall F: 509
- Carroll, John Lee** [American political leader]
Maryland (table) M: 255
- Cerroll, Julian M.** [American political leader]
Kentucky (table) K: 290
- Carroll, Lewis** [British author] C: 248 *with pictures*
Literature for children (Masterpieces of fiction) L: 362; *picture on* L: 376
Tenniel, Sir John T: 160
- Carroll, Paul Vincent** [Irish author]
Irish literature (Drama) I: 432
- Cerroll, Thomas King** [American political leader]
Maryland (table) M: 255
- Carroll, Wayne T.** [American journalist]
Feboldson, Febold F: 59
- Carroll, William** [American political leader]
Tennessee (table) T: 152
- Carros** [vehicles]
Drama (Religious plays) D: 333 *with picture*
- Carrot** [plant] C: 249 *with picture*
Flower F: 301 *with picture*
Plant (Roots) P: 529 *with picture*
Wild carrot W: 301 *with picture*
- Carrousel**
Merry-go-round M: 419
- Carrruthers, Garrey** [American political leader]
New Mexico (table) N: 272
- "Carry Me Back to Old Virginia"** [song]
Bland, James A. B: 398
- Carry-out restaurant**
Restaurant (Kinds of restaurants) R: 262
- Carrying** [mathematics]
Addition (How to carry) A: 50
Multiplication (How to carry in multiplication) M: 922
Numeration systems (Decimal addition) N: 606
- Carrying capacity**
Conservation (Conservation of grazing lands) Ci: 981
Ecology (Populations) E: 53
- Carsickness**
Motion sickness M: 874
- Carso** [plateau]
Italy (The Adriatic Plain) I: 508
- Carson, Christopher** *See* Carson, Kit *in this index*
- Carson, Johnny** [American entertainer] C: 250
- Carson, Kit** [American frontiersman] C: 250 *with portrait*
Arizona (Indian fighting) A: 690
Indian wars (Navajo conflicts) I: 195
Navajo Indians N: 70
New Mexico (Territorial days) N: 275
- Carson, Rachel** [American biologist] C: 250
Conservation (Renewed interest in conservation) Ci: 986
Pest control (Effects of pesticide use) P: 318
- Carson, William** [Scottish doctor]
Newfoundland and Labrador (Representation and independence) N: 377
- Carson City** [Nevada] C: 251
- Carson County**
Nevada (Early settlement) N: 174; (The Comstock Lode) N: 174
- Carson Pirie Scott and Company Building** [Chicago]
Architecture (Early modern architecture in America) A: 629; *picture on* A: 630
- Carson River**
Nevada (Rivers and lakes) N: 166
- Carson Sink** [region, Nevada]
Great Basin G: 336 *with map*
- Carswell, G. Harold** [American jurist]
Nixon, Richard Milhous (The national scene) N: 433-434
- Cart** [vehicle]
Transportation (Land transportation) T: 383-384; (The first great civilizations) T: 386; *picture on* T: 387
- Cartagens** [Colombia]
Drake, Sir Francis (Expeditions against Spain) D: 322
- Cartagena** [Spain] C: 251
- Cartago** [Costa Rica]
Costa Rica (Colonial period) Ci: 1084; *picture on* Ci: 1081
- Carte, Richard D'Oyly** *See* D'Oyly Carte, Richard *in this index*
- Cartel** [business] C: 251
Inflation (The cost-push theory) I: 268
- Carter, A. P.** [American singer]
Carter Family C: 260
- Carter, Amy Lynn** [daughter of]
Carter, Jimmy (Carter's family) C: 253; *picture on* C: 259
- Carter, Anita** [American singer]
Carter Family C: 260
- Carter, Benny** [American saxophonist]
Jazz (The 1920's) J: 70
- Cartar, Billy** [brother of]
Carter, Jimmy (Boyhood) C: 252
- Cartar, Don** [American bowler] C: 251
- Cartar, Elliott** [American composer] C: 251
- Carter, Frederic Bowker Terrington** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935

- Carter, Gerald Emmett Cardinal** [Canadian religious leader]
Cardinal (table: Canadian cardinals) C: 211
- Carter, Helen** [American singer]
Carter Family C: 260
- Carter, Howard** [British archaeologist] C: 251
Archaeology *picture on* A: 599
Tutankhamen T: 525
- Carter, James Earl, Sr.** [father of]
Carter, Jimmy (Boyhood) C: 252
- Carter, James Earl, Jr.** [U.S. president] *See*
Carter, Jimmy *in this index*
- Carter, Janette**
Carter Family C: 260
- Carter, Jimmy** [U.S. President] C: 252 *with pictures*
African Americans (Achievements) A: 136p
Arab-Israeli conflict (The Camp David Accords) A: 582a
Atlanta (Social problems) A: 860a
Clinton, Bill (International affairs) Ci: 682e
Democratic Party (Mixed results) D: 128
Egypt (Renewed warfare and peace) E: 133 *with picture*
Federal Emergency Management Agency F: 64
Georgia (table) G: 130
Iran (Revolution and the Islamic Republic) I: 406a
Latin America *picture on* L: 110
Maine *picture on* M: 92
Mondale, Walter Frederick M: 702
National Park System (table: National historic sites) N: 52-53
Olympic Games (Boycotts) O: 753
Panama Canal (The canal since 1920) P: 126-127
Sadat, Anwar el- S: 7
Union of Soviet Socialist Republics (The collapse of détente) U: 40
United States, History of the (Improved U.S.-Soviet relations) U: 195
- Carter, Joe** [American singer]
Carter Family C: 260
- Carter, June** [American musician]
Carter Family C: 260
Cash, Johnny C: 273
- Carter, Lillian Gordy** [mother of]
Carter, Jimmy (Boyhood) C: 252
- Carter, Maybelle Addington** [American singer]
Carter Family C: 260
- Carter, Robert** [American publisher]
Lowell, James Russell (Early career) L: 510
- Carter, Rosalynn Smith** [wife of Jimmy Carter]
Carter, Jimmy (Carter's family) C: 253; *picture on* C: 259
First ladies (table) F: 142
- Carter, Ruth** [sister of]
Carter, Jimmy (Boyhood) C: 252
- Carter, Sara Dougherty** [American singer]
Carter Family C: 260
- Carter, William Alton, III** [brother of]
Carter, Jimmy (Boyhood) C: 252
- Carter Family** [musical group] C: 260
Country music (Early commercial success) Ci: 1098b
- Carter Presidential Center**
Atlanta (Museums and libraries) A: 860a-860b
- Carteret, Sir George** [English colonial official]
New Jersey (English control) N: 250
- Carteret, Philip** [English explorer]
Pitcairn Island P: 498
- Carteret, Philip** [English colonial leader]
Elizabeth E: 238
- Carter's Grove** [estate]
Virginia (Places to visit) V: 408
Williamsburg (Williamsburg today) W: 313
- Cartesian system** [geometry]
Geometry (Analytic geometry) G: 104
- Cartesianism** [philosophy]
Descartes, René D: 154
- Carthage** [Illinois]
Young, Brigham (Mormon leader) Y: 571
- Carthage** [ancient city] C: 260 *with pictures and map*
Cato, Marcus Porcius, the Elder C: 304
Dido D: 195
Dionysius the Elder D: 214
Libya (Early days) L: 267
Mythology (The *Aeneid*) M: 981
Phoenicia (The spread of Phoenician influence) P: 394-395
Punic Wars P: 903
Regulus, Marcus Atilius R: 207
Rome, Ancient (Expansion overseas) R: 445-446
Tunisia (History) T: 489
Utica U: 251
- Carthusians** [religious group] C: 261
- Cartier, Sir George Étienne** [Canadian patriot] C: 261
Canada, History of (Confederation) C: 146
Confederation of Canada (Fathers of Confederation) Ci: 935 *with picture*;
(Moves toward confederation) Ci: 933
Macdonald, Sir John Alexander (Associate provincial prime minister) M: 7
- Cartier, Jacques** [French explorer] C: 261 *with picture*
Canada, History of (Early European exploration) C: 140-141
Canadian literature (Beginnings of Canadian literature) C: 157
Exploration *map on* E: 443; (The search for a northern passage) E: 446
Gulf of Saint Lawrence G: 437
Montreal M: 768; (Exploration) M: 777
New Brunswick (Exploration and settlement) N: 196
Northwest Passage N: 528
Prince Edward Island (Exploration and early history) P: 791
Quebec [province] (Indian days) Q: 30
Quebec [city] (Early days) Q: 36
Roberval, Sieur de R: 365
Saint Lawrence River (History) S: 42
- Cartier-Brébeuf National Historic Site** [Quebec]
Canada (table: National historic sites) C: 114
- Cartier-Bresson, Henri** [French photographer] C: 262 *with picture*
Photography (The photographic revolution) P: 427-428
- Cartilage** [anatomy] C: 263
Dwarf D: 394
Joint J: 155
Rib R: 320 *with diagram*
- Cartography**
Atlas A: 868
Careers (Technical and mathematical occupations) C: 232
Map M: 176
- Cartoon** [design]
Cartoon C: 263
Fresco F: 529
Painting (Gothic painting) P: 50
Stained glass (How stained-glass windows are made) So: 821
Tapestry (How tapestries are made) T: 39
- Cartoon** [drawing] C: 263 *with pictures*
Addams, Charles A: 46
Advertising (Production) A: 76b-77
Animation A: 511 *with pictures*
Comics Ci: 869 *with pictures*
Disney, Walt D: 235 *with pictures*
Franklin, Benjamin (Publisher) F: 487
Kennedy, John Fitzgerald *picture on* K: 268
Nast, Thomas N: 24
Public opinion (The press) P: 860
Pulitzer Prizes (Prizes in journalism) P: 887-892 *with picture*
Republican Party *pictures on* R: 254, R: 256
See also the list of Related Articles in the Cartoon article
- Cartouche** [ancient Egypt]
Cartouche C: 267 *with picture*
Hieroglyphics (Deciphering hieroglyphic writing) H: 226
- Cartouche** [architecture] C: 267 *with picture*
- Cartouche** [cartography]
Cartouche C: 268
- Cartouche** [heraldry]
Cartouche C: 268
- Cartridge** [ammunition] C: 268
Ammunition (Small-arms ammunition) A: 435 *with pictures*
Dynamite D: 397
Firearm (Mechanism) F: 132
Handgun (Types of handguns) H: 43 *with picture*
Rifle (Rifle cartridges) R: 339
- Cartridge** [electronics]
Phonograph (Parts of a phonograph) P: 400-401 *with diagram*
- Cartridge fuse**
Fuse F: 589 *with diagram*
- Cartridge tape recorder**
Tape recorder *picture on* T: 37
- Cartwright, Alexander J.** [American sportsman]
Baseball (Alexander Cartwright) B: 132; (Rule changes) B: 133; (table: Hall of Fame) B: 134
- Cartwright, Edmund** [British inventor] C: 268
Clothing (The 1700's) Ci: 701
Industrial Revolution (Weaving machines) I: 249
Invention (Economic needs) I: 355
Rugs and carpets (History) R: 517
Textile (The Industrial Revolution) T: 219
Weaving (History) W: 175
- Cartwright, Peter** [American religious leader]
Lincoln, Abraham (Search for advancement) L: 316
Revivalism R: 268
- Caruncle** [zoology]
Turkey (The body of a turkey) T: 513
Turtle *picture on* T: 522
- Carus** [Roman emperor]
Rome, Ancient (table) R: 447
- Carus, Titus Lucretius** *See* Lucretius *in this index*
- Caruso, Enrico** [Italian singer] C: 268
Radio (The start of broadcasting) R: 92
- Carved parallel turn**
Skiing (Alpine skiing) S: 482; *diagram on* S: 484
- Carvel, Elbert N.** [American political leader]
Delaware (table) D: 109
- Carver, George Washington** [American botanist] C: 268 *with picture*
African Americans *picture on* A: 136j
Alabama (Interesting facts) A: 257
Autograph *picture on* A: 943
Invention (The early and middle 1900's) I: 363
Peanut (History) P: 215
Tuskegee University T: 525
- Carver, John** [American colonial leader] C: 269
Massasoit M: 295
Plymouth Colony (The founding of Plymouth Colony) P: 582
- Carver, Raymond** [American author] C: 269
- Carville, Edward P.** [American political leader]
Nevada (table) N: 173
- Carving** [art]
Indian, American (Carving) I: 145 *with picture*
Inuit (Arts and crafts) I: 354f
Islamic art (Decorative arts) I: 469-470 *with picture*
Ivory (Ivory carving) I: 521 *with pictures*
Leathercraft (Cutting and assembling) L: 169 *with picture*
Maori *picture on* M: 175
Phoenicia *picture on* P: 393
Sculpture (The sculptor at work) S: 232 *with picture*
Woodcarving W: 391 *with diagrams*
- Carving, Meat**
Meat *pictures on* M: 348
- Cary, Joyce** [British author] C: 269
- Cary, Mary Ann Shedd** [American educator]
C: 270
- Caryatid** [sculpture]
Elgin Marbles E: 236
Sculpture (As part of architecture) S: 229-230
- Casa Grande**
Arizona *picture on* A: 671
- Casa Grande Ruins National Monument** [Arizona] C: 270
National Park System (table: National monuments) N: 50
- Case Guidi** [villa, Florence]
Browning, Elizabeth Barrett B: 646
- Case Guidi Windows** [book by Browning]
Browning, Elizabeth Barrett B: 646
- Casa Loma**
Toronto (Landmarks) T: 336-337; *picture on* T: 340a
- Casa Rosada**
Argentina *picture on* A: 647
Buenos Aires (The city) B: 672
- Cesaba** [fruit] C: 270 *with picture*
Muskmelon M: 963
- Casablanca** [city, Morocco] C: 270

Casablanca [film]

Bogart, Humphrey B: 436

Motion picture (Best picture: 1943) M: 861,
(Movies and World War II) M: 869**Casablanca Conference** [1943]World War II (The Allies attack in Europe and
Northern Africa) W: 478-479**Casals, Pablo** [Spanish cellist] C: 270 *with por-
trait***Casals Festival** [music]

Casals, Pablo C: 271

Casamance [region, Senegal]

Senegal (History) S: 299-300

Casamance River [Africa]

Senegal (Land and climate) S: 299

Casanova, Giacomo [Italian public figure]C: 271 *with portrait***Casas, Bartolomé de las** [Spanish missionary]

Las Casas, Bartolomé de L: 80

Casbah [district]

Algiers A: 365

CASC [organization]Automobile racing (Racing organizations)
A: 976**Cascade** [geography]

Waterfall W: 141

Cascade Falls [Minnesota]Minnesota (Lakes, rivers, and waterfalls)
M: 598**Cascade Range** [mountains, Canada-U.S.]

C: 271

California (Land regions) C: 48

Oregon *picture on* O: 840United States (The Pacific Ranges and
Lowlands) U: 125

Washington W: 58

Cascade Tunnel [tunnel, Washington]

Washington (Transportation) W: 64

"Cascadilla Falls" [poem by Ammons]

Ammons, A. R. A: 434

Cascara sagrada [shrub] C: 271 *with pictures***Case** [bibliography]

Bookbinding (Covering a book) B: 471

Case [grammar] C: 271

Declension D: 79

Noun (Number and case) N: 553

Case, Clarence E. [American political leader]

New Jersey (table) N: 249

Case, Norman S. [American political leader]

Rhode Island (table) R: 311

Case history

Medicine (Diagnosis) M: 364

Psychology (Systematic assessment) P: 848

Case law

Law (Common law systems) L: 132

Case method [education] C: 272

Architecture (Education and training) A: 634

Law (Law education) L: 138

Case of the Velvet Claws, The [book by
Gardner]

Gardner, Erle Stanley G: 39

Case studyAbnormal psychology (Studies in abnormal
psychology) A: 12

Criminology (Case studies) Ci: 1145

Sociology (Field observation) So: 566

Cased pencilPencil (Cased pencils) P: 236 *with picture***Casein** [protein] C: 272

Leather (Final processing) L: 168-169

Milk (Proteins) M: 546

Casement window

Window W: 334

Casework

Adoption (The adoption process) A: 66

Social work (Methods of social work) So: 558
*with picture***Casey, James** [American businessman]

United Parcel Service, Inc. U: 97

Cesey, Robert P. [American political leader]

Pennsylvania (table) P: 263

Casey Foundation, Annie E.

Foundations (table) F: 430

Casey Jones *See* Jones, Casey *in this index***Cash, Johnny** [American singer] C: 273

Carter Family C: 260

Country music *picture on* Ci: 1098d**Cash aid programs**

Poverty (Social welfare programs) P: 725

Welfare (Cash aid programs) W: 190

Cash benefitInsurance (How private health insurance is
provided) I: 311**Cash discount** [economics]

Discount (Cash discount) D: 224

Cash dispenser *See* Automated teller machine
*in this index***Cash flows, Statement of** *See* Statement of
cash flows *in this index***Cash fund** [economics]

Money market fund M: 718

Cash grain farmFarm and farming (Specialized crop farms)
F: 30**Cash lease**

Tenant farming T: 132

Cash machine *See* Automated teller machine *in
this index***Cash market** [economics]Commodity exchange (Cash market contracts)
Ci: 873**Cash order** [economics]

Installment plan (How the plan works) I: 304

Cash register C: 273 *with picture*

Ritty, James R: 351

Cash value

Investment (Life insurance policies) I: 369

Cashew [nut] C: 273 *with picture***Cashier's check** [banking]

Check (Special checking services) C: 391

Cashmere [fabric] C: 274**Cashmere** [region] *See* Kashmir *in this index***Cashmere goat** [animal] C: 274 *with picture*

Goat (Domestic goats) G: 239

Casimir III [king of Poland]

Poland (The early Polish state) P: 611

Casimir the Great [king of Poland] *See* Casimir
III *in this index***Casina** [play by Plautus]

Plautus P: 570

Casing [container]Petroleum (Casing) P: 341 *with picture*

Turbine (How turbines work) T: 495

Casing [food]

Meat packing (Sausage making) M: 351

Sausage S: 163

Casing [munitions]Ammunition (Small-arms ammunition) A: 435
with diagram

Rifle (Rifle cartridges) R: 339

Casinghead gasoline

Gasoline (How gasoline is produced) G: 61

Casino [game]

Card game C: 208

Casino [place]

Atlantic City A: 862

Gambling (Casino gambling) G: 20

Indian, American (Social and economic
progress) I: 180-181 *with picture*Las Vegas (History) L: 89 *with picture*

Monaco M: 698

Nevada (Service industries) N: 170 *with pic-
ture***Casino Royale** [book by Fleming]

Fleming, Ian Lancaster F: 233

"Cask of Amontillado, The" [story by Poe]Poe, Edgar Allan (Fiction and theory of fiction)
P: 590**Casket**Funeral customs (Preparation of the body)
F: 557**Caslon, William IV** [English printer]

Book (The 1600's and 1700's) B: 467

Type (Classes of type) T: 537

Cesona, Alejandro [Spanish dramatist]Spanish literature (Spanish literature today)
So: 763**Casper** [city, Wyoming] C: 274Wyoming (Population) W: 520, (Progress as a
state) W: 536**Caspian Sea** [Europe-Asia] C: 274 *with map*Asia (Coastline, bays, seas, and lakes) A: 794
with map

Azerbaijan (Land and climate) A: 997

Iran (Caspian Sea Coast) I: 404 *with picture*

Lake (table) L: 34

Russia (Rivers and lakes) R: 541

Caspian tern [bird]Tern T: 174 *with picture***Casque** [biology]

Guineafowl G: 435

Cass [West Virginia]

West Virginia (Places to visit) W: 216

Cass, Lewis [American political leader] C: 275

Buchanan, James (Prelude to war) B: 661

Fillmore, Millard (Vice President) F: 101

Polk, James Knox (Election of 1844) P: 642

Popular sovereignty P: 672

Van Buren, Martin (Later years) V: 273

Cassady, Howard [American football player]

Football (table) F: 363

Cassai, Tommaso [Italian painter] *See* Masaccio
*in this index***Cassander** [king of Macedonia]

Thessaloniki T: 257

Cassandra [legendary figure] C: 275

Paris P: 159

Trojan War (The fall of Troy) T: 449

Cassapanca [furniture]

Furniture (Italy) F: 572

Cassaria [play by Aristot]

Drama (Italian Renaissance drama) D: 330

Cassation, Court of [law]

France (Courts) F: 455

Cassatt, Mary [American painter] C: 275 *with
pictures*

Impressionism (American impressionism) I: 95

Painting (Edouard Manet and the impression-
ists) P: 71, (Women artists) P: 73**Cassava** [shrub] C: 276 *with pictures*Indian, American (Indians of the Tropical for-
est) I: 175

Tapioca T: 41

Cassava mealybug [insect]Invasive species (Managing invasive species)
I: 354k**Cassegrain telescope**

Telescope (Reflecting telescopes) T: 104

Cassette

Audio-visual materials (Audio materials) A: 883

Recording industry R: 180

Tape recorder (Kinds of tape recorders) T: 38
*with picture***Cassette deck** [electronics] *See* Cassette tape
recorder *in this index***Cassette tape recorder** [electronics]Stereophonic sound system (Parts of a stereo
system) So: 892Tape recorder (Kinds of tape recorders) T: 38
*with picture***Cassia** [plant] C: 276

Cinnamon Ci: 557

Cassiar Mountains

British Columbia (Land regions) B: 622

Cassin, René-Samuel [French jurist]

Nobel Prizes (Peace: 1968) N: 448

Cassini [space probe] C: 276 *with picture*

Astronomy (Space probes) A: 849

Planet (Saturn) P: 511

Saturn (Flights to Saturn) S: 153

Space exploration (Probes to Jupiter and
beyond) So: 710-711

Titan T: 299

Cassini, Giovanni Domenico [Italian-born
French astronomer] C: 277Map (Advances in European cartography)
M: 183-184

Saturn (Rings) S: 152-153

Cassini, Jean-Dominique [1625-1712, Italian-
born French astronomer] *See* Cassini,
Giovanni Domenico *in this index***Cassini division** [astronomy]

Cassini, Giovanni Domenico C: 277

Cassino [Italy] C: 277

World War II (The invasion of Italy) W: 482

Cassio [literary figure]Shakespeare, William (*Othello*) S: 363**Cassiodorus** [Roman nobleman]

Library (Medieval collections) L: 259-260

Cassiopeia [constellation] C: 277**Cassiopeia** [Greek mythology]

Andromeda [Greek mythology] A: 457

Cassiopeia C: 277

Cassiterite [mineral] C: 277

Tin (Where tin is found) T: 294

Cassius [literary figure]Shakespeare, William (*Julius Caesar*) S: 360**Cassius Longinus, Geius** [Roman general]
C: 277

Caesar, Julius (Assassination) C: 13

Cassock [vestment]Pope (Titles, clothing, and symbols) P: 661
with picture

Casson, Alfred Joseph [Canadian painter]
Group of Seven G: 403

Cassone
Furniture (Italy) F: 572 *with picture*

Cassoulet [food]
France (Food and drink) F: 459-460

Cassowary [bird] C: 277 *with picture*

Cast [drama]
Motion picture (Assembling the cast) M: 851

Cast [form]
Fossil (How fossils form) F: 425 *with picture*

Cast and casting [manufacturing] C: 277 *with pictures*
Aluminum (Casting) A: 395
Automobile (Manufacturing) A: 957
Bell (How bells are made) B: 238
Copper (How copper metal is produced)
Ci: 1041 *with diagrams*
Die and diecasting D: 195
Foundry F: 432
Glass (Casting) G: 216
Iron and steel (Shaping and finishing steel)
I: 445-447 *with diagrams; picture on*
I: 437
Plastics (Making plastic products) P: 557-558
with picture
Sculpture (Since the mid-1900's) S: 259

Cast iron C: 279
Iron and steel (Kinds of iron and steel) I: 437;
(Making iron products) I: 441
Nickel (Industrial uses) N: 404
Tin (Uses) T: 293-294

Cast-iron stove
Range *picture on* R: 138

Cast the First Stone [book by Himes]
Himes, Chester H: 234

Castalian spring [stream, Greece]
Parnassus P: 177

Castanets [musical instrument] C: 279 *with picture*

Caste [entomology]
Ant (Castes) A: 523
Termite (Life and habits) T: 173

Caste [sociology] C: 279
Asia (The people) A: 781
Hinduism (Caste) H: 236
India (Social structure) I: 116; (The Aryans)
I: 128
Mythology (Mythology and society) M: 988
Segregation (Segregation in other countries)
S: 286
Social class So: 550
Sri Lanka (People) So: 817-818
World, History of the (The Mauryan Empire in
India) W: 430

Castel dell'Ovo [castle]
Naples (The city) N: 13

Castel Gandolfo [villa]
Pope (The daily life of the pope) P: 661; (The
1700's and 1800's) P: 665

Castel Sant'Elmo [castle]
Naples (The city) N: 13

Castello, Dan [American performer]
Circus (History) Ci: 562b-563

Castelo Branco, Humberto de Alencar
[Brazilian political leader]
Brazil (Return to constitutional government)
B: 585-586; (Under military rule) B: 586

Castiglione, Baldassare [Italian author] C: 279
Italian literature (Humanism and the
Renaissance) I: 494
Renaissance (Humanism) R: 233-234

Castile and Aragon [Spanish history] C: 279
Spain (Reconquest by the Christian kingdoms)
So: 746

Castilian [dialect]
Spain (Language) So: 733
Spanish language So: 756b; (Castilian
Spanish) So: 757

Castilian Grammar [book by Nebrija]
Spanish literature (The 1400's) So: 758

Castilla, Ramón [Peruvian political leader]
C: 280
Peru (The early republic) P: 315

Castillejo, Cristóbal de [Spanish poet]
Spanish literature (The 1500's) So: 758-759

Castillo de San Marcos National Monument
[Florida] C: 280
Florida *picture on* F: 252
National Park System (table: National monu-
ments) N: 50

Castilloa [botany]
Rubber (The rubber tree) R: 502

Casting [fishing]
Fishing F: 175

Casting [manufacturing] See Cast and casting *in this index*

Casting [theater]
Motion picture (Assembling the cast) M: 851
Theater (Casting) T: 236 *with picture*

Casting Away of Mrs. Lacks and Mrs. Aleshine, The [book by Stockton]
Stockton, Frank Richard So: 906

Casting director [career]
Motion picture (Assembling the cast) M: 851

Casting machine
Monotype (How the Monotype works) M: 733

Casting on
Knitting (Knitting the fabric) K: 354

Castle [chess]
Chess (How chess is played) C: 413

Castle [building]
Washington, D.C. (Smithsonian museums)
W: 71-73

Castle [fortification] C: 280 *with pictures*
Citadel *picture on* Ci: 567
Crusades *picture on* Ci: 1160
Rhine River *picture on* R: 293
Shelter (The Middle Ages) S: 393
Windsor Castle W: 335 *with picture*
World, History of the *picture on* W: 432

Castle [platform]
Ship (The cog) S: 407

Castle, Irene Foote [American dancer]
Ballroom dancing B: 63

Castle, Michael N. [American political leader]
Delaware (table) D: 109

Castle, The [book by Kafka]
Kafka, Franz K: 209
German literature (Expressionism) G: 142

Castle, Vernon [American dancer]
Ballroom dancing B: 63

Castle, Wendell [American designer]
Furniture (Postmodern design) F: 585-586

Castle and Cooke, Inc. [company]
Hawaii (Lanai) H: 102

Castle Clinton National Monument (New York)
C: 282
National Park System (table: National monu-
ments) N: 50
New York (Places to visit) N: 302

Castle Garden
Castle Clinton National Monument C: 282

Castle Hill [Budapest]
Budapest (City) B: 666

Castle Hill National Historic Site
[Newfoundland]
Canada (table: National historic sites) C: 114

Castle of Otranto, The [book by Walpole]
English literature (Romantic prose) E: 320
Gothic novel G: 279
Romance R: 415
Walpole, Horace W: 19

Castle of São Jorge
Lisbon (The city) L: 348

Castle Rackrent [play by Edgeworth]
Irish literature (Prose and poetry) I: 431

Castle Rock
Edinburgh E: 77

Castlereagh, Viscount [British statesman]
C: 282
Aix-la-Chapelle, Congress of A: 253

Castor and Pollux [Greek mythology] C: 282

Castor oil C: 282 *with picture*

Castor-oil plant
Castor oil C: 282 *with picture*
Poisonous plant (Some poisonous plants)
P: 602

Castration
Cat (Birth control) C: 295-296
Dog (Social and moral responsibilities) D: 279-
280
Pet (Birth control) P: 322

Castries [city, Saint Lucia] C: 282
Saint Lucia S: 50

Castro, Américo [Spanish author]
Spanish literature (The Generation of 1898)
So: 762

Castro, Fidel [Cuban political leader] C: 283 *with portrait*
Carter, Jimmy (Later years) C: 259
Cold War (The Bay of Pigs) Ci: 766; *picture on*

Ci: 769
Communism (The spread of Communism)
Ci: 893-894
Cuba Ci: 1168; (History) Ci: 1175-1178 *with picture*
Eisenhower, Dwight David (A break with
Cuba) E: 155
Guantánamo G: 411
Guerrilla warfare (History) G: 420
Guevara, Ché G: 421
Havana H: 86
Kennedy, John Fitzgerald (Cuba) K: 265
Latin America (Political unrest) L: 110 *with picture*
Union of Soviet Socialist Republics *picture on*
U: 38
West Indies (Independence movements)
W: 205

Castro, Guillén de [Spanish dramatist]
Spanish literature (The 1600's) So: 759

Castro, Raúl [Cuban political leader]
Castro, Fidel C: 283

Castro, Raul Hector [American political leader]
C: 283 *with portrait*
Arizona (table) A: 687
Hispanic Americans (Political developments)
H: 255

Castro, Rosalia de [Spanish poet]
Spanish literature (The 1800's) So: 761

Castro Alves, Antônio de [Brazilian poet]
Brazil (The arts) B: 576-577

Castro Ruiz, Fidel See Castro, Fidel *in this index*

Castrotroneves, Helio [race driver]
Automobile racing (table: Indianapolis 500 win-
ners) A: 980

Casual shoe
Shoe (Kinds of shoes) S: 431 *with pictures*

Casuarina [tree] See Beefwood *in this index*

Caswell, Hollis Leland [American educator]
C: 283 *with portrait*

Caswell, Richard [American political leader]
North Carolina (table) N: 490; (Revolution and
independence) N: 492

Cat C: 284 *with pictures*
Animal *pictures on* A: 471, A: 472
Brain *diagram on* B: 559
Eye (Eyes of animals) E: 469
Pet P: 319
Skull S: 495 *with picture*
Toxoplasmosis T: 351
*See also the list of Related Articles in the Cat
article*

Cat distemper [disease] See Panleukopenia *in this index*

Cat Fanciers' Association, Incorporated [orga-
nization]
Cat (Cat associations and shows) C: 296

Cat Island
Bahamas (Land and climate) B: 29 *with map*

Cat on a Hot Tin Roof [play by Williams]
Williams, Tennessee W: 312

CAT scan See Computed tomography *in this index*

Cat show
Cat (Cat associations and shows) C: 296

Catabolism [physiology]
Metabolism (Catabolism) M: 424

Catacombs [burial] C: 297
Painting (Early Christian and Byzantine art)
P: 49
Rome (The catacombs) R: 433 *with picture*

Catacombs of San Sebastiano
Rome (The catacombs) R: 433

Catadioptric telescope
Telescope (Refracting-reflecting telescopes)
T: 105

Catadromous fish [zoology]
Fish (Fish migrations) F: 151

Catalan [language]
Andorra (People) A: 454-455
Romance language R: 415
Spain (Language) So: 733
Spanish language (Castilian Spanish) So: 757

Catalan forge
Iron and steel (The Iron Age) I: 450-451

Catalanas [breed]
Chicken (table) C: 443

Cataldo Mission
Idaho (Places to visit) I: 34

Catalepsy [disorder] C: 297

Catalexis

- Poetry (table) P: 594
Çatalhöyük [ancient city]
 Turkey (History) T: 509
Catalina Island [California]
 California (Coastline) C: 50
Catalog
 Mail-order business M: 66
Cataloging
 Library (The growth of information and technology) L: 238; (The work of librarians) L: 255
 Library of Congress L: 263
 A Guide to Research Skills Research Guide: 27-30
Cataloging in Publication
 Library of Congress L: 264
Catalogue of Nebulae and of Star Clusters
 [book by Messier]
 Messier, Charles M: 423
Catalonia [region, Spain]
 Spain (Language) So: 733; (Political changes) So: 751
Catalpa [tree] C: 297
 Tree pictures on T: 421
Catalysis [chemistry] C: 297
 Nickel (Industrial uses) N: 404
Catalyst [chemical]
 Catalysis C: 297
 Enzyme E: 340
 Hydrogenation H: 470
 Materials (Chemical properties) M: 300b-300c
 Platinum (Uses) P: 566
 Sodium (Uses) So: 569
 Vitamin (How vitamins work) V: 432
 Zeolite Z: 594
Catalytic converter C: 298 *with diagram*
 Air pollution (Control of air pollution) A: 199
 Automobile (Environmental impact) A: 949;
 (The exhaust system) A: 952
 Gasoline engine (Air pollution controls) G: 66
Catalytic cracking [industrial process]
 Petroleum (Conversion) P: 345
Catamaran [boat] C: 298
 Boating (Sailboats) B: 429; *picture on* B: 431
Catamount [wild cat] C: 298
 Mountain lion M: 898 *with pictures*
Cateplexy [disorder] C: 298
 Narcolepsy N: 20
Catapult [machine] C: 298 *with picture*
 Aircraft carrier (Flight operations) A: 206 *with diagram*
 Archimedes (His inventions) A: 605
 Army (Armies in the Middle Ages) A: 727
Cataract [disorder] C: 299
 Blindness (Diseases) B: 401
 Eye (Cataract) E: 466 *with picture*
Cataract [geography]
 Waterfall W: 141
Cataract Falls [Indiana]
 Indiana *picture on* I: 196
Catarrh [physiology] C: 299
Catawba Indians
 Indian, American (Indians of the Southeast) I: 157
Catbird [bird] C: 299
 Bird (Birds of brushy areas) B: 338 *with picture*
Catboat
 Sailing (Catboats and sloops) S: 24 *with picture*
Cetbrier [plant]
 Greenbrier G: 381
Catch-22 [book by Heller]
 Heller, Joseph H: 177
 Novel (The middle and late 1900's) N: 575
Catcher
 Baseball (Equipment) B: 125 *with picture*;
 (Player positions) B: 127
Catcher boat
 Whale (Hunting techniques) W: 263; *picture on* W: 264
Catcher in the Rye, The [book by Salinger]
 Novel (After World War II) N: 574
 Salinger, J. D. S: 86
Catcher interference
 Baseball (Reaching base) B: 129
Catcher's box
 Baseball (The infield) B: 126 *with diagram*
Catcher's mitt
 Baseball (Equipment) B: 125 *with picture*
Catchstitch
 Sewing (Hand stitches) S: 332
Catchup See Ketchup *in this index*
Catclaw acacia [plant]
 Acacia A: 20 *with picture*
Catechism [religion] C: 299
Catechism of the Catholic Church [religion]
 Roman Catholic Church (John Paul II) R: 412
Catechu [tree product] C: 300
Categorical syllogism
 Logic (The categorical syllogism) L: 425
Catenary
 Electric railroad (Kinds of electric railroads) E: 188 *with picture*
 Locomotive (Electric locomotives) L: 416
Caterpillar [insect] C: 300 *with picture*
 Butterfly B: 733 *with picture*; (The larva) B: 740-741 *with pictures*
 Cabbage *picture on* C: 2
 Cankerworm C: 177
 Chrysalis C: 539
 Gypsy moth G: 452 *with picture*
 Insect (Muscular system) I: 289; (Hearing) I: 290; (Complete metamorphosis) I: 293
 Jumping bean *picture on* J: 190
 Larva L: 78 *with picture*
 Metamorphosis (The larva) M: 428
 Moth M: 837 *with picture*; (The larva) M: 839 *with pictures*
 Spruce budworm *picture on* So: 810
 Tent caterpillar T: 171
Caterpillar Inc. [company]
 Peoria P: 277
Catesby, Robert [English public figure]
 Gunpowder Plot G: 442
Catfish [fish] C: 300 *with pictures*
 Animal *picture on* A: 492
 Bullhead B: 696 *with picture*
 Fish *picture on* F: 145
Catgut [cord] C: 301
 Ligature L: 281
Cathari [religious sect]
 Albigenses A: 332
Catharsis [psychology] C: 301
 Aristotle (Literary criticism) A: 664
Cathay [alternate name, China] C: 301
 Mongol Empire (European contacts) M: 721
 Polo, Marco P: 648 *with map*
Cathays Park
 Cardiff C: 209 *with picture*
Cathedral C: 301 with pictures
 Architecture (Gothic architecture) A: 617-619 *with pictures*
 City (Description) Ci: 582 *with picture*
 Córdoba Ci: 1051 *with picture*
 Gothic art G: 278 *with picture*
 Middle Ages (The Christian church) M: 523-524
 Notre Dame, Cathedral of *picture on* N: 551
 World, History of the (The Byzantine Empire) W: 434 *with picture*
Cathedral [book by Carver]
 Carver, Raymond C: 269
Cathedral [book by Macaulay]
 Literature for children *picture on* L: 384
Cathedral Church of Saint Peter and Saint Paul See Washington Cathedral *in this index*
Cathedral mosque [building]
 Mosque M: 830
Cathedral of ...
Cathedrals appear under their key words, as in
 Notre Dame, Cathedral of
Cathedral Spires [rock, Colorado]
 Garden of the Gods G: 29
Cather, Willa [American author] C: 302 *with portrait*
 American literature (Realist fiction) A: 422
Catherine I [empress of Russia]
 Russia (table: Czars and empresses) R: 549
Catherine II [empress of Russia] See Catherine the Great *in this index*
Catherine, Saint [daughter of]
 Bridget, Saint B: 607
Catherine de Médicis [wife of Henry II] C: 303
 Ballet (The birth of ballet) B: 50-51
 Charles IX C: 381
 Henry II [of France] H: 186
 Henry III [king of France] H: 186
 Huguenots (The massacre) H: 410
 Medici M: 362
 Tuilleries T: 481
Catherine of Aragon [wife of Henry VIII] C: 303
 Boleyn, Anne B: 440
 England (The Wars of the Roses) E: 306-307
 Henry VII [of England] H: 188
 Henry VIII [of England] H: 188
Catherine of Braganza [wife of Charles II]
 Queens Q: 39
Catherine of Siena, Saint [Italian religious leader] C: 303
 Correggio *picture on* Ci: 1071
Catherine the Great [empress of Russia] C: 303 *with portrait*
 Diamond (Famous diamonds) D: 182
 Jones, John Paul (Russian service) J: 159
 Russia (Music) R: 536; (table: Czars and empresses) R: 549; (Catherine the Great) R: 550 *with picture*
 Russo-Turkish wars R: 566
 Succession wars (The War of the Bavarian Succession) So: 950
Catherwood, Frederick [English artist]
 Stephens, John Lloyd So: 890
Catheter [medicine]
 Angiography A: 461
 Angioplasty A: 461 *with picture*
 Heart (Symptoms and diagnosis) H: 137-138 *with picture*
 Radiology R: 99
Cathode [electronics]
 Battery B: 168
 Electrolysis (How electrolysis works) E: 200-201 *with diagram*
 Silver (Extracting and refining silver) S: 465
 Television (Flat-panel, large-screen television) T: 128
 Vacuum tube (How a vacuum tube works) V: 258 *with diagram*
 X rays *diagram on* X: 541
Cathode-ray tube [electronics]
 Computer (Monitors) Ci: 916
 Electronics (Electron tubes) E: 210; (Early experiments) E: 215 *with picture*
 Oscilloscope O: 862 *with picture*
 Radar (The display) R: 71
 Vacuum tube (Kinds of vacuum tubes) V: 258-259
Cathode rays [electronics]
 Crookes tube Ci: 1153 *with diagram*
 Thomson, Sir Joseph John T: 264
Catholic Advertising Program
 Knights of Columbus K: 352
Catholic Appeal [organization]
 Foundations (Public and society benefit) F: 431
Catholic Association [organization]
 O'Connell, Daniel O: 668
Catholic Church See Roman Catholic Church;
 Eastern Catholic Churches *in this index*
Catholic Conference, United States C: 303
Catholic Educational Association, National
 National Catholic Educational Association N: 30
 Teaching (Teachers organizations) T: 69
Catholic Emancipation Act [1829]
 O'Connell, Daniel O: 668
 Wellington, Duke of (Political career) W: 195
Catholic Foreign Mission Society of America
 [religious group]
 Missionary (Organization) M: 621
"Catholic Hour, The" [radio program]
 Sheen, Fulton John S: 379
Catholic League [European history]
 Tilly, Count of T: 287
Catholic Library Association C: 304
 Regina Medal R: 206
Catholic Periodical and Literature Index
 Catholic Library Association C: 304
Catholic Reformation See Counter Reformation *in this index*
Catholic Revival See Counter Reformation *in this index*
Catholic Union
 Roman Catholic Church (The decline of church influence) R: 410
Catholic University of America
 Roman Catholic Church (In the United States) R: 412
Catholic University of Louvain
 Belgium (Education) B: 229-230
Catholic Workers [organization]
 Day, Dorothy D: 52
Catholic Youth Organization C: 304

Catilina, Lucius Sergius See *Catiline in this index*

Catiline [Roman political leader] **C:** 304

Caesar, Julius (Alliance with Pompey) **C:** 12

Cicero, Marcus Tullius (His works) **Ci:** 552

Cation [chemistry]

Electrolyte **E:** 202

Ion (Behavior of ions) **I:** 371-372

Pyroxene **P:** 920

Soil (Chemical conditions) **So:** 575

Catkin [botany] **C:** 304

Alder **A:** 339 *with picture*

Birch **B:** 327

Poplar **P:** 667

Pussy willow **P:** 912 *with picture*

Walnut **W:** 19 *with picture*

Willow **W:** 315

Catlin, George [American painter] **C:** 304

Comanche Indians *picture on* **Ci:** 866

Dance *picture on* **D:** 30

Indian, American *pictures on* **I:** 136a, **I:** 136d, **I:** 143, **I:** 157, **I:** 161

National park (The early national parks) **N:** 42j

Osceola *picture on* **O:** 862

Catmint See *Catnip in this index*

Catnip [plant] **C:** 304 *with picture*

Cat (Training) **C:** 294

Cato [play by Addison]

Addison, Joseph **A:** 47

Cato, Marcus Porcius, the Elder [Roman political leader] **C:** 304

Latin literature (Early Latin literature) **L:** 115

Cato, Marcus Porcius, the Younger [Roman political leader] **C:** 305

Cato the Censor See *Cato, Marcus Porcius, the Elder in this index*

Catoclin Mountain Park [Maryland]

National Park System (table: National parkways and other national parklands) **N:** 55

Catriona [book by Stevenson]

Stevenson, Robert Louis (Novels) **So:** 898

Catron, John [American jurist]

Supreme Court of the United States (table)

So: 1000

Cats [musical]

Lloyd-Webber, Andrew **L:** 403

Musical comedy (During the late 1900's)

M: 960

Cat's Cradle [book by Vonnegut]

Vonnegut, Kurt **V:** 448

Cat's cradle [game]

Magic (Homeopathic magic) **M:** 49

Cat's-eye [gem] **C:** 305

Gem *picture on* **G:** 78

Cat's-tail [plant]

Timothy **T:** 293

Catskill Aqueduct [New York City]

Aqueduct (Present-day aqueducts) **A:** 581

Catskill Mountains [New York] **C:** 305

Plateau **P:** 565

Catsup See *Ketchup in this index*

Catt, Carrie Chapman [American social reformer] **C:** 305 *with portrait*

Woman suffrage (Growth of the movement)

W: 380-381

Cattail [plant] **C:** 305 *with picture*

Cattail millet [grain]

Millet **M:** 555

Cattalo [animal]

Buffalo (Protection of bison) **B:** 675

Cattle **C:** 306 *with pictures*

Africa *picture on* **A:** 110

Amarillo **A:** 400 *with picture*

Aurochs **A:** 891

Australia (Agriculture) **A:** 919-920 *with picture*

Canada *picture on* **C:** 124

Colorado *picture on* **Ci:** 829

Cowboy (On the ranch) **Ci:** 1110

Dairying **D:** 6

Farm and farming (Specialized livestock farms)

F: 31 *with picture*

India (Hinduism) **I:** 116

Iowa (Agriculture) **I:** 390

Kansas (The great cattle towns) **K:** 237

Livestock **L:** 396 *with picture*

Mad cow disease **M:** 26

Meat (Kinds of meat) **M:** 347

Meat packing (Slaughtering and dressing)

M: 351; (By-products) **M:** 351

Montane (Agriculture) **M:** 756

Nebraska *picture on* **N:** 95

North Dakota *picture on* **N:** 497; *picture on* **N:** 515

Nuer **N:** 602

Oklahoma (Agriculture) **O:** 729 *with picture*

Prion **P:** 804

Ranching **R:** 134 *with picture*

Saskatchewan (Agriculture) **S:** 143

Texas (Agriculture) **T:** 202

Veal **V:** 291

Western frontier life in America (The cattle boom) **W:** 234

Westward movement in America (Cattle frontiers) **W:** 251

Wyoming (Agriculture) **W:** 531

See also the list of Related Articles in the Cattle article

Cattle brand

Ranching (Life on a cattle ranch) **R:** 134 *with picture*

Cattle drive [ranching]

Cowboy (The trail drive) **Ci:** 1111; *picture on* **Ci:** 1108

Kansas *picture on* **K:** 238

Ranching (History) **R:** 135

Western frontier life in America (The cattle boom) **W:** 234; (Life in the country) **W:** 237

Westward movement in America (Cattle frontiers) **W:** 251

Cattle egret [bird]

Egret (Kinds) **E:** 119

Cattle grub [insect]

Bot fly **B:** 507

Warble fly **W:** 34

Cattle plague [disease]

Rinderpest **R:** 342

Cattle Raid of Cooley, The [poem]

Cuchulainn **Ci:** 1182

Irish literature (Heroic tales, romances, and segas) **I:** 430-431

Maeve, Queen **M:** 41

Mythology (The Irish cycles) **M:** 983

Cattle ranch See *Ranching in this index*

Cattle show

Cattle (Show cattle) **C:** 315

Cattle tick [animal] **C:** 316 *with picture*

Cattle warble [insect]

Warble fly **W:** 34

Catton, Bruce [American historian] **C:** 316

Catts, Sidney J. [American political leader]

Florida (table) **F:** 260

Catullus, Gaius Valerius [Roman poet] **C:** 316

Latin literature (The age of Cicero) **L:** 115

Cauca River [Colombia]

Colombia (The Andes Mountains) **Ci:** 782

South America (Rivers) **So:** 628

Caucasian rug

Rugs and carpets (Oriental rugs) **R:** 516-517

Caucasians [people]

Turkey (People) **T:** 505

Caucasoid race

Races, Human (The three-race theory) **R:** 53-54 *with picture*

Caucasus [region, Eurasia] **C:** 317

Caucasus Mountains [Europe-Asia] **C:** 317

Azerbaijan (Land and climate) **A:** 997 *with map*

Georgia (Land and climate) **G:** 110 *with map*

Russia (Land regions) **R:** 539 *with map*

Cauchy, Augustin Louis [French mathematician]

Mathematics (In the 1800's) **M:** 307

Caucus [politics] **C:** 317

Election (Nomination of candidates) **E:** 159

Election campaign (Winning the nomination)

E: 160

House of Representatives (Organization of the U.S. House) **H:** 387

Political convention (Delegate selection)

P: 628-629

Political party (Selecting candidates) **P:** 631

Primary election (History) **P:** 777

Senate (The leaders of the senate) **S:** 294-295

Caucus-convention system [politics]

Caucus **C:** 317

Political convention (Delegate selection)

P: 628-629

Caudal anesthesia

Anesthesia (Local anesthesia) **A:** 459

Caudal fin [zoology]

Fish (Fins) **F:** 160-161 *with picture*

Caudal vertebra [anatomy]

Mammal (Skeleton) **M:** 118-119 *with diagram*

Caudillo, El

Franco, Francisco **F:** 483

Caulerpa [seaweed]

Invasive species (How invasive species affect

habitats) **I:** 354j-354k

Caulfield, Henry S. [American political leader]

Missouri (table) **M:** 668

Caulfield, Holden [literary figure]

Salinger, J. D. **S:** 66

Cauliflower [plant] **C:** 317 *with picture*

Cabbage **C:** 2

Evolution (Artificial selection) **E:** 432 *with picture*

Caulking

Palm (Products of palms) **P:** 109

Caunotauricus

Washington, George (Messenger to the

French) **W:** 93-94

Causality [philosophy]

Aristotle (Philosophy of nature) **A:** 664

Hume, David (Hume's thought) **H:** 432

Metaphysics (Causality) **M:** 430

Philosophy (Modern philosophy) **P:** 387-388

Cause and effect [philosophy] See *Causality in this index*

Causey, Peter F. [American political leader]

Delaware (table) **D:** 109

Caustic soda See *Lye in this index*

Cautantowwit [Indian god]

Indian summer **I:** 189

Cautery [medicine]

Surgery (History) **So:** 1007

Cauthen, Steve [American jockey]

Horse racing (History) **H:** 366

Cautionary Tales [book by Belloc]

Belloc, Hilaire **B:** 244

Cauto River

Cuba (The land) **Ci:** 1172 *with map*

Cavafy, Constantine [Greek poet]

Greek literature (Modern Greek literature)

G: 378

Cavalcade [film]

Motion picture (Best picture: 1932-33) **M:** 861

"Cavalcade for Creative Youth"

Music Clubs, National Federation of **M:** 958

Cavalcanti, Guido [Italian poet]

Italian literature (The Middle Ages) **I:** 494

Cavalier [English history]

England (The Civil War) **E:** 308

Hairdressing (The 1600's) **H:** 12

Hat *picture on* **H:** 84

Cavalier King Charles spaniel [dog] **C:** 318

Cavalier poets [English literature]

English literature (Metaphysical and Cavalier

poets) **E:** 317

Lovelace, Richard **L:** 509

Poetry (Renaissance poetry) **P:** 596

Suckling, Sir John **So:** 951

Cavaliers, Cleveland

Basketball (table) **B:** 150

Cavalleria Rusticana [opera by Mascagni]

Italy *picture on* **I:** 505

Mascagni, Pietro **M:** 262

Opera (Verismo opera) **O:** 799; (*Cavalleria*

Rusticana) **O:** 803

"Cavalleria Rusticana" [story by Verga]

Verga, Giovanni **V:** 317

Cavalry **C:** 318 *with picture*

Cavazos, Lauro Fred [American government

official] **C:** 318

Hispanic Americans (Political developments)

H: 255-256

CAVE [electronic device]

Virtual reality **V:** 426

- Prehistoric people (The appearance of art)
P: 750-751 *with pictures*
- Caveat emptor** C: 321
- Cavefish** C: 321 *with picture*
Eye picture on E: 468
Fish picture on F: 158
- Cavelier, René-Robert** See La Salle, Sieur de in *this index*
- Cavell, Edith Louisa** [British nurse] C: 322
- Cavendish, Henry** [British physicist] C: 322
Chemistry (The phlogiston theory) C: 401
Hydrogen (Properties) H: 469
- Cavendish, Victor Christian William** [British colonial official]
Devonshire, Duke of D: 175
- Cavendish, William** [British nobleman]
Hobbes, Thomas (His life) H: 272
- Cavern** See Cave in *this index*
- Cavernous hemangioma** [disorder]
Birthmark B: 380
- Caviar** [food] C: 322 *with picture*
Russia (Fishing industry) R: 546
Shad S: 341
Spawn So: 768
Sturgeon So: 934
- Caving** [mining]
Mining (Underground mining methods) M: 576
- Cavitation** [mechanics]
Propeller (Marine propellers) P: 826
- Cavity** [botany]
Tree surgery T: 434
- Cavity** [dentistry]
Dentistry (General dentistry) D: 143
Teeth (Dental decay) T: 82-83 *with pictures*
- Cavour, Camillo Benso** See Cavour, Count di in *this index*
- Cavour, Count di** [Italian political leader] C: 322
Italy (Italy united) I: 515
Napoleon III (Foreign affairs) N: 19-20
- Cavy** [animal] C: 322
- Cawdrey, Robert** [English educator]
Dictionary (Early English dictionaries) D: 194
- Cawnpore** [India] See Kanpur in *this index*
- Caxton, William** [English printer] C: 322
Advertising (The impact of printing) A: 79
Encyclopedia (From the 1200's to the 1600's)
E: 268a
Malory, Sir Thomas M: 112
- Caxtons, The** [book by Bulwer-Lytton]
Bulwer-Lytton, Edward George Earle Lytton
B: 697
- Cayenne** [French Guiana] C: 323
French Guiana F: 514 *with picture*
- Cayenne, Smooth** [fruit]
Pineapple (The pineapple plant) P: 472
- Cayenne pepper** [seasoning] C: 323
- Cayetano, Ben** [American political leader]
Hawaii (table) H: 105
- Cayley, Sir George** [British physicist] C: 323
Airplane (First human flights) A: 230
Glider (Early days) G: 230
- Cayman Brac** [island, Caribbean]
Cayman Islands C: 323
- Cayman Islands** [Caribbean] C: 323
- Cayuga and Seneca Canal** [waterway, New York]
Finger Lakes F: 104
New York State Barge Canal System N: 345
with map
- Cayuga Indians** C: 323
Iroquois Indians I: 455
Indian, American (Indians of the Northeast)
I: 154
- Cayuga Lake** [New York]
Finger Lakes F: 104
New York (Lakes) N: 306-307
- Cayuse Indians**
Whitman, Marcus W: 293
Whitman, Narcissa W: 293
- Cayuse War** [1847-1850]
Indian wars (In California and the Northwest)
I: 194
Oregon (Indian wars) O: 846
- CB** [radio] See Citizens band radio in *this index*
- CBC** See Canadian Broadcasting Corporation in *this index*
- CBE** See Competency-based education in *this index*
- CBO** See Congressional Budget Office in *this index*
- CBR warfare** See Chemical-biological-radiological warfare in *this index*
- CBS television network**
Television (The national networks) T: 114
- CCC** [U.S.] See Commodity Credit Corporation in *this index*
- CCC** [U.S. history] See Civilian Conservation Corps in *this index*
- CCD** [electronics] See Charge-coupled device in *this index*
- CCF** See Co-operative Commonwealth Federation in *this index*
- CCU** [medicine] See Coronary care unit in *this index*
- CD** [banking] See Certificate of deposit in *this index*
- CD** [electronics] See Compact disc in *this index*
- Cd** [symbol]
Cadmium C: 12
Candela C: 175
- CD changer** [machine]
Compact disc (Playback) Ci: 901-902
- CD player** [electronics] See Compact disc player in *this index*
- CD4 cell** [biology]
AIDS (How AIDS affects the body) A: 163
with picture; (Medical care for HIV infection and AIDS) A: 164
- CD-R** [electronics]
Compact disc (Other formats) Ci: 902-902a
Computer (Removable storage drives) Ci: 916
- CD-ROM** [electronics]
Compact disc Ci: 901 *with picture*
Computer (Storage devices) Ci: 915; *picture on Ci: 913*
Computerized instruction (How computerized instruction works) Ci: 924d-924h
Electronic publishing E: 205
Electronics (Digital circuits) E: 213-214
Encyclopedia (Today's encyclopedias) E: 268b
Library (The growth of information and technology) L: 238
Map M: 176
Multimedia M: 919
Publishing (Reference books) P: 868
Video game (How video games work) V: 359
A Guide to Research Skills Research
Guide: 30, 31
- CD-ROM player** [machine]
Compact disc Ci: 901
- CD-RW** [recording]
Compact disc (CD-RW) Ci: 902a
Computer (Removable storage drives) Ci: 916
- CDC** See Centers for Disease Control and Prevention in *this index*
- CDU** [German political party] See Christian Democratic Union in *this index*
- Ce** [symbol]
Cerium C: 362
- C.E.** [calendar]
B.C. B: 178
- Cease and desist order**
Federal Trade Commission F: 66
- Ceaușescu, Elena** [Romanian public figure]
Ceaușescu, Nicolae C: 323
Romania (Protests and political change) R: 425
- Ceaușescu, Nicolae** [Romanian political leader]
C: 323
Communism (In Eastern Europe) Ci: 896-897
Romania (Opposition to the Soviet Union)
R: 425; (Protests and political change)
R: 425
- Cebu City** [Philippines] C: 323
- Cebu Island** [Philippines]
Philippines (The main islands) P: 376-378 *with map*
- Cech, Thomas Robert** [American chemist]
Nobel Prizes (Chemistry: 1989) N: 443
- Cecil, Edgar Algernon Robert Gascoyne**
[British statesman]
Nobel Prizes (Peace: 1937) N: 447
- Cecil, Robert Arthur Talbot Gascoyne** [British political leader] See Salisbury, Marquess of in *this index*
- Cecil, W.** [British inventor]
Gasoline engine (Development of the gasoline engine) G: 66
- Cecil, William** [English government official]
Burghley, Lord B: 704
Elizabeth I (Problems at home and abroad)
E: 238
- Cecilia** [book by Burney] B: 709
- Cecilia, Saint** [Christian martyr] C: 324
- Cecropia moth** [insect]
Insect picture on I: 292
Moth pictures on M: 838
- Cecrops** [Greek mythology]
Athens (Earliest times) A: 857
- Cecum** [anatomy]
Colon [anatomy] Ci: 785
Intestine (The large intestine) I: 353 *with diagram*
- CEDA** [political party]
Spain (The Spanish republic) So: 750
- Cedar** [tree] C: 324 *with pictures*
Conifer Ci: 950
Juniper J: 196
Pencil (Cased pencils) P: 236
Tree pictures on T: 425, T: 426
- Cedar Breaks National Monument** [Utah]
National Park System (table: National monuments) N: 50
- Cedar elm**
Elm (Kinds) E: 244-245
- Cedar of Lebanon** [tree]
Cedar (Needle-leaved cedars) C: 324 *with picture*
- Cedar Rapids** [city, Iowa] C: 324
Amanites A: 400
- Cedar River**
Iowa (Rivers and lakes) I: 386
- Cedar waxwing**
Bird (Birds of forests and woodlands) B: 334
with picture
Waxwing W: 153 *with picture*
- Cédras, Raoul** [Haitian military leader]
Clinton, Bill (International affairs) Ci: 682e
- CEEB** [organization] See College Entrance Examination Board in *this index*
- Ceftriaxone** [medication]
Antibiotic (Antibacterial antibiotics) A: 550;
(table) A: 551
- Ceilidh Trail**
Nova Scotia (Places to visit) N: 560
- Ceiling** [scenery]
Theater (Kinds of scenery) T: 239
- Cel animation**
Animation (Cel animation) A: 511; *pictures on A: 512*
- Cela, Camilo José** [Spanish author]
Nobel Prizes (Literature: 1989) N: 446
Spanish literature (Spanish literature today)
So: 763
- Celadon ware**
Porcelain (Painting) P: 676
- Celandine** [plant] C: 324 *with picture*
- Celaya, Gabriel** [Spanish poet]
Spanish literature (Spanish literature today)
So: 763
- Celebes** [island, Indonesia] See Sulawesi in *this index*
- "Celebrated Jumping Frog of Calaveras County, The"** [story by Twain]
Twain, Mark (Newspaper work in the West)
T: 528
- Celebration** [Florida]
Walt Disney Company W: 20
- Celebration**
Holiday H: 290
- Celebrezze, Anthony Joseph** [American government official]
Health and Human Services, Department of (table) H: 128
Kennedy, John Fitzgerald (table) K: 266
- Celera Genomics Corporation** [company]
Biology (Current research and issues) B: 320-321
Heredity (The Human Genome Project) H: 210
Human Genome Project H: 427
Medicine (The challenge of genetics) M: 378
- Celery** [plant] C: 325 *with picture*
- Celesta** [musical instrument] C: 325 *with picture*
- Celeste, Richard F.** [American political leader]
Ohio (table) O: 699
- "Celeste Aida"** [aria]
Opera (Aida) O: 801
- Celestial coordinate system** [astronomy]
Astronomy (Locating objects in space) A: 837;
diagrams on A: 842
- Celestial equator**
Astronomy (Locating objects in space) A: 837-838

- Equator (The celestial equator) **E**: 346
 Equinox **E**: 348
 Zodiac (The origin of the zodiac) **Z**: 601
- Celestial globe**
 Globe **G**: 233
- Celestial Mechanics** [book by Laplace]
 Laplace, Marquis de **L**: 74
 Bowditch, Nathaniel **B**: 517
- Celestial meridian**
 Time (Measuring time by the sun) **T**: 288
- Celestial navigation**
 Navigation (Celestial navigation) **N**: 71; *pictures on N*: 72
- Celestial pole**
 Astronomy (How the stars move) **A**: 835;
 (Locating objects in space) **A**: 837
 Pole **P**: 618
 Star (Rising and setting of stars) **So**: 842
- Celestial sphere** [astronomy]
 Astronomy (Locating objects in space) **A**: 837
- Celestina** [literary figure]
 Spanish literature (The 1400's) **So**: 758
- Celestina, La** [play]
 Spanish literature (The 1400's) **So**: 758
- Celestine I, Saint** [pope]
 Pope (table) **P**: 666
- Celestine II** [pope]
 Pope (table) **P**: 666
- Celestine II** [antipope]
 Pope (table) **P**: 666
- Celestine III** [pope]
 Pope (table) **P**: 666
- Celestine IV** [pope]
 Pope (table) **P**: 666
- Celestine V, Saint** [pope]
 Pope (table) **P**: 666
- Celestite** [mineral]
 Strontium **So**: 930
- Celiac plexus** [anatomy] See *Solar plexus in this index*
- Celibacy** [custom] **C**: 325
 Family (Development of the Western family) **F**: 22
 Pope (The early Middle Ages) **P**: 663
 Religious life (Religious life in early Christianity) **R**: 226
- Céline, Louis-Ferdinand** [French author] **C**: 325
 Novel (New directions in the novel) **N**: 573-574
- Cell** [biology] **C**: 326 *with pictures*
 Aging (How aging occurs) **A**: 141
 Archaea **A**: 593
 Bacteria (The structure of bacteria) **B**: 20 *with diagram*
 Biosynthesis **B**: 326
 Botany (What botanists study) **B**: 508
 Cellulose **C**: 341
 DNA **D**: 258
 Growth (In living things) **G**: 404
 Heredity (Chromosomes and genes) **H**: 201;
 (The flow of genetic information) **H**: 205
 Histology **H**: 260
 Human body (Cells and tissues) **H**: 417 *with picture*
 Life (Cells) **L**: 276 *with pictures*
 Mitochondria **M**: 679
 Molecular biology (The beginning of molecular biology) **M**: 691-692
 Monoclonal antibody **M**: 730
 Mutation **M**: 968
 Plant **P**: 517; (Parts of plants) **P**: 529; (Factors affecting plant growth) **P**: 538
 Protein (How the body uses proteins) **P**: 832
 Protoplasm **P**: 836
 Technology (Emerging technologies) **T**: 75-76
 Tissue **T**: 299
- Pathology**
 Cancer **C**: 167 *with picture*
 Death (Medical aspects of death) **D**: 61
 Sickle cell anemia **S**: 448 *with picture*
 Virus (How a virus infects an organism) **V**: 426 *with diagram*
- Reproduction**
 Chromosome **C**: 538
 Egg (How embryos develop) **E**: 117
 Fertilization **F**: 78
 Gene **G**: 81
 Stem cell **So**: 889
 See also the list of *Related Articles in the Cell article*
- Cell** [communications]
 Cellular telephone **C**: 340 *with diagram*
- Cell** [electricity] See *Battery in this index*
- Cell** [entomology]
 Bee (The honey bee colony) **B**: 201 *with picture*
- Cell** [political science]
 Terrorism (Terrorist groups) **T**: 178
 Union of Soviet Socialist Republics (The Communist Party) **U**: 29
- Cell** [prison]
 Prison (Prison cells) **P**: 806 *with picture*
- Cell** [shipping]
 Ship (Container ships) **S**: 418 *with picture*
- Cell** [spreadsheet]
 Computer (Spreadsheet programs) **Ci**: 917
 Spreadsheet **So**: 805
- Cell body** [anatomy]
 Nervous system (Parts of a neuron) **N**: 133;
diagrams on N: 134
- Cell culture** [biology]
 Culture **Ci**: 1190
- Cell division** [biology]
 Baby (The developing baby) **B**: 4-5
 Cancer **C**: 167
 Cell (Cell division) **C**: 330 *with pictures*
 Chromosome **C**: 538
 Embryo **E**: 257
 Evolution (Mutation) **E**: 427-428
 Heredity (Sex cells and reproduction) **H**: 201
- Cell-mediated immune response** [physiology]
 Immune response *diagram on I*: 88b
 Immune system (The immune response) **I**: 88
- Cell membrane** [biology]
 Antibiotic (Disruption of the cell membrane) **A**: 550
 Bacteria (The structure of bacteria) **B**: 20 *with diagram*
 Cell (Inside a living cell) **C**: 328; (The cytoplasm) **C**: 329 *with diagrams*
 Life (Cells) **L**: 276
 Lipid (Importance of lipids) **L**: 344
- Cell sap**
 Sap (Cell sap) **S**: 121
- Cell suicide** [biology] See *Apoptosis in this index*
- Cell theory** [biology]
 Biology (Materialistic physiology and the cell theory) **B**: 319
- Cell wall** [biology]
 Antibiotic (Antibacterial antibiotics) **A**: 550;
 (Prevention of cell wall formation) **A**: 550
 Bacteria (The structure of bacteria) **B**: 20 *with diagram*
 Cell (Inside a living cell) **C**: 328 *with diagram*
- Cellar spider**
 Spider (Tangled-web weavers) **So**: 788
- Celler-Kefauver Act** [1950]
 Antitrust laws **A**: 560
 Consumerism (The right to choose) **Ci**: 1019
 Monopoly and competition (History) **M**: 732
- Cellini, Benvenuto** [Italian sculptor] **C**: 339 *with picture*
 Sculpture (Michelangelo) **S**: 252-253 *with picture*
- Cello** [musical instrument] **C**: 339 *with picture*
 Music (Stringed instruments) **M**: 948-949 *with picture*
- Cellophane** **C**: 340
- Cellucci, Argeo Paul** [American political leader]
 Massachusetts (table) **M**: 288
- Cellular microorganism**
 Microbiology (Microorganisms) **M**: 513
- Cellular Pathology** [book by Virchow]
 Virchow, Rudolf **V**: 391
- Cellular plastics**
 Insulation (In buildings) **I**: 306 *with picture*
 Plastics (Making plastic products) **P**: 557-558
- Cellular telephone** **C**: 340 *with diagram*
 Codes and ciphers (Modern applications of cryptography) **Ci**: 752
 Etiquette (Telephone etiquette) **E**: 373
 Fax machine (How a fax machine works) **F**: 57
 Internet *diagram on I*: 350d
 Smart card **S**: 513
 Telecommunications **T**: 89
 Telephone (Wireless telephone equipment) **T**: 97; (Improvements in telephone technology) **T**: 101; *picture on T*: 94
- Cellular vessel** [ship]
 Containerization **Ci**: 1021
- Celluloid** [plastic]
 Plastics (The invention of Celluloid) **P**: 559
- Cellulose** **C**: 341
 Carbohydrate (Kinds of carbohydrates) **C**: 203-204; (How the body uses carbohydrates) **C**: 204
 Cellophane **C**: 340
 Fiber (Regenerated fibers) **F**: 87
 Lacquer **L**: 22
 Lignin **L**: 302
 Paper **P**: 134
 Plant **P**: 517
 Plastics (The invention of Celluloid) **P**: 559
 Rayon (How rayon is made) **R**: 153 *with diagram*
 Ruminant **R**: 519
 Tree (How trunks and branches grow thicker) **T**: 418-419
 Wood (The composition of wood) **W**: 390
- Cellulose acetate** [substance]
 Acetate **A**: 25
 Cellulose (Industrial uses) **C**: 341
 Plastics (table) **P**: 556; (The invention of Celluloid) **P**: 559
- Cellulose nitrate** [material]
 Cellulose (Industrial uses) **C**: 341
- Cellulose xanthate** [chemical]
 Rayon (How rayon is made) **R**: 153
- Cellulosics**
 Fiber (Regenerated fibers) **F**: 87
- Celsius, Anders** [Swedish astronomer]
 Celsius scale **C**: 342
- Celsius scale** [temperature] **C**: 341 *with picture*
 Metric system (Heat) **M**: 440
- Celtic cross** [symbol]
 Cross *picture on Ci*: 1155
 Ireland (The arts) **I**: 421-422 *with picture*
- Celtic language**
 Celts **C**: 342
 England (History) **E**: 303
 Gaelic language **G**: 5
 Gaul **G**: 70
 Ireland (Language) **I**: 418
 Language (Indo-European) **L**: 64
- Celtics, Boston**
 Basketball (table) **B**: 150
- Celtics, Original**
 Basketball (The history of professional basketball) **B**: 153
- Celts** [ancient people] **C**: 342 *with picture*
 Druids **D**: 367
 England (Ancestry) **E**: 294; (History) **E**: 303
 English language (Origins) **E**: 313
 Gaels **G**: 5
 Halloween (Samhain) **H**: 25
 Ireland (History) **I**: 425
 Mythology (Celtic mythology) **M**: 983
 New Year's Day (Early customs) **N**: 289
 Painting (Early medieval painting in the West) **P**: 49
 Scotland (History) **S**: 218-219
 Wales (History) **W**: 12
- Celtuce** [plant]
 Lettuce (Kinds of lettuce) **L**: 214 *with picture*
- Cement and concrete** **C**: 342 *with pictures*
 Building construction (Foundations) **B**: 682
 Gravel **G**: 330
 Road (Paving) **R**: 359
- Cementum** [anatomy]
 Teeth (Cementum) **T**: 81 *with diagram*
- Cemetery**
 National cemetery **N**: 30
 Potter's field **P**: 715
- Cemetery Hill**
 Civil War (Battle of Gettysburg) **Ci**: 628
- Cemetery Ridge**
 Civil War (Battle of Gettysburg) **Ci**: 628
 Gettysburg, Battle of **G**: 176
- Cenacle** [room]
 Jerusalem (Christian sites) **J**: 96 *with map*
- Cenci, The** [play by Shelley]
 Shelley, Percy Bysshe (His writings) **S**: 391
- Cenizero**
 Rain tree **R**: 127
- Cenobitic religious life**
 Religious life (The Eastern Orthodox Churches) **R**: 227
- Cenotaph** [memorial, London]
 Lutyens, Sir Edwin Landseer **L**: 530
- Cenozoic Era** [geology] **C**: 345
 Earth (The Cenozoic Era) **E**: 28 *with pictures*;
 (table) **E**: 30

Forest (Later forests) F: 398
 Mammal (The Age of Mammals) M: 127
 Plant (Early plants) P: 540-541
 Prehistoric animal (The world of prehistoric animals) P: 736; (The Age of Mammals) P: 740 *with picture*
Censor [incense burner] C: 345 *with picture*
Censor
 Censorship (Military censorship) C: 346
Censorship C: 345
 Comstock Law Ci: 926
 Ireland (The arts) I: 421
 Journalism (Restrictions on freedom of the press) J: 173; (Journalism in free societies) J: 173; (Journalism in government-controlled societies) J: 173-174
 Library (Censorship) L: 239
 Motion picture (Censorship and self-regulation) M: 861
 Plato (Art) P: 569
 Propaganda (Censorship) P: 824
 Public opinion (Public opinion and government) P: 861
 Radio (Government regulation of radio) R: 91
 Russian literature (Late romanticism) R: 561; (Soviet literature) R: 564
Censure [government]
 Congress of the United States (Reviewing its own members) Ci: 946
Census [population] C: 346 *with pictures and map*
 Computer (The first successful computer) Ci: 924b
 Demography D: 129
 Domesday Book D: 300
 Literacy (Illiteracy in the United States) L: 351
 Population (Census) P: 673
Census Bureau, United States C: 350
 Census (United States censuses) C: 346
 Commerce, Department of (Functions) Ci: 871
 Crime (Unreported crime) Ci: 1138
 Map (Database development) M: 180
Cent [money] C: 350 *with pictures*
 Penny P: 271
 Money (United States currency today) M: 709-711 *with pictures*
Centaur [Greek mythology] C: 350 *with picture*
 Hercules (The death of Hercules) H: 199
 Mythology picture on M: 980
Centaurus [constellation]
 Southern Cross So: 688
Centennial Centre [Manitoba]
 Manitoba (Places to visit) M: 152
Centennial Exposition [Philadelphia]
 Museum (Early United States museums) M: 939-940
 Philadelphia (A growing city) P: 367
 World's fair V: 500
Centennial Park [Toronto]
 Toronto (Parks) T: 339
Centennial State
 Colorado Ci: 829
Centéotl [Aztec god]
 Aztec (Religion) A: 1000
 Mythology (American Indian mythology) M: 985-986
Center [geometry]
 Polygon P: 650 *with diagram*
 Sphere So: 779 *with diagram*
Center [sports]
 Basketball (The players) B: 144
 Football (The offensive team) F: 356 *with diagrams*
Center, The (Hong Kong, China)
 Skyscraper (table) S: 498
Center City [Philadelphia]
 Philadelphia (Continued growth) P: 367
Center cut [meat]
 Ham (Kinds of ham) H: 28
Center for Health Statistics, National
 Vital statistics (Collecting and publishing vital statistics) V: 429-430
Center for Research Libraries, The [Chicago]
 Library (Research libraries) L: 247
Center for Science in the Public Interest [organization] C: 351
Center for the Book
 Library of Congress L: 264
Center of curvature [optics]
 Mirror (Convex mirrors) M: 616-617 *with diagrams*

Center of gravity *See Gravity, Center of in this index*
Center of mass *See Mass, Center of in this index*
Center of population [geography]
 United States map on U: 109
Center of symmetry
 Crystal (Classifying crystals) Ci: 1166
 Symmetry So: 1066
Center of the United States
 Geographic center of the United States G: 91
Center-pivot irrigation
 Farm and farming picture on F: 33
Center spot
 Soccer (Starting the game) So: 546
Center work
 Ballet (A ballet class) B: 46-47 *with picture*
Centerboard [boat]
 Sailing (Hull) S: 23 *with diagram*; (Controlling direction) S: 25
Centering the puck
 Hockey (Hockey terms) H: 275
Centerless grinding
 Machine tool (Abrasive processes) M: 18-19
Centers for Disease Control and Prevention [U.S.] C: 351
 Disease (Governments) D: 234
 Health and Human Services, Department of (The Public Health Service) H: 128
 Public Health Service P: 857
Centi [prefix]
 Metric system (Use of standard prefixes) M: 437; (Metric prefixes) M: 439; (Selection of SI prefixes) M: 440
Centigrade scale *See Celsius scale in this index*
Centimeter [unit of measure] C: 351
 Metric system (Use of "family units" per quantity) M: 437; (The metric system at a glance) M: 438 *with pictures*
Centimeter-gram-second [measurement]
 Dyne D: 398
Centinel of the North-Western Territory [newspaper]
 Ohio (Communication) O: 698
Centipede [animal] C: 351 *with picture*
 Arthropod A: 752 *with picture*
Centipede grass [plant]
 Lawn (Planting the grass) L: 142-144
Central African Republic C: 352 *with picture and map*
 Flag picture on F: 198
 French Equatorial Africa F: 514
Central air conditioning
 Air conditioning (Kinds of air conditioners) A: 179 *with diagram*
Central Alps [mountains, Austria]
 Austria (Land regions) A: 934-935
Central America C: 354 *with map*
 City (Ancient cities) Ci: 578
 Hispanic Americans (Central American migration) H: 254
 Indian, American (Indians of Middle America) I: 169 *with pictures and map*; (Indians of the Caribbean) I: 172 *with pictures*
 Railroad (In other countries) R: 113
 Rain forest (The Americas) R: 126b *with map*
See also the list of Related Articles in the Central America article
Central America [ship]
 Shipwreck (table: Major shipwrecks) S: 428
Central America, United Provinces of [Latin American history]
 Central America (Independence) C: 355
 Costa Rica (Independence) Ci: 1084
 Delgado, José Matías D: 115
 El Salvador (Independence) E: 252
 Flag picture on F: 217
 Guatemala (Independence) G: 417
 Honduras (Independence) H: 312-313
 Latin America (The wars of independence) L: 107
 Nicaragua (Independence) N: 398-400
Central America and the Caribbean [region]
 North America (Land regions) N: 462-464
Central American Common Market
 Guatemala City G: 418
Central American Confederation
 Central America (Attempts at unification) C: 356
Central American Court of Justice [Latin American history]

Central America (Attempts at unification) C: 355-356
Central American Federation
 Central America (Attempts at unification) C: 355-356
Central Arizona Project
 Arizona (The late 1900's) A: 691
 Phoenix (Recent developments) P: 399
Central Asia [region, Asia]
 Asia (Way of life in Central Asia) A: 790 *with pictures*; (Land regions) A: 792; (Plants) A: 798 *with map*
Central bank
 Bank (Central banks) B: 91
 Federal Reserve System F: 65
 Money (How the money supply is determined) M: 714-716
Central basin [geography]
 Arctic Ocean (Depth and the ocean floor) A: 642
Central Canada Exhibition
 Ottawa (Annual events) O: 873
Central chimpanzee
 Chimpanzee C: 471
Central City
 Colorado (Places to visit) Ci: 836
 Western frontier life in America (The search for gold and silver) W: 233-234
Central City Park
 Georgia picture on G: 116
Central Command
 Air Force, United States (Combat commands) A: 192-193
Central Committee [Communist Party]
 Communism (Communist Party structure) Ci: 891
 Union of Soviet Socialist Republics (The Communist Party) U: 29
Central Conference of American Rabbis
 Synagogue Council of America So: 1067
Central dispatch office
 Police (Records and communications) P: 621
Central Division
 Hockey (table: National Hockey League) H: 281
Central dogma [biology]
 Molecular biology (The beginning of molecular biology) M: 691-692
Central European University Foundation
 Foundations (International affairs) F: 431
Central fissure
 Brain (The cerebrum) B: 550b *with diagram*
Central Flyway [route]
 Bird (Where birds migrate) B: 360-361
Central heating
 Heating (Central heating systems) H: 159
 House (Heating and air conditioning) H: 383
Central High School [Little Rock]
 African Americans (The civil rights movement) A: 136m *with picture*
 Arkansas (The mid-1900's) A: 714 *with picture*
 Eisenhower, Dwight David (Civil rights) E: 153-154
Central Intelligence Agency [U.S.] C: 356
 Bush, George Herbert Walker (CIA director) B: 718
 Central America (Developments since the mid-1900's) C: 356
 Espionage (History) E: 358
 Iran-contra affair (Background) I: 407
 Propaganda (After World War II) P: 825
 Strategic Services, Office of So: 920
Central limit theorem
 Statistics (Probability) So: 868-869
Central Museum of the Revolution
 Moscow (Museums and libraries) M: 825
 Russia (Museums and libraries) R: 536
Central nervous system [anatomy]
See also Brain; Spinal cord in this index
 Human body (The central nervous system) H: 425
 Nervous system (Divisions of the nervous system) N: 132 *with diagram*
 Paralysis (Paralysis of central nervous system origin) P: 152
 Reproduction, Human (Development of organs and organ systems) R: 248
 Reye's syndrome R: 288
 Spastic paralysis So: 767
Central office
 Telephone (Routing the call) T: 96

- Central Office of Vigilance**
Vatican City (Armed forces) V: 288
- Central Pacific Railroad**
California *picture* on C: 61
Railroad (The first transcontinental rail lines)
R: 116 *with picture*
Sacramento (History) S: 6
Western frontier life in America (East meets West) W: 234
- Central Park** [New York City]
Cleopatra's Needles Ci: 662b *with picture*
New York City (Manhattan) N: 323-325; (Parks)
N: 338; *picture* on N: 331
Olmsted, Frederick Law O: 745
- Central Park** [painting by Prendergast]
Prendergast, Maurice Brazil *picture* on P: 756
- Central Pine Belt**
Alabama (Land regions) A: 268
- Central planning** [economics] See Planned economy *in this index*
- Central Plateau** [region of Mexico]
Mexico (The Plateau of Mexico) M: 460 *with picture*
- Central Plaza** [Hong Kong]
Skyscraper (table) S: 498
- Central Powers** [World War I]
Germany (World War I) G: 166
World War I W: 452; (table: The warring nations) W: 453; *maps* on W: 456, W: 458, W: 461, W: 462, W: 466
- Central processing unit** [electronics] See Microprocessor; Processor *in this index*
- Central Railway** [railroad, South America]
Andes Mountains (Transportation) A: 453
Railroad (Worldwide development) R: 116-117
- Central receiver system**
Solar energy (Central receiver systems)
So: 579
- Central Research Library** [New York]
New York Public Library N: 344
- Central Thai dialect** [language]
Thailand (Languages) T: 224
- Central Time Zone**
Standard time (Time zones) So: 835
Time (Time zones in the United States and Canada) T: 289 *with map*
- Central Treaty Organization** [alliance]
Cold War (The death of Stalin) Ci: 764
- Central University** [Caracas]
Venezuela (Education) V: 301
- Central vacuum cleaner**
Vacuum cleaner V: 258
- Central Valley** [region, California]
California (Land regions) C: 48
- Central Valley Project**
San Joaquin River S: 100
- Centralized dispatching**
Railroad (Automatic block signal systems)
R: 111
- Centralized specialist system** [investment]
American Stock Exchange A: 430
- Centralized Traffic Control** [transportation]
Railroad (Automatic block signal systems)
R: 111
- Centre Block** [building]
Ottawa (The Parliament buildings) O: 872
- Centrex service**
Telephone (Business services) T: 98
- Centrifugal casting** [manufacturing]
Cast and casting (Other types of casting)
C: 278
- Centrifugal-flow compressor**
Jet propulsion (Turbojet) J: 111
- Centrifugal force** [physics] C: 357
- Centrifugal method**
Uranium (Separating uranium isotopes) U: 215
with diagram
- Centrifugal pump**
Pump (Dynamic pumps) P: 899 *with diagram*
- Centrifuge** [machine] C: 357 *with picture*
Cell (Looking at a cell) C: 327
Plasma (Uses in medicine) P: 551 *with picture*
- Centriole** [biology]
Cell (The cytoplasm) C: 329 *with diagram*;
(Mitosis) C: 330
- Centripetal force** [physics] C: 358 *with diagram*
Centrifugal force C: 357
- Centroid method of factor analysis** [psychology]
Thurstone, Louis Leon T: 273
- Centrosaurus** [dinosaur]
- Dinosaur (True dinosaurs) D: 206b-208
- Centuries** [book by Nostradamus]
Nostradamus N: 550
- Centurion** [ancient Rome]
Legion L: 184
- Century** [time] C: 358
- Century II** [Wichita]
Kansas *picture* on K: 225
Wichita (The city) W: 297
- Century 21** [Seattle, Washington]
Seattle (Economic expansion) S: 276
Washington *picture* on W: 67
- Century City** [California]
Los Angeles (West Los Angeles) L: 461
- Century of Dishonor, A** [book by Jackson]
Jackson, Helen Hunt J: 14
- Century of Louis the Great, The** [book by Perrault]
Perrault, Charles P: 293
- Century of Progress Exposition** [Chicago]
Chicago (Ending a century of progress) C: 436
- Century plant** [plant] C: 358 *with picture*
Aloe A: 380
Sisal S: 476
- Cepeda, Orlando** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Cephalic vein** [anatomy]
Human body *diagram* on H: 422
- Cephalonia** [island, Greece]
Ionian Islands I: 373 *with map*
- Cephalopod** [zoology]
Mollusk (Octopuses and squids) M: 695 *with picture*
- Cephalosporin** [medication] C: 359
Penicillin (How penicillins work) P: 240
- Cephalothorax** [zoology]
Arachnid A: 590
Shrimp (The body of a shrimp) S: 441
Spider (The spider's body) So: 784 *with diagram*
- Cepheid variable** [astronomy]
Leavitt, Henrietta Swan L: 170
- Cepheus** [Greek mythology]
Andromeda [Greek mythology] A: 457
- Ceram** [island, Indonesia]
Indonesia (The Molucca Islands) I: 234
- Ceramic insulation**
Insulation (In industry) I: 306-307
- Ceramic microphone**
Microphone (Crystal and ceramic microphones) M: 516 *with diagram*
- Ceramics** [material] C: 359 *with pictures*
See also Pottery *in this index*
Antique (Ceramic antiques) A: 557
Clay Ci: 658
Composite materials Ci: 904
Dwight, John D: 395
Materials (Ceramics) M: 300d *with picture*
Plastics (To replace glass and ceramics) P: 555
Porcelain P: 675
Pottery P: 716
Superconductivity So: 993
Tile T: 286
- Ceratopsian** [dinosaur]
Dinosaur (True dinosaurs) D: 206b-208 *with picture*
- Cerberus** [Greek mythology] C: 360
Hercules (The twelve labors) H: 198-199
- Cercopithecine** [monkey]
Primate (Old World monkeys) P: 778a
- Cercus**
Insect (Abdomen) I: 288; *diagram* on I: 286
- Cere** [zoology]
Parakeet P: 151 *with picture*
- Cereal** C: 361
Barley B: 112
Bran B: 562
Corn Ci: 1056 *with pictures*
Food (Food from plants) F: 329
Food supply (Cereal grains) F: 347
Grain G: 301
Grass (Cereals) G: 326
Livestock (Feed) L: 397
Michigan (Interesting facts) M: 489;
(Manufacturing) M: 504-505
Millet M: 555
Nutrition (Kinds of nutrients) N: 625
Oatmeal O: 640
Oats O: 640
Rice R: 322
Rye R: 572
- Wheat W: 266
- Cereal Bowl of America**
Michigan (Interesting facts) M: 489;
(Manufacturing) M: 504-505
- Cerealia** [Roman history]
Ceres C: 362
- Cerebellum** [anatomy]
Brain (The parts of the brain) B: 550b; *diagram*
on B: 552; (In controlling movement)
B: 553; (In vertebrates) B: 559
Human body *diagram* on H: 422
Nervous system (The central nervous system)
N: 132-133 *with diagram*
- Cerebral arteriosclerosis** [disease]
Senility S: 300
- Cerebral cortex** [anatomy]
Allergy (Emotional factors) A: 373
Brain (The parts of the brain) B: 550b *with diagram*;
(The work of the brain) B: 552; (In controlling movement) B: 553
Concussion Ci: 929
Dream (The biology of dreams) D: 344
Memory M: 392
Nervous system (In vertebrates) N: 136
Taste T: 51
- Cerebral embolism** [disorder]
Stroke (Causes) So: 930
- Cerebral hemisphere** [anatomy]
Brain (The parts of the brain) B: 550b *with diagram*;
(The work of the brain) B: 552
- Cerebral hemorrhage** [disorder] C: 361
Stroke (Causes) So: 930
- Cerebral palsy** C: 361
Brain (Injuries) B: 557
Occupational therapy (Helping people with physical disabilities) O: 648
- Cerebral Palsy Associations, United**
Disabled (table) D: 222
- Cerebral thrombosis** [disorder]
Stroke (Causes) So: 930
- Cerebrospinal fluid** [physiology] C: 362
Brain (How the brain is protected) B: 552
Meningitis (Symptoms and diagnosis) M: 401
Respiration (Control of breathing) R: 261
- Cerebrum** [anatomy]
Brain (The cerebrum) B: 550b *with diagram*;
(In vertebrates) B: 559
Human body *diagram* on H: 422
Nervous system (The central nervous system)
N: 132 *with diagram*
- Ceremonial march**
March M: 193
- Ceremonial mask**
Mask (Ceremonial masks) M: 263 *with pictures*
- Ceremony** [sociology]
Indian, American (Ceremonies) I: 148 *with picture*;
picture on I: 164
Marriage (Wedding ceremonies and customs)
M: 221
Masonry M: 266
Mythology (Frazer's theory) M: 986
- Ceremony** [book by Silko]
American literature (Works by minority writers) A: 425
- Ceremony of Carols, A** [music by Britten]
Britten, Benjamin B: 634
- Ceres** [astronomy] C: 362
Asteroid (Size) A: 824
- Ceres** [Roman mythology] C: 362
Mythology (table) M: 980
See also Demeter *in this index*
- Cereus** [plant]
Flower *picture* on F: 270
- Cerezo Arévalo, Marco Vinicio** [Guatemalan political leader]
Guatemala (Political developments) G: 417
- Cerium** [element] C: 362
- Cermak, Anton J.** [American political leader]
Roosevelt, Franklin Delano (Election of 1932)
R: 455-456
- Cermeno, Sebastián Rodríguez** [Spanish explorer]
San Francisco (History) S: 97
- CERN** [organization] C: 363
Antimatter A: 556
Berners-Lee, Tim B: 270
Particle accelerator (How accelerators work)
P: 184-186
Physics (Employment) P: 443
UNESCO (Science) U: 24

Cernan, Eugene Andrew [American astronaut]
Space exploration (Other moon landings)
So: 719

Cernunnos [Celtic god]
Mythology *picture on M*: 984

Cero [fish]
Kingfish K: 329

Cerro de Pasco Corporation
Peru (The growth of U.S. influence) P: 315

Cerro Gordo, Battle of [1847]
Mexican War (Principal battles) M: 447 *with picture*

Cerro Santa Lucia [Santiago]
Chile *picture on C*: 459

Cerro Tololo Inter-American Observatory [Chile]
National Optical Astronomy Observatories N: 42

Cerro de Celaque [mountains]
Honduras (The Mountainous Interior) H: 309

Certificate of deposit [banking] C: 363
Bank (Safeguarding deposits) B: 88
Investment (Indirect investments) I: 367

Certificated airline
Aviation (Airline operations) A: 984-985

Certification
Aviation (Careers in aviation) A: 992
Teaching (Certification of teachers) T: 68

Certified check [banking]
Check (Special checking services) C: 391

Certified mail
Postal Service, United States (Extra protection) P: 700

Certified public accountant C: 363
Accounting (Fields of accounting) A: 23

Certiorari, Petition for [law]
Supreme Court of the United States (Writ of certiorari) So: 999

Certiorari, Writ of [law] C: 363
Appeal A: 568
Supreme Court of the United States (Writ of certiorari) So: 999

Cervantes, Miguel de [Spanish author] C: 363 *with portrait*
Don Quixote D: 306
Novel (Early novels) N: 572
Proverb P: 839
Spanish literature (The 1500's) So: 758-759;
(The 1600's) So: 759

Cervera y Topete, Pascual [Spanish admiral]
Sampson, William Thomas S: 81
Spanish-American War (Cuban blockade)
So: 753-754; (Land battles) So: 754

Cervical cancer [disorder] C: 364
Cancer (Classification by primary body site) C: 167-168

Cervical intraepithelial neoplasia [disorder]
Cervical cancer C: 364

Cervical vertebra [anatomy]
Mammal (Skeleton) M: 118-119 *with diagram*
Skeleton (The axial skeleton) S: 479-480 *with diagrams*
Spine So: 792 *with diagram*

Cervix [anatomy]
Cervical cancer C: 364
Childbirth (The birth process) C: 456
Gonorrhea G: 268
Pap test P: 132
Reproduction, Human (The stages of labor) R: 249
Uterus U: 251
Vagina V: 259

Cesalpino, Andrea [Italian anatomist]
Heart (Discovery of circulation) H: 144

Cesare Angelotti [opera character]
Opera (*Tosca*) O: 807

Cesarean section [medicine]
Childbirth (The birth process) C: 456
Conjoined twins C: 950
Reproduction, Human (The stages of labor) R: 249
Surgery (Obstetrics and gynecology) So: 1007

Cesario [literary figure]
Shakespeare, William (*Twelfth Night*) S: 360

Cesium [element] C: 364
Fallout (The fallout hazard) F: 19 *with map*
Radiation (Radiation and radioactivity) R: 75;
(Artificial radioactive substances) R: 77

Céspedes, Augusto [Bolivian author]
Bolivia (The arts) B: 445

Céspedes, Carlos Manuel de [Cuban patriot]

Cuba (Struggle against Spain) Ci: 1176

Cessna Citation Bravo [airplane]
Airplane *picture on A*: 210

Cesta [equipment]
Jai alai J: 21 *with picture*

Cestus [ancient Rome]
Boxing (Ancient times) B: 532-533

Cetacean [zoology] C: 364
See also Dolphin; Porpoise; River dolphin;
Whale *in this index*
Mammal (table) M: 128 *with picture*

Ceuta [Morocco]
Henry the Navigator H: 191

Ceylon *See* Sri Lanka *in this index*

Cézanne, Paul [French painter] C: 364 *with pictures*
Braque, Georges B: 564
Derain, André D: 152
Painting (Postimpressionism) P: 75 *with picture*
Picasso, Pablo (Early sculptures) P: 448a-448b
Postimpressionism P: 709

Cezanne Pinto: A Memoir [book by Stolz]
Literature for children *picture on L*: 360

Cf. [abbreviation]
Cross-reference Ci: 1155

CF [disease] *See* Cystic fibrosis *in this index*

Cf [symbol]
Californium C: 66

CF-18 Hornet [aircraft]
Air force *picture on A*: 182

CFA
Consumer Federation of America Ci: 1017

CFC [chemical] *See* Chlorofluorocarbon *in this index*

CFL *See* Canadian Football League *in this index*

CFS [disorder] *See* Chronic fatigue syndrome *in this index*

CFTR [genetics] *See* Cystic fibrosis transmembrane conductance regulator *in this index*

CGI [motion pictures] *See* Computer-generated imagery *in this index*

CGPM [organization] *See* Weights and Measures, General Conference on *in this index*

C.G.S. [measurement]
Dyne D: 398

CGS system [measurement]
Metric system (Evolution of the metric system) M: 441

CHA *See* Canadian Hockey Association *in this index*

Cha-cha [dance]
Ballroom dancing B: 63
Latin America (Dancing) L: 103

Chac [Maya god]
Maya (Religion) M: 322

Chac-mool [Aztec god]
Mexico *picture on M*: 469

Chacma [animal]
Baboon B: 3

Chaco [region, South America]
Gran Chaco G: 304

Chaco Canyon [New Mexico]
Anasazi (History) A: 448a

Chaco Culture National Historical Park [New Mexico] C: 365
National Park System (table: National historical parks) N: 56
New Mexico (Places to visit) N: 264

Chaco War [1932-1935]
Bolivia (Territorial losses) B: 447
Paraguay (Military ruin) P: 149

Chacoan peccary [animal]
Peccary P: 226

Chaconne [music]
Counterpoint Ci: 1097

Chad [country] C: 365 *with picture and map*
Flag *picture on F*: 198
French Equatorial Africa F: 514

Chad [paper]
Ballot (In the United States) B: 63
Election of 2000 (Court challenges) E: 161
Voting machine (Operation) V: 451

Chad, Lake [Africa]
Lake Chad L: 36

Chador [clothing]
Iran (Clothing) I: 402 *with picture*

Chadri [clothing] *See* Burqa *in this index*

Chadwick, Henry [American author]
Baseball (table: Hall of Fame) B: 134

Chadwick, Sir James [British physicist] C: 368
Harkins, William Draper H: 61
Nuclear energy (Artificial fission) N: 590
Physics (Uncovering the secrets of the atom) P: 442

Chadwick, Stephen F. [American political leader]
Oregon (table) O: 845

Chaeronea, Battle of [338 B.C.]
Alexander the Great (His youth) A: 342
Boeotia B: 435
Demosthenes D: 129

Chaetoceros debilis [zoology]
Diatom *picture on D*: 186

Chaetognath [zoology]
Animal (A classification of the animal kingdom) A: 507 *with picture*

Chafee, John Hubbard [American political leader]
Rhode Island (table) R: 311

Cheff [warfare]
Ammunition (Artillery ammunition) A: 435-436
Radar (Advances during World War II) R: 72

Chaffee, Roger B. [American astronaut]
Astronaut (Accidents in space) A: 830
Space exploration (Making ready) So: 715

Chagall, Marc [Russian-born artist] C: 368 *with picture*
Chicago (Places to visit) C: 430-431
Illinois *picture on I*: 53
Opera *picture on O*: 805
Stained glass (Decline and revival) So: 823 *with picture*

Chagas' disease
Trypanosome T: 475

Chagga [people]
Tanzania (Population and ancestry) T: 31

Chagos Archipelago [islands, Indian Ocean]
British Indian Ocean Territory B: 632
Diego Garcia D: 198

Chagres River [Panama] C: 368
Panama Canal (Gatun Lake) P: 123 *with map*

Chaikin, Joseph [American dramatist]
Drama (Experimental theater) D: 340

Chaikovsky, P. I. *See* Tchaikovsky, Peter Ilich *in this index*

Chain [hardware] C: 369 *with pictures*

Chain [weaving]
Rugs and carpets (Weaving) R: 515 *with pictures*

Chain, Ernst Boris [British biochemist] C: 369
Penicillin (Early history) P: 240

Chain broadcasting
Radio (The start of broadcasting) R: 92

Chain cent [money]
Cent *pictures on C*: 350

Chain gang [prison] C: 369

Chain hoist [mechanics]
Block and tackle (Endless chain hoist) B: 405 *with diagram*

Chain lightning
Lightning (Appearance) L: 300

Chain mail
Armor (During the Middle Ages) A: 720
Gauntlet G: 70

Chain of evidence [criminology]
Crime laboratory (How evidence is handled) Ci: 1140

Chain-of-Lakes [lakes, California]
Lassen Volcanic National Park L: 87

Chain of title
Title T: 302

Chain pickerel [fish]
Pickerel P: 450 *with picture*
Pike P: 461

Chain reaction [nuclear energy]
Nuclear energy (Nuclear fission) N: 582-583 *with diagram*; (Chain reactions) N: 586;
(The development of nuclear energy) N: 589; (The development of nuclear weapons) N: 591
Uranium (Fissionability) U: 215

Chain restaurant
Restaurant (Chains and franchises) R: 262

Chain saw [tool]
Saw (Power saws) S: 167 *with picture*

Chain silicate
Silicate S: 458

Chain stitch
Crochet C: 1148c *with diagrams*

Chain store C: 369

- Retailing (Chain stores) R: 265
- Chénédé, Aline** [wife of]
Chrétien, Jean (College years and early career)
C: 522a *with picture*
- Chained stitch**
Embroidery (Embroidery stitches) E: 257 *with picture*
- Chaining**
Bicycle (Power and speed) B: 290 *with diagram*
- Chair** [furniture]
Antique *picture on A: 558*
Art and the arts *picture on A: 747*
Eames, Charles E: 6
Furniture (Ancient Egypt) F: 570 *with pictures*;
(Ancient Greece) F: 570
Jefferson, Thomas *picture on J: 78*
- Chairs, The** [play by Ionesco]
Ionesco, Eugène I: 372
- Chaise** [vehicle]
Carriage C: 248
- Chaitya**
Architecture (Indian architecture) A: 613
- Chakiris, George** [American actor]
Motion picture (Best performance by an actor
in a supporting role: 1961) M: 863
- Chakri dynasty** [Thai history]
Thailand (The Bangkok era) T: 227
- Chalan Kanoë** [city, Saipan]
Northern Mariana Islands, Commonwealth of
the N: 526 *with picture*
- Chalaza** [zoology]
Egg (The white) E: 117 *with diagram*
- Chalazion** [disorder]
Eye (Diseases of the outer parts) E: 466 *with picture*
- Chalcedon, Council of** [A.D. 451]
Copts Ci: 1045
Leo I, Saint L: 197
Roman Catholic Church (The recognition of
Christianity) R: 406; (Conflict with the
East) R: 406-407
- Chalcedony** [mineral] C: 369
Agate A: 138
Cameo C: 80
Jasper J: 65
Quartz (Types) Q: 8
Sardonyx S: 125
- Chalchihuitlicue** [Aztec goddess]
Mythology (American Indian mythology)
M: 985-986
- Chalcocite** [mineral] C: 370
- Chalcogenide glass**
Glass (Specialty glasses) G: 212-213
- Chalcophile element**
Geochemistry G: 91
- Chalcopyrite** [mineral] C: 370
Copper (Copper ores) Ci: 1042
Mineral *picture on M: 568*
- Chaldeae** *See Chaldaea in this index*
- Chaldaea** [region] C: 370 *with map*
- Chaldean Church** [religious group]
Eastern Catholic Church E: 45
- Chaldean Empire** *See New Babylonian Empire
in this index*
- Chalgrin, Jean François Thérèse** [French artist]
Arc de Triomphe A: 593
- Chalk C:** 370
Drawing (Materials and techniques) D: 342
with picture
- Chalk River Nuclear Laboratories** [Ontario]
Ontario (The mid-1900's) O: 786
- Chalkboard C:** 370
Audio-visual materials (Visual materials) A: 882
Eraser E: 349
- Chalky limestone**
Rock (Organic sediments) R: 372
- Challenge** [cryptology]
Codes and ciphers (Modern applications of
cryptography) Ci: 752
- Challenge and response** [history]
Civilization (Why civilizations rise and fall)
Ci: 636
- Challenge to Liberty, The** [book by Hoover]
Hoover, Herbert Clark (Elder statesman)
H: 330
- Challenger** [ship]
Atlantic Ocean (The beginnings of scientific
oceanography) A: 867
Exploration (Deep-sea exploration) E: 451
Pacific Ocean (Scientific research) P: 15
- Challenger** [space shuttle]
Astronaut (Achievements in space) A: 829-
830; (Accidents in space) A: 830
Garneau, Marc G: 44
National Aeronautics and Space
Administration N: 27
Ride, Sally Kristen R: 336
Space exploration (Repair missions) So: 724
with picture; (The Challenger disaster)
So: 725 *with picture*
- Challenger Deep** [oceanography]
Deep D: 81
Pacific Ocean (The ocean floor) P: 14
- Challis** [fabric]
Textile (table: Textile terms) T: 213
- Challoner, Richard** [English religious leader]
Vulgate V: 453
- Chama Cha Mapinduzi** [political party]
Tanzania (Politics) T: 31
- Chambellan, René** [American sculptor]
Newbery Medal N: 358 *with picture*
- Chamber** [anatomy]
Heart (Chambers, valves, and inner lining)
H: 133; (Hearts of animals) H: 146 *with diagrams*
- Chamber**
Firearm (Mechanism) F: 132 *with diagrams*
- Chamber music C:** 370
Classical music (Chamber music) Ci: 643 *with picture*; *picture on Ci: 648*
- Chamber Music Society of Lincoln Center**
Lincoln Center for the Performing Arts L: 327
- Chamber of commerce** [organization] C: 371
- Chamber of Commerce of the United States**
[organization] C: 371
- Chamber of Deputies** [government]
Italy (Parliament) I: 499
- Chamber orchestra**
Orchestra (The structure of a symphony
orchestra) O: 820
- Chambered nautilus** [sea animal]
Nautilus N: 69 *with picture*
Shell (Octopuses and squids) S: 388; *pictures
on S: 387*
- Chamberlain, Abiram** [American political leader]
Connecticut (table) Ci: 967
- Chamberlain, Sir Austen** [British statesman]
Chamberlain, Neville C: 371
Nobel Prizes (Peace: 1925) N: 447
- Chamberlain, Daniel H.** [American political
leader]
South Carolina (table) So: 658
- Chamberlain, George E.** [American political
leader]
Oregon (table) O: 845
- Chamberlain, Joseph** [British political leader]
Chamberlain, Neville C: 371
Laurier, Sir Wilfrid (Relations with Britain)
L: 126
- Chamberlain, Joshua L.** [American political
leader]
Maine (table) M: 87
- Chamberlain, Neville** [British statesman] C: 371
Churchill, Sir Winston Leonard Spencer (World
War II begins) C: 547
Macmillan, Harold M: 25
Munich Agreement (Background) M: 927-928
United Kingdom ("Peace in our time") U: 70
World War II (The failure of appeasement)
W: 472
- Chamberlain, Owen** [American physicist]
Physics (Advances in the mid-1900's) P: 442
- Chamberlain, Wilt** [American basketball player]
C: 371 *with picture*
Basketball (The history of professional basket-
ball) B: 153-155; *picture on B: 153*
- Chambers, Ephraim** [British author]
Encyclopedia (An age of experiment) E: 268a
- Chambers, John Graham** [British sportsman]
Queensberry, Marquess of Q: 39
Queensberry Rules Q: 39
- Chambers, Paul** [American bassist]
Davis, Miles *picture on D: 49*
- Chambers, Whittaker** [American public figure]
C: 372
Hiss, Alger H: 259 *with picture*
Nixon, Richard Milhous *picture on N: 430*
- Chambers, Sir William** [British architect]
Architecture (Neoclassical architecture) A: 623
- Chambi, Mount** [mountain, Tunisia]
Tunisia (Land) T: 488 *with map*
- Chambray** [fabric]
Textile (table: Textile terms) T: 213
- Chameleon** [reptile] C: 372 *with picture*
Animal (Camouflage) A: 493; *picture on A: 469*
Lizard (Defenses) L: 400
Rain forest *picture on R: 126c*
- Chamfron**
Armor *picture on A: 720*
- Chamizal National Memorial** [Texas]
National Park System (table: National memori-
als) N: 54
- Chamois** [animal] C: 372 *with picture*
- Chamois skin** [leather]
Chamois C: 373
Leather (Kinds of leather) L: 167
- Chamomile** [plant] *See Chamomile in this index*
- Chamorro, Pedro Joaquín** [Nicaraguan journal-
ist]
Chamorro, Violeta Barrios de C: 373
- Chamorro, Violeta Barrios de** [Nicaraguan
political leader] C: 373 *with portrait*
Nicaragua (Recent developments) N: 400-401
Ortega, Daniel O: 859
- Chamorro** [people]
Guam (People) G: 408
Mariana Islands M: 199
Northern Mariana Islands, Commonwealth of
the (People) N: 526
- Champ de Mars** [park, Paris]
Eiffel Tower E: 146
Paris (Gardens, squares, and parks) P: 162-163
with map; *picture on P: 161*
- Champagne** [province, France]
Champagne C: 373
Middle Ages (Economic recovery) M: 526-527
Wine (Wines from France) W: 337
- Champagne** [wine] C: 373
Wine (Wines from France) W: 337
- Champagne Castle** [mountain]
South Africa (The Plateau) So: 614 *with map*
- Champesak** [Laotian history]
Indochina (A new kingdom) I: 225; (French
influence) I: 225
- Championship Auto Racing Teams**
Automobile racing (Racing organizations)
A: 976
- Champlain, Lake** [Canada-U.S.]
Lake Champlain L: 36 *with map*
Vermont (Rivers and lakes) V: 328-330; *picture
on V: 335*
- Champlain, Samuel de** [French explorer] C: 373
with picture and map
Brulé, Étienne 8: 650
Canada, History of (Early settlements) C: 142;
picture on C: 140
Exploration (The French and English in North
America) E: 446 *with map*
Map (Mapping the Americas) M: 184-185
Monts, Sieur de M: 780
New Brunswick (Exploration and settlement)
N: 196
New York (Exploration and settlement) N: 314
Nova Scotia (Exploration and settlement)
N: 568
Ontario (Exploration) O: 784
Ottawa River O: 875
Poutincourt, Jean de Biencourt de P: 723
Prince Edward Island (Exploration and early
history) P: 791
Quebec (province) Q: 11; [city] Q: 34; (Early
days) Q: 36
Saint John S: 35
Vermont (Exploration and settlement) V: 334
- Champlain and Saint Lawrence** [railroad]
Railroad (Canada's first steam-powered rail-
way) R: 115
- Champlain Canal** [waterway, New York]
New York State Barge Canal System N: 345
with map
Vermont V: 336; *picture on V: 335*
- Champlain in Huronia** [painting by Woods]
Canada, History of *picture on C: 140*
- Champlevé** [art]
Enamel (Techniques) E: 265
- Champollion, Jean François** [French archaeolo-
gist]
Hieroglyphics (Deciphering hieroglyphic writ-
ing) H: 226
Rosetta stone R: 481
- Champs Élysées** [street, Paris]
Paris (Gardens, squares, and parks) P: 162

with pictures and map

Chamuscado, Francisco Sánchez [Spanish explorer]

New Mexico (Exploration and settlement) N: 273

Chan

Zen Z: 593

Chance, Frank [American baseball player]

Baseball (table: Hall of Fame) B: 134

Chance, Game of

Gambling G: 20

Chance composition [choreography]

Cunningham, Merce Ci: 1192

Chance music See Aleatory music in this index

Chancellor [title]

Equity E: 348

Germany (Executive) G: 147

Prime minister P: 778c

Universities and colleges (Administration)

U: 208

Chancellorsville, Battle of [1863]

Civil War (table) Ci: 624; (Battle of

Chancellorsville) Ci: 628 with map

Hooker, Joseph H: 324

Jackson, Stonewall (Tragic death) J: 16

Lincoln, Abraham (Building the army) L: 321-322

Chancery, Court of [law] See Court of chancery in this index

Chanchan [ancient city]

Peru (History) P: 314 with picture

Chancre [infection]

Syphilis So: 1069

Chandelier

White House pictures on W: 289

Chandigarh [city, India]

Le Corbusier L: 175

Chandler, Edward Barron [Canadian political leader]

Confederation of Canada (Fathers of

Confederation) Ci: 935 with picture

Chandler, Happy [American political leader]

Baseball (table: Hall of Fame) B: 134

Kentucky (table) K: 290

Chandler, Raymond [American author] C: 374

American literature (Realist fiction) A: 422

Parker, Robert B. P: 170

Chandler, William E. [American government official]

Arthur, Chester Alan (table) A: 756

Chandler, Zachariah [American political leader]

C: 374

Chandler Circle [geography]

North Pole N: 517

South Pole So: 686

Chandler Pavilion

Los Angeles (The arts) L: 466 with picture

Chandni Chowk [district]

Delhi (The city) D: 115

Chandra X-ray Observatory [spacecraft]

Astronomy (X-ray astronomy) A: 844-845

Observatory (Satellite observatories) O: 645

Chandragupta I [emperor of India]

Gupta dynasty (Rise and fall of the dynasty)

G: 442

Chandragupta II [emperor of India]

Gupta dynasty (Rise and fall of the dynasty)

G: 442

India (The golden age) I: 129

Chandragupta Maurya [emperor of India]

C: 374

India (The Mauryan Empire) I: 128

Mauryan Empire M: 318

Chandrasekhar, Subrahmanyan [American astrophysicist] C: 374

Asian Americans (Individual achievements)

A: 812c

Chanel, Coco [French fashion designer] C: 374

Chanel No. 5 [perfume]

Chanel, Coco C: 375

Chang [conjoined twin]

Conjoined twins Ci: 950 with picture

Chang Ch'ien [Chinese emperor] See Zhang

Qian in this index

Chang-Diaz, Franklin R. [American astronaut]

Astronaut (table) A: 830

Chang Hang [Chinese astronomer] See Zhang

Heng in this index

Chang Jiang See Yangtze River in this index

Changa [insect]

Mole cricket M: 691

Changamire Empire [African history]

Africa (Eastern, central, and southern kingdoms) A: 132-133

Zimbabwe (History) Z: 597

Chang'an [former name, Xian]

Han dynasty H: 38

Tang dynasty T: 25

World, History of the (China) W: 435

Changdok Palace

Seoul (The city) S: 304

Change, Social See Social change in this index

Change of life See Menopause in this index

Change of Light, A [book by Cortázar]

Latin-American literature (Recent developments) L: 113

Change of Skin [book by Fuentes]

Fuentes, Carlos F: 553

Change of venue [law]

Trial (The criminal defendant's rights) T: 437-438

Changeling

Fairy (Fairies and human beings) F: 11

Changing Light at Sandover, The [book by

Merrill]

American literature (Literature since 1945)

A: 423

Merrill, James M: 419

Changing-of-the-guard ceremony

London (Other places of interest) L: 437 with picture

Channel [electronics]

Radio (Broadcasting power and frequency)

R: 87-88; (Stereophonic receivers) R: 89

Television (Broadcasting) T: 122

Channel [natural feature]

Atlantic Ocean (The Atlantic seafloor) A: 864

Jetty J: 116

Mars (Channels, valleys, and gullies) M: 226

River (Channels) R: 352 with diagram

Strait So: 918

Channel [spiritualism] See Medium [spiritualism] in this index

Channel bass [fish]

Redfish R: 191

Channel catfish [fish]

Catfish C: 300

Fish picture on F: 158

Channel Islands [California]

California (Coastline) C: 50

Channel Islands [United Kingdom] C: 375 with map

Guernsey G: 419

Jersey J: 93

Sark S: 126

Channel Islands National Park [California]

C: 375

National Park System (table: National parks)

N: 48

Channel of distribution

Marketing (Distribution) M: 214

Channel rockfish

Fish picture on F: 156

Channel Tunnel [England-France] C: 375 with

diagram

English Channel E: 311

France (Transportation) F: 470

Tunnel (History) T: 491-492

United Kingdom picture on U: 73

Channeling machine

Marble (Properties) M: 192

Channing, William Ellery [American religious leader]

Unitarians (History) U: 42

Chanson [music]

Classical music (Music in other countries)

Ci: 646

Song So: 592

Chanson d'amor [poetry]

Trouvère T: 454

Chanson de geste [poetry]

French literature (Narrative poetry) F: 518

Knights and knighthood (Knighthood in literature) K: 351

Chanson d'Eve, La [music by Fauré]

Fauré, Gabriel Urbain F: 56

Chant [music] See Gregorian chant in this index

Classical music (Church music) Ci: 645

Chantel, Saint Jane de [French religious leader]

Francis de Sales, Saint F: 481

Chantecler

Chicken (table) C: 443

Chanter

Bagpipe B: 26 with picture

Chanterelle [fungus]

Mushroom (Mushroomlike fungi) M: 945

Chantey [song]

Music (In work) M: 947

Chanukah See Hanukkah in this index

Chanute, Octave [American engineer]

Airplane (First human flights) A: 230

Chao, Elaine L. [American government official]

Bush, George Walker (table) B: 723

Labor, Department of (table) L: 2

Chao Phraya River [Thailand]

Thailand (The Central Plain) T: 225

Chao Tzu-yang See Zhao Ziyang in this index

Chaophraya Chakri [king of Thailand]

Thailand (The Bangkok era) T: 227

Chaos [Greek mythology]

Mythology (The Creation myth) M: 978

Chaos [region, California]

Lassen Volcanic National Park L: 87

Chaos [science] C: 376

Mathematics (Philosophies of mathematics)

M: 307

Chaos Crags

Lassen Volcanic National Park L: 87

Chaos Jumbles

Lassen Volcanic National Park L: 87

Chaotic system [science]

Chaos C: 376

Chapais, Jean-Charles [Canadian political leader]

Confederation of Canada (Fathers of

Confederation) Ci: 935

Chapala, Lake

Mexico (The Plateau of Mexico) M: 460

Chaparrajos

Cowboy (His clothing) Ci: 1108-1109

Chaparral [shrubs] C: 376

Biome (table) B: 323 with map

Flower (Flowers of summer-dry regions)

F: 288 with pictures

Plant (Chaparrals) P: 523; picture on P: 526

Chapatti [food]

Bread (Kinds of bread) B: 588 with picture

India (Food and drink) I: 118 with picture

Pakistan (Food and drink) P: 96

Chapbook [pamphlet]

Storytelling (The Middle Ages) So: 914

Chaperon [hat]

Clothing (The Renaissance) Ci: 700; picture on Ci: 699

Chapin, Daryl M. [American physicist]

Solar energy (The development of photovoltaic cells) So: 577

Chapin, Roy D. [American government official]

Commerce, Department of (table) Ci: 871

Hoover, Herbert Clark (table) H: 330

Chapleau, J.-Adolphe [Canadian political leader]

Quebec (table) Q: 29

Chaplin, Charlie [British actor] C: 376 with pictures

Motion picture picture on M: 847

Sennett, Mack picture on S: 301

Chapman, Colin [British engineer]

Automobile racing (Development of racing cars) A: 980

Chapman, George [English author] C: 377

Chapman, Graham [British actor]

Cleese, John Ci: 661 with picture

Chapman, John [American frontiersman] See

Appleseed, Johnny in this index

Chapman, M. F. [American engineer]

Chinchilla C: 509

Chapman, Mark David [American assassin]

Beatles B: 190

Lennon, John L: 196

Chapman, Mount [mountain, North Carolina-Tennessee]

Great Smoky Mountains G: 348

Chapman, Oscar L. [American government official]

Interior, Department of the (table) I: 325

Truman, Harry S. (table) T: 469

Chapman, Reuben [American political leader]

Alabama (table) A: 274

Chappaquiddick Island [Massachusetts]

Kennedy, Edward Moore K: 259

Chappe, Claude [French inventor]

Communication (The 1700's) Ci: 880-881 with picture

Chaps [clothing]

Cowboy (His clothing) **Ci**: 1108-1109 *with picture*

Horse (Clothes for riding) **H**: 351

Chapter FFA degree

FFA (Degrees) **F**: 85

Chapter Two [play by Simon]

Simon, Neil **S**: 467

Chapultepec, Battle of [1847]

Mexican War (Scott's campaign) **M**: 446-447;
(Principal battles) **M**: 447

Mexico (War with Texas and the United States) **M**: 471

Mexico City (Independence) **M**: 478

Chapultepec Hill [Mexico City]

Mexico (War with Texas and the United States) **M**: 471

Chapultepec Park

Mexico City (Residential and commercial centers) **M**: 476a *with picture*

Char

Combustion **Ci**: 867

Char Minar [palace, India]

Hyderabad **H**: 461

Characin [fish]

Tetra **T**: 183

Character [literature]

Comedy **Ci**: 867

Drama (The structure of drama) **D**: 325

Literature (Characters) **L**: 353

Theater (Creating a role) **T**: 238

Character [writing]

China (Languages) **C**: 481

Chinese language (Written Chinese) **C**: 510
with pictures

Japanese language **J**: 61

Character and Opinion in the United States

[book by Santayana]

Santayana, George **S**: 115

Character doll

Doll (The early 1900's) **D**: 291

Character generator [machine]

Television (Computer-generated video) **T**: 122

Characteristic [mathematics]

Logarithms (Common logarithms) **L**: 424

Characteristic piece

Classical music (Solo music) **Ci**: 643

Characteristic X rays

X rays (How X rays are produced) **X**: 542

Characterization [drama]

Theater (Creating a role) **T**: 238

Characters of Shakespeare's Plays [book by Hazlitt]

Hazlitt, William **H**: 123

Shakespeare, William (Romantic criticism)
S: 369

Characters of Theophrastus, The [book by La Bruyère]

French literature (Classical prose) **F**: 520

La Bruyère, Jean de **L**: 19

Charbonneau, Toussaint [Canadian explorer]

Lewis and Clark expedition (Up the Missouri)
L: 222-223

Sacagawea **S**: 4

Charcas [colony]

Bolivia (Colonial rule) **B**: 446

Sucre **So**: 951

Charcoal **C**: 377

Barbecue **B**: 106

Carbon (Amorphous carbons) **C**: 206

Drawing *picture on* **D**: 344

Industrial Revolution (Early ironmaking) **I**: 249

Charcoal briquette

Charcoal (Uses of charcoal) **C**: 377

Charcot, Jean Martin [French doctor]

Freud, Sigmund (His life) **F**: 530

Hypnotism (Scientific studies) **H**: 479

Unconscious **U**: 20

Chard [plant]

Swiss chard **So**: 1049 *with picture*

Chardin, Jean Baptiste Siméon [French painter] **C**: 377**Chardonnet, Hilaire** [French chemist]

Clothing (Clothing materials) **Ci**: 704

Chares [Greek sculptor]

Seven Wonders of the Ancient World (The Colossus of Rhodes) **S**: 325

Charest, Jean [Canadian political leader] **C**: 378

Campbell, Kim (Prime minister) **C**: 90d

Charge [furnace]

Furnace (Sources of heat) **F**: 567; (Heating the

charge) **F**: 567

Iron and steel (Running a blast furnace) **I**: 441;
(The basic oxygen process [BOP]) **I**: 443;

(The electric furnace process) **I**: 444

Charge [heraldry]

Heraldry (Elements of a coat of arms) **H**: 194-196 *with pictures*

Charge, Cavalry [military tactic]

Cavalry **C**: 318 *with picture*

Charge, Electric [physics] *See* Electric charge *in this index***Charge account**

Credit (Types of credit) **Ci**: 1124

Interest **I**: 321

Charge bargaining [law]

Plea bargaining **P**: 571

Charge carrier [physics] *See* Free electron *in this index***Charge-coupled device** [electronics] **C**: 378

Astronomy (Optical astronomy) **A**: 838-840

Camera (Digital cameras) **C**: 83-84

Camcorder (How a camcorder works) **C**: 75
with diagram

Hubble Space Telescope (How the telescope works) **H**: 403

Photography **P**: 409

Sun (Studying the sun) **So**: 982

Telescope **T**: 102; (Detecting faint objects)
T: 103

Television (The television camera) **T**: 121; *diagram on* **T**: 124

Chargé d'affaires [diplomat]

Foreign Service (Beginnings) **F**: 389

"Charge of the Light Brigade" [poem by Tennyson]

Balaklava, Battle of **B**: 33

Tennyson, Lord (His poems) **T**: 169

Charge of the Rough Riders at San Juan Hill, The [painting by Remington]

Spanish-American War *picture on* **So**: 754

Charge to the jury [law]

Jury (Petit juries) **J**: 202

Trial (Presenting evidence) **T**: 437

Chargers, San Diego *See* San Diego Chargers *in this index***Charging** [industrial process]

Iron and steel (Running a blast furnace) **I**: 441

Charging grand jury

Grand jury **G**: 308

Chari River

Chad (Land and climate) **C**: 366-367

Chariot [vehicle] **C**: 378

Army (Ancient armies) **A**: 726

Byzantine Empire *picture on* **B**: 753

Egypt, Ancient (Trade and transportation)
E: 139

Hittites (Way of life) **H**: 269

Transportation (The first great civilizations)
T: 386-387 *with picture*

Charioteer [constellation] *See* Auriga *in this index***Charioteer of Delphi** [sculpture]

Sculpture (Form and treatment) **S**: 230 *with picture*; (Classical sculpture) **S**: 245

Chariots of Fire [film]

Motion picture (Best picture: 1981) **M**: 861

Charismatic Christianity [religion]

Pentecostal churches (Major Pentecostal churches) **P**: 275

Religion (Religion today) **R**: 223; *picture on*
R: 224

Charitable trust [economics]

Trust fund (Kinds of trusts) **T**: 474

Charitable Uses, Statute of [1601]

Philanthropy **P**: 368

Charity

Philanthropy **P**: 368

Charity Organization Society

Colorado (Interesting facts) **Ci**: 829

Social work (History) **So**: 559

United Way of America **U**: 204

Charivari [custom]

Folklore (Superstitions and customs) **F**: 325

Pioneer life in America (Social activities) **P**: 485

Charlemagne [Holy Roman emperor] **C**: 378

with picture and map

Aachen **A**: 2

Architecture (Carolingian architecture) **A**: 618

Austria (Early years) **A**: 937

Belgium (The Middle Ages) **B**: 232

Carolingian art **C**: 244

Christianity (The Middle Ages) **C**: 526

Europe (The Middle Ages) **E**: 409-410 *with map*

France (The Carolingian dynasty) **F**: 471 *with picture*

Franks **F**: 494

Germany (Kingdom of the Franks) **G**: 162

Holy Roman Empire **H**: 298

Italy (The Middle Ages) **I**: 513

Leo III, Saint **L**: 197

Lombards **L**: 427

Middle Ages (The Carolingian Empire) **M**: 524

Mother Goose (Who was Mother Goose?)
M: 842

Painting (Early medieval painting in the West)
P: 48-49

Roland **R**: 401

Roman Catholic Church (Charlemagne) **R**: 407

Saxons **S**: 168

Sculpture (Medieval sculpture) **S**: 248

Tithe **T**: 301

Charles [prince of Wales] *See* Charles, Prince *in this index***Charles** [Scottish pretender]

Scotland (Union with England) **S**: 220

Charles I [emperor of Austria] **C**: 380**Charles I** [king of England] **C**: 380

Buckingham, Duke of **B**: 663

Cromwell, Oliver (Rise to power) **Ci**: 1151

Divine right of kings **D**: 242

England (The first Stuarts) **E**: 308; (The Civil War) **E**: 308 *with picture*

James I **J**: 25

Laud, William **L**: 121

London (War, plague, and fire) **L**: 441

Long Parliament **L**: 448

Maryland (Exploration and settlement) **M**: 256

Newfoundland and Labrador (Colonization)
N: 375

North Carolina (Exploration and settlement)
N: 490

Painting (Baroque) **P**: 58-61 *with picture*

Parliament (Parliament gains strength) **P**: 174

Petition of Right **P**: 327

Postal services (The creation of the Penny Post) **P**: 706

Rump Parliament **R**: 519

Scotland (War with the king) **S**: 220

South Carolina (Exploration and settlement)
So: 659

Stuart, House of **So**: 931

Van Dyck, Sir Anthony **V**: 281

Whig Party **W**: 280

Charles I [king of Spain] *See* Charles V (Holy Roman emperor) *in this index***Charles II** [king of England] **C**: 380

Cabal **C**: 2

Cavalier King Charles spaniel **C**: 318

Dryden, John **D**: 370

England (The Restoration) **E**: 309

Gwyn, Nell **G**: 447

Horse racing (History) **H**: 366

Hobbes, Thomas (His life) **H**: 272

Long Parliament **L**: 448

Monck, George **M**: 701

Monmouth, Duke of **M**: 730

North Carolina (Exploration and settlement)
N: 490

Nunavut (Arrival of the Europeans) **N**: 611-612

Penn, William (Founds Pennsylvania) **P**: 242

Pennsylvania (Exploration and settlement)
P: 264

Restoration **R**: 263

Rye House Plot **R**: 574

Scotland (War with the king) **S**: 220

South Carolina (Exploration and settlement)
So: 659

United States, History of the (The Middle Colonies) **U**: 154; (The Southern Colonies)
U: 154

Virginia (Royal governors and Cromwell) **V**: 418

Charles II [king of France] **C**: 380

Germany (The breakup of Charlemagne's empire) **G**: 162

Verdun, Treaty of **V**: 316

Charles II [king of Spain]

Succession wars (The War of the Spanish Succession) **So**: 950

Charles III [king of France] **C**: 380

Normans **N**: 456

Charles III [king of Spain] **C**: 380

- Bourbon (In Naples and Sicily) B: 516
Mexico (Spanish rule) M: 470
Paraguay (The Jesuits) P: 149
- Charles IV** [Holy Roman emperor]
Bohemia B: 437
Czech Republic (The rise of Bohemia) Ci: 1213
Luxembourg (History) L: 531
Prague (History) P: 730
Sigismund S: 453
- Charles V** [king of France] C: 381
Bibliothèque Nationale de France B: 289
- Charles V** [Holy Roman emperor; also Charles I of Spain] C: 381
Augsburg Confession A: 885
Austria (The Habsburgs) A: 937-938
Belgium (Habsburg rule) B: 233
Clement VII Ci: 662a
Cortés, Hernando (After the conquest) Ci: 1074
Exploration (Magellan's globe-circling expedition) E: 445
Francis I F: 480
Habsburg, House of H: 3
Holy Roman Empire (The House of Habsburg) H: 299
Italy (Spanish and Austrian rule) I: 514
Magellan, Ferdinand (Planning the expedition) M: 46
Maximilian I M: 319
Mexico (Spanish rule) M: 470
Netherlands (Spanish control) N: 148
Reformation (Martin Luther) R: 197
Spain (The Spanish Empire) So: 747
William I, Prince of Orange W: 308
- Charles VI** [king of France]
Henry V [of England] H: 187
Henry VI [king of England] H: 187
- Charles VI** [Holy Roman emperor]
Austria (Wars in the 1700's and 1800's) A: 938
Maria Theresa M: 199
Pragmatic sanction P: 729
Succession wars (The War of the Spanish Succession) So: 950; (The War of the Austrian Succession) So: 950
- Charles VII** [king of France] C: 381
Joan of Arc, Saint (Joan sees the king) J: 128
Louis XI L: 474
- Charles VII** [Holy Roman emperor] C: 381
- Charles VIII** [king of France] C: 381
Italy (Rise of the city-states) I: 513-514
- Charles IX** [king of France] C: 381
Catherine de Médicis C: 303
Saint Bartholomew's Day, Massacre of S: 31
- Charles X** [king of France] C: 382
France (The revolutions of 1830 and 1848) F: 474
July Revolution J: 190
- Charles X** [king of Sweden] C: 382
- Charles XI** [king of Sweden] C: 382
- Charles XII** [king of Sweden] C: 382
Sweden (The age of expansion) So: 1033
- Charles XIII** [king of Sweden]
Norway (Union with Sweden) N: 545-546
- Charles XIV** [king of Sweden and Norway]
Bernadotte, Jean Baptiste Jules B: 270
Sweden (The Napoleonic Wars) So: 1034
- Charles, Jacques Alexandre César** [French physicist]
Balloon (The hydrogen balloon) B: 60
Gas [physics] (Gas laws) G: 48-49
- Charles, Nick and Nora** [literary figures]
Hammett, Dashiell H: 35
- Charles, Prince** [prince of Wales] C: 382 *with portrait*
Diana, Princess of Wales D: 183
Elizabeth II (The royal family) E: 240
Prince of Wales P: 794
William, Prince W: 309
- Charles, Ray** [American singer] C: 383 *with portrait*
- Charles Albert** [king of Sardinia]
Italy (Italy united) I: 515
Sardinia, Kingdom of S: 125
- Charles Bent House**
Taos T: 36
- Charles Bridge** [Prague]
Czech Republic *picture on* Ci: 1209
Prague (The city) P: 730
- Charles Center**
Baltimore (The city) B: 66
- Charles de Gaulle Airport** [Paris]
Airport (table) A: 245
- Charles Dickens, A Critical Study** [book by Gissing]
Gissing, George Robert G: 202
- Charles Francis University** [Austria]
Graz G: 335
- Charles H. Wright Museum of African American History** [Detroit] *See* Museum of African American History *in this index*
- Charles Island**
Galapagos Islands G: 7 *with map*
- Charles Martel** [Frankish ruler] C: 383
France (The Carolingian dynasty) F: 471
- Charles Mound**
Illinois (Land regions) I: 64
- Charles of Mecklenburg-Strelitz** [father of]
Louise of Mecklenburg-Strelitz L: 477
- Charles Pinckney National Historic Site** [South Carolina]
National Park System (table: National historic sites) N: 52
- Charles Robert** [king of Hungary]
Hungary (The Kingdom of Hungary) H: 445
- Charles Sheldon Antelope Refuge**
Nevada (Plant and animal life) N: 168
- Charles Stewart Mott Foundation** *See* Mott Foundation *in this index*
- Charles the Bald** *See* Charles II [king of France] *in this index*
- Charles the Bold** [duke of Burgundy]
France (A period of wars) F: 473
Louis XI L: 474
- Charles the Great** *See* Charlemagne *in this index*
- Charles the Simple** *See* Charles III [king of France] *in this index*
- Charles the Wise** *See* Charles V [king of France] *in this index*
- Charles Town** [city, South Carolina]
Colonial life in America (Development of the Thirteen Colonies) Ci: 789-790
- Charles Town** [city, West Virginia]
West Virginia (Places to visit) W: 216
- Charles Town** [former name]
Charleston (Government and history) [West Virginia] C: 384
- Charles Towne** [English settlement]
Nassau N: 24
- Charles Towne Landing** [Charleston]
Colonial life in America (Places to visit) Ci: 800
South Carolina (Places to visit) So: 650
- Charles University**
Czech Republic (Education) Ci: 1211
Prague (The city) P: 730
- Charlesbank Outdoor Gymnasium** [Boston]
Playground P: 571
- Charles's law** [chemistry]
Gas [physics] (Gas laws) G: 48 *with pictures*
Gay-Lussac, Joseph Louis G: 71
- Charleston** [South Carolina] C: 383 *with picture*
Revolutionary War in America (Savannah and Charleston) R: 283
South Carolina So: 640 *with picture*;
(Population) So: 644 *with pictures*;
(Exploration and settlement) So: 659; *picture on* So: 661
- Charleston** [West Virginia] C: 384
West Virginia *picture on* W: 207
- Charleston** [dance]
Roaring Twenties *picture on* R: 364
- Charleston** [former name]
Lake Charles L: 36
- Charleston, College of**
Charleston (The city) C: 383
- Charleston, Oscar** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Charleston Library Society** [U.S. history]
Museum (Early United States museums) M: 939
- Charleston Museum**
South Carolina (Museums) So: 645 *with picture*
- Charlestown** [Massachusetts]
Boston (Charlestown) B: 500; (Early settlement) B: 503
- Charlestown** [former name]
Lake Charles L: 36
- Charleville, Charles** [French explorer]
Tennessee (Exploration) T: 153
- Charley clown**
Clown Ci: 713
- Charlie and the Chocolate Factory** [book by Dahl]
Dahl, Roald D: 5
- Charlie Brown** [cartoon character]
Schulz, Charles Monroe S: 187 *with picture*
- Charlie Needs a Cloak** [book by de Paola]
DePaola, Tomie D: 149
- Charlois, August H. P.** [French astronomer]
Eros E: 355
- Charlotte** [wife of George III]
Charlotte C: 384
- Charlotte** [North Carolina] C: 384
North Carolina *picture on* N: 473
- Charlotte Amalie** [city, Virgin Islands] C: 385
Virgin Islands (Islands) V: 393-394 *with picture*;
(The people) V: 394 *with picture*;
(Government) V: 395-396 *with picture*
- Charlotte Observer** [newspaper]
North Carolina (Communication) N: 489
- Charlotte's Web** [book by White]
Literature for children *picture on* L: 363
White, E. B. W: 284
- Charlottesville** [city, Virginia] C: 385
Jefferson, Thomas *picture on* J: 78
- Charlottetown** [city, Prince Edward Island] C: 385
Prince Edward Island P: 782 *with picture*;
(Visitor's guide) P: 788 *with picture*
- Charlottetown accord** [Canadian history]
Campbell, Kim (The 1993 election) C: 90d
Canada, History of (The constitutional crisis) C: 154
Chrétien, Jean (Election as party leader) C: 522c
Trudeau, Pierre Elliott (Later years) T: 465
- Charlottetown Conference** [1864]
Canada, History of (Confederation) C: 146
Confederation of Canada (Moves toward confederation) Ci: 933 *with picture*
- Charm** [physics]
Quark Q: 7
Psi particle P: 844
Subatomic particle (Elementary particles) So: 937; (Theoretical research) So: 938
- Charm** [superstition]
Amulet A: 445
Witchcraft (Witchcraft as sorcery) W: 371
- Charmides** [uncle of]
Plato (Plato's life) P: 567
- Charmides** [book by Plato]
Plato (The early dialogues) P: 568; (The theory of forms) P: 568
- Charms** [magic]
Amulet A: 445
Evil eye E: 426
Fetish F: 80
Magic (Magic objects) M: 49
- Charolais** [breed]
Cattle (Charolais) C: 308 *with picture*; (table) C: 312
- Cheron** [Greek mythology]
Hades H: 4
Styx S: 936
- Cheron** [satellite]
Pluto P: 581
Satellite (Geologic history unknown) S: 150c;
(History of satellite study) S: 150c-150d
- Cherpak, Georges** [French physicist]
Nobel Prizes (Physics: 1992) N: 442
Particle detector (Tracking chambers) P: 187
- Charro suit**
Mexico (Clothing) M: 456
- Charrú Indians**
Uruguay (Early days) U: 227
- Chart**
Graph (Circle graphs) G: 322 *with picture*
Map (Navigation maps) M: 177
Navigation N: 70
- Charter** [document] C: 385
Charter school C: 386
Colonial life in America (Economic reasons) Ci: 787; (Changes in colonial control) Ci: 790
Constitution Ci: 995
Magna Carta M: 53
- Charter flight**
Aviation (Airline operations) A: 984-985
- Charter Oak** [U.S. history] C: 386
Connecticut (Defending the colony) Ci: 970
- Charter of ...**
Charters appear under their key words, as in

Privileges, Charter of
Charter school C: 386
 Alberta (Schools) A: 317
 Education (Control and support of U.S. education) E: 91
Chartered accountant
 Accounting (Fields of accounting) A: 23
Chartered bank
 Bank (Canada) B: 92
Chartered colony
 United States, History of the (The thirteen colonies) U: 152
Chartered Life Underwriter
 Insurance (Careers in the industry) I: 315
Chartered Property and Casualty Underwriter
 Insurance (Careers in the industry) I: 315-316
Charterhouse [British secondary school] C: 386
Charterhouse of Parma, The [book by Stendhal]
 Stendhal So: 889
Chartism [British history] C: 386
 Carlyle, Thomas (Later career) C: 240
Chartres [France] C: 386
Chartres Cathedral [France]
 Chartres C: 386
 Europe *picture on* E: 392
 Stained glass (Technical improvements) So: 823
Chartreuse [drink]
 Carthusians C: 261
Chartreux
 Cat (Short-haired breeds) C: 290
Chartwell Manor [estate]
 Churchill, Sir Winston Leonard Spencer (Leader of the opposition) C: 549
Charybdis [whirlpool, Mediterranean]
 Scylla S: 261
 Whirlpool W: 281
Chase, Ira Joy [American political leader]
 Indiana (table) I: 214
Chase, Salmon Portland [American jurist]
 C: 386
 Emancipation Proclamation *picture on* E: 254
 Free Soil Party F: 499
 Johnson, Andrew (Impeachment) J: 140
 Lincoln, Abraham (Election of 1860) L: 318;
 (First inauguration) L: 320; (table) L: 323
 Ohio (table) O: 699
Chase, Samuel [American jurist] C: 387
 Impeachment (History) I: 91-92
 Jefferson, Thomas (The courts) J: 84
Chase, William Merritt [American painter]
 C: 387 *with picture*
Chasing [engraving]
 Islamic art (Metalware) I: 470
Chasm [geology]
 Canyon C: 185
Chastell Foundation
 Foundations (table) F: 430
Chastisements, The [poems by Hugo]
 Hugo, Victor Marie (Exile and return) H: 410;
 (His works) H: 410
Chasuble [vestment]
 Pope *picture on* P: 661
Chat [bird] C: 387
Chat room [computing]
 Computer (The Internet) Ci: 920-921
 Internet (Other uses) I: 350c; (Glossary of Internet terms) I: 350a
 Online service O: 763
Château [architecture]
 Architecture (Later Renaissance architecture) A: 621 *with picture*
 France (Architecture) F: 463 *with picture*
Chateau De Moras
 North Dakota (Places to visit) N: 504
Château Frontenac [hotel, Quebec City]
 Quebec Q: 34 *with picture*
Château Queyras [castle]
 Castle *picture on* C: 280
Château Ramezay
 Montreal (Museums) M: 773
 Quebec (Museums) Q: 15
Château-Thierry, Battle of [1918]
 World War I (The last campaigns) W: 463
Chateaubriand, François-René de [French author] C: 387
 French literature (The preromantics) F: 521
Chateaubriand and His Literary Circle [book by Sainte-Beuve]
 Sainte-Beuve, Charles Augustin S: 58

Chatelaine
 Magazine (table) M: 45
Châtelet, Marquise du [French author]
 Châtelet, Marquise du C: 387
 Voltaire (Exile and return to France) V: 446
Chatham, Earl of See Pitt, William *in this index*
Chatham Island
 Galapagos Islands G: 7 *with map*
Chatham Islands [islands]
 New Zealand (Other islands) N: 352
Chatham Lake [New Brunswick]
 New Brunswick (Interesting facts) N: 181 *with picture*
Chatoyant effect
 Cat's-eye C: 305
Chatsky [literary figure]
 Russian literature (Early romanticism) R: 560-561
Chattahoochee River [Alabama-Georgia]
 Alabama (Rivers and lakes) A: 270
Chattahoochee River National Recreation Area [Georgia]
 National Park System (table: National recreation areas) N: 49
Chattanooga [Tennessee] C: 387
Chattanooga, Battle of [1863]
 Civil War (table) Ci: 624; (Battle of Chattanooga) Ci: 630
Chattel [law]
 Real estate R: 171
Chatterjee, Bankim Chandra [Indian author]
 India (Literature) I: 120
Chatterji, Saratchandra [Indian author]
 India (Literature) I: 120
Chatterton [play by Musset]
 French literature (Romantic drama) F: 521
Chatterton, Fenimore [American political leader]
 Wyoming (table) W: 532
Chattopadhyaya, Saratcandra [Indian author]
 India (Literature) I: 120
Chaubunagungamaug, Lake [Massachusetts]
 Massachusetts (Rivers and lakes) M: 284-285
Chaucer, Geoffrey [English poet] C: 388
 Book *picture on* B: 464
Canterbury Tales C: 183
 English literature (The age of Chaucer) E: 316
 Short story S: 434
 Valentine, Saint V: 260
Chaudhry, Mahendra [Fijian political leader]
 Fiji (History) F: 98-99
Chaudière Falls [falls, Canada]
 Ottawa River O: 875
Chaudière River [river, Quebec]
 Quebec (Rivers, waterfalls, and lakes) Q: 24
Chautauqua [education] C: 388
 Adult education (During the 1800's) A: 69
 Lyceum L: 532
Chautauqua Institution, The [education]
 Chautauqua (The Chautauqua Institution) C: 389
 New York (Lakes) N: 306-307
Chautauqua Lake
 New York (Lakes) N: 306-307
Chautauqua Literary and Scientific Circle, The [education]
 Chautauqua (The Chautauqua Literary and Scientific Circle) C: 389
Chautauqua Sunday School Assembly [1874]
 Woman's Christian Temperance Union W: 381
Chauveau, Pierre-J.-O. [Canadian political leader]
 Quebec (table) Q: 29; (Early years as a province) Q: 30
Chauvinism
 Patriotism (Abuses of patriotism) P: 198
Chaves, Federico [Paraguayan political leader]
 Paraguay (Political unrest) P: 149-150
Chávez, Carlos [Mexican composer] C: 389
 Latin America (Music) L: 102-103
Chavez, Cesar Estrada [American labor leader]
 C: 389 *with portrait*
 Huerta, Dolores Fernandez H: 408
 Labor movement (New groups become unionized) L: 14 *with picture*
 Hispanic Americans (Political developments) H: 255-256 *with picture*
 Migrant labor M: 538
 United Farm Workers of America U: 47
Chavez, Dennis [American political leader]
 C: 389

Chávez Frias, Hugo [Venezuelan political leader]
 Venezuela (Recent developments) V: 305
Chavin de Huanter [ancient city, Peru]
 Indian, American (Indians of the Andes) I: 173
Chavin Indians
 Indian, American (Indians of the Andes) I: 173
 Peru (History) P: 314
 Sculpture (Early sculpture) S: 242 *with picture*
Chavis, Benjamin Franklin, Jr. [American civil rights leader] C: 389
Chayote [plant] C: 390 *with picture*
"Che mi frena" [aria]
 Opera (*Lucia di Lammermoor*) O: 804
Cheaha Mountain
 Alabama (Land regions) A: 268
Cheaha Mountain State Park [Anniston]
 Alabama *picture on* A: 256
Cheatgrass [plant]
 Brome B: 635
Chechnya [republic, Russia] C: 390 *with maps*
 Moscow (Recent developments) M: 827
 Russia (The new nation) R: 555; (Recent developments) R: 555-556
 Stepashin, Sergei Vadimovich So: 890
Check [banking] C: 390
 Bank (Providing a means of payment) B: 89
 Bill of exchange B: 301
 Forgery F: 408
 Money (Definitions of the money supply) M: 714
 Negotiable instrument (Forms) N: 119
Check [chess]
 Chess (How chess is played) C: 413
Check [hockey]
 Hockey (Hockey skills) H: 277
Check [manufacturing]
 Glass (Glass terms) G: 222
Check, Traveler's See Traveler's check *in this index*
Check valve
 Valve V: 267 *with diagram*
Checkbook
 Check (How the checking system works) C: 390
Checkbook money [economics]
 Check (Checks and the economy) C: 391
Checker chamber [industry]
 Iron and steel (The open-hearth process) I: 444-445 *with diagram*
Checkerboard
 Checkers C: 391 *with picture*
Checkered lily [plant]
 Fritillary F: 535
Checkering [decoration]
 Rifle (The parts of a rifle) R: 338
Checkers [game] C: 391 *with picture*
"Checkers speech" [U.S. history]
 Nixon, Richard Milhous (The 1952 campaign) N: 430-431
Checkerspot [insect]
 Butterfly (Brush-footed butterflies) B: 734
Checking account
 Bank (Providing a means of payment) B: 89
 Check C: 390
Checkmate
 Chess C: 412
Checkoff agreement
 Labor movement (Arranging contracts) L: 6-5
Checks and balances C: 392
 Democracy (Controls on power) D: 121
 Freedom (Limits on political freedom) F: 502
 Government (Presidential government) G: 288
 United States, Government of the (Separation of powers) U: 137
Cheddar cheese
 Cheese (Hard cheese) C: 392 *with picture*;
 (Treating the curd) C: 393
Cheddaring
 Cheese (Treating the curd) C: 393
Checkbone [anatomy]
 Human body *diagram on* H: 422
Cheerleading C: 392
Cheese [food] C: 392 *with pictures*
 Casein C: 272
 Cattle (Brown Swiss) C: 311
 Dairying D: 6
 Netherlands (Manufacturing) N: 146
 Nutrition (Proteins) N: 625
 Wisconsin *picture on* W: 362
Cheetah [wild cat] C: 395 *with picture*
 Animal *picture on* A: 472

Endangered species (table) E: 270
 Taxidermy pictures on T: 55
Cheever, Eddie [American race driver]
 Automobile racing (table: Indianapolis 500 winners) A: 980
Cheever, John [American author] C: 395
Chef [occupation]
 Careers (Tourism and hospitality) C: 233-234
 with picture
Cheju Island [Korea]
 Korea (Islands) K: 374
Chek Lap Kok [island]
 Hong Kong (The land) H: 318
Cheka [secret police]
 Communism (Under Lenin) Ci: 892
 KGB K: 308a
 Lenin, V. I. (Rule by terror) L: 194
 Stalin, Joseph (Rule by terror) So: 826
Chekhov, Anton [Russian author] C: 396
 Drama (Russian drama and Chekhov) D: 338
 Realism (In drama) R: 172
 Russian literature (Late realism) R: 562-563
 Short story S: 434
 Theater picture on T: 244
Chelae [claw]
 Crab Ci: 1115
 Fiddler crab F: 91 with picture
Chelation therapy [medicine] C: 396
 Thalassemia T: 228
Chelicera
 Spider (Cheliceræ) So: 784 with diagrams
Chelmino [concentration camp]
 Concentration camp (Nazi concentration camps) Ci: 927
Chelsea [district] See Kensington and Chelsea in this index
Cheltenham Festival
 United Kingdom (The arts) U: 58
Chemical C: 396
 Occupational medicine O: 647
Chemical Abstracts Service
 Columbus (Economy) Ci: 855
Chemical agent
 Terrorism (Chemical attacks) T: 178
Chemical-biological-radiological warfare
 C: 396
 Anthrax A: 545
 Army, United States (Logistic units) A: 735-736
 Biological Weapons Convention B: 315
 Chemical Weapons Convention C: 397
 World War I (Trench warfare) W: 457-458 with picture
Chemical bomb [weapon]
 Bomb (Other conventional bombs) B: 450-451
Chemical bond See Bond in this index
Chemical bonding [process]
 Textile (Nonwovens) T: 215
Chemical burn
 Burn (First-aid care) B: 708
 First aid (Burns) F: 139
Chemical change
 Chemistry C: 398
 Electrochemistry E: 200
 Oxidation O: 888
 Senses (Internal senses) S: 302
Chemical compound
 Chemistry (Fundamental ideas of chemistry) C: 398-399
Chemical culture [agriculture] See Hydroponics in this index
Chemical decomposition
 Soil (Kinds of parent material) So: 573
Chemical element See Element, Chemical in this index
Chemical energy
 Electrochemistry E: 200
 Energy supply (Chemical energy) E: 279
Chemical engineering
 Engineering (Chemical engineering) E: 285
 with picture
Chemical equation
 Chemical reaction C: 397
Chemical equilibrium See Equilibrium, Chemical in this index
Chemical evolution, Theory of
 Life (Modern theories) L: 278
Chemical formula
 Berzelius, Jöns Jakob B: 273
Chemical fuel
 Fuel (Chemical fuels) F: 551

Chemical grenade [weapon]
 Grenade G: 390
"Chemical History of a Candle, The" [lecture]
 Faraday, Michael F: 28
Chemical industry C: 397
 Chemistry (The chemical industry) C: 405
 Drug (Chemical laboratories) D: 354
 Electrolysis (Uses of electrolysis) E: 201
 Forest products (Chemical products) F: 402
 with pictures
 Petrochemicals P: 329
Chemical machining
 Machine tool (Chemical machining) M: 19
Chemical mine
 Mine warfare (Land mines) M: 564
Chemical oceanography
 Ocean (Careers in oceanography) O: 666
 Water (Fresh water from the sea) W: 127
Chemical properties
 Materials (Chemical properties) M: 300b
Chemical reaction C: 397
 Catalysis C: 297
 Cell (Inside a living cell) C: 328
 Combustion Ci: 867
 Compound Ci: 906
 Electrolysis E: 201
 Equilibrium, Chemical E: 347
 Heat (Sources of heat) H: 149
 Oxidation O: 888
 Photochemistry P: 404
Chemical sediment [geology]
 Earth (Sedimentary rocks) E: 21
 Rock (Chemical sediments) R: 372
Chemical Society, American
 American Chemical Society A: 408
Chemical symbol
 Berzelius, Jöns Jakob B: 273
 Element, Chemical (Names and symbols of elements) E: 219; (table) E: 219
Chemical toxicity [botany]
 Plant (Nutrient deficiencies) P: 543
Chemical weapon
 Arms control (History of arms control) A: 721-722
 Chemical-biological-radiological warfare (Chemical) C: 396
 Chemical Weapons Convention C: 397
 Civil defense (Recent developments) Ci: 606
 Gulf War syndrome G: 438
 Peace (Arms control) P: 207
 Technology (Challenges of technology) T: 76-77
 Terrorism (Chemical attacks) T: 178
Chemical Weapons Convention [1997] C: 397
Chemins du Roi, Les [Canadian history]
 Quebec (Transportation) Q: 28
Chemisorption [physics]
 Absorption and adsorption (Adsorption) A: 18
Chemistry C: 398 with pictures
 Careers (Life, physical, and social sciences) C: 225-226
 Crime laboratory (Analyzing the evidence) Ci: 1141
 Element, Chemical E: 219
 Inorganic chemistry I: 276
 Metric system (Chemistry) M: 440
 Science (The physical sciences) S: 193; (The Age of Reason) S: 199
 Soil (Chemical conditions) So: 575
 See also the list of Related Articles in the Chemistry article
Chemnitz [city, Germany] C: 407
Chemorceptor [anatomy]
 Hunger H: 449
 Respiration (Control of breathing) R: 261
 Senses (Internal senses) S: 302
Chemosterilant
 Insecticide I: 302
Chemosynthesis [biology]
 Deep sea (The deep-sea environment) D: 82-82a
 Hot vent H: 376
 Ocean (The food cycle) O: 655-658
Chemotherapy [medicine] C: 407
 Breast cancer B: 591
 Cancer (Drug therapy) C: 172
 Cervical cancer C: 364
 Colon cancer C: 785
 Ovarian cancer O: 881
 Drug (The drug revolution) D: 359
 Immune system (Other problems of the

immune system) I: 88d
 Leukemia (Acute leukemias) L: 215
 Science (Science in the early 1900's) S: 201-202
 Testicular cancer T: 181
Ch'en Jung See Chen Rong in this index
Chen Rong [Chinese painter] C: 407
Chen Shui-bian [Taiwanese political leader]
 Taiwan (History) T: 18
Cheney, Lynne Ann Vincent [wife of Richard Cheney]
 Cheney, Richard Bruce (Early life) C: 407
Cheney, Person C. [American political leader]
 New Hampshire (table) N: 223
Cheney, Richard Bruce [American political leader] C: 407 with portrait
 Bush, George Walker (The campaign) B: 722f
 with picture
Cheng Ho [Chinese explorer]
 Exploration (Chinese exploration) E: 442
Chengdu [city, China] C: 408
Chénier, André [French poet]
 French literature (The preromantics) F: 521
Chenille [textile] C: 408
Chenin Blanc [grape variety]
 Grape (European grapes) G: 319
Chenla [former kingdom]
 Cambodia (History) C: 72-73
Chennai [city, India] C: 408
 India picture on I: 120
Chennault, Claire Lee [American aviator] C: 408
 World War II (The China-Burma-India theater) W: 489-490
Chenonceaux [France]
 France picture on F: 462
Cheops [king of ancient Egypt] See Khufu in this index
Cheque See Check in this index
Chequy
 Heraldry picture on H: 195
Cher [American actress]
 Motion picture (Best performance by an actress: 1987) M: 862
Cherbourg [city, France] C: 408
Cherenkov, Pavel Alekseyevich [Russian physicist]
 Nobel Prizes (Physics: 1958) N: 441
Cherimoya [tree] C: 408
Chermayeff, Serge [architect]
 Mendelsohn, Eric M: 399
Chernenko, Konstantin Ustinovich [Soviet political leader]
 Gorbachev, Mikhail Sergeyevich (Early life and political rise and fall) G: 272
Chernobyl nuclear power plant
 Belarus (History) B: 224b-224c
 Cancer (Radiation) C: 170
 Fallout (History) F: 19 with map
 Kiev K: 314
 Nuclear energy (Safety concerns) N: 591-592
 with picture
 Radiation (Dose) R: 79-80 with picture
 Ukraine (The Chernobyl disaster) U: 13
Chernomyrdin, Viktor Stepanovich [Russian political leader] C: 408
 Yeltsin, Boris Nikolayevich Y: 561
Chernozem [earth]
 Prairie (Climate and soil) P: 731
 Russia (Land regions) R: 539; (Agriculture) R: 543-545
Cherokee Advocate [newspaper]
 Oklahoma (Communication) O: 730
Cherokee Heritage Center [Oklahoma]
 Oklahoma (Places to visit) O: 722
Cherokee Indian Reservation
 North Carolina (Places to visit) N: 482
Cherokee Indians [American Indians] C: 409
 with picture
 Indian, American (Writing) I: 150; (Indians of the Southeast) I: 157
 Indian Territory I: 189 with map
 Jackson, Andrew (The Indian issue) J: 13
 Oklahoma (Schools) O: 716
 Ross, John R: 483
 Sequoyah S: 312
 Trail of Tears T: 368
Cherokee Mounted Rifles [U.S. history]
 Watte, Stand W: 147
Cherokee Nation
 Cherokee Indians C: 409
Cherokee Nation v. Georgia [U.S. history]

- Jackson, Andrew (The Indian issue) J: 13
- Cherokee Trail** [Wyoming]
Wyoming (The great trails) W: 533-534
- Cherokee Trail of Tears, 1838, The** [painting by Janes]
Cherokee Indians *picture on* C: 409
- Cherokees, Lake O' The** [lake, Oklahoma]
Lake O' The Cherokees L: 42 *with map*
- Cherry** [bowling]
Bowling (table) B: 521
- Cherry** [fruit] C: 409 *with pictures*
Maraschino cherry M: 190
Michigan (Agriculture) M: 505 *with picture*
Tanager T: 24
Tree *pictures on* T: 417, T: 421
Wood *picture on* W: 389
- Cherry, Francis** [American political leader]
Arkansas (table) A: 712
- Cherry, R. Gregg** [American political leader]
North Carolina (table) N: 490
- Cherry birch** [tree]
Birch (Sweet birch) B: 327
- Cherry laurel** [shrub] C: 410 *with picture*
Laurel L: 121
- Cherry Orchard, The** [play by Chekhov]
Chekhov, Anton C: 396
Theater *picture on* T: 244
- Cherry pepper** [plant]
Pepper P: 278
- Cherry picker** [machine]
Fruit *picture on* F: 546
- Cherry Point Marine Corps Air Station** [North Carolina] C: 410
- Cherry salmon**
Salmon (Kinds of salmon) S: 70; *picture on* S: 69
- Chersiphron** [Greek architect]
Seven Wonders of the Ancient World (The Temple of Artemis at Ephesus) S: 325
- Chert** [rock]
Flint F: 236
- Cherubini, Luigi** [Italian composer] C: 410
Bell (Uses of bells) B: 239
- Chervenkov, Vulko** [Bulgarian political leader]
Bulgaria (Communist rule) B: 693
- Chesapeake** [ship]
Barron, James B: 119
Jefferson, Thomas (The struggle for neutrality) J: 86
Lawrence, James L: 146
War of 1812 (Impressment of seamen) W: 29
- Chesapeake and Delaware Canal** [waterway]
Canal (table) C: 164
Delaware (Transportation) D: 108
- Chesapeake and Ohio Canal** [waterway] C: 411
- Chesapeake and Ohio Canal National Historical Park** C: 411
National Park System (table: National historical parks) N: 56
- Chesapeake Bay** C: 411 *with map*
Maryland M: 240 *with picture*; (Coastline) M: 252
Virginia (Pollution problems) V: 422
- Chesapeake Bay Bridge-Tunnel** [Virginia]
Bridge (table: Combination) B: 603
- Chesapeake Bay Maritime Museum** [Maryland]
Maryland (Places to visit) M: 248
- Chesapeake Bay retriever** [dog] C: 411 *with picture*
Dog *pictures on* D: 268, D: 277, D: 281
- Chesapeake Colonies**
Colonial life in America (Geographic divisions) C: 789 *with map*; *picture on* Ci: 792
- Chesbro, Jack** [American baseball player]
Baseball (table: Hall of Fame) B: 134; (table: Modern major league records) B: 137
- Cheshire Cat** [fictional animal]
Carroll, Lewis (The *Alice* books) C: 249
- Chasnutt, Charles Waddell** [American author] C: 411
African American literature (The 1800's) A: 136a
American literature (Realists) A: 419
- Chess** [game] C: 412 *with pictures*
- Chest** [anatomy] C: 415
Cardiopulmonary resuscitation C: 213
Diaphragm D: 184
Human body *diagram on* H: 422
Lung (Parts of the lungs) L: 523
Pleura P: 573
- Chest** [furniture]
Furniture (The Middle Ages) F: 571 *with picture*
- Chest cuirass**
Respirator R: 262
- Chest protector**
Baseball (Equipment) B: 125 *with picture*
- Chest X ray**
X rays *picture on* X: 540
- Chester White** [breed]
Hog (Kinds of hogs) H: 285 *with picture*; (table) H: 286
- Chesterfield, Earl of** [British author] C: 415
- Chesterton, G. K.** [British author] C: 415
Belloc, Hilaire B: 244
Detective story (The pattern) D: 162-163
- Chestnut** [color]
Horse (Coat and skin) H: 348-349
- Chestnut** [tree] C: 415 *with pictures*
Nut (Uses of nuts) N: 621; (Kinds of nuts) N: 621-622
Plant (Plant enemies) P: 543
Tree *pictures on* T: 421, T: 426
- Chestnut, Water** [plant]
Water chestnut W: 134
- Chestnut beetle** [insect]
Beetle *picture on* B: 218
- Chestnut blight** [plant disease]
Chestnut C: 416
Fungicide F: 560
Invasive species (How invasive species affect habitats) I: 354j-354k
Plant (Plant enemies) P: 543
- Chesuncook Lake** [Maine]
Penobscot River P: 271
- Chetniks** [soldiers]
Tito, Josip Broz (Early life) T: 302
Yugoslavia (World War II) Y: 579-580
- Chettle, Henry** [English author]
Shakespeare, William (First recognition) S: 347
- Chevalier, Maurice** [French actor] C: 416
- Cheves, Langdon** [American banker]
Bank of the United States (The Second Bank of the United States) B: 96
- Cheviot and Leicester** [breed]
Sheep *picture on* S: 380
- Cheviot Hills** [United Kingdom]
United Kingdom (The Southern Uplands) U: 59 *with map*
- Chevon** [food]
Goat (Products) G: 240
- Chevrolet**
Automobile *picture on* A: 966
Plastics (Growth of the plastics industry) P: 560
- Chevrolet, Arthur** [American businessman]
Chevrolet, Louis C: 416
- Chevrolet, Gaston** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
Chevrolet, Louis C: 416
- Chevrolet, Louis** [American businessman] C: 416
- Chevrolet Brothers Aircraft Company**
Chevrolet, Louis C: 416
- Chevrolet Motor Company**
Automobile (William Crapo Durant) A: 965
Chevrolet, Louis C: 416
Durant, William Crapo D: 388
- Chevron** [architecture]
Chevron C: 416
- Chevron** [emblem] C: 416
Heraldry *picture on* H: 195
Insignia I: 303
- Chevron Texaco Corporation** [company]
Manufacturing (table) M: 170
Standard Oil Company So: 834
- Chevrotain** [animal]
Animal *picture on* A: 481
- Chewing** See Mastication *in this index*
- Chewing gum** C: 416 *with diagrams*
Chicle C: 446
Gum G: 440
- Chewing louse** [insect]
Louse L: 507
- Chewing tobacco**
Smoking S: 520
Tobacco T: 305
- Cheyenne** [Wyoming] C: 417 *with picture*
Wyoming (Population) W: 520; (Schools) W: 520; (table: Average monthly weather) W: 528; W: 517 *with picture*
- Cheyenne, The** [sculpture by Remington]
Sculpture (American sculpture) S: 255-256 *with picture*
- Cheyenne Indians** [American Indians] C: 418 *with picture*
Indian, American (Indians of the Plains) I: 158-159; *pictures on* I: 161
Indian wars (The Sioux wars) I: 194; (The Southern Plains) I: 194
Poetry (Rhythm and meter) P: 591-592
South Dakota (Indian days) So: 681
Wyoming (Indian and settler conflicts) W: 534
- Cheyenne River**
South Dakota (Rivers and lakes) So: 676
- Chhattisgarh** [state, India]
India (Recent developments) I: 134
- Chi**
T'ai chi chuan T: 14
- Chiang Ch'ing** See Jiang Qing *in this index*
- Chiang Ching-kuo** [Chinese government official] C: 418
Taiwan (History) T: 18
- Chiang Kai-shek** [Chinese political leader] C: 419 *with portrait*
Acheson, Dean Gooderham A: 26
Beijing (History) B: 223-224
Chiang Soong Mei-ling C: 419
China (The war lord period) C: 504; (Nationalist rule) C: 504
Cold War (Communist expansion in Asia) Ci: 764
Mao Zedong (His life) M: 174
Roosevelt, Franklin Delano (The Big Three) R: 461
Sun Yat-sen (His later efforts) So: 989
Taiwan T: 15; (History) T: 18
World War II (Japan attacks) W: 477-478
- Chiang Soong Mei-ling** [Chinese social leader] C: 419 *with portrait*
Chiang Kai-shek (Nationalist victory) C: 419
- Chianti** [wine]
Wine (Wines from Italy) W: 337
- Chiao** [money]
Yuan Y: 575
- Chiao Chih** [Vietnamese history]
Indochina (The Viets) I: 224-225
- Chiapas** [state, Mexico]
Indian, American (Current issues) I: 182-183
Mexico (Recent developments) M: 474
- Chieramonti, Gregorio Luigi Barnaba**
Pius VII P: 503
- Chiaroscuro** [painting]
Gentileschi, Artemisia G: 90
Leonardo da Vinci (Paintings) L: 200b
Painting (The 1600's and 1700's) P: 58-59
- Chieroscuro woodcut** [art]
Cranach, Lucas, the Elder Ci: 1116
- Chiba** [district]
Tokyo (The Tokyo metropolitan region) T: 314
- Chibcha Indians** [American Indians] C: 419
Colombia (Early days) Ci: 783; *picture on* Ci: 781
El Dorado E: 158
Indian, American (Indians of the Caribbean) I: 172
- Chic** [musical group]
Rock music (Disco and punk) R: 380
- Chicago** [Illinois] C: 420 *with pictures and maps*
Architecture (Early modern architecture in America) A: 629 *with picture*
Burnham, Daniel Hudson B: 709 *with picture*
City (The people) Ci: 586
Daley, Richard Joseph D: 9
Du Sable, Jean Baptiste Point D: 390
Hispanic Americans (Where Hispanics live) H: 245
Illinois (Visitor's guide) I: 62 *with pictures*
King, Martin Luther, Jr. (The Chicago campaign) K: 322
Shelter *picture on* S: 393
Skyscraper S: 497 *with picture*
Thompson, William Hale T: 264
Trade *picture on* T: 362
Water (How Chicago treats its water) W: 124 *with pictures*
- Chicago** [musical group]
Rock music (Rock goes pop) R: 379
- "Chicago"** [poem by Sandburg]
Sandburg, Carl (His poetry) S: 108
- Chicago, Judy** [American artist]

- Sculpture (As a record of history) S: 228-229
with picture; S: 260
United States picture on U: 117
- Chicago, University of** C: 437
Argonne National Laboratory A: 660
Harper, William Rainey H: 66
Nuclear energy (The development of nuclear weapons) N: 590-591 with picture
Yerkes Observatory Y: 565
- Chicago Bears**
Football (National Football League) F: 364
Halas, George Stanley H: 17
- Chicago Blackhawks** See Blackhawks, Chicago in this index
- Chicago Board of Trade**
Chicago (Places to visit) C: 430-431; (Finance) C: 432-433; (Growth as a city) C: 435
Commodity exchange Ci: 873
Illinois (Service industries) I: 67-68
Wheat (Buying and selling wheat) W: 274
- Chicago Bulls**
Basketball (table) B: 150
- Chicago Cubs**
Baseball (table) B: 130
- Chicago Defender** [newspaper]
Abbott, Robert Sengstacke A: 6
Chicago (Communications) C: 433
- Chicago Drainage Canal** See Chicago Sanitary and Ship Canal in this index
- Chicago Fire** [1871]
Chicago (The Great Chicago Fire) C: 435 with picture
Architecture (Early modern architecture in Chicago) A: 629
- Chicago Historical Society**
Chicago (Museums) C: 428-429
- Chicago Mercantile Exchange**
Chicago (Finance) C: 432-433 with picture
Commodity exchange Ci: 873
Illinois (Service industries) I: 67-68 with picture
- Chicago Natural History Museum** See Field Museum in this index
- Chicago Picasso, The** [sculpture by Picasso]
Chicago (Places to visit) C: 430-431 with picture
- Chicago Portage** [U.S. history]
Chicago (Growth as a city) C: 435
- Chicago Public Library**
Chicago (Libraries) C: 430
- Chicago riots** [1968]
Chicago (The mid-1900's) C: 436
Riot (During the 1900's) R: 349
- Chicago River** [river, Illinois]
Chicago (The city) C: 420; (Flood damage) C: 437
Chicago Sanitary and Ship Canal C: 438
Great Lakes (Drainage) G: 345
- Chicago Sanitary and Ship Canal** C: 438
Canal (Major canals in the United States and Canada) C: 163; (table) C: 164
Chicago (The city) C: 420; (The West Side) C: 424; (Trade) C: 432
Great Lakes (Drainage) G: 345; (Water routes to the sea) G: 345
Illinois (Industrial development) I: 74-75
- Chicago school** [architecture]
Architecture (Early modern architecture in America) A: 629; picture on A: 630
Burnham, Daniel Hudson B: 709
Chicago (Architecture) C: 428
Root, John Wellborn R: 475
Sullivan, Louis Henri So: 970
- Chicago School** [literature]
Sandburg, Carl S: 108
- Chicago Stock Exchange** [Chicago]
Chicago (Finance) C: 432
- Chicago Strike** See Pullman Strike in this index
- Chicago style jazz**
Jazz (The 1920's) J: 70
- Chicago style pizza** [food]
Pizza P: 504
- Chicago Sun-Times** [newspaper]
Chicago (Communications) C: 433
Field, Marshall, III F: 91
- Chicago Symphony Orchestra**
Chicago (The arts) C: 428
Orchestra picture on O: 821
- Chicago Transit Authority**
Chicago (Transportation) C: 433
- Chicago Tribune** [newspaper]
Chicago (Communications) C: 433
- McCormick, Robert Rutherford M: 334
Medill, Joseph M: 380
- Chicago Union Stock Yards**
Chicago (Industry) C: 431-432; (Growth as a city) C: 435
- Chicago White Sox**
Baseball (table) B: 130; (The Black Sox Scandal) B: 136
Jackson, Shoeless Joe J: 16
- Chicanos** [people]
Hispanic Americans H: 244; (The Chicano movement) H: 255
Los Angeles (East Los Angeles) L: 461-462 with picture
- Chicha** [drink]
Inca (Food, clothing, and shelter) I: 95-96
Indian, American (Food) I: 136d
- Chichén Itzá** [ancient city, North America] C: 439
Indian, American picture on I: 170
Maya (The Maya heritage) M: 326
Toltec Indians T: 323
- Chichester, Sir Francis** [British adventurer] C: 439
- Chichewa** [language]
Malawi (People) M: 97
- Chichimec** [American Indian]
Mexico (The Classic Period) M: 468
- Chichishima** [island, Japan]
Bonin Islands B: 460
- Chick**
Chicken (Raising chicks) C: 443
Penguin (The life of penguins) P: 238-240 with picture
- Chickadee** [bird] C: 439 with picture
Titmouse T: 302
- Chickamauga, Battle of** [1863]
Civil War (table) Ci: 624; (Battle of Chickamauga) Ci: 630
- Chickamauga and Chattanooga National Military Park**
National Park System (table: National military parks) N: 55
- Chickamauga Dam** [Tennessee River]
Chattanooga C: 388
- Chickamauga Indians** [American Indians]
Chattanooga C: 388
- Chickasaw Indians** [American Indians] C: 439
Indian, American (Indians of the Southeast) I: 157
Indian Territory I: 189 with map
Jackson, Andrew (The Indian issue) J: 13
Mississippi (Indian days) M: 641; (Exploration and early settlement) M: 641
- Chickasaw National Recreation Area** [Oklahoma]
National Park System (table: National recreation areas) N: 49
- Chickee** [dwelling]
Indian, American picture on I: 158
Seminole Indians S: 293
- Chicken** [bird] C: 440 with pictures
Cockfighting Ci: 744
Egg E: 116; (Development of the bird's egg) E: 117; (How embryos develop) E: 117-118; (Uses of eggs) E: 118
Incubator I: 106
Junglefowl J: 195
Poultry P: 720 with picture
Skeleton diagram on S: 481
- Chicken mite** [animal]
Mite M: 678
- Chickenpox** [disease] C: 446
Disease (table) D: 226
Shingles S: 401
- Chickpea** [plant] C: 446 with picture
- Chicle** [tree product] C: 446 with picture
Chewing gum (History) C: 416
Gum G: 440
Mexico (Plant and animal life) M: 463
Sapodilla S: 122
- Chicoasen Dam** [Grijalva River, Mexico]
Mexico (Energy sources) M: 466-467
- Chicomécóatl** [Aztec goddess]
Mythology (American Indian mythology) M: 985-986
- Chicora** [U.S. history]
Ayllón, Lucas Vázquez de A: 995
- Chicory** [plant] C: 446
Coffee (Kinds of coffee) Ci: 754-755
- Chicxulub Basin** [Mexico]
- Asteroid (Asteroid collisions) A: 824 with map
Earth (The Mesozoic Era) E: 27-28
Meteor (Impact craters and basins) M: 432
- Chief** [title]
Indian, American (Tribes) I: 143 with picture; (Indians of the Southeast) I: 157-158; pictures on I: 160, I: 162
Pacific Islands (Villages) P: 5
- Chief engineer**
Ship (Officers and crew) S: 423
- Chief executive** [office]
President of the United States P: 758
- Chief justice** [office] C: 447
Supreme Court of Canada (Organization) So: 996 with portrait
Supreme Court of the United States (How the Supreme Court is organized) So: 998; (table) So: 1000
- Chief of defence staff**
Canada, Armed Forces of (Organization) C: 128
- Chief of naval operations** [office]
Navy, Department of the N: 81
Navy, United States (The Navy Department) N: 85
- Chief of staff** [military officer]
Air Force, United States (The Department of the Air Force) A: 192
Army, Department of the A: 729
Army, United States (Army headquarters) A: 737
Defense, Department of (Organization) D: 87
Joint Chiefs of Staff J: 155
Marine Corps, United States (Headquarters) M: 208
- Chief of state** [office]
President of the United States (Chief of state) P: 766
- Chieftom** [social unit]
Indian, American (Tribes) I: 143
- Chiefs, Kansas City** See Kansas City Chiefs in this index
- Chiesa, Giacomo Della** See Benedict XV in this index
- Chifley, Ben** [Australian political leader]
Australia (table) A: 925
- Chigger** [animal] C: 447 with picture
Mite M: 678
- Chignecto Bay** [Canada]
Bay of Fundy B: 176
- Chignon**
Hairdressing (The Renaissance) H: 11-12
- Chigoe** [insect]
Chigger C: 447
Flea (Kinds of fleas) F: 232
- Chihuahua** [state, Mexico] C: 447
- Chihuahua** [city, Mexico] C: 447
- Chihuahua** [dog] C: 447 with picture; C: 447
Dog pictures on D: 265, D: 274
- Chihuahuan raven** [bird]
Raven R: 151
- Chikamatsu Monzaemon** [Japanese dramatist]
Japanese literature (The Tokugawa period) J: 62
- Chilblain** [disorder] C: 447
- Child** C: 448 with pictures
See also Literature for children; Child welfare in this index
Adolescent (The "invention" of adolescence) A: 60
Air bag A: 175
Cancer (Cancer in children) C: 169
Child abuse C: 454
Children's home C: 457
Colonial life in America (Colonists at home) Ci: 796; (Education and religion) Ci: 803
Culture (Learning) Ci: 1187
Divorce (Child custody arrangements) D: 254
Domestic violence D: 301
Early childhood education E: 15
Family F: 20
Foster care F: 428
Halloween H: 24a with picture
Health (Emotional development) H: 126
Home schooling H: 301
Imagination I: 79
Infanticide I: 264
Language L: 62
Library (Services for children) L: 240 with picture; (Elementary school libraries) L: 244
Mental retardation M: 410

- Minor M: 608
Occupational therapy (Helping people with physical disabilities) O: 648
Parent (The role of parents) P: 156
Pediatrics P: 227
Playground P: 571
Progeria P: 811
Reading (Developing good readers) R: 159
Safety picture on S: 14
Sexuality (In childhood) S: 338
Sex education S: 336
Special education So: 770
Toy T: 351
See also the list of Related articles in the Child article
- Child, Lydia Maria** [American social reformer]
C: 454 with portrait
- Child abuse** C: 454
Children and Families, Administration for C: 457
Shaken baby syndrome S: 343
- Child care** [sociology]
Camp Fire Boys and Girls (Child-care programs) C: 89
Day care D: 52
Early childhood education (Child-care programs) E: 15
Education (The organization of U.S. education) E: 89
School (Nursery schools) S: 181
Women's movements (In Western societies) W: 386-387 with picture
- Child Care and Development Block Grant** [program]
Children's Bureau C: 457
- Child-care center**
Day care (Types of day care for children) D: 52
- Child City** [Mooseheart, Illinois]
Moose International Inc. M: 799
- Child custody** [law]
Adoption (The adoption process) A: 66
Divorce (Child custody arrangements) D: 254
- Child development** [psychology] See Developmental psychology in this index
- Child labor** C: 455
Industrial Revolution (The working class) I: 251; picture on I: 252
Sweatshop So: 1019
- Child Labor Act** [1916]
Wilson, Woodrow (Legislative program) W: 322-323
- Child labor amendment** [U.S. history]
Child labor (U.S. federal laws) C: 455
- Child life worker** [career]
Hospital (Nonmedical services) H: 373
- Child marriage**
Family (Non-Western families) F: 24
- Child pornography**
Obscenity and pornography (In the United States) O: 643-644
- Child Protection and Toy Safety Act** [1969]
Toy (History) T: 352
- Child psychoanalysis** [psychotherapy]
Freud, Anna F: 530
- Child psychology** See Developmental psychology in this index
- Child support**
Children and Families, Administration for C: 457
Welfare (Since 1960) W: 191
- Child Support Enforcement** [program]
Children and Families, Administration for C: 457
- Child welfare** [social work] C: 456
Child abuse C: 455
Childhood Education International, Association for C: 457
Children and Families, Administration for C: 457
Children's Bureau C: 457
Children's home C: 457
Social work (Family and child welfare) So: 558
UNICEF U: 26
United Nations (Aid to children) U: 88 with picture
- Child Welfare League of America**
Social work (Family and child welfare) So: 558
- Child Welfare Services**
Children's Bureau C: 457
- Childbirth** C: 456
See also Birth in this index
- Anesthesia (Local anesthesia) A: 459
Baby (Birth) B: 6
Cerebral palsy (Causes) C: 361
Depression D: 151
Midwife M: 536
Multiple birth M: 919
Obstetrics and gynecology O: 646
Pregnancy P: 734a with picture
Premature birth P: 755
Reproduction, Human R: 244 with picture; (Birth) R: 248 with pictures
Sexually transmitted disease (How STD's are transmitted) S: 338b
- Childe Harold's Pilgrimage** [poem by Byron]
Byron, Lord (Byron's life) B: 748; (Byron's poetry) B: 748
- Childeric III** [king of the Franks]
Merovingian dynasty M: 418
Pepin the Short P: 277
- Childhood**
Child (The stages of childhood) C: 449
- Childhood** [story by Tolstoy]
Tolstoy, Leo (Early life and works) T: 322
- Childhood and Society** [book by Erikson]
Erikson, Erik Homburger E: 352
- Childhood Education International, Association for** C: 457
Nursery school (Nursery schools in the United States) N: 616-617
- Children** See Child in this index
- Children and Families, Administration for** [U.S.] C: 457
Health and Human Services, Department of (Organization) H: 128
- "Children of Adam"** [poems by Whitman]
Whitman, Walt (His work) W: 294
- Children of Don** [legendary people]
Mythology (Welsh myths) M: 984
- Children of Ilyr** [legendary people]
Mythology (Welsh myths) M: 984
- Children of the Covenant**
B'nai B'rith B: 426
- Children of Violence, The** [books by Lessing]
Lessing, Doris L: 208
- Children's Aid Society**
Brace, Charles Loring B: 543
- Children's Book Council**
Book Week B: 470
Literature for children (Children's editors) L: 365
- Children's Bureau** [U.S.] C: 457
Kelley, Florence K: 255
Lathrop, Julia Clifford L: 90
Parent education (History) P: 157
Wald, Lillian D. W: 7
- Children's court** See Juvenile court in this index
- Children's Crusade** [European history]
Crusades (The Children's Crusade) Ci: 1161
Pied Piper of Hamelin P: 453
- Children's Defense Fund**
Child welfare C: 456
Clinton, Hillary Rodham Ci: 682h
- Children's Foundation**
Child welfare C: 456
- Children's Fund, United Nations** See UNICEF in this index
- Children's Games** [painting by Bruegel]
Bruegel, Pieter, the Elder B: 648 with picture
Folklore picture on F: 322
- Children's home** C: 457
- Children's Hour, The** [play by Hellman]
Hellman, Lillian H: 178
- Children's librarian**
Library (Services for children) L: 240
Literature for children (Librarians) L: 365
- Children's literature** See Literature for children in this index
- Children's magazine**
Magazine (Consumer magazines) M: 42
- Children's Museum of Indianapolis**
Indiana (Museums) I: 201
- Children's Park** [Seoul]
Seoul picture on S: 306
- Children's zoo**
Zoo (Displaying animals) Z: 605 with picture; (The evolution of zoos) Z: 609
- Childress, Sarah** [wife of James Knox Polk] See Polk, Sarah Childress in this index
- Childs, Richard S.** [American businessman]
City government (The council-manager form) Ci: 596
- Child's Garden of Verses, A** [book by Stevenson]
Literature for children (Poetry) L: 356-357
Stevenson, Robert Louis (Other writings) So: 898-899
- Chile** C: 458 with pictures and maps
Araucanian Indians A: 592
Indian, American (Indians of the Andes) I: 173
Latin America (Border disputes) L: 108
Tsunami T: 476
World War II (table: The Allies) W: 471
See also the list of Related Articles in the Chile article
- Chile nut** [seed]
Monkey puzzle tree M: 730
- Chile pine** See Monkey puzzle tree in this index
- Chile saltpeter** [chemical]
Saltpeter S: 76a
- Chilean clover**
Alfalfa (History) A: 348
- Chiles, Lawton** [American political leader]
Florida (table) F: 260
- Chili pepper**
Pepper P: 278
- Chilkat Indians**
Indian, American picture on I: 162
Yukon Territory (History) Y: 585
- Chilkat River** [Alaska]
Alaska (Interesting facts) A: 283
- Chilkoot Trail** [British Columbia]
Canada (table: National historic sites) C: 114
- Chill, Wind** [weather]
Wind chill W: 331
- Chillicothe** [Ohio]
Ohio (Exploration and settlement) O: 700; (Statehood) O: 700
- Chillingworth, Roger** [literary figure]
Hawthorne, Nathaniel (His novels) H: 115
- Chillon** [castle, Switzerland]
Lake Geneva L: 38 with map
- Chills and fever**
Malaria (Symptoms) M: 96
- Chilopod** [zoology]
Arthropod A: 752 with picture
- Chiluba, Frederick** [Zambian political leader]
Zambia (History) Z: 589-590
- Chilwa, Lake** [Mozambique]
Stanley and Livingstone (Livingstone's discoveries) So: 837 with map
- Chimaera** [fish]
Fish (Sharks, rays, and chimaeras) F: 148 with picture
- Chimborazo** [volcano, Ecuador] C: 471
Andes Mountains (Physical features) A: 452
Mountain (table) M: 894 with diagram
- Chimera** [art]
Chimera C: 471
- Chimera** [book by Barth]
American literature (Experimental styles) A: 424
- Chimera** [Greek mythology] C: 471
- Chimères, Les** [poems by Nerval]
Nerval, Gérard de N: 131
- Chimes** [musical instrument] C: 471
Bell (Chimes and carillons) B: 239
Orchestra bells O: 823
- Chimney**
Heating (Fireplaces) H: 160
- Chimney, Lamp**
Lamp (Fat or oil lamps) L: 52 with pictures
- Chimney Rock**
North Carolina (Places to visit) N: 482
- Chimney Rock National Historic Site** [Nebraska]
Nebraska (Places to visit) N: 102 with picture
- Chimney sweep** [job] C: 471
- Chimney swift** [bird]
Swift So: 1038
Bird picture on B: 353
- Chimpanzee** [animal] C: 471 with pictures
AIDS (History of AIDS) A: 165
Ape (Way of life) A: 563 with picture
Bonobo B: 462
Goodall, Jane G: 269 with picture
Primate (Great apes) P: 778a
Psychology picture on P: 849
- Chimu Indians**
Peru (History) P: 314
- Chin** [anatomy]
Face F: 3
- Chin** [people]

Myanmar (Early days) **M: 970d**

Ch'in dynasty See *Qin dynasty in this index*

China [country] **C: 474** with pictures and maps

See also *Taiwan in this index*

Agriculture

Agriculture picture on **A: 149**

Asia (Way of life in East Asia) **A: 785**; (Way of life in Central Asia) **A: 790**; (History) **A: 804-805** with pictures

Cotton (Leading cotton-producing countries) **Ci: 1089** with map

Sheep **S: 380**; (table) **S: 382**

Wheat (table) **W: 273** with map

Art and architecture

China (The arts) **C: 488** with pictures

Archaeology picture on **A: 595**

Architecture (Chinese architecture) **A: 612** with picture

Asia (The arts) **A: 789**

Bed picture on **B: 198**

Dance (Asian theatrical dance) **D: 30**

Drama (China) **D: 336** with picture

Furniture (China) **F: 571** with pictures

Ivory (Ivory carving) **I: 521**

Jade **J: 20**

Lacquerware **L: 23** with picture

Mask (Theatrical masks) **M: 265** with picture

Music (Chinese music) **M: 956**

Painting (Landscapes and seascapes) **P: 32-33** with picture; (Chinese painting) **P: 44** with pictures; (Japanese painting) **P: 47**

Porcelain (Oriental porcelain) **P: 676**; picture on **P: 675**

Pottery (Early pottery) **P: 718**; picture on **P: 716**

Religion picture on **R: 221**

Sculpture (China) **S: 238** with picture

Communications and mass media

China (Communication) **C: 499**

Newspaper (In Asia) **N: 386**

Defense

China (The armed forces) **C: 481**

Air force (The Chinese Air Force) **A: 184** with picture

Army (The Chinese Army) **A: 726**

Navy (Major navies of the world) **N: 78** with picture; (Navies in the Middle Ages) **N: 79**; picture on **N: 77**

Education

China (Education) **C: 486** with picture

Asia (Education) **A: 789**

Library (Australia and the Far East) **L: 254**; (Libraries in the East) **L: 261**

Literacy (Literacy in other countries) **L: 352**

Government

China (National government) **C: 477** with pictures

Communism (Communism in practice) **Ci: 890-892**

Freedom of assembly (In other countries) **F: 504**

Police (In other countries) **P: 623** with picture

Health and welfare

Abortion (In other countries) **A: 16**

Acupuncture **A: 31**

Birth control (Birth control today) **B: 379**

Housing (Other countries) **H: 392**

Medicine (China and India) **M: 372**

History

China (History) **C: 500** with pictures

Albania (Communist control) **A: 308**

Army (Ancient armies) **A: 726-727**

Asia (The rise of the Japanese Empire) **A: 807**; (The spread of Communism) **A: 809** with map

Asian Americans (History of Asian immigration) **A: 812d**

Bush, George Herbert Walker (Envoy to China) **B: 718**

Chiang Kai-shek **C: 419**

Chinese-Japanese wars **C: 509**

City (Government) **Ci: 585**

Clinton, Bill (International affairs) **Ci: 682f**

Cold War **Ci: 762**; (Communist expansion in Asia) **Ci: 764**; (The great blocs split) **Ci: 768**; (The Cold War in the 1970's) **Ci: 769-770**

Communism (World War II) **Ci: 893-894**; (China after Mao) **Ci: 896**

Exploration (The Chinese) **E: 441**; (Chinese

exploration) **E: 442**

Famine (Too much rainfall) **F: 26**

Flag picture on **F: 217**

Hong Kong **H: 316**; (History) **H: 319**

Immigration (The second wave) **I: 82**; (Canada) **I: 84**

India (India in the 1950's and early 1960's) **I: 133**

Indochina **I: 224**

International relations (New patterns of international relations) **I: 345**

Japan (Chinese influence) **J: 53**

Korea (Early years) **K: 375**

Korean War **K: 379**

Manchuria (History) **M: 134**

Mao Zedong **M: 174**

Map (Maps in the Middle Ages) **M: 182**

Mathematics (Chinese mathematics) **M: 306**

Money (The first coins) **M: 705-706** with pictures; (The development of paper money) **M: 706** with picture

Mongol Empire (Invasions) **M: 720**

Nanking Massacre **N: 11**

Nixon, Richard Milhous (Foreign policy) **N: 432-433**

Olympic Games (Boycotts) **O: 753**

Opium (History) **O: 811**

Philosophy (Oriental philosophy) **P: 385-386**

Polo, Marco **P: 648** with map

Qin dynasty **Q: 3**

Russia (Expansion in Asia) **R: 551**

Russo-Japanese War (Underlying causes) **R: 566**

Science (Early civilizations) **S: 196**

Silk Road **S: 462**

Tang dynasty **T: 25** with picture and map

Tibet **T: 276**; (History and government) **T: 277**

Treaty port **T: 409**

Union of Soviet Socialist Republics (Khrushchev's policies) **U: 38-39**

United Nations (Membership questions) **U: 95**

United States, History of the (Improved U.S.-Soviet relations) **U: 195**

Vietnam (Nam Viet) **V: 369**

World, History of the (The Huang He Valley) **W: 425**; (The unification of China) **W: 431** with picture; (China) **W: 435** with picture; (Developments in China and Japan) **W: 442**

World War II (Aggression on the march) **W: 470**; (table: The Allies) **W: 471**;

(Japan attacks) **W: 477-478**; (The China-Burma-India theater) **W: 489**; (table: Military casualties) **W: 497**

Language and literature

See also *Chinese language*; *Chinese literature in this index*

Book (The development of printed books) **B: 466** with picture

Manuscript (Paper manuscripts) **M: 173**

Manufacturing

Iron and steel (In other countries) **I: 450**

Textile (In Asia) **T: 218**

Natural resources

Conservation (Asia) **Ci: 989**

Panda (Protecting pandas) **P: 129**

Petroleum (Asia) **P: 333**

Sequoia (The dawn redwood) **S: 311**

Three Gorges Dam **T: 270**

People

China (People) **C: 481** with pictures

Asia (The people) **A: 786**; (Life in China) **A: 786**

Family (Home life) **F: 21** with picture

Hmong **H: 270**

Standard of living (table) **So: 834**

Recreation and sports

Kite (History) **K: 340**

Martial arts (Chinese martial arts) **M: 233-234**

Religion

China (Religion) **C: 486**

Asia (Religions) **A: 786**

Religion (Confucianism) **R: 220**

Social and cultural life

China (Way of life) **C: 483** with pictures

Calendar (The Chinese calendar) **C: 29**

Circus (History) **Ci: 562b**

Clothing (Why clothing varies) **Ci: 690-691**

Dragon **D: 319**

Food (Why diets differ around the world) **F: 331**; picture on **F: 332**

Technology and science

Bronze Age **B: 639** with picture

Coal (History of coal use) **Ci: 731**

Fishing industry (Inland fisheries) **F: 182**

Heart (Early beliefs about the heart) **H: 143**

Invention (China) **I: 359**

Printing (History) **P: 802**

Rocket (Early rockets) **R: 390** with picture

Space exploration (China) **So: 727**

Trade

Macao **M: 2**

Tea (History) **T: 63**

Trade route (Early trade routes) **T: 364**

Trudeau, Pierre Elliott (Foreign affairs) **T: 463-464**

Transportation

Railroad (In other countries) **R: 113-114**

See also the list of *Related Articles* in the China article and headings beginning Chinese... in this index

China [pottery] See *Porcelain in this index*

China, Communist See *China in this index*

China, Nationalist See *Taiwan in this index*

China, People's Republic of See *China in this index*

China, Republic of See *Taiwan in this index*

China aster [plant]

Aster **A: 823**

China clay See *Kaolin in this index*

China doll

Doll (The 1800's) **D: 289**

China grass [plant]

Boehmeria **B: 435**

Ramie **R: 133**

China poblana

Mexico (Clothing) **M: 456**

China Sea **C: 508** with map

China-wood oil [tree product]

Tung oil **T: 486**

Chinaberry [tree]

Poisonous plant (Some poisonous plants) **P: 602**

Chinampa [agriculture]

Aztec (Agriculture) **A: 1002**

Indian, American (Before European contact) **I: 169-171**

Lake Xochimilco **L: 48**

China's Sorrow See *Huang He in this index*

Chinatown

Australia picture on **A: 902**

California (Population) **C: 40**

Canada picture on **C: 105**

Chicago (The South Side) **C: 424-425**

Minority group (Asian Americans) **M: 610**

New York City (Manhattan) **N: 323-324**

San Francisco (Downtown San Francisco) **S: 92-93**; picture on **S: 95**

Toronto picture on **T: 339**

Vancouver (The city) **V: 274** with map

Chinaware See *Porcelain in this index*

Chinch bug [insect] **C: 508** with picture

Insect picture on **I: 281**

Lawn picture on **L: 143**

Chincha Indians [American Indians]

Chinchilla **C: 509**

Chincha Islands [islands, Pacific]

Guano **G: 411**

Chinchilla [animal] **C: 508**

Animal picture on **A: 474**

Fur (table) **F: 561**; picture on **F: 562**

Chinchilla cat

Cat (Coat) **C: 287**

Chincoteague Island [island, Virginia]

Virginia (Visitor's guide) **V: 408** with picture

Chindits [World War II commandos] See

Wingate's Raiders in this index

Chinese [people]

California (Early statehood) **C: 62**

China (People) **C: 481** with pictures

Hong Kong (Ancestry) **H: 317**

Malaysia (People) **M: 98b-98c**

Minority group (Asian Americans) **M: 610**

Oriental exclusion acts **O: 855**

Riot (During the 1800's) **R: 348-349**

See also the *People* section under the heading China in this index

Chinese alligator

Alligator **A: 375**

- Chinese cabbage** [plant] C: 509 *with picture*
- Chinese calendar**
Calendar (The Chinese calendar) C: 29
- Chinese City** [district]
Shanghai (The city) S: 371-372
- Chinese Communist Party**
China (The Communist Party) C: 477; (The Great Leap Forward) C: 505
Mao Zedong (His life) M: 174
- Chinese crested** [dog] C: 509 *with picture*
- Chinese Eastern Railway**
Russo-Japanese War (Underlying causes) R: 566
Trans-Siberian Railroad T: 401
- Chinese elm**
Elm (Diseases) E: 245
- Chinese Exclusion Act** [1882]
Asian Americans (The first wave of Asian immigration) A: 812d
Oriental exclusion acts O: 855
- Chinese goose** [bird]
Goose (Kinds of geese) G: 270 *with picture*
- Chinese gooseberry** See Kiwi fruit *in this index*
- Chinese Gordon**
Gordon, Charles George G: 273
- Chinese hibiscus** [plant]
Hibiscus H: 222 *with picture*
- Chinese jade** [mineral]
Jade (Jadeite) J: 20
- Chinese-Japanese wars** C: 509
Taiwan (History) T: 18
- Chinese juniper** [tree]
Juniper J: 197; *picture on* J: 196
- Chinese language** C: 510 *with pictures*
Alphabet (Chinese) A: 384
Asia (The Huang He and Yangtze valleys) A: 805
China (Languages) C: 481
Hong Kong (Languages) H: 317
Lin Yutang L: 309
Name (Beginnings) N: 6
Writing (Phoneticization) W: 513
- Chinese literature** C: 511
- Chinese Nationalist Party** [political party]
Beijing (History) B: 223-224
- Chinese New Year**
New Year's Day (Modern customs) N: 289 *with picture*
- Chinese peony** [plant]
Peony P: 276
- Chinese rug**
Rugs and carpets (Oriental rugs) R: 516-517
- Chinese shar-pei** [dog] C: 512
Dog D: 262 *with picture*
- Chinese silverbell** [plant]
Silverbell S: 465
- Chinese soapberry** [plant]
Soapberry So: 543
- Chinese State Circus**
Circus (The circus today) Ci: 564-565 *with picture*
- Chinese tallowtree**
Tallowtree T: 21
- Chinese Turkestan**
Turkestan (Chinese Turkestan) T: 501
- Chinese University**
Hong Kong (Education) H: 318
- Chinese water chestnut** [plant]
Water chestnut W: 134 *with picture*
- Chinese water deer**
Deer (Young) D: 84; (table) D: 85
- Chinese wool-handed crab**
Crustacean (Reproduction) Ci: 1163
- Chinese zodiac** See Eastern zodiac *in this index*
- Chingis Khan** See Genghis Khan *in this index*
- Chingo Smith of the Erie Canal** [book by Adams]
Adams, Samuel Hopkins A: 44
- Chinking** [construction]
Pioneer life in America (A pioneer settlement) P: 479-480
Log cabin L: 422 *with picture*
- Chinlon** [sport]
Myanmar (Recreation) M: 970a
- Chinnereth, Sea of** [Old Testament]
Galilee, Sea of G: 10 *with maps*
- Chinoise, La** [film]
Godard, Jean-Luc G: 244
- Chinoiserie** [art]
Furniture (The Rococo style) F: 576-577
Paperwork (Wallpaper) P: 138
Wallpaper W: 18
- Chinook** [aircraft]
Army, United States *picture on* A: 736
- Chinook** [weather] C: 512
Colorado (Climate) Ci: 841
Foehn F: 313
Wind (Local winds) W: 329-330
- Chinook Indians** [American Indians] C: 513
Indian, American (Language) I: 149-150
Portland (Oregon) (History) P: 684
- Chinook salmon** [fish]
Salmon (Kinds of salmon) S: 70; *picture on* S: 69
- Chinquapin** [tree]
Chestnut C: 416
- Chinstrap penguin**
Antarctica (Animal life) A: 534-535 *with picture*
- Chip** [electronics] See Computer chip; Silicon *in this index*
- Chip log** [measuring device]
Log (Logs used in the past) L: 421
- Chipá** [food]
Paraguay (Food and drink) P: 146
- Chipekwan Indians** [American Indians]
Manitoba (Indian days) M: 160
Saskatchewan (Early days) S: 144
- Chipmunk** [animal] C: 513 *with pictures*
Animal *picture on* A: 479
- Chippendale, Thomas** [British cabinetmaker] C: 513
- Chippendale furniture**
Chippendale, Thomas C: 513
Furniture (Chippendale furniture) F: 579; *picture on* F: 577
- Chippendale, Battle of** [1875]
Alfred the Great A: 348
- Chipper-canter** [machine]
Lumber *picture on* L: 520
- Chippewa, Battle of** [1814]
War of 1812 (Campaigns of 1814) W: 31
- Chippewa Indians** [American Indians] C: 514
Indian, American (Indians of the Northeast) I: 154-155; *pictures on* I: 156, I: 182
Minnesota (Indian days) M: 603
Ontario (Indian days) O: 784
Potawatomi Indians P: 714
Totem T: 344
- Chippewa National Forest** [Minnesota]
Minnesota (Places to visit) M: 594
- Chipping sparrow** [bird]
Sparrow So: 764
- CHIPS** See Clearing House Interbank Payments System *in this index*
- Chirac, Jacques René** [French political leader] C: 514
France (Socialists win power) F: 478
- Chiral form** [geometry]
Symmetry So: 1066
- Chiriaeff, Ludmilla** [Latvian-Canadian dancer]
Ballet (Ballet in Canada) B: 54
- Chiricahua Indians** [American Indians]
Cochise Ci: 743
Geronimo G: 173
- Chiricahua National Monument** [Arizona]
National Park System (table: National monuments) N: 50
- Chirico, Giorgio de** [Italian painter] C: 514 *with picture*
- Chirikov, Aleksei I.** [Russian sailor]
Exploration (The Russians in Siberia) E: 447
- Chiromancy**
Palmistry P: 111 *with diagram*
- Chiron** [Greek mythology]
Centaur C: 351
- Chiroprectic** C: 514
Alternative medicine A: 388
- Chiroprectic, Doctor of** [degree]
Chiroprectic C: 515
- Chiroptractor** [career]
Chiroprectic C: 514
- Chiroptera** [zoology]
Mammal (table) M: 128 *with picture*
- Chisel** [tool]
Woodcarving W: 391 *with diagram*
Woodworking (Cutting) W: 397 *with pictures*
- Chisel plow**
Corn (Preparing the soil) Ci: 1060
Farm and farming (Preparing the soil) F: 35 *with pictures*
Plow (Other types of bottoms) P: 576 *with picture*
- Chishima** [islands, Pacific] See Kuril Islands *in this index*
- Chisholm, Jesse** [American frontiersman]
Chisholm Trail C: 515
- Chisholm, Shirley** [American political leader] C: 515 *with portrait*
- Chisholm Trail** [U.S. history] C: 515
Abilene A: 11
Cowboy (The growth of the cattle industry) Ci: 1111-1112
Oklahoma (After the Civil War) O: 731-732
Western frontier life in America (The cattle boom) W: 234
- Chishona** [language]
Zimbabwe (People) Z: 596
- Chisinau** [capital city, Moldova] C: 515
- Chisos Mountains** [mountains, Mexico-U.S.]
Big Bend National Park B: 297
Texas *picture on* T: 184; (Mountains) T: 198
- Chissano, Joaquim** [Mozambique political leader]
Mozambique (History) M: 905-906
- Chiswick House** [London]
Architecture (The Palladian Revival) A: 623 *with picture*
- Chital** [animal]
Deer (table) D: 85 *with picture*; (Asian and European deer) D: 86
- Chitimukulu** [chief]
Bemba B: 246
- Chitin** [biology]
Arthropod A: 753
Insect (Skeleton) I: 286
Moth (The pupa) M: 839
- Chiton** [clothing]
Clothing (Ancient times) Ci: 696-697 *with picture*
Greece, Ancient (Food, clothing, and shelter) G: 367
Tunic T: 487
- Chiton** [sea animal] C: 515
Mollusk (Chitons) M: 696; *picture on* M: 695
Shell (Kinds of mollusk shells) S: 385-388 *with picture*
- Chitral Valley**
Pakistan *picture on* P: 92
- Chittenden, Thomas** [American political leader]
Vermont (table) V: 333
- Chitterlings** [food]
Hog (Food) H: 286
- Chitty Chitty Bang Bang** [book by Fleming]
Fleming, Ian Lancaster F: 233
- Chivalry** [custom]
Etiquette (The origins of etiquette) E: 374
Knights and knighthood K: 348; (The code of chivalry) K: 348-350
Middle Ages (Life of the people) M: 526
Novel (Medieval narratives) N: 572
- Chive** [plant] C: 516 *with picture*
- Chivington, John M.** [American military leader]
Black Kettle B: 389
- Chlamydia** [disease] C: 516
Disease (table) D: 226
Koala K: 360
Sexually transmitted disease S: 338b
- Chlamydia trachomatis** [bacteria]
Chlamydia C: 516
- Chlamys** [clothing]
Clothing (Ancient times) Ci: 696-697
- Chloracne** [disorder]
Dioxin D: 215
- Chloramphenicol** [medication] C: 516
Antibiotic (table) A: 551
Typhus (Treatment) T: 541
- Chlorate of potash** [chemical]
Match (Safety matches) M: 299
- Chlordane** [chemical]
Insecticide (Organic insecticides) I: 302; (Dangers of insecticides) I: 303
- Chlordiazepoxide** [drug]
Benzodiazepine B: 256
- Chloride** [chemistry] C: 516
Salt, Chemical S: 75
- Chlorinated hydrocarbon insecticide**
Insecticide (Organic insecticides) I: 302
- Chlorinated lime** [chemical]
Disinfectant D: 235
- Chlorine** [element] C: 516
Bleach B: 399
Compound Ci: 906
Halogen H: 27

Hypochlorous acid H: 480
 Salt (In the chemical industry) S: 72
 Water (Purifying and treating water) W: 126
See also the list of Related Articles in the Chlorine article

Chlorite

Rock (Metamorphic rock) R: 372-373

Chlorofluorocarbon [chemical compound]
 C: 517

Aerosol A: 89
 Air (Changes in the atmosphere) A: 173-174
 Environmental pollution (Air pollution) E: 331;
 (Government action) E: 335-336; *picture on E: 333*
 Food, Frozen (Liquid-CFC freezing) F: 338
 Ozone hole O: 894

Chloroform [chemical] C: 517

Water pollution (Drinking water standards)
 W: 138

Chlorolabe [anatomy]

Eye (The retina) E: 462

Chlorophyll [botany] C: 517

Algae A: 349
 Leaf (The leaf changes color) L: 152
 Mushroom M: 941
 Photosynthesis P: 430
 Plant (Leaves) P: 530; (Photosynthesis) P: 538
 Saprophyte S: 122
 Tree (Leaves) T: 417

Chloroplast [botany] C: 518

Cell (The cytoplasm) C: 329 *with diagram*

Chlorophyll C: 517

Leaf (Photosynthesis) L: 155 *with diagram*

Photosynthesis P: 430

Plant (Photosynthesis) P: 538

Tree (Leaves) T: 417

Chloroquine [medication]

Malaria (Treatment and prevention) M: 96

Quinine Q: 42

Chlorpromazine [medication] C: 518

Tranquilizer T: 370

Chlorpyrifos [insecticide]

Insecticide (Dangers of insecticides) I: 303

Choanocyte [zoology]

Sponge (Special cells) So: 799 *with diagram*

Choate, Pat [American economist]

Perot, Ross P: 292

Chobe National Park [Botswana]

National park (table) N: 42f

Chocolate [food] C: 518 *with picture*

Cacao C: 9

Candy (Chocolate candies) C: 176

Carob C: 244

Hershey, Milton Snavely H: 216

Pennsylvania (Interesting facts) P: 245

Chocolate liquor

Chocolate (Manufacturing chocolate) C: 518

Chocolate Soldier, The [operetta by Straus]

Straus, Oscar S: 921

Choctaw Indians [American Indians] C: 519

with picture

Code talkers C: 749

Indian, American (Indians of the Southeast)

I: 157

Indian Territory I: 189 *with map*

Jackson, Andrew (The Indian issue) J: 13

Mississippi (Indian days) M: 641; (Territorial

days) M: 641-642

Choi Kyu Hah [Korean political leader]

Korea (South Korea) K: 377

Choice [publication]

American Library Association A: 413

Choice meat

Beef (Grades of beef) B: 209

Choke [engine]

Carburetor C: 208

Choke [gun]

Shotgun S: 438

Choke coil [electricity]

Inductance I: 239

Chokecherry [fruit]

Tree *pictures on T: 421*

Chokedamp [gas]

Damp D: 24

Choking [disorder]

First aid (Restoring breathing) F: 138;

(Choking) F: 139 *with pictures*

Chole Empire [Indian history]

India (Southern India) I: 129

Cholecalciferol

Vitamin (Vitamin D) V: 432

Cholecystokinin [hormone]

Gallbladder G: 14

Cholera [human disease] C: 519

Epidemic E: 343

Map (Development of thematic and inventory
 mapping) M: 185

Public health (History) P: 857

Cholesterol [biochemistry] C: 520

Arteriosclerosis (Causes) A: 750

Beef (Food value) B: 211

Bile B: 300

Bloch, Konrad Emil B: 404

Butter (Composition and food value) B: 730-
 731

Ester E: 360

Fat (Fats and disease) F: 53

Heart (Coronary artery disease) H: 137;
 (Progress in treatment and prevention)
 H: 145-146

Lipid (Kinds of lipids) L: 345

Liver (Other functions) L: 394

Margarine M: 198

Meat (Food value of meat) M: 346

Milk (Milk in the human diet) M: 546

Nutrition (Limit intake of saturated fats, trans
 fats, and cholesterol) N: 628; (Heart dis-
 ease) N: 630

Physical fitness (Cholesterol levels) P: 434

Psyllium P: 853

Seafood S: 264

Triglyceride T: 442

Vegetarianism V: 295

Cholla cactus [plant]

Cactus (Kinds of cactuses) C: 10 *with picture*

Cholo [people]

Bolivia (Way of life) B: 443

Cholon [district]

Ho Chi Minh City H: 271

Choluteca River

Honduras (The Southern Coast) H: 310

Chomede, Paul de *See* Maisonneuve, Sieur de
in this index

Chomette, René-Lucien *See* Clair, René *in this
 index*

Chomolungma *See* Mount Everest *in this index*

Chomsky, Noam [American linguist] C: 520

Linguistics (The generative theory of language)
 L: 337

Socialism (The New Left) So: 561

Chondrichthyes [zoology]

Fish (table) F: 172 *with pictures*

Chondrite

Earth (Earth's interior) E: 23

Meteor (Meteorites) M: 431

Chondrodystrophic dwarfism [birth defect]

Dwarf (Chondrodystrophic dwarfism) D: 395

Chondrostea [zoology]

Fish (The Age of Fishes) F: 171

Ch'ongju [drink]

Korea (Food and drink) K: 371

Chongmyo Royal Shrine

Seoul (The city) S: 304

Chongqing [city, China] C: 521

Chopin, Frédéric François [Polish composer]

C: 521 *with portrait*

Ballade B: 43

Liszt, Franz (His life) L: 349-350

Sand, George S: 106

Chopin, Kate [American author] C: 521

American literature (Women writers) A: 420

Chopiniana [ballet]

Ballet (Ballet in Russia) B: 52

Chopper [aircraft]

Helicopter H: 169

Chopsticks [utensil] C: 521

Choquette, Ernest [Canadian author]

Canadian literature (Fiction: 1850-1918) C: 158

Choral music

Classical music (Choral music) Ci: 644 *with
 picture*

Choral ode [poetry]

Drama (Tragedy) D: 326

Greek literature (Lyric poetry) G: 377

Ode O: 673

Poetry (Lyric poetry) P: 591

Chorale [music] C: 522

Classical music (The Reformation) Ci: 646

Chord [geometry]

Circle (Parts of a circle) Ci: 558 *with diagram*

Sphere So: 780

Chord [music]

Harmony H: 62

Music (Harmony) M: 951 *with diagrams*

Chordate [biology] C: 522

Animal (A classification of the animal kingdom)

A: 507 *with picture*

Invertebrate I: 366

Chordotonal organ

Ant (Sense organs) A: 522-523

Chorea [disorder] C: 522

Brain (Infectious diseases) B: 557

Huntington's disease H: 451

Rheumatic fever R: 291

Chorea [veterinary medicine]

Distemper D: 238

Choregus [ancient Greece]

Drama (Tragedy) D: 326

Choreographer

Ballet B: 44; (Choreography) B: 49 *with picture*
 Musical comedy (Dancing) M: 959

Choreographic School

Saint Petersburg [Russia] (Education and cul-
 tural life) S: 55

Choreography

Ballet (table) B: 45; (Choreography) B: 49 *with
 picture*; (Music) B: 50

Ice skating (Singles skating) I: 12

Chorion [biology]

Baby *diagrams on B: 5*

Placenta P: 505

Chorionic cavity [pregnancy]

Reproduction, Human (Nourishing the embryo)
 R: 247 *with diagram*

Chorionic villus sampling [medicine]

Genetic counseling (Reasons for seeking
 genetic counseling) G: 84

Pregnancy (Medical care) P: 734-735

Choroid [anatomy]

Eye (The uveal tract) E: 460-462; *picture on
 E: 461*

Choroiditis [disease]

Eye (Diseases of the uveal tract) E: 467

Chorus

Classical music (Choral music) Ci: 644 *with
 picture*

Drama (Greek drama) D: 326-327

Opera (The singers) O: 792 *with picture*; (The
 stage director) O: 794

Poetry (Ancient poetry) P: 595-596

Chorus Line, A [musical]

Musical comedy (The modern musical
 emerges) M: 960

Theater *picture on T: 244*

Choson [name for Korea]

Korea (Early years) K: 375; (The Choson
 dynasty) K: 376

October O: 670

Seoul S: 304

Choson dynasty [Korean history]

Korea (The Choson dynasty) K: 376

Chott [geography]

Algeria (The High Plateaus) A: 363

Chou dynasty *See* Zhou dynasty *in this index*

Chou En-lai *See* Zhou Enlai *in this index*

Chouart, Médard *See* Groseilliers, Sieur des *in
 this index*

Chouteau, François [American businessman]

Kansas City [Missouri] (History) K: 243

Chouteau, Jean Pierre [American businessman]
 C: 522

Chouteau, Pierre, Jr. [American financier]

C: 522

Chouteau, René Auguste [American frontiers-
 man] C: 522

Missouri (Exploration and settlement) M: 669

Saint Louis (Early settlement) S: 49

Chouteau's Landing

Kansas City [Missouri] (History) K: 243

Chow chow [dog] C: 522

Dog D: 262 *with picture*

Chow mein [food]

Asian Americans (Asian influences on
 American culture) A: 812c

Chrétien, Jean [Canadian political leader]

C: 522a *with pictures*

Campbell, Kim (The 1993 election) C: 90d

Canada, History of (The 1993 national election)
 C: 154

Liberal Party L: 227

Chrétien de Troyes [French poet] C: 522d

Holy Grail H: 298

Lancelot, Sir L: 56

Chrism [oil]
Coronation (Development) C: 1069

Chrisman, Arthur [American author]
Newbery Medal (table) N: 359

Chrimatism [religion]
Eastern Orthodox Churches (Sacraments) E: 46-47

Christ, Jesus See *Jesus Christ in this index*

Christ and Saint Thomas [sculpture by Verrocchio]
Verrocchio, Andrea del V: 339

Christ Before Pilate [tapestry]
Jesus Christ picture on J: 107

Christ Church [Alexandria]
Virginia (Places to visit) V: 408

Christ Church [Boston]
Old North Church O: 740 *with picture*

Christ Church [Philadelphia]
Philadelphia (Downtown Philadelphia) P: 359

Christ Church Cathedral [Dublin]
Dublin (History) D: 371

Christ Church College
Oxford University O: 887

Christ Disputing with the Elders [fresco by Giotto]
Jesus Christ picture on J: 105

Christ of the Andes [sculpture by Alonzo]
Andes Mountains (Transportation) A: 453

Christ of the Apocalypse [painting]
Painting (Romanesque painting) P: 50 *with picture*

Christ on the Road to Calvary [painting by Martini]
Jesus Christ picture on J: 108

Christ the Redeemer [sculpture by Landowski]
Rio de Janeiro (The city) R: 345

Christ the Savior Cathedral [Moscow]
Moscow (Recent developments) M: 827

"Christabel" [poem by Coleridge]
Coleridge, Samuel Taylor (His writing) Ci: 772

Christaller, Walter [German geographer]
Geography (The growth of geography) G: 95-96

Christchurch [New Zealand] C: 522d

Christening [custom]
Ship (Launching and outfitting a ship) S: 425

Christening [religion] See *Baptism in this index*

Christian [literary figure]
Bunyan, John B: 700

Christian [religion] See *Christianity in this index*

Christian III [king of Denmark]
Denmark (A great power) D: 139-140

Christian IV [king of Denmark] C: 522d
Oslo O: 864
Thirty Years' War (The Danish period) T: 260

Christian IX [king of Denmark] C: 522d

Christian X [king of Denmark] C: 522d
Denmark (Social and political reforms) D: 140

Christian, Charlie [American guitarist] C: 522d
Jazz (Cool jazz) J: 72; *picture on J: 71*

Christian, Fletcher [British seaman]
Pitcairn Island P: 498

Christian, Letitia [wife of John Tyler] See *Tyler, Letitia Christian in this index*

Christian art See *Religious art in this index*

Christian Association, Young Men's See *Young Men's Christian Association in this index*

Christian Association, Young Women's See *Young Women's Christian Association in this index*

Christian Athletes, Fellowship of
Fellowship of Christian Athletes F: 69

Christian Brothers [religious order]
Jean Baptiste de la Salle, Saint J: 75
Religious life (table) R: 227

Christian Church [religious group]
Disciples of Christ D: 223

Christian Coalition [organization] C: 522d

Christian Democratic Party [political party]
Italy (The Italian republic) I: 517-518

Christian Democratic People's Party [political party]
Hungary (Multi-party elections) H: 448

Christian Democratic Union [political party]
Germany (Politics) G: 147; (East Germany) G: 170-171

Christian Democratic Union-Czech People's Party [political party]
Czech Republic (Politics) Ci: 1210

Christian Endeavor International [ministry]
C: 523

Christian Era [calendar] C: 523

Christian fundamentalism [religious movement]
Fundamentalism F: 557
Religion (Religion today) R: 223

Christian humanism [philosophy]
Humanism (The spread of humanism) H: 431
Renaissance (Christian humanism) R: 237-238

Christian Mission
Salvation Army (History) S: 77

Christian name
Name N: 5

Christian realism [philosophy]
Niebuhr, Reinhold N: 406

Christian Reformed Church [religious group]
C: 523

Christian Science Monitor, The [newspaper]
Boston (Communication) B: 502

Christian Scientists [religious group] C: 523
Eddy, Mary Baker E: 75

Christian Social Union [political party]
Germany (Politics) G: 147

Christian Socialism [philosophy]
Kingsley, Charles K: 331

Christiania [former name]
Oslo O: 864

Christianity [religion] C: 523 *with pictures*
See also *Jesus Christ in this index*
Angel A: 460
Arabs (Religion) A: 586
Asia (Religions) A: 773
Bible B: 279
Catechism C: 299
Church C: 541
Creationism Ci: 1123
Cross Ci: 1155
Deacon D: 55
Devil D: 174
Eastern Orthodox Churches E: 45
Education (Christian education in the Middle Ages) E: 99
Europe (Religions) E: 390
Fast F: 52
Feasts and festivals (In Christianity) F: 58
Galilee G: 10
Gnosticism G: 238
Gospels G: 277
Grace G: 296
Heaven H: 161
Heresy H: 210
History (The Bible and post-Roman history) H: 262
Jerusalem J: 94a; (Holy places) J: 95
Jews (Jews in Christian Europe) J: 122
Latin America (Colonial rule) L: 106
Lebanon (Ethnic groups and religion) L: 171
Lord's Prayer L: 454
Missionary M: 620
Monasticism (Christian monasticism) M: 700-701
New Testament N: 287 *with picture*
Old Testament O: 740
Paul, Saint P: 200
Protestantism P: 833
Religion (Religion today) R: 223
Religious life R: 226
Resurrection R: 264
Saint (Christian saints) S: 29
Scholasticism S: 179
Slavery (The Middle Ages) S: 501
Ten Commandments T: 132
Trinity T: 447
Witchcraft (Witchcraft as a religion) W: 371-372

Art and music
Architecture (Medieval architecture) A: 617
Byzantine art B: 749 *with pictures*
Communication (During the Middle Ages) Ci: 879
Madonna and Child M: 37 *with picture*
Painting (Medieval painting) P: 48 *with pictures*
Renaissance (Christian humanism) R: 237-238
Spiritualism (Spiritualism and religion) So: 796
Stained glass (Early stained-glass windows) So: 822 *with picture*

History
Africa (The influence of Christianity) A: 131

Byzantine Empire (The people) B: 752-753;
(Cultural life) B: 753

Church and state (In early times) C: 542

Constantine the Great Ci: 993

Crusades Ci: 1159

Cult (Kinds of cults) Ci: 1185

Education (Religion and early Western education) E: 98

Family (Development of the Western family) F: 22

Freedom (The Middle Ages) F: 502

Freedom of religion (In the United States) F: 505

Gallienus G: 15

Julian J: 186

Justinian I J: 204

King K: 319

Luther, Martin L: 527

Middle Ages (The Christian church) M: 523

Mission life in America M: 618

Mysteries M: 972

Philosophy (Ancient philosophy) P: 386-387;
(Medieval philosophy) P: 387

Pliny the Younger P: 574

Reformation R: 195

Religion (Christianity) R: 222

Rome, Ancient (Temporary recovery) R: 448

Theodosius I T: 252

Tithe T: 301

World, History of the (The Romans) W: 429-430; (Medieval Europe) W: 432; (The Byzantine Empire) W: 434 *with pictures*

Christianity or Europe [essay by Novalis]
Novelis N: 571

Christians and Jews, National Conference of
Brotherhood/Sisterhood Week B: 642
National Conference of Christians and Jews N: 31

Christiansborg Palace [Copenhagen]
Denmark picture on D: 133

Christiansen, Larry [American chess player]
Chess (United States chess champions) C: 414

Christianson, Theodore [American political leader]
Minnesota (table) M: 602

Christiansted [Virgin Islands]
Virgin Islands (Islands) V: 393; (The people) V: 394

Christiansted National Historic Site [Virgin Islands]
National Park System (table: National historic sites) N: 52

Christie, Agatha [British author] C: 527

Christie, Julie [British actress]
Motion picture (Best performance by an actress: 1965) M: 862

Christina [queen of Sweden]
Charles X [of Sweden] C: 382

Christkind [legendary figure]
Christmas (In Germany) C: 530
Santa Claus (Santalike characters in other countries) S: 114

Christmas [religion] C: 528 *with pictures*
December D: 68
Twelfth Night T: 531

Christmas bonus
Bonus B: 463

Christmas card
Christmas (Christmas cards) C: 536 *with picture*
Greeting cards G: 387

Christmas Carol, A [book by Dickens]
Christmas (Other customs) C: 536
Dickens, Charles (The first phase) D: 188
Ghost G: 182

Christmas disease
Hemophilia (Major types of hemophilia) H: 183

Christmas Garland, A [book by Beerbohm]
Beerbohm, Max 8: 212

Christmas Island [Kiribati] See *Kiritimati Atoll in this index*

Christmas Oratorio [music by Bach]
Bach, Johann Sebastian (His works) B: 16

Christmas orchid [plant]
Orchid picture on O: 824

Christmas rose [plant]
Flower picture on F: 279
Hellebore H: 177

Christmas Seal
American Lung Association A: 428

Christmas tree [custom]

Christmas (Christmas decorations) C: 535

Fir F: 119

Tree *picture on* T: 427**Christmas tree** [industry]Petroleum (Completing the well) P: 341 *with picture***Christo** [Bulgarian-born sculptor] C: 537Sculpture (Environmental sculpture) S: 259-260 *with picture***Christophe, Henri** [Haitian patriot] C: 537

Haiti (History) H: 15-16

Christophe Colomb [opera by Milhaud]

Milhaud, Darius M: 543

Christopher [antipope]

Pope (table) P: 666

Christopher, Saint [early Christian] C: 537**Christopher, Warren Minor** [American government official] C: 537**Christopher Robin** [literary figure]

Milne, A. A. M: 556

Christy, E. P. [American singer]

Foster, Stephen Collins F: 428

Christy, Howard Chandler [American painter]Constitution of the United States *picture on* Ci: 996Westward movement in America *picture on* W: 247**Christy Minstrels**

Minstrel show M: 612

ChromaColor (Characteristics of color) Ci: 824 *with diagrams***Chromatic aberration** [light]Aberration A: 10 *with diagram*

Telescope (Refracting telescopes) T: 103-104

Chromatic adaptation [vision]

Color (Surprising color-vision effects) Ci: 819

Chromatic harmonica [musical instrument]Harmonica *picture on* H: 62**Chromatic induction** [vision]

Color (Surprising color-vision effects) Ci: 819

Chromatic scaleMusic (Tone) M: 950-951 *with diagram***Chromatin** [biology]

Cell (Before 1900) C: 337

Chromatography [chemistry] C: 537**Chromatophore** [biology]

Fish (Skin and color) F: 160

Octopus (The life of an octopus) O: 673

Photosynthesis P: 430

Chrome [metal]

Chromium C: 538

Chrome [pigment] C: 538**Chrome tanning** [industrial process]

Leather (Tanning) L: 167

Chrome yellow [pigment]

Chromium C: 538

Chromic acid C: 538**Chrominance signal** [electronics]

Television (The television camera) T: 121-122

Chromis [fish]Fish *picture on* F: 155**Chromite** [mineral]

Chromium C: 538

Chromium [element] C: 538

Stainless steel So: 823

Chromium trioxide *See* Chromic acid *in this index***Chromosome** [genetics] C: 538 *with picture**See also* Gene *in this index*

Alzheimer's disease (Diagnosis) A: 398-399

Cell (The nucleus) C: 328 *with diagrams*;

(Mitosis) C: 330; (Meiosis) C: 331; (Before 1900) C: 337

Cystic fibrosis Ci: 1208

DNA D: 258

Down syndrome D: 316

Evolution (Mutation) E: 427

Gene G: 81

Gene mapping G: 81

Genetic engineering (How genes are reintroduced into cells) G: 84a

Genetic testing (How genes carry information) G: 85

Genetics (Molecular genetics) G: 86

Heredity H: 200; (Chromosomes and genes)

H: 201; (Patterns of heredity) H: 202;

(Sources of genetic variation) H: 203

Human Genome Project H: 427

Huntington's disease H: 451

Lesch-Nyhan syndrome L: 205

Life (Cells) L: 276

Mental retardation (Causes) M: 410

Mutation M: 968

Plant (Factors affecting plant growth) P: 538

Races, Human (Mutation) R: 58

Reproduction (How genes are transferred) R: 242

Reproduction, Human (How sex is determined) R: 246

Sexuality (Before birth) S: 338

Weismann, August W: 188

Chromosome-related dwarfism [biology]

Dwarf (Chromosome-related dwarfism) D: 395

Chromosphere [sun]Sun (Zones of the sun) So: 979-980 *with picture*;*picture on* So: 985**Chronic fatigue syndrome** [disorder] C: 538**Chronic pain**

Pain P: 21

Chronicle [literature]

French literature (Early prose) F: 519

Russian literature (Nonreligious literature)

R: 559

Chronicles [book by Froissart]

Froissart, Jean F: 541

Chronicles, Books of [Old Testament] C: 539**Chronicles of England, Scotland, and Ireland***See* Holinshed's *Chronicles in this index***Chronicles of Japan** *See* Nihongi *in this index***Chronicles of Narnia, The** [book by Lewis]

Lewis, C. S. L: 220

Chronicles of the Giant Gargantua [book]

Rabelais, François R: 49

Chronobiology

Biological clock B: 314

Chronological age [psychology]

Intelligence quotient (Calculating IQ) I: 319

Chronometer [instrument] C: 539Clock *picture on* Ci: 682j

Exploration (Exploring the Pacific) E: 447

Navigation N: 70

Chronopathology [medicine]

Biological clock (Biological clocks in people) B: 315

Chronopharmacology [medicine]

Biological clock (Biological clocks in people) B: 315

Chrysalis [entomology] C: 539 *with picture*

Butterfly (The pupa) B: 741

Metamorphosis (The pupa) M: 428; (The pupa) M: 429 *with picture***Chrysanthemum** [plant] C: 539 *with pictures*

Daisy D: 8

Flower (Garden perennials) F: 278 *with picture*

Viroid V: 425

Chrysanthemum, Supreme Order of the

Medals, decorations, and orders (table) M: 359

Chryseis [legendary figure]

Agamemnon A: 137

Chryselephantine statue [sculpture]

Ivory (Ivory carving) I: 521

Chrysler [automobile]Automobile *picture on* A: 971**Chrysler, Walter Percy** [American businessman] C: 540

Automobile (William Crapo Durant) A: 965;

(Changes at the top) A: 966

Chrysler Corporation C: 540

DaimlerChrysler AG D: 5

Chrysler Corporation C: 540

Automobile (Major producing countries and companies) A: 958-959; (Changes at the top) A: 966-968; (Challenges to the Big Three) A: 972

Chrysler, Walter Percy C: 540

DaimlerChrysler AG D: 5

Dodge brothers D: 260

Iacocca, Lee I: 2

Sports car (History) So: 803

Chrysler Hall

Norfolk (Description) N: 453-454

Chrysler Museum

Norfolk (Description) N: 453-454

Chrysoberyl [gem]

Alexandrite A: 345

Cat's-eye C: 305

Gem *picture on* G: 78**Chrysostom, Saint John** [Syrian religious leader] C: 540**Chrysotile**

Asbestos (Types of asbestos) A: 765

Serpentine S: 318

Chu, Stevan [American physicist]

Nobel Prizes (Physics: 1997) N: 442

Chuang Tzu [Chinese philosopher] *See**Zhuangzi in this index***Chuang-tzu** [religious book]

Taoism (Taoism as a philosophy) T: 36

Chub [fish] C: 540 *with picture***Chub mackerel** [fish]

Mackerel M: 24

Chubb, Lewis W. [American chemist]

Glass (table) G: 218

Chuck wagon C: 540

Cowboy (The trail drive) Ci: 1111

Chuck-will's widow [bird]

Whippoorwill W: 281

Chuckwalla [reptile] C: 541 *with picture*

Iguana I: 50

Chugach MountainsAlaska *picture on* A: 292Anchorage *picture on* A: 450**Chugach National Forest** [Alaska]

Alaska (Places to visit) A: 290

Chukar [bird]

Partridge P: 189

Chukchi [people]

Arctic (Americanoids) A: 639

Chukkar

Polo (The game) P: 647

Chula [music]

Portugal (The arts) P: 689-690

Chulalongkorn [king of Thailand]

October O: 670

Thailand (Modernization) T: 227

Chum salmon [fish]Salmon (Kinds of salmon) S: 70; *picture on* S: 69**Chumash Indians** [American Indians] C: 541**Chun Doo Hwan** [Korean military leader]

Korea (South Korea) K: 377

Ch'ung-ch'ing [China] *See* Chongqing *in this index***Chungking** [China] *See* Chongqing *in this index***Chunkey** [game]

Indian, American (Recreation) I: 142-143

Chunnel [nickname] *See* Channel Tunnel *in this index***Chuño** [food]

Bolivia (Food) B: 444

Inca (Food, clothing, and shelter) I: 95-96

Potato (History) P: 713

Chuquicamata [mine, Chile]Chile (Mining) C: 466 *with picture***Chuquisaca** [former name]

Sucre So: 951

Church [religion] C: 541Architecture (Medieval architecture) A: 617-619 *with pictures*; (Renaissance architecture) A: 620 *with pictures*Byzantine art (Architecture) B: 749 *with picture*City (Description) Ci: 582 *with picture*United States *picture on* U: 114**Church, Dogmatic Constitution on the**

Vatican Council II (The work of the council) V: 289

Church, Frederick Edwin [American painter]C: 541 *with picture***Church and state** C: 542

Christianity (The Middle Ages) C: 526

City (Government) C: 581

Constitution of the United States (Amendment

1) Ci: 1011; (Article VI) Ci: 1011

Evolution (Acceptance of evolution) E: 433

Freedom of religion F: 505

Parochial school P: 178

Quebec Act Q: 38

Reformation (Political causes) R: 197

Religious education (Public schools) R: 225

School prayer S: 186

Supreme Court of the United States (Church

and state) So: 1001; (table) So: 1002

Test Acts T: 180

Totalitarianism T: 343

Church Dogmatics [book by Barth]

Barth, Karl B: 120

Church in the Modern World, Pastoral

Constitution on the

Vatican Council II (The work of the council)

V: 289-290

Church mode [music]Classical music (Church music) **Ci**: 645**Church music** See Sacred music in this index**Church of ...**

Religious groups whose names begin Church of ... appear below; church buildings appear under their key words, as in San Lorenzo, Church of

Church of Christ [religious group] See Churches of Christ in this index**Church of Christ, Scientist** [religious group] Christian Scientists **C**: 523**Church of England** [religious group] **C**: 542

See also Anglicans in this index

Boleyn, Anne **B**: 440Elizabeth I (Problems at home and abroad) **E**: 238England (Religion) **E**: 298 with picture; (The English Reformation) **E**: 307Episcopal Church **E**: 344Hampton Court Conference **H**: 36

Laud, William L: 121

Methodists **M**: 434Puritans (Puritan beliefs) **P**: 910; (History) **P**: 910Religious life (Religious life in the 1700's and 1800's) **R**: 227Test Acts **T**: 180Thirty-Nine Articles **T**: 259United Kingdom (Religion) **U**: 56Wales (Religion) **W**: 10**Church of God in Christ, The** [religious group] **C**: 543Pentecostal churches (Major Pentecostal churches) **P**: 275-276**Church of Jesus Christ of Latter-day Saints** [religious group] See Mormons in this index**Church of Jesus Christ of Latter Day Saints, Reorganized** See Community of Christ in this index**Church of Scotland** [religious group]Scotland (Religion) **S**: 215United Kingdom (Religion) **U**: 56**Church of South India** [religious group]Anglicans (Christian unity) **A**: 463**Church of the Brethren** See Brethren, Church of the in this index**Church of the Nazarene** [religious group] **C**: 543**Church school**Parochial school **P**: 177Religious education **R**: 225**Churches, World Council of**Protestantism (The unity movement [the 1800's and 1900's]) **P**: 835**Churches of Christ** [religious group] **C**: 543**Churches of Christ, National Council of the** See National Council of Churches in this index**Churches of God** [religious groups] **C**: 543**Churchill** [city, Manitoba]Hudson Bay **H**: 405Manitoba (Places to visit) **M**: 152**Churchill, Caryl** [British dramatist]English literature (Recent English drama) **E**: 323**Churchill, Clementine Hozier** [wife of]

Churchill, Sir Winston Leonard Spencer

(Churchill's family) **C**: 547 with portrait**Churchill, Diane** [daughter of]

Churchill, Sir Winston Leonard Spencer

(Churchill's family) **C**: 547**Churchill, Jennie Jerome** [mother of]

Churchill, Sir Winston Leonard Spencer

(Boyhood and education) **C**: 545 with picture**Churchill, John** [brother of]

Churchill, Sir Winston Leonard Spencer

(Boyhood and education) **C**: 545 with picture**Churchill, John** See Marlborough, Duke of in this index**Churchill, Marigold** [daughter of]

Churchill, Sir Winston Leonard Spencer

(Churchill's family) **C**: 547**Churchill, Mary** [daughter of]

Churchill, Sir Winston Leonard Spencer

(Churchill's family) **C**: 547**Churchill, Lord Randolph** [British political leader]

Churchill, Sir Winston Leonard Spencer

(Boyhood and education) **C**: 545**Churchill, Randolph** [son of]

Churchill, Sir Winston Leonard Spencer

(Churchill's family) **C**: 547**Churchill, Sarah** [daughter of]

Churchill, Sir Winston Leonard Spencer

(Churchill's family) **C**: 547**Churchill, Sarah Jennings** [wife of]Marlborough, Duke of **M**: 215Anne **A**: 517**Churchill, Thomas J.** [American political leader] Arkansas (table) **A**: 712**Churchill, Sir Winston Leonard Spencer**[British statesman] **C**: 544 with picturesAtlantic Charter **A**: 862 with pictureAutograph picture on **A**: 943Caricature picture on **C**: 238Cold War (The alliance breaks up) **Ci**: 763;(The Iron Curtain descends) **Ci**: 763; picture on **Ci**: 766Democracy (Famous quotations about democracy) **D**: 120Iron Curtain **I**: 453London picture on **L**: 442Marlborough, Duke of **M**: 215Potsdam Conference **P**: 715Quebec (The early 1900's) **Q**: 37

Roosevelt, Franklin Delano (The eve of war)

R: 460; (The Big Three) **R**: 461Stalin, Joseph (World War II) **So**: 827Tehran Conference **T**: 88

Truman, Harry S. (The end of World War II)

T: 469 with pictureUnion of Soviet Socialist Republics (Results of the war) **U**: 37United Kingdom ("Peace in our time") **U**: 70World War II (The Allies attack in Europe and Northern Africa) **W**: 478 with pictureYalta Conference **Y**: 549**Churchill Downs** [Louisville]Kentucky Derby **K**: 295**Churchill Falls** (Newfoundland)Churchill River (Newfoundland) **C**: 550Labrador (People and economy) **L**: 18

Newfoundland and Labrador (Confederation

with Canada) **N**: 377; picture on **N**: 376**Churchill Memorial and Library** [Fulton]Missouri (Places to visit) **M**: 660**Churchill River** (Manitoba-Saskatchewan)**C**: 550Saskatchewan (Visitor's guide) **S**: 136**Churchill River** (Newfoundland) **C**: 550Newfoundland and Labrador (Rivers and lakes) **N**: 370 with map**Churn** **C**: 550Butter (Churning) **B**: 730**Churrasco**Brazil (Food and drink) **B**: 574-575**Churrigueresque** [architecture]Architecture (Baroque architecture) **A**: 622**Churro** [food]Spain (Food and drink) **So**: 737**Churubusco, Battle of** [1847]Mexican War (Scott's campaign) **M**: 446-447;(Principal battles) **M**: 447**Chuuk Island** [Pacific]Micronesia, Federated States of **M**: 515Pacific Islands, Trust Territory of the **P**: 13**Chuuk State**Truk Islands **T**: 465**Chylak, Nestor** [American baseball umpire]Baseball (table: Hall of Fame) **B**: 134**Chyle** [physiology]Intestine (The small intestine) **I**: 352-353Lymphatic system (Absorption of fats) **L**: 535**Chyme**Alimentary canal **A**: 368

Digestive system (From mouth to stomach)

D: 202-203Human body (The mouth, esophagus, and stomach) **H**: 419-420**CIA** See Central Intelligence Agency in this index**Cierdi, John** [American poet] **Ci**: 551 with portrait**Cibao** [region, Dominican Republic]Dominican Republic (Land) **D**: 304**Cibber, Colley** [English actor/author]

Poet laureate (table: Poets laureate of the

United Kingdom) **P**: 590Pope, Alexander **P**: 667**Cibole, Seven Cities of** [legend] **Ci**: 551Coronado, Francisco Vázquez de **Ci**: 1067Estevanico **E**: 360Exploration (Spain's conquests in the New World) **E**: 445-446Indian, American (After European contact) **I**: 168New Mexico (Exploration and settlement) **N**: 273Texas (Spanish exploration) **T**: 204Zuni Indians **Z**: 613**Ciboney Indians**Cuba (Early years) **Ci**: 1175West Indies (Early days) **W**: 205**Cicada** [insect] **Ci**: 551 with pictureInsect picture on **I**: 281; (Hearing) **I**: 290-291; pictures on **I**: 281, **I**: 292Locust **L**: 418**Ciccione, Madonna Louise Veronica** [American singer] See Madonna in this index**Cicely** [herb] See Sweet cicely in this index**Cicero, Marcus Tullius** [Roman orator] **Ci**: 551 with portraitAugustus **A**: 889Catiline **C**: 304Civil rights (Natural law) **Ci**: 610Classicism (Rome) **Ci**: 653Democles **D**: 23Democracy (Origins of democracy) **D**: 122Forum, Roman **F**: 420Latin literature (The age of Cicero) **L**: 115Oratory (Classical orators) **O**: 819Renaissance (Humanism) **R**: 233-234Rome, Ancient picture on **R**: 444Roscius, Quintus **R**: 477**C.I.D.** See Scotland Yard in this index**Cid, The** [Spanish hero] **Ci**: 552Spain (Reconquest by the Christian kingdoms) **So**: 746Spanish literature (Early medieval literature) **So**: 757-758**Cid, The** [play by Corneille]Corneille, Pierre **Ci**: 1065Drama (Neoclassical playwrights) **D**: 333French literature (Classical drama) **F**: 520**Cider** [drink] **Ci**: 552**Cider House Rules, The** [book by Irving]

Irving, John I: 459

Cider vinegarCider **Ci**: 552**Cid's Youth, The** [play by Castrol]Spanish literature (The 1600's) **So**: 759**Cienfuegos, Nicasio Álvarez de** [Spanish poet]Spanish literature (The 1800's) **So**: 761**Cierva, Juan de la** [Spanish inventor]Autogiro **A**: 943**Ciger** **Ci**: 552Cuba (Manufacturing) **Ci**: 1174 with pictureSmoking **S**: 520Tobacco **T**: 305; (Kinds of tobacco) **T**: 305-306**Ciger** [horse]Horse racing (History) **H**: 366**Ciger-Makers' International Union** [labor union]Gompers, Samuel **G**: 267**Ciger store Indian** [sculpture]Folk art (Sculpture) **F**: 317 with picture**Cigarette** **Ci**: 552Filter **F**: 103

Flax (Growing and processing seed flax)

F: 231Smoking **S**: 520Tobacco **T**: 305**Cigarette** [sculpture by Smith]Sculpture (Varieties of abstraction) **S**: 258 with picture**Cigarette tax**Tobacco **T**: 305**Cigna Corporation** [company]Insurance (table) **I**: 315**Cigrend, Bernard J.** [American educator]Flag Day **F**: 224**Ciguatera** [disease]Barracuda **B**: 118**Cilia** [biology] **Ci**: 553Cell (The cytoplasm) **C**: 329Clam (The body of a clam) **Ci**: 637Disease (Natural barriers) **D**: 231Lung (Other jobs of the lungs) **L**: 524Nose **N**: 548Oyster (Body organs) **O**: 890

188 Ciliary body

Paramecium P: 152 *with picture*
 Protozoan (Ciliates) P: 837 *with picture*
 Reproduction, Human (The human reproductive system) R: 244-245
 Smoking (Why smoking is dangerous) S: 520

Ciliary body [anatomy]
 Eye (The uveal tract) E: 460-461 *with picture*

Ciliate [biology]
 Protozoan (Ciliates) P: 837 *with picture*

Ciliated cell [biology]
 Fallopian tube F: 18

Çiller, Tansu [Turkish political leader]
 Turkey (Political changes) T: 512

Cimabue, Giovanni [Italian painter] Ci: 553 *with picture*
 Giotto (His life) G: 193
 Madonna and Child (Painters of the Madonna) M: 37-38
 Painting (The 1300's) P: 51
 Renaissance *picture on* R: 234

Cimarron [film]
 Motion picture (Best picture: 1930-31) M: 861

Cimbri [ancient people]
 Teutons T: 183
 Germany (Ancient times) G: 162

Cimino, Michael [American director]
 Motion picture (Best achievement in directing: 1978) M: 862

Cimmerians [ancient people] Ci: 553
 Russia (Early days) R: 547
 Ukraine (Early days) U: 12

Cimon [Greek political leader] Ci: 553
 Pericles P: 287; (War with Sparta) P: 287

CIN [disorder] See Cervical intraepithelial neoplasia *in this index*

Cinch ring [riding equipment]
 Saddle *diagrams on* S: 7

Cinchona [tree] Ci: 553
 Plant (Medicines) P: 518
 Quinine Q: 42

Cincinnati [Ohio] Ci: 554 *with picture and map*
 Cincinnati, Society of the Ci: 556
 Ohio (table: Average monthly weather) O: 695

Cincinnati [horse]
 Horse (table: Famous horses in history and legend) H: 361

Cincinnati, Society of the [organization] Ci: 556
 Veterans' organizations (In the United States) V: 344

Cincinnati, University of
 Cincinnati (Education) Ci: 555 *with map*

Cincinnati Art Museum
 Cincinnati (Museums) Ci: 555 *with map*
 Ohio (Museums) O: 685

Cincinnati Bengals
 Cincinnati (Sports) Ci: 556
 Football (National Football League) F: 364

Cincinnati Museum of Natural History
 Cincinnati (Museums) Ci: 555-556

Cincinnati Observatory
 Ohio (Interesting facts) O: 681

Cincinnati Red Stockings [former team]
 Baseball (Professional baseball) B: 133
 Ohio *picture on* O: 701

Cincinnati Reds
 Baseball (table) B: 130
 Cincinnati (Sports) Ci: 556

Cincinnati Southern Railway
 Cincinnati (The 1800's) Ci: 556

Cincinnatus, Lucius Quinctius [Roman patriot] Ci: 557

Cinco da Mayo [holiday] Ci: 557
 Hispanic Americans (Holidays) H: 249 *with picture*
 Texas (Annual events) *picture on* T: 195

Cinder cone
 Moon (Rilles) M: 790
 Volcano (Kinds of volcanoes) V: 440 *with picture*

"Cinderella" [story]
 Grimm's Fairy Tales G: 394

Cinderella Man, The [nickname]
 Braddock, James J. B: 544

Cinema See Motion picture *in this index*

Cinema Novo
 Motion picture (Movies in the 1960's) M: 871

CinemaScope
 Motion picture (Postwar American movies) M: 870

Cinematographe [machine]
 Lumière brothers L: 522

Cinematographer [career]
 Motion picture (Assembling the production team) M: 850 *with picture*

Cineraria [plant] Ci: 557 *with picture*

Cinereous vulture [bird]
 Vulture (Old World vultures) V: 454

Cinna [play by Corneille]
 French literature (Classical drama) F: 520

Cinna, Lucius Cornelius [Roman political leader]
 Caesar, Julius (Early life) C: 12

Cinnabar [mineral] Ci: 557
 Mercury (Sources) M: 414 *with picture*

Cinnamon [spice] Ci: 557 *with picture*

Cinnamon bear
 Bear (American black bears) B: 184

Cinnamon fern [plant]
 Plant *picture on* P: 547

Cinnamon teal [bird]
 Teal T: 71 *with picture*

Cinque, Joseph [African slave]
 African Americans (The growth of slavery) A: 136e
 Amistad Rebellion A: 433

Cinquefoil [plant] Ci: 557
 Flower (Flowers of the Arctic tundra) F: 283 *with picture*

CIO See Congress of Industrial Organizations *in this index*

Cio-cio-san [opera character]
 Opera (*Madama Butterfly*) O: 804 *with picture*

Cion [botany]
 Forestry (Tree improvement) F: 405

Cipher
 Codes and ciphers Ci: 749

Cipher machine
 Codes and ciphers (Cipher machines) Ci: 750

Ciphertext
 Codes and ciphers Ci: 749; (Communications security) Ci: 749

Ciprofloxacin [medication]
 Antibiotic (table) A: 551
 Quinolone Q: 42

Circadian rhythm [biology]
 Biological clock (Daily rhythms) B: 315
 Time (Biological time) T: 292

Circe [Greek mythology] Ci: 557
 Odyssey (Odysseus describes his wanderings) O: 675
 Scylla S: 261

Circle [geometry] Ci: 558 *with diagrams*
 Degree D: 91
 Pi P: 445

Circle [organization]
 Girl Scouts (Brownies) G: 199

Circle dance
 Dance (Ritual ethnic dances) D: 27

Circle Game, The [poems by Atwood]
 Atwood, Margaret A: 880

Circle graph
 Graph (Circle graphs) G: 322 *with picture*

Circle of Death [U.S. history]
 Wyoming (Indian and settler conflicts) W: 534

Circle of position
 Navigation *picture on* N: 72

Circle of the World [book by Snorri Sturluson]
 Snorri Sturluson S: 538

Circle racing
 Motorboat racing (Types of racing) M: 877

Circuit [government]
 United States, Government of the (Lower court system) U: 144

Circuit, Electric See Electric circuit *in this index*

Circuit, Electronic See Electronic circuit *in this index*

Circuit board [electronics]
 Computer (Parts of computers) Ci: 911-912
 Computer chip (External connections) Ci: 924e
 Electronics (Types of electronic circuits) E: 209-210 *with picture*

Circuit breaker [electricity] Ci: 558
 Electric circuit E: 166
 Electricity (Controlling electric current) E: 195
 Fuse F: 589
 House (Electrical wiring) H: 382

Circuit Court of Appeals [law]
 Court (Federal courts) Ci: 1102
 Court of appeals Ci: 1105

Circuit Justice [office]
 Court of appeals Ci: 1105

Circuit rider [U.S. history] Ci: 558
 Asbury, Francis A: 766

Methodists (Early history) M: 434-435
 Pioneer life in America (Religion) P: 484
 Western frontier life in America (Religion) W: 236

Circular accelerator [machine]
 Particle accelerator (How accelerators work) P: 184 *with diagrams*

Circular cylinder [geometry]
 Cylinder Ci: 1204

Circular mound
 Mound builders *picture on* M: 882

Circular orbit
 Space exploration (Kinds of earth orbits) *diagram on* So: 697

Circular saw [tool]
 Lumber *picture on* L: 520
 Saw (Power saws) S: 167 *with picture*
 Woodworking (Cutting) W: 397 *with picture*

Circulation [physiology] See Circulatory system *in this index*

Circulation [publishing]
 Advertising (Magazines) A: 75
 Newspaper (Circulation) N: 385

Circulatory disorder
 See also Cardiovascular disease *in this index*
 Blood (Blood disorders) B: 414
 Blood pressure B: 416
 Blue baby B: 419
 Embolism E: 256
 Stroke S: 929

Circulatory shock [disorder]
 Shock S: 429

Circulatory system Ci: 559 *with diagrams*
 Aorta A: 562
 Artery A: 750
 Blood B: 407
 Butterfly (The internal organs) B: 739 *with diagram*
 Fish (Circulatory system) F: 163
 Harvey, William H: 81
 Heart H: 132; (Discovery of circulation) H: 144
 Human body (The circulatory system) H: 421 *with picture*
 Insect (Circulatory system) I: 288 *with diagram*
 Lung (Gas exchange in the lungs) L: 523-524
 Lymphatic system L: 533 *with diagram*
 Mammal (Internal organ systems) M: 119
 Medicine (The beginnings of modern research) M: 374
 Reproduction, Human (Development of organs and organ systems) R: 248
 Spider (Circulatory system) So: 785 *with diagram*
 Vein V: 295

Circumcision Ci: 561
 Penis P: 241
 Surgery (History) So: 1007

Circumference [geometry]
 Circle (Parts of a circle) Ci: 558 *with diagram*
 Pi P: 445

Circumferential
 Road (Bypasses) R: 358

Circumflex
 Diacritical mark D: 180

Circumstantial evidence [law]
 Evidence (Kinds of evidence) E: 426

Circus Ci: 562 *with pictures*
 Barnum, P. T. B: 115
 Clown Ci: 713
 Lion (Training lions) L: 343
 Picasso, Pablo (The Rose Period) P: 448a
 Ringling brothers R: 343
 Rome, Ancient (Recreation) R: 439
 United States, History of the *picture on* U: 181

Circus City Festival [Indiana]
 Circus (Places to visit and annual events) Ci: 566

Circus Flora [Missouri]
 Circus (The circus today) Ci: 564-565

Circus march
 March M: 193

Circus Maximus [Roman Empire]
 City *picture on* Ci: 580
 Hippodrome H: 240
 Rome, Ancient (Recreation) R: 439

Circus Oz [Australia]
 Circus (The circus today) Ci: 564-565

Circus World Museum [Barabool]
 Circus (Places to visit and annual events) Ci: 566
 Wisconsin (Places to visit) W: 356

- Cirque** [geology]
Alps (How the Alps were formed) A: 384
Glacier (How glaciers shape the land) G: 204-205 *with diagram*
- Cirque du Soleil** [circus]
Circus (The circus today) Ci: 564-565 *with picture*
- Cirque Médrano** [circus]
Picasso, Pablo (The Rose Period) P: 448a
- Cirrrate octopod** [animal]
Deep sea (Invertebrates) D: 82a-82b, *picture on D: 82*
- Cirrhosis** [disorder] Ci: 566
Alcoholism (Effects of alcoholism) A: 337
Hepatitis H: 192
Liver (Diseases of the liver) L: 394-395
- Cirri** [biology]
Barnacle B: 114 *with picture*
Deep sea (Invertebrates) D: 82a-82b
- Cirrocumulus**
Cloud (High clouds) Ci: 709 *with picture*
- Cirrostratus**
Cloud (High clouds) Ci: 709 *with picture*
- Cirrus**
Cloud (Kinds of clouds) Ci: 708-709 *with pictures*
- Cirrus fibratus**
Cloud *picture on Ci: 709*
- Cirrus floccus**
Cloud *picture on Ci: 709*
- C.I.S.** [confederation] *See* Commonwealth of Independent States *in this index*
- Cisalpine Gaul** [former region]
Gaul G: 70 *with map*
- Cisneros, Henry Gabriel** [American political leader] Ci: 567 *with portrait*
Hispanic Americans (Political developments) H: 255-256
- Cistercians** [religious group] Ci: 567
Bernard of Clairvaux, Saint B: 270
Merton, Thomas M: 419
Trappists T: 404
- Cisterna chyli** [anatomy]
Lymphatic system (Absorption of fats) L: 535 *with diagram*
- Cisterium** *See* Cistercians *in this index*
- Citadel** [Egypt]
Cairo (The city) C: 15-16
- Citadel** [fortification] Ci: 567 *with picture*
- Citadel, The** [book by Cronin]
Cronin, A. J. Ci: 1152
- Citadel, The** [historic park]
Nova Scotia (Museums) N: 558
- Citadel, The** [Quebec City]
Quebec [province] (Places to visit) Q: 20
Quebec [city] (The city) Q: 34
- Citadel, The** [school, South Carolina]
South Carolina (Schools) *picture on So: 644*
- Citadel and York Redoubt** [Halifax]
Nova Scotia (Places to visit) N: 560
- Citadel of King Sargon II** [Assyria]
Architecture (Mesopotamian architecture) A: 611 *with picture*
- Citation** [horse]
Arcaro, Eddie A: 593
- Cité Libre** [magazine]
Trudeau, Pierre Elliott (Entry into public life) T: 462
- Cité Souterrain** *See* Underground City *in this index*
- Citeaux, Order of** [religious group] *See* Cistercians *in this index*
- CITES** [international agreement] *See* Convention on International Trade in Endangered Species of Wild Fauna and Flora *in this index*
- Citibank** [New York City] Ci: 567
- Citic Plaza** [Guangzhou, China]
Skyscraper (table) S: 498
- Cities** *See* City *in this index*
- Cities of refuge** [ancient Palestine] Ci: 568
- Cities of the Plain** [book by Proust]
Proust, Marcel P: 838
- Citigroup**
Bank (Diversification and mergers) B: 95
- Citizen**
Greece, Ancient (The people) G: 367
- Citizen Kane** [film]
Motion picture (Movies in the 1930's) M: 868-869 *with picture*
Welles, Orson W: 194
- Citizen King** *See* Louis Philippe *in this index*
- Citizen of the World, The** [essays by Goldsmith]
Goldsmith, Oliver G: 259
- Citizen's arrest**
Arrest A: 743
- Citizens band radio** Ci: 568 *with picture*
Radio (In private communications) R: 85
Walkie-talkie W: 15
- Citizen's Guide to Foreign Policy, A** [book]
Foreign Policy Association F: 387
- Citizenship** Ci: 568 *with pictures*
Constitution of the United States (Amendment 14) Ci: 1013
Dred Scott Decision D: 345
European Union (Internal affairs) E: 418-419
Immigration and Naturalization Service I: 86
Indian, American (In the United States) I: 179
Law (Ancient Roman law) L: 133-134
Naturalization N: 66
Rome, Ancient (The people) R: 437
- Citizenship Act** [1977]
Citizenship (Canadian citizenship) Ci: 571
- Citizenship and immigration, Minister of** [office]
Canada, Government of (The Cabinet) C: 132; *diagram on C: 137*
- Citizenship Day** [custom] Ci: 572
- Citizenship education** *See* Civics *in this index*
- Citlatépetl** [mountain, Mexico] *See* Orizaba, Pico de *in this index*
- Citrangle** [plant] Ci: 572 *with picture*
- Citrate** [chemical]
Citric acid Ci: 573
- Citric acid** [chemical] Ci: 573
- Citrin** [chemical] Ci: 573
- Citrine**
Quartz (Types) Q: 8
- Citron** [fruit] Ci: 573 *with picture*
- Citronella** [oil] Ci: 573
- Citronellal** [chemical]
Citronella Ci: 573
- Citrus** [botany] Ci: 573
Florida (Agriculture) F: 258; (The late 1900's) F: 264-265
Fruit (Subtropical fruits) F: 545
Lake (Climate) L: 33
- City** Ci: 574 *with pictures and maps*
African Americans (The black migration to the North) A: 136k
City government Ci: 594
City planning Ci: 598
Civilization Ci: 635
Climate (Human activity) Ci: 678
Conservation (Urban conservation) Ci: 984
Culture (Invention) Ci: 1189
Curfew Ci: 1194
Environmental pollution (History) E: 338
Europe (City life) E: 388 *with pictures*
Latin America (City life) L: 96 *with pictures*
Metropolitan area M: 442
Middle East (Way of life) M: 530
New York City (Housing) N: 332; (Social problems) N: 332
Police (City police) P: 622
Soleri, Paolo So: 583 *with picture*
Suburb So: 949
Transit T: 374
United States, History of the (Industrialization and reform) U: 176; (Life during the industrial era) U: 179; (Change and problems) U: 185; (Urban unrest) U: 192
Urban renewal U: 220
Water (City water systems) W: 124 *with pictures*
Weather (How people affect the weather) W: 170
World, History of the (The Industrial Revolution) W: 444
- City, The** [district]
London L: 428; (Greater London) L: 428-429; (Residential areas and housing) L: 432; *picture on L: 438*; (Expansion beyond the walls) L: 440-441
- City bank**
Bank (Asia and the Middle East) B: 91
- City Beautiful movement**
City planning (The Industrial Revolution) Ci: 603
- City commission** [political science] *See* City council *in this index*
- City council** [political science]
City government Ci: 595; (Forms of city government) Ci: 595
Mayor M: 329
- City Dionysia** [ancient Greece]
Drama (Greek drama) D: 326
- City Duma** [legislature]
Moscow (Government) M: 826; (Early 1900's) M: 827
- City government** Ci: 594 *with diagrams*
City (Governmental problems) Ci: 592; *picture on Ci: 575*
Local government (Units of local government) L: 407
Mayor M: 329
- City Hall** [Philadelphia]
Philadelphia (Downtown Philadelphia) P: 359 *with picture*
- City Hall** [Stockholm]
Sweden (Fine arts) So: 1027
- City Hall** [Toronto]
Toronto (Landmarks) T: 336; *picture on T: 340*
- City Hotel** [New York City]
Hotel (History) H: 377
- City in History, The** [book by Mumford]
Mumford, Lewis M: 925
- City Island**
New York City (The Bronx) N: 328-329
- City jail**
Prison (Types of correctional institutions) P: 805
- City Lights** [film]
Chaplin, Charlie C: 376
- City manager** [government]
City government (The council-manager form) Ci: 596 *with diagram*
- City of Brotherly Love**
Philadelphia P: 358
- City of Fountains** [nickname]
Kansas City [Missouri] (Cultural life) K: 242-243
- City of Glasgow** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- City of God, The** [book by Augustine]
Augustine, Saint (His beliefs) A: 888
Millennium M: 553
Philosophy (Medieval philosophy) P: 387
- City of Light** [nickname]
Paris P: 160
- City of Oranges** [nickname]
Salto S: 76a
- City of Rocks National Reserve** [Idaho]
National Park System (table: National parkways and other national parklands) N: 55
- City of Roses** [nickname]
Portland [Oregon] P: 683
- City of Sails** [nickname]
Auckland A: 880
- City of Salina** [train]
Railroad (The 1920's and the Great Depression) R: 118
- City of the Sun, The** [book by Campanella]
Italian literature (The baroque period and the Age of Reason) I: 494
- City of Washington, The** [U.S. history]
United States capitals U: 199
- City Park** [New Orleans]
New Orleans (Residential districts) N: 279; (Recreation) N: 282
- City planning** Ci: 598 *with pictures*
City (Future cities) Ci: 593; *pictures on Ci: 579, Ci: 580*
Conservation (Careers in conservation) Ci: 990
Housing (New towns) H: 390
Landscape architecture L: 58
Sociology (Careers) So: 567
Soleri, Paolo So: 583 *with picture*
Urban renewal U: 220
Zoning Z: 602
- City-state** [political unit] Ci: 603
Athens (Earliest times) A: 857
Europe (Ancient Greece) E: 408
Free city F: 498
Greece, Ancient G: 366; (Government) G: 372; (The development of the Greek city-state) G: 372
Hittites (History) H: 269
Italy (Rise of the city-states) I: 513-514 *with map*
Phoenicia (Government) P: 394
Renaissance *map on R: 233*

War (Ancient times) W: 26
 World, History of the (The Tigris-Euphrates Valley) W: 422-424, (The Greeks) W: 428
City University of New York See New York, City University of *in this index*
Ciudad Bolívar [Venezuela] Ci: 604
 Bolívar, Simón (Fight for freedom) B: 441
 Orinoco River O: 856
Ciudad Juárez [Mexico]
 Juárez J: 178
Ciudad Trujillo [former name]
 Santo Domingo S: 117
Civet [animal] Ci: 604 *with picture*
Civic Arena
 Pittsburgh (The city) P: 500a-500b
Civic Arts Center-Planetarium [Mississippi]
 Jackson (Government and history) J: 5
Civic center [public buildings]
 San Francisco (Downtown San Francisco) S: 92-93
 Wright, Frank Lloyd *picture on* W: 507
Civic Democratic Party [political party]
 Czech Republic (Politics) Ci: 1210
Civic Forum [political party]
 Czechoslovakia (The Velvet Revolution) Ci: 1216
 Havel, Václav H: 87
Civic humanism
 Humanism (Work of the humanists) H: 431
Civics Ci: 604
Civil Aeronautics Administration
 Carter, Jimmy (table) C: 252
 Federal Aviation Administration F: 62
Civil Aeronautics Board [U.S.]
 Aviation (Deregulation of the U.S. airlines) A: 991
 Federal Aviation Administration F: 62
Civil Air Patrol [U.S.] Ci: 604 *with picture*
 Air Force, United States (Civil Air Patrol [CAP]) A: 194
Civil Aviation Authority
 Aviation (Aviation agencies) A: 985-986
Civil Aviation Organization, International See International Civil Aviation Organization *in this index*
Civil ceremony
 Marriage (Wedding ceremonies and customs) M: 221
Civil code See Code Napoléon *in this index*
Civil court [law]
 Court (Types of courts) Ci: 1101, (How civil courts work) Ci: 1102
Civil defense Ci: 605 *with pictures*
"Civil Disobedience" [essay by Thoreau]
 Civil disobedience (History of civil disobedience) Ci: 607
 Thoreau, Henry David (His beliefs and works) T: 266
Civil disobedience [law] Ci: 607
 India (Rise of Indian nationalism) I: 131
 South Africa (The Union of South Africa) So: 618-619
Civil Disorders, National Advisory Commission on See Kerner Commission Report *in this index*
Civil engineering [career]
 Engineering (Civil engineering) E: 285 *with picture*; (History) E: 288
Civil flag
 Flag (Civil and state flags) F: 195
Civil forfeiture [law]
 Forfeiture F: 408
Civil heraldry
 Heraldry (Heraldry today) H: 194
Civil justice treaty
 Treaty (Kinds of treaties) T: 408-409
Civil law Ci: 607
 Court (Courts in other countries) Ci: 1102
 Crime Ci: 1135
 Law (Private law) L: 130, (Civil law systems) L: 132
 Law enforcement L: 141
 Legal aid L: 182
 Tort T: 342
Civil liberties
 See also Civil rights *in this index*
 Human rights (Types of human rights) H: 428
Civil Liberties Act [1988]
 Asian Americans (Japanese internment) A: 812e-812f
 Mineta, Norman Yoshio M: 572

Civil Liberties Union, American [organization]
 See American Civil Liberties Union *in this index*
Civil rights Ci: 608
 Alabama (Interesting facts) A: 257
 Citizenship (The rights of citizens) Ci: 569
 Class action Ci: 642
 Democracy (Majority rule and minority rights) D: 121
 Freedom F: 501
 Freedom of religion F: 505
 Freedom of speech F: 506
 Freedom of the press F: 507
 Gay rights movement G: 73
 Great Society (Legislation) G: 349
 Mississippi (The mid-1900's) M: 644
 Northern Ireland (The civil rights movement) N: 525
 Racial profiling R: 61
 Segregation S: 285
Documents and laws
 Attainder A: 878
 Bill of rights B: 301
 Constitution of the United States (The Bill of Rights) Ci: 1001; (Amendment 14) Ci: 1013; (Amendment 15) Ci: 1014
Ex parte Milligan E: 435
 Grandfather clause G: 310
 Habeas corpus H: 2
 Law L: 130
 Supreme Court of the United States (Civil rights) So: 1001, (table) So: 1002
 Toleration Act T: 321
 Wiretapping W: 345
History
 African Americans (The civil rights movement) A: 136m *with pictures*
 Alabama (The mid-1900's) A: 278
 American literature (Works by minority writers) A: 425
 Housing (Housing since 1900) H: 391-392
 Indian, American (Indians in the early and mid-1900's) I: 178b
 Jim Crow J: 126
 Reconstruction (The Civil Rights Act) R: 178
 Scottsboro Case S: 223
 Slavery (Effects of slavery) S: 503-504
 United States, History of the (Poverty and discrimination) U: 191; (The civil rights movement) U: 192 *with picture*
 Women's movements (In Western societies) W: 386
Leaders
 Du Bois, W. E. B. D: 372
 Evers, Medgar E: 425
 Jackson, Jesse Louis J: 15
 Johnson, Lyndon Baines (Majority leader) J: 147-148
 Kennedy, John Fitzgerald (Civil rights) K: 264
 King, Martin Luther, Jr. K: 320
 Meredith, James Howard M: 417
 Randolph, A. Philip R: 136
 Washington, Booker T. (Racial leader) W: 89
Organizations
 American Civil Liberties Union A: 408
 American GI Forum of the United States A: 411
 American Indian Movement A: 411
 Congress of Racial Equality Ci: 941
 See also the list of Related Articles in the Civil rights article
Civil Rights, Commission on [U.S.] Ci: 611
Civil Rights Act of 1866 [U.S. history]
 Black codes B: 386
 Reconstruction (The Civil Rights Act) R: 178
Civil Rights Act of 1957 [U.S. history]
 Civil rights (The struggle for the rights of blacks) Ci: 609
 National Association for the Advancement of Colored People N: 29
Civil Rights Act of 1960 [U.S. history]
 Civil rights (The struggle for the rights of blacks) Ci: 609
Civil Rights Act of 1964 [U.S. history] Ci: 611
 Bakke case B: 33
 Civil rights (The struggle for the rights of blacks) Ci: 609, (The struggle for women's rights) Ci: 609-610
 Equal Employment Opportunity Commission E: 345
 Filibustering F: 99

Government (Commerce) G: 287-288
 Great Society (Legislation) G: 349
 Johnson, Lyndon Baines (The national scene) J: 148; *picture on* J: 150
 King, Martin Luther, Jr. (The growing movement) K: 321
 National Association for the Advancement of Colored People N: 29
 Sex discrimination (Changes in laws) S: 335
 Sexual harassment S: 337
 United States, History of the (The civil rights movement) U: 192
 Women's movements (Legal gains) W: 386
Civil Rights Act of 1968 [U.S. history]
 African Americans (Unrest in the cities) A: 136o
 Civil rights (The struggle for the rights of blacks) Ci: 609
 Johnson, Lyndon Baines (The Great Society) J: 150
 Open housing O: 789
 Segregation (De facto segregation) S: 286
 United States, History of the (The civil rights movement) U: 192
Civil Rights Division [Department of Justice]
 Civil rights (The struggle for the rights of blacks) Ci: 609
Civil rights movement [U.S. history] See Civil rights *in this index*
Civil service [government] Ci: 612
 Astronaut A: 828
 Arthur, Chester Alan (Civil service reform) A: 756
 City government (Civil service) Ci: 597
 Government (Obtaining a government job) G: 291
 Grant, Ulysses S. (Political corruption) G: 315
 Han dynasty H: 38
 Hayes, Rutherford Birchard (Civil service reform) H: 121
 Pension (Federal civilian pensions) P: 273
 Republican Party (Political inactivity) R: 255
 United Kingdom (Gladstone and Disraeli) U: 69
Civil Service Act [1883]
 Arthur, Chester Alan (Civil service reform) A: 756
 Civil service (History) Ci: 613
 United States, History of the (Early reform efforts) U: 181
Civil Service Act [Canada, 1908]
 Civil service (Civil service in other lands) Ci: 613
Civil Service Commission, United States
 Civil service (History) Ci: 613
Civil Service Employees Association
 Labor movement (table) L: 8
Civil Service Reform Act [1978]
 Civil service (History) Ci: 613
Civil Service Retirement System
 Pension (Federal civilian pensions) P: 273
Civil suit [law]
 Debt D: 65
 Jury (Petit juries) J: 202
 Law (Private law) L: 130
 Trial T: 437
Civil war
 War W: 23
Civil War [United States] Ci: 614 *with pictures and maps*
 Air force (History) A: 184-185
 American literature (The Age of Realism [1871-1913]) A: 419
 Army, United States *picture on* A: 730
 Bahamas (History) B: 29
 Balloon (Balloons in war) B: 61
 Brady, Mathew B. B: 547
 Cavalry C: 318
 Democratic Party (The slavery issue) D: 125
 Douglass, Frederick D: 314
 Draft, Military (Military drafts throughout history) D: 318
 Flag *picture on* F: 209
 Gettysburg, Battle of G: 176
 Gettysburg Address G: 176
 Lincoln, Abraham (Lincoln's Administration 1861-1865) L: 320 *with pictures*
 Mine warfare (History) M: 565
 Minnesota (Statehood) M: 604
 Money (The rebirth of paper money) M: 709
 Navy, United States (The Civil War [1861-1865]) N: 88

New York (Growing prosperity) N: 316-318
 Popular music (The Civil War [1861-1865])
 P: 669
 Railroad (Expansion in the United States)
 R: 115-116
 Telegraph (Uses for the telegraph) T: 91
 Texas *picture on* T: 205
 United States, History of the (The Civil War)
 U: 174
 Virginia (The Civil War and Reconstruction)
 V: 421
 Warship *pictures on* W: 42
 Washington, D.C. (The Civil War) W: 86
Background and causes
 Abolition movement (In the United States)
 A: 12-13
 African Americans (The Civil War) A: 136g
with picture
 Brown, John B: 643
 Buchanan, James (Election of 1856) B: 660,
 (Prelude to war) 8: 661
 Compromise of 1850 Ci: 906
 Cotton (American colonists) Ci: 1093
 Douglas, Stephen Arnold D: 312
 Dred Scott Decision D: 345
 Kansas-Nebraska Act K: 244
 Popular sovereignty P: 672
 Proslavery movement P: 828
 Slavery (Effects of slavery) S: 503-504
 Slidell, James S: 508
Uncle Tom's Cabin U: 20
 United States, History of the (The irrepress-
 ible conflict) U: 172 *with pictures and*
map
Diplomacy
 Crittenden Compromise Ci: 1147
 Hampton Roads Conference H: 37
 Seward, William Henry S: 331
Trent Affair T: 435
Military leaders
 Grant, Ulysses S. (Return to the Army)
 G: 314
 Lee, Robert Edward (The Civil War) L: 177
 McClellan, George Brinton M: 332
 Meade, George Gordon M: 344
Aftermath
 Democratic Party (After the Civil War)
 D: 125
 Homelessness (History) H: 302
 Income tax (History of U.S. income taxes)
 I: 105
 Radicalism (In the United States) R: 82
 Reconstruction R: 176
 States' rights (Early history) So: 866
 United States, Government of the (The rise
 of big government) U: 146
 United States, History of the
 (Reconstruction) U: 175 *with picture*
 War (table) W: 25
 Whale (American whaling) W: 262-263
Civil War, Bosnian
 Bosnia-Herzegovina (History) B: 492-493
Civil War, English
 Charles I [of England] C: 380
 Cromwell, Oliver (Rise to power) Ci: 1151
 England (The Civil War) E: 308
 Hobbes, Thomas H: 272
 James I J: 25
 Laud, William L: 121
 Long Parliament L: 448
Civil War, Georgian
 Georgia [country] (History) G: 111
 Shevardnadze, Eduard Amvrosiyevich S: 399
Civil War, Irish [1922-1923]
 Ireland (The Irish Free State) I: 427
Civil War, Lebanese
 Beirut B: 224
 Lebanon (Economy) L: 172; (War and terror-
 ism) L: 173 *with picture*
Civil War, Russian
 Communism (Under Lenin) Ci: 892
 Lenin, V. I. (Civil war) L: 194
 Russia (Civil war and the formation of the
 U.S.S.R.) R: 553
 Stalin, Joseph (The Bolshevik revolution)
 So: 826
 Trotsky, Leon T: 452
Civil War, Spanish See Spanish Civil War *in this*
index
Civil Wars: A Tree is Best Measured When It's
Down, The [opera]

Glass, Philip G: 224
Civil Works Administration [U.S. history]
 Roosevelt, Franklin Delano (The New Deal)
 R: 457
Civiletti, Benjamin R. [American government
 official]
 Carter, Jimmy (table) C: 257
 Justice, Department of (table) J: 203
Civilian award
 Medals, decorations, and orders (Civilian
 awards) M: 355
Civilian Conservation Corps [U.S. history]
 Ci: 635
 Conservation (The rise of the conservation
 movement) Ci: 985-986 *with picture*
 Great Depression (The New Deal) G: 341 *with*
picture
 Michigan (Depression and recovery) M: 509
with picture
 New Deal (Helping the needy) N: 201
 Roosevelt, Franklin Delano (The New Deal)
 R: 457
 South Dakota (Boom-and-bust economy)
 So: 684
Civilian Defense Mobilization, Office of [U.S.]
 Civil defense (The fallout shelter program)
 Ci: 606
Civilian Vocational Rehabilitation Act [1920]
 Vocational rehabilitation V: 436
Civilization Ci: 635
See also Culture; World, History of the *in this*
index
 Ancient civilization A: 450
 Conservation (The rise of civilization) Ci: 984
 Culture Ci: 1186
 Technology (Agriculture and civilization) T: 74
 World, History of the W: 420
Civilization and Barbarism [book by Sarmiento]
 Argentina (The arts) A: 651
 Latin-American literature (Romanticism) L: 112
Civitan International [organization] Ci: 636
Cixous, Hélène [French author]
 French literature (Recent French literature)
 F: 523
Cl [symbol]
 Chlorine (Chemical properties) C: 517
CLA [organization] See Canadian Library
 Association; Catholic Library Association *in*
this index
Cladding [physics]
 Cable (Fiber-optic cables) C: 5; *diagram on* C: 6
 Fiber optics F: 88 *with diagram*
 Nuclear energy (Fuel preparation) N: 586
Cladogenesis [biology]
 Evolution (Main ideas of evolutionary theory)
 E: 426
Claffin, Tennessee [American businesswoman]
 Woodhull, Victoria Claffin W: 393
Claffin, William [American political leader]
 Massachusetts (table) M: 288
Claiborne, Harry E. [American jurist]
 Impeachment (History) I: 91-92
Claiborne, William [American colonial leader]
 Claiborne's Rebellion Ci: 636
 Maryland (Exploration and settlement) M: 256;
 (Colonial days) M: 256
Claiborne, William Charles Cole [American
 political leader]
 Laffite, Jean L: 28
 Louisiana (table) L: 496; (Territorial days)
 L: 498
Claiborne's Rebellion [U.S. history] Ci: 636
Claim [insurance]
 Insurance I: 309
Claim association
 Squatter's rights So: 814
Claim-jumper [U.S. history]
 Pre-emption P: 734a
 Western frontier life in America (Crime)
 W: 238
Claiming race
 Horse racing (Claiming races) H: 365
Claims, Court of [law]
 Court of claims Ci: 1105
Claims adjuster
 Insurance (Careers in the industry) I: 315
Claims Court, United States
 Court of claims Ci: 1105
Claire, René [French director] Ci: 637
"Clair de Lune" [music by Debussy]
 Debussy, Claude D: 66

Clairvoyance Ci: 637
 Extrasensory perception (What parapsycholo-
 gists study) E: 458
 Fortunetelling F: 419
 Joan of Arc, Saint (Joan's mission) J: 128
 Mind reading M: 563
Clallum Women Weaving a Blanket [painting
 by Kane]
 Indian, American *picture on* I: 162
Clam [animal] Ci: 637 *with pictures*
 Biology *picture on* B: 316
 Cockle Ci: 744
 Deep sea (Invertebrates) D: 82a-82b; *picture*
on D: 82
 Geoduck G: 91 *with picture*
 Mollusk (Bivalves) M: 695
 Shell S: 384 *with picture*
Claman, Henry N. [American biochemist]
 Immune system (Further breakthroughs)
 I: 88d
Clamp
 Tool (Woodworking tools) T: 330
 Woodworking (Gluing) W: 398 *with pictures*
Clamshell orchid
 Flower (Flowers of the tropics and subtropics)
 F: 292 *with picture*
Clamworm
 Worm *picture on* W: 501
Clan Ci: 638
 Africa (Marriage and the family) A: 113-114
 Arabs (Family life) A: 586
 Family (Non-Western families) F: 24
 Indian, American (Family groups) I: 136c
 Kyrgyzstan (People) K: 398-399
 Scotland S: 211
 Tartan T: 47
 World, History of the (The rise of Japanese
 civilization) W: 435-436 *with picture*
Clandestine Marriage, The [play by Garrick and
 Colman]
 Garrick, David G: 45
Clanton, Ike [American frontiersman]
 Earp, Wyatt E: 15
Clapboard [construction]
 Pioneer life in America (A pioneer settlement)
 P: 479-480 *with picture*
 Shelter (In early America) S: 394
Clapper [device]
 Carillon C: 238 *with picture*
Clapperton, Hugh [Scottish explorer]
 Exploration map on E: 449
Clapskate
 Ice skating (Speed skating) I: 13
Clapstick
 Motion picture (Shooting the movie) M: 853-
 854 *with picture*
Clapton, Eric [British musician]
 Rock music (Expanding styles and sounds)
 R: 378-379
Clara Barton National Historic Site [Maryland]
 National Park System (table: National historic
 sites) N: 52
Clare, Saint [Italian religious leader]
 Franciscans F: 482
Clarel [poem by Melville]
 Melville, Herman (His later life) M: 391
Clarence, Duke of [literary figure]
 Shakespeare, William (*Richard III*) S: 356
Clarendon, Earl of [English political leader]
 Ci: 638
Claret-cup cactus
 Flower *picture on* F: 290
Clari [opera by Bishop]
 Payne, John Howard P: 204
Claridge Foundation
 Foundations (table) F: 430
Clarification [industrial process]
 Cheese (Processing the milk) C: 393
 Wine (Clarifying and aging the wine) W: 338
Clarifier [machine]
 Milk (At a processing plant) M: 547-548
Clarín [Spanish author]
 Spanish literature (The 1800's) So: 761-762
Clarinet [musical instrument] Ci: 638 *with pic-*
tures
 Jazz (The reeds) J: 69 *with picture*
 Music (Wind instruments) M: 949 *with picture*
Clarissa [book by Richardson]
 Richardson, Samuel R: 330
Clark, Abraham [American patriot] Ci: 638
Clark, Alonzo M. [American political leader]

Wyoming (table) W: 532
Clark, Ann Nolan [American author]
 Newbery Medal (table) N: 359
 Regina Medal (table: 1963) R: 206
Clark, Barney B. [American patient]
 Artificial heart A: 760
 Heart (The first heart transplants and artificial hearts) H: 145
Clark, Barzilla W. [American political leader]
 Idaho (table) I: 42
Clark, Carol Higgins [American author]
 Clark, Mary Higgins Ci: 642
Clark, Champ [American political leader]
 Wilson, Woodrow (Presidential candidate) W: 322
Clark, Charles [American political leader]
 Mississippi (table) M: 640
Clark, Charles Joseph [Canadian political leader] *See* Clark, Joe *in this index*
Clark, Chase A. [American political leader]
 Idaho (table) I: 42
Clark, Francis E. [American religious leader]
 Christian Endeavor International C: 523
Clark, George Rogers [American military leader]
 Ci: 639
 Clark, William Ci: 642
 Illinois (Early national period) I: 72
 Indiana (Exploration and settlement) I: 215
 Kentucky (Exploration and early settlement) K: 291
 Northwest Territory (Early history) N: 534
 Revolutionary War in America (Fighting in the West) R: 283
 Virginia (Independence and statehood) V: 420
 Westward movement in America (The Revolutionary War) W: 246
Clark, Glen [Canadian political leader]
 British Columbia (table) B: 627
Clark, Helen Elizabeth [New Zealand political leader] Ci: 639
Clark, Henry T. [American political leader]
 North Carolina (table) N: 490
Clark, James [American political leader]
 Kentucky (table) K: 290
Clark, Jim [British race driver]
 Automobile racing (table: Grand Prix world champions) A: 980; (table: Indianapolis 500 winners) A: 980
Clark, Joe [American political leader]
 African Americans (During the late 1800's) A: 136i-136j
Clark, Joe [Canadian political leader] Ci: 639 *with pictures*
 Canada, History of (Economic developments) C: 153
 Mulroney, Brian (Election as party leader) M: 917
Clark, John [American political leader]
 Delaware (table) D: 109
Clark, John [American political leader]
 Georgia (table) G: 130
Clark, Kenneth Bancroft [American psychologist] Ci: 641
Clark, M. Lewis [American businessman]
 Kentucky Derby K: 297
 Louisville (History) L: 506
Clark, Mark Wayne [American general] Ci: 642
 Korean War (The truce talks) K: 382-383
 World War II (The invasion of Italy) W: 482
Clark, Mary Higgins [American author] Ci: 642
Clark, Myron Holley [American political leader]
 New York (table) N: 313
Clark, Ramsey [American lawyer] Ci: 638
Clark, Tom Campbell [American jurist] Ci: 638
 Truman, Harry S. (table) T: 469
Clark, William [American explorer] Ci: 642
 Clark, George Rogers Ci: 639
 Exploration (Crossing North America) E: 447 *with map*
 Lewis, Meriwether L: 221
 Lewis and Clark expedition L: 221 *with portrait*
 Rocky Mountains (History) R: 396
 South Dakota (Exploration and fur trade) So: 681
 Westward movement in America (Exploration) W: 248
Clark, William A. [American businessman]
 Montana (Statehood) M: 760
Clark, William P. [American government official]
 Interior, Department of the (table) I: 325
Clark Air Base [Philippines]

Philippines (Independence) P: 380;
 (Recovering democracy) P: 381
Clark Art Institute [Williamstown]
 Massachusetts (Museums) M: 275
Clark County [Nevada]
 Las Vegas L: 87
Clarke, Arthur C. [British-born author] Ci: 642
 Communications satellite (History) Ci: 888b
Clarke, Austin [Irish poet]
 Irish literature (Fiction and poetry) I: 432-433
Clarke, Fred [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Clarke, George J. [Canadian political leader]
 New Brunswick (table) N: 196
Clarke, George W. [American political leader]
 Iowa (table) I: 391
Clarke, Henry J. H. [Canadian political leader]
 Manitoba (table) M: 159
Clarke, James Paul [American political leader]
 Arkansas (table) A: 712
Clarke, John [American colonial leader]
 Rhode Island (Settlement) R: 312
Clarke, John H. [American jurist]
 Supreme Court of the United States (table) So: 1000
Clarke, Marcus [Australian author]
 Australia (Literature) A: 906
Clarke-McNary Act [1924]
 Forestry (Laws that protect U.S. forest resources) F: 408
Clark's nutcracker [bird]
 Nutcracker N: 622 *with picture*
Clarkson, Adrienne [Canadian political leader]
 Ci: 642
Clarkson, John [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Clash [musical group]
 Rock music (Disco and punk) R: 380
Clasper [zoology]
 Fish (Reproductive system) F: 163
 Shark (The body of a shark) S: 374
Class [biology]
 Animal (The scientific classification of animals) A: 472-473
 Classification, Scientific (Groups in classification) Ci: 654-655
Class [law]
 Class action Ci: 642
Class [religion]
 Methodists (Early history) M: 434-435
Class [sociology] *See* Social class *in this index*
Class I railroad
 Railroad (Railroad systems) R: 112-113
Class action [law] Ci: 642
 Consumerism (The right to safety) Ci: 1018
 Smoking (Smoking regulations) S: 521
Class representative [law]
 Class action Ci: 642
Class struggle [political science]
 Communism (The ideas of Marx) Ci: 890
 Economic determinism E: 57
 Marx, Karl (*Das Kapital*) M: 237
 Revolution of 1848 R: 269
Classic
 Literature (Judging literature) L: 352
Classic car [automobile]
 Automobile (Changes at the top) A: 966-968 *with pictures*
Classic Car Club of America
 Automobile picture on A: 967
Classic format
 Photography (Film) P: 417
Classic modern style
 Furniture (Recent developments) F: 584
Classic of the Way and the Virtue, The [religious book]
 Chinese literature (Beginnings) C: 511
 Taoism (Taoism as a philosophy) T: 36
Classical architecture
 Architecture (Classical Greek architecture) A: 615
Classical Chinese [language]
 Chinese language (Development) C: 511
Classical conditioning [psychology]
 Learning (Classical conditioning) L: 163
Classical economics
 Economics (The classical economists) E: 65
 Laissez faire L: 31
 Marshall, Alfred M: 228
 Ricardo, David R: 321
 Smith, Adam S: 515

Classical education
 Education (The Renaissance) E: 100
Classical hemophilia [disease]
 Hemophilia (Major types of hemophilia) H: 183
Classical mechanics [physics]
 Quantum mechanics Q: 6
Classical music Ci: 643 *with pictures*
See also Music *in this index*
 Ballet (Music) B: 50
 India (Music and dance) I: 120
 Music (Western music) M: 955
 Popular music P: 669
See also the list of Related Articles in the
 Classical Music article
Classical ode [poetry]
 Poetry (Lyric poetry) P: 591
Classical opera
 Opera (Classical opera) O: 798
Classical physics
 Subatomic particle (Early theories) So: 937
Classical prophet [religion]
 Prophet P: 827
Classical symphony
 Orchestra (History) O: 822
 Symphony So: 1067
Classical tutu [costume]
 Ballet (Sets and costumes) B: 49-50
Classicism [philosophy] Ci: 653 *with picture*
 Classical music (The Classical period) Ci: 647
 French literature (The classical age) F: 520
 Painting (Classicism) P: 61 *with picture*
 Realism R: 171
 Russian literature (The classical movement) R: 559
Classification, Scientific Ci: 653 *with pictures*
 Animal (The scientific classification of animals) A: 472; (A classification of the animal kingdom) A: 506
 Biology (The origins of scientific classification) B: 318
 Bird (A classification of birds) B: 371
 Botany (What botanists study) B: 508
 Fish (A classification of fish) F: 172 *with pictures*
 Flower (The classifying of flowers) F: 299
 Linnaeus, Carolus L: 337
 Plant (Kinds of plants) P: 519; (Classification of plants) P: 546
Classification Act [1923]
 Civil service (History) Ci: 613
Classification yard [railroad]
 Railroad (Freight operations) R: 109 *with pictures*
Classified ad
 Advertising (Newspapers) A: 74
 Newspaper (Preparing advertisements) N: 383
Classified School Employees, American Association of
 Labor movement (table) L: 8
Classing
 Cotton (Classing) Ci: 1091
Classing Office, United States
 Cotton (Classing) Ci: 1091
Classis [religion]
 Reformed Church in America R: 199
Classless society [sociology]
 Marx, Karl (*Das Kapital*) M: 237
 Union of Soviet Socialist Republics (Privileged classes) U: 32
Clastic sediment [geology]
 Rock (Clastic sediments) R: 372
Clathrate hydrate
 Ice (Ice "cages") I: 5
Claude [French artist] Ci: 656
 Classicism picture on Ci: 653
 Painting (Composition) P: 35; (Classicism) P: 61
Claude, Albert [American physiologist]
 Nobel Prizes (Physiology or medicine: 1974) N: 445
Claude, Georges [French engineer]
 Liquid air (Making liquid air) L: 347
Claude process
 Liquid air (Making liquid air) L: 347 *with diagram*
Claudel, Paul [French author] Ci: 656
 French literature (The four masters) F: 522
 Milhaud, Darius M: 543
Claudius [literary figure]
 Shakespeare, William (*Hamlet*) S: 361

Claudius [Roman emperor] Ci: 656
 Agrippina the Younger A: 162
 England (The Roman conquest) E: 303
 Nero N: 130
Claudius II [Roman emperor]
 Gallienus G: 15
 Rome, Ancient (table) R: 447
Claudius Ptolemaeus See Ptolemy *in this index*
Claus, C.F. [English chemist]
 Sulfur (How sulfur is obtained) So: 967
Claus conversion
 Sulfur (How sulfur is obtained) So: 967
Clause [grammar] Ci: 657
 Sentence (Sentence classifications) S: 303
Clausewitz, Karl von [Prussian author] Ci: 657
Clausius, Rudolf Julius Emmanuel [German physicist] Ci: 657
Clauson, Clinton [American political leader]
 Maine (table) M: 87
Claustrophobia [psychology]
 Mental illness (Anxiety disorders) M: 405-406
 Phobia P: 392
Clavichord [musical instrument] Ci: 657
 Piano (History) P: 447
Clavicle [anatomy]
 Collarbone Ci: 773
 Shoulder S: 439 *with picture*
Claw [device]
 Motion picture (The camera) M: 857 *with diagram*
Claw [zoology]
 Animal pictures on A: 494
 Bear (The body of a bear) B: 183
 Bird (Legs and feet) B: 364
 Cat (Body size and structure) C: 286 *with picture*
 Lobster (Body) L: 405 *with pictures*
Claw hammer
 Hammer H: 34 *with picture*
Clawed jird [animal]
 Gerbil G: 136
Clawless otter
 Otter (Body) O: 876
Clay [earth] Ci: 657 *with picture*
 Ceramics (Properties of ceramics) C: 359
 Gravel G: 330
 Grinding and polishing (Grinding wheels) G: 395
 Kaolin K: 244
 Loam L: 404
 Pottery P: 715
 Rhône River R: 319
 Rock (Metamorphic rock) R: 372-373
 Soil (Minerals) So: 573
Clay, Cassius Marcellus [American boxer] See Ali, Muhammad *in this index*
Clay, Cassius Marcellus [American social reformer] Ci: 658
Clay, Clement Comer [American political leader]
 Alabama (table) A: 274
Clay, Henry [American statesman] Ci: 658 *with picture*
 Adams, John Quincy (table) A: 43
 Duel D: 378
 Jackson, Andrew (Election of 1824) J: 9-10
 Missouri Compromise M: 674
 Monroe, James ("The American System") M: 736
 Polk, James Knox (Election of 1844) P: 642
 Randolph, John R: 137
 Speaker (In the United States) So: 768
 Tariff (United States tariffs) T: 44
 Tyler, John (Opposition to the Whigs) T: 534;
 (The Whigs disown Tyler) T: 534
 United States, History of the (The War of 1812) U: 164; (Nationalism and the economy) U: 165; (Congressional views) U: 172 *with picture*
 Whig Party (The first program) W: 280
Clay, Lucius Dubignon [American military leader] Ci: 659
Clay, Mount
 New Hampshire (Mountains) N: 220
Clay animation
 Animation (Clay animation) A: 514
Clay disk [target]
 Trapshooting T: 404
Clay tablet
 Book (Early books) B: 465
 Library (Ancient libraries of clay) L: 257 *with picture*
 Mythology (Greek mythology) M: 978
Claymore [weapon]
 Sword So: 1061 *with picture*
Clayton, Adam [Irish musician]
 U2 U: 2

Clayton, John [English clergyman]
 Gas [fuel] (First uses of manufactured gas) G: 58
Clayton, John Middleton [American political leader] Ci: 659
 Clayton-Bulwer Treaty Ci: 659
Clayton, Joshua [American political leader]
 Delaware (table) D: 109
Clayton, Powell [American political leader]
 Arkansas (table) A: 712
Clayton Antitrust Act [1914]
 Antitrust laws A: 560
 Consumerism (The right to choose) Ci: 1019
 Gompers, Samuel G: 267
 Monopoly and competition (History) M: 732
 United States, History of the (The Progressive Era) U: 181-183
 Wilson, Woodrow (Legislative program) W: 322-323
Clayton-Bulwer Treaty [1850] Ci: 659
 Buchanan, James (Minister to Great Britain) B: 660
 Clayton, John Middleton Ci: 659
 Panama Canal (Early efforts) P: 125
 Taylor, Zachary (The Nicaragua Canal) T: 60
CLC [labor union]
 Labor movement (In Canada) L: 14
Clea [book by Durrell]
 Durrell, Lawrence D: 389
Clean Air Act [Britain, 1956]
 London (Dealing with problems) L: 442
Clean Air Act [Britain, 1968]
 London (Dealing with problems) L: 442
Clean Air Act [U.S., 1963]
 Automobile (The growth of government regulation) A: 971
 Gasoline engine (Air pollution controls) G: 66
Clean Air Act [U.S., 1970]
 Automobile (The growth of government regulation) A: 971
 Environmental pollution (Government action) E: 335-336
 Gasoline (History) G: 62
Clean Air Act Amendments [U.S., 1990]
 Acid rain A: 27
 Air pollution (Control of air pollution) A: 199
 Automobile (The growth of government regulation) A: 971-972
 Bush, George Herbert Walker (National affairs) B: 720
 Gasoline (History) G: 62
Clean and jerk
 Weightlifting W: 183
Clean Monday
 Lent L: 196b
Clean plowing
 Farm and farming (Preparing the soil) F: 35
Clean room
 Air conditioning (In business and industry) A: 176-177
 United States *picture* on U: 133
Clean Water Act [1972]
 Environmental pollution (Government action) E: 335
Cleaning See Dry cleaning *in this index*
Cleaning fluid
 Carbon tetrachloride C: 207
 Dry cleaning (How clothes are dry cleaned) D: 368
Cleanliness
 Bath B: 163
 Health (Cleanliness) H: 126
Cleanout plug
 Plumbing (The drainage system) P: 578-579
Cleanser
 Detergent and soap D: 163
Clear-air turbulence
 Air turbulence A: 200
Clear Grit Party [Canadian history]
 Liberal Party L: 227
Clear Lake
 Iowa (Rivers and lakes) I: 386
Clearcutting
 Forestry (Harvesting) F: 404 *with picture*
Clearing bank
 Bank (Europe) B: 92
Clearing House Interbank Payments System
 Clearinghouse Ci: 660
Clearinghouse [economics] Ci: 659 *with diagram*
Clearinghouse on Disability Information
 Disabled (table) D: 222
Clearwater Beach [Florida]
 Florida *picture* on F: 243
Cleary, Beverly [American author] Ci: 660

Regina Medal (table: 1980) R: 206
Cleavage [physical property]
 Gem (Cleavage) G: 77
 Mineral (Cleavage) M: 567 *with picture*;
 (Chemical bonds) M: 570 *with diagram*
Cleavage plane
 Mineral (Chemical bonds) M: 570 *with diagram*
Cleavage site [genetics]
 Gene mapping G: 81
 Genetic engineering (How genes are reintroduced into cells) G: 84a
Cleaveland, Moses [American settler]
 Cleveland (Early settlement) Ci: 666
Cleaver, Eldridge [American social reformer]
 Ci: 660
 American literature (Works by minority writers) A: 425
Cleaves, Henry B. [American political leader]
 Maine (table) M: 87
CLEC [company] See Competitive local exchange carrier *in this index*
Cleese, John [British actor] Ci: 661 *with picture*
Clef [music]
 Music (Indicating pitch) M: 953 *with pictures*
Cleft grafting
 Grafting (Kinds of grafting) G: 298 *with picture*
Cleft lip [birth defect]
 Cleft palate Ci: 661
Cleft palate [birth defect] Ci: 661
 Reproduction, Human (Development of organs and organ systems) R: 248
 Speech therapy (Types and causes of speech defects) So: 773
Cleisthenes [Athenian political leader] Ci: 661
 Athens (Democracy) A: 857
 Greece, Ancient (New forms of government) G: 372-373
 Pericles P: 287
Cleitus [friend of]
 Alexander the Great (Central Asia and the Indus) A: 343
Clematis [plant] Ci: 661 *with picture*
Clemenceau, Georges [French statesman]
 Ci: 662 *with portrait*
 Foch, Ferdinand F: 313
 Versailles, Treaty of V: 340
 World War I (The Paris Peace Conference) W: 465
Clemens, Olivia Langdon [wife of]
 Twain, Mark (Return to the East) T: 529
Clemens, Orion [brother of]
 Twain, Mark (Boyhood) T: 528; (Newspaper work in the West) T: 528
Clemens, Roger [American baseball player]
 Ci: 662
Clemens, Samuel Langhorne See Twain, Mark *in this index*
Clement I, Saint [pope] Ci: 662
 Pope (The early papacy) P: 663
Clement III [pope]
 Pope (table) P: 666
Clement III [antipope]
 Pope (table) P: 666
Clement V [pope]
 Church and state (The Middle Ages) C: 542
 France (Growth of royal power) F: 472-473
 Knights Templars K: 353
 Philip IV P: 370
Clement VII [antipope] Ci: 662
 Pope (table) P: 666
Clement VII [pope] Ci: 662
 Bolayn, Anne B: 440
 Michelangelo (The Last Judgment) M: 486
Clement VIII [pope] Ci: 662a
Clement XIV [pope]
 Jesuits (History) J: 103
 Pope (table) P: 666
Clement, Frank G. [American political leader]
 Tennessee (table) T: 152
Clement, Percival W. [American political leader]
 Vermont (table) V: 333
Clemente, Roberto [American baseball player]
 Ci: 662a *with portrait*
 Baseball (table: Hall of Fame) B: 134
Clementi, Muzio [Italian composer] Ci: 662a
Clementine [space probe]
 Moon (Recent exploration) M: 795 *with picture*
 Space exploration (Lunar probes) So: 709-710
Clements, Bill [American political leader]
 Texas (table) T: 203
Clements, Earle C. [American political leader]
 Kentucky (table) K: 290
Clements, Frederick [American ecologist]

- Botany (Later developments) B: 509
Clemm, Maria [aunt of]
 Poe, Edgar Allan (Poe's life) P: 589
Clemm, Virginia [wife of]
 Poe, Edgar Allan (Poe's life) P: 589
Clendenin, George (American political leader)
 Charleston (Government and history) C: 384
Cleomenes [king of Sparta]
 Cleisthenes Ci: 661
Cleopatra [queen of ancient Egypt] Ci: 662a
 Alexandria (History) A: 344
 Antony, Mark A: 561
 Augustus (Rise to power) A: 889
 Caesar, Julius (Civil war) C: 13
 Egypt, Ancient (Roman rule) E: 144; *picture on*
 E: 143
 Octavia O: 669
Cleopatra [literary figure]
 Shakespeare, William (*Antony and Cleopatra*)
 S: 364
Cleopatra Selene [daughter of]
 Cleopatra (Cleopatra and Mark Antony)
 Ci: 662a-662b
Cleopatra's Needles (New York and London)
 Ci: 662b *with picture*
 Thutmose III T: 274
CLEP [testing program]
 Adult education (Sources of adult education)
 A: 68
Clepsydra [measuring device]
 Water clock W: 134
Clerc, Laurent (French educator)
 Sign language S: 454
Clerestory [architecture] Ci: 662b
 Architecture (Romanesque architecture)
 A: 618
Clergy
 Address, Forms of (Members of the clergy)
 A: 54
 Careers (Community and social services)
 C: 221 *with picture*
 Christianity (The first Christians) C: 525
 Middle Ages (Life of the people) M: 526
 Minister M: 578
 Priest P: 776
 Rabbi R: 46
 Religion (How the major religions are orga-
 nized) R: 218
 Seminary S: 292
 Vatican Council II (The work of the council)
 V: 289-290
Clergyman's Daughter, A [book by Orwell]
 Orwell, George O: 860
Clerical work
 Careers (Administrative support) C: 219
 Office work O: 677
Clerk [religion]
 Quakers (Worship) Q: 5
Clerk [occupation] See Clerical work in *this*
index
Clerk, Sir Dugald [British engineer]
 Diesel engine (History) D: 200
Clerk of court [office] Ci: 662b
Clermont [boat] Ci: 662b
 Fulton, Robert F: 555; (Builds the *Clermont*)
 F: 556 *with picture*
 Livingston, Robert R. L: 399
 Ship (The *Clermont*) S: 411
 Steamboat So: 882
Clermont, Council of [1095]
 Crusades (How the Crusades began) Ci: 1159-
 1160
 Urban II U: 219
Cletus, Saint [pope]
 Pope (table) P: 666
Cleve, Per Theodor [Swedish chemist]
 Helium H: 176
 Holmium H: 296
 Thulium T: 272
Cleveland [Ohio] Ci: 663 *with pictures and map*
 Ohio (table: Average monthly weather) O: 695;
picture on O: 681
Cleveland, Chauncey F. [American political
 leader]
 Connecticut (table) Ci: 967
Cleveland, Frances Folsom [wife of Grover
 Cleveland]
 Cleveland, Grover (Cleveland's family) Ci: 671
with picture
 First ladies (table) F: 142
Cleveland, Grover [U.S. President] Ci: 668 *with*
pictures
 Democratic Party (After the Civil War) D: 125-
 126
 Harrison, Benjamin H: 70
 Labor Day L: 3
 Monroe Doctrine (The Monroe Doctrine in
 action) M: 740
 Mugwumps M: 910
 New York (table) N: 313
 Pullman Strike P: 898
 Thurman, Allen Granberry T: 273
 United States, History of the (Early reform
 efforts) U: 181
Cleveland, Mount [mountain, Montana]
 Glacier National Park (Mountains) G: 205
Cleveland, Rose [sister of]
 Cleveland, Grover (Life in the White House)
 Ci: 671
 White House hostesses W: 291
Cleveland, Stephen Grover See Cleveland,
 Grover in *this index*
Cleveland bay [breed]
 Horse (table: Some types and breeds of hors-
 es) H: 343; (Heavy harness horses) H: 347
Cleveland Browns
 Football (National Football League) F: 364
Cleveland Cavaliers
 Basketball (table) B: 150
Cleveland Clinic Foundation
 Cleveland (Service industries) Ci: 666
Cleveland Indians
 Baseball (table) B: 130
Cleveland Museum of Art
 Ohio (Museums) O: 685 *with picture*
Cleveland Museum of Natural History
 Ohio (Interesting facts) O: 681 *with picture*
Cleveland: Now [government program]
 Cleveland (Social problems) Ci: 665
Cleveland Orchestra
 Cleveland (The arts) Ci: 665
 Szell, George So: 1077
Cleveland Penny Press [newspaper]
 Scripps, Edward Wyllis S: 227
Cleveland Play House
 Cleveland (The arts) Ci: 665
Cleveland Public Library [Ohio]
 Cleveland (Museums and libraries) Ci: 666
 Library (Research libraries) L: 247
Cleveland Transit System
 Cleveland (Economy) Ci: 666
Clever Hans [horse]
 Horse (table: Famous horses in history and
 legend) H: 361
CLI [computing] See Command line interface in
this index
Cliburn, Harvey Lavan, Jr. See Cliburn, Van in
this index
Cliburn, Van [American pianist] Ci: 674 *with pic-
 ture*
Cliche Royal Commission
 Mulroney, Brian (Young lawyer) M: 916-917
Click beetle [insect] Ci: 674 *with picture*
 Beetle (Click beetles) B: 217; *picture on*
 B: 218
Click language
 Africa (Languages) A: 104-105
Clicking [computing]
 Computer (A mouse) Ci: 912-914
Client
 Lawyer L: 147
Client [computer]
 Internet (How the Internet works) I: 350c;
 (Glossary of Internet terms) I: 350a
Client, The [book by Grisham]
 Grisham, John G: 396
Client-centered therapy
 Psychotherapy (Humanistic psychotherapy)
 P: 852
Client-server network [computing]
 Computer (Personal computers) Ci: 909
Cliff [geology] Ci: 674
Cliff dwellers [people] See Anasazi in *this index*
Cliff frog
 Frog (Other frogs) F: 540
Cliff Palace
 Mesa Verde National Park M: 420
Cliff swallow [bird]
 Swallow So: 1014 *with picture*
Cliff Walk [Newport]
 Rhode Island (Places to visit) R: 304; *picture*
on R: 296
Clifford, Clark McAdams [American govern-
 ment official] Ci: 674
Clifford, John H. [American political leader]
 Massachusetts (table) M: 288
Clifford, Nathan [American government official]
 Justice, Department of (table) J: 203
 Polk, James Knox (table) P: 643
 Supreme Court of the United States (table)

So: 1000

Cliffs of Dover [England] See Dover, Cliffs of in
*this index***Cliffside field** [region, Texas]

Helium (Production) H: 176

Clifty Falls

Indiana (Rivers, lakes, and waterfalls) I: 208

Climacteric See Menopause in *this index***Climate** [weather] Ci: 675 *with pictures and*
map

Age of Reason (The orderliness of nature)

A: 139

Clothing (Protection) Ci: 688

Colony Ci: 815

Dinosaur (Land and climate) D: 206a; (Why
dinosaurs died out) D: 213

El Niño E: 245

Europe (Climate) E: 398 *with map*

Global warming G: 232

Greenhouse effect G: 382

Irrigation I: 456

Lake (Climate) L: 33

Life (The physical environment) L: 275

Mountain (Climate) M: 891

Nuclear winter N: 602

Ocean (As an influence on climate) O: 654

Phenology P: 356

Plant (Factors affecting plant growth) P: 538

Races, Human (Climatic adaptations) R: 58

Rain forest (Environmental value) R: 126c-
126d

Season S: 270

Shelter (Why shelters differ around the world)

S: 392

Soil (Effects of climate) So: 573

Weather W: 157

Weather satellite W: 171

Climate modelGlobal warming (Analyzing global warming)
G: 232b**Climate simulation**Global warming (Analyzing global warming)
G: 232b**Climatic optimum** [geology]

Middle Ages (The High Middle Ages) M: 526

Climatic season

Season S: 270

Climatology

Climate (Kinds of climates) Ci: 676a

Geography (Physical geography) G: 93

Humboldt, Baron von H: 432

Climax [literature]

Literature (Plot) L: 353

Climax community

Ecology (Changes in communities) E: 54

Climbing [sport] Ci: 679 *with pictures*See also Mountain climbing in *this index***Climbing perch** [fish] Ci: 680 *with picture***Climbing rose** [plant]Rose R: 477; *picture on* R: 479**Clinching**Boxing *picture on* B: 529**Cline** [cartography]Races, Human (The clinal approach) R: 55-56
*with map***Cline, Patsy** [American singer] Ci: 681Country music *picture on* Ci: 1098c**Clines, Thomas G.** [American public figure]Iran-contra affair (Charges and court actions)
I: 407**Clingmans Dome** [mountain, Tennessee]

Ci: 681

Tennessee (Land regions) T: 146

Clingstone peach [fruit]

Peach (Cultivars) P: 210

Clinic, Legal

Law (The right to legal assistance) L: 137-138

Clinic of Doctor Agnew, The [painting by

Eakins]

Eakins, Thomas E: 6

Clinic of Doctor Gross, The [painting by Eakins]

Eakins, Thomas E: 6

Clinical engineeringBiomedical engineering (Specialty areas of bio-
medical engineering) B: 324-325**Clinical ethics**

Medical ethics M: 361

Clinical pathology [medicine]

Pathology P: 196

Clinical pharmacology [science]

Pharmacology P: 354

Clinical psychology Ci: 681

Psychology (Major fields of psychology) P: 845

Clinical research [medicine]

Medicine (Medical researchers) M: 369-370

Clinical training

Medicine (A career as a doctor) M: 370

Clinical trial

Cancer (Clinical trials) C: 174

Clinker

Cement and concrete (Burning) C: 344

Clinker-built vessel

Ship (Viking ships) S: 406

Clinopyroxene [mineral]

Pyroxene P: 920

Clinton, Bill [U.S. President] Ci: 682 *with pictures*

Arkansas (table) A: 712

Bush, George Herbert Walker (The 1992 election) B: 722a

Clinton, Hillary Rodham Ci: 682h

DeLay, Thomas Dale D: 114

Democratic Party (Mixed results) D: 128

Gore, Al (Political career) G: 274

Impeachment (History) I: 91

Iran (Recent developments) I: 406b

Israel *picture on* I: 489

Middle East *picture on* M: 534

President of the United States (Term of office)

P: 758-762; (The impeachment of Bill Clinton) P: 769

Reno, Janet R: 240

Republican Party (Control of Congress) R: 257

Starr, Kenneth Winston So: 857

United States, History of the (Impeachment)

U: 195

Clinton, Chelsea [daughter of]

Clinton, Bill (Clinton's family) Ci: 682b *with picture*

Clinton, De Witt [American political leader]

Ci: 682g

Castle Clinton National Monument C: 282

Erie Canal (The building of the Erie Canal)

E: 351

New York (table) N: 313; (Growing prosperity)

N: 316

Van Buren, Martin (U.S. senator) V: 271

Clinton, George [American political leader]

Ci: 682g

New York (table) N: 313; (Statehood) N: 315

Vice President of the United States (table)

V: 351; V: 348 *with portrait*

Clinton, Sir Henry [British general] Ci: 682h

André, John A: 456

Arnold, Benedict (Turns traitor) A: 742

Cornwallis, Charles Ci: 1066

Revolutionary War in America (Fighting in the

Southern Colonies) R: 275; (France's entry

into the Revolutionary War) R: 283; (The

end of the war) R: 285

Clinton, Hillary Rodham [American political leader]

Ci: 682h *with portrait*

Clinton, Bill (Clinton's family) Ci: 682b *with picture*

First ladies F: 143

Clinton, James [American general]

New York (Statehood) N: 315

Clinton, Roger [stepfather of]

Clinton, Bill (Early life) Ci: 682a

Clinton, William Jefferson *See* Clinton, Bill *in this index***Clinton P. Anderson Mason Physics Facility**

Los Alamos National Laboratory L: 455

Clinton's Ditch

Erie Canal (The building of the Erie Canal)

E: 351

Clio [Greek mythology]

Muses M: 937

Clipper ship Ci: 682h *with picture*

Ship (Clipper ships) S: 410 *with picture*

Transportation (The age of overseas expansion) T: 389 *with picture*

Clippers, Los Angeles

Basketball (table) B: 150

Clipping [language]

Slang (Shortened or lengthened words) S: 499

Clipping [sports]

Football (Violations and penalties) F: 363

Citellum [zoology]

Earthworm E: 39 *with picture*

Citoris [anatomy]

Circumcision Ci: 561

Vagina V: 259

Clive, Robert [British colonial official] Ci: 682i

Bangladesh (The East India Company) B: 85

India (The rise of the East India Company)

I: 130

Cloaca [zoology]

Snake (Internal organs) S: 527 *with diagram*;

(Reproduction) S: 530

Cloche [hat]

Hat (History) H: 84-85 *with picture*

Clock Ci: 682i *with pictures*

Antique *picture on* A: 558

Atomic clock A: 877

Chronometer C: 539

Colonial life in America (Furnishings) Ci: 797-798

Hour H: 379

Pendulum (Clock pendulums) P: 237

Quartz (Properties and uses) Q: 8

Watch W: 114 *with pictures*

Water clock W: 134

Clock speed [electronics]

Computer chip (Clock speed) Ci: 924f

Clockers [film]

Lee, Spike L: 179

Clockmaker, The [book by Haliburton]

Canadian literature (Early English-Canadian literature) C: 157

Clockwork Orange, A [book by Burgess]

Burgess, Anthony B: 703

Clodia [ancient Roman]

Catullus, Gaius Valerius C: 316

Clofazimine [drug]

Leprosy (Treatment) L: 204

Clog [shoe]

Shoe *picture on* S: 432

Cloisonné [art]

Enamel (Techniques) E: 265

Cloister [architecture] Ci: 683 *with picture*

Architecture (Carolingian architecture) A: 618

Cloister [religious community]

Convent Ci: 1024

Cloisters [museum, New York City]

Metropolitan Museum of Art (The Cloisters)

M: 444

Clonazepam [drug]

Anticonvulsant A: 553

Clone [reproduction] Ci: 684 *with pictures*

Biology (Current research and issues) B: 320-321

Genetic engineering (Uses of genetic engineering)

G: 84a-84b

Heredity (The era of genetic engineering)

H: 209

Primate (The study of nonhuman primates)

P: 778c

Close, Charles Thomas [American artist] *See*

Close, Chuck *in this index*

Close, Chuck [American artist] Ci: 685

Painting (People) P: 31-32 *with picture*

Close binary [astronomy]

Nova N: 553

Close Encounters of the Third Kind [film]

Spielberg, Steven So: 792

Close of Play [play by Gray]

Gray, Simon G: 334

Close-up magic

Magician (Close-up magic) M: 51

Closed basin [geography]

Basin B: 141

Closed captioning [television] Ci: 685 *with picture*

Deafness (Special devices) D: 58-59

Disabled *picture on* D: 219

Closed circuit

Electric circuit E: 166

Closed-circuit television

Television (Closed-circuit television) T: 110b

with picture

Closed couplet [poetry]

Couplet Ci: 1100

Poetry (table) P: 594

Closed die forging

Forging (Machine forging) F: 409-410

Closed-end investment company

Investment (Other kinds of direct investments) I: 368

Mutual fund M: 969

Closed fracture [injury]

Fracture F: 451 *with diagram*

Closed gentian [plant]

Gentian G: 90

Closed primary [voting]

Primary election (Open and closed) P: 777

Closed shop [labor] Ci: 685

Labor movement (Organizing workers) L: 4

Open shop O: 789

Right-to-work law R: 340

Taft-Hartley Act T: 13

Closed-stack system

Library (Other features) L: 237

Closely Watched Trains [film]

Motion picture (Movies in the 1960's) M: 871

Clostridium botulinum [bacteria]

Botulism B: 514

Food poisoning F: 340

Food preservation (How food spoils) F: 341

Clostridium tetani [bacteria]

Tetanus T: 182

Closure [parliamentary procedure] *See* Cloture *in this index***Closure** [psychology]

Gestalt psychology G: 175

Perception (Principles of perception) P: 284

Clot *See* Blood clot *in this index***Clotbur** [plant] *See* Burdock *in this index***Clotel, or The President's Daughter** [book by Brown]

African American literature (The 1800's)

A: 136a

Cloth [fabric]

See also Textile *in this index*

Cotton (Making cotton into cloth) Ci: 1091

Painting (Supports) P: 36

Weaving W: 173 *with pictures*

Cloth beam

Weaving (How a loom works) W: 174

Cloth doll

Doll (The 1800's) D: 289 *with picture*

Cloth-of-gold [plant]

Crocus Ci: 1150

"Clothes Make the Man" [story by Keller]

Keller, Gottfried K: 254

Clothier's brush [plant]

Teasel T: 73

Clothier's teasel [plant]

Teasel T: 73

Clothing Ci: 686 *with pictures*

See also Costume *in this index*

Armor A: 719 *with pictures*

Army *picture on* A: 725

Button (Button legends) B: 745 *with pictures*

Colonial life in America (Clothing) Ci: 799 *with picture*

Cotton (Cotton fibers) Ci: 1086

Easter (Wearing new clothes) E: 44

Egypt, Ancient (Food, clothing, and shelter)

E: 137

Fashion F: 50

Fire department (Protective clothing) F: 127

with picture

Fur F: 561

Greece, Ancient (Food, clothing, and shelter)

G: 367

Hat H: 83

Inca (Food, clothing, and shelter) I: 95-96; *picture on* I: 98

Indian, American (Clothing) I: 136d; (Before

European contact) I: 166-167; *pictures on*

I: 138

Inuit (Clothing) I: 354b; *pictures on* I: 354d

Mexico M: 456 *with picture*

Modeling M: 684

Pioneer life in America (Clothing) P: 482 *with picture*

Sewing S: 331

Shoe S: 430 *with pictures*

Skiing (Ski clothing) S: 485

Tartan T: 47 *with pictures*

United Kingdom (Manufacturing) U: 63-65

Western frontier life in America (Clothing)

W: 236

See also the list of Related Articles in the

Clothing article

Clothing and Textile Workers Union,

Amalgamated

Labor movement (table) L: 8

Clothing industry *See* Garment industry *in this index***Clothing store**

Clothing (Ready-to-wear clothes) Ci: 704-705

with picture

Clotho [mythology]

Fates F: 54

Clotting *See* Blood clot *in this index***Clotting factor** [blood]

Blood (Controlling bleeding) B: 411

Blood transfusion B: 416

Hemophilia H: 182

Plasma (Functions of plasma) P: 551

Von Willebrand's disease V: 448

Cloture [parliamentary procedure] Ci: 707

Filibustering F: 99

- Dust (Influence on climate) D: 390
 Earth *picture on* E: 16
 Fog F: 314
 Hurricane H: 452 *with diagram*
 Lamarck, Chevalier de L: 50
 Lightning (How lightning develops) L: 300 *with pictures*
 Mars (Clouds) M: 226b
 Rain (Characteristics of rain) R: 122-123
 Rainmaking R: 129
 Tornado *picture on* T: 333
 Water (Water in the air) W: 120 *with diagram*
 Weather (Humidity) W: 158 *with picture*;
 (Synoptic-scale systems) W: 159-160;
 (Weather satellites) W: 163-164; (Science project: A cloud in a bottle) W: 168
- Cloud condensation nucleus**
 Cloud (How clouds form) Ci: 711
 Rain (Formation of rain) R: 123 *with diagram*
- Cloud Messenger, The** [poem by Kalidasa]
 Sanskrit literature (The Classical period) S: 112
- Cloud seeding** [meteorology]
 Rain (The ice-crystal process) R: 124
 Rainmaking R: 129 *with diagram*
 Weather (How people affect the weather) W: 170
- Cloud-to-air lightning**
 Lightning (The charges) L: 300
- Cloud-to-cloud lightning**
 Lightning (The charges) L: 300
- Cloud-to-ground lightning**
 Lightning (The charges) L: 300
- Cloudburst** [weather] Ci: 712
- Clouded sulfur** [insect]
 Insect *picture on* I: 282
- Clouds** [play by Aristophanes]
 Aristophanes A: 663
- Cloud's Rest**
 Yosemite National Park (Rock masses) Y: 570
- Clough, David M.** [American political leader]
 Minnesota (table) M: 602
- Clove** [spice] Ci: 712 *with pictures*
- Clove hitch**
 Knots, hitches, and splices (Two half hitches) K: 357 *with diagram*
- Cloven hoof** [zoology]
 Goat (The bodies of goats) G: 240
- Clover** [plant] Ci: 712 *with pictures*
 Flower *picture on* F: 287
 Lawn *picture on* L: 143
 Shamrock S: 371
- Clover mite** [animal]
 Mite M: 678
- Cloverleaf** [road]
 Road (Intersections) R: 358-359
- Clovis I** [king of the Franks] Ci: 713
 Belgium (The Middle Ages) B: 232
 Fleur-de-lis F: 234 *with picture*
 France (Victory of the Franks) F: 471
 Franks F: 494
 Germany (Kingdom of the Franks) G: 162
 Merovingian dynasty M: 418
 Paris (Early years) P: 166
 Salic law S: 66
- Clown** Ci: 713 *with picture*
 Circus (At the circus) Ci: 562 *with pictures*
- Clown, The** [book by Böll]
 Böll, Heinrich B: 448
- Clown anemonefish**
 Fish *picture on* F: 155
- Clown loach** [fish]
 Fish *picture on* F: 157
 Loach L: 404
- Clown triggerfish**
 Fish *picture on* F: 154
- Club** [organization] Ci: 714
- Club** [suit]
 Card game (History) C: 209
- Club** [weapon]
 Indian, American *pictures on* I: 138, I: 144
- Club drug**
 Drug abuse (table: Some commonly abused drugs) D: 363, (Club drugs) D: 363
- Club hair** [anatomy]
 Hair (Cycles of hair growth) H: 10
- Club moss** [botany] Ci: 714 *with pictures*
 Flower *picture on* F: 289
 Plant (Lycopods) P: 520 *with picture*;
 (Classification of plants) P: 546 *with picture*
- Tree (Fossil trees) T: 415
- Clubfoot** [disorder] Ci: 714
- Cluj-Napoca** [city, Romania]
 Transylvania T: 402
- Clumber spaniel** [dog] Ci: 714 *with picture*
- Clumping** [physiology]
 Blood (The significance of blood groups) B: 412 *with picture*
- Cluniac reform** [history of religion]
 Pope (The early Middle Ages) P: 663
 Roman Catholic Church (Cluniac reform) R: 407
- Cluny Museum**
 Paris (Museums and art galleries) P: 164-165
- Cluster** [astronomy]
 Dark matter D: 37
 Galaxy (Groups of galaxies) G: 8a
 Universe U: 205
- Cluster bomb**
 Bomb (Fragmentation bombs) B: 450
- Clutch** [engine]
 Automobile (The power train) A: 952-953
 Starter (Automobile starters) So: 857 *with diagram*
 Transmission (Clutches) T: 377 *with diagram*;
 (The clutch) T: 378 *with diagram*
- Clutch** [zoology]
 Bird (Laying and hatching eggs) B: 357
 Turtle (Young) T: 521
- Clutch plate** [engine]
 Transmission (The clutch) T: 378
- Cluttering** [speech defect]
 Speech therapy (Types and causes of speech defects) So: 773
- Clyde, George D.** [American political leader]
 Utah (table) U: 245; (The mid-1900's) U: 249
- Clyde, River** Ci: 714
 Scotland (Rivers and lakes) S: 217 *with map*
- Clydesdale**
 Horse (table: Some types and breeds of horses) H: 343; (Draft horses) H: 346 *with picture*
- Clymene** [Greek mythology]
 Phaëthon P: 353
- Clymer, George** [American patriot] Ci: 715
- Clytemnestra** [ballet]
 Graham, Martha G: 301
- Clytemnestra** [legendary figure] Ci: 715
 Cassandra C: 275
 Electra E: 164
- Cm** [symbol]
 Curium Ci: 1194
- CMA** [organization] See Country Music Association *in this index*
- CN North America** [railway system] See Canadian National Railway Company *in this index*
- CN Tower** [Toronto]
 Toronto (Landmarks) T: 336-337 *with picture*;
 (Urban renewal) T: 340a
 Tower T: 349
- Cnidarian** [animal] Ci: 715
 Animal (A classification of the animal kingdom) A: 506 *with picture*
 Invertebrate I: 366
 Jellyfish J: 89
- CNN** [television network] See Cable News Network *in this index*
- CNN Center** [building]
 Atlanta (The late 1990's) A: 861
- CNO cycle** [physics] See Carbon-nitrogen-oxygen cycle *in this index*
- Cnossus** See Knossos *in this index*
- CNTU** [labor federation]
 Labor movement (In Canada) L: 14
- Cnut** See Canute *in this index*
- Co** [symbol]
 Cobalt Ci: 740
- CO detector** [instrument] See Carbon-monoxide detector *in this index*
- Coach** [sports]
 Baseball (Players) B: 125; (Player positions) B: 127
 Basketball (The coach) B: 145 *with picture*
 Careers (Sports and entertainment) C: 230
 Football (The coaches) F: 358
- Coach** [train]
 Railroad (Passenger service) R: 105
- Coach** [vehicle] Ci: 715
 Colonial life in America (Transportation) Ci: 805-806 *with picture*
 Transportation *picture on* T: 388
- Coach dog**
 Dalmatian D: 16
- Coach horse**
 Horse (table: Some types and breeds of horses) H: 343; (Heavy harness horses) H: 347
- Coach's box**
 Baseball (Foul territory) B: 127 *with diagram*
- Coachwhip** [shrub]
 Ocotillo O: 669 *with picture*
- Coachwhip** [snake]
 Snake *picture on* S: 532
- Coagulant** [physiology] Ci: 715
 Blood (Controlling bleeding) B: 411
 Fibrin F: 90
- Coagulation** [chemistry]
 Bleeding (How bleeding is stopped) B: 399
 Anticoagulant A: 553
 Colloid Ci: 777
 Rubber (Separating the latex) R: 503
 Water (Purifying and treating water) W: 126
- Coahuiltec Indians**
 San Antonio (History) S: 86
- Coal** Ci: 716 *with pictures and map*
 Coke Ci: 759
 Energy supply (Fossil fuels) E: 277; (Depletion of fuel reserves) E: 281
 England (Mining) E: 302
 Environmental pollution (History) E: 338
 Europe (Mining) E: 403 *with picture*
 Fuel (Solid fuels) F: 550
 Heating (Coal) H: 160
 Lignite L: 302
 Montana (Natural resources) M: 755 *with picture*
 North Dakota (Interesting facts) N: 497 *with picture*
 Peat P: 225
 Pennsylvania (Mining) P: 261
 Petrochemicals (History) P: 329
 Plant (Raw materials) P: 518
 Poland (Natural resources) P: 610
 Rock (table) R: 373 *with picture*; (Organic sediments) R: 372
 Synthetic fuel So: 1068
 Wales (Economy) W: 12
 West Virginia (Mining) W: 223 *with picture*;
 (History) W: 226-229 *with picture*
 See also the list of Related Articles in the Coal article
- Coal and Steel Community, European** See European Coal and Steel Community *in this index*
- Coal Association, National**
 Coal (Coal producers) Ci: 728
- Coal auger** [machine]
 Coal (Auger mining) Ci: 722
- Coal bed** [geology]
 Coal (How coal was formed) Ci: 717
- Coal dust**
 Coal (Mine safety) Ci: 729
- Coal-fueled power plant**
 Kentucky *picture on* K: 289
- Coal gas** See Coke oven gas *in this index*
- Coal gasifier tar**
 Tar T: 41
- Coal Mine Health and Safety Act** [1969]
 Coal (Government regulation) Ci: 729-730
- Coal mining** See Mining *in this index*
- Coal oil** See Kerosene *in this index*
- Coal tar** Ci: 733
 Coal (Coal as a raw material) Ci: 720
 Coke Ci: 759
 Tar T: 41
- Coal-ter dye**
 Dye (History) D: 396
 Lake L: 35
- Coalbanks**
 Lethbridge L: 209
- Coalescence** [chemistry]
 Paint (Household paints) P: 23
- Coalescence process** [meteorology]
 Rain (Formation of rain) R: 123-124 *with diagram*
- Coalition** [political science] Ci: 733
 Democracy (Political parties) D: 121
 Government (Party systems) G: 288-290
 Parliament P: 172
 Political party (Multiparty systems) P: 634
 President (Dual presidency) P: 756b
 Prime minister P: 778c
- Coalition government** [political science]
 Union of Soviet Socialist Republics (Beginnings of the Cold War) U: 38
- Coalition of American Public Employees** [organization]
 Farmer, James Leonard F: 46
- Coalition warfare**
 Army A: 724
- Coanda, Henri-Marie** [Romanian inventor]
 Ci: 733
- Coanda effect** [aerodynamics]
 Coanda, Henri-Marie Ci: 733
- Coarctation of the aorta** [disorder]

- Heart (Blockage of blood flow) H: 141
- Coarse crystalline quartz**
Quartz (Types) Q: 8
- Coarse-wooled sheep**
Sheep (Coarse-wooled sheep) S: 382
Wool (Sources of wool) W: 399
- Coase, Ronald Harry** [British-born economist]
Nobel Prizes (Economics: 1991) N: 449
- Coast Guard, United States** Ci: 734 *with pictures*
Boating (Boating regulations) B: 429
Flag *picture* on F: 211
Helicopter *picture* on H: 170
Medals, decorations, and orders (Civilian awards) M: 355
Navy, United States (The Coast Guard) N: 85
Radar (In ship navigation) R: 65
Ship (Safety at sea) S: 424
Transportation, Department of (Agencies) T: 400
United States Coast Guard Academy U: 199
- Coast Guard Academy, United States** *See* United States Coast Guard Academy *in this index*
- Coast Guard Auxiliary** [organization]
Coast Guard, United States (Safety) Ci: 734-735; (World War II) Ci: 738
- Coast Guard Medal**
Medals, decorations, and orders (table) M: 357
- Coast Mountains**
British Columbia (Land regions) B: 622
Canada (Land regions) C: 112-115
- Coast of Slaves** [Togolese history]
Togo (History) T: 310
- Coast Ranges** [mountains, North America]
Ci: 739
California (Land regions) C: 48; *picture* on C: 51
United States (The Pacific Ranges and Lowlands) U: 125-126
- Coast Salish** [American Indians]
Salish Indians (The Coast Salish) S: 67
- Coast Salish** [language]
Bella Coola Indians B: 242
- Coastal Islands**
Finland (Land regions) *map* on F: 113
- Coastal Lowlands**
Finland (Land regions) *map* on F: 113
- Coastal Lowlands** [region, U.S.]
North America (Land regions) N: 462-464
United States (The Coastal Lowlands) U: 121 *with picture; map* on U: 123
- Coastal plain** [geography]
Plain P: 506 *with picture*
- Coastal Sami** [people]
Sami S: 79
- Coaster brake**
Bicycle (Steering and stopping) B: 291
- Coasting sled**
Sled S: 505
- Coat** [clothing]
Clothing (The 1800's) Ci: 702 *with picture*
- Coat** [zoology]
Cat (Coat) C: 287 *with pictures*
Dog (Coat) D: 265; (Grooming) D: 278
Horse (Coat and skin) H: 348
- Coat of arms** [heraldry]
Heraldry H: 194 *with pictures*
- Coati** [animal] Ci: 739 *with picture*
Animal *picture* on A: 480
- Coatimundi** [animal] *See* Coati *in this index*
- Coatlucue** [Aztec goddess]
Aztec *picture* on A: 1001
- Coatsworth, Elizabeth** [American author]
Ci: 740
- Coaxial cable** [electronics] Ci: 740 *with picture*
Cable (Coaxial cables) C: 5 *with diagrams*
Television (Coaxial cable and fiber-optic cable) T: 123
- Coaxial propeller**
Airplane (Propellers) A: 217
- Coaxial-rotor helicopter**
Helicopter (Types of helicopters) H: 170-171 *with diagram*
- Cob** [bird]
Swan S: 1015
- Cobalamin** *See* Vitamin B₁₂ *in this index*
- Cobalt** [element] Ci: 740
Vitamin (Vitamin B complex) V: 430-431
- Cobalt 60** [isotope]
Cobalt (Uses) Ci: 741
- Cobalt blue**
Porcelain (Painting) P: 676
- Cobb, Howell** [American government official]
Georgia (table) G: 130
- Treasury, Department of the (table) T: 407
- Cobb, Rufus W.** [American political leader]
Alabama (table) A: 274
- Cobb, Ty** [American baseball player] Ci: 741 *with portrait*
Baseball (table: Hall of Fame) B: 134 *with picture*; (table: Modern major league records) B: 137
- Cobb, William T.** [American political leader]
Maine (table) M: 87
- Cobble Hill** [district]
New York City (Brooklyn) N: 326-328
- Cobbler**
Potato P: 712; *picture* on P: 711
- Cobblestone** [magazine]
Literature for children (The middle and late 1900's) L: 364-365
- Cobden, Richard** [British political leader] Ci: 741
Peel, Sir Robert (Prime minister) P: 229
- Cobequid Mountains**
Nova Scotia (Land regions) N: 562
- Cobnut**
Filbert F: 99 *with pictures*
Hazel H: 122
- Cobo, Albert E.** [American political leader]
Detroit (The city) D: 167-168
- COBOL** [computer language]
Computer (Using programming languages) Ci: 923
Hopper, Grace Murray H: 334
- Cobra** [snake] Ci: 741 *with picture*
Asp A: 814 *with picture*
Snake (Protection against enemies) S: 532-533; *picture* on S: 534
Snake charming S: 536
- Cobra plant**
Pitcher plant P: 499
- Coburn, Abner** [American political leader]
Maine (table) M: 87
- Coburn, Charles** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1943) M: 863
- Coburn, James** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1998) M: 863
- Cobweb**
Spider (Tangled-web weavers) So: 788
- Coca** [shrub] Ci: 742
Bolivia (Food) B: 444; (Economy) B: 446
Cocaine Ci: 742
- Coca-Cola** [soft drink]
Coca-Cola Company Ci: 742
- Coca-Cola Company** Ci: 742
Advertising *pictures* on A: 80
Atlanta (Manufacturing) A: 860b *with picture*
Fox Quesada, Vicente F: 442
- Cocaine** [drug] Ci: 742
Bolivia (Food) B: 444
Coca Ci: 742
Dentistry (Modern dentistry) D: 145
Drug abuse (Abuse of illegal drugs) D: 362; (table: Some commonly abused drugs) D: 363; (History) D: 365
- Cocci** [bacteriology]
Bacteria (The structure of bacteria) B: 20 *with picture*
Staphylococcus So: 839
- Coccidioidomycosis** [disease]
Fungal disease (In people) F: 558
- Coccidiosis** [disease]
Poultry (Raising poultry) P: 720-721
- Coccolithophore** [sea animal]
Ocean (The plankton) O: 655; *picture* on O: 656
- Coccyx** [anatomy]
Human body *diagram* on H: 422
Skeleton (The axial skeleton) S: 479-480 *with diagram*
Spine So: 792 *with diagram*
- Cochin** [chicken]
Chicken (Asiatic class chickens) C: 441, (table) C: 443
- Cochin China** [region, Vietnam]
Indochina (French influence) I: 225
Vietnam (French rule) V: 370
- Cochise** [American Indian chief] Ci: 743
- Cochlea** [anatomy]
Ear (The inner ear) E: 8-9 *with diagram*
- Cochlear duct** [anatomy]
Ear (The inner ear) E: 8-9 *with diagram; diagrams* on E: 10
- Cochlear fluid** [anatomy]
Ear (How sounds travel to the inner ear) E: 9-10
- Cochlear implant** [medicine]
- Deafness (Medical treatment) D: 58
- Cochlear nerve** [anatomy]
Ear (The inner ear) E: 8-9
- Cochran, Elizabeth** [American journalist] *See* Bly, Nellie *in this index*
- Cochran, Jacqueline** [American aviator] Ci: 743
- Cochran, John P.** [American political leader]
Delaware (table) D: 109
- Cochran, Robert Leroy** [American political leader]
Nebraska (table) N: 110
- Cochrane, Mickey** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Cock** [gun]
Flintlock F: 236
Harquebus H: 67
- Cock-of-the-rock** [bird] Ci: 743 *with picture*
Bird (Birds of Central and South America) B: 345 *with picture*
- Cockatiel** [bird] Ci: 743 *with picture*
Parrot (Kinds of parrots) P: 179
- Cockatoo** [bird] Ci: 744 *with pictures*
Parrot (Kinds of parrots) P: 179; *picture* on P: 180
- Cockburn, James** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935
- Cockcroft, Sir John Douglas** [British physicist]
Ci: 744
Particle accelerator (How accelerators work) P: 184
- Cockcroft-Walton accelerator** [machine]
Particle accelerator (How accelerators work) P: 184
- Cocked hat**
Colonial life in America (Clothing) Ci: 799
- Cocker spaniel** [dog] Ci: 744
Dog *pictures* on D: 265, D: 269; [English cocker spaniel] E: 311
- Cockerell, Christopher** [British inventor]
Air cushion vehicle (History) A: 181
- Cockerill, John** [British businessman]
Industrial Revolution (Spread of the Industrial Revolution) I: 252-253
- Cockerill, William** [British businessman]
Industrial Revolution (Spread of the Industrial Revolution) I: 252
- Cockfighting** [sport] Ci: 744
- Cockle** [sea animal] Ci: 744
- Cocklebur** [plant] Ci: 744 *with picture*
- Cockney** [people] Ci: 745
London (Ancestry) L: 430
- Cockpit** [airplane]
Airplane (The fuselage) A: 214; (The controls and instruments) A: 217 *with picture*
- Cockpit of the Revolution**
New Jersey N: 231
- Cockrell, Kenneth D.** [American astronaut]
International Space Station *picture* on I: 346b
- Cockrell Hill** [community]
Dallas (The city) D: 11
- Cockroach** [insect] Ci: 745 *with picture*
Antennae *picture* on A: 544
Insect (Hearing) I: 290; *picture* on I: 285
- Cockscomb** [plant] Ci: 745 *with picture*
- Cockspur** [plant]
Sandbur S: 107
- Cockspur** [tree]
Hawthorn H: 114
Tree *pictures* on T: 421
- Cocksure** [book by Richler]
Richler, Mordecai R: 331
- Cocktail** [drink]
Alcoholic beverage (Distilled beverages) A: 336
- Cocktail Party, The** [play by Eliot]
Eliot, T. S. (His works) E: 237-238
- Coco-de-mer** [tree]
Seychelles (Land and climate) S: 340
Tree (Interesting facts about trees) T: 411
- Cocoa** [food]
Cacao C: 9
Chocolate (Chocolate products) C: 518
- Cocoa bean** [food]
Chocolate (The cacao tree) C: 518
- Cocoa butter**
Cacao C: 9
Chocolate (Manufacturing chocolate) C: 518
Vegetable oil (Uses) V: 294
- Cocoanuts, The** [film]
Marx brothers M: 238
- Coconut**
Coconut palm (The coconut) Ci: 746 *with pictures*
Copra Ci: 1045

Pacific Islands (Agriculture) P: 9
 Palm (The fruits) P: 109
 Plant (Seed dispersal) P: 541-542 with picture

Coconut crab
 Animal picture on A: 469
 Hermit crab H: 212

Coconut milk
 Coconut palm (The coconut) Ci: 746

Coconut oil
 Copra Ci: 1045
 Vegetable oil (Uses) V: 294

Coconut palm [tree] Ci: 746 with pictures
 Palm (The fruits) P: 109

Coconut-stearin [by-product]
 Copra Ci: 1045

Cocoon [biology] Ci: 747 with pictures
 Estivation E: 361
 Lungfish L: 525
 Metamorphosis (The pupa) M: 428-429
 Moth (The pupa) M: 839 with pictures
 Pupa P: 904
 Silk (Spinning the cocoon) S: 459 with picture;
 (Discovery of silk) S: 461 with pictures
 Wasp (Life cycle) W: 111

Cocos Islands (Indian Ocean)
 Straits Settlements So: 918

Cocteau, Jean [French author] Ci: 747
 French literature (French drama of the mid-1900's) F: 523
 Picasso, Pablo (Picasso as a designer) P: 448b

Cod [fish] Ci: 747 with picture
 Fish picture on F: 153

COD service
 Postal Service, United States (Other services) P: 700

Coddington, William [American colonial leader]
 Rhode Island (Settlement) R: 312

Code
 Codes and ciphers Ci: 749; (Codes) Ci: 750

Code [law] Ci: 748
 Civil law Ci: 607
 Draco D: 317
 Law (Civil law systems) L: 132

Code and answering pennant
 Flag (Flags that talk) F: 208

Code Civil See *Code Napoléon in this index*

Code Napoléon [French law] Ci: 748
 Civil law Ci: 607
 Law (The first modern law codes) L: 135-136
 Napoleon I (Administrator and lawmaker) N: 16

Code of Hammurabi See *Hammurabi, Code of in this index*

Code of Justinian See *Justinian Code in this index*

Code of Manu [Hinduism]
 Manu M: 168

Code talkers [American history] Ci: 749

Codeine [drug] Ci: 749
 Analgesic A: 448
 Drug abuse (Heroin) D: 362; (table: Some commonly abused drugs) D: 363
 Opiate O: 810

Codes and ciphers Ci: 749 with diagrams

Codex [book]
 Book (Early books) B: 465-466
 Manuscript (Illustrated manuscripts) M: 174

Codex [law]
 Justinian Code J: 204

Codex Duran [manuscript]
 Exploration picture on E: 445

Codex Sinaiticus [manuscript]
 Library (Medieval collections) L: 259

Codfish See *Cod in this index*

Codicil [law]
 Will (Codicil) W: 307

Codification movement
 Law (The first modern law codes) L: 135

Codling moth [insect] Ci: 752 with picture
 Apple (Pests and diseases) A: 571
 Pear (Insects) P: 216

Codon [biology]
 Cell (Producing proteins) C: 333-334, (The genetic code) C: 336
 Heredity (How proteins are made) H: 206

Cody, William Frederick [American frontiersman] See *Buffalo Bill in this index*

Coeducation Ci: 752
 Universities and colleges (The student body) U: 208-209

Coefficient [mathematics]
 Algebra (Other definitions) A: 354

Coefficient of friction [physics]
 Friction (Laws of friction) F: 532

Coefficient of linear expansion [physics]

Heat (Changes in size) H: 152

Coefficient of thermal expansion [physics]
 Materials (Thermal properties) M: 300c

Coelacanth [fish] Ci: 752 with picture
 Animal picture on A: 507
 Fish (Fleshy-finned fish) F: 148 with picture

Coelenterate [animal] See *Cnidarian in this index*

Coelho, Gonçalo [Portuguese explorer]
 Rio de Janeiro R: 345
 Vespucci, Amerigo (Life and expeditions) V: 342

Coelom [biology] Ci: 753 with diagram

Coelophysis [dinosaur]
 Dinosaur (True dinosaurs) D: 206b-211

Coen, Ethan and Joel [American producers/directors]
 Motion picture (A new generation of filmmakers) M: 872

Coendou [animal]
 Porcupine P: 678

Coenzyme [biochemistry]
 Enzyme (Structure) E: 341
 Vitamin (How vitamins work) V: 432

Coenzyme A
 Vitamin (Vitamin B complex) V: 430-431
 Lipmann, Fritz Albert L: 345

Coercion
 Power (Forms of power) P: 727

Coercive Acts See *Intolerable Acts in this index*

Coeur d'Alene District Mining Museum
 Idaho (Places to visit) I: 34

Coeur d'Alene Lake
 Idaho picture on I: 27; (Rivers, waterfalls, springs, and lakes) I: 38

Coeur d'Alene Mountains [Idaho-Montana]
 Ci: 753
 Idaho (Mountains) I: 36

Coexistence [international relations]
 Cold War (The spirit of Geneva) Ci: 765; (New challenges) Ci: 765; (Easing Cold War tensions) Ci: 767

Coffea arabica [plant]
 Coffee (The coffee plant) Ci: 753

Coffee [painting by Portinari]
 Brazil picture on B: 576

Coffee [plant] Ci: 753 with pictures
 Brazil (Agriculture) B: 581 with picture
 Burundi (Economy) B: 713 with picture
 Chicory C: 446
 Colombia (Agriculture) Ci: 782
 Costa Rica picture on Ci: 1084
 El Salvador picture on E: 248
 Guatemala (Agriculture) G: 416 with picture
 Puerto Rico (Agriculture) P: 882 with map
 Rwanda (Economy) R: 571
 São Paulo S: 117

Coffee bean
 Coffee (Preparation for market) Ci: 754 with picture

Coffee break
 Coffee Ci: 753

Coffee Cantata [music by Bach]
 Bach, Johann Sebastian (His works) B: 16

Coffee house Ci: 755

Coffeetree, Kentucky [tree]
 Kentucky coffeetree K: 295

Cofferdam [construction] Ci: 755
 Dam (How dams are built) D: 19

Coffin [funeral]
 Funeral customs (Preparation of the body) F: 557
 Sarcophagus S: 124

Coffin, Levi [American social reformer]
 Underground railroad U: 21

Coffin, Long Tom [literary figure]
 Cooper, James Fenimore Ci: 1035

Coffin, O. Vincent [American political leader]
 Connecticut (table) Ci: 967

Coffin, Robert Peter Tristram [American author] Ci: 756

Cog
 Ship (The cog) S: 407; picture on S: 408

Cogito, ergo sum
 Descartes, René (His philosophy) D: 154

Cognac [drink]
 Alcoholic beverage (Brandy) A: 336

Cognate [language]
 Etymology (Etymons and cognates) E: 375
 Language (Linguistic terms) L: 63

Cognition
 Learning (Theories of learning) L: 163-164

Cognitive behavioral therapy
 Chronic fatigue syndrome C: 539

Cognitive dissonance [psychology]

Social psychology So: 552

Cognitive map [psychology]
 Tolman, Edward Chace T: 322

Cognitive psychology
 Psychology (Major fields of psychology) P: 848

Cognitive school [psychology]
 Psychology (Modern psychology) P: 850

Cognitive theory [psychology]
 Developmental psychology (Cognitive theory) D: 174
 Education (How people learn) E: 96

Cognitive therapy
 Mental illness (Psychotherapy) M: 407-408

Cogswell, Alice [American public figure]
 Gallaudet, Thomas Hopkins G: 14

Cogwheel
 Wheel and axle W: 278

Cohen, George M. [American composer] Ci: 756
 Musical comedy (The first musicals) M: 959

Cohen, Abner [British anthropologist]
 Anthropology (The middle and late 1900's) A: 549

Cohen, Leonard [Canadian author] Ci: 756

Cohen, Paul [American record producer]
 Country music picture on Ci: 1098c

Cohen, Stanley [American physiologist]
 Nobel Prizes (Physiology or medicine: 1986) N: 445

Cohen, Wilbur J. [American government official]
 Health and Human Services, Department of (table) H: 128

Cohen, William Sebastian [American government official] Ci: 756

Cohen-Tannoudji, Claude [Algerian physicist]
 Nobel Prizes (Physics: 1997) N: 442

Coherence theory [philosophy]
 Philosophy (Epistemology) P: 383-384

Coherent light
 Laser (Characteristics of laser light) L: 84-85 with diagram

Cohesion [physics] Ci: 756
 Surface tension So: 1003

Cohl, Emile [French artist]
 Animation (Early animation) A: 514

Coho [fish]
 Fish picture on F: 159
 Salmon (Kinds of salmon) S: 70

Cohort [Roman Empire]
 Army (Ancient armies) A: 726
 Legion L: 184

Cohosh [plant]
 Snakeroot S: 537

Coil [electricity]
 Induction coil I: 240

Coil method [pottery]
 Indian, American (Pottery) I: 145
 Pottery (Shaping the clay) P: 716; picture on P: 718

Coil spring
 Spring So: 806

Coiling [weaving]
 Basket making (Methods) B: 141-142 with pictures

Coin [money]
 Coin collecting Ci: 756; pictures on Ci: 758
 Die and die-making diagram on D: 195
 Dollar D: 294 with pictures
 Eagle E: 6
 Gresham's law G: 391
 Mint M: 612
 Money (The first coins) M: 705-706 with pictures; (United States currency today) M: 709-711 with pictures; (Minting coins) M: 713 with pictures

Coin collecting [hobby] Ci: 756 with pictures
 Gold (Money) G: 251

Coinage
 Language (Linguistic terms) L: 63
 Slang (Coinages) S: 500

Coinage Act [1792]
 Money (The first United States currency) M: 708

Coinage metal [trade]
 Silver (Uses of silver) S: 464

Coincidence range finder [instrument]
 Range finder R: 139

Coir [fiber]
 Coconut palm (The coconut) Ci: 746-747
 Laccadive Islands L: 20

Coit, Stanton [American social worker]
 Settlement house S: 324

Coit Tower
 San Francisco (Downtown San Francisco) S: 92-93

Cojuangco, Corazon *See* Aquino, Corazon *in this index*

Coke [fuel] **Ci:** 759 *with diagrams*

Bitumen **B:** 384

Carbon (Graphite) **C:** 205

Coal (Coal as a raw material) **Ci:** 720 *with picture*; (Developments in England) **Ci:** 731-732

Coal tar **Ci:** 733

Graphite **G:** 323

Industrial Revolution (The revolution in iron-making) **I:** 249

Iron and steel (Raw materials) **I:** 440

Petroleum coke **P:** 350

Coke, Sir Edward [English jurist]

Williams, Roger (Early life) **W:** 310

Coke, Richard [American political leader]

Texas (table) **T:** 203; (The Civil War and Reconstruction) **T:** 207

Coke, Thomas [American religious leader]

Methodists (Early history) **M:** 434-435

Coke, Thomas [British nobleman]

Agriculture (Improved crop-growing methods) **A:** 157

Coke oven

Coke **Ci:** 759 *with diagram*

Coke oven gas **Ci:** 759

Coke oven gas [fuel] **Ci:** 759

Coal (Coal as a raw material) **Ci:** 720

Coke **Ci:** 759 *with diagram*

Gas [fuel] (How gas is manufactured) **G:** 57

Coking coal

Coal (Coal as a raw material) **Ci:** 720

Col [geology]

Alps (How the Alps were formed) **A:** 384

Cola di Rienzo [Italian government official] **Ci:** 759

Rome (Feudal times and the Renaissance) **R:** 434

Tribune **T:** 441

Cola nut *See* Kola nut *in this index*

Colbath, Jeremiah Jones *See* Wilson, Henry [American political leader] *in this index*

Colbert, Claudette [American actress]

Motion picture (Best performance by an actress: 1934) **M:** 862

Colbert, Jean Baptiste [French government official] **Ci:** 760

France (The age of absolutism) **F:** 473

Louis XIV **L:** 475

Colbred sheep

Sheep *picture on S:* 381

Colburn, I. W. [American chemist]

Glass (table) **G:** 218

Colby, Anthony [American political leader]

New Hampshire (table) **N:** 223

Colby, Bainbridge [American government official]

State, Department of (table) **So:** 860

Colchicine [drug]

Colchicum **Ci:** 760

Gout **G:** 281

Triticale **T:** 448

Colchicum [plant] **Ci:** 760 *with picture*

Crocus **Ci:** 1150

Colchis [legendary country]

Golden Fleece **G:** 255

Colcord, Roswell K. [American political leader] Nevada (table) **N:** 173

Cold, Common [disease] **Ci:** 760

Immune system (Active immunity) **I:** 88b

Nose **N:** 549

Rhinitis **R:** 293

Sneezing **S:** 538

Virus (Virus diseases in human beings) **V:** 426

Cold-blooded animal [zoology] **Ci:** 761

Amphibian **A:** 440

Animal (Some common ways of grouping animals) **A:** 472

Dinosaur (How dinosaurs lived) **D:** 211;

(Reproduction and growth) **D:** 211

Fish **F:** 145

Reptile **R:** 250

Cold extrusion [industrial process]

Extrusion **E:** 459

Cold frame [gardening] **Ci:** 761 *with picture*

Pepper **P:** 278

Cold front [weather]

Weather (Synoptic-scale systems) **W:** 159-160 *with diagram*

Cold Harbor, Battle of [1864]

Civil War (table) **Ci:** 624; (Battle of Cold Harbor) **Ci:** 631

Cold Heading [industrial process]

Riveting **R:** 356

Cold-peck cheese

Cheese (Process cheese) **C:** 394-395

Cold-pressing [industrial process]

Olive oil **O:** 744

Vegetable oil (Production) **V:** 294

Cold rolling [industrial process]

Iron and steel (Rolling) **I:** 447 *with diagram*

Cold seep [oceanography]

Deep sea (The deep-sea floor) **D:** 82a

Cold sore [disease] **Ci:** 761

Skin (Skin disorders) **S:** 490

Cold storage **Ci:** 761

See also Food, Frozen *in this index*

Food preservation (Cold storage) **F:** 342

Cold type

Printing (Phototypesetting) **P:** 797

Type **T:** 536

Cold War [international relations] **Ci:** 762 *with pictures*

Air force (Air forces in the nuclear age) **A:** 186

Berlin **B:** 260

Berlin Wall **B:** 267

Central America (Developments since the mid-1900's) **C:** 356

Central Intelligence Agency **C:** 357

Communism (The Cold War) **Ci:** 895

Cuban missile crisis **Ci:** 1179

Education (What should be taught?) **E:** 105

Foreign aid (Economic development and mutual security) **F:** 383

France (The Fourth Republic) **F:** 475-476

Franco, Francisco (As dictator) **F:** 483

Germany (The division of Germany) **G:** 169

India (India in the 1950's and early 1960's) **I:** 133

International relations (The Cold War begins) **I:** 345

Navy (Navies during the Cold War) **N:** 80

North Atlantic Treaty Organization **N:** 471

Nuclear weapon (The Cold War) **N:** 601

Organization for Security and Cooperation in Europe **O:** 853

Pan-American conferences (Stronger ties) **P:** 113

Propaganda (After World War II) **P:** 825

Radio Free Europe/Radio Liberty **R:** 97

Russia (The Cold War) **R:** 554

Socialism (The Cold War) **So:** 561

Spain (Involvement in the Cold War) **So:** 751

Stalin, Joseph (The Cold War) **So:** 827

Third World **T:** 258

Truman, Harry S. (The Truman Doctrine) **T:** 470

Union of Soviet Socialist Republics (History) **U:** 35-38

United Nations (The end of the Cold War) **U:** 92

United States, Government of the (World power) **U:** 146

United States, History of the (The Cold War and foreign policy) **U:** 190; (The easing of Cold War tensions) **U:** 195

War **W:** 23; (Clashing ideologies) **W:** 24; (The United Nations) **W:** 25; (The Cold War era) **W:** 26

World, History of the (The rise of Communism) **W:** 446; (The easing of Cold War tensions) **W:** 448

See also the list of Related Articles in the Cold War article

Cold wave

Hairdressing (The 1900's) **H:** 12

Cold working [manufacturing]

Artillery (The mono-block process) **A:** 763

Cole, Henry [British businessman]

Greeting cards **G:** 387

Cole, Nat "King" [American musician] **Ci:** 771 *with portrait*

Jazz (The swing era) **J:** 71

Cole, Natalie [American singer]

Cole, Nat "King" **Ci:** 771

Cole, Paula [American singer]

Rock music (Rock music today) **R:** 380-381

Cole, Thomas [American painter] **Ci:** 771 *with picture*

Hudson River School **H:** 406

Coleman, Ann [fiancée of]

Buchanan, James (Tragedy) **B:** 659

Coleman, James P. [American political leader] Mississippi (table) **M:** 640

Coleman, Ornette [American composer]

Jazz (New directions) **J:** 73

Coleman, William Thaddeus, Jr. [American government official] **Ci:** 771

Coleoptera [entomology]

Beetle (Kinds of beetles) **B:** 216-217

Insect (table) **I:** 300; *pictures on I:* 283

Coleridge, Samuel Taylor [British poet] **Ci:** 771

English literature (Romantic poetry) **E:** 320

Epigram **E:** 343

Lake Poets **L:** 44

Poetry (Romantic poetry) **P:** 597

Shakespeare, William (Romantic criticism) **S:** 369

Southey, Robert **So:** 688b

Wordsworth, William **W:** 404

Coleridge, Sara [British author]

July (Quotations) **J:** 189

Coles, Edward [American political leader] Illinois (table) **I:** 71

Coles, George [Canadian political leader] Confederation of Canada (Fathers of Confederation) **Ci:** 935 *with picture*

Coles, Nathaniel Adams [American singer] *See* Cole, Nat "King" *in this index*

Colette [French author] **Ci:** 772

Colette, Sidonie-Gabrielle [French author]

Colette **Ci:** 772

Coleus [botany] **Ci:** 772 *with picture*

Gardening (Some popular house plants) **G:** 37 *with picture*

Colewort *See* Kale *in this index*

Colfax, Schuyler [American political leader] **Ci:** 772

Credit Mobilier of America **Ci:** 1125

Grant, Ulysses S. (Election of 1868) **G:** 315

Vice President of the United States (table) **V:** 351; **V:** 348 *with portrait*

Colhua-Mexica [people]

Aztec **A:** 999

Colic [disorder] **Ci:** 772

Colligny, Gaspard de [French political leader]

Catherine de Médicis **C:** 303

Huguenots **H:** 410

Saint Bartholomew's Day, Massacre of **S:** 31

Colin Clout [poem by Skelton]

Skelton, John **S:** 481

Colin Clouts Come Home Again [poem by Spenser]

Spenser, Edmund (Spenser's other poems) **So:** 778

Colines, Simon de [French printer]

Book (The spread of printed books) **B:** 467

Coliseum *See* Colosseum *in this index*

Colitis [disease] **Ci:** 772

Crohn's disease **Ci:** 1150

Diarrhea **D:** 184

Inflammatory bowel disease **I:** 266

Collage [art] **Ci:** 773 *with picture*

Braque, Georges **B:** 564

Cubism **Ci:** 1181 *with picture*

Dadaism *picture on D:* 2

Picasso, Pablo (Cubism) **P:** 448b *with picture*

Schwitters, Kurt **S:** 190

Collagen [protein] **Ci:** 773

Bone (Composition of bone) **B:** 456

Connective tissue **Ci:** 972

Scleroderma **S:** 209

Collamer, Jacob [American political leader]

Taylor, Zachary (table) **T:** 60

Collar [botany]

Grass (The grass plant) **G:** 324

Collar [clothing]

Clothing (The 1600's) **Ci:** 701 *with picture*

Collar [machine]

Die and diemaking *picture on D:* 195

Collar [riding equipment]

Harness **H:** 63 *with diagram*

Invention (The Middle Ages) **I:** 359

Collar cell [zoology]

Sponge (Special cells) **So:** 799 *with diagram*

Collar mining

Mining (Surface mining methods) **M:** 574-575

Collarbone [anatomy] **Ci:** 773 *with diagram*

Human body *diagram on H:* 422

Shoulder **S:** 439 *with picture*

Collards [vegetable] **Ci:** 774

Collared anteater [animal]

Anteater **A:** 541

Collared dove [bird]

Pigeon (Pigeons and human beings) **P:**

Collateral trust bond

Bond (Kinds of bonds) B: 454

Collected Papers of Charles Sanders Peirce, The [book by Peirce]

Peirce, Charles Sanders P: 230

Collected Stories of Jean Stafford, The [book by Stafford]

Stafford, Jean So: 820

Collectibles Ci: 774

Antique A: 557

Collecting [hobby]

Butterfly (How to collect butterflies) B: 742

Doll (What to buy) D: 294

Hobby (Collecting) H: 272

Rock (Rocks as a hobby) R: 373 *with picture*Shell (Collecting shells) S: 388 *with pictures***Collecting tubule** [anatomy]

Kidney (How the kidneys produce urine)

K: 311-312 *with diagram***Collection agency** Ci: 774**Collection box** [mail] See Mailbox in this index**Collection development** [library]

Library (Providing materials) L: 235-236; (The work of librarians) L: 255

Collection of Hymns [book by Wesley]

Methodists (Early history) M: 434-435

Collective bargaining [labor]

Civil service (Federal civil service) Ci: 612

Industrial relations (Collective bargaining) I: 245

Labor movement (Arranging contracts) L: 4 *with pictures*

National Labor Relations Act N: 39

Strike (Functions of strikes) So: 928

Collective behavior [sociology] Ci: 774**Collective community**

Communal society Ci: 877

Inuit (New ways of life) I: 354g-354h

Israel (Rural life) I: 481

Kibbutz K: 310

Collective creation [drama]

Canadian literature (Modern Canadian drama) C: 161

Collective farm [agriculture] Ci: 775

See also State farm in this index

Agriculture (Eastern Europe) A: 154

Asia (Life in China) A: 786-787 *with picture*;
(Farm organization) A: 800

China (Rural life) C: 483; (Agriculture) C: 498

Communism (Under Stalin) Ci: 892

Cooperative (In other countries) Ci: 1036

Czech Republic (Agriculture) Ci: 1213

Czechoslovakia (Communist rule) Ci: 1215-1216

Europe (Rural life) E: 388-389; (Farm organization) E: 407

Germany (Rural life) G: 150

Korea (North Korea) K: 375

Russia (Agriculture) R: 544

Stalin, Joseph (The five-year plan) So: 826

Ukraine (Agriculture) U: 11

Union of Soviet Socialist Republics
(Agriculture) U: 34; (Stalin's policies) U: 36**Collective noun** [grammar]

Noun (Collective nouns) N: 553

Collective ownership

Socialism So: 560

Collective pitch lever

Helicopter (Piloting a helicopter) H: 171

Collective security [international relations]

International relations (Collective security) I: 345

League of Nations (The League in action) L: 160

Peace (Collective security) P: 207

Collective unconscious [psychology]

Jung, Carl Gustav (His theories) J: 195

Collectivism [economics] Ci: 775**Collectivization** [political program]

Ukraine (Soviet rule) U: 12-13

Uzbekistan (History) U: 254

Collector [electronics]Transistor (How transistors work) T: 373 *with diagram*

Vacuum tube (How a vacuum tube works) V: 258

Colleen Bawn, The [play by Boucicault]

Boucicault, Dion B: 515

College

Adolescent (Education) A: 64

Community college Ci: 898

Curriculum (Curriculum content) Ci: 1197

Physical education (University and college programs) P: 432

School (High schools) S: 181

Teaching (Teacher-training programs) T: 67

Universities and colleges U: 206 *with pictures***College** [high school]

France (Education) F: 460-461

College, Junior See Community college in this index**College and Academy of Philadelphia**

Pennsylvania, University of P: 270

College and Research Libraries [publication]

American Library Association A: 413

College degree See Degree, College in this index**Collège d'enseignement général et professionnel** [school]

Canada (Education) C: 107

College entrance examination Ci: 775

Psychology (Systematic assessment) P: 848

College Entrance Examination Board

College entrance examination Ci: 775

College Football Hall of Fame [Indiana]

Hall of fame (Sports halls of fame) H: 22

College Level Examination Program

Adult education (Sources of adult education) A: 68

College of...*Colleges appear under their key words, as in New Jersey, College of***College of Cardinals**

Cardinal C: 210

College preparatory school

Education (The organization of U.S. education) E: 89-90

High school (High schools in the United States) H: 228

College World Series [baseball]

Omaha (Cultural life and recreation) O: 756

Collegiate Church of Saint Peter [London] See Westminster Abbey in this index**Collegiate School**

Yale, Elihu Y: 548

Yale University (History) Y: 549

Collembola [entomology]Insect (table) I: 299; *picture on* I: 280**Collie** [dog] Ci: 776 *with picture**Dog pictures on* D: 265, D: 276**Collier, Henry Watkins** [American political leader]

Alabama (table) A: 274

Collimating lensSpectrometer So: 772 *with diagram***Collin, Jonas** [friend of]

Andersen, Hans Christian A: 451

Colline [opera character]Opera (*Bohème, La*) O: 801**Collins, Anthony** [English philosopher]

Freethinker F: 509

Collins, Billy [American poet]

Poet laureate (table: Poets laureate of the United States) P: 590

Collins, David [Australian settler]

Hobart H: 271

Collins, Eddie [American baseball player]

Baseball (table: Hall of Fame) B: 134

Collins, Eileen Marie [American astronaut]Ci: 776 *with portrait*

Astronaut (table) A: 830

Collins, Floyd [American explorer]

Mammoth Cave National Park M: 130

Collins, Jimmy [American baseball player]

Baseball (table: Hall of Fame) B: 134

Collins, John [American political leader]

Rhode Island (table) R: 311

Collins, John [American political leader]

Delaware (table) D: 109

Collins, John S. [American businessman]

Miami Beach M: 482

Collins, LeRoy [American political leader]

Florida (table) F: 260

Collins, Martha Layne [American political leader]

Kentucky (table) K: 290

Collins, Michael [American astronaut]

Space exploration (Landing on the moon) So: 717

Collins, Michael [Irish political leader]

Irish Republican Army (Division in the IRA) I: 433

Sinn Féin (History) S: 473

Collins, Mount [North Carolina-Tennessee]

Great Smoky Mountains G: 348

Collins, Thomas [American political leader]

Delaware (table) D: 109

Collins, Wilkie [British author] Ci: 776

Detective story (The pattern) D: 162-163

Collins, William Wilkie

Collins, Wilkie Ci: 776

Collins, Zerubbabel [American sculptor]Sculpture (American sculpture) S: 255 *with picture***Collip, James Bertram** [Canadian biochemist]

Banting, Sir Frederick Grant B: 99

Insulin (History) I: 308

Collision insurance

Insurance (Automobile insurance) I: 313

Collodi, Carlo [Italian author] Ci: 776**Collodion** [chemical]

Photography (The beginnings of modern photography) P: 426

Collodion cotton

Guncotton G: 441

Colloid [chemistry] Ci: 777

Suspension So: 1012

Ultramicroscope U: 16

Colloided powder

Gold (Other uses) G: 251

Gunpowder (Kinds of gunpowder) G: 441

Colloquialism

Language (Linguistic terms) L: 63

Novel (The United States) N: 573

Slang S: 499

Colloquy of the Old Men, The [story]

Irish literature (Heroic tales, romances, and sagas) I: 430-431

Collor de Mello, Fernando [Brazilian political leader]

Brazil (Return to civilian government) B: 586

Collotype printing

Printing (Collotype printing) P: 801

Colman, George [British author]

Garrick, David G: 45

Colman, Norman J. [American government official]

Agriculture, Department of (table) A: 161

Cleveland, Grover (table) Ci: 671

Colman, Ronald [British actor]

Motion picture (Best performance by an actor: 1947) M: 862

Colo [gorilla]

Gorilla (Gorillas in captivity) G: 276

Colôane [island, Pacific Ocean]

Macao M: 2

Colobine [monkey]

Primate (Old World monkeys) P: 778a

Colobus [monkey] Ci: 777Monkey *picture on* M: 728

Primate (Old World monkeys) P: 778a

Cologne [Germany] Ci: 777

Agrippina the Younger A: 162

Cologne [perfume]

Perfume P: 286

Cologne Cathedral

Cologne Ci: 777

"Colomba" [story by Mérimée]

Mérimée, Prosper M: 418

Colombard [grape variety]

Grape (European grapes) G: 319

Colombia [country] Ci: 778 *with pictures and maps*

Bolívar, Simón B: 441

Flag *picture on* F: 200

Herrera, Tomás H: 214

Indian, American (Indians of the Caribbean) I: 172; (Indians of the Andes) I: 173; (Indians of the Tropical Forest) I: 175

Panama (Colombian rule) P: 120

World War II (table: The Allies) W: 471

See also the list of Related Articles in the Colombia article

Colombian coca [plant]

Coca Ci: 742

Colombo [city, Sri Lanka] Ci: 784Sri Lanka So: 817; *picture on* So: 819**Colombo, Cristóforo** See Columbus, Christopher in this index**Colombo, Domenico** [father of]

Columbus, Christopher (Early years) Ci: 857

Colombo Plan [economics] Ci: 784**Colón** [Panama] Ci: 785Panama (Way of life) P: 116; *picture on* P: 118**Colon** [anatomy] Ci: 785

Colon cancer Ci: 785

Colostomy Ci: 850

Diverticulitis D: 240 *with picture*

Fiber, Dietary F: 88

Inflammatory bowel disease I: 266

Colon [punctuation] Ci: 785

Punctuation (The colon) P: 902

Colón, Archipiélago de See Galapagos Islands in this index**Colón, Cristóbal** See Columbus, Christopher in this index

Colon cancer [disorder] Ci: 785

Cancer (Classification by primary body site)

C: 167-168; (table) C: 170

Colón Theater [Buenos Aires]Argentina (Recreation) A: 651; *picture on* A: 652**Colonel** [rank]Army, United States *picture on* A: 732Marine Corps, United States *pictures on* M: 207

Rank, Military (table) R: 140

Colonia [government]

Mexico City (Residential and commercial centers) M: 476a-476b

Colonial architectureArchitecture (Colonial architecture in America) A: 624 *with pictures*Colonial life in America (Houses) Ci: 796 *with picture*

Georgian architecture G: 136

Richmond Town R: 334 *with picture***Colonial bentgrass** [plant]

Bentgrass B: 254

Colonial Dames of America, National Society of the Ci: 785**Colonial life in America** [U.S. history] Ci: 786 *with pictures and map**See also* Pioneer life in America *in this index*African Americans (Colonial times) A: 136d *with picture*

Agriculture (Colonial agriculture) A: 156

American literature (Colonial literature [1608-1764]) A: 414

Cotton (American colonists) Ci: 1092

Draft, Military (Military drafts throughout history) D: 318

Fire department (Fire protection in North America) F: 128

Glass (Early American glass) G: 222

Hispanic Americans (Exploration and settlement) H: 250; (Cultural backgrounds) H: 246

Immigration (The first wave) I: 81

Indentured servant I: 106

Iron and steel (The Iron Age) I: 450-451

Journalism (Early American journalism) J: 174

Law (Beginnings of U.S. law) L: 136

Log cabin L: 422 *with picture*

Minutemen M: 613

Money (History of United States currency) M: 707 *with pictures*

Navy, United States (The earliest colonial wars) N: 85

New France (Colonial life) N: 204

New Year's Day (Early customs) N: 289

Pewter (History) P: 352-353

Plymouth Colony P: 582 *with pictures*

Popular music (Popular music before recording) P: 669

Postal Service, United States (Colonial times) P: 700

Postal services (Postal service in the United States) P: 706

Revolutionary War in America (Life in the American Colonies) R: 271

Rice (History) R: 327

School (Colonial schools) S: 183

Slavery (Modern times) S: 502

Town crier T: 350

United States, History of the (The colonial heritage) U: 152 *with pictures and map*

Wampum W: 22

Williamsburg *pictures on* W: 313*See also the list of Related Articles in the* Colonial Life in America *article***Colonial life in Latin America**

Argentina (Colonial days) A: 656

Chile (Colonial period) C: 468

Honduras (The colonial period) H: 312

Indian, American (Indians of Middle America) I: 169-171; (Indians of the Andes) I: 173-175; (Indians of the Marginal Regions) I: 176-177; (In Latin America) I: 178

Latin America (Colonial rule) L: 106; (The beginnings of colonial unrest) L: 106

Latin-American literature (Colonial literature) L: 111

Mexico (Spanish rule) M: 470; (Revolt against the Spaniards) M: 470

Paraguay (The Jesuits) P: 149

Venezuela (European exploration and settlement) V: 304

Colonial National Historical Park [Virginia]Colonial life in America (Places to visit) Ci: 800 *with picture*

National Park System (table: National historical parks) N: 56-57

Williamsburg (Williamsburg today) W: 313

Yorktown Y: 569

Colonial organism

Life (The structure of living things) L: 276

Colonialism [political science] Ci: 813*See also* Imperialism *in this index*

Africa (The beginnings of European control) A: 133; (Colonial rule) A: 134

Asia (The Western conquest of Asia) A: 806; (The age of colonialism) A: 806; (The end of colonialism) A: 807; (Results of colonialism) A: 807

Colony Ci: 815

Europe (Colonial expansion) E: 413

Imperialism I: 92

Minority group (How a group becomes a minority) M: 609

Muslims (Colonialism) M: 964d

Racism (History) R: 62

World, History of the (Imperialism) W: 445; (The birth of new nations) W: 448; *map on* W: 439

World War I (Competition for colonies) W: 454

*See also the list of Related Articles in the*Colonialism *article***Colonna, Oddone** [pope]

Martin V M: 235

Colonna, Piazza

Rome R: 429

ColonnadeArchitecture (table) A: 608 *with picture*;

(Islamic architecture) A: 613

Colonnade of the Congress [Brussels]

Unknown soldier U: 211

Colony [biology]*See also* Community *in this index*

Prairie dog (Habits) P: 732

Colony [political unit] Ci: 815

Colonialism Ci: 813

Commonwealth of Nations (Dependencies)

Ci: 876

World, History of the (The colonization of America) W: 441

Colony, Penal *See* Penal colony *in this index***Colony House**

Newport N: 379

Colophon

Book (Inside a book) B: 464-465

Color Ci: 816 *with pictures*

Culture (Using symbols) Ci: 1187

Flag F: 194

Frog (Skin) F: 536-537

Gem (Qualities of gem minerals) G: 77

Interior design (Elements of design) I: 327

with pictures; (Pattern and texture) I: 328; (Using color) I: 331

Mineral (Color) M: 567

Newton, Sir Isaac (Light and color) N: 389

Paint (Shading) P: 25

Painting (The elements of painting) P: 34-35

Photography (Tone or color) P: 412; (Color)

P: 413

Pigment P: 461

Protective coloration P: 831

Rainbow R: 127

Sculpture (Form and treatment) S: 230-231

Sun (Color) So: 977

Color [subatomic physics]

Subatomic particle (The Standard Model)

So: 938

Color [poems by Cullen]

Cullen, Countee Ci: 1185

Color balance

Photography (Color balance) P: 418

Color blindness [birth defect] Ci: 827 *with pictures*

Blindness B: 401

Color (The roles of the eyes and brain)

Ci: 818-819

Dalton, John D: 16

Eye (Color blindness) E: 466

Mammal (Senses) M: 120-121

Color burst [electronics]

Television (The television camera) T: 121-122

Color by additionColor (Mixing colored lights) Ci: 821; *diagram on* Ci: 822**Color by subtraction**Color (Mixing colorants) Ci: 819-820 *with diagrams***Color circle**Color (Producing color harmony) Ci: 823 *with diagram***Color-defective vision** *See* Color blindness *in this index***Color-field painting** [art]Painting (Color-field painting) P: 86 *with picture***Color film**Photography (Color balance) P: 418; (Developing color film) P: 422; *pictures on* P: 423**Color filter**

Photography (Filters) P: 419

Color guard

Flag (Carrying the flag) F: 219

Color harmonyColor (Producing color harmony) Ci: 823 *with diagrams***Color Intervals at Provincetown** [drawing by Hofmann]Drawing *picture on* D: 343**Color negative film**Photography (Film) P: 417-418; (Developing color film) P: 422-424 *with pictures***Color of Money, The** [film]

Newman, Paul N: 379

Color photographyPhotography (Developing color film) P: 422-424 *with pictures***Color printing**

Photoengraving and photolithography

(Capturing the image) P: 405

Printing (Printing in color) P: 801 *with pictures***Color Purple, The** [book by Walker]

African American literature (Recent developments) A: 136a

African Americans (Achievements) A: 136p

Walker, Alice W: 14

Color Purple, The [film]

Winfrey, Oprah W: 338

Color reversal filmPhotography (Film) P: 417-418; (Developing color film) P: 422-424 *with pictures***Color scheme**Interior design (Using color) I: 331 *with pictures***Color sensitivity**

Photography (Color sensitivity) P: 418

Color television

Television (Creating television signals) T: 120-121; (Amplifiers and separators) T: 123-124

Color triangleColor *diagram on* Ci: 822**Color vision**Color (How we see color) Ci: 818-819 *with picture*

Color blindness Ci: 827

Color vision deficiency *See* Color blindness *in this index***Color wheel**Color (Producing color harmony) Ci: 823 *with diagram***Colorado** Ci: 828 *with pictures and maps*

Civil rights (Major changes in the field of civil rights) Ci: 610

Gold rush (Gold rushes in the United States)

G: 254

Great Sand Dunes National Monument G: 348

United States *picture on* U: 124*See also the list of Related Articles in the* Colorado *article***Colorado, University of** Ci: 848**Colorado Aqueduct** [California]

Aqueduct (Present-day aqueducts) A: 581

Colorado Avalanche [hockey team]

Hockey (table: National Hockey League)

H: 281

Colorado-Big Thompson Project [water system]

Colorado (The mid-1900's) Ci: 847

Colorado River Ci: 849

Colorado City [former name]

Yuma Y: 586

Colorado Desert [region, California] Ci: 848

California (The Basin and Range Region) C: 50

Colorado IndiansClothing *picture on* Ci: 687**Colorado National Monument** [Colorado]

Ci: 848

Colorado *picture on* Ci: 840

National Park System (table: National monuments) N: 50

Colorado Party [political party]

Paraguay (Politics) P: 145; (Stroessner's rule and overthrow) P: 150

Uruguay (Politics) U: 223; (Civil war) U: 227; (Struggles for power) U: 228

Colorado Plateau [region, U.S.]

Colorado (Land regions) Ci: 838

United States (The Western Plateaus, Basins, and Ranges) U: 125

Colorado potato beetle [insect]

Beetle (Leaf beetles) B: 217

Potato beetle P: 714 *with picture***Colorado River** [U.S.] Ci: 848 *with map*Arizona (Rivers, waterfalls, and lakes) A: 682
California (Rivers, waterfalls, and lakes) C: 50-51

Grand Canyon G: 306

Grand Canyon National Park (Recreational activities) G: 307-308 *with map*

Irrigation I: 456

Powell, John Wesley P: 726

River (table) R: 352

Salton Sea S: 76a

Seven Natural Wonders of the World (The Grand Canyon) S: 324

Utah (Rivers and lakes) U: 242

Colorado River Storage Project

Colorado (The mid-1900's) Ci: 847

Colorado Rockies [baseball team]

Baseball (table) B: 130

Colorado Springs [Colorado] Ci: 849**Colorado squawfish**

Minnow M: 607

ColorantColor (Mixing colorants) Ci: 819-821 *with diagrams*

Ink I: 272

Coloratura soprano

Opera (table) O: 791; (The singers) O: 792

Colorbearer

Flag (Carrying the flag) F: 219

Colorectal cancer [disease]

Colon cancer Ci: 785

Colored [racial category] See *Coloured in this index***Colored glass**

Glass (Specialty glasses) G: 212; (Colored glass) G: 214

Stained glass So: 821 *with pictures***Colored Methodist Episcopal Church** [religious group]

Methodists (Social change and division) M: 435

Colored pencil

Pencil (Colored pencils) P: 236

Colored people See *African Americans in this index***Colored People, National Association for the Advancement of** See *National Association for the Advancement of Colored People in this index***Colored Women, National Association of**

Terrell, Mary Church T: 175

Colorfast

Dye (How dyes work) D: 395

Coloring, Protective See *Protective coloration in this index***Coloring agent**

Food additive (Kinds of additives) F: 339

Colorpoint coatCat (Coat) C: 287 *with picture***Colorpoint shorthair**

Cat (Short-haired breeds) C: 290

Colors

Flag (table) F: 193; (Military flags) F: 195-196; (First United States flags) F: 208-210

Colosio, Luis Donaldo [Mexican political leader]

Zedillo Ponce de León, Ernesto Z: 592

Colossal scale [art]

Sculpture (Kinds of sculpture) S: 230

Colosseum [Rome] Ci: 849 *with picture*

City picture on Ci: 580

Italy picture on I: 497

Rome (The Colosseum) R: 433 *with picture***Colossians, Epistle to the** [New Testament]

Ci: 850

Colossus of Rhodes [sculpture by Chares]

Rhodes R: 317

Seven Wonders of the Ancient World (The Colossus of Rhodes) S: 325; *picture on* S: 327**Colostomy** [surgery] Ci: 850

Surgery (Some common surgical operations) So: 1006

Colour See *Color in this index***Coloured** [racial category]

South Africa (Political parties) So: 609;

(People) So: 609; (Ways of life) So: 611

Zimbabwe (People) Z: 596

Colposcope [instrument]

Pap test P: 132

Colquitt, Alfred H. [American political leader]

Georgia (table) G: 130

Colquitt, Oscar B. [American political leader]

Texas (table) T: 203

Colt [horse]

Horse (table; Horse terms) H: 343; (Life history) H: 351

Horse racing (Thoroughbred horses) H: 363-364

Colt, Samuel [American businessman] Ci: 850*with portrait*

Arizona (Libraries and museums) A: 674

Connecticut (The 1800's) Ci: 970

Colt .45 [gun]Handgun (Types of handguns) H: 43 *with picture***Colt Paterson** [gun]

Handgun (Rapid-fire handguns) H: 45

Colter [tool]

Plow (The tractor plow) P: 575

Colter, John [American explorer] Ci: 850Wyoming (Exploration) W: 533; *picture on* W: 535

Yellowstone National Park (History) Y: 559-560

Coltrane, John William [American saxophonist]

Ci: 850

Jazz (New directions) J: 73

Colts, Indianapolis See *Indianapolis Colts in this index***Coltsfoot** [plant] Ci: 851 *with picture***Colubrid** [zoology]

Snake (Colubrids) S: 534

Colugo [mammal]Flying lemur F: 312 *with picture***Colum, Padraic** [Irish dramatist] Ci: 851

Irish literature (Drama) I: 432

Regina Medal (table: 1961) R: 206

Columba, Saint [Irish missionary]

Irish literature (Early Irish literature) I: 430

Scotland (Beginning of the Scottish kingdom) S: 219

Tory Island T: 343

Columbarium [burial vault]

Cremation Ci: 1126

Columbia [company]

Motion picture (Movies become big business) M: 866

Columbia [Maryland]City planning *picture on* Ci: 601Washington, D.C. (Metropolitan area) W: 80-81 *with map***Columbia** [Missouri] Ci: 851**Columbia** [South Carolina] Ci: 851South Carolina (Population) So: 644; *pictures on* So: 649, So: 651**Columbia** [space shuttle]Astronaut (Achievements in space) A: 829-830
National Aeronautics and Space Administration N: 27Space exploration (The shuttle era begins) So: 723 *with picture***Columbia** [U.S.] Ci: 851**Columbia, Mount**Alberta (Land regions) A: 322 *with map***Columbia College** [New York City]

Columbia University (Its divisions) Ci: 853

Columbia Icefield [Alberta]Alberta (Places to visit) A: 320 *with picture*

Jasper National Park J: 65

Columbia Plateau [region, U.S.]

Idaho (Land regions) I: 36

Nevada (Land regions) N: 166

Oregon (Land regions) O: 838

United States (The Western Plateaus, Basins, and Ranges) U: 125

Columbia River [river, Canada-U.S.] Ci: 852 *with map*

Canada (Rivers, waterfalls, and lakes) C: 118-120

Exploration (Crossing North America) E: 447

Grand Coulee Dam G: 308

Gray, Robert G: 334

Jetty J: 116 *with picture*

Oregon (Rivers, waterfalls, and lakes) O: 840

Washington W: 60

Columbia River Gorge [region, Oregon-Washington]

Oregon (Places to visit) O: 836

Columbia River Treaty [1964]

British Columbia (The mid-1900's) B: 630

Montana (Rivers and lakes) M: 752-754

Columbia Seefirst Center [Seattle]

Seattle (Landmarks) S: 273

Columbia University Ci: 853See also *Teachers College, Columbia University in this index*

Butler, Nicholas Murray B: 728

New York (Libraries) N: 294

Pulitzer, Joseph (His bequests) P: 887

Universities and colleges (The oldest U.S. universities and colleges) U: 210

Columbian, The [magazine]

Magazine (History) M: 43

Columbian Museum of Chicago [former name]See *Field Museum in this index***Columbian Order** See *Tammany, Society of in this index***Columbian Squires** [organization]

Knights of Columbus K: 352

Columbine [literary figure]

Pantomime P: 132

Columbine [plant] Ci: 853Colorado *picture on* Ci: 828Flower (Flowers of woodlands and forests) F: 284 *with picture***Columbine High School** [Littleton]

Denver (History) D: 148

Columbite [mineral] Ci: 853**Columbium** [element]

Niobium N: 424

Columbus [Georgia] Ci: 853**Columbus** [New Mexico]

Mexico (The Constitution of 1917) M: 472-473

Columbus [Ohio] Ci: 854 *with picture and map*Ohio *pictures on* O: 682, O: 684**Columbus** [pen name]

Adams, John Quincy (Lawyer and writer) A: 40-41

Columbus, Bartholomew [brother of]

Columbus, Christopher (Early years) Ci: 857; (Success in Spain) Ci: 858; (Trouble, settlement, and exploration) Ci: 862

Santo Domingo S: 117

Columbus, Christopher [Italian explorer] Ci: 857*with pictures and map*

Atlantic Ocean (Exploration) A: 867

Canada, History of (Early European exploration) C: 140-141

Cattle (American cattle) C: 315

Corn (European corn production) Ci: 1062

Cuba (Early years) Ci: 1175

Dominica (History) D: 302

Dominican Republic (History) D: 304 *with picture*Exploration (The great age of European exploration) E: 442-444 *with map*Flag *picture on* F: 209

Food (Foods of the New World) F: 336

Indian, American I: 136

Isabella I: 461

Latin America (European discovery and exploration) L: 104

Lemon (History) L: 189

Panama (The Spanish colonial period) P: 120

Ponce de León, Juan (Early life and career) P: 655

Puerto Rico P: 872

Renaissance (The heritage of the Renaissance) R: 238-239

Tobacco (History) T: 307

United States, History of the (Columbus) U: 151

Venezuela V: 298

Virgin Islands V: 392; (Exploration) V: 396

West Indies W: 201; (The colonial period) W: 205

World's fair W: 500

Columbus, Diego [brother of]

Columbus, Christopher (Early years) Ci: 857; (Trouble, settlement, and exploration) Ci: 862

Columbus, Diego [son of]

Columbus, Christopher (Young adulthood) Ci: 858

Columbus, Ferdinand [son of]

Columbus, Christopher (Years of waiting) Ci: 858; (Fourth voyage westward) Ci: 863

Columbus, Knights of [organization]

Knights of Columbus K: 352

Columbus Blue Jackets [team]

Hockey (table: National Hockey League) H: 281

Columbus Day [custom] Ci: 865**Columbus Dispatch** [newspaper]

Newspaper (Recent trends) N: 386-387

Columbus Museum of Art

Columbus (Cultural life and recreation) Ci: 855

- Column** [architecture] Ci: 865 *with pictures*
Architecture (table) A: 608 *with picture*
Building construction (Beams, girders, and columns) B: 682-683
Sculpture (As part of architecture) S: 229
- Column** [mathematics]
Addition (Adding 10's and 1's) A: 50
- Column of July** [Paris]
July Revolution J: 190 *with picture*
- Column of King Sigismund**
Warsaw (The city) W: 38
- Column of Marcus Aurelius** [ruins]
Rome (Other remains) R: 433
- Column still**
Distilling D: 239
- Columnar cell** [physiology]
Epithelium E: 345
- Columnar snow crystals**
Snow (How snow forms) S: 539 *with picture*
- Columnar transposition**
Codes and ciphers (Transposition) Ci: 749
- Coma** [astronomy]
Comet Ci: 867
- Coma** [disorder] Ci: 866
Living will L: 399
- Coma** [optics]
Aberration (Point aberration) A: 10-11
- Coman, Carolyn** [American author]
Literature for children (Fiction) L: 358-359
- Comanche**
Horse (table): Famous horses in history and legend) H: 361
- Comanche Indians** [American Indians] Ci: 866 *with picture*
Code talkers Ci: 749
Indian, American (Indians of the Plains) I: 158-159; *picture on I: 136d*
Quanah Q: 5
Texas Rangers (Early days) T: 211
- Comanche Village, A** [painting by Catlin]
Indian, American *picture on I: 136d*
- Comeneci, Nadia** [Romanian gymnast] Ci: 866
Olympic Games (Boycotts) O: 753; *picture on O: 754*
- Comeyagua** [city, Honduras]
Tegucigalpa T: 87
- Comb** [zoology]
Chicken (The body of a chicken) C: 440 *with pictures*
- Comb-footed spider**
Spider (Tangled-web weavers) So: 788; (table) So: 790; *picture on So: 782*
- Comb jelly** [sea animal] See Ctenophore in this index
- Comba, Juan** [Spanish artist]
Drama *picture on D: 333*
- Combat, Trial by** See Trial by combat in this index
- Combat command** [military unit]
Air Force, United States (Combat commands) A: 192
- Combat correspondent**
War correspondent W: 27
- Combat engineer**
Engineers, Corps of E: 291
- Combat fatigue** [psychology] See Post-traumatic stress disorder in this index
- Combat knife**
Knife (Types of knives) K: 345-346
- Combat mission** [warfare]
Air force (The role of air forces) A: 182
Air Force, United States (Offense) A: 190
- Combat of the Kearsarge and the Alabama** [painting by Manet]
Alabama *picture on A: 255*
Manet, Edouard M: 139
- Combat service support**
Army, United States (Weapons and equipment of the Army) A: 734
- Combat ship**
Navy, United States (Combat ships) N: 84
- Combat unit**
Army, United States (Weapons and equipment of the Army) A: 734
- Combatant craft** [ship]
Navy, United States (Combat ships) N: 84
- Combination** [boxing]
Boxing (Boxing skills) B: 530
- Combination carrier** [ship]
Tanker (Kinds of tankers) T: 28
- Combination padlock**
Lock (Mechanical locks) L: 411-412
- Combination truck** [vehicle]
Truck (Kinds of trucks) T: 457
- Combinations** [mathematics]
Permutations and combinations P: 290
- Combinatorics** [mathematics]
Permutations and combinations P: 290
- Combine** [machine] Ci: 866
Corn (Harvesting) Ci: 1061; *picture on Ci: 1062*
North Dakota *picture on N: 511*
Oats (Harvesting oats) O: 641 *with picture*
Potato (Harvesting) P: 713 *with picture*
Reaper R: 173
Rice (Harvesting) R: 326 *with picture*
Wheat (Harvesting) W: 272 *with picture*
- Combine painting** [art]
Rauschenberg, Robert R: 150
- Combined Chiefs of Staff** [World War II]
Joint Chiefs of Staff J: 155
- Combined competitions**
Skiing (Alpine competitions) S: 486-487
- Combined operations units** [military]
Commando Ci: 871
- Combined warfare**
Army A: 724
- Combing** [fiber]
Thread (Making thread from natural fibers) T: 269
Wool (Making yarn) W: 400
- Combing length fiber**
Wool (Processing of wool) W: 400
- Combining volumes, Law of**
Gay-Lussac, Joseph Louis G: 71
- Combite** [custom]
Haiti (People) H: 14
- Combo** [music]
Jazz (The sound of jazz) J: 68 *with picture*
- Combs, Bert T.** [American political leader]
Kentucky (table) K: 290
- Combs, Earle** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Combustible material**
Fire (Kinds of fire) F: 120
Fire extinguisher F: 130
- Combustion** [chemistry] Ci: 867
Carbon dioxide C: 206
Carbon monoxide C: 207
Environmental pollution (Air pollution) E: 331; (Solid waste) E: 334
Fire (What is fire?) F: 120
Lavoisier, Antoine Laurent L: 129
Oxidation O: 888 *with picture*
Science (The Age of Reason) S: 199
- Combustion chamber**
Electric power (Fossil-fueled steam electric power plants) E: 183 *with diagram*
Gasoline engine (Cylinder head) G: 64 *with pictures*
Jet propulsion (Power in a jet engine) J: 111 *with diagram*
Rocket (Kinds of rocket engines) R: 388 *with diagram*
Turbine (Gas turbines) T: 497-498
- Combustion cleaner**
Air cleaner (Types of air cleaners) A: 175-176
- Combustion furnace**
Furnace (Sources of heat) F: 567 *with diagram*
- Come Back, Little Sheba** [play by Inge]
Inge, William I: 270
- Come Hither** [book by De la Mare]
De la Mare, Walter D: 95
- Come with Me: Poems for a Journey** [book by Nye]
Literature for children (Children's literature today) L: 365
- Comeback City** [name for]
Cleveland (Comeback City) Ci: 667
- COMECON** [economic alliance]
Cold War (The Containment Policy) Ci: 763
Europe (Trade) E: 404
- Comedia de Calisto y Melibea** [play]
Spanish literature (The 1400's) So: 758
- Comédie-Française** [theater group]
Drama (France) D: 335
Theater (France) T: 248
- Comédie-Italienne** [theater group]
Drama (France) D: 335
- Comédie larmoyante**
Drama (France) D: 335
- Comédiens du Roi, Les** [theater group]
Drama (The French theater) D: 333
- Comédies et Proverbes** [plays by Musset]
Musset, Alfred de M: 967
- Comedy** [drama] Ci: 867
Drama (Comedy) D: 325; (New Comedy) D: 327; (Roman drama) D: 328; (Italian Renaissance drama) D: 330; (England) D: 334
Greek literature (Drama) G: 377
- Plautus P: 570
- Comedy of character**
Comedy Ci: 867
- Comedy of Errors, The** [play by Shakespeare]
Shakespeare, William (*The Comedy of Errors*) S: 356
- Comedy of humours**
Drama (Elizabethan playwrights) D: 331-332
- Comedy of ideas**
Comedy Ci: 867
- Comedy of manners**
Comedy Ci: 867
Drama (England) D: 334
English literature (Restoration drama) E: 318
- Comedy of menace** [drama]
Pinter, Harold P: 475
- Comegys, Cornelius P.** [American political leader]
Delaware (table) D: 109
- Comanias, John Amos** [Czech educator]
Ci: 867
Literature for children (Early children's literature) L: 361
Universal language U: 205
- Comer, Braxton Bragg** [American political leader]
Alabama (table) A: 274
- Comet** [airplane]
Airplane (The jet age) A: 238; *picture on A: 235*
Aviation (A new age of flight) A: 990
- Comet** [astronomy] Ci: 867 *with pictures*
Halley, Edmond H: 24
Halley's Comet H: 24 *with diagram*
Halo H: 27
Jupiter (The impact of Comet Shoemaker-Levy 9) J: 200 *with picture*
Meteor (Meteor showers) M: 431
Moon (Origin and evolution of the moon) M: 788
Oort cloud O: 788
Shoemaker, Eugene Merle S: 433
Solar system (Comets) So: 581
Solar wind So: 582
Space exploration (Probes to comets) So: 711
- Comet** [train]
Railroad (The 1920's and the Great Depression) R: 118
- Cometary globule**
Star *picture on So: 845*
- Comfort bicycle**
Bicycle (Road bikes) B: 290
- Comic book**
Cartoon C: 263
Comics Ci: 870
- Comic opera** [music]
Gilbert and Sullivan G: 189
Opera (Opera seria and opera buffa) O: 797
- Comic strip**
Cartoon C: 263
Comics (Comic strips) Ci: 869
- Comics** Ci: 869 *with pictures*
Cartoon C: 263; (Developing the idea) C: 266-267 *with pictures*
- Comics Code Authority**
Comics (Comic books) Ci: 870
- "Comin' Thro' the Rye"** [song]
Burns, Robert (Burns's works) B: 710
- Cominform** [organization]
Cold War (The Containment Policy) Ci: 763
Yugoslavia (Communist rule) Y: 580
- Coming and Going of the Pony Express, The** [painting by Remington]
Pony express *picture on P: 658*
- Coming of Age in Samoa** [book by Mead]
Mead, Margaret M: 344
- Coming Race, The** [book by Bulwer-Lytton]
Bulwer-Lytton, Edward George Earle Lytton B: 697
- Comino** [island, Mediterranean]
Malta M: 113 *with map*
- Cominotto** [island, Mediterranean]
Malta M: 113 *with map*
- COMINT** [cryptology] See Communications intelligence in this index
- Comintern** [organization]
Communism (The spread of Communism) Ci: 893
Lenin, V. I. (Civil war) L: 194
Spanish Civil War (Foreign assistance) So: 756a
- Comiskey, Charles A.** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Comiskey Park** [Chicago]

- Baseball (Depression and war) B: 136
- Comitia** [government, ancient Rome]
Plebeians P: 572
Rome, Ancient (The Roman Republic) R: 441-444
- Comma** [punctuation]
Punctuation (The comma) P: 902
- Commager, Henry Steele** [American historian]
Ci: 870
- Command** [military unit]
Air force (The organization of air forces) A: 183
Air Force, United States (Organization of the Air Force) A: 192
Army, United States (Organization of the Army) A: 736 with diagram
Navy, United States (The Operating Forces) N: 85
- Command economy** See Planned economy in this index
- Command flag**
Flag (Military flags) F: 195-208
- Command guidance**
Guided missile (Command guidance) G: 426 with diagram
- Command line interface** [electronics]
Computer (A keyboard) Ci: 912; (Operating system software) Ci: 916-917
- Command of the Army Act** [1867]
Reconstruction (The impeachment of Johnson) R: 178
- Command/service module**
Space exploration (Apollo: Mission to the moon) So: 714-715 with pictures
- Command ship**
Navy, United States (Combat ships) N: 84
- Commandant** [military officer]
Coast Guard, United States (Organization of the Coast Guard) Ci: 736
Marine Corps, United States (Headquarters) M: 208
- Commandant of the Marine Corps** [military officer]
Navy, Department of the N: 81
- Commander** [rank]
Rank, Military (table) R: 140
- Commander in chief** [rank] Ci: 870
Constitution of the United States (Article II, Section 2) Ci: 1009
President of the United States (Commander in chief) P: 765
Rank, Military R: 139
- Commander Islands** [Bering Sea] Ci: 870
- Commandments, Ten** See Ten Commandments in this index
- Commando** [soldier] Ci: 870
Army (Attack) A: 725
Rangers R: 139
- Commedia** [poem by Dante]
Divine Comedy D: 242
- Commedia dell'arte** [drama]
Drama (Commedia dell'arte) D: 331 with picture, (Italy) D: 335
Italian literature (Humanism and the Renaissance) I: 494
Pantomime P: 132
- Commemorative law**
United States, Government of the (Functions) U: 138
- Commemorative sculpture**
Sculpture (As monuments and memorials) S: 229
- Commemorative stamp**
Postal Service, United States (Stamps and other mailing materials) P: 699; pictures on P: 701
Stamp collecting (Special stamps) So: 830, pictures on So: 830
- Commencement** [education]
Graduation G: 297
- Commendation Medal**
Medals, decorations, and orders (table) M: 357
- Commensalism** [biology]
Symbiosis So: 1065
- Commentaries** [essays by Story]
Story, Joseph So: 912
- Commentaries on American Law** [book by Kent]
Kent, James K: 271
- Commentaries on the Gallic War** [book by Caesar]
Caesar, Julius (Other talents) C: 14
History (The ancient Greeks and Romans) H: 261-262
- Commentaries on the Laws of England** [book by Blackstone]
Blackstone, Sir William B: 394
Magna Carta (The charter after 1215) M: 53
- Commentary**
Journalism (Influencing public opinion) J: 172
- Commerce** [economics] See Trade in this index
- Commerce, Chamber of**
Chamber of commerce C: 371
- Commerce, Department of** [U.S.] Ci: 871 with picture
Balance of payments (How the balance of payments is determined) B: 35
Washington, D. C. map on W: 76
- Commerce, Secretary of** [office]
Commerce, Department of Ci: 871
Flag picture on F: 211
- Commerce and Labor, Department of** [U.S. history]
Commerce, Department of (History) Ci: 871
Labor, Department of (History) L: 2
- Commerce clause**
Constitution of the United States (Article I, Section 8) Ci: 1007
- Commercial**
Advertising (Television) A: 73; (Radio) A: 75; (Social effects) A: 78
Radio (Stations and networks) R: 90
Television (Commercial television) T: 110; (The national networks) T: 114
- Commercial agent** [diplomat]
Consul Ci: 1017
- Commercial agriculture**
Agriculture (Commercial agriculture) A: 148
- Commercial and Industrial Development Corporation**
Ottawa (The 1900's) O: 875
- Commercial arbitration**
Arbitration (Commercial arbitration) A: 592
- Commercial art** Ci: 872
Airbrush A: 201 with picture
Careers (Art, design, and communications) C: 220
Copyright (Works protected) Ci: 1046
Pop art P: 659
Poster P: 708
- Commercial attaché** [diplomat]
Attaché A: 878
- Commercial bank**
Bank (Commercial banks) B: 90
- Commercial bribery** [crime]
Bribery B: 597
- Commercial Bureau of the American Republics**
Pan-American conferences (The "new" Pan Americanism) P: 113
- Commercial Cable Company**
Mackay, John William M: 20
- Commercial credit** [economics]
Credit (Types of credit) Ci: 1124
- Commercial grade** [meat]
Beef (Grades of beef) B: 209
- Commercial hotel**
Hotel (Kinds of hotels) H: 376
- Commercial law**
Law (Private law) L: 130
- Commercial model**
Modeling (Kinds of models) M: 684
- Commercial paper** [economics] Ci: 872
- Commercial photography**
Photography (Commercial photography) P: 429
- Commercial pilot license**
Aviation (Jobs in general aviation) A: 992
- Commercial service airport**
Airport (Kinds of airports) A: 243
- Commercial television**
Television (Commercial television) T: 110; (The U.S. television industry) T: 113-114
- Commercial top shell**
Shell picture on S: 386
- Commercial transport plane**
Airplane (Commercial transport planes) A: 210 with pictures
Aviation (Aircraft manufacturing) A: 984
- Commercial treaty**
Treaty (Kinds of treaties) T: 408-409
- Commerzbank building**
Frankfurt F: 485
- Commines, Philippe de** [French author]
French literature (Early prose) F: 519
- Comminuted fracture** [injury]
Fracture F: 451 with diagram
- Commission...**
Commissions are listed under their key words, as in Civil Rights, Commission on
- Commission** [income]
Advertising (Advertising agencies) A: 77
- Painting P: 28
Percentage (Commissions) P: 281
- Commission, Military** Ci: 872
Canada, Armed Forces of (Recruitment and training) C: 128
Reserve Officers Training Corps R: 258
- Commission firm** [selling]
Meat packing (Selling livestock) M: 350
- Commission form of government** [political science]
City government Ci: 595; (The commission form) Ci: 596
- Commission Internationale de L'Éclairage**
Color (The CIE System of Color Specification) Ci: 824
- Commission pennant**
Flag (Military flags) F: 195-208
- Commissioned officer** [rank]
Rank, Military R: 139; (table) R: 140
- Commissioners, Board of**
County (Forms of county governments) Ci: 1099
- Committee**
Parliamentary procedure (Committees) P: 175
Senate (Senate committees) S: 295 with picture
United States, Government of the (Committee system) U: 138; (How a bill moves through Congress) U: 142
- Committee for Foreign Affairs** [U.S. history]
State, Department of (Establishment) So: 860
- Committee for Industrial Organization** [labor union]
Congress of Industrial Organizations Ci: 941
American Federation of Labor and Congress of Industrial Organizations (History) A: 410
Labor movement (Formation of the CIO) L: 12
Lewis, John L. L: 221
- Committee for State Security** See KGB in this index
- Committee for the Re-election of the President** [U.S. history]
Watergate (The break-in and cover-up) W: 144
- Committee for Togolese Unity Party** [political party]
Togo (History) T: 310-311
- Committee of Public Safety** [French history]
French Revolution (Terror and equality) F: 526-527
Robespierre (Revolutionary leader) R: 366
- Committee of Secret Correspondence** [U.S. history]
State, Department of (Establishment) So: 860
- Committee of the whole** [parliamentary procedure] Ci: 872
- Committee on Disarmament** [UN]
United Nations (Arms control) U: 92-93
- Committee on Internal Security**
Un-American Activities Committee U: 19
- Committee on State Security** See KGB in this index
- Committee to Defend America by Aiding the Allies** [U.S. history]
America First Committee A: 407
- Committee to Investigate the National Defense Program** [U.S. history]
Truman, Harry S. (The Truman Committee) T: 468
- Committees of correspondence** [U.S. history]
Ci: 872
Adams, Samuel (The patriot) A: 44
Revolutionary War in America (The Townshend Acts) R: 272-273; (The Intolerable Acts) R: 273
United States, History of the (Unity, optimism, and nationalism) U: 159
- Committees of safety** [U.S. history] Ci: 873
Madison, James M: 32
- Commode** [furniture]
Furniture picture on F: 576
- Commodity Credit Corporation** [U.S.] Ci: 873
Agricultural Stabilization and Conservation Service A: 145
- Commodity exchange** [economics] Ci: 873
Aluminum (Recent developments) A: 397
Bears and bulls B: 189
Illinois (Service industries) I: 67-68 with picture
Trade picture on T: 362
Wheat (Buying and selling wheat) W: 274
- Commodity Futures Trading Commission** [U.S.]
Commodity exchange Ci: 873
- Commodity money**
Colonial life in America (Money) Ci: 811
Money (How the money supply is determined) M: 714

- Commodity organization** [economics]
Agriculture (Organized support for U.S. agriculture) A: 151
Farm and farming (Farm organizations) F: 44
- Commodore John Barry Bridge** [Pennsylvania]
Bridge (table: Cantilever) B: 603
- Commodus** [Roman emperor]
Gladiator G: 206
Rome, Ancient (table) R: 447
- Common Agricultural Policy**
European Union (Internal affairs) E: 418-419
Milk (Marketing) M: 547
- Common ancestry** [biology]
Evolution (Main ideas of evolutionary theory) E: 426
- Common Australian crow** [insect]
Butterfly picture on B: 737
- Common Bible**
Bible (Modern English translations) B: 286-287
- Common bile duct** [anatomy]
Bile B: 300
Gallbladder G: 14
Liver (Structure of the liver) L: 393
- Common brick**
Brick (Building bricks) B: 597
- Common carrier** [transportation] Ci: 874
Truck (Industrial uses) T: 456
United Parcel Service, Inc. U: 97
- Common case** [grammar]
Case (Nouns) C: 272
Declension D: 80
Grammar (Inflection) G: 303
- Common Cause** [organization] Ci: 874
Gardner, John William G: 39
- Common denominator**
Fraction (Comparing fractions) F: 447-448
- Common difference** [mathematics]
Progression P: 811
- Common earth**
Rare earth R: 144
- Common factor** [mathematics]
Factor (Common factors) F: 4
- Common Foreign and Security Policy**
European Union E: 418
- Common gender** [grammar]
Gender G: 80
- Common Glory, The** [play by Green]
Green, Paul Eliot G: 379
- Common greenbrier** [plant]
Smilax S: 515 with picture
- Common ice plant**
Ice plant I: 9
- Common law** Ci: 874
Civil law Ci: 607
Court (Courts in other countries) Ci: 1102;
(Development of civil-law and common-law courts) Ci: 1104
England (Struggles for power) E: 305-306
Henry II [of England] H: 185
Law (Common law systems) L: 132; (The Middle Ages) L: 134-135; (Beginnings of U.S. law) L: 136
Lien L: 273
Public utility (History) P: 867
Trial (History) T: 438
- Common-law marriage**
Marriage (Laws concerning marriage) M: 220-221
- Common logarithms**
Logarithms (Common logarithms) L: 424
- Common market** [economics] Ci: 875
Association of Southeast Asian Nations A: 820
European Free Trade Association E: 417
European Union E: 418
- Common measure** [poetry]
Ballad (The ballad style) B: 43
Poetry (Rhythm and meter) P: 591-593
- Common noun** [grammar]
Noun (Proper and common nouns) N: 553
- Common Prayer, Book of** See *Book of Common Prayer in this index*
- Common ratio** [mathematics]
Progression P: 811
Series S: 316; (Working with infinite series) S: 317
- Common school** [education]
See also *Public school in this index*
Mann, Horace M: 164
- Common Sense** [pamphlet by Paine]
Paine, Thomas (American revolutionary) P: 22
Declaration of Independence (The Continental Congress) D: 74
Revolutionary War in America (The Declaration of Independence) R: 276
United States, History of the (The Revolutionary War begins) U: 158
- Common Sense Book of Baby and Child Care** [book by Spock]
Spock, Benjamin McLane So: 797
- Common-Slavic** [language]
Russian language (History) R: 557
- Common stock** [economics]
Investment (Stocks) I: 368
Stock, Capital (Kinds of stock) So: 903
- Commoner, Barry** [American biologist] Ci: 875
- Commoner, The** [newspaper]
Bryan, Charles Wayland B: 654
Bryan, William Jennings (Democratic Party leader) B: 654-655
- Commonplaces** [book by Melanchthon]
Melanchthon, Philipp M: 388
- Commons, House of** See *House of Commons in this index*
- Commons Chamber** [London]
Parliament picture on P: 172
- Commonwealth** [political unit] Ci: 875
- Commonwealth, The** [newspaper]
Howe, Julia Ward H: 401
Howe, Samuel Gridley H: 401
- Commonwealth Convention Center**
Louisville L: 504
- Commonwealth Games** Ci: 875
Edmonton (History) E: 85
- Commonwealth of Australia** See *Australia in this index*
- Commonwealth of England** [English history]
Cromwell, Oliver (Rise to power) Ci: 1151-1152
England (The Civil War) E: 308-309
- Commonwealth of Independent States** [confederation] Ci: 875
Communism (The Soviet Union under Gorbachev) Ci: 895-896
Estonia (Independence regained) E: 363
Minsk M: 611
Russia R: 526; (The breakup of the U.S.S.R.) R: 554
Ukraine (Independence) U: 13
Union of Soviet Socialist Republics (The breakup of the Soviet Union) U: 41
Yeltsin, Boris Nikolayevich Y: 560
- Commonwealth of Nations** [alliance] Ci: 876
Canada, History of (Independence) C: 150
United Kingdom (Ancestry) U: 55; (Decline of the empire) U: 71
- Commonwealth of the Northern Mariana Islands** See *Northern Mariana Islands, Commonwealth of the in this index*
- Commonwealth Preference** [economics]
Commonwealth of Nations (History) Ci: 876-877
- Communal society** [anthropology] Ci: 877
Amanites A: 400
Brook Farm B: 639
Collectivism Ci: 775
Cult (Kinds of cults) Ci: 1185
Doukhobors D: 314
Hutterites H: 458
New Harmony N: 228 with pictures
Oneida Community O: 761
Shakers S: 343 with picture
- Commune** [agriculture]
Communal society Ci: 877
- Commune** [political unit]
Belgium (Regions and language communities) B: 227
China (Rural life) C: 483
France (Local government) F: 455
Italy (Local government) I: 499
- Communicable disease**
See also *Infectious disease in this index*
Disease (Spread of infectious diseases) D: 228
Public health (Health planning) P: 856;
(Furnishing support services for health workers) P: 857
- Communication** Ci: 878 with pictures
Alphabet A: 381
Ant (Communication) A: 525
AT&T Corp. A: 852
Autism (Symptoms) A: 941
Bird (How birds communicate) B: 354
Cable C: 4 with pictures
Careers (Art, design, and communications) C: 220 with picture
Cellular telephone C: 340
Clothing (Communication) Ci: 688
Coaxial cable (Uses) Ci: 740
Colonial life in America (Communication) Ci: 806 with picture
Communications satellite Ci: 888a
Comparative psychology Ci: 902a
Dance (Why people dance) D: 25-26
Dog (Behavior) D: 277
Dolphin (Research on dolphins) D: 300
Electricity (In communication) E: 191
Electronics (Uses of electronics) E: 207
Fiber optics (Uses of optical fibers) F: 88
Fire department (Communication systems) F: 125 with picture
Handwriting H: 46
Human being (Cultural characteristics) H: 414
Indian, American (Language) I: 149 with pictures
Internet (Uses of the Internet) I: 350
Kinesics K: 319
Language L: 62
Laser (How lasers are used) L: 82
McLuhan, Marshall M: 343
Pager P: 20
Public relations (Methods) P: 864
Radiation (Uses of radiation) R: 74
Space exploration (Communicating with the earth) So: 704
Technology (The development of electronics) T: 75; (Benefits of technology) T: 76
Telephone T: 94 with picture
Television T: 110
United States, History of the (Distribution, sales, and communication) U: 178
Wireless communication W: 344
Writing W: 512
See also *the list of Related articles in the Communication article*
- Communication device** [electronics]
Burglar alarm B: 704
- Communications center**
Police (Records and communications) P: 621 with picture
- Communications intelligence**
Codes and ciphers Ci: 749; (Communications intelligence) Ci: 750
- Communications satellite** Ci: 888a with pictures
Antenna (Dish antennas) A: 544
Communication (The development of television) Ci: 885 with picture
Communications Satellite Corporation Ci: 889
Intelsat, Ltd. I: 319
Internet (How the Internet works) I: 350c with diagram
Journalism (Journalism today) J: 175
Maine picture on M: 91
Radio, Amateur (Uses of amateur radio) R: 95-96
Satellite, Artificial (Types of artificial satellites) S: 150f; picture on S: 150d
Telecommunications T: 89
Telephone (Transmitting the telephone signals) T: 96 with diagram; (Improvements in telephone technology) T: 101
Television (Satellite television) T: 110b; (Satellites) T: 123
- Communications Satellite Corporation** Ci: 889
- Communications security**
Codes and ciphers Ci: 749; (Communications security) Ci: 749
- Communications Workers of America**
Labor movement (table) L: 8
- Communion** [religion] Ci: 889
Christianity (Beliefs) C: 524
Eastern Orthodox Churches (Services) E: 46; (Sacraments) E: 46-47
Holy Grail (The search for the Grail) H: 298
Jesus Christ (The Last Supper) J: 107-108
Lutherans (Doctrine) L: 529
Mass M: 269
Protestantism (Belief in sacraments) P: 834
Roman Catholic Church (Worship) R: 404
Transubstantiation T: 401
- Communism** Ci: 889 with pictures
See also *Communist Party and the Recent developments sections in articles for specific countries*
- Asia*
Communism (The spread of Communism) Ci: 893-894; (China after Mao) Ci: 896
Asia (The spread of Communism) A: 809
Balkans (Communist rule) B: 42
Brainwashing B: 560
Cambodia (History) C: 72-73
China (Economy) C: 496; (Way of life) C: 483
Chinese literature (Modern Chinese literature) C: 512
Iran-contra affair (Background) I: 407

Korea (North Korea) K: 368
Tibet (History and government) T: 277
Thailand (Opposition to Communism) T: 227
United Nations (Military actions) U: 91
Vietnam (History) V: 369-371

Economics

Communism (Communism in theory)
Ci: 890; (The centrally planned economy) Ci: 891
Capitalism C: 193
Collective farm Ci: 775
Collectivism Ci: 775
Economics (Variations among countries)
E: 59; (Karl Marx and Communism)
E: 65
Philosophy (Philosophy in the 1800's) P: 390
Social class So: 550
Socialism (Karl Marx) So: 560
Tariff (Modern tariff policies) T: 44
Welfare state W: 192
World (Economic systems) W: 408-413
World War II (Economic problems) W: 469

Europe

Communism (European reality in the early 1900's) Ci: 890; (In Eastern Europe) Ci: 896
Albania (Communist control) A: 308
Belarus (History) B: 224b-224c
Berlin B: 260
Berlin Wall B: 267
Bulgaria (Communist rule) B: 693
Cold War (The Cold War after 1980) Ci: 770
Czech Republic Ci: 1209; (The arts) Ci: 1211; (Economy) Ci: 1211; (History) Ci: 1213-1214
Czechoslovakia (Communist rule) Ci: 1215
Estonia (History) E: 362-363
Europe E: 382; (The Industrial Revolution) E: 413; (The breakup of Communism) E: 416
Germany (The division of Germany) G: 169; (East Germany) G: 170
Hungary (History) H: 445-447
Latvia (History) L: 119-120
Lithuania (History) L: 389-390
Macedonia M: 12
North Atlantic Treaty Organization N: 471
Organization for Security and Cooperation in Europe O: 853
Poland P: 604; (History) P: 611-613
Romania (The arts) R: 419; (Communist control) R: 425
Slovakia S: 508b
Ukraine (Soviet rule) U: 12
United Nations (The end of the Cold War) U: 92
Yugoslavia (World War II) Y: 579-580; (Communist rule) Y: 580

Government and freedoms

Communism (The role of the Communist Party) Ci: 891; (Restrictions on personal freedom) Ci: 891
Civil rights (Civil rights today) Ci: 611
Dictatorship D: 191
Freedom of religion (In other countries) F: 505
Government (Communism) G: 285; (Modern times) G: 290-291
Journalism (Journalism in government-controlled societies) J: 173-174
Local government (Unitary systems) L: 409

Latin America

Communism (Communist influence in other areas) Ci: 894
Cuba Ci: 1168; (History) Ci: 1175-1178
Latin America (Political unrest) L: 110

Leaders and theorists

Engels, Friedrich E: 283
Lenin, V. I. L: 191
Luxemburg, Rosa L: 532
Mao Zedong M: 174
Marx, Karl M: 236
Stalin, Joseph So: 824

Union of Soviet Socialist Republics

Communism (Communism in the Soviet Union) Ci: 892
Cold War Ci: 762
KGB K: 308a
Lenin, V. I. (Lenin the dictator) L: 194
Politburo P: 627
Propaganda (History) P: 824-825
Russia (Politics) R: 531; (Civil war and the formation of the U.S.S.R.) R: 553
Socialism (The fall of the Soviet Union) So: 562; (The Cold War) So: 561

Union of Soviet Socialist Republics U: 28
World, History of the (The rise of Communism) W: 446; (The easing of Cold War tensions) W: 448
World War II (New power struggles) W: 496

United States

McCarthy, Joseph Raymond M: 331
McCarthyism M: 332
Nixon, Richard Milhous (Career in Congress) N: 430
Un-American Activities Committee U: 19
United States, History of the (Communism and internal friction) U: 190

See also the list of Related articles in the Communism article

Communist bloc

Cold War Ci: 762; (The great blocs split) Ci: 768

Communist China See China in this index**Communist Manifesto** [book by Marx and Engels]

Communism (The ideas of Marx) Ci: 890
Engels, Friedrich E: 283
Government (Modern times) G: 290-291
Marx, Karl (Marriage and move to Paris) M: 236-237; (The Communist Manifesto) M: 237
Socialism (Karl Marx) So: 560

Communist Party

Communism (The role of the Communist Party) Ci: 891; (Communist Party structure) Ci: 891; (The party state) Ci: 891; (In non-Communist countries) Ci: 897

Bulgaria (Government) B: 688
China (The Communist Party) C: 477
Cuba (Government) C: 1169
Germany (Politics) G: 147
Gorbachev, Mikhail Sergeyevich G: 272
Hungary (History) H: 445-447
Indonesia (The fall of Sukarno) I: 238
Italy (Economic problems and political change) I: 518; (Social problems) I: 518
Khrushchev, Nikita Sergeyevich (Soviet dictator) K: 309
Kosygin, Aleksei Nikolaevich K: 386
Latvia (History) L: 119-120
Lenin, V. I. L: 191; (Lenin the dictator) L: 194
Lithuania (History) L: 389-390
Mao Zedong (His life) M: 174
Medina, Harold Raymond M: 380
Mongolia (History) M: 723-724
Moscow M: 823
Poland P: 604; (History) P: 611-613
Politburo P: 627
Political party P: 631; (One-party systems) P: 633-634; (Third parties) P: 636
Romania (Government) R: 417; (Communist control) R: 425
Russia (Politics) R: 531; (The October Revolution) R: 553; (The new nation) R: 555

Shanghai (History) S: 372
Slovakia (Economy) S: 508d; (History) S: 508d-509

Smith Act S: 518
Union of Soviet Socialist Republics (Government) U: 29; (History) U: 35-36
Uzbekistan (Government) U: 253
Women's movements (In Eastern Europe and the former Soviet republics) W: 387

Communist Party of Vietnam [political party]

Vietnam (Government) V: 365

Community [biology]

Animal (Animal homes and communities) A: 501
Ant (Life in an ant colony) A: 523
Beaver (The life of a beaver) B: 193-194 with picture
Bee B: 200 with pictures
Chimpanzee (The life of a chimpanzee) C: 471
Community Ci: 898
Ecology (Communities) E: 54
Fish (Fish in the balance of nature) F: 147
Habitat H: 3
Insect (Family life) I: 294-295 with picture
Life (The biological environment) L: 275
Penguin (The life of penguins) P: 238-239 with picture
Portuguese man-of-war P: 696
Termite T: 173
Wasp (Group life) W: 111

Community [sociology] Ci: 898

City planning Ci: 598
Law L: 130
Library (Active community service) L: 237

Police (In the United States since the mid-1900's) P: 624

Public health P: 855

Town T: 350

Community Chests

Colorado (Interesting facts) Ci: 829

Community college [education] Ci: 898

Careers (Community colleges) C: 217
Education (The organization of U.S. education) E: 89-91
School (Community colleges) S: 182
Vocational education (Community and junior colleges) V: 434

Community correctional center

Prison (Reforms in the 1900's) P: 808

Community development

Mott Foundation M: 880

Community forestry

Forestry (Community forestry) F: 406

Community foundation

Foundations (Community foundations) F: 430

Community health nurse

Nursing (Community health nurses) N: 618

Community hospital

Hospital (Type of ownership) H: 371

Community Mental Health Centers

Construction Act [1963]
Mental illness (Recent developments) M: 409

Community of Christ [religious group] Ci: 899

Smith, Joseph S: 517

Community organization work

Social work (Methods of social work) So: 558

Community planning See City planning in this index**Community property** [law] Ci: 899

Divorce (Financial arrangements) D: 254
Dower D: 316

Community Reinvestment Act [1977]

Bank (Changes in banking laws) B: 94

Community Rule [document]

Dead Sea Scrolls D: 56

Community school

Adult education (In the 1900's) A: 69-70
School (Recent developments) S: 184

Community Service Organization

Huerta, Dolores Fernandez H: 408

Community theater

Theater (Nonprofessional theater groups) T: 246

Community treatment center

Criminal justice system (Problems in the correctional system) Ci: 1144

Mental illness (Treatment settings) M: 408

Community trust

Foundations (Community foundations) F: 430

Community worker

Careers (Community and social services) C: 221 with picture

Commutative Law of Addition

Algebra (Basic algebra) A: 354

Commutative Law of Multiplication

Algebra (Basic algebra) A: 354

Commutator

Electric generator (How DC generators work) E: 173, diagrams on E: 172
Electric motor (The commutator) E: 180 with diagram
Tesla, Nikola (The alternating-current system) T: 180

Commuter

Metropolitan area M: 442
Transportation (Public transportation) T: 392

Commuter airline

Aviation (General aviation activities) A: 984

Commuter college

Community college (Importance to students) Ci: 899

Commuter train

Electric railroad E: 187, E: 188 with picture
Railroad (Commuter trains) R: 105 with picture
Transit T: 375

Como, Lake [Italy]

Lake Como L: 37 with map

Comoe National Park [Ivory Coast]

National park (table) N: 42f

Comoros [country] Ci: 899 with picture and map

Flag picture on F: 198

Compact car

Automobile (World War II and the postwar years) A: 968-970

Compact disc [electronics] Ci: 901 with pictures

Audio-visual materials (Audio materials) A: 883
Communication (In recording) Ci: 886
Copyright (Users' rights) Ci: 1047
Dictionary (Modern dictionaries) D: 194

- Digital technology D: 203
Electronics (Digital circuits) E: 213-214; *picture on* E: 206
Encyclopedia (Today's encyclopedias) E: 268b
Invention (Recent developments) I: 364
Laser (Recording, storing, and transmitting information) L: 82
Multimedia M: 919
Popular music (New technologies) P: 671
Recording industry R: 180; (History) R: 182
Television (Video entertainment systems) T: 110c
- Compact disc player**
Stereophonic sound system (Parts of a stereo system) So: 892
- Compact Disc Read-Only Memory** *See* CD-ROM *in this index*
- Compact of Free Association** [government]
See Free Association, Compact of *in this index*
- Compact tissue** [anatomy]
Bone (Structure of the bones) B: 456 *with diagram*
- Compadre** [godparent]
Family (Family relationships) F: 21
- Compañía, La** [cathedral]
Latin America *picture on* L: 101
- Companionate family**
Family (Changes) F: 23
- Companionway**
Ship (Nautical terms) S: 416
- Company** [ballet]
Ballet B: 44
- Company** [business]
Holding company H: 290
Joint-stock company J: 156
Limited company L: 308
- Company** [military]
Army (The organization of armies) A: 724-725; (Armies in the Middle Ages) A: 727
Army, United States (table) A: 737
- Company store**
Coal (Labor unions) Ci: 728
- Company town**
Coal (Labor unions) Ci: 728
- Compaoré, Bleise** [African political leader]
Burkina Faso (History) B: 707
- Compaq Computer Corporation**
Manufacturing (table) M: 170
- Comparative advantage** [economics]
Free trade (The theory of free trade) F: 499
International trade (Why nations trade) I: 348
Ricardo, David R: 321
- Comparative anatomy**
Anatomy A: 448b
Biology (The origins of scientific classification) B: 318
Evolution (Comparative anatomy) E: 431
Homologous structures H: 306
Human body *diagram on* H: 422
Skeleton *diagram on* S: 481
Zoology (What zoologists study) Z: 610
- Comparative degree** [grammar]
Adjective (Comparison of adjectives) A: 57
Comparison (The three degrees of comparison) Ci: 902b
- Comparative government**
Political science (Comparative government) P: 638
- Comparative lexicology**
Semantics S: 290
- Comparative linguistics**
Language (The science of language) L: 66
Linguistics L: 335; (Comparative and historical linguistics) L: 336; (Comparative and historical research) L: 337
- Comparative pathology**
Pathology P: 196
- Comparative psychology** Ci: 902a *with picture*
- Comparative reconstruction**
Linguistics (Comparative reconstruction) L: 336
- Comparator** [device]
Automation (How automation works) A: 945 *with diagram*
- Comparison** [grammar] Ci: 902b
Adjective (Comparison of adjectives) A: 57
Grammar (Inflection) G: 303
Inflection I: 268a
- Comparison** [mathematics]
Percentage (Comparisons) P: 281
- "Comparison between Laughing and Sentimental Comedy, A"** [essay by Goldsmith]
Goldsmith, Oliver G: 259
- Compartment**
Ship (The chief parts of a ship) S: 424
- Compass** [mathematics]
Circle Ci: 558
Geometry (Some basic geometric constructions) G: 103
Tool (Woodworking tools) T: 330
- Compass** [navigation] Ci: 902b *with picture*
Automatic flight control system (How an AFCS works) A: 944
Exploration (Medieval exploration) E: 441
Lodestone L: 419
Magnetism (Magnetic fields) M: 59
Navigation N: 70
Surveying (Early tools) So: 1011
- Compass card**
Compass Ci: 902b
- Compass plant** Ci: 903 *with picture*
- Compass rose** [cartography]
Navigation *picture on* N: 75
- Compassionate conservatism**
Bush, George Walker B: 722b; (The campaign) B: 722f
- Compendium of Theological Studies** [book by Bacon]
Bacon, Roger (His life) B: 19
- "Compensation"** [essay by Emerson]
Emerson, Ralph Waldo (His prose works) E: 259
- Compensation** [income]
Workers' compensation W: 405
- Compensatory damages** [law]
Damages D: 22
- Competency-based education** Ci: 903
Education (How can performance be improved?) E: 105-106
Teaching (The effectiveness of teacher training) T: 70
- Competency test**
Curriculum (Curriculum changes) Ci: 1197
- Competition** [biology]
Balance of nature (Competition) B: 34
Life (The biological environment) L: 275
- Competition** [economics]
See also Monopoly and competition *in this index*
Antitrust laws A: 560
Business (Competition) B: 724
Capitalism (Capitalism in its ideal form) C: 194; (Ensuring competition) C: 194
Conglomerate Ci: 938
Consumerism (The right to choose) Ci: 1018
Economics (Markets, prices, and competition) E: 60
Free trade F: 499
Industry (Labor productivity) I: 259
Labor movement (Other possible origins) L: 9
Nationalization (Advantages and disadvantages) N: 63
Profit P: 811
- Competitive local exchange carrier** [company]
Telephone (The telephone industry) T: 99
- Competitive service**
Civil service (Federal civil service) Ci: 612
- Compilation mapping** [cartography]
Map (Observation and measurement) M: 180
- Compiler** [program]
Computer (Compiling or assembling a program) Ci: 923
- Complaint, The** [book by Young]
Young, Edward Y: 572
- Complaint letter**
Letter writing (Complaint letters) L: 212 *with picture*
- Compleat Angler, The** [book by Walton]
Walton, Izaak W: 21
- Complement** [biology]
Immune system (The humoral immune response) I: 88-88a; (Other problems of the immune system) I: 88d
- Complement** [mathematics]
Angle A: 463
- Complementary and alternative medicine** *See* Alternative medicine *in this index*
- Complementary color**
Color (Mixing colored lights) Ci: 821-822 *with diagram*; (Producing color harmony) Ci: 823-824 *with diagram*
Interior design (Using color) I: 331
- Complete protein**
Kwashiorkor K: 398
Nutrition (Proteins) N: 625
Protein (Proteins in the diet) P: 832 *with diagrams*
- Completely penetrant disease**
Genetic testing (Genes associated with disease) G: 85-86
- Complex** [psychology]
Oedipus complex O: 676
Psychoanalysis (Psychoanalytic theory) P: 846
- Complex carbohydrate**
Carbohydrate (Kinds of carbohydrates) C: 203-204 *with diagram*
Nutrition (Carbohydrates) N: 625
- Complex family**
Family (Varieties of families) F: 20
- Complex fraction** [mathematics]
Fraction (Division) F: 448-449
- Complex marriage** [sociology]
Oneida Community O: 762
- Complex number** [mathematics]
Factor (Algebraic factors) F: 4-5
- Complex sentence**
Sentence (Sentence classifications) S: 303
- Complexity and Contradiction in Architecture** [book by Venturi]
Venturi, Robert V: 310
- Compliance audit** [business]
Audit A: 884
- Complimentary close**
Letter writing (The complimentary close) L: 211 *with picture*
- Complin** [religion]
Hour H: 379
- Component system** [electronics]
Stereophonic sound system (Types of systems) So: 892
- Compony**
Heraldry *picture on* H: 195
- "Composed Upon Westminster Bridge, September 3, 1802"** [poem by Wordsworth]
Poetry (Rhythm and meter) P: 591-594
- Composer** Ci: 904
American Society of Composers, Authors and Publishers A: 430
Ballet (Music) B: 50
Motion picture (Adding music and sound effects) M: 856
Television (Planning and preparation) T: 110c-111
See also the lists of composers in the Related articles in the Classical Music article
- Composers, Authors and Publishers, American Society of**
American Society of Composers, Authors and Publishers A: 430
- Compositae** [botany]
Composite family Ci: 904
- Composite** [cattle]
Cattle (Other beef cattle) C: 309
- Composite** [modeling]
Modeling (Careers) M: 685
- Composite color video signal** [electronics]
Television (Creating television signals) T: 120-121
- Composite column** [architecture]
Architecture (table) A: 608 *with picture*
Column (The Roman orders) Ci: 866 *with picture*
- Composite family** [botany] Ci: 904
Flower F: 300 *with picture*
- Composite flower** [botany]
Flower (Variations in flower structure) F: 294
- Composite materials** [manufacturing] Ci: 904
Materials M: 300b
Plastics (Making synthetic resins) P: 556-557
Materials (Composite materials) M: 300d
- Composite number** [mathematics]
Factor F: 4
- Composite object** [physics]
Boson B: 494
Fermion F: 74
- Composite particle** [physics]
Quark Q: 7
Subatomic particle So: 936; (Composite particles) So: 937
- Composite volcano**
Volcano (Kinds of volcanoes) V: 440 *with picture*
- Composition** [art]
Painting (The elements of painting) P: 34-35
Photography (Composition) P: 412 *with pictures*
- Composition** [art material]
Doll (The 1800's) D: 289
- Composition** [painting by Mondrian]
Painting (Line) P: 35; (De Stijl) P: 80 *with picture*
- Composition** [printing]

Printing [industry] (Typesetting) P: 797
Composition [writing] Ci: 905
 See also *Essay in this index*
 A Guide to Writing Skills Research Guide: 6
Composition B [explosive]
 Ammunition (Artillery ammunition) A: 435
 RDX R: 154
Compositor [career]
 Printing (Typesetting) P: 797
Compost [gardening] Ci: 905
 Environmental pollution (Environmental do's and don'ts) E: 337
 Fertilizer (Organic fertilizers) F: 79
 Gardening (Planning the garden) G: 31-34; *diagram on* G: 36
 Lawn (Preparing the soil) L: 142
 Recycling (Uses for recycled materials) R: 184
Compound [chemistry] Ci: 905
 Acid A: 26
 Atom A: 870
 Chemistry (Fundamental ideas of chemistry) C: 398-399
 Cobalt (Uses) Ci: 741
 Element, Chemical E: 219
 Isomers I: 475
Compound bow
 Archery (Archery equipment) A: 601
Compound engine
 Steam engine (Reciprocating steam engines) So: 880
Compound eye [zoology] Ci: 906 *with diagrams*
 Ant (Sense organs) A: 522 *with picture*
 Bee (Eyes) B: 201
 Beetle (The bodies of beetles) B: 215-216 *with diagram*
 Butterfly (The head) B: 738 *with diagram*
 Eye (Eyes of animals) E: 469 *with picture*
 Fly (Head) F: 309 *with pictures*
 Grasshopper (The body) G: 327
 Insect (Eyes and antennae) I: 287 *with diagram*; (Sight) I: 290 *with pictures*
 Lobster (Body) L: 405
 Wasp (Body) W: 110
Compound fracture
 Fracture F: 451 *with diagram*
Compound fruit
 Fruit (How botanists classify fruits) F: 546-548 *with pictures*
Compound interest
 Interest (Compound interest) I: 321; (How interest is calculated) I: 321 *with diagram*
Compound leaf
 Leaf (The blade) L: 153-154 *with pictures*
 Plant (Leaves) P: 530 *with picture*
 Tree (Leaves) T: 417
Compound lens [optics]
 Telescope (Refracting telescopes) T: 103-104
Compound lever
 Lever (Classes of levers) L: 217
Compound microscope
 Microscope (How an optical microscope works) M: 517
Compound motor
 Electric motor (DC motors) E: 181
Compound ore
 Ore O: 825
Compound predicate [grammar]
 Sentence (Subject and predicate) S: 303
Compound sentence
 Sentence (Sentence classifications) S: 303
Compound steam engine
 Ship (Increasing power and speed) S: 413
Compound subject [grammar]
 Sentence (Subject and predicate) S: 303
Compounding a felony [law]
 Felony F: 69
Comprehension
 Reading (Comprehending what is perceived) R: 157; (Reading problems) R: 161
Comprehensive Drug Abuse Prevention and Control Act [1970]
 Drug (U.S. drug laws) D: 357-358
 Drug abuse (Reducing demand) D: 365
Comprehensive Employment and Training Act [1973]
 Migrant labor M: 538
Comprehensive Environmental Response, Compensation, and Liability Act [1980]
 Environmental pollution (Government action) E: 335 *with picture*
 Environmental Protection Agency E: 340
 Hazardous wastes (Disposal of hazardous wastes) H: 122
Comprehensive insurance
 Insurance (Automobile insurance) I: 313

Comprehensive Nuclear Test Ban Treaty [1996]
 Arms control (History of arms control) A: 721-722
 Nuclear weapon (Limiting testing) N: 600-601
 United Nations (Arms control) U: 92-93
Comprehensive program
 Sex education (How sex education is taught) S: 336
Comprehensive school
 Education (The organization of U.S. education) E: 89-90
 England (Education) E: 297
 Germany (Education) G: 151-153
 Scotland (Education) S: 215
 United Kingdom (Education) U: 56-57
 Vocational education (Public high schools) V: 434
Compress
 Bandage B: 75
Compress warehouse [factory]
 Cotton (Ginning and baling) Ci: 1090-1091
Compressed air
 Air (Air compression) A: 169
Compressed-air method [construction]
 Tunnel (Earth tunnels) T: 490
Compression [electronics]
 Computer (Research and development) Ci: 924
 Internet (How the Internet works) I: 350c-350d
Compression [engines]
 Gasoline engine (High and low compression) G: 63
Compression-ignition engine
 Diesel engine (How a diesel engine works) D: 199
Compression molding [industrial process]
 Phenolic P: 356
 Plastics (Making plastic products) P: 557; *picture on* P: 558
Compression ratio
 Diesel engine (How a diesel engine works) D: 199
 Gasoline engine (High and low compression) G: 63
Compression stroke
 Automobile (The engine) A: 949
Compression system [mechanics]
 Refrigeration (Mechanical refrigeration) R: 201
Compressional wave [physics]
 See also *Longitudinal wave in this index*
 Earthquake (How an earthquake spreads) E: 34 *with diagram*
Compressor [machine]
 Refrigeration (The electric refrigerator) R: 201 *with diagram*
Compressor, Air See *Air compressor in this index*
Compressor station [industry]
 Gas [fuel] (Transmitting and distributing gas) G: 53
Compromise
 Congress of the United States (Legislative bargaining) Ci: 944
Compromise of 1850 [U.S. history] Ci: 906
 African Americans (The deepening division over slavery) A: 136f
 Civil War (The Compromise of 1850) Ci: 616
 Clay, Henry (The Compromise of 1850) Ci: 659
 Fillmore, Millard (Vice President) F: 101-102
 Fugitive slave laws F: 553
 Mexican War (Results of the war) M: 447
 Taylor, Zachary (Sectional quarrels) T: 60
 United States, History of the (The Compromise of 1850) U: 172 *with picture*
 Utah (Territorial days and statehood) U: 246
Compromise projection [cartography]
 Map (Map projections) M: 182-183 *with diagram*
Compromise Tariff [1833]
 Tariff (United States tariffs) T: 44
Compsognathus [dinosaur] Ci: 907
 Dinosaur (True dinosaurs) D: 206b-211, *picture on* D: 207
Compton, Arthur Holly [American physicist]
 Nobel Prizes (Physics: 1927) N: 440
 Quantum mechanics (Wave-particle duality) Q: 6
Compton-Burnett, Ivy [British author] Ci: 907
Compton Gamma Ray Observatory [satellite]
 Astronomy (Gamma-ray astronomy) A: 845
 Satellite, Artificial *picture on* S: 150f
 Telescope (Gamma-ray telescopes) T: 109 *with picture*

Compton's Interactive Encyclopedia [software]
 Encyclopedia (Today's encyclopedias) E: 268b-269
Comptroller of the Currency [office]
 Bank (Regulation of U.S. banks) B: 92
 Bank of the United States (The Second Bank of the United States) B: 96-97
Compulsion [psychology]
 Mental illness (Anxiety disorders) M: 405
 Obsessive-compulsive disorder O: 646
 Overeaters Anonymous O: 881
Compulsive personality disorder
 Mental illness (Personality disorders) M: 406
Compulsory arbitration
 Arbitration (Industrial, or labor, arbitration) A: 592
Compulsory dances
 Ice skating (Ice dancing) I: 12-13
Compulsory military service See *Draft, Military in this index*
Compulsory referendum [government]
 Initiative and referendum (The referendum) I: 272
Compulsory school-attendance law
 School (The growth of the public school system) S: 184
Computational fluid dynamics
 Aerodynamics (Computational fluid dynamics) A: 88
Compute server [computer]
 Computer (Local area networks [LAN's]) Ci: 922
Computed tomographic scanner [machine]
 X rays (Uses of X rays) X: 540
Computed tomography [medicine] Ci: 907 *with picture*
 Alzheimer's disease (Diagnosis) A: 398
 Brain (Disorders of the brain) B: 556-557; *pictures on* B: 558
 Cancer (Preliminary diagnosis) C: 171
 Computer graphics (In medicine) Ci: 924g
 Heart (Symptoms and diagnosis) H: 137-138
 Positron emission tomography P: 697 *with picture*
 Radiology R: 98
 X rays (Uses of X rays) X: 540
Computer [machine] Ci: 908 *with pictures*
 Algebra (History) A: 359
 Archaeology (Evaluation) A: 598-599; *picture on* A: 597
 Artificial intelligence A: 760
 Astronomy (Computer modeling) A: 846; (Learning about astronomy) A: 846
 Audio-visual materials (Visual materials) A: 881-882; (Multisensory materials) A: 883
 Automated teller machine A: 944
 Automation (Uses of automation) A: 944; (How automation works) A: 945
 Automobile (Cars of tomorrow) A: 972-973
 Babbage, Charles B: 2
 Bank (Electronic banking) B: 89-90
 Biomedical engineering (Clinical engineering) B: 325
 Book (Modern books) B: 468
 Braille B: 550 *with picture*
 Careers (Technical and mathematical occupations) C: 232 *with picture*
 Codes and ciphers (Cipher machines) Ci: 750
 Communication (The development of the Internet) Ci: 886 *with picture*
 Computerized instruction Ci: 924h
 Crime (Computer crime) Ci: 1136-1137
 Culture (Invention) Ci: 1189 *with picture*
 Database D: 41
 Developmental psychology (Cognitive theory) D: 174
 Eckert, J. Presper, Jr. E: 50
 Electricity (Recent developments) E: 198
 Electronic music E: 204
 Electronic publishing E: 205
 Electronics (Uses of electronics) E: 207; (The development of electronics) E: 215
 Factory (Location and design) F: 5
 Fingerprinting *picture on* F: 106
 Greenhouse effect (Studying the greenhouse effect) G: 383
 Hobby (Other hobbies) H: 273
 Hopper, Grace Murray H: 334
 Information retrieval I: 268b
 Information science I: 269
 Inkjet printer I: 273
 International Business Machines Corporation I: 338

- Internet I: 350 *with picture*
 Invention (The early and middle 1900's) I: 363;
 (Recent developments) I: 364
 Keyboard K: 308 *with picture*
 Library (The growth of information and technology) L: 238 *with picture; picture on*
 L: 251
 Magnetism (In industry and business) M: 60a
 Management information systems M: 131
 Manufacturing (How science helps manufacturing) M: 171
 Map M: 176; (How maps are made) M: 180
with picture; (Mapmaking and modern technology) M: 185
 Mathematics (Philosophies of mathematics) M: 307
 Mauchly, John William M: 312
 Mechanical drawing (Creating a drawing) M: 354 *with picture*
 Modem M: 686
 Motion picture (Computer editing) M: 856;
 (The computer revolution) M: 872 *with pictures*
 Multimedia M: 919
 Newspaper (Writing and editing stories) N: 383; (Making up the pages) N: 383;
 (Recent trends) N: 386-387; *picture on* N: 384
 Numeration systems (The binary system) N: 607
 Occupational therapy (Helping people with physical disabilities) O: 648
 Ocean (Computers) O: 664 *with picture*
 Office work O: 677
 Online service O: 763
 Photocomposition P: 405
 Photoengraving and photolithography (Capturing the image) P: 405
 Planetarium (Digital projectors) P: 514b
 Postal services (Technological advancements) P: 707
 Printer P: 795
 Printing (Typesetting) P: 797; (The electronic age) P: 804
 Radar (Continued progress) R: 72
 Railroad (Freight operations) R: 109-110 *with picture*
 Repetitive strain injury R: 242
 Robot R: 369
 Satellite, Artificial (Performing the mission) S: 150g
 Science (Modeling with computers) S: 195
 Spreadsheet So: 805
 Systems analysis So: 1077
 Teaching (Guiding and assisting student learning) T: 66 *with picture*
 Technology (The computer age) T: 75
 Telemarketing T: 93
 Telephone (How a telephone call travels) T: 96;
 (Modems) T: 97
 Telescope (Controlling a telescope) T: 105
 Television (Computer-generated video) T: 122
 Terrorism (Computer-based terrorism) T: 178
 Turing, Alan Mathison T: 501
 United States *picture on* U: 133
 United States, History of the (Advances in the development of computers) U: 194
 Video game V: 359
 Virtual reality V: 425
 Voting machine (Operation) V: 451
 War (Warfare today) W: 26
 Weather (Mathematical models) W: 166
 Word processing W: 403
 World Wide Web W: 499
 X rays (Uses of X rays) X: 540
 A Guide to Research Skills Research Guide: 29-30
- Computer, Personal** [machine] See Personal computer *in this index*
- Computer-aided design**
 Automobile (Development of the concept) A: 955 *with picture*
 Clothing *picture on* Ci: 706
 Computer (Computer-aided design [CAD] programs) Ci: 919 *with picture; picture on* Ci: 920
 Computer graphics (In engineering) Ci: 924f-924g
 Industrial design (How an industrial designer works) I: 244
 Map (Production and reproduction) M: 180-181
 Mechanical drawing (Creating a drawing) M: 354
- Computer-aided design and drafting**
 Computer graphics (In engineering) Ci: 924f-924g
 Mechanical drawing (Creating a drawing) M: 354 *with picture*
- Computer-aided engineering**
 Automobile (Product engineering) A: 957
- Computer-aided manufacturing**
 Automobile (Manufacturing) A: 957 *with picture*
 Mechanical drawing (Creating a drawing) M: 354
- Computer animation**
 Animation (Computer animation) A: 512 *with picture; (Animation in the mid-1900's) A: 514a*
- Computer chip** [electronics] Ci: 924e *with pictures*
 See also Integrated circuit; Microprocessor *in this index*
 California *picture on* C: 54
 Computer (Parts of computers) Ci: 911
 Copyright (Works protected) Ci: 1046-1047
 Electric meter (Digital meters) E: 177
 Electronics E: 207; (Types of electronic circuits) E: 209-210
 Noyce, Robert N: 578
 Photoengraving and photolithography (Nonprinting applications) P: 407
 Semiconductor S: 291
 Smart card S: 513
 Transistor T: 372
 Watch (Electronic watches) W: 114
- Computer chip** [electronics]
 Smart card S: 513
 United States, History of the *picture on* U: 192
- Computer engineering**
 Computer (Careers) Ci: 924a
 Engineering (Computer engineering) E: 286
- Computer file** [electronics]
 Computer (Storage devices) Ci: 915
 Database D: 41
- Computer game** See Video game *in this index*
- Computer-generated imagery**
 Animation (Computer animation) A: 512;
 (Animation today) A: 514b
- Computer graphics** Ci: 924f *with pictures*
 Audio-visual materials (Filmstrips and slides) A: 882-883
 Computer (Graphics programs) Ci: 918
 Newspaper (Making up the pages) N: 383
- Computer keyboard** [electronics]
 Computer (Input devices) Ci: 912 *with picture*
 Keyboard K: 308 *with picture*
 Laptop computer L: 75
- Computer language**
 Computer (Programming a computer) Ci: 923
- Computer modeling**
 See also Mathematical model *in this index*
 Astronomy (Computer modeling) A: 846
 Climate (Climate models) Ci: 679
 Computer (Spreadsheet programs) Ci: 917-918
 Computer graphics (In engineering) Ci: 924f
 Meteorology (Computer modeling) M: 433
 Ocean (Computers) O: 664
 Science (Modeling with computers) S: 195
 Tornado (Studying tornadoes) T: 335
 Weather (Mathematical models) W: 166
- Computer monitor** [electronic device]
 Computer (Output devices) Ci: 916; *picture on* Ci: 913
- Computer network** [communications]
 Computer (Personal computers) Ci: 909;
 (Computer networks) Ci: 920
 Internet I: 350; (Glossary of Internet terms) I: 350a
 Privacy, Right of P: 808a
 Technology (The computer age) T: 75
 Telecommunications T: 89
- Computer numerical control** [industrial process]
 Machine tool (Numerical control of machine tools) M: 19
- Computer program** See Program *in this index*
- Computer programmer** [career] See Programmer *in this index*
- Computer programming** See Programming *in this index*
- Computer security**
 Computer (Computer security) Ci: 924
 Internet (Security) I: 350e
- Computer simulation**
 Aerodynamics (Computational fluid dynamics) A: 88, *picture on* A: 87
 Astronomy (Computer modeling) A: 846
- Audio-visual materials (Multisensory materials) A: 883
 Computer (Computer-aided design [CAD] programs) Ci: 919 *with pictures*
 Computerized instruction (Types of programs) Ci: 924h
 Meteorology (Computer modeling) M: 433
 Science (Simulation with computers) S: 195
 Teaching (Guiding and assisting student learning) T: 66
 Video game (How video games work) V: 359
- Computer storage disk** [electronics]
 Computer (Storage devices) Ci: 915
 DVD D: 393
- Computer-to-plate** [process]
 Newspaper (Making up the pages) N: 383
 Printing (Offset printing plates) P: 798
- Computer virus**
 Computer (Computer security) Ci: 924
 Internet (Security) I: 350e
- Computerized axial tomography** See Computed tomography *in this index*
- Computerized instruction** Ci: 924h *with picture*
 Computer (Educational software) Ci: 920 *with picture*
 Reading (Individualized reading programs) R: 159
- Computerized tomography** See Computed tomography *in this index*
- Computerized typesetting** [publishing]
 Electronic publishing E: 205
 Printing (The electronic age) P: 804
 Type T: 536
- Computing-Tabulating-Recording Company**
 International Business Machines Corporation I: 338
- Comrades** [play by Strindberg]
 Strindberg, August So: 929
- COMSAT** See Communications Satellite Corporation *in this index*
- COMSEC** [cryptology] See Communications security *in this index*
- Comstock, Anthony** [American social reformer]
 Comstock Law Ci: 926
- Comstock, Henry T. P.** (American prospector)
 Comstock Lode Ci: 926
 Nevada (The Comstock Lode) N: 174
- Comstock, William A.** [American political leader]
 Michigan (table) M: 507
- Comstock Law** [1873] Ci: 926
 Obscenity and pornography (In the United States) O: 643-644
- Comstock Lode** [U.S. history] Ci: 926
 Nevada (The Comstock Lode) N: 174
- Comte** [title]
 Count Ci: 1096
- Comte, Auguste** [French philosopher] Ci: 926
 Positivism P: 697
 Sociology (Early sociological thought) So: 566
- Comtesse d'Haussonville** [painting by Ingres]
 Drawing *picture on* D: 343
 Painting (Later neoclassicism) P: 67-68 *with picture*
- Comus** [play by Milton]
 Milton, John (His early life and works) M: 557
- Comyn, Michael** [Irish poet]
 Irish literature (Modern works in Gaelic) I: 431
- Comyn, Red** [Scottish nobleman]
 Bruce, Robert B: 648
- Con-con**
 Political convention (Other types of conventions) P: 630
- Conakry** [city, Guinea] Ci: 926
 Guinea (Economy) G: 431 *with picture*
- Conan, Laure** [Canadian author]
 Canadian literature (Fiction: 1850-1918) C: 158
- Conant, Gordon D.** [Canadian political leader]
 Ontario (table) O: 783
- Conant, James Bryant** [American educator]
 Ci: 926
 Harvard University (History) H: 80-81
- Conant, Roger** [American settler]
 Salem (History) S: 61
- Concave lens** [optics]
 Eye (Nearsightedness) E: 464 *with picture*
 Glasses (Prescription glasses) G: 224-225
 Lens (A negative lens) L: 196 *with diagrams*
- Concave mirror** [light]
 Mirror (Concave mirrors) M: 617 *with diagrams*
- Concave polygon** [geometry]
 Polygon P: 650 *with diagram*
- Conceit** [poetry]
 Donne, John (His poetry) D: 308

- English literature (Metaphysical and Cavalier poets) E: 317
Poetry (Renaissance poetry) P: 596
Concentrate [agriculture]
Feed F: 67
Concentrate [food]
Soft drink (How soft drinks are made) So: 571
Concentrate
Iron and steel (Processing) I: 439
Concentration [economics]
Industry (Industrial organization) I: 261
Concentration [industrial process]
Lead (Production) L: 149-150
Ore O: 825
Concentration camp Ci: 926 *with picture*
See also *Labor camp in this index*
Auschwitz A: 892
Bergen-Belsen B: 257
Buchenwald B: 663
Dachau D: 2
Himmler, Heinrich H: 234
Hitler, Adolf (The New Order) H: 267
Holocaust (Before the Holocaust) H: 296-296a
with picture; (The Holocaust) H: 296a
Holocaust Memorial Museum, United States H: 297
Jews (The Holocaust) J: 123
Treblinka T: 409
World War II (Victory in Europe) W: 484 *with picture*; (In the United States and Canada) W: 494-495
Concepción [former name]
Grenada (History and government) G: 389
Concepción [ship]
Magellan, Ferdinand (The voyage begins) M: 46
Concept car
Automobile (Development of the concept) A: 955
Conception
See also *Fertilization in this index*
Abortion (Abortion history) A: 15
Pregnancy P: 734a
Reproduction, Human (Fertilization) R: 246
Sexuality (Before birth) S: 338
Conception, Immaculate [religion] See *Immaculate Conception in this index*
Conceptismo [literature]
Spanish literature (The 1600's) So: 759-760
Concerned Women for America
Women's movements (Women's organizations) W: 386
Concerning Children [book by Gilman]
Gilman, Charlotte Perkins G: 190
Concerning Faith [book by Saint Ambrose]
Ambrose, Saint A: 405
"Concerning Stones" [essay by Theophrastus]
Geology (The ancient Greeks) G: 97
Concerning Traditionalism [book by Unamuno]
Unamuno, Miguel de U: 19
Concert band [music]
Band (Concert bands) B: 74
Concert Champêtre [painting by Giorgione]
Giorgione G: 193
Concert grand piano
Piano (Grand pianos) P: 447 *with picture*
Concert of powers
International relations (From the 1500's to the 1900's) I: 345
Concert overture [music]
Overture O: 881
Concertina [musical instrument] Ci: 927 *with picture*
Concerto [music] Ci: 928
Classical music (Orchestral music) Ci: 644
Orchestra (History) O: 822
Concerto for Left Hand [music by Ravel]
Ravel, Maurice R: 151
Concerto grosso
Classical music (Orchestral music) Ci: 644
Concerto Ci: 928
Corelli, Arcangelo Ci: 1052
Orchestra (History) O: 822
Concerto in F [music by Gershwin]
Gershwin, George G: 174
Conch [machine]
Chocolate (Chocolate products) C: 518-519
Conch [sea animal] Ci: 928 *with picture*
Conch shell
Indian, American *picture on* I: 172
Shell *picture on* S: 386
Concha [anatomy]
Nose N: 548
Smell (How odors are detected) S: 514
Conchiolin [zoology]
Pearl (Characteristics of pearls) P: 217; (Care of pearls) P: 218
Conchobar, King [legendary figure]
Irish literature (Heroic tales, romances, and sagas) I: 430-431
Mythology (The Irish cycles) M: 983
Conchology [hobby]
Shell (Collecting shells) S: 388
Concierge [occupation]
Careers (Personal services) C: 228
Concilium Plebis [ancient Rome]
Rome, Ancient (The Roman Republic) R: 441-444
Concini, Concino [Italian public figure]
Marie de Médicis M: 200
Conclave [religion]
Pope (Present procedures) P: 662
Concluding Unscientific Postscript [book by Kierkegaard]
Kierkegaard, Søren Aabye (His philosophy) K: 313
Conclusion
Deductive method D: 81
Geometry (Deductive reasoning) G: 101
Logic L: 425
Philosophy (Logic) P: 384
Concord [city, Massachusetts] Ci: 928
Revolutionary War in America (Lexington and Concord) R: 274 *with picture and map*
Concord [city, New Hampshire] Ci: 929
New Hampshire N: 209; (table: Average monthly weather) N: 220
Concord, Battle of [1775] Ci: 929
Concord Ci: 928
Gage, Thomas G: 5
Revolutionary War in America (table) R: 276
United States, History of the (The Revolutionary War begins) U: 158
Concord, Book of [religious book]
Lutheran Church-Missouri Synod L: 529
Lutherans (Doctrine) L: 529
Concord Academy
Vermont (Interesting facts) V: 319
Concord grape
Grape (North American grapes) G: 320
Concord Square [Greece]
Athens (Landmarks) A: 854 *with map*
Concordance
Information retrieval (History) I: 269
Concordat [religion]
Roman Catholic Church (Pius X) R: 410
Treaty T: 408
Concordat of Bologna [1516]
Francis I F: 480
Concordat of Worms [1122]
Church and state (In early times) C: 542
Concorde [airplane]
Airplane (Supersonic airplanes) A: 238, *picture on* A: 237
Transportation (Overseas service) T: 394
Concorde, Place de la
Paris (Gardens, squares, and parks) P: 162
with picture and map
Concourse [passage]
Airport (Terminal designs) A: 248
Concrete [building material]
Cement and concrete C: 342
Edison, Thomas Alva (Cement manufacture) E: 80
House (Building materials) H: 380
Rome, Ancient (Architecture and engineering) R: 440-441
Concrete girder bridge
Bridge (Girder bridges) B: 600-601
Concrete mixer [machine]
Truck (Kinds of trucks) T: 457; *picture on* T: 459
Concrete noun [grammar]
Noun (Abstract and concrete nouns) N: 552
Concrete operations [psychology]
Piaget, Jean P: 445
Concubinage [practice]
Family (Development of the family) F: 21-22
Concurrent forces [physics]
Force (Concurrent forces) F: 370
Concurrent powers
Constitution of the United States (The supreme law of the land) Ci: 998
Concurring opinion
Supreme Court of the United States (Written opinions) So: 999
Concussion [injury] Ci: 929
First aid (Concussion) F: 140
Condamine River [Australia]
Queensland (Location, size, and surface features) Q: 39-40
Condé [diamond]
Diamond *picture on* D: 181
Condé [title]
Count Ci: 1096
Condell, Henry [English actor]
Shakespeare, William (Folios) S: 388
Condemnation [law]
Eminent domain E: 260
Urban renewal (The role of government) U: 220
Condensation [physics]
Air (Moisture in the air) A: 167
Dew D: 176
Dew point D: 176
Distillation D: 238
Natural gas liquids N: 64
Sound (table) So: 599; (The nature of sound) So: 599 *with diagram*; (Beats) So: 604 *with diagram*
Condensation point [temperature]
Heat (Changes in state) H: 153 *with diagram*
Condensation trail See *Contrail in this index*
Condensed-matter physics See *Solid-state physics in this index*
Condenser [electricity]
Dehumidifier D: 93 *with diagram*
Refrigeration (The electric refrigerator) R: 201 *with diagram*
Condenser, Steam [mechanics]
Distillation D: 238
Electric power (Fossil-fueled steam electric power plants) E: 183 *with diagram*
Nuclear energy (Steam production) N: 587 *with diagram*
Watt, James W: 148
Condenser microphone
Microphone (Capacitor microphones) M: 517
Condition of the Working Class in England, The [book by Engels]
Engels, Friedrich E: 283
Conditioned reflex [psychology]
Learning (Classical conditioning) L: 163
Pavlov, Ivan Petrovich P: 202
Reflex action (Conditioned reflex) R: 195
Conditioning [psychology]
Abnormal psychology (Theories of abnormal psychology) A: 12
Behavior (Behaviorism) B: 221
Developmental psychology (Learning theory) D: 174
Learning (Classical conditioning) L: 163
Psychology (Behaviorism) P: 849-850
Psychotherapy (Behavioral psychotherapy) P: 852
Conditioning process [industry]
Manufacturing (Making products) M: 170
Condom
AIDS (Prevention) A: 164a; (Education) A: 164a
Birth control (Methods of birth control) B: 378-379
Condominium [dwelling] Ci: 929
Housing (Condominium housing) H: 390
Condon, Edward Uhler [American physicist]
Szilard, Leo *picture on* So: 1077
Condor [bird] Ci: 929 *with pictures*
Animal (Breeding in captivity) A: 505
Bird (Endangered species) B: 370 *with picture*; *picture on* B: 328
Endangered species (table) E: 270; *picture on* E: 271
Condor of the Andes, National Order of the
Medals, decorations, and orders (The Americas) M: 358
Condorcet, Marquis de [French philosopher]
Ci: 930
Age of Reason A: 138
Philosophes P: 382
Women's movements (Forces of change) W: 384
Conduct
Behavior B: 220
Etiquette E: 373
Conducting [music]
Opera (The conductor) O: 793 *with picture*
Orchestra (The conductor) O: 821
See also *list of Related Articles in the Orchestra article*
Conduction
Heat (How heat travels) H: 151 *with diagram*
Insulation (Insulation to control heat flow) I: 306
Conductive disorder
Deafness (Types of hearing loss) D: 57;

(Medical treatment) D: 58

Conductive plastics

Plastics (Growth of the plastics industry)
P: 560

Conductive support

Electrophoresis E: 218

Conductivity [physical property]

See also Superconductivity in this index
Alloy (Characteristics of alloys) A: 377
Gold (Physical properties) G: 249

Conductor, Electrical [electricity]

Cable (Cable construction) C: 4 with diagrams
Coaxial cable C: 740
Copper (Conductivity) C: 1041
Electric current (Conductors and insulators)
E: 168
Electric motor (Parts of an electric motor)
E: 179
Electricity (Conductors and insulators) E: 193
with diagram
Electrode E: 200
Electrolysis (How electrolysis works) E: 200-201
Electronics (Electronic circuits) E: 208-209
Insulator, Electric I: 308
Ohm O: 706
Transistor (Transistor materials) T: 372

Conductor, Railroad [career]

Careers (Transportation) C: 235
Railroad (Railroad systems) R: 112-113

Conductus [music]

Classical music (The Middle Ages) Ci: 645-646

Conduit [construction]

Cable (Cable installation) C: 5-6
House (table) H: 380

Conduit [geology]

Volcano (The eruption of a volcano) V: 438-439
with diagram

Cone [anatomy]

Eye (The retina) E: 462 with picture
Color (The roles of the eyes and brain) Ci: 818
Mammal (Senses) M: 120-121
Perception (The nervous system) P: 283

Cone [electronics]

Radio (The speaker) R: 89

Cone [geology]

Paricutin picture on P: 159
Vesuvius V: 342
Volcano (Lava) V: 439

Cone [geometry] Ci: 931 with diagrams

See also Conic section in this index
Geometry picture on G: 104

Cone, Fred P. [American political leader]

Florida (table) F: 260

Cone-bearing plant See Conifer; Cycad in this index

Cone cluster [botany]

Welwitschia W: 196

Cone shell [snail]

Snail (Useful and harmful snails) S: 523 with picture

Coneflower

Echinacea E: 49
Flower (Flowers of prairies and dry plains)
F: 286-287 with picture

Conestoga wagon [vehicle] Ci: 931

Pennsylvania Dutch P: 270
Pioneer life in America (How the pioneers traveled) P: 478

Wagon picture on W: 5

Western frontier life in America picture on W: 232

Westward movement in America picture on W: 244

Coney [animal] See Hyrax in this index

Coney Island [New York City]

New York City (Brooklyn) N: 326-328

Coney Island of the Mind, A [poem by Ferlinghetti]

Ferlinghetti, Lawrence F: 73

Confabulation [psychology]

Memory (Constructive processes) M: 393

Confection [food]

Candy C: 175

Confederación Española de Derechas

Autónomas [political party]

Spain (The Spanish republic) So: 750

Confederacy See Confederate States of America in this index

Confederacy, First White House of the

Alabama (Places to visit) A: 266 with picture

Confederate currency

Money (The rebirth of paper money) M: 709
with picture

Confederate flag [U.S. history]

Flag F: 210 with pictures

Confederate Gulch [region]

Montana (The gold rush) M: 758

Confederate Memorial Day [custom]

Davis, Jefferson (His last years) D: 48

Memorial Day M: 392

Confederate States of America [U.S. history]

Ci: 931 with map

Alabama (The Civil War and Reconstruction)
A: 276

Buchanan, James (Prelude to war) B: 661

Choctaw Indians C: 519

Civil War (Secession) Ci: 617

Davis, Jefferson (Spokesman for the South)
D: 48

Flag pictures on F: 210

Reconstruction R: 176

Richmond (History) R: 333

South Carolina (The Civil War) So: 660

United States, History of the (Secession)
U: 174; (Reconstruction) U: 175

Confederate Veterans, United [organization]

Veterans' organizations (In the United States)
V: 344

Confederation [government]

Federalism F: 66

Confederation [treaty]

Treaty (Kinds of treaties) T: 408-409

Confederation, Articles of See Articles of

Confederation in this index

Confederation Bridge

New Brunswick (Recent developments)
N: 199

Prince Edward Island (Recent developments)
P: 793

Confederation Building [Saint John's]

Newfoundland and Labrador picture on N: 362

Confederation Centre of the Arts

Prince Edward Island (Places to visit) P: 788
with picture

Confederation Congress [U.S. history] See

Congress of the Confederation in this index

Confederation of Canada Ci: 933 with pictures

Confederation of Chiefs of the United Tribes

of New Zealand [New Zealand history]

New Zealand (European contact) N: 354-355

Confederation of Free Trade Unions,

International See International

Confederation of Free Trade Unions in this index

Confederation of National Trade Unions [labor

federation]

Labor movement (In Canada) L: 14

Confederation of North, Central American

and Caribbean Association Football

Soccer (International competition) So: 548

Confederation of the Rhine [German history]

Napoleon I (Dominates Europe) N: 16-17

Confederation poets

Canadian literature (Poetry: 1850-1918)
C: 157-158

Conference [politics]

House of Representatives (Organization of the
U.S. House) H: 387

Conference committee

Congress of the United States (From bill to
law) Ci: 945-946

House of Representatives (Committees)
H: 387

Conference on Security and Cooperation in

Europe See Organization for Security and

Cooperation in Europe in this index

Confessed judgment [law]

Judgment J: 183

Confessio Amantis [poems by Gower]

English literature (The age of Chaucer) E: 316

Confession [book by Saint Patrick]

Patrick, Saint (His writings) P: 197

Confession [law] Ci: 936

Confession [religion]

Eastern Orthodox Churches (Sacraments)
E: 46-47

Roman Catholic Church (Worship) R: 404

Confessional poetry

American literature ("Confessional" poetry)
A: 423

Lowell, Robert L: 511

Poetry (Poetry of the 1900's) P: 597-598

Teasdale, Sara T: 73

Confessions [book by Rousseau]

French literature (The Age of Reason) F: 520

Rousseau, Jean-Jacques (Early life) R: 492

Confessions [book by Saint Augustine]

Augustine, Saint (His life) A: 888

Autobiography A: 942

Confessions of a Young Man [book by Moore]

Moore, George Augustus M: 796

Confessions of an English Opium Eater [book

by De Quincey]

De Quincey, Thomas D: 152

English literature (Romantic prose) E: 320

Confessions of Felix Krull, Confidence Man

[book by Mann]

Mann, Thomas M: 164

Confessions of Henry Lorrequer, The [play by

Lever]

Irish literature (Prose and poetry) I: 431

Confessions of Nat Turner, The [book by

Styron]

Novel (The novel today) N: 575

Styron, William So: 936

Confidence man [criminal]

Western frontier life in America (Crime)
W: 238

Confidence-Man, The [book by Melville]

Melville, Herman (His literary career) M: 390-391

Confinement [agriculture]

Farm and farming (Confinement operations)
F: 40 with picture

Confirmation [religion] Ci: 936

Bar mitzvah B: 102

Eastern Orthodox Churches (Sacraments)
E: 46-47

Religious education (Private education) R: 225

Roman Catholic Church (Worship) R: 404

Conflict [sociology]

Human relations (Group conflicts) H: 428

Conflict of interest [politics] Ci: 936

Confocal scanning optical microscope

Microscope (Using an optical microscope)
M: 519

Confocal projection

Map (Map projections) M: 182 with diagram

Confrérie de la Passion [theater group]

Drama (The French theater) D: 333

Confucianism [religion] Ci: 936

Asia (Way of life in East Asia) A: 785-786; (Life
in China) A: 786-787

China (Religion) C: 486; (The early empire)
C: 501

Chinese literature (Beginnings) C: 511

Han dynasty H: 38

Korea (Religion) K: 371; (Early years) K: 375-376

Mencius M: 397

Philosophy (Oriental philosophy) P: 385-386

Religion (How the major religions are orga-
nized) R: 218; (Confucianism) R: 220 with
picture

Saint (Non-Christian saints) S: 29

Shinto S: 401

Taoism (Taoism as a philosophy) T: 36

World, History of the (The unification of China)
W: 431

Confucius [Chinese philosopher] Ci: 937

Confucianism Ci: 936

Golden rule G: 256

I Ching I: 2

Religion (Confucianism) R: 220

Conga drum [musical instrument] Ci: 937 with

picture

Hispanic Americans picture on H: 247

Congaree Swamp National Monument [South

Carolina]

National Park System (table: National monu-
ments) N: 50

Congenital blindness

Blindness B: 401

Congenital defect See Birth defect in this index

Congenital disease

Heart (Birth defects) H: 140 with picture

Congenital dislocation [disorder]

Dislocation D: 235

Hip H: 238

Congenital muscular dystrophy [disease]

Muscular dystrophy (Other muscular dystro-
phies) M: 937

Conger eel [fish]

Eel E: 114

Congestive cardiomyopathy [disorder]

Heart (Cardiomyopathy) H: 142-143

Congestive heart failure

Heart (Valve disease) H: 141-142

Congkak [game]

Malaysia (Recreation) M: 98d

Conglomerate [economics] Ci: 938

Business (Corporations) B: 725

Merger M: 418

Conglomerate [geology]

Pudding stone P: 870
 Rock (Clastic sediments) R: 372
 Sedimentary rock S: 280
Congo (Brazzaville) [country] Ci: 938 *with picture and map*
 Flag picture on F: 198
 French Equatorial Africa F: 514
Congo (Kinshasa) [country] Ci: 940 *with pictures and maps*
 Army (Prevention of war) A: 725
 Diamond (Where natural diamonds are found) D: 181-182
 Luba L: 512
 Sculpture (Royal and public sculpture) S: 240 *with picture*
See also the list of Related Articles in the Congo (Kinshasa) article
"Congo, The" [poem by Lindsay] Lindsay, Vachel L: 333
Congo buffalo [animal]
 Water buffalo W: 133
Congo Free State
 Belgium (Independence) B: 233
 Berlin Conference B: 267
 Congo (Kinshasa) (Belgian rule) Ci: 940d
 Stanley and Livingstone (Stanley's explorations) So: 837-838
Congo-Ocean railroad
 Congo (Brazzaville) (Economy) Ci: 939
Congo River [west-central Africa] Ci: 940f *with map*
 Africa picture on A: 119
 Congo (Brazzaville) (Land) Ci: 939 *with map*
 Congo (Kinshasa) (Rivers and lakes) Ci: 940c *with map*; (Transportation and communication) Ci: 940c
 River (table) R: 352
 Stanley and Livingstone (Stanley's explorations) So: 837-838
Congregación [village]
 Indian, American (In Latin America) I: 178
Congregate care
 Foster care F: 428
Congregatio de Propaganda Fide [organization]
 Propaganda (History) P: 824
Congregation of ...
Congregations appear under their key words, as in Index, Congregation of the
Congregational Christian Churches [U.S.]
 Baptists (Early history) B: 101
 United Church of Christ U: 47
Congregational Christian Churches, National Association of
 National Association of Congregational Christian Churches N: 29
Congregationalist, The
 National Association of Congregational Christian Churches N: 29
Congregationalists [religious group] Ci: 940f
 Protestantism (The free church movements [the 1500's and 1600's]) P: 835
Congress [meeting] Ci: 941
Congress Hall [Philadelphia]
 Philadelphia (Downtown Philadelphia) P: 359
Congress-I Party [political party]
 Gandhi, Rajiv G: 26
 India (India under Indira Gandhi) I: 133-134
 Rao, P. V. Narasimha R: 141
Congress of Aix-la-Chapelle [1818]
 Aix-la-Chapelle, Congress of A: 253
Congress of Berlin [1878] *See Berlin, Congress of in this index*
Congress of Cities
 National League of Cities N: 40
Congress of Industrial Organizations [labor history] Ci: 941
 American Federation of Labor and Congress of Industrial Organizations (History) A: 410
 Bridges, Harry B: 607
 Dubinsky, David D: 370
 Hillman, Sidney H: 232
 Labor movement (Formation of the CIO) L: 12
 Lewis, John L. L: 221
 Murray, Philip M: 931
 Reuther, Walter Philip R: 266
 United Automobile Workers U: 46
Congress of Paris [1856]
 Congress Ci: 941
Congress of Racial Equality [organization] Ci: 941
 Farmer, James Leonard F: 46
 McKissick, Floyd Bixler M: 342
Congress of the Confederation [U.S. history] Ci: 941
 Articles of Confederation A: 758

Federal Hall F: 64
 Maryland (Statehood) M: 258
 United States capitals U: 199
Congress of the United States Ci: 942 *with pictures*
 Apportionment A: 574
 Black Caucus, Congressional B: 386
 Capitol, United States C: 196
 Checks and balances C: 392
 Citizenship (U.S. citizenship laws) Ci: 571
 Congressional page Ci: 949
Congressional Record Ci: 949
 Constitution of the United States (Article I) Ci: 1004; (Amendment 12) Ci: 1013
 Franking and penalty privileges F: 485
 Government (Constitutional questions) G: 286
 House of Representatives H: 385 *with picture*
 Impeachment (Procedure) I: 91
 Iran-contra affair (Background) I: 407
 Library of Congress L: 263
 Political party (Organizing the government) P: 632
 Reconstruction (Early congressional reaction) R: 177
 Constitution of the United States (Amendment 27) Ci: 1016
 Senate S: 294 *with pictures*
 State, Department of (Relationship with the president and Congress) So: 859
 Supreme Court of the United States (How the Supreme Court is organized) So: 998
 Television (Congress) T: 118
 United States, Government of the (The legislative branch) U: 138; (How a bill becomes law in the United States) U: 141; (Current issues in U.S. government) U: 146
 United States, History of the (Congressional views) U: 172 *with picture*
 United States capitals U: 199
 Veto V: 346
 Washington, D.C. (Capitol Hill) W: 71
Congress of Vienna *See Vienna, Congress of in this index*
Congress Party [political party]
 India (Politics) I: 111; (India under Indira Gandhi) I: 133-134; (Religious and ethnic unrest) I: 134
Congress Voting Independence [painting by Pine and Savage]
 United States, History of the picture on U: 159
Congressional Black Caucus *See Black Caucus, Congressional in this index*
Congressional Budget and Impoundment Control Act [1974]
 Congressional Budget Office Ci: 949
Congressional Budget Office [U.S.] Ci: 949
 Budget (Preparation of the U.S. budget) B: 671
Congressional Caucus for Women's Issues
 Heckler, Margaret Mary H: 164
Congressional committee
 Congress of the United States (Working in committees) Ci: 944; (Conducting investigations) Ci: 946
Congressional Debates
Congressional Record Ci: 949
Congressional district
 House of Representatives (Size) H: 385
Congressional election
 House of Representatives (Size) H: 385
 Senate (Qualifications and election) S: 294
Congressional Globe
Congressional Record Ci: 949
Congressional Government [book by Wilson]
 Wilson, Woodrow (Graduate student) W: 320
Congressional immunity
 Constitution of the United States (Article I, Section 6) Ci: 1006
Congressional investigation
 Congress of the United States (Conducting investigations) Ci: 946
Congressional Library *See Library of Congress in this index*
Congressional Medal of Honor *See Medal of Honor in this index*
Congressional page [messenger] Ci: 949
Congressional Record [publication] Ci: 949
 Government Printing Office G: 293
Congressional Space Medal of Honor
 Medals, decorations, and orders (table) M: 357 *with picture*
Congressman [office] Ci: 949
 Address, Forms of (Officials of the United States) A: 53
 Congress of the United States (How Congress

is organized) Ci: 942; (Members of Congress at work) Ci: 946

Congresswoman
 Congressman Ci: 949
 Congress of the United States (How Congress is organized) Ci: 942
Congreve
 Match (The first matches) M: 300
Congreve, William [English dramatist] Ci: 949
Congreve, Sir William [British engineer] Ci: 950
 Guided missile (Early development) G: 427
 Rocket (Early rockets) R: 390
Congreve rocket [weapon]
 Rocket (Early rockets) R: 390
Congruence
 Geometry (Properties of geometric figures) G: 102
 Triangle (Properties and relationships of triangles) T: 438-439
Conibear [trap]
 Trapping (Kinds of traps) T: 403 *with picture*
 Fur (Trapping) F: 562
Conic section [mathematics]
 Cone Ci: 931 *with diagram*
 Ellipse E: 243
 Geometry (Analytic geometry) G: 104-105
 Hyperbola H: 475
Conidiophore [biology]
 Mold M: 690
Conie [animal]
 Pika P: 461 *with picture*
Conifer [botany] Ci: 950
 Earth (The Mesozoic Era) E: 27-28
 Fir F: 119 *with pictures*
 Flower F: 272
 Lumber (Softwood lumber) L: 517
 Pine P: 468 *with pictures*
 Plant (Gymnosperms) P: 519 *with picture*; (Forests) P: 522 *with picture*; (In seed plants) P: 534 *with pictures*; (Early plants) P: 540-541; (Classification of plants) P: 546-547 *with picture*
 Seed (Seed development in gymnosperms) S: 282
 Tree (Needleleaf trees) T: 414
 Wood (Kinds of wood) W: 389
Coniferous forest
 Plant (Forests) P: 522; *picture on P: 524*
Conjectures on Original Composition [book by Young]
 Young, Edward Y: 572
Conjoined twins Ci: 950 *with picture*
 Multiple birth (How multiple births occur) M: 920
Conjugation [biology]
 Bacteria (How bacteria reproduce) B: 21
 Parametrium P: 153
Conjugation [grammar] Ci: 950
 Grammar (Inflection) G: 303
 Inflection I: 268a
Conjunction [grammar] Ci: 951
 Adverb (Conjunctive adverbs) A: 70
Conjunctiva [anatomy]
 Conjunctivitis Ci: 951
 Eye (The outer parts) E: 460 *with picture*; (Diseases of the outer parts) E: 466
 Trachoma T: 353
Conjunctive adverb [grammar]
 Adverb (Conjunctive adverbs) A: 70
Conjunctivitis [disorder] Ci: 951
 Chlamydia C: 516
 Eye (Diseases of the outer parts) E: 466 *with picture*
 Trachoma T: 353
Conjure Woman, The [book by Chesnutt]
 Chesnutt, Charles Waddell C: 411
Conjuring
 Magician (Sleight of hand) M: 51
Conkling, Roscoe [American political leader]
 Arthur, Chester Alan (Custom house collector) A: 755; (Election of 1880) A: 756
 Hayes, Rutherford Birchard (Campaign of 1876) H: 120
Conlan, Jocko [American umpire]
 Baseball (table: Hall of Fame) B: 134
Conley, Benjamin [American political leader]
 Georgia (table) G: 130
Conley, William G. [American political leader]
 West Virginia (table) W: 225
Conly, Robert Leslie *See O'Brien, Robert C. in this index*
Connolly, John Bowden [American political leader] Ci: 951
 Kennedy, John Fitzgerald (The death of the President) K: 266 *with picture*

- Texas (table) T: 203; (The mid-1900's) T: 208
Connally Amendment [U.S. history]
 International Court of Justice I: 339
Connaught and Strathearn, Duke of [British general] Ci: 951
Connaught Place
 New Delhi (The city) N: 202-203
Connecticut Ci: 952 *with pictures and maps*
 Colonial life in America (Development of the Thirteen Colonies) Ci: 789 *with map*
 United States, History of the (New England) U: 153
 Western Reserve W: 241
See also the list of Related Articles in the Connecticut article
Connecticut, University of Ci: 972
Connecticut Compromise *See* Great Compromise *in this index*
Connecticut Courant [newspaper]
 Connecticut (Communication) Ci: 966
Connecticut Land Company
 Western Reserve W: 241
Connecticut River [river, U.S.] Ci: 972
 New Hampshire (Rivers and lakes) N: 220
 Vermont (Land regions) V: 328
Connecticut River Valley [region, U.S.]
 New Hampshire (Land regions) N: 218
Connecticut Yankee in King Arthur's Court, A [book by Twain]
 Twain, Mark (Productive years in Hartford) T: 529
Connecting rod [engine]
 Automobile (The power system) A: 949; *diagram on A*: 951
 Gasoline engine (Pistons and connecting rods) G: 64
Machine diagram on M: 13
Connective tissue [anatomy] Ci: 972
 Cancer (Classification by tissue) C: 168-169
 Collagen Ci: 773
 Human body (Cells and tissues) H: 417-418; (Organs and organ systems) H: 418
 Knee K: 345
 Marfan syndrome M: 198
 Tissue (Animal tissues) T: 299
Connelly, Jennifer [American actress]
 Motion picture (Best performance by an actress in a supporting role: 2001) M: 863
Connelly, Marc [American author] Ci: 972
Conner, Martin Sennett [American political leader]
 Mississippi (table) M: 640
Conner, Patrick E. [American military leader]
 Utah (Territorial days and statehood) U: 246-248
Conner Prairie Pioneer Settlement and Museum
 Indiana (Places to visit) I: 206
 Indianapolis (Recreation) I: 222
Connery, Sean [Scottish actor]
 Motion picture (Best performance by an actor in a supporting role: 1987) M: 863
Connolly, Harold [Canadian political leader]
 Nova Scotia (table) N: 567
Connolly, James B. [American athlete]
 Olympic Games (The modern games) O: 750
Connolly, Maureen [American tennis player]
 Tennis (Tennis tournaments) T: 165; (The mid-1900's) T: 166-168
Connolly, Tom [American umpire]
 Baseball (table: Hall of Fame) B: 134
Connor, Fox [American general]
 Eisenhower, Dwight David (Early military career) E: 149
Connor, John Thomas [American government official]
 Commerce, Department of (table) Ci: 871
Connor, Ralph [Canadian author]
 Canadian literature (Fiction: 1850-1918) C: 158
Connor, Roger [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Connor, Seldon [American political leader]
 Maine (table) M: 87
Connors, Jimmy [American tennis player]
 Ci: 973
Conoco Inc.
 DuPont Company D: 387
 Manufacturing (table) M: 170
Canon [pope]
 Pope (table) P: 666
Conover, Harry [American businessman]
 Ford, Gerald Rudolph (College student) F: 373-374
Conquest of Granada, The [play by Dryden]
 Dryden, John D: 370
Conquistador [poem by MacLeish]
 MacLeish, Archibald M: 24
Conquistadors [Latin American history] Ci: 973
 Latin America (The conquest of the Indians) L: 106
Conrad I [king of Germany]
 Germany (The breakup of Charlemagne's empire) G: 162
Conrad II [king of Germany]
 Henry III [of Germany] H: 186
Conrad III [Holy Roman emperor]
 Hohenstaufen H: 289
Conrad, Charles, Jr. [American astronaut]
 Ci: 973
 Astronaut (Achievements in space) A: 829-830; (table) A: 830 *with picture*
 Cooper, Leroy Gordon, Jr. Ci: 1035
 Space exploration (Returning to the earth) So: 718; (Skylab) So: 721
Conrad, Charles M. [American government official]
 Fillmore, Millard (table) F: 102
Conrad, Frank [American engineer]
 Radio, Amateur (History) R: 96
Conrad, Joseph [Polish-British author] Ci: 973
 English literature (Literature before World War I) E: 322
 Ford, Ford Madox F: 371
 Novel (New directions in the novel) N: 573-574
Conrad Hilton [hotel]
 Hilton, Conrad Nicholson H: 233
Conrail Ci: 973
 Railroad (Economic recovery and decline) R: 118-119; (Railroads today) R: 119
Conscience of a Conservative, The [book by Goldwater]
 Goldwater, Barry Morris (Political career) G: 259
Conscientious objector Ci: 974
 Pacifism P: 18
Conscious Lovers, The [play by Steele]
 Steele, Sir Richard So: 882
Consciousness [psychology]
 Concussion Ci: 929
 Mind M: 562
 Phenomenology P: 356
 Psychoanalysis (Psychoanalytic theory) P: 846
 Subliminal So: 938
Conscription *See* Draft, Military *in this index*
Consensual union
 Family (Varieties of families) F: 20
Consensus
 Public opinion P: 859
Consent, Informed *See* Informed consent *in this index*
Consenting Adult [book by Hobson]
 Hobson, Laura Zametkin H: 273
Conservancy Act [1914]
 Ohio (The early 1900's) O: 702
Conservation Ci: 974 *with pictures*
See also Wildlife conservation *in this index*
Forest conservation
 Conservation (Forest conservation) Ci: 981
 Forestry F: 404 *with pictures*
 Rain forest (Saving rain forests) R: 126d
 Soil (Soil conservation) So: 576
 Tree farming T: 433
Fuel conservation
 Conservation (Energy conservation) Ci: 983 *with pictures*
 Energy, Department of (Functions) E: 276
 Energy supply (Conserving energy) E: 282
 Natural resources (Conservation and development) N: 64
 Petroleum (Petroleum conservation) P: 346-347
Organizations
 Audubon Society, National A: 885
 Fish and Wildlife Service F: 175
 Greenpeace G: 386
 Izaak Walton League of America I: 523
 Land Management, Bureau of L: 57
 Nature Conservancy N: 67
 Soil Conservation Service So: 576
 State government (Environment) So: 864-865
 World Wildlife Fund W: 500
Soil conservation
 Conservation (Soil conservation) Ci: 979 *with pictures*
 Agronomy A: 162
 Coal (Strip mining) Ci: 721-722
 Cropping system Ci: 1153
 Irrigation (History) I: 459
 Rye (Uses) R: 573
 Soil (Soil conservation) So: 576
Water conservation
 Conservation (Water conservation) Ci: 977 *with picture*
 California (The mid-1900's) C: 62-63
 Dam (What does a dam do?) D: 17
 Detergent and soap (The development of detergents) D: 165
 Ground water G: 402
 Irrigation I: 456
 Reservoir R: 258
 Tennessee Valley Authority T: 158
 Water (Water management and conservation) W: 122; (Fresh water from the sea) W: 127; (The challenge of today) W: 132
See also the list of Related Articles in the Conservation article
Conservation [acting]
 Theater (Conservation and build) T: 238
Conservation biologist [occupation]
 Biodiversity B: 311
 Conservation (Careers in conservation) Ci: 990
 Zoology (History) Z: 610-611
Conservation of energy [physics]
 Energy (Conservation of energy) E: 274
 Heat (Thermodynamics) H: 155
 Helmholtz, Hermann Ludwig Ferdinand von H: 179
 Joule, James Prescott J: 169
 Mayer, Julius Robert von M: 327
 Physics (Developments in the 1800's) P: 440
 Thermodynamics T: 253
Conservation of mass, Law of [physics]
 Chemistry (Lavoisier's contributions) C: 401
 Lavoisier, Antoine Laurent L: 129
 Science (The Age of Reason) S: 199
Conservation of matter, Law of *See* Conservation of mass, Law of *in this index*
Conservation of momentum [physics]
 Momentum M: 698 *with diagram*
Conservation of parity [physics] *See* Parity [physics] *in this index*
Conservation tillage [agriculture]
 Conservation (Soil conservation) Ci: 979-980
 Farm and farming (Preparing the soil) F: 35
Conservationist [occupation]
 Animal (How human beings protect animals) A: 505
 Conservation Ci: 974
Conservatism [philosophy] Ci: 991
 Heritage Foundation H: 210
 Liberalism L: 227
 Right wing R: 340
 United States, Government of the (Current issues in U.S. government) U: 146
Conservative Judaism
 Judaism (Conservative Judaism) J: 180; (Worship) J: 181
 Religion (Judaism) R: 219-220
Conservative Party [Canada]
 Diefenbaker, John George (Member of Parliament) D: 197
 Political party (Oldest parties) P: 636
 Progressive Conservative Party P: 812
 Tupper, Sir Charles T: 493
Conservative Party [Norway]
 Norway (Politics) N: 539
Conservative Party [United Kingdom] Ci: 992
 Disraeli, Benjamin D: 237
 Liberal Democrats L: 226
 Peel, Sir Robert (Starts Conservative Party) P: 229
 Tory Party T: 343
 United Kingdom (Politics) U: 54, (Political confusion) U: 69
Conservative People's Party [Denmark]
 Denmark (Politics) D: 133
Conservator [archaeology]
 Archaeology (Recording and preserving evidence) A: 597
Conservator [career]
 Museum (Exhibition and care of materials) M: 939 *with picture*
Conservatory [school]
 Music (Careers in music) M: 957
Conservatory of Music [Russia]
 Saint Petersburg [Russia] (Education and cultural life) S: 55
Consideration [law]
 Contract Ci: 1023
Considerations of Representative Government [book by Mill]
 Mill, John Stuart M: 552

Consiglio [government]
Italy (Local government) I: 499

Consistory [religion]
Presbyterians P: 756a
Reformed Church in America R: 199

Consolation of Philosophy [book by Boethius]
Boethius, Anicius Manlius Severinus B: 436

Console [electronics] See *Rack system in this index*

Console piano [musical instrument]
Piano (Upright pianos) P: 447

Consolidated Aircraft Corporation
Aviation (Aviation progress) A: 988

Consolidated city [government]
Metropolitan area (Metropolitan federation) M: 444

Consolidated Metropolitan Statistical Area
Metropolitan area M: 442

Consolidated Rail Corporation
Conrail Ci: 973

Consolidated school [education] Ci: 992
School (Public school districts) S: 182

Consonance [music]
Music (Harmony) M: 951-952

Consonance [poetry]
Poetry (Sounds) P: 594-595

Consonant [language] Ci: 992

Consort [title]
Prince consort P: 781
Queen Q: 39

Conspiracy [law] Ci: 992
Coup d'état Ci: 1099
Un-American Activities Committee U: 19

Conspiracy of Catiline [book by Sallust]
History (The ancient Greeks and Romans) H: 261-262

Constable [office] Ci: 992
Police P: 620
Royal Canadian Mounted Police (Organization and duties) R: 495

Constable, John [British painter] Ci: 992
Painting (Romanticism) P: 68 *with picture*

Constance, Council of [1414-1418]
Hus, John H: 456
John XXIII [antipope] J: 132
Martin V M: 235
Pope (The troubles of the papacy) P: 664
Roman Catholic Church (The Great Schism) R: 408
Sigismund S: 453

Constance, Lake [Europe]
Lake Constance L: 37
Switzerland (The Swiss Plateau) So: 1055 *with map*

Constance, Peace of [1183]
Frederick I F: 497

Constance of Castile [wife of]
John of Gaunt J: 134

Constasy [psychology]
Perception (Principles of perception) P: 284

Constans [Roman emperor]
Rome, Ancient (table) R: 447

Constant
Algebra (Sets and variables) A: 350-351

Constant, Benjamin [French author]
Staël, Madame de So: 820

Constant dollars [economics]
Gross domestic product (Real GDP) G: 399

Constant of proportion [mathematics]
Geometry (Similarity) G: 102-103
Proportion P: 828

Constant proportions, Law of [chemistry]
Chemistry (Dalton's atomic theory) C: 402
Proust, Joseph Louis P: 838

Constant Reader [book by Parker]
Parker, Dorothy P: 170

Constant-speed propeller
Airplane (Propellers) A: 217
Propeller (The airplane propeller) P: 826

Constant-volume gas thermometer
Liquid air (Properties) L: 346

Constantine [antipope]
Pope (table) P: 666

Constantine [city, Algeria] Ci: 993

Constantine I [pope]
Pope (table) P: 666

Constantine I [Roman emperor] See *Constantine the Great in this index*

Constantine I [king of Greece] Ci: 993
Greece (George I) G: 362-363

Constantine II [Roman emperor]
Rome, Ancient (table) R: 447

Constantine II [king of Greece] Ci: 993
Greece (The revolt of 1967) G: 364, (The restoration of democracy) G: 365

Constantine III [king of Scotland]
Scotland (Beginning of the Scottish kingdom) S: 219

Constantine VII [Byzantine emperor]
Byzantine Empire (Invasion and conquest) B: 754

Constantine XI [Byzantine emperor]
Byzantine Empire (The decline and end of the empire) B: 754

Constantine the Great [Roman emperor]
Ci: 993
Byzantine Empire B: 752 *with picture*;
(Beginnings) B: 753
Church C: 541
Eastern Orthodox Churches (History) E: 45
Flag *picture on* F: 216
Istanbul (History) I: 491
Jerusalem (Roman rule) J: 101
Julian J: 186
Nicene Councils N: 402
Praetorian Guard P: 729
Rome, Ancient (Temporary recovery) R: 448
Saint Peter's Basilica (History) S: 53
Sylvester I, Saint So: 1065

Constantine, Arch of [ruins]
Constantine the Great Ci: 993
Rome (Other remains) R: 433 *with picture*

Constantine, Basilica of
Vatican City (History) V: 288-289

Constantinescu, Emil [Romanian political leader]
Romania (Recent developments) R: 426

Constantinople [former name, Istanbul]
See also *Istanbul in this index*
Architecture (Byzantine architecture) A: 617 *with picture*
Byzantine Empire (Beginnings) B: 753
Crusades (The First Crusade) C: 1160
Greece (Ottoman rule) G: 361
Library (Libraries of the Middle Ages and the Renaissance) L: 259
Ottoman Empire O: 877
Tulip T: 482
World, History of the (The Byzantine Empire) W: 434

Constantinople, Battle of [1453]
Byzantine Empire (The decline and end of the empire) B: 754
Ottoman Empire (Expansion and decline) O: 878

Constantinople, Council of [381]
Trinity T: 447

Constantius I [West Roman emperor]
Constantine the Great Ci: 993
Rome, Ancient (table) R: 447

Constantius II [Roman emperor]
Julian J: 187
Rome, Ancient (table) R: 447

Constellation [aircraft carrier]
Aircraft carrier (The United States carrier fleet) A: 206

Constellation [astronomy] Ci: 993 *with picture*
Astrology (History) A: 827
Astronomy (Observing the sky) *maps on*
A: 835; (Locating objects in space)
A: 837-838
Star (Names of stars) So: 842 *with picture*
Zodiac (The zodiac in astrology) Z: 601

Constellation [ship] Ci: 994 *with picture*
Baltimore (Other interesting places to visit) B: 69
Navy, United States (Undeclared war with France) N: 88

Constipation [disorder] Ci: 994
Laxative L: 148
Nutrition (Include fiber) N: 628

Constituency [district]
House of Commons H: 384
Parliament (The House of Commons) P: 172-173
United Kingdom (National government) U: 49

Constituent [government]
United States, Government of the (Functions) U: 138

Constitution [document] Ci: 995
Bill of rights (The United States Constitution) B: 301
Civil rights Ci: 608
Democracy (Constitutional government) D: 121
Law (Public law) L: 130-131
State government (State constitutions) So: 862
Term limits T: 173

Constitution [ship] Ci: 995 *with picture*

Hull, Isaac H: 412
Massachusetts (Places to visit) M: 280
Navy, United States (Undeclared war with France) N: 88; *picture on* N: 90

Constitution Act [1867] See *British North America Act in this index*

Constitution Act [1982]
British North America Act B: 632
Canada, Government of (The constitution) C: 131
Canada, History of (Constitutional changes) C: 153 *with picture*
Trudeau, Pierre Elliott (The national scene) T: 464-465

Constitution Day [custom]
Holiday (In other countries) H: 291

Constitution Gardens National Parkway
[Washington, D.C.]
National Park System (table: National parkways and other national parklands) N: 56

Constitution of 1795 [French history]
French Revolution (The revolution ends) F: 527

Constitution of 1917 [Mexican history]
Carranza, Venustiano C: 248
Mexico (The Constitution of 1917) M: 472-473

Constitution of Canada
Bloc Québécois B: 404
Campbell, Kim (The 1993 election) C: 90d
Canada, Government of (The constitution) C: 131
Canada, History of (Constitutional changes) C: 153
Mulroney, Brian (Prime minister) M: 917
Quebec (Recent developments) Q: 32
Trudeau, Pierre Elliott (Later years) T: 465

Constitution of Divine Revelation
Vatican Council II (The work of the council) V: 289

Constitution of France
French Revolution (The National Assembly) F: 525

Constitution of South Africa
South Africa (The dismantling of apartheid) So: 620; (Recent developments) So: 621

Constitution of the Confederacy [document]
Confederate States of America (Government) Ci: 931

Constitution of the United States [document]
Ci: 996 *with pictures*
Amendment A: 406
American literature (The revolutionary period [1765-1787]) A: 415
Census (Kinds of censuses) C: 346-347
Checks and balances C: 392
Citizenship (The Constitution) Ci: 571
Civil rights (Civil rights in the United States) Ci: 608
Democracy (American democracy) D: 123;
(Controls on power) D: 121
Election (Elections in the United States) E: 159
Fletcher v. Peck F: 234
Freedom (During the Age of Reason) F: 503
Government (The U.S. Constitution) G: 286
Impeachment (Procedure) I: 91
Interstate commerce I: 350f
Judicial review J: 183
Law (Beginnings of U.S. law) L: 136
Marshall, John (Chief justice) M: 230
Massachusetts (The Revolutionary War) M: 291-292
Money (The first United States currency) M: 708
National Archives N: 29
Pennsylvania *picture on* P: 266
Pinckney, Charles P: 467
President of the United States (The founding of the presidency) P: 767
Shays's Rebellion S: 379
State government (Relations with other governments) So: 865
Territory (In the United States) T: 176
Treason T: 406
Trial (The criminal defendant's rights) T: 437
United States, Government of the (Principles of American government) U: 136;
(Growth of the federal government) U: 145
United States, History of the (Forming a new nation) U: 160; (The Louisiana Purchase) U: 163; (Reconstruction) U: 175
World, History of the (The rise of democracy and nationalism) W: 443
See also *the list of Related Articles in the Constitution of the United States article*

Constitution on the Liturgy

- Vatican Council II (The work of the council)
V: 289
- Constitution Plaza** [Mexico City]
Mexico City (Downtown) M: 476
- Constitution Square** [Danville]
Kentucky (Places to visit) K: 282
- Constitution Square** [Greece]
Athens (Landmarks) A: 854 *with map*
- Constitution State**
Connecticut Ci: 953
- Constitutional Act** [1791]
Canada, History of (The United Empire Loyalists) C: 144 *with map*
- Constitutional convention** [government]
Political convention (Other types of conventions) P: 630
- Constitutional Convention** [U.S. history]
Congress of the United States (The founding of Congress) Ci: 947
Constitution of the United States (The Constitutional Convention) Ci: 999
Franklin, Benjamin (The twilight years) F: 491
United States, Government of the (Growth of the federal government) U: 145
United States, History of the *picture* on U: 162
Washington, George (Constitutional Convention) W: 100 *with picture*
- Constitutional Court**
Russia (Courts) R: 532
South Africa (National government) So: 608
- Constitutional law**
Law (Public law) L: 130-131; (Beginnings of U.S. law) L: 136
- Constitutional monarchy** [government]
French Revolution (The National Assembly) F: 525
Monarchy M: 700
Puritans (Puritan influence) P: 910
- Constitutional referendum** [government]
Initiative and referendum (The referendum) I: 272
- Constitutional Union Party** [U.S. history]
Ci: 1016
Civil War (Developments in the political party system) Ci: 616
Lincoln, Abraham (Election of 1860) L: 318
United States, History of the (The election of 1860) U: 174
- Constitutional View of the Late War Between the States (1867-1870), A** [book by Stephens]
Stephens, Alexander Hamilton So: 890
- Constitutionalism**
Political science (Constitutionalism) P: 639
- Constitutionality** [law]
Government (The U.S. Constitution) G: 286
Supreme Court of the United States (Authority of the Supreme Court) So: 998
- Constitutive Act of the African Union** [2000]
African Union A: 137
- Constraint-induced movement therapy**
Stroke (Rehabilitation) So: 930
- Constrictor snake**
Boa constrictor B: 427 *with picture*
Python P: 922
Snake (Feeding habits) S: 531
- Construction** [art]
Nevelson, Louise *picture* on N: 178
Sculpture (Assemblages) S: 257 *with picture*
- Construction** [geometry]
Geometry (Some basic geometric constructions) G: 103 *with diagrams*
- Construction, Building** *See* Building construction *in this index*
- Construction Battalion** [U.S. Navy]
Seabees S: 264
- Construction equipment**
Dredging D: 345
- Construction industry**
Building trade B: 685
United States *picture* on U: 131
- Construction survey**
Survey (Other surveys) So: 1011
- Constructional hill** [geography]
Hill H: 230
- Constructive interference** [physics]
Diffraction (How diffraction occurs) D: 201
Interference I: 323 *with diagram*
Light (Interference) L: 286 *with diagram*
Sound (Beats) So: 604 *with diagram*
Waves (Interference) W: 153
- Constructive speech**
Debate (Format) D: 64
- Constructivism** [art]
Abstract art A: 18
- Gabo, Naum G: 2
Minimal art M: 573
Pevsner, Antoine P: 351 *with picture*
Russia (Painting and sculpture) R: 537
- Consuelo** [book by Sand]
Sand, George S: 106
- Consul** [government official] Ci: 1017
Diplomacy (Diplomatic representatives) D: 216
Foreign Service (Service) F: 388
International relations (Diplomacy) I: 344
- Consul** [office]
Consul Ci: 1017
Rome, Ancient (The Roman Republic) R: 441
- Consul, The** [opera by Menotti]
Menotti, Gian Carlo M: 402
- Consulate** [French history]
Napoleon I (First consul of France) N: 16
- Consultative Council on Postal Studies**
Postal Union, Universal P: 708
- Consulting firm**
Industrial design (How an industrial designer works) I: 244
- Consulting meteorologist**
Weather (Careers in weather) W: 170
- Consumable electrode**
Welding (Fusion welding) W: 189
- Consumer Affairs, United States Office of** [U.S.] Ci: 1017
- Consumer and family studies** *See* Home economics *in this index*
- Consumer cooperative** [economics]
Cooperative (Supply, or purchasing, cooperatives) Ci: 1036
- Consumer credit** [economics]
Credit (Types of credit) Ci: 1124
Installment plan I: 304
- Consumer Credit Protection Act** *See* Truth in Lending Act *in this index*
- Consumer Federation of America** Ci: 1017
Consumerism (Growth of the movement) Ci: 1019
- Consumer goods**
Economics (table) E: 58
Gross domestic product (Measuring the GDP) G: 399
Home economics (Areas of study) H: 300
Industry (Other systems of classification) I: 261
Manufacturing (Kinds of manufacturing) M: 169
- Consumer magazine**
Magazine (Consumer magazines) M: 42
- Consumer Price Index** [economics] Ci: 1017
Cost of living Ci: 1079 *with diagram*
Inflation (Measuring inflation) I: 267
Labor movement (Arranging contracts) L: 6-5
- Consumer Product Safety Commission** [U.S.] Ci: 1017
Consumerism (The right to safety) Ci: 1018
Fire Department (Recent developments) F: 128-129
Packaging (Packaging regulations) P: 19
- Consumer protection** *See* Consumerism *in this index*
- Consumer Reports** [publication]
Consumers Union Ci: 1020
- Consumerism** [economics] Ci: 1017
Better business bureau B: 276
Class action Ci: 642
Clothing (Protecting the public) Ci: 705
Consumer Federation of America Ci: 1017
Consumption Ci: 1020
Crime (White-collar crime) Ci: 1136-1137
Economics (Consumers) E: 60
Guaranty G: 411
Home economics (Areas of study) H: 300
Marketing M: 214
Nader, Ralph N: 2
National Consumers League N: 32
Price (What prices do) P: 775
- Consumers League, National**
National Consumers League N: 32
- Consumers' Research, Inc.** [organization]
Consumerism (Beginnings of consumerism) Ci: 1019
- Consumers Union** [organization] Ci: 1020
Consumerism (The right to information) Ci: 1018-1019; (Beginnings of consumerism) Ci: 1019
- Consumption** [disease] *See* Tuberculosis *in this index*
- Consumption** [economics] Ci: 1020
Gross domestic product (Measuring the GDP) G: 399
Inflation (Effects on consumer behavior) I: 267
- Production P: 810
Trade (Trade in the United States) T: 363
Standard of living (How standard of living is measured) So: 833
- Contact** [cryptology]
Codes and ciphers (Communications intelligence) Ci: 750-751
- Contact** [switch]
Burglar alarm B: 704
- Contact copying**
Copying machine (Contact copying) Ci: 1046
- Contact dermatitis**
Eczema E: 74
- Contact external senses** [anatomy]
Senses (External senses) S: 301-302
- Contact fuse**
Bomb B: 450
- Contact lens** Ci: 1020 *with pictures*
Eye (Defects of the eye) E: 464
- Contact metamorphism**
Metamorphic rock M: 428
- Contact method** [industrial process]
Sulfuric acid (How sulfuric acid is made) So: 968
- Contact mine**
Mine warfare (Naval mines) M: 565
- Contact poison**
Insecticide I: 302
- Contact printing**
Photography (Printing black-and-white photographs) P: 421
- Contagious disease** *See* Communicable disease; Infectious disease *in this index*
- Contagious magic**
Magic (Contagious magic) M: 50
- Contagiousness of Puerperal Fever, The** [book by Holmes]
Holmes, Oliver Wendell (His life) H: 294
- Container**
Bottle B: 513
Glass (Soda-lime glass) G: 213; *picture* on G: 211
Gutta-percha G: 445
Packaging P: 18
Tin can T: 294
- Container car**
Railroad (Freight service) R: 106; *pictures* on R: 105
- Container garden**
Gardening (Ornamental gardens) G: 31
- Container ship**
Containerization Ci: 1021
Saint Lawrence Seaway (The seaway today) S: 45
Ship (Container ships) S: 418 *with pictures*
- Containerization** [transportation] Ci: 1021 *with picture*
Transportation (Freight transportation) T: 394-395 *with picture*
- Containment building**
Nuclear energy (Power plant design) N: 584
- Containment policy** [international relations]
Cold War (The Containment Policy) Ci: 763
Kennan, George Frost K: 259
- Contamination** *See* Environmental pollution *in this index*
- Conte** [poem]
French literature (Narrative poetry) F: 518-519
- Conté, Lansane** [Guinean political leader]
Guinea (History) G: 432
- Conte, Nicolas Jacques** [French inventor]
Pencil (History) P: 236
- Conte Di Savoia** [ship]
Gyroscope (Mechanical gyroscopes) G: 453-454
- Contemplation** [religion]
Meditation M: 380
- Contemplations, The** [poems by Hugo]
Hugo, Victor Marie (Exile and return) H: 410; (His works) H: 410
- Contemplative religious order** [group]
Carthusians C: 261
- Contempt** [law] Ci: 1021
Impeachment (History) I: 91-92
Trial (Presenting evidence) T: 437
- Content word**
English language (Grammar) E: 312
- Contes** [book by La Fontaine]
La Fontaine, Jean de L: 29
- Contest, The** [book by Hogrogian]
Hogrogian, Nonny H: 289
- Context clue**
Reading (Comprehending what is perceived) R: 157
- Contiguity, Law of** [psychology]

- Association A: 819
Continent Ci: 1021
 Earth (The lithosphere) E: 20; (The shaping of the continents) E: 24
 Plate tectonics P: 561 *with pictures and maps*; (The drifting continents) map on P: 564
 Races, Human (The geographical-race theory) R: 54-55 *with map*
 World (Land) W: 418, maps on W: 410, W: 413
Continental [money]
 Money (The first United States currency) M: 708 *with picture*
 Revolutionary War in America (Financing the war) R: 279
Continental Army [U.S. history]
 Army, United States (History) A: 738
 Revolutionary War in America (The beginning of the war) R: 274; (The Continental Army) R: 275; (The fighting forces) R: 278; (Valley Forge) R: 283 *with picture*
 Trumbull, Jonathan T: 473
Continental Association [U.S. history] Ci: 1021
Continental Board of War and Ordnance [U.S. history]
 Adams, John (National politics) A: 36
Continental Congress [U.S. history] Ci: 1021 *with picture*
 Adams, John (National politics) A: 36
 Adams, Samuel (The patriot) A: 44
 Continental Association Ci: 1021
 Declaration of Independence (The Continental Congress) D: 74; picture on D: 77
 Pennsylvania (The Revolutionary War) P: 265
 Randolph, Peyton R: 137
 Revolutionary War in America R: 270
 United States capitals U: 198
First Continental Congress
 Continental Congress (The First Continental Congress) Ci: 1021-1022
 Galloway, Joseph G: 16
 Philadelphia (The Revolutionary War period) P: 366
 Revolutionary War in America (The First Continental Congress) R: 273
 United States, History of the (The First Continental Congress) U: 158
 Washington, George (First Continental Congress) W: 97
Second Continental Congress
 Continental Congress (Second Continental Congress) Ci: 1022
 Articles of Confederation A: 759
 Congress of the Confederation Ci: 941
 Madison, James (Entry into politics) M: 32-33
 Marine (History) M: 204
 Revolutionary War in America (The Continental Army) R: 275; (The Declaration of Independence) R: 276
 United States, History of the (The Revolutionary War begins) U: 158; (The Declaration of Independence) U: 158 *with picture*
 Washington, George (Elected commander in chief) W: 97
Continental divide [geography] Ci: 1022
 River (Divides) R: 353
Continental Divide [North America] See Great Divide *in this index*
Continental drift [geology]
 Climate (Continental drift) Ci: 678
 Mantle M: 168
 Earth (The shaping of the continents) E: 24
 Indian Ocean (Ocean floor) I: 186-187
 Ocean (How the sea floor was formed) O: 662
 Plate tectonics (History of tectonic theory) P: 564 *with diagrams*
 Prehistoric animal (The distribution of mammals) P: 741
Continental glacier
 Glacier (Kinds of glaciers) G: 203 *with picture*
Continental grip
 Tennis picture on T: 164
Continental island
 Island (Kinds of islands) I: 471 *with picture*
Continental margin [geology]
 Atlantic Ocean (The Atlantic seafloor) A: 864
 Ocean (The continental margin) O: 660
Continental Navy [U.S. history]
 Flag picture on F: 209
 Revolutionary War in America (The fighting forces) R: 278-279; (Fighting at sea) R: 283
Continental rise [geology]
 Atlantic Ocean (The continental margin) A: 864
 Ocean (The continental rise) O: 662
Continental shelf [geology]
 Ocean (The continental shelf) O: 660
 Arctic Ocean (Depth and the ocean floor) A: 642
 Atlantic Ocean (The continental margin) A: 864
 Earth (The lithosphere) E: 20
 Fishing industry (Ocean fisheries) F: 181
 Island diagram on I: 471
 Pacific Ocean (The ocean floor) P: 14
Continental slope [oceanography]
 Atlantic Ocean (The continental margin) A: 864
 Ocean (The continental slope) O: 662
Continental System [French history] Ci: 1022
 Milan Decree M: 541
Contingent truth [philosophy]
 Age of Reason (The worship of reason) A: 138
 Metaphysics (Possibility and necessity) M: 430
Contino, Antonio [Italian architect]
 Bridge of Sighs B: 606
Continuation War [1941-1944]
 Finland (World War II) F: 117-118
 Russo-Finnish wars (The Continuation War) R: 566
Continuing education See Adult education *in this index*
Continuo [music] See Basso continuo *in this index*
Continuous freezer
 Ice cream (How ice cream is made) I: 8
Continuous furnace
 Furnace (Heating the charge) F: 567
Continuous mining machine
 Coal (The room-and-pillar system) Ci: 723-725 *with pictures*
 Mining picture on M: 577
Continuous premium policy
 Insurance (Main kinds of life insurance) I: 309-310
Continuous progress plan [education]
 Education (The organization of U.S. education) E: 89-90
Continuous spectrum [light]
 Light (Electromagnetic waves) L: 285
Continuous tank [furnace]
 Glass (Melting) G: 215
Continuous tone copy [printing]
 Printing (Preparing illustrations for reproduction) P: 797
Continuous-wave laser
 Laser (Kinds of lasers) L: 85
Continuous-wave radar
 Radar (Continuous-wave radar) R: 69
Continuum mechanics
 Mechanics M: 354
Contour feather
 Feather (Kinds and parts of feathers) F: 59
Contour map
 Map (Thematic maps) M: 178
 Photogrammetry picture on P: 407
Contour mining
 Coal (Strip mining) Ci: 721
 Mining (Surface mining methods) M: 574-575
Contour plowing
 Agronomy A: 162
 Conservation (Soil conservation) Ci: 979-980 *with picture*
 Dry farming D: 369
 Erosion (Controlling erosion) E: 355
Contra bassoon [musical instrument]
 Bassoon B: 158
 Music (Wind instruments) M: 949
Contraband [commerce] Ci: 1023
 High seas H: 229
 Right of search R: 340
Contrabass [musical instrument] See Bass *in this index*
Contraception See Birth control *in this index*
Contraceptive
 Birth control (Methods of birth control) B: 378
Contraceptive implant
 Birth control (Methods of birth control) B: 378-379
Contract [law] Ci: 1023
 Labor movement (Arranging contracts) L: 4
 Law (Private law) L: 130; (Beginnings of U.S. law) L: 136; (Law since 1900) L: 136
 Lease L: 166
 Minor M: 608
 Teaching (Employment practices) T: 68
 Tort T: 342
 Treaty T: 408
Contract, Freedom of
 Law (Law since 1900) L: 136; (Beginnings of U.S. law) L: 136
 U.S. law L: 136
Contract, Liberty of [law]
 Labor movement (The early 1900's) L: 11
Contract bridge [game]
 Bridge B: 604
Contract builder [construction]
 Housing (Private housing) H: 390
Contract carrier [transportation]
 Truck (Industrial uses) T: 456
Contract farming
 Agriculture (The organization of U.S. agriculture) A: 150-151
 Farm and farming (Marketing farm products) F: 42
Contract laborer
 Asian Americans (The second wave) A: 812-812e
Contract market [economics] See Futures contract *in this index*
Contract performance bond
 Insurance (Other kinds of property and liability insurance) I: 313-314
Contract with America [document]
 Gingrich, Newt G: 191
Contract with the American Family [social program]
 Christian Coalition C: 523
Contractile vacuole [biology]
 Ameba A: 406
 Paramecium P: 152
Contracting
 Building trade (The contracting system) B: 685
Contracting party
 General Agreement on Tariffs and Trade G: 82
Contraction [economics]
 Business cycle B: 727
 Depression (Causes and prevention) D: 150
 See also Recession *in this index*
Contraction [physics]
 Heat (Changes in size) H: 152
Contractor [manufacturing]
 Clothing (Ready-to-wear clothes) Ci: 704-705
Contractual forfeiture [law]
 Forfeiture F: 408
Contrail Ci: 1023 *with picture*
Contralto [music]
 Opera (The singers) O: 792
 Singing (Voice classification) S: 472
Contras [political group]
 Nicaragua (Recent developments) N: 400-401
 Honduras (Recent developments) H: 313
 Iran-contra affair I: 407
 Ortega, Daniel O: 859
Contrast
 Classical music (Classical music forms) Ci: 644
 Design (Contrast) D: 157
Contrast [photography]
 Motion picture (Preparing to shoot) M: 852-853 *with picture*
Contrast, Law of [psychology]
 Association A: 819
Contrast, The [play by Tyler]
 Tyler, Royall T: 535
Contrast agent [medicine]
 Angiography A: 461
 Computed tomography Ci: 907
 Radiology R: 99
Contre Sainte-Beuve [book by Proust]
 Proust, Marcel P: 839
Conteras, Battle of [1847]
 Mexican War (Scott's campaign) M: 446-447
Contribution of the Negro to American Democracy, The [painting by White]
 African Americans picture on A: 136b
Contributory negligence [law]
 Negligence N: 119
Control board
 Radio (Radio stations) R: 86; (From electric waves to radio waves) R: 86; picture on R: 83
Control circuit
 Electronics (Digital circuits) E: 213-214
Control column
 Helicopter (Piloting a helicopter) H: 171
Control Data Corporation
 Computer (Miniaturization) Ci: 924c
Control group
 Placebo P: 505
 Psychology (Experimentation) P: 849
Control-line model
 Airplane, Model (Control-line models) A: 241 *with picture*
Control mode [aviation]
 Automatic flight control system (How an AFCS works) A: 944

Control rod [nuclear energy]

Gadolinium G: 4

Nuclear energy (Power reactors) N: 584-585
with diagrams; (Chain reactions) N: 586
with picture**Control room**Radio (Radio stations) R: 86; *picture on* R: 83
Television (Putting a show on the air) T: 111-112 with pictures**Control stick**

Airplane (The controls and instruments) A: 217

Control system

Automobile (Control systems) A: 953 with diagrams

Guided missile (Guidance and control systems) G: 424

Control tape

Machine tool (Numerical control of machine tools) M: 19

Control towerAirport (The control tower) A: 245; (Air traffic control) A: 246; *picture on* A: 243**Control unit** [electronics]

Computer (Microprocessors) Ci: 912

Control vehicle

Television (Other production methods) T: 113

Controllable-pitch propeller

Airplane (Engineering improvements) A: 237; (Propellers) A: 217

Controlled access

Road (Primary highways) R: 358

Controlled-atmosphere storage

Food preservation (Other methods) F: 343-344

Controlled cross [agriculture]

Corn (Hybrid corn) Ci: 1059

Controlled environment agriculture

Greenhouse G: 382

Controlled experiment

Sociology (Methods of sociological research) So: 565

Statistics (Collecting the data) So: 868

Controlled mine

Mine warfare (Land mines) M: 564

Controlled substance

Opiate O: 810

Controller [device]

Automation (How automation works) A: 945 with diagram

Servomechanism S: 320

Transmission (The controller) T: 378

Cutusion [injury] *See* Bruise in this index**Conundrum**

Riddle R: 335

Conure [bird]

Parrot (Kinds of parrots) P: 179

Conus arteriosus [anatomy]

Heart (Fish) H: 146

Convair XFY-1 [aircraft]Airplane *picture on* A: 236

V/STOL V: 452

Convection [heat]

Heat (How heat travels) H: 151 with diagram

Cloud (How clouds form) Ci: 711 with pictures

Heating (Steam and hot-water heating systems) H: 159

Insulation (Insulation to control heat flow) I: 306

Radiator R: 82

Convection current

Air turbulence A: 200

Plate tectonics (Causes of plate movement) P: 564

Convection oven

Range (History) R: 138-139

Convection zone

Sun (Zones of the sun) So: 979-980 with diagram

Convective cloud

Rain (Characteristics of rain) R: 122-123

Convective heating

Air turbulence A: 200

Convector

Heating (Steam and hot-water heating systems) H: 159 with diagrams

Convenience, Flag of

Ship (Merchant fleets of the world) S: 425; (Merchant fleets of other countries) S: 426

Convenience food

Cooking (Planning time-saving meals) Ci: 1027

Convent [religion] Ci: 1024

Monasticism M: 700

Nun N: 608

Women's movements (During the Middle Ages) W: 384

Convention [international relations]

Treaty T: 408

Convention [meeting]*See also* Political convention in this index

Delegate D: 115

Convention for the Protection of the Mediterranean Sea Against Pollution [1976]

Mediterranean Sea (History of the Mediterranean) M: 382

Convention of American Instructors of the Deaf [organization]

Deafness (Education) D: 59

Convention of London [1818]

Lake of the Woods L: 43

Convention on International Trade in Endangered Species of Wild Fauna and Flora [international agreement]Elephant (Protecting elephants) E: 231-232
Endangered species (Protecting endangered species) E: 270

Ivory (Ivory today) I: 521

Poaching P: 588

Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction [1997] *See* Chemical Weapons Convention in this index**Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction** [1972] *See* Biological Weapons Convention in this index**Convention People's Party** [political party]

Ghana (History) G: 179-180

Conventional aircraft

Navy (Aircraft carriers) N: 78

Conventional Armed Forces in Europe, Treaty of [1990]

Bush, George Herbert Walker (International affairs) B: 721-722

Nuclear weapon (Limiting numbers) N: 601

Conventional circuit

Electronics (Types of electronic circuits) E: 209-210

Conventional loan [economics]

Mortgage M: 821

Conventional miningCoal (The room-and-pillar system) Ci: 723, *picture on* Ci: 724**Conventuals** [religion]

Franciscans F: 482

Convergence [mathematics]

Series (Working with infinite series) S: 317

Convergence [optics]

Lens (Convergence) L: 196a

Convergence and Union [political party]

Spain (Political parties) So: 733

Convergence zone

Glider (Soaring) G: 229-230

Convergent evolution

Jerboa J: 92

Convergent plate boundaries [geology]

Plate tectonics (Plate interactions) P: 562

Converging lens [optics] *See* Convex lens in this index**Conversation at Midnight** [book by Millay]

Millay, Edna St. Vincent M: 553

Conversation in the Cathedral [book by Vargas Llosa]

Vargas Llosa, Mario V: 285

Conversation piece [art]

Gainsborough, Thomas G: 6

Converse, Julius [American political leader]

Vermont (table) V: 333

Conversion [industrial process]

Coal (Coal research) Ci: 730-731

Energy (Energy conversion) E: 274

Petroleum (Refining petroleum) P: 343-344

Conversion [sports]

Rugby football (Rugby Union) R: 510; (Rugby League) R: 511-512

Conversion factor

Weights and measures (Conversion factors) W: 184

Conversion of Saint Paul [painting by Caravaggio]

Painting (Baroque) P: 58 with picture

Conversion of Saint Paul, The [painting by Michelangelo]New Testament *picture on* N: 287**Conversion plant**

Uranium (Refining and processing uranium ore) U: 215

Converter [electricity]

Radio (The tuner) R: 88-89 with picture

Convertibility [economics] Ci: 1024**Convertible term insurance**

Insurance (Main kinds of life insurance) I: 309

Convex lens [optics]

Aberration (Point aberration) A: 10-11 with diagram

Eye (Farsightedness) E: 464 with picture

Glasses (Prescription glasses) G: 224-225

Lens (A positive lens) L: 196 with diagrams

Convex mirror [light]

Mirror (Convex mirrors) M: 616 with diagram

Convex polygon [geometry]

Polygon P: 650 with diagram

Convex polyhedron [geometry]

Polyhedron P: 650 with diagrams

Conveyor belt Ci: 1024 with pictures

Assembly line A: 818

Coal (The room-and-pillar system) Ci: 723-725 with picture; *picture on* Ci: 719**Convivio, //** [poems by Dante]

Dante Alighieri (His works) D: 34-35

Convuluted tubule [anatomy]

Kidney (How the kidneys produce urine) K: 311-312 with diagram

Convoy [warfare]

World War I (The United States enters the war) W: 462-463

World War II (The Battle of the Atlantic) W: 477

Convoy of Tears [Vietnamese history]

Vietnam War (The end of the war) V: 376

Convulsions [disorder] Ci: 1025

Anticonvulsant A: 553

First aid (Convulsion and epileptic seizure) F: 140

Conway, Elias Nelson [American political leader]

Arkansas (table) A: 712

Conway, Jack [American author]

Slang (Sources of slang) S: 500

Conway, James Savier [American political leader]

Arkansas (table) A: 712

Conway, Thomas [American general]

Cabal C: 2

Washington, George (The army) W: 99

Conway cabal [U.S. history]

Cabal C: 2

Washington, George (The army) W: 99

Cony [animal]*See also* Hyrax in this index

Pika P: 461 with picture

Cony, Samuel [American political leader]

Maine (table) M: 87

Coochs Bridge, Battle of [1777]

Delaware (The Revolutionary War) D: 110

Coode, John [American colonial leader]

Maryland (Colonial days) M: 256-258

Coogan, Jackie [American actor]Chaplin, Charlie *picture on* C: 377**Cook, Frederick Albert** [American explorer]

Ci: 1025

Exploration (Arctic exploration) E: 449-450

Mount McKinley M: 886

Peary, Robert Edwin (Arctic expeditions) P: 224; (Dispute with Cook) P: 224

Cook, George Cram [husband of]

Glaspell, Susan G: 210

Cook, James [British explorer] Ci: 1025 with pictures and map

Antarctica (Early exploration) A: 535

Australia (European discovery) A: 922 with picture and map

British Columbia (European contact) B: 628; *picture on* B: 629

Cook Islands Ci: 1026

Exploration (Exploring the Pacific) E: 448 with map

Hawaii H: 89; (European exploration) H: 106 with picture

Navigation (History) N: 74

New Zealand (Early European contact) N: 354

Oregon (Exploration and settlement) O: 846

Pacific Islands (Discovery by Europeans) P: 11

Pacific Ocean P: 14

Cook, John [American political leader]

Delaware (table) D: 109

Cook, John K. [American surveyor]

Sioux City S: 474

Cook, Sir Joseph [Australian statesman]

Australia (table) A: 925

Cook, Mount *See* Mount Cook in this index**Cook County** [county, Illinois]

Chicago (Metropolitan area) C: 425

Cook Inlet

Alaska (Coastline) A: 294
Cook Islands [Pacific] Ci: 1026
 New Zealand (Overseas territories) N: 348

Cookbook

Connecticut (Interesting facts) Ci: 953
Cooke, Hope [wife of Namgyal]
 Sikkim (History) S: 456
Cooke, Jay [American financier] Ci: 1027
 Philadelphia (Industrial beginnings) P: 366-367
Cooke, Lorin A. [American political leader]
 Connecticut (table) Ci: 967
Cooke, Nicholas [American political leader]
 Rhode Island (table) R: 311
Cooke, Terence James Cardinal [American religious leader] Ci: 1027
Cooke, William F. [British physicist]
 Telegraph (Development of the telegraph)
 T: 90
 Wheatstone, Sir Charles W: 278
Cookie [computers]
 Internet (Glossary of Internet terms) I: 350a
 Computer (The World Wide Web) Ci: 921
Cooking Ci: 1027 *with pictures*
 Colonial life in America (Food and drink)
 Ci: 802
 Herb H: 196
 Meat (How meat is cooked) M: 347
 Microwave oven M: 520
 Pressure P: 773
 Starch (Use in foods) So: 855
*See also the list of Related Articles in the
 Cooking article*

Cool jazz

Jazz (Cool jazz) J: 72
 Davis, Miles D: 49
 Getz, Stan G: 177

Coolant

Automobile (The cooling system) A: 952
 Nuclear energy (Power reactors) N: 584-586
with picture

Cooley, Denton A. [American doctor]

Artificial heart A: 760

Cooley's anemia [disease]

Thalassemia T: 228

Coolidge, Abigail [sister of]

Coolidge, Calvin (Childhood) Ci: 1030

Coolidge, Calvin [U.S. President] Ci: 1030 *with pictures*

Harding, Warren Gamaliel (table) H: 58
 Hoover, Herbert Clark (Secretary of commerce) H: 328-329
 Massachusetts (table) M: 288; (The early 1900's) M: 293
 Roaring Twenties (Rising prosperity) R: 363
 Vermont (Places to visit) V: 326
 Vice President of the United States (table)
 V: 351; (Social duties) V: 352; (Growth of the vice presidency) V: 353

Coolidge, Calvin, Jr. [son of]

Coolidge, Calvin (Entry into politics) Ci: 1030-1031; (Life in the White House) Ci: 1033

Coolidge, Carlos [American political leader]

Vermont (table) V: 333

Coolidge, Grace Goodhue [wife of Calvin Coolidge]

Coolidge, Calvin (Entry into politics) Ci: 1030-1031; *picture on* Ci: 1032

Coolidge, John [son of]

Coolidge, Calvin (Entry into politics) Ci: 1030-1031

Coolidge, John Calvin [father of]

Coolidge, Calvin (Childhood) Ci: 1030

Coolidge, Victorine Josephine Moor [mother of]

Coolidge, Calvin (Education) Ci: 1030

Coolidge Dam

Gila River G: 189

Cooling-off period [labor relations]

National Mediation Board N: 40

Cooling system

Air conditioning A: 176

Automobile (The cooling system) A: 952

Cooling tower

Electric power (Fossil-fueled steam electric power plants) E: 183 *with diagram*

Nuclear energy (Steam production) N: 587

Coomes, Mrs. William [American educator]

Kentucky (Schools) K: 276

Coon [animal] *See Raccoon in this index***Coon cat**

Cat (Long-haired breeds) C: 292; *picture on*
 C: 289

Coonay, Barbara [American artist]
 Literature for children *picture on* L: 374; *pic-*

ture on L: 379
Cooney, Frank H. [American political leader]
 Montana (table) M: 757
Coonhound [dog]
 Black and tan coonhound B: 386
 Dog *picture on* D: 271
Coonskin Library [U.S. history]
 Ohio (Libraries) O: 685
Co-op *See Cooperative in this index*
Co-op City
 New York City (The Bronx) N: 328-329
Cooper [career]
 Barrel B: 118
Cooper, Anthony Ashley [English political leader]
 Locke, John (His life) L: 413
Cooper, Astley [British sportsman]
 Commonwealth Games Ci: 875
Cooper, Chuck [American basketball player]
 Basketball (The history of professional basketball) B: 153-155
Cooper, Edward [son of]
 Cooper, Peter Ci: 1035
Cooper, Floyd [American artist]
 Literature for children *picture on* L: 377
Cooper, Frank James *See Cooper, Gary in this index*
Cooper, Gary [American actor] Ci: 1034 *with portrait*
 Motion picture (Best performance by an actor: 1941) M: 862
Cooper, George [poet]
 October (Quotations) O: 671
Cooper, James Fenimore [American author]
 Ci: 1034
 American literature (The romance) A: 418
 Novel (The United States) N: 573
 Uncas U: 19
 United States, History of the (Cultural change)
 U: 169
Cooper, Job A. [American political leader]
 Colorado (table) Ci: 844
Cooper, John Sherman [American political leader]
 Warren Report W: 37
Cooper, Leon Neil [American physicist]
 Bardeen, John B: 109
 Nobel Prizes (Physics: 1972) N: 441
 Superconductivity So: 993
Cooper, Leroy Gordon, Jr. [American astronaut]
 Ci: 1035
 Space exploration (Vostok and Mercury: The first human beings in space) So: 711-712
with picture
Cooper, Myers Y. [American political leader]
 Ohio (table) O: 699
Cooper, Peter [American inventor] Ci: 1035 *with picture*
 Maryland (The War of 1812 and industrial development) M: 258
 Railroad (Developments in the United States)
 R: 115
Cooper, Prentice [American political leader]
 Tennessee (table) T: 152
Cooper, Robert A. [American political leader]
 South Carolina (table) So: 658
Cooper, Susan [British author] Ci: 1035
Cooper, William [American settler]
 Camden C: 76
Cooper, William [American judge]
 Cooperstown Ci: 1037
Cooper, William B. [American political leader]
 Delaware (table) D: 109
Cooper-Hewitt Museum [New York City]
 Smithsonian Institution (Museums) S: 519
Cooper Union
 Cooper, Peter Ci: 1035
Cooperative [economics] Ci: 1035
 Collectivism Ci: 775
 Cuba (Agriculture) Ci: 1174
 Electric power (In the United States) E: 186
 Europe (Farm organization) E: 407
 Farm and farming (Managing production costs)
 F: 42
 Farm Credit System (Organization) F: 45-46
 Fishing industry (Marketing) F: 187
 Housing (Cooperative housing) H: 390
 Milk (Marketing) M: 547
 Owen, Robert O: 882
 Truck farming (How truck farms operate)
 T: 460
Cooperative [education]
 Universities and colleges (Residence) U: 209
Cooperative bank
 Savings and loan association S: 165

Co-operative Commonwealth Federation
 [political party]
 Canada, Government of (Political parties)
 C: 138-139
 New Democratic Party N: 203
 Political party (Other parties) P: 636-637
 Saskatchewan (Political changes) S: 147
 Woodsworth, James Shaver W: 396
Cooperative education Ci: 1037
 Career education C: 213
 Careers (Preparing for a career) C: 216
 Vocational education (Vocational teaching methods) V: 434-435
Cooperative Extension System [U.S.] Ci: 1037
 4-H F: 434
Cooperative farm
 Israel (Rural life) I: 481
 Ukraine (Agriculture) U: 11
Cooperative for American Relief Everywhere
See CARE in this index
Cooperative game
 Game theory G: 22
Cooperative insurance company
 Insurance (Types of insurance companies)
 I: 315
Cooperative Marketing Act [1926]
 Cooperative (History) Ci: 1036
Cooperative work experience
 Cooperative education Ci: 1037
Cooper's Ferry [former name]
 Camden C: 76
Cooper's hawk
 Hawk H: 111
Cooperstown [New York] Ci: 1037 *with picture*
 Doubleday, Abner D: 312
Coordinate school [education]
 Universities and colleges (The student body)
 U: 208-209
Coordinates [geography]
 Latitude L: 116
Coordinates [mathematics]
 Algebra (Functions) A: 356
 Geometry (Analytic geometry) G: 104 *with diagram*
Coordinating conjunction [grammar]
 Conjunction (Coordinating conjunctions)
 Ci: 951
Coordination
 Grammar (Grammatical relationships) G: 303
Coordination compound [chemistry]
 Inorganic chemistry I: 276
Coot [bird] Ci: 1038 *with picture*
 Bird *pictures on* B: 359
 Rail R: 103
Cootamundra wattle [tree]
 Tree *picture on* T: 427
Cootie [insect]
 Louse L: 507
Cop *See Police in this index*
Copa Libertadores [award]
 Soccer (International competition) So: 548
Copacabana Beach [Rio de Janeiro]
 Brazil *picture on* B: 574
 Latin America *picture on* L: 91
 Rio de Janeiro (The city) R: 345
Copán [ancient city, Honduras] Ci: 1038
 Honduras (The Indian period) H: 312
 Maya (The Maya heritage) M: 326
Copayment [insurance]
 Medicine (The United States) M: 367-368
Cope [manufacturing]
 Cast and casting (How castings are made)
 C: 278 *with diagram*
Cope, Edward Drinker [American paleontologist]
 Dimetrodon D: 204
Copenhagen [Denmark] Ci: 1038 *with picture*
 Denmark D: 132 *with pictures*; (Recreation)
 D: 136-137 *with picture*
Copenhagen [horse]
 Horse (table: Famous horses in history and legend) H: 361
Copenhagen, Battle of [1801]
 Nelson, Horatio (Battle of Copenhagen)
 N: 122; (Victory at Trafalgar) N: 122
Copenhagen, University of [Denmark]
 Copenhagen (The city) Ci: 1038-1039
 Denmark (Education) D: 135-136
Copepod [sea animal] Ci: 1039
 Animal *picture on* A: 486
 Crustacean Ci: 1162 *with picture*
 Ocean (Zooplankton) O: 655; *picture on* O: 656
Copernican theory [astronomy]
 Brahe, Tycho B: 548
 Astronomy (Sun-centered theories) A: 835;

- (History) A: 846-847 *with diagram*
 Mathematics (Mathematics and the scientific revolution) M: 306
 Physics (The Renaissance) P: 438-439
 Planet (How planets move) P: 508-509
- Copernicus** [crater]
 Moon (Craters) M: 789
- Copernicus, Nicolaus** [Polish astronomer]
 Ci: 1039
 Astronomy (Sun-centered theories) A: 835;
 (Developing the modern view) A: 847
with picture
 Evening star E: 423
 Galileo (Early scientific interests) G: 11
 Geology (The Renaissance) G: 98
 Mathematics (Mathematics and the scientific revolution) M: 306
 Moon (Ancient ideas) M: 791-792
 Physics (The Renaissance) P: 438-439
 Planet (How planets move) P: 508-509
 Science (The rebirth of science) S: 197
- Coping saw** [tool]
 Saw (Handsaws) S: 166 *with picture*
 Woodworking (Cutting) W: 397 *with picture*
- Copland, Aaron** [American composer] Ci: 1040
 Classical music (The 1900's) Ci: 649
- Coplas** [book by Manrique]
 Spanish literature (The 1400's) So: 758
- Copley, John Singleton** [American painter]
 Ci: 1040 *with picture*
 Adams, Samuel *picture on* A: 44
 Hancock, John *picture on* H: 39
 Revere, Paul *picture on* R: 267
 United States *picture on* U: 116
- Coppley Square** [Boston]
 Boston *picture on* B: 495
- Copolymerization** [chemistry]
 Polyvinyl chloride P: 652
- Coppélia** [ballet]
 Art and the arts *picture on* A: 748
 Ballet (Kinds of ballet) B: 48
 Delibes, Léo D: 116
- Copper** [element] Ci: 1040 *with picture*
 Aluminum (Properties of aluminum alloys)
 A: 391-392
 Metal (Metals through the ages) M: 425
 Metallurgy (Electrolysis) M: 427
 Monel metal M: 703
 Plant (Nutrient deficiencies) P: 543
 Trace elements T: 353
 Chemical properties
 Copper (Properties of copper) Ci: 1041
 Electrolysis (Uses of electrolysis) E: 201
 Industrial processes
 Smelting S: 515
 Mining
 Copper (Sources of copper) Ci: 1042 *with diagrams*
 Arizona (Mining) A: 685
 Chile (The Northern Desert) C: 464; (Mining)
 C: 466
 Congo (Kinshasa) (Mining) Ci: 940c
 Greater Sudbury G: 350
 Lavender Pit L: 129
 Michigan (Natural resources) M: 503
 Mining *picture on* M: 574
 Montana *picture on* M: 759
 Zambia (Economy) Z: 589
- Ores**
 Copper (Copper ores) Ci: 1042
 Azurite A: 1004
 Chalcocite C: 370
 Chalcopyrite C: 370
 Malachite M: 95
 Mineral *picture on* M: 568
- Uses**
 Brass B: 565
 Thermometer (Resistance thermometers)
 T: 255
 Wire (Uses of wire) W: 343
- Copper** [shield]
 Indian, American (Before European contact)
 I: 162
- Copper butterfly**
 Butterfly (Blues, coppers, and hairstreaks)
 B: 734 *with picture*; *picture on* B: 732
- Copper concentrate**
 Copper (Milling) Ci: 1042-1043
- Copper matte**
 Copper (Smelting) Ci: 1043
- Copper mine** *See* Copper *in this index*
- Copper River Basin**
 Alaska (Land regions) A: 292-294
- Copper sulfate** [chemical]
 Sulfate So: 966
- Copperbelt** [region]
 Zambia (Economy) Z: 589
- Copperfield, David** [character] *See* David
 Copperfield *in this index*
- Copperhead** [snake] Ci: 1044 *with picture*
 Snake *pictures on* S: 530-533
 Viper V: 391
- Copperheads** [U.S. history] Ci: 1044
 Civil War (Government and politics) Ci: 622-
 623
 Democratic Party (The slavery issue) D: 125
 Ohio (The Civil War) O: 702
 Sons of Liberty So: 593
- Copperplate**
 Handwriting (Later writing styles) H: 50
- Coppola, Francis Ford** [American director]
 Ci: 1045 *with portrait*
 Motion picture (Best achievement in directing:
 1974) M: 862; (Changes in Hollywood)
 M: 871
- Copolani, Xavier** [Mauritanian political leader]
 Mauritania (History) M: 315
- Copra** [coconut] Ci: 1045
 Caroline Islands C: 244
 Coconut palm (The coconut) Ci: 746-747
 Pacific Islands (Agriculture) P: 9; *picture on*
 P: 12
- Co-processor** [computing]
 Computer (Personal computers) Ci: 909
- Coptic language**
 Copts Ci: 1045
 Rosetta stone R: 481
- Copts** [religious group] Ci: 1045
 Africa *picture on* A: 106
 Arabs (Religion) A: 586
 Eastern Catholic Churches E: 45
 Egypt (Religion) E: 124
- Copulative verb** [grammar]
 Verb (Linking, or copulative, verbs) V: 315
- Copy**
 Advertising (Creative work) A: 76b
 Magazine (Editing and assembling an issue)
 M: 43
 Newspaper (table) N: 383
 Photoengraving and photolithography
 (Capturing the image) P: 405
- Copy camera**
 Copying machine (Projection copying) Ci: 1046
- Copy editor** [career]
 Newspaper (Writing and editing stories)
 N: 383
- Copying machine** Ci: 1045 *with diagrams*
See also Duplicator; Photocopying *in this index*
 Printing (Digital printing) P: 801
 Xerox Corporation X: 544
- Copyreader** [career]
 Newspaper (Writing and editing stories)
 N: 383
- Copyright** [law] Ci: 1046
 Book (Inside a book) B: 464-465
 Intellectual property I: 317
 Library (Photocopying) L: 239
 Library of Congress L: 264
 Plagiarism P: 505
 Public domain P: 855
- Copyright Office, United States**
 Copyright (How to obtain a copyright) Ci: 1048
 Library (United States government libraries)
 L: 248
- Copywriter** [career]
 Advertising (Creative work) A: 76b
 Clothing (Fashion writers and artists) Ci: 706
- Coquelles** [village, France]
 Channel Tunnel C: 375
- Coqui** [animal]
 Puerto Rico (Plant and animal life) P: 880
- Coquillard, Alexis** [French explorer]
 South Bend So: 639
- Coquina** [rock]
 Limestone L: 308; *picture on* L: 307
- Coral** [sea animal] Ci: 1048 *with pictures*
 Animal *picture on* A: 487
 Coral reef Ci: 1048a
 Gem *picture on* G: 78
 Global warming (Harm to ocean life) G: 232
 Ocean *picture on* O: 656
 Rock (Organic sediments) R: 372
 Seven Natural Wonders of the World (The
 Great Barrier Reef) S: 324b *with picture*
- Coral gall crab**
 Crab Ci: 1115
- Coral Harbour**
 Southampton Island So: 686
- Coral honeysuckle** [plant]
 Honeysuckle H: 316 *with picture*
- Coral island**
 Island (Kinds of islands) I: 471-472 *with diagram*
- Coral key** [island]
 Cuba (The land) Ci: 1172
- Coral reef** Ci: 1048a *with picture*
 Australia (The Great Barrier Reef) A: 911 *with picture*
 Atoll A: 869 *with picture*
 Coral Ci: 1048
 Ecology *picture on* E: 53
 Fish *pictures on* F: 154
 Great Barrier Reef G: 336 *with picture*
 Island (Coral islands) I: 472 *with diagram*
 Pacific Islands (The low islands) P: 7 *with picture*
 Pacific Ocean (Damage to reefs) P: 17
- Coral Sea** [South Pacific] Ci: 1049
- Coral Sea, Battle of the** [1942]
 Air force (World War II) A: 185-186
 Navy (World War II) N: 80
 World War II (The tide turns) *map on* W: 486-
 487
- Coral snake** [reptile] Ci: 1049 *with picture*
 Snake *picture on* S: 533
- Coral tree** Ci: 1050 *with picture*
- Coral trout**
 Fish *picture on* F: 168
- Coralbean** [tree] *See* Coral tree *in this index*
- Coralgem deervetch** [plant]
 Trefoil T: 435
- Corelli, Jean** [French choreographer]
 Ballet (Romantic ballet) B: 51
- Coralline algae** [animals]
 Coral reef (How coral reefs form) Ci: 1048b
- Coralline sponge** [animal]
 Sponge (Kinds of sponges) So: 800
- Coranto** [publication]
 Communication (The effects of printing)
 Ci: 880
- Corax** [Greek orator]
 Oratory (Beginnings) O: 818
- Corbenic Castle**
 Holy Grail (Early history of the Grail) H: 298;
 (The search for the Grail) H: 298
- Corbett, James John** [American boxer]
 Ci: 1050
 Boxing (From bare knuckles to gloves) B: 533
with picture
 Solar plexus So: 579
- Corbett National Park** [India]
 National park (table) N: 42f
- Corbin, Abel R.** [brother-in-law of]
 Grant, Ulysses S. (Political corruption) G: 315-
 316
- Corbin, Margaret Cochran** [American patriot]
 Ci: 1050
- Corbusier, Le** *See* Le Corbusier *in this index*
- Corcium nigrescens** [plant]
 Orchid *picture on* O: 824
- Corcoran, William Wilson** [American philanthropist]
 Corcoran Gallery of Art Ci: 1050
- Corcoran Gallery of Art** [Washington, D.C.]
 Ci: 1050 *with picture*
 Washington, D.C. (Other Washington museums) W: 75; *map on* W: 76
- Corcovado Mountain** [Brazil]
 Rio de Janeiro (The city) R: 345
- Corcyra** [former name, Corfu]
 Corinth Ci: 1053
- Cord**
 Glass (Glass terms) G: 222
 Cord [unit of measure] Ci: 1050 *with diagram*
 Weights and measures (Miscellaneous weights and measures) W: 184
- Cord and cordage**
 Rope R: 476 *with pictures*
 Macramé M: 26 *with picture*
- Cord blood** [medicine]
 Bone marrow transplant B: 458
- Cord 812 Sportsman**
 Automobile *picture on* A: 967
- Cord quilt**
 Quilt Q: 41
- Corday, Charlotte** [French patriot] Ci: 1051
 French Revolution (The National Convention)
 F: 526
- Cordelia** [literary figure]
 Shakespeare, William (*King Lear*) S: 363
- Cordeliers Club** [French history]
 Danton, Georges-Jacques D: 35
- Cordial**
 Alcoholic beverage (Liqueurs) A: 336

- Cordillera** [geography] Ci: 1051
Canada (The Rocky Mountains) C: 115
- Cordillera Central** [mountains, Colombia]
Colombia (The Andes Mountains) Ci: 782
- Cordillera Central** [mountains, Puerto Rico]
Puerto Rico *picture on* P: 873
- Cordillera Neo-Volcánica** [region of Mexico]
Mexico (The Plateau of Mexico) M: 460
- Cordillera Occidental** [mountains, Colombia]
Colombia (The Andes Mountains) Ci: 782
- Cordillera Oriental** [mountains, Colombia]
Colombia (The Andes Mountains) Ci: 782
- Cordillera Septentrional** [region, Dominican Republic]
Dominican Republic (Land) D: 304
- Cordite** [explosive] Ci: 1051
- Cordless keyboard** [electronic device]
Computer (A keyboard) Ci: 912
- Cordless mouse** [electronic device]
Computer (A mouse) Ci: 912-914
- Cordless telephone**
Telephone (Cordless telephones) T: 97
- Córdoba** [Argentina] Ci: 1051
- Córdoba** [Spain] Ci: 1051 *with picture*
- Córdoba, Francisco Fernández de** [Spanish explorer]
Mexico (The Spanish conquest) M: 469
Nicaragua (The colonial period) N: 398
- Cordon offense**
Civil War (Grant in command) Ci: 631
- Cordovan leather**
Córdoba Ci: 1051
- Corduroy** [fabric] Ci: 1052
- Corduroy road**
Road (Early American roads) R: 361-362
- Core** [botany]
Root (The core) R: 474
- Core** [electromagnetism]
Electromagnet E: 202
Transformer T: 371 *with diagram*
- Core** [geology]
Earth E: 20 *with diagram*; (Earth's interior) E: 23
Mantle M: 168
- Core** [Mars]
Mars (Physical features of Mars) M: 225
- Core** [moon]
Moon (The interior of the moon) M: 790
- Core** [nuclear reactor]
Nuclear energy (Power reactors) N: 584-585
with picture; (Hazards and safeguards) N: 587-588
- Core** [oceanography]
Climate (Determining past climates) Ci: 678-679 *with picture*
Ocean (Research ships) O: 662-663
Ocean Drilling Program O: 667
- CORE** [organization] *See* Congress of Racial Equality *in this index*
- Core** [sun]
Sun (Zones of the sun) So: 979 *with diagram*; (Sun terms) So: 976
- Core curriculum** [education]
Education (How can performance be improved?) E: 105
Harvard University (History) H: 80-81
- Core thread**
Thread (Making thread from manufactured fibers) T: 270
- Corea, Chick** [American pianist]
Rock music (Rock goes pop) R: 379
- Co-recreational sports**
Intramural sports I: 353
- Corelli, Arcangelo** [Italian composer] Ci: 1052
- Coreopsis** [botany] Ci: 1052 *with picture*
- Coretta Scott King Awards** [literary awards]
Literature for children (Awards) L: 366
- Corey, Elias James** [American chemist]
Nobel Prizes (Chemistry: 1990) N: 443
- CORFO** [Chilean history]
Chile (Years of progress) C: 469
- Corfu** [island, Greece]
Ionian Islands I: 373 *with map*
- Corgi** [dog]
Cardigan Welsh corgi C: 210 *with picture*
Dog *picture on* D: 276
Pembroke Welsh corgi P: 233
- Cori, Carl Ferdinand** [Czech-American physiologist]
Nobel Prizes (Physiology or medicine: 1947) N: 444
- Cori, Gerty Theresa** [Czech-American physiologist]
Nobel Prizes (Physiology or medicine: 1947) N: 444
- Coriander** [herb] Ci: 1052 *with picture*
- Corigliano, John** [American composer]
Classical music (Classical music today) Ci: 651
- "Corinna's Going A-Maying"** [poem by Herrick]
Herrick, Robert H: 215
- Corinne** [book by Staël]
Staël, Madame de So: 820
- Corinth** [ancient city] Ci: 1053 *with picture*
- Corinth** [Mississippi]
Civil War (Battle of Shiloh) Ci: 629
- Corinth Canal** [waterway, Greece] Ci: 1053
Canal (table) C: 164
- Corinthian column** [architecture]
Column (The Greek orders) Ci: 865 *with pictures*
Acanthus A: 21
Architecture (table) A: 608 *with picture*; (Classical Greek architecture) A: 615
Brunelleschi, Filippo *picture on* B: 652
- Corinthians, Epistles to the** [New Testament] Ci: 1053
- Coriolanus** [play by Shakespeare]
Shakespeare, William (*Coriolanus*) S: 364
Coriolanus, Gaius Marcius Ci: 1053
- Coriolanus, Gaius Marcius** [Roman general] Ci: 1053
- Corioli** [ancient city]
Coriolanus, Gaius Marcius Ci: 1053
- Coriolis, Gaspard Gustave de** [French scientist]
Coriolis effect Ci: 1053
- Coriolis effect** [physics] Ci: 1053
Air (Air movement) A: 169
Hurricane (Hurricane conditions) H: 453
Weather (Planetary-scale systems) W: 158
- Cork** [city, Ireland] Ci: 1054
- Cork** [bark] Ci: 1054 *with pictures*
Bark (Outer bark) B: 110
Cell *picture on* C: 337
Interior design (Choosing patterns and textures) I: 332-333
Leaf (The leaf becomes fully grown) L: 152
Stem (Woody stems) So: 887-888
Tree (Trunk and branches) T: 416-417 *with diagram*
- Cork black** [paint]
Cork (Uses) Ci: 1055
- Cork cambium** [botany]
Bark (Inner bark) B: 110
Root (Secondary tissues) R: 474 *with diagram*
Stem (Woody stems) So: 887-888 *with diagram*
- Cork elm** [tree]
Elm (Kinds) E: 244-245
- Cork oak** [tree]
Cork (The tree) Ci: 1054
Oak (Other oaks) O: 636
- Corliss, George Henry** [American engineer] Ci: 1055
- Corn** [botany] Ci: 1055
Gladiolus G: 206
- Cornack, Allan MacLeod** [American physicist]
Nobel Prizes (Physiology or medicine: 1979) N: 445
- Cornel** [botany]
Corn Ci: 1055
- Cormorant** [bird] Ci: 1055 *with pictures*
Bird (In the water) B: 354
- Corn** [disorder] Ci: 1064
Callus C: 69
Skin (Other skin disorders) S: 491
- Corn** [food] Ci: 1056 *with pictures and map*
Arikara Indians A: 661
Colonial life in America (Food and drink) Ci: 802
Fertilizer *pictures on* F: 79
Grain G: 301
Grass (Cereals) G: 326
Hereditry *picture on* H: 205
Hog H: 284
Hominy H: 306
Hybrid (Producing hybrid plants) H: 461 *with picture*
Indian, American (The first farmers) I: 152
Indiana (Agriculture) I: 212 *with picture*
Iowa (Agriculture) I: 390; *picture on* I: 374
Mexico (Food and drink) M: 455
Nutrition (Kinds of nutrients) N: 625
Ohio (Agriculture) O: 697 *with picture*
Pellagra P: 232
Pioneer life in America (Food) P: 481; *picture on* P: 482
Plant (How people have changed plants) P: 542 *with picture*; *picture on* P: 516
Popcorn P: 659
- Root (Kinds of roots) R: 473-474 *with diagram*
- Sculpture (Later Indian sculpture) S: 243 *with picture*
- "Corn"** [poem by Lanier]
Lanier, Sidney L: 68
- Corn Belt** [region, U.S.]
Corn (The corn plant) Ci: 1057 *with picture*; (Corn production in the United States) Ci: 1059
- Corn borer** [insect] Ci: 1064 *with map*
- Corn earworm** [insect] Ci: 1064
Insect *picture on* I: 285
- Corn Is Green, The** [play by Williams]
Williams, Emlyn W: 310
- Corn Laws** [British history] Ci: 1064
Disraeli, Benjamin D: 237
Peel, Sir Robert (Prime minister) P: 229
United Kingdom (Establishment of free trade) U: 69
- Corn meal** [food]
Pioneer life in America (Food) P: 481; (Tools) P: 483
- Corn oil** [food] Ci: 1064
Vegetable oil V: 294
- Corn Palace** [Mitchell]
South Dakota (Places to visit) So: 672 *with picture*
- Corn plant**
Gardening (Some popular house plants) G: 37 *with picture*
- Corn plaster** [first aid]
Corn Ci: 1064
- Corn root aphid**
Insect *picture on* I: 281
- Corn salad** [plant]
Valerian V: 265
- Corn smut** [plant disease]
Fungi *picture on* F: 559
Smut S: 522
- Corn snake** [reptile]
Snake *pictures on* S: 531-532
- Corn State**
Iowa I: 374
- Corn syrup** [food] Ci: 1064
Sugar (Cornstarch and other starches) So: 959
- Corn whiskey** [drink]
Pioneer life in America (Food) P: 481-482
- Cornaro Chapel** [Rome]
Bernini, Gian Lorenzo B: 271
- Corncob pipe**
Missouri (Interesting facts) M: 651
- Corncrake** [bird]
Rail R: 103
- Cornea** [anatomy]
Astigmatism A: 825 *with picture*
Blindness (Diseases) B: 401-402
Cataract C: 299
Contact lens Ci: 1020
Eye (The sclera and the cornea) E: 460 *with picture*; (Focusing) E: 462; (Astigmatism) E: 464; (Diseases of the cornea) E: 467
Eye bank E: 470
First aid (Eye injury) F: 140
Nearsightedness N: 93
Trachoma T: 353
- Corneal graft** [medicine] *See* Corneal transplant *in this index*
- Corneal opacity** [disorder]
Blindness (Diseases) B: 401-402
- Corneal transplant** [medicine]
Blindness (Diseases) B: 401-402
Eye (Diseases of the cornea) E: 467
Eye bank E: 470
Transplant (Tissue transplants) T: 379; *picture on* T: 380
- Corneille, Pierre** [French dramatist] Ci: 1065
Drama (Neoclassical playwrights) D: 333
French literature (Classical drama) F: 520
- Cornelia** [wife of]
Caesar, Julius (Early life) C: 12
- Cornelian** *See* Carnelian *in this index*
- Cornelius, Saint** [pope]
Pope (table) P: 666
- Cornell, Alonzo B.** [American political leader]
New York (table) N: 313
- Cornell, Eric Allin** [American physicist]
Nobel Prizes (Physics: 2001) N: 442
- Cornell, Ezra** [American philanthropist] Ci: 1065
- Cornell University** Ci: 1065
Cornell, Ezra Ci: 1065
New York *picture on* N: 295
- Corner Brook** [Newfoundland] Ci: 1065
Newfoundland and Labrador (Population) N: 364
- Corner kick**

- Soccer (Restarts) **So**: 546
- Cornarbeck**
Football (The defensive team) **F**: 357-358 *with diagrams*
- Cornering the market** [economics] **Ci**: 1065
Black Friday **B**: 387
- Cornet** [musical instrument] **Ci**: 1065
Jazz (The brass) **J**: 69
- Cornfield ant**
Insect *picture on* **I**: 283
- Cornflower** [plant] See Bachelor's-button;
Bluebonnet *in this index*
- Cornforth, Sir John** [Australian chemist]
Nobel Prizes (Chemistry: 1975) **N**: 443
- Cornhusk**
Corn (Appearance) **Ci**: 1057
- Cornhusker State**
Nebraska **N**: 94
- Cornice**
Architecture (table) **A**: 608-609 *with picture*;
(Minoan architecture) **A**: 615
- Corning Ewer** [vessel]
Glass *picture on* **G**: 219
- Corning Glass Center**
New York (Places to visit) **N**: 302
- Corning Glass Works**
Fiberglass (History) **F**: 89
Glass (table) **G**: 218
Invention (Recent developments) **I**: 364
- Cornish, Samuel** [American journalist]
Russwurm, John Brown **R**: 567
- Cornish chicken**
Chicken (English class chickens) **C**: 441, (table) **C**: 443
- Cornish rex cat**
Cat (Short-haired breeds) **C**: 290
- Corno Grande** [mountain, Italy]
Apennines **A**: 564
- Cornplanter** [American Indian chief] **Ci**: 1066
- Cornstalk** [American Indian chief] **Ci**: 1066
Shawnee Indians **S**: 379
- Cornstarch** [food] **Ci**: 1066
Corn (The wet-milling industry) **Ci**: 1061
Sugar (Cornstarch and other starches) **So**: 959
- Cornu, Paul** [French inventor]
Helicopter (Early designs and experiments) **H**: 173 *with picture*
- Cornucopia** [symbol] **Ci**: 1066
- Cornwall, Duke of** [title]
Prince of Wales **P**: 794
- Cornwallis, Charles** [British general] **Ci**: 1066 *with picture*
Clinton, Sir Henry **Ci**: 682h
North Carolina (Revolution and independence) **N**: 492
Revolutionary War in America (Trenton and Princeton) **R**: 281; (Savannah and Charleston) **R**: 283-284; (Camden) **R**: 284; (Kings Mountain) **R**: 285; (The end of the war) **R**: 285
- Cornwallis, Edward** [British colonial official] **Ci**: 1066
Halifax (Government and history) **H**: 21
- Cornwell, David John Moore** See Le Carré,
John *in this index*
- Cornwell, John J.** [American political leader]
West Virginia (table) **W**: 225; (Labor developments) **W**: 229
- Cornwell, Patricia** [American author] **Ci**: 1066
- Corolla** [botany]
Flower (The corolla) **F**: 293 *with picture*
Plant (Flowers) **P**: 531 *with picture*
- Corolla** [sun] **Ci**: 1066
Astronomy (Optical astronomy) **A**: 838-840
Eclipse (Solar eclipses) **E**: 51 *with picture*
Solar wind **So**: 581
Sun (Sun terms) **So**: 976; (Zones of the sun) **So**: 979-980 *with pictures*; (Producing images) **So**: 982 *with picture*
- Corona** [Venus]
Venus (Surface and atmosphere) **V**: 311-312
- Coronado, Francisco Vázquez de** [Spanish explorer] **Ci**: 1067 *with picture and map*
Arizona (Spanish exploration) **A**: 688
Estevanico **E**: 360
Exploration *map on* **E**: 443; (Spain's conquests in the New World) **E**: 445-446
Hispanic Americans (In the Southwest) **H**: 250
Indian, American (After European contact) **I**: 168
Kansas (Exploration) **K**: 235
Nebraska (Exploration) **N**: 111
New Mexico (Exploration and settlement) **N**: 273
Oklahoma (Early days) **O**: 731
- Texas (Spanish exploration) **T**: 204
- Coronado, Juan Vázquez de** [Spanish colonial official]
Costa Rica (Colonial period) **Ci**: 1084
- Coronado National Memorial** [Arizona]
National Park System (table: National memorials) **N**: 54
- Coronagraph** [instrument]
Corona **Ci**: 1067
Sun (Studying the sun) **So**: 982-983 *with picture*
- Coronal hole** [astronomy]
Corona **Ci**: 1067
Magnetic storm **M**: 57
- Coronal loop**
Sun **So**: 984 *with picture*
- Coronal mass ejection** [astronomy]
Corona **Ci**: 1067
Sun (Sun terms) **So**: 976; (Coronal mass ejections) **So**: 982; *picture on* **So**: 986
- Coronal streamer** [astronomy]
Corona **Ci**: 1067
- Coronary angiography** [medicine]
Angiography **A**: 461
Heart (Symptoms and diagnosis) **H**: 137-138; (Development of heart surgery) **H**: 144-145
Stress test **So**: 928
- Coronary angioplasty** [medicine] See Angioplasty *in this index*
- Coronary artery** [anatomy]
Aorta **A**: 562
Artery (Principal arteries) **A**: 751
Fat (Fats and disease) **F**: 53
Heart (Blood vessels) **H**: 135 *with picture*; (Coronary artery disease) **H**: 137; (Heart attack) **H**: 138 *with pictures*
Human body *diagram on* **H**: 422
Stress test **So**: 927
- Coronary artery bypass graft surgery**
Angina pectoris **A**: 461
DeBakey, Michael Ellis **D**: 63
Heart (Treatment) **H**: 138 *with pictures*; (Development of heart surgery) **H**: 144-145
Surgery (Cardiac surgery) **So**: 1007
- Coronary artery disease**
Electrocardiograph **E**: 200
Heart (Coronary artery disease) **H**: 137; (Progress in treatment and prevention) **H**: 145-146
Nutrition (Heart disease) **N**: 630
Physical fitness (Health-related fitness) **P**: 434
Stress test **So**: 927
- Coronary care unit** [medicine]
Heart (Diagnosis and treatment) **H**: 139
Intensive care unit **I**: 320
- Coronary occlusion** See Coronary thrombosis *in this index*
- Coronary thrombosis** [disorder] **Ci**: 1068
See also Heart attack *in this index*
Blood (Controlling bleeding) **B**: 411
Heart (Heart attack) **H**: 138
- Coronary vasodilator**
Drug (Vasodilators) **D**: 351
- Coronation** [ceremony] **Ci**: 1068
Elizabeth II *picture on* **E**: 240
Scone, Stone of **S**: 209
- Coronation Chair**
Westminster Abbey **W**: 243
- Coronation of Poppa, The** [opera by Monteverdi]
Monteverdi, Claudio **M**: 764a
- Coronation of the Virgin** [painting by Bellini]
Bellini, Giovanni *picture on* **B**: 243
- Coroner** [office]
Inquest **I**: 277
Medical examiner **M**: 361
- Coroner's inquest** [law]
Inquest **I**: 277
- Coroner's jury**
Jury (Coroner's juries) **J**: 202
Medical examiner **M**: 361
- Coronis** [Greek mythology]
Apollo **A**: 566
- Corot, Camille** [French painter] **Ci**: 1069 *with picture*
Barbizon School **B**: 108
Painting (Romanticism) **P**: 68
- Corpora cavernosa** [anatomy]
Impotence **I**: 94
- Corporación de Fomento de la Producción** [Chilean history]
Chile (Years of progress) **C**: 469
- Corporal** [rank]
Rank, Military (table) **R**: 140
- Corporal punishment**
Torture **T**: 343
- Corporate bond**
Investment (Indirect investments) **I**: 367-368
- Corporate chain**
Chain store **C**: 369
- Corporate colony** [U.S. history]
Colonial life in America (Changes in colonial control) **Ci**: 790
- Corporate farm**
Farm and farming (Farm owners and farm operators) **F**: 41
- Corporate income tax** [economics]
Income tax (Types of income taxes) **I**: 102
- Corporate plane**
Airplane (General aviation planes) **A**: 211-212
- Corporation** [economics] **Ci**: 1070
Business (Corporations) **B**: 725
Conglomerate **Ci**: 938
Globalization (Features of globalization) **G**: 233
Joint-stock company **J**: 156
Multinational corporation **M**: 919
Stock, Capital **So**: 903
- Corporation for Public Broadcasting** **Ci**: 1070
National Public Radio **N**: 59
Television (Public stations) **T**: 115
- Corporation law**
Law (Private law) **L**: 130
- Corporative state**
Fascism (Economic life) **F**: 49
- Corps** [military] **Ci**: 1070
Army, United States (table) **A**: 737
- Corps de ballet**
Ballet (table) **B**: 45
- Corps of Cadets**
United States Military Academy (The student body) **U**: 202
- Corps of Engineers** See Engineers, Corps of *in this index*
- Corpe**
Funeral customs (Preparation of the body) **F**: 557
- Corpus** [law] See Trust fund *in this index*
- Corpus callosum** [anatomy]
Brain (The cerebrum) **B**: 550b; (The work of the brain) **B**: 552-553
- Corpus Christi** [city, Texas] **Ci**: 1071
Texas (table: Average monthly weather) **T**: 198
- Corpus Christi** [custom]
Drama (Religious plays) **D**: 333 *with picture*
- Corpus Christi plays**
Mystery play **M**: 972
- Corpus Juris Civilis** See Justinian Code *in this index*
- Corpus luteum**
Menstruation (Luteal phase) *diagram on* **M**: 403
- Corpus striatum**
Brain (The brain's chemical messengers) **B**: 556
- Corpuscle** [philosophy]
Mechanist philosophy **M**: 355
- Corpuscle** [physiology] **Ci**: 1071
See also Red blood cell; White blood cell *in this index*
- Corpuscular theory** [physics]
Light (Early ideas about light) **L**: 292
- Corral**
Ranching (Life on a cattle ranch) **R**: 134
- Correa, Charles** [Indian architect]
India (Architecture and sculpture) **I**: 119
- Correctional facility**
Prison (Types of correctional institutions) **P**: 805
- Correctional Service of Canada**
Prison **P**: 805
- Corrections** [law]
Criminal justice system (The correctional system) **Ci**: 1144
Social work (Fields of social work) **So**: 558
- Corrective shoe**
Shoe (Corrective shoes) **S**: 431
- Correggio** [Italian artist] **Ci**: 1071 *with picture*
- Corregidor** [island, Philippines] **Ci**: 1071
Bataan Peninsula **B**: 162 *with map*
Manila Bay **M**: 143
- Correns, Carl** [German botanist]
Cell (The 1900's) **C**: 337-338
Heredity (The birth of genetics) **H**: 208
- Correspondence** [geometry]
Geometry (Congruence) **G**: 102
- Correspondence** See Letter writing *in this index*
- Correspondence, Committees of** See Committees of Correspondence *in this index*

Correspondence course

Correspondence school Ci: 1072

Correspondence school Ci: 1072

School (Other kinds of schools) S: 182

"Correspondences" [poem by Baudelaire]

Baudelaire, Charles B: 173

Symbolism So: 1066

Correspondent [journalism]

Foreign correspondent F: 385

War correspondent W: 27

Correspondent bank

Clearinghouse Ci: 660

Corresponding secretary [official]

Parliamentary procedure (Officers) P: 175

Corrida

Bullfighting (Types of bullfights) B: 695

Corrida de toros

Bullfighting (Types of bullfights) B: 695

Corridor Train

Railroad (Intercity trains) R: 105

Corridos [songs]

Mexico (Music) M: 459-460

Corriedale sheep

Sheep (Crossbred-wooled sheep) S: 382

Corriere della Sera [newspaper]

Italy (Communication) I: 512

Corrigan, Mairead [Irish social reformer]

Nobel Prizes (Peace: 1976) N: 448

Corrigan, Sharon Christa See McAuliffe,

Christa in this index

Corrosion [chemistry] Ci: 1072 with picture

Aluminum (Corrosion resistance) A: 392

Electrochemistry E: 200

Materials (Chemical properties) M: 300b

Rust R: 567

Corrosive poison

Poison (Kinds of poisons) P: 601

Corrupt bargain [U.S. history]

Adams, John Quincy (Democratic-Republican

Party split) A: 42

Jackson, Andrew (Election of 1824) J: 9-10

Corrupt practices [politics] Ci: 1072

Lobbying L: 404

Police (In the United States since the mid-

1900's) P: 624-625

United States, History of the (Government and

the people) U: 180-181

Corruption of blood [English law]

Attainder A: 878

Corsair [pirate]

Algeria (Ottoman rule) A: 364

Barbary States B: 105

Libya (Early days) L: 267

Morocco (Corsairs and sharifs) M: 814

Pirate (Pirates and privateers of the

Mediterranean) P: 495

Corse See Corsica in this index**Corsica** [island, Mediterranean] Ci: 1072 with

maps

France (Local government) F: 455; (Language)

F: 458-459 with map; (The land) F: 464-

466

Napoleon I (Boyhood) N: 15

Corson, Dale R. [American physicist]

Astatine A: 823

Cort, Henry [British inventor]

Industrial Revolution (The revolution in iron-

making) I: 249-250

Cortázar, Julio [Argentine author]

Latin-American literature (Recent develop-

ments) L: 113

Cortelyou, George B. [American government

official]

Commerce, Department of (table) Ci: 871

Roosevelt, Theodore (table) R: 470

Treasury, Department of (table) T: 407

Cortereal, Miguel de [Portuguese explorer]

Rhode Island (Exploration) R: 312

Cortes [Spanish government]

Spain (The parliament) So: 733; (Reconquest

by the Christian kingdoms) So: 746-

747

Cortés, Hernando [Spanish conqueror] Ci: 1073

with pictures and map

Alvarado, Pedro de A: 398

Aztec (The Spanish conquest) A: 1003

Conquistadors Ci: 973

Exploration map on E: 443; (Spain's conquests

in the New World) E: 445

Indian, American (Indians of Middle America)

I: 169-171, picture on I: 178a

Latin America (The conquest of the Indians)

L: 106 with map

Latin-American literature (Colonial literature)

L: 111

Mexico (The Spanish conquest) M: 469; pic-

ture on M: 470

Mexico City (City of the Aztec) M: 478

Montezuma II M: 764b

Taxco T: 55

Cortés, Sea of

Gulf of California G: 436

Cortex [anatomy]

Adrenal gland A: 67 with diagram

Hair (The root and shaft) H: 9 with diagram

Kidney (How the kidneys produce urine)

K: 311 with diagrams

Cortex [botany]

Potato (The potato plant) P: 712 with picture

Root (The outer tissues) R: 474 with diagrams

Stem (Herbaceous stems) So: 887

Cortex, Cerebral See Cerebral cortex in this

index

Cortez, Hernando See Cortés, Hernando in this

index

Cortez, Viorica [Romanian singer]

Opera picture on O: 803

Corti, Organ of See Organ of Corti in this index**Cortijo** [slum]

São Paulo (People) S: 118

Corticosteroid [hormone]

Asthma (Treatment) A: 825

Cortisone Ci: 1074

Eczema E: 74

Inflammation I: 266

Multiple sclerosis M: 921

Corticosterone [hormone]

Steroid (The adrenal steroids) So: 895

Cortina, Juan Nepomuceno [Mexican political

leader] Ci: 1074

Cortina d'Ampezzo [Italy]

Italy picture on I: 496

Cortisol [hormone]

Adrenal gland A: 67

Drug (Chemical laboratories) D: 354-355

Steroid (The adrenal steroids) So: 895

Cortisone [hormone] Ci: 1074

Julian, Percy Lavon J: 187

Plant (Medicines) P: 518

Cortland apple

Apple (table) A: 571 with picture

Corum, L. L. [American race driver]

Automobile racing (table: Indianapolis 500 win-

ners) A: 980

Corundum [mineral] Ci: 1074

Alumina A: 390

Ruby R: 508

Sapphire S: 122

Corvair

Automobile (The growth of government regu-

lation) A: 971

Corvée [tax]

Egypt, Ancient (Government) E: 139-142

Corvette [automobile]

Plastics (Growth of the plastics industry)

P: 560

Sports car So: 802 with picture; (History)

So: 803 with picture

Corvette [ship]

Warship (Frigates) W: 40

Corvisart, Jean Nicolas [French doctor]

Laënnec, René Théophile Hyacinthe L: 26

Corwin, Thomas [American political leader]

Fillmore, Millard (table) F: 102

Ohio (table) O: 699

Treasury, Department of (table) T: 407

Corydon [Indiana]

Indiana (The Civil War) I: 216

Coryell, Charles D. [American chemist]

Promethium P: 818

Corymb [botany]

Inflorescence I: 268a with picture

Corythosaurus [dinosaur]

Dinosaur (True dinosaurs) D: 206b-206c with

pictures

Prehistoric animal picture on P: 739

Cos lettuce [plant]

Lettuce (Kinds of lettuce) L: 214 with picture

Cosa, Juan de la [Spanish explorer]

Columbus, Christopher (Ships and crews)

Ci: 859

Cosby, Bill [American entertainer] Ci: 1075 with

portrait

Advertising picture on A: 76b

African Americans (Achievements) A: 136p-

136q

Cosby, William [British colonial official]

Utica U: 251

Zenger, John Peter Z: 593

Cosby Show, The [television program]

Cosby, Bill Ci: 1075

Television (The 1980's and 1990's) T: 120

Coscoraba swan

Swan (Kinds) So: 1015-1016

Cosecant

Trigonometry (Right triangles) T: 443

Cosgrave, Liam [Irish political leader]

Ireland (table) I: 428

Cosgrave, William Thomas [Irish political

leader]

Ireland (The Irish Free State) I: 427; (table)

I: 428

Cosgrove, Samuel G. [American political leader]

Washington (table) W: 65

Cosi Fan Tutte [opera by Mozart]

Mozart, Wolfgang Amadeus (His style) M: 907

Cosimo, Piero di [Italian painter]

Leonardo da Vinci (Return to Florence) L: 199

Cosimo de' Medici [Florentine ruler] See

Medici, Cosimo de' in this index

Cosine [trigonometry]

Trigonometry (Right triangles) T: 443

Cosines, Law of

Trigonometry (The law of cosines) T: 443

Cosmetic surgery See Plastic surgery in this

index

Cosmetician [career]

Cosmetics Ci: 1075

Cosmetics Ci: 1075

See also Makeup in this index

Egypt, Ancient (Food, clothing, and shelter)

E: 137

Pure food and drug laws (Cosmetics) P: 908

Cosmetologist [career]

Careers (Personal services) C: 228 with pic-

ture

Cosmetics Ci: 1075

Hairdressing H: 11

Cosmic Background Explorer [satellite]

Astronomy (Advances in astrophysics) A: 848-

849

Galaxy (Origin of galaxies) G: 8b

Cosmic dust grains [astronomy]

Heliosphere (Magnetic field) H: 175

Cosmic inflation [astronomy]

Big bang B: 297

Cosmic-ray astronomy

Astronomy (Cosmic-ray astronomy) A: 845

Cosmic rays [physics] Ci: 1075 with diagram

Astronomy (Cosmic-ray astronomy) A: 845

Heliosphere (Magnetic field) H: 175

Millikan, Robert Andrews M: 555

Particle detector P: 186

Radiation (The sun and other stars) R: 77

Radiocarbon R: 97

Relativity (Time dilation) R: 211

Thermosphere T: 256

Van Allen belts V: 269

Cosmological constant [astronomy]

Big bang B: 297

Cosmology [astronomy] Ci: 1078

Astronomy A: 834

Gravitation (Predictions of general relativity)

G: 332

Cosmology [philosophy]

God (Ideas about God) G: 244

Philosophy (Metaphysics) P: 383

Cosmonaut

See also Space exploration in this index

Astronaut A: 828; (The cosmonauts) A: 833

with pictures

Cosmonaut researcher [occupation]

Astronaut A: 829

Cosmopolitan [magazine]

Magazine (table) M: 45

Cosmos (book by Humboldt)

Humboldt, Baron von H: 432

Cosmos [plant] Ci: 1078

Flower picture on F: 277

Cossa, Baldassare See John XXIII [antipope] in

this index

Cossacks [people] Ci: 1079

Russia (The Time of Troubles) R: 549

Ukraine (Lithuanian and Polish rule) U: 12

Cossacks, Don [people]

Sholokhov, Mikhail S: 433

Cossacks, The [book by Tolstoy]

Tolstoy, Leo (Early life and works) T: 322

Cossette [food processing]

Sugar (Making beet sugar) So: 961

Cost [economics] See Price in this index**Cost accountant** [occupation]

Accounting (Management accounting) A: 23

Cost-benefit analysis [economics] Ci: 1079

Utilitarianism U: 252

- Cost of living** [economics] **Ci:** 1079 *with diagram*
Economics (table) **E:** 58
Social security (Old-age, survivors, and disability insurance) **So:** 553-555; (Developments since 1970) **So:** 556
- Cost per unit** [economics]
Farm and farming (Managing production costs) **F:** 40
- Cost-push inflation** [economics]
Inflation (The cost-push theory) **I:** 268
- Costa** [botany]
Moss (The structure of mosses) **M:** 834
- Costa, Lúcio** [Brazilian architect]
Brasília (History) **B:** 565
- Costa Brava** [region]
Spain *picture on* **So:** 742
- Costa Rica** **Ci:** 1080 *with pictures and maps*
See also Central America *in this index*
National park (Other interesting national parks) **N:** 42e
World War II (table: The Allies) **W:** 471
- Costa Smeralda** [region, Sardinia]
Sardinia **S:** 124
- Costanoan Indians**
San Francisco (History) **S:** 97
- Costello, John Aloysius** [Irish political leader]
Ci: 1084a
Ireland (The Republic of Ireland) **I:** 427, (table) **I:** 428
- Coster, Dirk** [Dutch chemist]
Hafnium **H:** 5
- Costner, Kevin** [American actor/director]
Motion picture (Best achievement in directing: 1990) **M:** 862
- Costovertebral joint** [anatomy]
Rib **R:** 320
- Costumbrismo** [literature]
Latin-American literature (Realism) **L:** 112
Spanish literature (The 1800's) **So:** 761-762
- Costume** [clothing]
Ballet (Sets and costumes) **B:** 49 *with pictures*
Halloween (Halloween customs and symbols) **H:** 24a *with picture*
Mexico **M:** 456 *with picture*
Motion picture (Assembling the production team) **M:** 850 *with picture*
Opera (The designers) **O:** 794 *with picture*
Shakespeare, William (Costumes and sound effects) **S:** 353
Theater (Costumes and makeup) **T:** 242 *with pictures*
- Costume designer** [career]
Motion picture (Assembling the production team) **M:** 850 *with picture*
Television (Producing television programs) **T:** 110c-110d
- Costume doll**
Doll (Costume dolls) **D:** 287
- Cosyns, Max** [Swiss balloonist]
Balloon (Balloon explorations of the upper atmosphere) **B:** 61
- Cotangent**
Trigonometry (Right triangles) **T:** 443
- Côte d'Azur** [region, France] **Ci:** 1084a
- Côte d'Ivoire** **Ci:** 1084a *with pictures and map*
Flag *picture on* **F:** 198
French West Africa **F:** 527 *with map*
Houphouët-Boigny, Félix **H:** 379
Yamoussoukro **Y:** 550
- Cote-hardie**
Clothing (The Middle Ages) **Ci:** 698-699
- Coteau des Prairies**
South Dakota (Land regions) **So:** 674
- Coteau-du-lac National Historic Site** [Quebec]
Canada (table: National historic sites) **C:** 114
- Coterie** [biology]
Prairie dog (Habits) **P:** 732
- Cotillion** [dance] **Ci:** 1085
Dance (Social dances) **D:** 29
- Cotonou** [city, Benin]
Benin **B:** 249 *with map*
- Cotopaxi** [volcano, Ecuador] **Ci:** 1085
Mountain (table) **M:** 894 *with diagram*
Volcano (table) **V:** 441 *with map*
- Cotrubas, Ileana** [Romanian singer]
Opera *picture on* **O:** 802
- Cotswold Hills** [region, England]
Europe *picture on* **E:** 380
- Cotswold sheep**
Sheep (Long-wooled sheep) **S:** 382
- Cottage cheese**
Cheese (Soft cheese) **C:** 392 *with picture*
- Cottage industry** [economics] **Ci:** 1085
Cotton (England) **Ci:** 1092
Industrial Revolution (The textile industry) **I:** 248; (The working class) **I:** 251, *picture on* **I:** 247
Textile (During the Middle Ages) **T:** 218-219
- "Cotter's Saturday Night, The"** [poem by Burns]
Burns, Robert (Burns's works) **B:** 710
- Cotton** **Ci:** 1086 *with pictures and map*
Boll weevil **B:** 448 *with pictures*
Clothing (Clothing materials) **Ci:** 704
Cotton gin **Ci:** 1094
Egypt (Agriculture) **E:** 128-129 *with picture*
Farm and farming *picture on* **F:** 30
Fiber (Plant fibers) **F:** 87
Mississippi (Agriculture) **M:** 638-639 *with picture*; (Statehood) **M:** 642 *with picture*
Mumbai (History) **M:** 925
Pink bollworm **P:** 473
Plant *picture on* **P:** 519
Slavery (Functions of slaves) **S:** 503 *with picture*
Sudan *picture on* **So:** 955
Textile (Natural fibers) **T:** 212
Thread **T:** 269
- Cotton, John** [American religious leader]
Ci: 1094
Literature for children (The Puritans) **L:** 361
- Cotton, Sir Robert** [English historian]
History (Antiquarian research and the philosophes) **H:** 262
- Cotton, William** [British inventor]
Knitting machine **K:** 355
- Cotton Bowl** [stadium]
Dallas (Recreation) **D:** 14-15
- Cotton candy**
Candy (Other candies) **C:** 176
- Cotton Club** [New York City]
Ellington, Duke **E:** 242
- Cotton Comes to Harlem** [book by Himes]
Himes, Chester **H:** 234
- Cotton diplomacy**
Civil War (Relations with Europe) **Ci:** 623
- Cotton dust**
Brown lung **B:** 644
- Cotton gin** [machine] **Ci:** 1094 *with picture*
African Americans (The growth of slavery) **A:** 136e *with picture*
Agriculture *picture on* **A:** 157
Cotton (American colonists) **Ci:** 1092; (Ginning and baling) **Ci:** 1090
Invention (Economic needs) **I:** 355
Textile (The Industrial Revolution) **T:** 219
Whitney, Eli **W:** 295
- Cotton Incorporated**
Cotton (Synthetic fibers) **Ci:** 1093
- Cotton picker** [machine]
Cotton (Harvesting) **Ci:** 1090; *picture on* **Ci:** 1087
- Cotton Plantation on the Mississippi, A** [lithograph by Currier and Ives]
United States, History of the *picture on* **U:** 168
- Cottonmouth**
Snake *picture on* **S:** 533
Water moccasin **W:** 135 *with picture*
- Cottonseed oil** **Ci:** 1094
Cotton (Cotton seeds) **Ci:** 1086
- Cottontail**
Rabbit **R:** 47 *with picture*; (Young) **R:** 48; (Cottontails) **C:** 46
- Cottonwood** [tree] **Ci:** 1094 *with picture*
Leaf *picture on* **L:** 154
Tree *pictures on* **T:** 421
- Cottonwood borer** [insect]
Beetle *picture on* **B:** 218
- Cottony cushion scale**
Insect (Insect control) **I:** 284-285; *picture on* **I:** 281
Ladybug **L:** 25
Scale insect **S:** 170
- Coty, René** [French political leader]
De Gaulle, Charles André Joseph Marie (The Fifth Republic) **D:** 91
- Cotyledon** [botany] **Ci:** 1095
Dicotyledon **D:** 191
Monocotyledon **M:** 731
Plant (Seed plants) **P:** 519; (Seeds) **P:** 531-532 *with picture*; (Germination) **P:** 536 *with picture*
Seed (The parts of a seed) **S:** 281 *with diagrams*
Tree (Broadleaf trees) **T:** 414
- Coubertin, Pierre de** [French sportsman]
International Olympic Committee **I:** 343
Olympic Games (The modern games) **O:** 750
- Couch, William L.** [American settler]
Oklahoma (The great land rushes) **O:** 732
- Cougar** [wild cat]
Mountain lion **M:** 898 *with pictures*
- Cough** [disorder] **Ci:** 1095
Croup **Ci:** 1157
Tuberculosis (The disease) **T:** 478
- Cough medication**
Drug abuse (Over-the-counter drugs) **D:** 361
Menthol **M:** 411
- Coughlin, Charles Edward** [American religious leader] **Ci:** 1095
- Coulee** [geography]
Washington **W:** 58
- Coulee Dam** *See* Grand Coulee Dam *in this index*
- Coulbaly, Ouezzin** [African political leader]
Burkina Faso (History) **B:** 707
- Coulomb** [unit of measure] **Ci:** 1095
Ampere **A:** 438
Coulomb, Charles Augustin de **Ci:** 1095
Electrolysis (Laws of electrolysis) **E:** 201
Force (The electromagnetic force) **F:** 370
Metric system (Electricity) **M:** 440
Volt **V:** 446
- Coulomb, Charles Augustin de** [French physicist] **Ci:** 1095
Coulomb **Ci:** 1095
Electricity (Experiments with electric charge) **E:** 196-197
- Coulomb's Law** [physics]
Coulomb, Charles Augustin de **Ci:** 1095
- Coumbite** [custom]
Haiti (People) **H:** 14
- Coumbite** [painting by Valcín]
Latin America *picture on* **L:** 103
- Council**
League of Nations (Powers and organization) **L:** 159
- Council** [scouting]
Girl Scouts (Troops, groups, and councils) **G:** 198
- Council, City** [government]
City government **Ci:** 595; (The council-manager form) **Ci:** 596
- Council ...**
Most councils appear under their key words, as in Mutual Economic Assistance, Council for; Trent, Council of; or Europe, Council of
- Council Bluffs and Nebraska Ferry Company** [U.S. history]
Omaha (History) **O:** 756
- Council flats** [housing]
England (City life) **E:** 296
- Council houses** [housing]
Scotland (City life) **S:** 213
- Council-manager form of government**
City government (The council-manager form) **Ci:** 596 *with diagram*
- Council Oak** [tree]
Tulsa (History) **T:** 483
- Council on Foreign Relations** [organization]
Ci: 1095
- Counseling**
Careers (Sources of information) **C:** 216
Guidance **G:** 422
Teaching (Duties outside the classroom) **T:** 67
- Counseling psychology**
Psychology (Major fields of psychology) **P:** 848
- Counselor** *See* Lawyer *in this index*
- Count** [title] **Ci:** 1096
- Count-all** [sports]
Horseshoe pitching (Scoring) **H:** 369
- Count Almaviva** [opera character]
Opera (*Barber of Seville, The*) **O:** 801 *with picture*; (*Marriage of Figaro, The*) **O:** 805-806
- Count di Luna** [opera character]
Opera (*Trovatore, Il*) **O:** 808
- Count Dracula** [literary figure]
Stoker, Bram **So:** 906
- Count Fleet** [horse]
Kentucky Derby (table) **K:** 296
- Count Lucanor** [book by Manuel]
Spanish literature (Early medieval literature) **So:** 757-758
- Count noun**
Noun (Mass nouns and count nouns) **N:** 552
- Count of Carmagnola, The** [play by Manzoni]
Italian literature (Romanticism) **I:** 495
- Count of Monte Cristo, The** [book by Dumas]
Dumas, Alexandre, père **D:** 382
Monte Cristo **M:** 762
- Count Raggi's bird-of-paradise**
Bird *picture on* **B:** 328

- Counter air tactical mission** [military]
Air force (Combat missions) A: 182-183
- Counter Reformation** [European history]
Ci: 1096 *with picture*
Architecture (Baroque architecture) A: 622
Baroque B: 117
Christianity (The Counter Reformation) C: 526
Education (The Reformation) E: 100-101
Europe (The Reformation) E: 411-412
Germany (The Reformation) G: 164
Loyola, Saint Ignatius L: 512
Paul IV P: 199
Pius IV P: 502
Pope (Renaissance and Reformation) P: 664
Reformation (Religious influences) R: 198
Roman Catholic Church (The Counter Reformation) R: 408
Spanish literature (The 1600's) So: 759-760
Trent, Council of T: 435
- Counterclaim** [law]
Court (How civil courts work) Ci: 1102
- Counterculture**
Jeans J: 75
Woodstock festival W: 395
- Counter-electromotive force** [physics]
Electric motor (Parts of an electric motor) E: 179-180
- Counterespionage**
Central Intelligence Agency C: 356
Espionage (Counterespionage) E: 358
- Counterfeiters, The** [book by Gide]
Gide, André G: 188
- Counterfeiting** [crime] Ci: 1097
- Counter glow** [astronomy]
Zodiacal light Z: 602
- Counterintelligence**
Central Intelligence Agency C: 356
- Counter melody** [music]
Counterpoint Ci: 1097
- Counterpoint** [music] Ci: 1097
Canon C: 182
Music (Harmony) M: 951-952
- Countershaft**
Transmission (The gears) T: 378 *with diagram*
- Counterspy**
Espionage (Counterespionage) E: 358
- Countersubject** [music]
Fugue F: 553
- Counterterrorism** [policy]
Terrorism T: 177
- Counterweight** [mechanics]
Crane Ci: 1119 *with picture*
Elevator (How elevators work) E: 234 *with diagram*
- Countess** [title]
Lady L: 25
Nobility (In the United Kingdom) N: 450
- Countess Cathleen, The** [play by Yeats]
Yeats, William Butler Y: 555
Irish literature (The Irish literary revival) I: 431-432
- Counting** [mathematics]
Addition (Addition by counting) A: 48
Roman numerals R: 413
Subtraction (Subtraction Terms) So: 944
Writing (Counting devices) W: 512
- Counting chamber**
Blood count B: 415
- Counting coup** [warfare]
Indian, American (Why the Indians fought) I: 144; (After European contact) I: 159
- Country** [political unit] Ci: 1097
Nation N: 26
Patriotism (Foundations of patriotism) P: 198
World (table) W: 408-412; *map on* W: 410
- Country and western music** See *Country music in this index*
- Country collector** [occupation]
Fur (Marketing fur) F: 562
- Country elevator**
Grain elevator (Kinds of grain elevators) G: 301
- Country music** Ci: 1098
Arnold, Eddy A: 742
Atkins, Chet A: 858
Branson B: 564
"Grand Ole Opry" G: 308
Music (Western music) M: 955
Popular music (The rise of country music) P: 671 *with picture*
United States *picture on* U: 118
- Country Music Association**
Country music (Emergence of the country music industry) Ci: 1098b-1098c
- Country of the Pointed Firs, The** [stories by Jewett]
Jewett, Sarah Orne J: 119
- Country rock**
Popular music (New forms of rock) P: 671
Rock music (Rock goes pop) R: 379
- Country sale**
Tobacco (Marketing tobacco) T: 307 *with picture*
- Country School, The** [painting by Homer!]
Education *picture on* E: 102
- Country Wife, The** [play by Wycherley]
Wycherley, William W: 514
- County** [political unit] Ci: 1099
Colonial life in America (Local government) Ci: 794
Local government L: 407
Metropolitan area (County government) M: 444
Township T: 351
- County agricultural extension agent** [office] Ci: 1099
Farm and farming (Obtaining management assistance) F: 43-44
Gardening (Planning the garden) G: 31-32
- County Championship** [award]
Cricket (History) Ci: 1134-1135
- County fair**
Fair (Agricultural fairs) F: 7
- County government**
County (Forms of county governments) Ci: 1099
Local government L: 407
Metropolitan area (County government) M: 444
- County jail**
Prison (Types of correctional institutions) P: 805
- County police**
Police (County police) P: 622
- Coup, William Cameron** [American businessman]
Barnum, P. T. B: 115
- Coup d'état** [political science] Ci: 1099
- Coup d'État of Eighteenth Brumaire** [1799]
Napoleon I (First consul of France) N: 16
- Coup stick** [weapon]
Indian, American (Why the Indians fought) I: 144
- Couperin, François** [French composer] Ci: 1099
- Couperus, Louis** [Dutch author]
Netherlands (Arts) N: 142-144
- Coupler** [photography]
Photography (Developing color film) P: 422-424
- Coupler** [railroad]
Locomotive *diagram on* L: 416
- Couples** [book by Updike]
Updike, John U: 213
- Couplet** [poetry] Ci: 1100
Poetry (table) P: 594
- Coupon**
Rationing R: 148
- Courage to Be, The** [book by Tillich]
Tillich, Paul T: 287
- Courant Institute of Mathematical Sciences**
New York University N: 345
- Courantyne** [river, Guyana]
Guyana (Land) G: 446
- Courbet, Gustave** [French artist] Ci: 1100 *with picture*
Painting (Realism) P: 70 *with picture*
- Coueurs de bois** [Canadian history] Ci: 1100
- Cournand, André Frédéric** [American physician]
Nobel Prizes (Physiology or medicine: 1956) N: 444
- Cournault, Étienne** [French artist]
Engraving *picture on* E: 326
- Course** [textile]
Textile (Knitted fabrics) T: 214
- Course of Empire, The** [paintings by Cole]
Cole, Thomas C: 771
- Course of Positive Philosophy, The** [book by Comte]
Comte, Auguste Ci: 926
- Course of study**
Curriculum (Curriculum content) Ci: 1197
- Courser** [bird] Ci: 1100 *with picture*
- Coursing** [sport]
Dog racing D: 283
- Court** [law] Ci: 1101
Canada, Government of (The courts) C: 138
Constitution of the United States (Article III) Ci: 1009
Crime laboratory (Presenting the evidence) Ci: 1141
Criminal justice system (The courts) Ci: 1143;
(Problems in the courts) Ci: 1144
- District court D: 240
Feudalism (Justice under feudalism) F: 82
International law (Courts and arbitration) I: 341
Judicial review J: 183
Law (Common law systems) L: 132; (How laws are changed) L: 132
Law enforcement L: 141
Star Chamber So: 853
State government (Judicial branch) So: 864
Supreme Court of Canada So: 996
Supreme Court of the United States So: 998
Trial T: 437
United Kingdom (Courts) U: 54
- Court** [sports]
Handball H: 41 *with pictures*
Honduras *picture on* H: 313
Squash So: 813 *with pictures*
Table tennis (Equipment) T: 3
Tennis (The court and equipment) T: 161 *with diagram*; *diagram on* T: 162
Volleyball (The court) V: 445
- Court, Inns of** [English history]
Inns of Court I: 276
- Court, Margaret Smith** [Australian tennis player] Ci: 1104
Tennis (Tennis tournaments) T: 165; (The mid-1900's) T: 166-168; (Tennis today) T: 168
- Court cupboard**
Furniture (England) F: 573
- Court dance**
Dance (Social dances) D: 29
- Court fool**
Jester J: 103
- Court-martial** [military] Ci: 1104
Court of Military Appeals, United States Ci: 1105
Mitchell, Billy M: 677
Uniform Code of Military Justice U: 27
- Court of Appeal**
New Zealand (Courts) N: 347
- Court of appeals** [law] Ci: 1105 *with map*
Court (Types of courts) Ci: 1101; (Federal courts) Ci: 1102
State government (Judicial branch) So: 864
Supreme Court of the United States (Authority of the Supreme Court) So: 998
United States, Government of the (Lower court system) U: 144
- Court of Cassation** [law]
France (Courts) F: 455
- Court of chancery** [law]
Common law Ci: 875
Equity E: 348
- Court of claims** [law] Ci: 1105
Court (Federal courts) Ci: 1102
- Court of Common Council**
London (The government of the City of London) L: 439
- Court of equity** [law]
Equity E: 348
- Court of Honor**
Girl Scouts (Troops, groups, and councils) G: 198
- Court of International Trade, United States**
Ci: 1105
- Court of Military Appeals, United States**
Ci: 1105
Court-martial Ci: 1105
Uniform Code of Military Justice U: 27
- Court of Saint James's** [British royal court]
Saint James's Palace S: 35
- Court of the Four Evangelists** [courtyard]
Escorial E: 357
- Court of the Lions** [courtyard]
Alhambra A: 367
Spain *picture on* So: 739
- Court Square** [Springfield]
Massachusetts *picture on* M: 279
- Courtesy** See *Etiquette in this index*
- Courtesy flag**
Flag (table) F: 193
- Courtesy title**
Nobility (Privileges of the peerage) N: 450
- Courtier, The** [book by Castiglione] See *Book of the Courtier, The in this index*
- Courtly love** [European history]
Chaucer, Geoffrey (Life) C: 388
Minnesinger M: 583
Poetry (Medieval poetry) P: 596
Walther von der Vogelweide W: 21
- Courtois, Bernard** [French chemist]
Iodine (Properties of iodine) I: 370-371
- Courtrai, Battle of** [1302]
Feudalism (The decline of feudalism) F: 83

Courtroom

Johnson, Andrew *picture on J*: 141
 Supreme Court of the United States *picture on So*: 998

Courtship

See also Dating *in this index*
 Animal (Courtship behavior) **A**: 497 *with picture*
 Bird (Courtship and mating) **B**: 356 *with pictures*
 Butterfly (The life cycle of butterflies) **B**: 739-740
 Dance (Why people dance) **D**: 25-26
 Hare **H**: 60
 Insect (Courtship) **I**: 294
 Swan (Habits) **So**: 1016

Courtship of Miles Standish, The [poem by Longfellow]

Alden, John and Priscilla **A**: 338
 Longfellow, Henry Wadsworth (Narrative poems) **L**: 450

Standish, Miles **So**: 836

Couscous [food]

Africa (Food and clothing) **A**: 109
 Algeria (Foods) **A**: 361
 Morocco (Food and drink) **M**: 812

Cousin [family] **Ci**: 1105

Family (Family relationships) **F**: 21

Cousin Bette [book by Balzac]

Balzac, Honoré de **B**: 70

Cousteau, Jacques-Yves [French explorer] **Ci**: 1106 *with portrait*

Diving, Underwater (History) **D**: 247
 Exploration (Deep-sea exploration) **E**: 451
 Skin diving (History) **S**: 494

Cousy, Bob [American basketball player] **Ci**: 1106**Couteau Slope** [North Dakota]

North Dakota (Land regions) **N**: 506

Couture [clothing]

Fashion (The fashion industry) **F**: 51

Couture, Thomas [French painter]

Manet, Edouard **M**: 138

Couvade [custom]

Folklore (Superstitions and customs) **F**: 325

Covalent bond

Bond **B**: 454
 Electronics (Solid-state components) **E**: 210
 Materials (The role of bonds) **M**: 301

Coveleski, Stan [American baseball player] **Ci**: 1111

Baseball (table: Hall of Fame) **B**: 134

Coven

Witchcraft (Organization and practices) **W**: 371

Covenant [religion]

Abraham **A**: 16
 Ark of the Covenant **A**: 693
 Judaism (The covenant with God) **J**: 179
 Moses (The covenant with God) **M**: 829
 Old Testament **O**: 740

Covenant, Ark of the See Ark of the Covenant *in this index***Covenanthers** [Scottish history] **Ci**: 1106

Scotland (War with the king) **S**: 220

Covent Garden Market

London (Trade) **L**: 438

Coventry [England] **Ci**: 1106 *with picture***Coventry Cathedral** [England]

Cathedral *picture on C*: 301
 Coventry **Ci**: 1107 *with picture*

Cover [shelter]

Balance of nature (Competition) **B**: 34

Cover crop [agriculture]

Alfalfa (As a cover crop) **A**: 346-347
 Erosion (Controlling erosion) **E**: 355
 Farm and farming (Preparing the soil) **F**: 35
 Rye (Uses) **R**: 573

Cover letter

Careers (Contacting employers) **C**: 218
 Letter writing (Letters of application) **L**: 211 *with picture*
 Writing (Preparing and submitting a manuscript) **W**: 512

Coverdale, Miles [English religious leader] **Ci**: 1106

Bible (Early English translations) **B**: 286

Covered bridge

New Brunswick (Places to visit) **N**: 188 *with picture*

Covered smut [plant disease]

Smut **S**: 522

Covered wagon

Conestoga wagon **Ci**: 931
 Pioneer life in America (How the pioneers traveled) **P**: 478-479; (Crossing the Plains) **P**: 485-486 *with picture*
 Westward movement in America *picture on W*: 244

Coverley, Sir Roger de [literary figure]

Addison, Joseph **A**: 47

Coverslip [slide]

Microtomy **M**: 520

Covert [feather]

Bird (Feathers) **B**: 362

Covert action

Central Intelligence Agency **C**: 356
 Intelligence service **I**: 319

Covey [zoology]

Grouse (Habits) **G**: 403-404
 Quail **Q**: 4

Covington [Kentucky] **Ci**: 1107**Covington, Leonard** [American general] **Ci**: 1107**Cow** [female animal] **Ci**: 1107

Elephant (Kinds of elephants) **E**: 227
 Moose (The life of a moose) **M**: 798 *with picture*

Cow [female cattle]

Cattle **C**: 306 *with pictures*

Cow **Ci**: 1107

Dairying **D**: 6 *with picture*

Lactation **L**: 25

Milk **M**: 545 *with picture*; (History of the milk industry) **M**: 549

Skeleton *diagram on S*: 481

Cow Ford [former name]

Jacksonville **J**: 17

Cow parsnip [plant] **Ci**: 1107**Cow Plain**

Forum, Roman **F**: 421

Cow town [U.S. history]

Cowboy (The trail drive) **Ci**: 1111
 Kansas (The great cattle towns) **K**: 237
 Western frontier life in America (Life in the country) **W**: 237; (Law and order) **W**: 238

Cowan, Clyde [American physicist]

Neutrino **N**: 154

Coward, Noël [British dramatist] **Ci**: 1107 *with portrait*

Lean, David **L**: 162

Cowbane [plant]

Poisonous plant (Some poisonous plants) **P**: 602

Cowberry [fruit]

Lingonberry **L**: 335 *with picture*

Cowbird **Ci**: 1107 *with picture*

Bird (Birds of grasslands) **B**: 336 *with picture*;
 (Feeding methods) **B**: 350

Cowboy **Ci**: 1108 *with pictures*

See also Gaucho *in this index*

Abilene **A**: 11

Montana *picture on M*: 746

Ranching **R**: 134 *with picture*

Rodeo **R**: 397 *with picture*

Western frontier life in America (Life in the country) **W**: 237

Westward movement in America (Cattle frontiers) **W**: 251

Cowboy boots

Cowboy (His clothing) **Ci**: 1108-1109 *with picture*

Cowboy Horse Race

Nebraska (Interesting facts) **N**: 95 *with picture*

Cowboy music

Country music (Cowboy music) **Ci**: 1098a

Cowboys, Dallas [football team] See Dallas

Cowboys *in this index*

Cowell, Henry [American composer] **Ci**: 1112

Classical music (Experimental music) **Ci**: 650

Cowgirl

Rodeo **R**: 398 *with picture*

Cowhand

See also Cowboy *in this index*

Cowboy (Cowhands) **Ci**: 1112

Cowin, Eileen [American photographer]

Photography (Photography today) **P**: 428

Cowley, Abraham [English author] **Ci**: 1112**Cowley, Joy**

Literature for children *picture on L*: 380

Cowley Fathers [Anglican religious group]

Religious life (table) **R**: 227

Cowpea [plant] **Ci**: 1113**Cowpens, Battle of** [1781]

Morgan, Daniel **M**: 803
 Revolutionary War in America (table) **R**: 276;
 (Cowpens and Guilford Courthouse) **R**: 285 *with picture*
 South Carolina (The Revolutionary War) **So**: 659

Cowpens National Battlefield [South Carolina]

National Park System (table: National battlefields) **N**: 55

Cowper, Steve [American political leader]

Alaska (table) **A**: 300

Cowper, William [British poet] **Ci**: 1113

February (Quotations) **F**: 61
 Literature for children (The rise of illustration) **L**: 363

Cowpox [disease]

Jenner, Edward **J**: 91
 Medicine (The development of immunology) **M**: 374-375

Cowrie [sea animal] **Ci**: 1113 *with picture*

Money *picture on M*: 705

Shell *pictures on S*: 386

Cowrie shell [device]

Arithmetic (Calculation tools) **A**: 669

Cowry See Cowrie *in this index***Cowslip** [plant] **Ci**: 1113**Cowtown** [nickname]

Fort Worth **F**: 417

Cox, Archibald [American lawyer]

Nixon, Richard Milhous (Events at home) **N**: 435-436

Watergate (The break-in and cover-up) **W**: 144;
 (The tape controversy) **W**: 144

Cox, Channing H. [American political leader]

Massachusetts (table) **M**: 288

Cox, Edward Finch [son-in-law of]

Nixon, Richard Milhous *picture on N*: 435

Cox, George B. [American political leader]

Ohio (The early 1900's) **O**: 702

Cox, Isabel [wife of]

Meighen, Arthur (Early life) **M**: 385

Cox, Jacob Dolson [American political leader]

Grant, Ulysses S. (table) **G**: 316

Interior, Department of the (table) **I**: 325

Ohio (table) **O**: 699

Cox, James Middleton [American political leader] **Ci**: 1113

Harding, Warren Gamaliel (The smoke-filled room) **H**: 57

Ohio (table) **O**: 699

Roosevelt, Franklin Delano (Candidate for Vice President) **R**: 455

Cox, John I. [American political leader]

Tennessee (table) **T**: 152

Cox, Patricia Nixon [daughter of]

Nixon, Richard Milhous *picture on N*: 435

Cox-2 inhibitor [drug]

Arthritis (Osteoarthritis) **A**: 751-752

Coxey, Jacob Sechler [American labor leader] **Ci**: 1114**Coxey's Army** [U.S. history]

Coxey, Jacob Sechler **Ci**: 1114

Cleveland, Grover (Labor unrest) **Ci**: 672 *with picture*

Coxswain

Rowing (Types of rowing) **R**: 493

Coy, George W. [American inventor]

Connecticut (Interesting facts) **Ci**: 953

Coyle, Grace L. [American social worker]

Social work (History) **So**: 559

Coyote [dog] **Ci**: 1114 *with picture*

Animal *picture on A*: 483

Fur (table) **F**: 561

Sheep (Enemies of sheep) **S**: 383

Coyote State [nickname]

South Dakota **So**: 665

Coyotes, Phoenix [team]

Hockey (table: National Hockey League) **H**: 281

Coypu [animal]

Nutria **N**: 623 *with picture*

Coysevox, Antoine [French sculptor] **Ci**: 1114

Sculpture (Form and treatment) **S**: 230-231;
 (European sculpture) **S**: 253-254 *with picture*

Cozad, Robert Henry See Henri, Robert *in this index***Cozzens, James Gould** [American author] **Ci**: 1114**Cozzens, William C.** [American political leader]

Rhode Island (table) **R**: 311

CPA See Certified public accountant *in this index***CPB** See Corporation for Public Broadcasting *in this index***CPI** See Consumer Price Index *in this index***CPP** [political party]

Ghana (History) **G**: 179-180

CPR [medicine] See Cardiopulmonary resuscitation *in this index***CPU** [electronics] See Microprocessor *in this index***Cr** [symbol]

Chromium **C**: 538

Crab [astrology]

Cancer C: 174 *with picture*
Crab [sea animal] Ci: 1115 *with pictures*
 Animal pictures on A: 469, A: 486
 Arthropod A: 752 *with picture*
 Crustacean Ci: 1162 *with picture*; (The life of a crustacean) Ci: 1163-1165 *with pictures*
 Deep sea (Invertebrates) D: 82a *with picture*
 Ocean picture on O: 656
Crab apple [tree] Ci: 1116 *with pictures*
Crab-eating raccoon
 Raccoon R: 50
Crab grass [weed]
 Lawn picture on L: 143
Crab Nebula
 Astronomy (Gamma-ray astronomy) A: 845
 Gamma rays G: 23
 Supernova So: 994
Crab spider
 Spider (table) So: 790; *picture on So: 782*
Crabbing [industrial process]
 Wool (Making fabric) W: 401
Crabeater seal [sea animal]
 Seal (Food) S: 267; (Enemies) S: 267
Crack [drug]
 Cocaine Ci: 742
 Drug abuse (Cocaine) D: 362; (table: Some commonly abused drugs) D: 363
Crack-Up, The [book by Fitzgerald]
 Fitzgerald, F. Scott F: 190
Cracking [industrial process]
 Gasoline (History) G: 62
Crackowe
 Shoe S: 430
Kraków [city, Poland] See *Kraków in this index*
Cradle Mountain National Park [Australia]
 National park (table) N: 42f
Cradle of Jazz
 Louisiana L: 478
Cradle of Liberty
 Boston B: 495
 Faneuil, Peter F: 27
Cradle of New France [nickname]
 Quebec Q: 34
Cradle of the Confederacy
 Montgomery M: 766
Cradle of the Russian Empire
 Nizhny Novgorod N: 438
Cradle of the Union [nickname]
 Albany (Government and history) A: 309-310
Cradle scythe [tool]
 Scythe S: 261
Cradle Will Rock, The [opera by Blitzstein]
 Blitzstein, Marc B: 403
Cradleboard [bed]
 Baby picture on B: 4
Cradles of civilization [anthropology]
 Asia (History) A: 804
Craft See *Handicraft in this index*
Craft [religion]
 Witchcraft W: 371
Craft guild [European history]
 Guild (Craft guilds) G: 428
Craft union [labor union]
 Industrial Workers of the World I: 255
 Labor movement (Types of unions) L: 7
Crafts, Samuel C. [American political leader]
 Vermont (table) V: 333
Craftworker [laborer]
 City (Economy) Ci: 580, (Economy) Ci: 584-585 *with picture*; (Economy) Ci: 588
 Folk art (Folk artists) F: 319 *with pictures*
 Handicraft H: 45
Craig, George N. [American political leader]
 Indiana (table) I: 214
Craig, Helen [American author]
 Literature for children picture on L: 374
Craig, Locke [American political leader]
 North Carolina (table) N: 490
Craigie, Andrew [American pharmacist]
 Drug (Growth of the drug industry) D: 359
Craigie House [estate]
 Longfellow, Henry Wadsworth picture on L: 450
Craig's Wife [play by Kelly]
 Kelly, George Edward K: 256
Craik, James [American doctor]
 Washington, George (Death) W: 107
Craik [city, Scotland]
 Scotland picture on S: 213
Craigo [Rensselaer, New York]
 Colonial life in America (Places to visit) Ci: 800
Crak [tile]
 Mah-jongg M: 64 *with picture*
Cram, Donald James [American chemist]
 Nobel Prizes (Chemistry: 1987) N: 443

Cramer, Charles F. [American public figure]
 Harding, Warren Gamaliel (Government scandals) H: 58
Cramer, Stuart W. [American engineer]
 Air conditioning (History) A: 180
Cramp [disorder] Ci: 1116
 Muscle (Disorders of the muscles) M: 935-936
Crampon [tool]
 Mountain climbing (Basic mountaineering equipment and methods) M: 897
Cranach, Lucas, the Elder [German painter]
 Ci: 1116
 Luther, Martin picture on L: 527
Cranberry [fruit] Ci: 1116 *with picture*
 New Jersey picture on N: 234
Cranbrook Academy of Art [Bloomfield Hills, Michigan]
 Detroit (Other interesting places to visit) D: 170
Crandall, Prudence [American educator]
 Ci: 1117 *with portrait*
Crane [bird] Ci: 1117 *with pictures*
 Animal picture on A: 485
 Whooping crane W: 297
Crane [machine] Ci: 1119 *with pictures*
 Building construction (Constructing a skyscraper) B: 683-684 *with picture*
Crane, Arthur Griswold [American political leader]
 Wyoming (table) W: 532
Crane, Hart [American poet] Ci: 1120
 American literature (Modernist poetry) A: 421
 Lost Generation L: 472
Crane, Ichabod [literary figure]
 Irving, Washington I: 460
Crane, Stephen [American author] Ci: 1120 *with portrait*
 American literature (Naturalists) A: 419-420
 Novel (The United States) N: 573
Crane, Walter [British artist] Ci: 1120
 Literature for children (The rise of illustration) L: 363
Crane, Winthrop M. [American political leader]
 Junior Achievement J: 196
 Massachusetts (table) M: 288
Crane fly [insect]
 Daddy longlegs D: 3
Crane's-bill [plant]
 Geranium G: 136
Cranford [book by Gaskell]
 Gaskell, Elizabeth G: 60
Cranial bones [anatomy]
 Skull S: 495
Cranial capacity [biology]
 Head H: 124
Cranium [anatomy]
 Skull S: 495
Crank [machine]
 Gasoline engine (Crankshaft) G: 64
 Starter (Automobile starters) So: 857-858
Crankcase
 Gasoline engine (Crankcase) G: 64 *with pictures*
Cranko, John [South African choreographer]
 Ballet (Ballet in Europe) B: 54
Crankshaft [mechanical device]
 Automobile (How an automobile works) A: 949 *with diagram*
 Gasoline engine (Crankshaft) G: 64
 Ignition (The direct fire ignition system) I: 49
 Machine diagram on M: 13
 Starter (Automobile starters) So: 857-858
 Transmission (What a transmission does) T: 375
Cranmer, Thomas [English religious leader]
 Ci: 1120
 Boleyn, Anne B: 441
 Henry VIII [of England] H: 188
Crannog
 Lake dwelling L: 37
Cranston, Alan MacGregor [American political leader] Ci: 1121
Cranston, John [British scientist]
 Protactinium P: 831
Crapo, Henry H. [American political leader]
 Michigan (table) M: 507
Crappier, Sir Thomas [British plumber]
 Plumbing (History) P: 580
Crappie [fish] Ci: 1121 *with picture*
Craps [gambling]
 Dice D: 186
Crash, The [book by Zola]
 Zola, Émile Z: 602
Crash truck
 Fire department (Special fire vehicles) F: 127

Crashaw, Richard [English poet]
 Counter Reformation (Catholic reform) Ci: 1096-1097
Crasileck, Harold [American scientist]
 Hypnotism (Scientific studies) H: 479-480
Crassus, Marcus Licinius [Roman political leader] Ci: 1121
 Caesar, Julius (Alliance with Pompey) C: 12
 Jerusalem (Roman rule) J: 101
 Rome, Ancient (Breakdown of the republic) R: 446
 Triumvirate T: 448
Crater [geology] Ci: 1121
 Callisto C: 68
 Meteor picture on M: 431
 Mars (Craters and impact basins) M: 226 *with picture*
 Moon M: 783; (Surface features of the moon) M: 788 *with picture*; (Determining the origin of craters) M: 793
 Seven Natural Wonders of the World (Meteor Crater) S: 324b *with picture*
 Volcano (The eruption of a volcano) V: 438-439 *with diagram*
Crater ejecta blanket [astronomy]
 Moon (Craters) M: 789
Crater Lake [Oregon] Ci: 1121 *with picture*
 Lake (How lakes are formed) L: 32
 Oregon (Rivers, waterfalls, and lakes) O: 840; *picture on O: 836*
Crater Lake National Park [Oregon] Ci: 1122
 National Park System (table: National parks) N: 48
 Oregon (Places to visit) O: 836 *with picture*
Crater of Diamonds State Park
 Arkansas (Places to visit) A: 704 *with picture*
Crater ray [astronomy]
 Moon (Craters) M: 789
Craters of the Moon National Monument
 [Idaho]
 Idaho (Places to visit) I: 34 *with picture*
 Lava (Kinds of lava) L: 128
 National Park System (table: National monuments) N: 50
Cratylus [book by Plato]
 Plato (The dialogues) P: 567
Cravat [clothing]
 Necktie N: 117
Crawfish See *Crayfish in this index*
Crawford, Adair [Irish chemist]
 Strontium So: 930
Crawford, Broderick [American actor]
 Motion picture (Best performance by an actor: 1949) M: 862
Crawford, Coe I. [American political leader]
 South Dakota (table) So: 680
Crawford, George W. [American government official]
 Georgia (table) G: 130
 Taylor, Zachary (table) T: 60
Crawford, Isabella Valancy [Canadian poet]
 Canadian literature (Poetry: 1850-1918) C: 157-158
Crawford, James [uncle of]
 Jackson, Andrew (Boyhood and education) J: 6
Crawford, Joan [American actress]
 Motion picture (Best performance by an actress: 1945) M: 862
Crawford, Sam [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Crawford, Samuel J. [American political leader]
 Kansas (table) K: 234
Crawford, William Harris [American political leader] Ci: 1122
 Jackson, Andrew (Election of 1824) J: 9-10
Crawford Square [housing development]
 Pittsburgh (Housing) P: 500b
Crawl
 Swimming (The basic strokes) So: 1043; *pictures on So: 1044*
Crawler [insect]
 San Jose scale S: 102
Crawler mounted crane [machine]
 Crane Ci: 1119 *with picture*
Crawler tractor [machine]
 Tractor T: 361 *with picture*
Craxi, Bettino [Italian political leader]
 Italy (Political changes) I: 519
Cray, Seymour [American engineer]
 Computer (Miniaturization) Ci: 924c
Crayfish [animal] Ci: 1122 *with picture*
 Evolution (Vestigial organs) E: 431
Crayon Ci: 1122
 Drawing (Materials and techniques) D: 342 *with picture*

- Crazy bone** [anatomy]
Funny bone F: 560
- Crazy Horse** [American Indian chief] Ci: 1123
Indian wars (The Sioux wars) I: 194
South Dakota So: 664; (Territorial days) So: 681-683
- Crazy Horse Memorial** [South Dakota]
South Dakota (Places to visit) So: 672
- Crazy Horse's Vision** [book by Bruchac]
Literature for children *picture* on L: 360
- Crazy Mountains**
Montana (Land regions) M: 752
- Crazy quilt** [sewing]
Quilt Q: 42
- Cream** [cooking]
Cooking (table) Ci: 1029
- Cream** [food]
Butter (How butter is made) B: 730
Milk (table) M: 547
- Cream cheese**
Cheese (Soft cheese) C: 392 *with picture*
- Cream of tartar** [chemical]
Tartaric acid T: 48
- Creamery**
Butter (How butter is made) B: 730
Dairying (History of dairying) D: 8
- Creamware** [china]
Colonial life in America (Furnishings) Ci: 797-798
Wedgwood ware W: 178 *with picture*
- Craesey, John** [British author] Ci: 1123
Detective story (The pattern) D: 162-163
- Creation**
Creationism Ci: 1123
Evolution (Acceptance of evolution) E: 433
Genesis G: 83
Life (Religious explanations) L: 278
Mythology (What myths are about) M: 974 *with picture*; (The Creation myth) M: 978; (The creation of life) M: 984
Roman Catholic Church (The Trinity and creation) R: 404
- Creation** [book by Vidal]
Vidal, Gore V: 359
- Creation, The** [music by Haydn]
Haydn, Joseph H: 117
- Creation of Adam, The** [painting by Michelangelo]
Painting (The High Renaissance) P: 54-55
- Creation of the World, The** [music by Milhaud]
Milhaud, Darius M: 543
- Creation Story** [poem]
Babylonia (Language and literature) B: 13
- Creationism** [doctrine] Ci: 1123
Darwin, Charles Robert (The influence of Darwin's ideas) D: 40
Evolution (Acceptance of evolution) E: 433
- Creative Intelligence, Science of**
Transcendental Meditation T: 370
- Creative writing**
Writing (Preparing for a writing career) W: 511
- Creativity**
Imagination I: 79
Learning (Theories of learning) L: 163-164
- Creator** [religion]
Mormons (Church doctrines) M: 806
- Crèche** [nativity]
Christmas (Religious practices) C: 533; *picture* on C: 528
Doll D: 286
- Crécy, Battle of** [1346] Ci: 1124
Archery (History) A: 603
Edward [the Black Prince] E: 111
Edward III E: 112
England (The Hundred Years' War) E: 306 *with picture*
Feudalism (The decline of feudalism) F: 83
Hundred Years' War H: 437
- Credit** [economics] Ci: 1124
See also Loan *in this index*
Bookkeeping (Double-entry bookkeeping) B: 472
Credit card Ci: 1125
Installment plan I: 304
Interest I: 321, (Degree of risk) I: 322
Women's movements (Legal gains) W: 386
- Credit** [education]
Universities and colleges (Curriculum) U: 209
- Credit bureau** [economics]
Credit Ci: 1124
- Credit card** Ci: 1125
Bank (Providing a means of payment) B: 89
Credit (Types of credit) Ci: 1124
Loan company L: 404
Smart card S: 513
- Credit check** [economics]
Installment plan (How the plan works) I: 304
- Credit life insurance**
Insurance (Main kinds of life insurance) I: 309
- Credit Mobilier of America** [U.S. history]
Ci: 1125
Garfield, James Abram (Congressman) G: 41
Grant, Ulysses S. (Grant's second Administration) G: 317
- Credit rating** [economics]
Credit Ci: 1124
- Credit union** [economics] Ci: 1125
Bank (Credit unions) B: 91; (Regulation of U.S. banks) B: 92
Cooperative (Credit unions) Ci: 1036
- Creditor** [economics]
Debt D: 65
Bankruptcy B: 97
Collection agency Ci: 774
- Creditors** [play by Strindberg]
Strindberg, August So: 929
- Cree Indians** [American Indians] Ci: 1125
North West Rebellion N: 520
Quebec (Indian days) Q: 30
Regina (History) R: 206
Saskatchewan (Early days) S: 144 *with picture*; (Métis and Indian troubles) S: 146-147
- Creech, Sharon** [American author]
Newbery Medal (table) N: 359
- Creed** [religion]
Roman Catholic Church (Roman Catholic beliefs) R: 403
- Creed, American's**
American's Creed A: 431
- Creed, Apostles'** *See* Apostles' Creed *in this index*
- Creed, Nicene** [religion]
Nicene Councils N: 402
Constantine the Great Ci: 993
- Creek** [stream] *See* Brook *in this index*
- Creek Capitol** [Okmulgee]
Oklahoma (Places to visit) O: 722
- Creek chub** [fish]
Chub C: 540 *with picture*
Fish *picture* on F: 158
Minnow M: 608
- Creek Confederacy** [U.S. history]
Creek Indians Ci: 1126
- Creek Indians** Ci: 1126
Alabama (Territorial days) A: 275; *picture* on A: 277
Black Seminole B: 391
Indian, American (Indians of the Southeast) I: 157 *with picture*
Indian Territory I: 189 *with map*
Indian wars (In the South) I: 193
Jackson, Andrew (The Battle of Horseshoe Bend) J: 9
McGillivray, Alexander M: 336
Tulsa (History) T: 483
- Creek Indians** [drawing by Catlin]
Indian, American *picture* on I: 157
- Creel** [fishing]
Fishing (Bait) F: 177-178
- Creel** [textiles]
Textile (Making the fabric) T: 216
- Crælay, Robert** [American poet] Ci: 1126
American literature (Poetry) A: 423
- Creep**
Materials (Properties of materials) M: 300b
- Creaper** [bird] Ci: 1126
Bird (Birds of Europe and Asia) B: 346 *with picture*
Hawaiian honeycreeper *picture* on H: 110
- Creaper** [plant]
Virginia creeper V: 424 *with picture*
- Creeping bentgrass** [plant]
Bentgrass B: 254
- Creeping buttercup** [plant]
Buttercup B: 731 *with picture*
- Creeping Charlie** [plant]
Loosestrife L: 453
- Creeping eruption** [disorder]
Hookworm H: 325
- Creeping Jennie** [plant]
Loosestrife L: 453
- Cremaster** [entomology]
Butterfly (The pupa) B: 741
Chrysalis C: 539
- Cremation** Ci: 1126
Funeral customs (The funeral) F: 557
Suttee So: 1013
- Crematorium** [German history]
Holocaust (The camps) H: 296a
- Crematory**
Cremation Ci: 1126
- Crémazie, Octave** [Canadian poet]
Canadian literature (Poetry: 1850-1918) C: 157
- Cramer, Sir William Randal** [British statesman]
Nobel Prizes (Peace: 1903) N: 447
- Crenel** [structure]
Castle (Structure) C: 280
- Creole** [language]
Aborigines, Australian A: 13
Haiti (People) H: 14-15
Language (Unusual languages) L: 66
Mauritius (People) M: 316
- Creole** [people] Ci: 1126
Louisiana L: 478; (Population) L: 482
Mauritius (People) M: 316
Mexico (Spanish rule) M: 470
New Orleans (Ethnic groups) N: 281
São Tomé and Príncipe (People) S: 119
Sierra Leone (People) S: 451
- Creole Jazz Band**
Armstrong, Louis A: 723
- Creon** [literary figure]
Antigone A: 554
- Creosote** [chemical] Ci: 1127
Termite (Termite control) T: 174
- Creosote bush** [shrub] Ci: 1127 *with picture*
- Crape paper**
Paperwork (Paper handicrafts) P: 138
- Crape rubber**
Rubber (Processing crude rubber) R: 503
- Crepitus** [disorder]
Fracture F: 451
- Crepúsculo de la Libertad, El** [newspaper]
New Mexico (Communication) N: 271
- Crerar, Henry Duncan Graham** [Canadian military leader]
Canada, History of (World War II) C: 150
- Crescendo**
Music (table) M: 954
- Crescent** [insect]
Butterfly (Brush-footed butterflies) B: 734
- Crescent** [symbol] Ci: 1127
Heraldry *picture* on H: 195
- Crescent City**
New Orleans (The city) N: 278
- Crescent moon**
Moon (Phases) M: 783-784
- Crespi, Juan** [Spanish religious leader]
Los Angeles (Exploration) L: 469
- Cress** [plant] Ci: 1127
- Cressent, Charles** [French cabinetmaker]
Furniture (The Régence style) F: 576 *with picture*
- Cressida** [literary figure]
Shakespeare, William (*Troilus and Cressida*) S: 362
- Cresson, Edith** [French political leader]
France (Socialists win power) F: 478
- Crest**
Heraldry (Elements of a coat of arms) H: 194-196 *with picture*
- Crastr** [bird]
Chicken (Kinds of chickens) C: 441
- Crest** [physics]
Waves (Measuring waves) W: 152; *diagram* on W: 150
- Crested caracara** [bird]
Caracara C: 201 *with picture*
- Crested touraco** [bird]
Touraco T: 346 *with picture*
- Crested wheatgrass** [plant]
Grass *picture* on G: 325
- Creswell, John A. J.** [American government official]
Grant, Ulysses S. (table) G: 316
- Crataceous Period** [geology] Ci: 1127
Baryonyx B: 122
Chalk C: 370
Dinosaur (Kinds of dinosaurs) D: 206b
Earth (The Mesozoic Era) E: 27-28; (table) E: 30; *map* on E: 31
Forest (Later forests) F: 398
Prehistoric animal (The Age of Reptiles) P: 737; (table) P: 739 *with picture*
- Cræte** [island, Mediterranean] Ci: 1127
Aegean civilization (The Minoan culture) A: 83
Clothing (Ancient times) Ci: 696-697 *with pictures*
Greece (Crete) G: 358 *with picture*
Painting (Aegean painting) P: 41 *with picture*
World, History of (The Greeks) W: 428
- Cræte, Battle of** [1941]
Mountbatten, Louis M: 899

Crete, Sea of [Greece]

Aegean Sea A: 84

Cretenism [birth defect] Ci: 1128

Thyroid gland (Underactive thyroid) T: 274-275

Creutzfeldt, Hans G. [German physician]

Creutzfeldt-Jakob disease Ci: 1128

Creutzfeldt-Jakob disease Ci: 1128

Mad cow disease M: 26

Prion P: 804

Crevasse [geology]

Antarctica (The Antarctic ice sheets) A: 532

Glacier (The movement of glaciers) G: 204
with diagram**Crèvecoeur, Michel-Guillaume Jean de**

[French author] Ci: 1129

American literature (The revolutionary period [1765-1787]) A: 415

Crew

Opera (The technical staff) O: 795-796 with picture

Ship (Officers and crew) S: 423

Crew cut

Hairdressing (The 1900's) H: 12-13 with picture

Crewel [handicraft] Ci: 1129 with picture

Bayeux Tapestry B: 177 with picture

Crib [game]

Cribbage Ci: 1129

Crib death See Sudden infant death syndrome in this index**Cribbage** [game] Ci: 1129 with picture**Cribellum**

Spider (How spiders make silk) So: 786

Crichton, Michael [American author] Ci: 1130

Science fiction (Growing popularity) S: 205-206

Crick, Francis H. C. [British biologist] Ci: 1130

Biology (The growth of modern biology) B: 319-320

Cell (The 1900's) C: 337-338

Heredity (The chemistry of genes) H: 209

Science (Achievements of the mid-1900's) S: 202 with picture

Watson, James Dewey W: 147

Wilkins, Maurice Hugh Frederick W: 306

Cricket [game] Ci: 1131 with pictures

Australia (Recreation) A: 904 with picture

England (Recreation) E: 296-297 with picture

London (Recreation) L: 434

Samoa (People) S: 80a

United Kingdom (Recreation) U: 55

Cricket [insect] Ci: 1130 with pictures

Ear picture on E: 13

Insect (Hearing) I: 290-291 with picture; pictures on I: 280

Toad picture on T: 303

Cricet [magazine]

Literature for children (New types of children's magazines) L: 364-365

Cricoid cartilage [anatomy]

Larynx L: 79

Crier

Advertising (History) A: 79

Colonial life in America (Communication) Ci: 806

Crile, George Washington [American doctor] Ci: 1135**Crime** Ci: 1135 with diagrams

See also Criminal law in this index

Adolescent (Delinquency) A: 64

Burglary B: 704

Capital punishment C: 193

City (Social problems) Ci: 591

Colonial life in America (Crime and punishment) Ci: 795

Computer (Computer security) Ci: 924

Confession Ci: 936

Crime laboratory Ci: 1140

Criminal justice system (The police) Ci: 1143

Criminology Ci: 1145

Gang G: 26

Gun control G: 440

Hate crime H: 85

Hostage H: 374a

Internet (Concerns about the use of the Internet) I: 350d-350e

Juvenile delinquency J: 205

Mafia M: 41

Medical examiner M: 361

Moscow (Social problems) M: 825

New York City (Social problems) N: 332-333

Police (In the United States since the mid-1900's) P: 624-625

Poverty (Effects on society) P: 724

Racketeering R: 63

Sentence S: 304

Shoplifting S: 433

United States, History of the (Urban unrest)

U: 192

Vigilante V: 378

See also the list of Related Articles in the Crime article and the Criminal law section of the Related Articles in the Law article

Crime and Punishment [book by Dostoevsky]

Dostoevsky, Fyodor D: 311

Novel (Russia) N: 573

Russian literature (The 1860's and 1870's) R: 562

Crime detection

Ballistics (Forensic ballistics) B: 56

Bertillon system B: 272

Crime laboratory Ci: 1140

Fingerprinting F: 106

Footprinting F: 369 with picture

Wiretapping W: 345

Crime deterrent [law]

Criminal justice system (The correctional system) Ci: 1144

Crime Index

Crime (Crime in the United States) Ci: 1138

Crime insurance

Insurance (Other kinds of property and liability insurance) I: 313-314

Crime laboratory Ci: 1140

Police (Investigations of crimes) P: 621

Crime prevention

Crime (Crime prevention) Ci: 1139

Capital punishment C: 193

Criminal justice system (Problems of the police) Ci: 1144

Juvenile delinquency (Prevention of delinquency) J: 206

Lighting (On streets and highways) L: 297

Crime rate

Crime (The extent of crime) Ci: 1137 with diagram; (Social conditions and crime) Ci: 1138-1139

Criminology (Statistical studies) Ci: 1145

Crime syndicate

Crime (Organized crime) Ci: 1136

Crimea [region, Ukraine] Ci: 1142 with picture and map

Russo-Turkish wars R: 566

Crimea Declaration [1945]

Roosevelt, Franklin Delano (Yalta Conference)

R: 462

Crimean Mountains [Crimean Peninsula]

Ukraine (The Crimean Mountains) U: 10

Crimean Tatars [people]

Minority group (Minority groups in other countries) M: 610

Crimean War [1853-1856] Ci: 1142

Balaklava, Battle of B: 33

Foreign Legion F: 386

Greece (Otto I) G: 362

Napoleon III (Foreign affairs) N: 19-20

Nicholas I N: 402

Nightingale, Florence (Service in Crimea) N: 420

Russia (Nicholas I) R: 551

Russo-Turkish wars R: 567

War (Conflicts over resources) W: 24

Crimes against humanity

War (Changes in the rules of war) W: 24

Criminal

Crime Ci: 1135

Criminal justice system Ci: 1143

Criminology Ci: 1145

Criminal court [law]

Court (How courts work) Ci: 1101

Criminal Investigation [book by Gross]

Crime laboratory (History) Ci: 1141-1142

Criminal Investigation Command

Army, United States (Organization of the Army) A: 736-738

Criminal Investigation Department

See also Scotland Yard in this index

Police (In other countries) P: 623

Criminal justice system Ci: 1143

Police P: 620

Criminal law

Confession Ci: 936

Crime Ci: 1135

Criminal justice system (The courts) Ci: 1143

Criminology (History) Ci: 1145

Insanity I: 277

Jury (Petit juries) J: 202

Law (Public law) L: 130

Law enforcement L: 141

Supreme Court of the United States (Criminal law) So: 1001

Treaty (Kinds of treaties) T: 408-409

Trial T: 437

Criminal Victimization in the United States

[report]

Crime (Unreported crime) Ci: 1138

Criminalist

Crime laboratory Ci: 1140

Criminology (What criminologists study) Ci: 1145

Criminology Ci: 1145 with picture

See also Crime detection; Crime prevention in this index

Blood (The significance of blood groups) B: 412

Criminal justice system (The correctional system) Ci: 1144

DNA fingerprinting D: 258

Juvenile delinquency (What causes delinquency?) J: 206

Lie detector L: 271

Crimson clover [plant]

Clover (Crimson clover) Ci: 713 with picture

Crinet

Armor picture on A: 720

Crinoid [animal]

Ocean picture on O: 656

Crinoline [fabric]

Clothing (The 1800's) Ci: 702 with picture

Criollo [people]

Creole Ci: 1127

Latin America (The beginnings of colonial unrest) L: 106-107

Crioulo [language]

Guinea-Bissau (People) G: 432-433

Crippen, Robert L. [American astronaut]

Astronaut (Achievements in space) A: 829-830; (table) A: 830

Space exploration (The shuttle era begins) So: 723 with picture

Cripple Creek [Colorado]

Colorado (Progress as a state) Ci: 847

Crisis [literature]

Drama (The structure of drama) D: 325

Crisis, Tha [magazine]

Du Bois, W. E. B. D: 372

National Association for the Advancement of Colored People (History) N: 29

Crisp, Donald [British actor]

Motion picture (Best performance by an actor in a supporting role: 1941) M: 863

Crisp head lettuce

Lettuce (Kinds of lettuce) L: 213 with picture

Crispin and Scapin [painting by Daumier]

Daumier, Honoré picture on D: 44

Cristallo glass

Glass (The Middle Ages) G: 218; (Types of art glass) G: 220

Cristes mæsse

Christmas C: 528

Cristiani, Alfredo [El Salvadoran political leader]

El Salvador (Recent developments) E: 252

Cristóbal Colón [volcano, Colombia]

Andes Mountains (Physical features) A: 452-453

Colombia (The Andes Mountains) Ci: 782

Cristofori, Bartolommas [Italian inventor]

Piano (History) P: 447

Criterion, Tha [magazine]

Eliot, T. S. (His life) E: 237

Critias [Greek political leader]

Plato (Plato's life) P: 567

Sophists So: 595

Thirty Tyrants T: 259

Critias [book by Plato]

Atlantis A: 868

Critic [career]

Book review B: 469

Criticism Ci: 1146

Critic, The [play by Sheridan]

Sheridan, Richard Brinsley S: 397

Critica, La [magazine]

Croce, Benedetto Ci: 1148c

Critical and Pronouncing Dictionary and Expositor of the English Language [book by Walker]

Dictionary (Early English dictionaries) D: 194

Critical day

Biorhythm B: 326

Critical mass [physics]

Nuclear energy (Chain reactions) N: 586

Nuclear weapon (Fission weapons) N: 596

Critical philosophy See Transcendentalism in this index

Critical temperature

Gas [physics] (How gases behave) G: 48
Mendeleev, Dmitri Ivanovich M: 398

Critical thinking [philosophy]

Education (How teachers guide learning)
E: 96-97

Ethics (What can ethics do for us?) E: 367

Criticism Ci: 1146

Book review B: 469

French literature (Realism) F: 521-522

Greek literature (Philosophical literature)
G: 378

Literature (Judging literature) L: 352-353

New Testament (Critical studies of the New
Testament) N: 288

Painting (The art world, 1850-1900) P: 73

Shakespeare, William (Shakespearean criticism) S: 369

Critique of Dialectical Reason [book by Sartre]

Sartre, Jean-Paul S: 127

Critique of Practical Reason [book by Kant]

Kant, Immanuel (Kant's ideas) K: 244

Philosophy (Modern philosophy) P: 387-389

Critique of Pure Reason [book by Kant]

Kant, Immanuel K: 244

Philosophy (Modern philosophy) P: 387-389

Transcendentalism T: 371

Crito [book by Plato]

Plato (The dialogues) P: 567

Socrates (Socrates' life) So: 567-568

Critolaus [Greek philosopher]

Aristotle (Aristotle's place in Western thought)
A: 664

Crittenden, John J. [American political leader]

Crittenden Compromise Ci: 1147

Fillmore, Millard (table) F: 102

Harrison, William Henry (table) H: 76

Justice, Department of (table) J: 203

Kentucky (table) K: 290

Tyler, John (table) T: 534

Crittenden, Thomas T. [American political leader]

Missouri (table) M: 668; (Progress as a state)
M: 671

Crittenden Compromise [U.S. history] Ci: 1147**Crivelli, Carlo** [Italian painter]

Painting picture on P: 38

Cro-Magnon man [anthropology] See Cro-

Magnons in this index

Cro-Magnons [anthropology] Ci: 1147 with pictures

Europe (Prehistoric times) E: 408

Prehistoric people (Physically modern human
beings) P: 750; (table) P: 752

Croaker [fish]

Drum D: 367 with picture

Croatian Indians [American Indians]

Lumbee Indians L: 516

Croatia [country] Ci: 1148 with pictures and map

Bosnia-Herzegovina (History) B: 492-493

Flag picture on F: 205

Serbia (History) S: 314-315

United Nations picture on U: 92

Yugoslavia Y: 576; (History) Y: 579; (Ethnic tensions)
Y: 580 with picture

Croatian language

Croatia (People) Ci: 1148

Croatian Peasant Party [Croatian history]

Croatia (History) Ci: 1148a-1148b

Croatian [U.S. history]

Lost Colony L: 472

Croats [people]

Croatia (People) Ci: 1148

Bosnia-Herzegovina (People) B: 492

Yugoslavia (People) Y: 577

Croce, Benedetto [Italian philosopher] Ci: 1148c**Crochet** [handicraft] Ci: 1148c with pictures**Crochet hook**

Crochet Ci: 1148c with pictures

Needle N: 117 with picture

Crochet lace

Lace L: 22

Crocidolite

Asbestos (Types of asbestos) A: 765

Crock of Gold, The [book by Stephens]

Irish literature (Fiction and poetry) I: 432-433
Stephens, James So: 890

Crocker, Charles [American businessman]

California (Early statehood) C: 62

Crocker Art Museum

Sacramento (Education and cultural life) S: 6

Crockett, Davy [American frontiersman]

Ci: 1148d with picture

Alamo (Early days) A: 280

Folklore (Legends) F: 324

Texas (The Texas revolution) T: 206

Crocodile [reptile] Ci: 1149 with pictures

Alligator (Alligators and crocodiles) A: 376

Animal (Providing protection) A: 500; picture
on A: 486

Endangered species (table) E: 270; picture on
E: 271

Reptile (Crocodilians) R: 251 with picture

Crocodile bird

Courser Ci: 1101

Crocodile River [river, Africa]

Limpopo River L: 309

Crocodilian [zoology]

Alligator (Alligators and crocodiles) A: 376 with
pictures

Crocodile Ci: 1149 with pictures

Dinosaur D: 206a

Gavial G: 71 with picture

Crocus [plant] Ci: 1150 with picture

Flower (Garden perennials) F: 280 with picture

Saffron S: 17

Crocus, Autumn [plant]

Colchicum Ci: 760

Croesus [king of Lydia] Ci: 1150

Cyrus the Great Ci: 1208

Lydia L: 533

Croft [farm]

Hebrides H: 163

Highland Clearances H: 229

Croft, William [English clergyman]

Hymn (Words and music) H: 474

Crofter [agriculture]

Highland Clearances H: 229

Crofters' Holdings Act [1886]

Highland Clearances H: 229

Crohn's disease Ci: 1150

Colostomy Ci: 850

Inflammatory bowel disease I: 266

Croly, Jane Cunningham [American journalist]

Women's Clubs, General Federation of W: 382

Crompton, Samuel [British inventor] Ci: 1151

Clothing (The 1700's) Ci: 701

Industrial Revolution (Spinning machines)
I: 248-249

Spinning (The mule) So: 794

Textile (The Industrial Revolution) T: 219

Cromwell [play by Hugo]

Hugo, Victor Marie (Early life) H: 409-410

Cromwell, Oliver [English political leader]

Ci: 1151 with portrait

Charles I [of England] C: 380

Charles II [of England] C: 380

England (The Civil War) E: 308

Ireland (Religious persecution) I: 426

London (War, plague, and fire) L: 441

Long Parliament L: 448

Parliament (Parliament gains strength) P: 174

Puritans (History) P: 910

Rump Parliament R: 519

Scotland (War with the king) S: 220

Virginia (Royal governors and Cromwell) V: 418

Cromwell, Richard [son of Oliver Cromwell]

Ci: 1152

Cromwell, Oliver (The Protectorate) Ci: 1152

England (table) E: 308; (The Restoration)
E: 309

Restoration R: 263

Cromwell, Thomas [English political leader]

Ci: 1152

England (The English Reformation) E: 307

Henry VIII [of England] H: 188

Cronin, A. J. [British author] Ci: 1152**Cronin, James Watson** [American physicist]

Nobel Prizes (Physics: 1980) N: 441

Cronin, Joe [American baseball player]

Baseball (table: Hall of Fame) B: 134

Cronkite, Walter [American newscaster]

Ci: 1152 with portrait

Cronstedt, Axel [Swedish chemist]

Nickel N: 404

Cronus [Greek mythology] Ci: 1152

See also Saturn [Roman mythology] in this
index

Hades H: 4

Hestia H: 219

Mythology (The Creation myth) M: 978, (table)
M: 980

Rhea R: 290

Titans T: 300

Uranus U: 217

Zeus Z: 594

Crook

Bassoon B: 158 with diagram

Crook, George [American general]

Crazy Horse Ci: 1123

Geronimo G: 173

Indian wars (The Sioux wars) I: 194

Crookedest Street in the World [San Francisco]

San Francisco (Downtown San Francisco)

S: 92-93; picture on S: 96

Crookes, Sir William [British chemist] Ci: 1153

Crookes tube Ci: 1153

Electronics (Early experiments) E: 215 with
picture

Crookes tube [physics] Ci: 1153 with diagram

Electronics (Early experiments) E: 215 with
picture

Roentgen, Wilhelm Conrad R: 400

Crookesite [mineral]

Thallium T: 229

Crooklyn [film]

Lee, Spike L: 179

Crop [agriculture] Ci: 1153

Agriculture (Chief agricultural products) A: 147

Food supply (Limited agricultural resources)
F: 348

Crop [zoology]

Ant (Internal organs) A: 522

Bird (The digestive system) B: 365

Chicken (The body of a chicken) C: 440-441

Esophagus E: 358

Hoatzin H: 271

Insect (Digestive system) I: 289 with diagram

Crop-dusting

Insecticide I: 302 with picture

Airplane (Special-purpose planes) A: 212 with
picture

Helicopter picture on H: 170

Plant picture on P: 545

Crop insurance Ci: 1153**Crop milk** [zoology] See Pigeon's milk in this index**Crop Over** [festival]

July J: 188

Crop rotation

Agriculture (Improved crop-growing methods)
A: 157

Conservation (Soil conservation) Ci: 979-980

Cropping system Ci: 1153

Environmental pollution (Agriculture) E: 337

Invention (The Industrial Revolution) I: 361-362

Nitrogen (Nitrogen in agriculture) N: 426

Pest control (Natural pest control) P: 318

Crop storage

Farm and farming (Processing and storage)
F: 37 with pictures

Crop surplus [agriculture]

Soil bank So: 576

Cropping

Dog (Body structure) D: 264-265

Cropping system [agriculture] Ci: 1153**Croquet** [game] Ci: 1154 with pictures**Crore** [money]

Rupee R: 521

Crosby, Bing [American entertainer] Ci: 1154

with portrait

Hope, Bob H: 333

Motion picture (Best performance by an actor:
1944) M: 862

Crosby, Fanny [American hymnist]

Hymn (History) H: 474

Crosby, Robert B. [American political leader]

Nebraska (table) N: 110

Crosby, William G. [American political leader]

Maine (table) M: 87

Crosley Field [Cincinnati]

Baseball (Depression and war) B: 136

Cross [symbol] Ci: 1155 with pictures

Byzantine art picture on B: 751

Easter (The crucifix and the cross) E: 43

Ku Klux Klan picture on K: 390

Cross, Burton M. [American political leader]

Maine (table) M: 87

Cross, James R. [British government official]

Canada, History of (The separatist threat)
C: 153

Montreal (The separatist movement) M: 779

Quebec (Recent developments) Q: 32

Trudeau, Pierre Elliott (The national scene)
T: 464

Cross, Wilbur L. [American political leader]

Connecticut (table) Ci: 967

Cross-bracing [building construction]

Earthquake (Reducing earthquake damage)
E: 35 with picture

Cross burning

Hate crime H: 85

Ku Klux Klan picture on K: 390

Cross-country [sport] Ci: 1155

Cross-country event

Horse (Eventing) H: 358; *picture on* H: 357

Cross-country flight

Airplane (Learning to fly) A: 226

Cross-country skiing [sport]

Olympic Games (Winter Olympic Games)

O: 746d

Skiing (Nordic skiing) S: 482 *with picture*; (Ski equipment and clothing) S: 483; (Nordic competitions) S: 487; *diagrams on* S: 485

Cross-examination

Civil rights (Due process) Ci: 608-609

Debate (Format) D: 64

Trial (Presenting evidence) T: 437

Cross-eye [disorder] *See* Strabismus *in this index*

Cross fox [animal]

Fox (Kinds of foxes) F: 440

Cross-licensing [law]

Automobile (Technological advances) A: 965-966

Cross-linking [chemistry]

Plastics (Types of plastics) P: 555

Materials (Physical bonds) M: 301

Cross-match [blood test]

Blood (The significance of blood groups) 8: 412

Blood transfusion (Types of transfusion) B: 417

Cross moline

Heraldry *picture on* H: 195

Cross of gold [U.S. history]

Bryan, William Jennings (Early career) B: 654

Cleveland, Grover (Saving the gold standard) Ci: 673

"Cross of Snow, The" [poem by Longfellow]

Longfellow, Henry Wadsworth (Author and world celebrity) L: 450

Cross-pollination [botany]

Flower (Cross-pollination) F: 295

Plant (In seed plants) P: 532-534

Pollen (Cross-pollination) P: 645 *with diagrams*

Cross-reference [library] Ci: 1155

Dictionary (What a dictionary tells you) D: 193

Encyclopedia (Ease of use) E: 266-267; (Providing cross-references) E: 267; (Basic steps in the preparation of a World Book article) E: 268 *with picture*

Cross stitch

Needlepoint N: 118

Cross treble stitch

Crochet Ci: 1148d

Crossbar [sports]

Pole vault P: 618

Crossbill [bird] Ci: 1155 *with picture*

Crossbow [weapon] Ci: 1156 *with picture*

Crossbred [animal husbandry]

Hog (Kinds of hogs) H: 285

Horse (table: Horse terms) H: 343

Livestock (Outbreeding) L: 398

Crossbred-wooled sheep

New Zealand (Agriculture) N: 353

Wool (Sources of wool) W: 399

Crosscut

Mining (Mining terms) M: 577

Crosscut saw [tool]

Saw (Handsaws) S: 166 *with picture*

Woodworking (Cutting) W: 397

Crosse [sports]

Lacrosse (The field and equipment) L: 24 *with picture*

Crosse check [sports]

Lacrosse (Men's lacrosse) L: 24

Crossing [genetics]

Breeding B: 592

Fruit (Developing new varieties of fruit) F: 546

Crossing over [genetics]

Heredity (Genetic recombination) H: 203

Crossing straight

Ice skating (Long-track skating) I: 14

"Crossing the Bar" [poem by Tennyson]

Tennyson, Lord (His poems) T: 169-170

Crossley, Archibald M. [American statistician]

Public opinion poll (History) P: 863

Crossmatch *See* Cross-match *in this index*

Crossover hit [recording]

Country music (Emergence of the country music industry) Ci: 1098b-1098c

Crossroads of America [state motto]

Indiana I: 196

Indianapolis I: 220

Crossroads of the Pacific [nickname]

Honolulu H: 320

Crossroads of the South [nickname]

Jackson J: 4

Crossroads of the World [nickname]

Panama P: 115

Crosstie [construction]

Railroad (Tracks) R: 108-109

Crossword puzzle Ci: 1156 *with picture*

Croswell, Charles M. [American political leader]

Michigan (table) M: 507

Crothers, Austin L. [American political leader]

Maryland (table) M: 255

Croton [shrub] Ci: 1157

Croton Aqueduct [New York City]

Aqueduct (Present-day aqueducts) A: 581

Croton bug [insect]

Cockroach Ci: 745

Crouch, Eric [American football player]

Football (table) F: 363

Crounse, Lorenzo [American political leader]

Nebraska (table) N: 110

Croup [disorder] Ci: 1157

Croupier [gambling]

Roulette R: 490

Crouse, Russel [American dramatist]

Lindsay, Howard L: 333

Crow [bird] Ci: 1157 *with picture*

Jackdaw J: 4 *with picture*

Crow [poems by Hughes]

English literature (Recent English poetry) E: 323

Hughes, Ted H: 409

Crow, Jim [U.S. history]

Segregation (Jim Crow laws) S: 285

Crow, John [American football player]

Football (table) F: 363

Crow, Sheryl [American singer]

Rock music (Rock music today) R: 380-381

Crow Indians [American Indians] Ci: 1157

Indian, American *picture on* I: 144

Crowbar [tool]

Fire department (Rescue trucks) F: 126-127 *with picture*

Crowd control

Mace M: 11

Crowder, Enoch H. [American general]

Missouri (Progress as a state) M: 671

Crowe, Russell [Australian actor]

Motion picture (Best performance by an actor: 2000) M: 863

Crowe, William J., Jr. [American military leader]

Joint Chiefs of Staff (table) J: 156

Crowfoot [Canadian Indian chief] Ci: 1158

Crowfoot [plant] *See* Buttercup *in this index*

Crowley [Louisiana]

Louisiana *picture on* L: 489

Crowley, Aleister [British author]

Witchcraft (Witchcraft in modern times) W: 373

Crown [anatomy]

See also Crowning *in this index*

Teeth (Kinds of teeth) T: 79; (Pulp) T: 80 *with picture*

Crown [botany]

Sugar beet So: 962 *with picture*

Rain forest (Structure and growth) R: 126a

Tree (Trunk and branches) T: 416

Crown [hat]

Hat H: 83

Crown [symbol] Ci: 1158 *with pictures*

Crown Center

Kansas City [Missouri] (History) K: 243

Crown colony [political unit]

Commonwealth of Nations (Dependencies) Ci: 876

Crown conch

Shell *picture on* S: 386

Crown dependency [political unit]

Commonwealth of Nations (Dependencies) Ci: 876

Crown gall [plant disease]

Bacteria (Harmful bacteria) B: 19-20

Gall G: 13

Crown glass

Glass (Early American glass) G: 222

Crown Hill Cemetery [Indianapolis]

Indianapolis (Recreation) I: 222

Crown imperial [plant]

Fritillary F: 535

Crown of thorns [starfish]

Coral (Stony corals) Ci: 1048-1048a

Great Barrier Reef G: 336

Shell *picture on* S: 384

Crown Point [region, New York]

Revolutionary War in America (The evacuation of Boston) R: 275

Crown rot [plant disease]

Alfalfa (Diseases and pests) A: 347

Crowned crane [bird]

Crane (Kinds) Ci: 1117

Crowned eagle

Eagle (Other kinds of eagles) E: 5

Crowning [dentistry]

Teeth (Dental decay) T: 82-83 *with diagrams*

Crowning Privilege, The [book by Graves]

Graves, Robert G: 331

Crowning with Thorns [painting by Titian]

Painting (The Renaissance in Venice) P: 55-56 *with picture*

Crowninshield, B. W. [American government official]

Madison, James (table) M: 35

Crow's-nest

Ship (Nautical terms) S: 416

Crowther, Samuel [American author]

Ford, Henry (Political and charitable activities) F: 380

Crozat, Antoine [American businessman]

Louisiana (Exploration and early settlement) L: 497-498

Crozat, Pierre [French art collector]

Watteau, Antoine W: 149

CRP [U.S. history]

Watergate (The break-in and cover-up) W: 144

CRT *See* Cathode-ray tube *in this index*

Cruce, Lee [American political leader]

Oklahoma (table) O: 730

Crucible

Iron and steel (Running a blast furnace) I: 441

Crucible, The [play by Miller]

Miller, Arthur M: 553

Crucible process [industry]

Iron and steel (The first steel) I: 451

Crucifix

Cross Ci: 1155 *with picture*

Easter (The crucifix and the cross) E: 43

Crucifixion

Jesus Christ (The Crucifixion) J: 108 *with pictures*

Joseph of Arimathea J: 168

New Testament (The Crucifixion) N: 288

Peter, Saint (Life as an apostle) P: 324

Crucifixion [painting by Cimabue, Florence]

Cimabue, Giovanni *picture on* Ci: 553

Crucifixion of Saint Peter, The [painting by Michelangelo]

Michelangelo *picture on* M: 485

Crude oil

Bitumen B: 384

Energy supply (Fossil fuels) E: 277

Fuel (Petroleum) F: 550

Oil shale O: 708

Persian Gulf War (Consequences of the war) P: 300d-301

Petroleum P: 330 *with pictures*; (table) P: 331; (The uses of petroleum) P: 331-332

Crude rate

Vital statistics (Using vital statistics) V: 429

Crude rubber

Rubber (Natural rubber) R: 502; (Processing crude rubber) R: 503

Cruel Teles [stories by Villiers de l'Isle-Adam]

Villiers de l'Isle-Adam, Comte de V: 385

Cruikshank, George [British artist] Ci: 1158

Dickens, Charles *picture on* D: 189

English literature *picture on* E: 321

Cruikshank, William [British chemist]

Carbon monoxide C: 207

Cruise [lamp]

Lamp (Fat or oil lamps) L: 52

Cruise, Tom [American actor] Ci: 1158 *with portrait*

Cruise control

Automobile (Comfort and convenience systems) A: 954

Cruise missile

Carter, Jimmy (Early programs) C: 257

Guided missile (Nonballistic missiles) G: 426;

(Preset guidance) G: 426

Submarine (Attack submarines) So: 939-940

Cruise ship Ci: 1159

Ship (Officers and crew) S: 423

Cruiser [ship] Ci: 1159

Navy (Cruisers) N: 78

Navy, United States (Combat ships) N: 84; (Ordnance) N: 84

- Boating *picture on B*: 431
- Crumb, George** [American composer] **Ci**: 1159
- Crumb, Robert** [American cartoonist]
Comics (Comic books) **Ci**: 870
- Crumb rubber**
Rubber (Processing crude rubber) **R**: 503
- Crump, Diane** [American jockey]
Horse racing (History) **H**: 366
- Crump, E. H.** [American political leader]
Memphis (History) **M**: 396-397
Tennessee (The mid-1900's) **T**: 156
- Crupper**
Harness *diagram on H*: 63
Armor *picture on A*: 720
- Crusade for Justice** [organization]
Gonzales, Rodolfo **G**: 268
Hispanic Americans (Political developments)
H: 255-256
- Crusade in Europe** [book by Eisenhower]
Eisenhower, Dwight David (NATO commander) **E**: 150
- Crusades** [European history] **Ci**: 1159 *with picture and map*
Byzantine Empire (The decline and end of the empire) **B**: 754
Clothing *picture on Ci*: 700
Eugene III **E**: 376
Flag *picture on F*: 216
Food (The Middle Ages) **F**: 336
Heraldry (The development of heraldry) **H**: 194
Jews (Jews in Christian Europe) **J**: 122
Knights Templars **K**: 353
Louis IX **L**: 474
Middle Ages (Economic recovery) **M**: 526
Painting (Medieval painting) **P**: 48
Palestine (Arab control) **P**: 105
Slavery (The Middle Ages) **S**: 501
Trade (The expansion of trade) **T**: 363
War (Clashing ideologies) **W**: 24
First Crusade (1096-1099)
Egypt (Muslim rule) **E**: 130
Insignia **I**: 303
Jerusalem (Muslim rule) **J**: 101
Peter the Hermit **P**: 325
Turkey (The Seljuk Turks) **T**: 509-510
Urban II **U**: 219
Third Crusade (1189-1192)
Richard I **R**: 328
Saladin **S**: 59
Teutonic Knights **T**: 183
Fourth Crusade (1201-1204)
Innocent III (Crusades) **I**: 275
- Crushed stone**
Building stone **B**: 685
Materials (Stone) **M**: 300c-300d
Quarrying **Q**: 7
- Crusoe, Robinson** *See Robinson Crusoe in this index*
- Crust** [geology]
Earth (The lithosphere) **E**: 20 *with diagram*
Hot spot **H**: 374a
Mantle **M**: 168
Plate tectonics (Structure of tectonic plates)
P: 561
San Andreas Fault **S**: 83
- Crust** [moon]
Moon (The interior of the moon) **M**: 790
- Crust** [Mars]
Mars (Interior) **M**: 225
- Crustacean** [zoology] **Ci**: 1162 *with pictures*
Aquaculture **A**: 578
Compound eye **Ci**: 906
Crab **Ci**: 1115
Eye (Eyes of animals) **E**: 469
Ocean (Zooplankton) **O**: 655
Prehistoric animal (Invertebrates) **P**: 737
See also the list of Related Articles at the end of the Crustacean article
- Crustose lichen** [plant]
Lichen **L**: 269
- Crutcher** [machine]
Detergent and soap (The kettle method) **D**: 164
- Crutches**
Poliomyelitis *picture on P*: 626
- Crutzen, Paul Josef** [Dutch chemist]
Nobel Prizes (Chemistry: 1995) **N**: 443
- Crux** [constellation]
Southern Cross **So**: 688
- Cruz, Celia** [Cuban American entertainer]
Hispanic Americans (Entertainment and arts)
H: 248
- Cruz, Juana Inés de la** [Mexican poet] *See Juana Inés de la Cruz in this index*
- Cruz, Ramón Ernesto** [Honduran political leader]
Honduras (Revolutions and reforms)
H: 313
- Cry, the Beloved Country** [book by Paton]
Paton, Alan **P**: 196
- Cry of Dolores** [Mexican history] *See Grito de Dolores in this index*
- "Cry of the Children"** [poem by Browning]
Browning, Elizabeth Barrett **B**: 646
- Crying**
Baby (Crying) **B**: 10
Tears **T**: 72
- Crying of Lot 49, The** [book by Pynchon]
Pynchon, Thomas **P**: 915
- Cryobiology** **Ci**: 1165
Biology (table) **B**: 317
- Cryogenic freezer**
Food preservation (Freezing) **F**: 342
- Cryogenic refrigerator**
Refrigeration (Low-temperature refrigeration)
R: 202
- Cryogenics** [physics] **Ci**: 1165
Physics (Heat) **P**: 437
- Cryolite** [mineral]
Aluminum (Smelting the alumina) **A**: 393
- Cryoprecipitate**
Blood transfusion (Types of transfusion)
B: 417
- Cryosurgery**
Cryobiology **Ci**: 1165
Surgery (Technique) **So**: 1005
- Cryotherapy**
Eye (Diseases of the retina) **E**: 467-468
- Crypsis** [insect]
Animal *picture on A*: 495
- Crypt** [architecture] **Ci**: 1165
- Cryptanalysis**
Codes and ciphers **Ci**: 749
- Cryptic coloration** [zoology]
Protective coloration **P**: 831 *with picture*
- Cryptocrystalline quartz**
Jasper **J**: 65
Quartz (Types) **Q**: 8
- Cryptogram** *See Ciphertext in this index*
- Cryptographic algorithm** [cryptology]
Codes and ciphers **Ci**: 749
- Cryptographic authentication** [cryptology]
Codes and ciphers (Modern applications of cryptography) **Ci**: 752
- Cryptography**
Central Intelligence Agency **C**: 357
Codes and ciphers **Ci**: 749
- Cryptology**
Codes and ciphers **Ci**: 749
- Cryptosporidium** [parasite]
Food poisoning **F**: 340
- Cryptosystem**
Codes and ciphers **Ci**: 749
- Crystal** [chemistry] **Ci**: 1166 *with pictures*
Diffraction (Uses of diffraction) **D**: 201
Gem (Crystal shape) **G**: 77
Ice **I**: 4 *with diagram*
Ion *pictures on I*: 371
Ion microscope **I**: 372 *with picture*
Liquid crystal **L**: 347
Mineral (Mineral crystals) **M**: 567 *with pictures*; (The scientific study of mineral crystals) **M**: 571
Quartz (Types) **Q**: 8
Quasicrystal **Q**: 9
Semiconductor (Semiconductor crystals)
S: 291
Silicate **S**: 457 *with picture*
Snow **S**: 539 *with pictures*
Solid-state physics **So**: 583
Symmetry **So**: 1066
X rays (In crystal research) **X**: 541
- Crystal** [glass]
Glass (Types of art glass) **G**: 220
- Crystal ball**
Fortunetelling (Methods of fortunetelling)
F: 419
- Crystal Cave** [cave, Kentucky]
Mammoth Cave National Park **M**: 130
- Crystal Ice Cave**
Idaho (Interesting facts about Idaho) **I**: 27
- Crystal laser**
Laser (Solid-state lasers) **L**: 85
- Crystal microphone**
Microphone (Crystal and ceramic microphones) **M**: 516 *with diagram*
- Crystal Palace** [London]
Architecture (The Industrial Revolution) **A**: 625 *with picture*
Shelter (The Industrial Revolution) **S**: 394
World's fair **W**: 500
- Crystal Palace National Sports Centre**
London (Recreation) **L**: 434
- Crystal radio**
Radio (How radio programs are received)
R: 88; *picture on R*: 92
- Crystal rectifier** [electronics]
Radio (How radio programs are received)
R: 88
- Crystalline lens** [anatomy]
Eye (The uveal tract) **E**: 460-461 *with picture*
- Crystalline rocks** [geology]
Igneous rock **I**: 48
- Crystalline silicon cell**
Solar energy (How a photovoltaic cell is made)
So: 577
- Crystalline structure** [chemistry]
Carbon (Forms of carbon) **C**: 205 *with diagrams*
- Crystallization** *See Crystal in this index*
- Crystallization nucleus**
Crystal (Crystallization) **Ci**: 1166
- Crystellography**
Crystal **Ci**: 1166
X rays (In crystal research) **X**: 541
- Cs** [symbol]
Cesium **C**: 364
- CSCE** [organization] *See Organization for Security and Cooperation in Europe in this index*
- CSM** [space exploration] *See Command/service module in this index*
- CSPI** [organization] *See Center for Science in the Public Interest in this index*
- CSRS** *See Civil Service Retirement System in this index*
- CSX Corporation**
Railroad (Railroad systems) **R**: 112
- CT scan** *See Computed tomography in this index*
- CT scanner** [machine] *See Computed tomographic scanner in this index*
- CTC** [transportation]
Railroad (Automatic block signal systems)
R: 111
- CTD** [injury] *See Repetitive strain injury in this index*
- Ctenoid scale** [zoology]
Fish (Scales) **F**: 160 *with picture*
- Ctenophore** [sea animal] **Ci**: 1167
Animal (A classification of the animal kingdom)
A: 506 *with picture*
- Ctesibius of Alexandria** [Greek engineer]
Invention (Ancient Greece) **I**: 358
Organ (History) **O**: 852
Pump (History) **P**: 900
- CTV Television Network**
Television (In Canada) **T**: 117
- Cu**
Copper **Ci**: 1041
- Cuatro** [musical instrument]
Venezuela (Recreation) **V**: 301
- Cuahtémoc** [Aztec emperor] **Ci**: 1167
Aztec (The Spanish conquest) **A**: 1003
Cortés, Hernando (Victory over the Aztec)
Ci: 1073-1074
Mexico **M**: 448
- Cuahtlatatzin** [Mexican saint] *See Juan Diego, Saint in this index*
- Cub** [animal]
Bear (Cubs) **B**: 184; *picture on B*: 183
Fox (Young) **F**: 439 *with picture*
Lion (The body of a lion) **L**: 340-341 *with picture*
Mammal *diagram on M*: 124
Polar bear *picture on P*: 616
Tiger (The life of a tiger) **T**: 284
- Cub Scout**
Boy Scouts (Cub Scouting) **B**: 537 *with picture*
- Cuba** **Ci**: 1168 *with pictures and maps*
Angola (History) **A**: 465-466
Buchanan, James (Minister to Great Britain)
B: 660
Carter, Jimmy (Later years) **C**: 259
Castro, Fidel **C**: 283
Clinton, Bill (International affairs) **Ci**: 682e
Cold War (The Bay of Pigs) **Ci**: 766; (The Cuban missile crisis) **Ci**: 767
Columbus, Christopher (The first landing)
Ci: 860-861
Communism (The spread of Communism)
Ci: 893-894
Cuban missile crisis **Ci**: 1179
Exploration (Columbus reaches America)
E: 444
Guerrilla warfare (History) **G**: 420

- Guevara, Ché G: 421
 Hispanic Americans (In Puerto Rico and Cuba) H: 246; (Cuban immigration) H: 253
 Latin America (The wars of independence) L: 107-108
 Literacy (Literacy in other countries) L: 352
 Kennedy, John Fitzgerald (Cuba) K: 265
 Organization of American States O: 854
 Ostend Manifesto O: 866
 Reno, Janet R: 240
 Slavery (The decline of slavery) S: 504
 Spanish-American War So: 753
 Union of Soviet Socialist Republics (Relations with the United States) U: 39
 United States, History of the (The Spanish-American War) U: 183
 West Indies (Independence movements) W: 205
 World War II (table: The Allies) W: 471
- Cubagua** [island]
 Venezuela (European exploration and settlement) V: 304
- Cuban Americans** [people]
 Hispanic Americans H: 244 *with pictures*; (Cuban immigration) H: 253 *with picture*
- Cuban Independence Day**
 Hispanic Americans (Holidays) H: 249-250
- Cuban missile crisis** [1962] Ci: 1179
 Cold War (The Cuban missile crisis) Ci: 767
 Communism (The Cold War) Ci: 895
 Cuba (The Cuban missile crisis) Ci: 1178
 Kennedy, John Fitzgerald (Cuba) K: 265
 Khrushchev, Nikita Sergeyevich (Soviet dictator) K: 309
 Union of Soviet Socialist Republics (Relations with the United States) U: 39
 United Nations (Arms control) U: 92-93
- Cuban Revolutionary Party** [Cuban history]
 Cuba (Struggle against Spain) Ci: 1176
- Cubans** [people]
 Hispanic Americans (Cuban immigration) H: 253 *with picture*
 Miami (The city) M: 479; (History) M: 480
 Minority group (Hispanic Americans) M: 610
- Cube** [mathematics] Ci: 1180 *with picture*
 Geometry *picture on* G: 104
 Polyhedron P: 650 *with diagram*
 Power P: 728
- Cube root** [mathematics] Ci: 1180
- Cubeb** [fruit] Ci: 1180
- Cubi XIX** [sculpture by Smith]
 Sculpture (Form and treatment) S: 230-231; (Varieties of abstraction) S: 258 *with picture*
- Cubic centimeter** [measurement]
 Metric system (The metric system at a glance) M: 438 *with picture*
- Cubic decimeter** [measurement]
 Metric system (Space and time) M: 437
- Cubic foot** [unit of measure]
 Cube *picture on* Ci: 1180
 Foot F: 352
- Cubic measure**
 Metric system (Space and time) M: 437
 Weights and measures (table: Volume and capacity) W: 186
- Cubic meter** [unit of measure]
 Metric system (Space and time) M: 437; (The metric system at a glance) M: 438 *with picture*
- Cubic zirconia**
 Gem (Imitation and synthetic gems) G: 79
- Cubism** [art] Ci: 1181 *with pictures*
 Braque, Georges B: 564
 Chagall, Marc C: 368
 Duchamp, Marcel D: 373 *with picture*
 Feininger, Lyonel *picture on* F: 67
 Gris, Juan G: 395
 Lipchitz, Jacques L: 344
 Marin, John M: 202
 Painting (Cubism) P: 77 *with picture*
 Picasso, Pablo (Cubism) P: 448b
 Sculpture (Cubism and futurism) S: 257 *with pictures*
 Sheeler, Charles S: 379
- Cubit** [unit of measure] Ci: 1182
 Weights and measures (Early units) W: 186
- Cuboidal cell** [physiology]
 Epithelium E: 345
- Cubs, Chicago** See Chicago Cubs in this index
- Cuchilla Grande**
 Uruguay (The interior lowlands) U: 226
- Cuchulainn** [legendary figure] Ci: 1182
 Irish literature (Heroic tales, romances, and sagas) I: 430-431
- Mythology (The Irish cycles) M: 983
- Cuckoo** [bird] Ci: 1182 *with picture*
 Ani A: 467
 Bird (Birds of forests and woodlands) B: 334 *with picture*; (Birds of Africa) B: 348 *with picture*; (Foster parents) B: 359
- Cuckoo bee** [insect]
 Bee (Solitary bees) B: 205-206 *with picture*
- Cuckoo-roller** [bird]
 Bird (Birds of Africa) B: 348 *with picture*
- Cuckoo-shrike** [bird] Ci: 1182 *with picture*
- Cuckoo wasp**
 Wasp W: 110 *with picture*
- Cuckoopint** [plant]
 Arum A: 764 *with picture*
- Cucumber** [plant] Ci: 1183 *with picture*
 Pickle P: 451
- Cucumber beetle**
 Beetle *picture on* B: 218
 Insect *picture on* I: 283
- Cucumber tree** [tree]
 Magnolia M: 63
- Cud** [zoology] Ci: 1183
 Cattle (Stomach) C: 307
 Deer (Food) D: 84-85
 Goat (Digestive system) G: 240
 Ranching (Life on a cattle ranch) R: 134
 Ruminant R: 519 *with diagram*
- Cudahy, Michael** [American businessman] Ci: 1183
- Cudahy Packing Company**
 Cudahy, Michael Ci: 1184
- Cue**
 Billiards (Equipment) B: 305-306 *with picture*
 Shuffleboard S: 443
- Cue** [behavior]
 Butterfly (The life cycle of butterflies) B: 739-740
- Cue** [riding]
 Horse (To control a horse) H: 353
- Cue ball**
 Billiards B: 305
- Cue card**
 Television (Planning and preparation) T: 110c-111
- Cue giving and taking**
 Congress of the United States (Legislative bargaining) Ci: 944-945
- Cue sheet**
 Motion picture (Mixing the sound) M: 856
- Cued speech**
 Deafness (Special language techniques) D: 58
 Lip reading L: 344
- Cuenca** [Ecuador] Ci: 1184
- Cuernavaca** [Mexico] Ci: 1184
- Cuervo y Valdés, Francisco** [Spanish colonial official]
 Albuquerque (Government and history) A: 333
- Cueva, Juan de la** [Spanish author]
 Spanish literature (The 1500's) So: 758-759
- Cuff, Sergeant** [literary figure]
 Collins, Wilkie Ci: 776
 Detective story (The pattern) D: 162-163
- Cuffe, Paul** [American social reformer] Ci: 1184
- Cugnot, Nicolas Joseph** [French inventor]
 Automobile (The steam car) A: 962 *with picture*
 Truck (History) T: 458
- Cui-ui** [fish]
 Nevada (Plant and animal life) N: 168
- Cuicuilco** [ancient Mexican village]
 Mexico (The growth of villages) M: 468
- Cuirass**
 Armor (In early times) A: 720
- Cuisenaire, Emile-Georges** [Belgian educator]
 Cuisenaire Method Ci: 1184
- Cuisenaire Method** [education] Ci: 1184 *with diagrams*
- Cuisse**
 Armor *picture on* A: 720
- Cukor, George** [American director] Ci: 1184
 Motion picture (Best achievement in directing: 1964) M: 862
- Culberson, Charles A.** [American political leader]
 Texas (table) T: 203
- Culebra Cut** [waterway]
 Panama Canal (The Gaillard Cut) P: 123
- Culex mosquito**
 Mosquito M: 831 *with picture*; *pictures on* M: 833
- Cullen, Countee** [American poet] Ci: 1184
 American literature (The Harlem Renaissance) A: 422
- Cullet**
 Glass (Mixing) G: 214 *with diagram*
- Cullinan Stone** [diamond]
 Diamond (Famous diamonds) D: 182; *picture on* D: 181
 Gem (Some famous gems) G: 79
- Culloden, Battle of** [1746]
 Scotland (Union with England) S: 220
- Cullom, Shelby Moore** [American political leader]
 Illinois (table) I: 71
- Culm** [botany]
 Grass (The grass plant) G: 324 *with picture*
- Culpeper, John** [English rebel]
 North Carolina (Colonial days) N: 492
- Culpeper Flag** [U.S. history]
 Flag *picture on* F: 209
- Culpeper's Rebellion** [1678]
 North Carolina (Colonial days) N: 492
- Culp's Hill**
 Civil War (Battle of Gettysburg) Ci: 628
 Gettysburg, Battle of G: 176
- Cult** Ci: 1185
 See also *Mysteries in this index*
 Religion R: 214
- Cultch**
 Oyster (Oyster farming) O: 892
- Culteranismo** [poetry]
 Góngora, Luis de G: 268
 Spanish literature (The 1600's) So: 759-760
- Cultivar**
 Fruit (Developing new varieties of fruit) F: 546
- Cultivating**
 Farm and farming (Pest control) F: 34; (Cultivating) F: 36 *with picture*
 Plow P: 574 *with pictures*
- Cultivator** [machine]
 Farm and farming (Cultivating) F: 36 *with picture*
- Cultural anthropology**
 Anthropology (Cultural anthropology) A: 547 *with picture*
 Careers (Life, physical, and social sciences) C: 225-226 *with picture*
- Cultural diffusion** [anthropology]
 City (Population growth) Ci: 578
 Culture (Contact with other cultures) Ci: 1189
- Cultural diversity** [sociology]
 Multiculturalism M: 918
- Cultural geography**
 Geography (Human geography) G: 94
- Cultural lag** [anthropology] Ci: 1185
 Culture (How cultures change) Ci: 1189
- Cultural literacy** [education]
 Education (What should students know?) E: 106
 Multiculturalism M: 918
- Cultural pattern**
 Culture (Forming patterns) Ci: 1187
- Cultural pluralism**
 Ethnic group E: 372
 United States (Ancestry) U: 109-110
- Cultural rationalism** [philosophy]
 Rationalism R: 148
- Cultural relativism**
 Anthropology A: 546
 Culture (Ethnocentrism and cultural relativism) Ci: 1188
- Cultural resource management** [process]
 Archaeology (Archaeology today) A: 600
- Cultural Revolution** [Chinese history]
 China (The Cultural Revolution) C: 506
 Cold War (The great blocs split) Ci: 768
 Jiang Qing J: 125
 Tibet (History and government) T: 277-278
- Cultural studies** [education]
 Communication (Communication and culture) Ci: 888
- Cultural trait** [anthropology]
 Culture (Forming patterns) Ci: 1187
- Culture** [social science] Ci: 1186 *with pictures*
 Anthropology A: 546; (Cultural anthropology) A: 547
 Archaeology A: 594
 Asian Americans (Asian influences on American culture) A: 812c
 Campbell, Joseph C: 90a
 City (Cultural variety in cities) Ci: 593
 Civilization Ci: 635
 Clothing (Clothing around the world) Ci: 690
 Communication (Communication and culture) Ci: 888
 Ethics (Nietzsche) E: 367
 Ethnocentrism E: 372
 Ethnography E: 372
 Etiquette E: 373

- Hispanic Americans (Cultural backgrounds)
H: 246; (Hispanic influences on American culture) H: 248
- Human being (Cultural characteristics) H: 414
with pictures; (Human cultural development) H: 415
- Human rights (Human rights and cultural differences) H: 428a
- Indian, American (The preservation of Indian culture) I: 180
- Library L: 234
- Multiculturalism M: 918
- Poverty (Effects on the poor) P: 723
- Prehistoric people (Cultural development after *Homo erectus*) P: 747
- Sexuality (Cultural factors) S: 338; (Cultural influences) S: 338a
- Sociology (Cultural influences) So: 565
- Culture** [biology] Ci: 1190
- Culture and Anarchy** [book by Arnold]
Arnold, Matthew A: 742
- Culture area** [anthropology]
Culture (The boundaries of cultures) Ci: 1187-1188
- Indian, American I: 136b; *map on* I: 137
- Culture-fair test**
Races, Human (Race and discrimination) R: 59-60
- Testing (Interpreting test scores) T: 182
- Culture-free test**
Testing (Interpreting test scores) T: 182
- Races, Human (Race and discrimination) R: 59-60
- Culture shock** [anthropology]
Culture (Culture and society) Ci: 1188
- Cultured pearl**
Pearl (Kinds of pearls) P: 217 *with picture*
- Culvert** [pipe]
Road (Grading) R: 359
- Cum laude**
Degree, College (The bachelor's degree) D: 91
- Cumaeen Sibyl** [legendary figure]
Sibyl S: 446
- Cumann na nGaedheal** [Irish history]
Ireland (The Irish Free State) I: 427
- Cumberland Compact** [U.S. history]
Tennessee (Territorial years) T: 153
- Cumberland Falls**
Kentucky *picture on* K: 273
- Cumberland Gap** [Appalachian Mountains]
Ci: 1190
- Kentucky (Places to visit) K: 282
- Pioneer life in America (Crossing the Appalachians) P: 477
- Virginia *picture on* V: 419
- Cumberland Gap National Historical Park**
National Park System (table: National historical parks) N: 56-57
- Cumberland House** [Canadian history]
Saskatchewan (The coming of the fur traders) S: 146; *picture on* S: 145
- Cumberland Island National Seashore**
[Georgia]
Georgia *picture on* G: 112
- National Park System (table: National seashores) N: 57
- Cumberland Mountains** [mountains, U.S.]
Ci: 1191
- Kentucky (Land regions) K: 285
- Cumberland Museum and Science Center**
[Nashville]
Tennessee *picture on* T: 138
- Cumberland Narrows**
Allegheny Mountains A: 370
- Cumberland Plateau** [region, U.S.]
Alabama (Land regions) A: 268
- Cumberland Mountains Ci: 1191
- Kentucky (Land regions) K: 285
- Cumberland River** [Kentucky-Tennessee]
Ci: 1191
- Cumberland Road** *See* National Road *in this index*
- Cumberland Sound**
Exploration (The search for a northern passage) E: 446
- Cumbres and Toltec Scenic Railroad**
Colorado (Places to visit) Ci: 836
- Cumin** [herb] Ci: 1191 *with picture*
- Cumming, Alfred** [American political leader]
Utah (Territorial days and statehood) U: 246-248
- Cumming plaid**
Tartan *picture on* T: 47
- Cummings, Bill** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Cummings, Candy** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Cummings, E. E.** [American poet] Ci: 1191 *with portrait*
- American literature (Modernist poetry) A: 421
- Lost Generation L: 472
- Poetry (Rhythm and meter) P: 591-592
- Cummings, Homer S.** [American government official]
Justice, Department of (table) J: 203
- Roosevelt, Franklin Delano (table) R: 458
- Cummins, Albert B.** [American political leader]
Iowa (table) I: 391
- Cumolah** [hill, New York]
Mormons (Revelations) M: 808
- Cumulative trauma disorder** [injury] *See* Repetitive strain injury *in this index*
- Cumulonimbus**
Cloud (Clouds that grow vertically) Ci: 711; *pictures on* Ci: 708
- Hurricane (The life of a hurricane) H: 453
- Lightning (Types of lightning) L: 299
- Cumulus**
Cloud (Clouds that grow vertically) Ci: 711
- Cumulus congestus**
Cloud *picture on* Ci: 709
- Cuna Indians**
Indian, American (Indians of the Caribbean) I: 172
- Panama (Way of life) P: 116-117 *with picture*
- San Blas Indians *picture on* S: 87
- Cunard, Sir Samuel** [British businessman]
Ci: 1191
- Cunard Line**
Ship (Passenger vessels) S: 414-415 *with pictures*
- Cunaxa, Battle of** [401 B.C.]
Xenophon X: 543
- Cunctator** [nickname]
Fabius Maximus, Quintus F: 2
- Cuneiform** [writing] Ci: 1192 *with picture*
- Assyria (Language and literature) A: 821
- Babylonia (Language and literature) B: 13
- Communication *picture on* Ci: 880
- Hittites (Way of life) H: 269
- Numeration systems (The Babylonian numeral system) N: 607
- Persia, Ancient (Language and literature) P: 297
- Semitic languages S: 293
- Sumer So: 972 *with pictures*
- World, History of the (The Tigris-Euphrates Valley) W: 422-424
- Cunha, Euclides da** [Brazilian author] Ci: 1192
- Brazil (The arts) B: 576-577
- Latin-American literature (The early 1900's) L: 113
- Cunningham, Merce** [American choreographer]
Ci: 1192
- Dance (European and American theatrical dance) D: 31
- Cuomo, Andrew M.** [American government official]
Clinton, Bill (table) Ci: 682d
- Cuomo, Mario Matthew Ci: 1193
- Housing and Urban Development, Department of (table) H: 393
- Cuomo, Mario Matthew** [American political leader] Ci: 1192 *with portrait*
- New York (table) N: 313
- Cup** [container]
Persia, Ancient *picture on* P: 298
- Shell *picture on* S: 390
- Cupid** [Roman mythology] Ci: 1193
- Psyche P: 845
- Venus V: 310
- Cupid and Psyche** [sculpture by Canova]
Canova, Antonio C: 183
- Cupola** [architecture]
Byzantine art *picture on* B: 750
- Cuprammonium process**
Rayon (How rayon is made) R: 153
- Cuquenán Falls** [waterfall, Venezuela] Ci: 1193
- South America (Waterfalls) So: 628
- Waterfall (table: Famous waterfalls of the world) W: 143
- Cur Deus Homo** [book by Anselm]
Anselm, Saint A: 519
- Curacao** [island] Ci: 1193
- Netherlands Antilles N: 151
- Curacao** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Curare** [poison] Ci: 1193
- Surgery (Anesthesia) So: 1004
- Curassow** [bird] Ci: 1193 *with picture*
- Curator** [career]
Museum (Exhibition and care of materials) M: 939
- Zoo (Zoo workers) Z: 607
- Curb bit** [riding equipment]
Horse (The bridle) H: 352 *with picture*
- Curb Exchange**
Stock exchange (History) So: 904
- Curbside collection program**
Recycling (Collecting materials) R: 184
- Curculio** [insect]
Plum (Diseases and pests) P: 577
- Curd**
Cheese (Separating the curd) C: 393; *pictures on* C: 394
- Tofu T: 308
- Curdling**
Cheese (Separating the curd) C: 393
- Cure, The** [book by Avicenna]
Avicenna A: 993
- Curecanti National Recreation Area** [Colorado]
National Park System (table: National recreation areas) N: 49
- Curetteage, Suction** *See* Suction curettage *in this index*
- Curfew** [custom] Ci: 1193
- Curia** [religion]
Roman Catholic Church (The pope) R: 405
- Curia** [ruins, Rome]
Forum, Roman F: 420 *with picture*
- Curia regis** [European history] Ci: 1194
- England (The Norman Conquest) E: 305
- Witenagemot W: 374
- Curie** [unit of measure] Ci: 1194
- Curie, Frédéric Joliot** [French physicist] *See* Joliot-Curie, Frédéric *in this index*
- Curie, Irène** *See* Joliot-Curie, Irène *in this index*
- Curie, Jacques** [French physicist]
Curie, Pierre Ci: 1194
- Piezoelectricity P: 458
- Curie, Marie Skłodowska** [Polish-French physicist] Ci: 1194 *with picture*
- Bequerel, Antoine Henri B: 197
- Curie, Pierre Ci: 1194 *with picture*
- Medicine (The medical revolution) M: 376; *picture on* M: 375
- Nobel Prizes (Physics: 1903) N: 440; (Chemistry: 1911) N: 442 *with picture*
- Physics (The beginning of modern physics) P: 440-441 *with picture*
- Polonium P: 649
- Radium R: 99
- Curie, Pierre** [French physicist] Ci: 1194 *with picture*
- Bequerel, Antoine Henri B: 197
- Curie, Marie Skłodowska Ci: 1194 *with picture*
- Magnetism (The magnetic properties of materials) M: 61
- Medicine (The medical revolution) M: 376; *picture on* M: 375
- Physics (The beginning of modern physics) P: 440-441
- Piezoelectricity P: 458
- Polonium P: 649
- Radium R: 99
- Curie point** [physics]
Curie, Pierre Ci: 1194
- Magnetism (Magnetism of materials) M: 60b-60c
- Curing** [industrial process]
Bacon B: 18
- Cement and concrete (Curing) C: 344
- Cheese (Ripening) C: 394
- Food preservation (Curing) F: 341
- Ham (Curing and smoking) H: 28
- Leather (Preparing the hides) L: 167
- Meat packing (Curing and smoking) M: 351
- Pork P: 679
- Tobacco (Kinds of tobacco) T: 305-306 *with picture*; (Curing tobacco) T: 306
- Curing society** [religion]
Indian, American (Shamans) I: 147-148
- Curium** [element] Ci: 1194
- Transuranium element T: 401
- Curl, Robert Floyd, Jr.** [American chemist]
Carbon (Fullerenes) C: 206
- Nobel Prizes (Chemistry: 1996) N: 443
- Curlew** [bird] Ci: 1195 *with picture*
- Curley, James Michael** [American political leader] Ci: 1195
- Boston (Rise of Irish politicians) B: 504
- Massachusetts (table) M: 288
- Curling** [game] Ci: 1195 *with pictures*
- Olympic Games (Winter Olympic Games) O: 746d

234 Curly-coated retriever

Scotland (Recreation) S: 214-215
Curly-coated retriever [dog] Ci: 1196 *with picture*

Curly maple [wood]
 Maple (Sugar maple) M: 186

Curly top [disease]
 Sugar beet (Raising sugar beets) So: 962

Currant [plant] Ci: 1196

Raisin (Varieties of raisins) R: 130

Currency See Money in *this index*

Currency changer

Vending machine (How vending machines work) V: 297

Current, Air

Glider G: 228; *diagram on* G: 229

Jet stream J: 115

Current, Electric See Electric current in *this index*

Current, Ocean

Arctic Ocean (Currents, water masses, and tides) A: 643

Atlantic Ocean (Moving ocean waters) A: 866

Earth (Cycles on and in Earth) E: 22

El Niño E: 245

Gulf Stream G: 437

Ocean (Temperature) O: 653 *with map*; (How the ocean moves) O: 658

Pacific Ocean (Currents) P: 15

Southern Ocean (Currents) So: 688a

Whirlpool W: 281

Current account [economics]

Balance of payments (How the balance of payments is determined) B: 35

Capital C: 192

Current events

Journalism J: 170

Current rating [electricity]

Fuse F: 589

Current River [Missouri]

Missouri (Rivers and lakes) M: 662

Currents, Ocean See Current, Ocean in *this index*

Curriculum [education] Ci: 1197

American literature (The study of American literature) A: 426

Edison Schools E: 83

Education (What should be taught?) E: 105; (What should students know?) E: 106

Elementary school (Elementary school instruction) E: 225

Teaching (Preparing to teach classes) T: 65

Universities and colleges (Curriculum) U: 209; (Recent developments) U: 211

Currie Cup [award]

Cricket (History) Ci: 1134-1135

Currier, Moody [American political leader]

New Hampshire (table) N: 223

Currier, Nathaniel [American lithographer]

Currier and Ives Ci: 1197

Currier, William [American lithographer]

Currier and Ives Ci: 1198

Currier and Ives [lithographers] Ci: 1197

Baseball *picture on* B: 133

Brooklyn Bridge *picture on* B: 640

United States, History of the (Cultural change) U: 169 *with picture*

Currier Gallery of Art [museum]

New Hampshire (Museums) N: 213

Curry [seasoning] Ci: 1198

Turmeric T: 515

Curry, Jabez Lamar Monroe [American educator] Ci: 1198

Curry, John Steuart [American painter] Ci: 1198

with picture

Painting (Regionalism) P: 83

Cursive writing

Handwriting (Kinds of handwriting) H: 47 *with pictures*; (Learning cursive writing) H: 48 *with pictures*

Cursor [computing] See Insertion point in *this index*

Curtain [scenery]

Theater (Kinds of scenery) T: 239

Curtain wall [construction]

Building construction (Types of construction) B: 683

Curtin, Andrew Gregg [American political leader]

Pennsylvania (table) P: 263

Curtin, John Joseph [Australian political leader]

Australia (table) A: 925

Curtis, Benjamin R. [American jurist]

Johnson, Andrew (Impeachment) J: 140

Supreme Court of the United States (table) So: 1000

Curtis, Charles [American political leader]

Ci: 1198

Hoover, Herbert Clark (Election of 1928)

H: 329

Vice President of the United States V: 349 *with portrait*; (table) V: 351; (Growth of the vice presidency) V: 353

Curtis, Charles G. [American inventor]

Turbine (History) T: 498-499

Curtis, Christopher Paul [American author]

Newbery Medal (table) N: 359

Curtis, Cyrus Hermann Kotschmar [American publisher] Ci: 1198

Curtis, Edwin U. [American public figure]

Coolidge, Calvin (As governor) Ci: 1031

Curtis, Kenneth M. [American political leader]

Maine (table) M: 87

Curtis, Oakley C. [American political leader]

Maine (table) M: 87

Curtis, Samuel R. [Union general]

Civil War (Battles of Fort Henry and Fort Donelson) Ci: 629

Curtis Act [1898]

Indian Territory I: 190

Curtis Publishing Company

Curtis, Cyrus Hermann Kotschmar Ci: 1198

Curtiss, Glenn Hammond [American inventor]

Ci: 1199

Airplane (Other pioneer planes and fliers)

A: 233 *with picture*

Aviation (Beginnings) A: 986

Langley, Samuel Pierpont L: 61

Curtiss-Wright Corporation

Aviation (Aviation progress) A: 988-989

Curtiz, Michael [Hungarian-American director]

Motion picture (Best achievement in directing: 1943) M: 862

Curule [chair]

Furniture (Ancient Rome) F: 570-571 *with picture*

Curve

Circle Ci: 558 *with diagrams*

Parabola P: 141 *with diagram*

Curve ball

Baseball (Pitching) B: 127

Bernoulli's principle B: 271

Bowling (How to bowl) B: 521-522 *with diagram*

Curvilinear motion

Motion M: 844

Curzon, Lord George [British diplomat]

Curzon Line Ci: 1199

Curzon Line [Polish history] Ci: 1199

Cusco [Peru] Ci: 1199

Inca I: 95 *with picture*

Machu Picchu M: 20

Peru (Spanish conquest and rule) P: 314

Cuscus [animal] Ci: 1199 *with picture*

Possum P: 698

Cush See Kush in *this index*

Cushing, Caleb [American government official]

Justice, Department of (table) J: 203

Pierce, Franklin (table) P: 456

Cushing, Harvey [American doctor] Ci: 1199

Cushing, Richard Cardinal [American religious leader]

Cardinal (table: American cardinals) C: 211

Cushing, William [American jurist]

Supreme Court of the United States (table) So: 1000

Cushion comb

Chicken (Kinds of chickens) C: 441 *with picture*

Cushman, Karen [American author]

Literature for children (Fiction) L: 358

Newbery Medal (table) N: 359

Cushnoc [U.S. history]

Augusta (Maine) A: 888

Cusp [anatomy]

Teeth (Permanent teeth) T: 79-80 *with picture*

Cuspid [anatomy] See Canine teeth in *this index*

Custer, George Armstrong [American military leader] Ci: 1200 *with picture*

Black Kettle B: 389

Crazy Horse Ci: 1123

Indian wars (The Sioux wars) I: 194

Montana (Indian fighting) M: 758 *with picture*

Reno, Marcus Albert R: 240

Sioux Indians S: 474

South Dakota (Territorial days) So: 681

Custer Battlefield National Monument

[Montana] See Little Bighorn Battlefield

National Monument in *this index*

Custer Died for Your Sins [book by Deloria]

Deloria, Vine, Jr. D: 117

Custer National Forest

South Dakota (Places to visit) So: 672

Custer State Park [South Dakota]

South Dakota (Places to visit) *picture on* So: 672

"Custer's Last Stand" See Little Bighorn, Battle of in *this index*

Custis, Daniel Parke [husband of]

Washington, Martha Custis W: 109

Custis, Eleanor Parke [granddaughter of]

Washington, George (Life in the Executive Mansion) W: 101-102

Custis, George Washington Parke [American dramatist]

Washington, George (Life in the Executive Mansion) W: 101-102; *picture on* W: 107

Custis, John Parke [stepson of]

Washington, George (Marriage) W: 95-96

Custis, Martha [wife of George Washington]

See Washington, Martha Custis in *this index*

Custis, Martha Parke [stepdaughter of]

Washington, George (Marriage) W: 95-96

Custis, Mary Anna Randolph [wife of]

Lee, Robert Edward (In the Corps of Engineers) L: 176-177

Custodian of the Two Holy Mosques [title]

Saudi Arabia (National government) S: 155

Custody [law]

Adoption (The adoption process) A: 66

Arrest A: 743

Divorce (Child custody arrangements) D: 254

Custom Ci: 1200

Clothing (Why clothing varies) Ci: 690-691

Culture Ci: 1186

Democracy (Constitutional government)

D: 121

Etiquette E: 373

Family (Home life) F: 21

Fashion F: 50

Folklore (Superstitions and customs) F: 325

Food (Customs) F: 332

Law (The development of law) L: 133

Marriage (Wedding ceremonies and customs) M: 221

Mores M: 802

See also the list of Related Articles in the Custom article

Custom-built home

Housing (Private housing) H: 390

Custom knife

Knife (Types of knives) K: 345-346

Custom of Paris [law]

Law (The development of Canadian law) L: 136

Custom publication

Magazine (Other magazines) M: 42-43

Customary system [measurement] See Inch-pound system in *this index*

Customer service representative

Careers *picture on* C: 219

Customs [government] Ci: 1201

Customs Service, United States Ci: 1201

Customs Court, United States [law] See Court of International Trade, United States in *this index*

Customs duties

Foreign trade zone F: 389

Smuggling S: 521

See also Tariff in *this index*

Customs Service, United States Ci: 1201

Washington, D.C. *map on* W: 76

Customs union [economics] Ci: 1201

Tariff T: 43

Cut [engineering]

Panama Canal (The Gaillard Cut) P: 123

Cut [injury]

Safety (In the kitchen) S: 10

Cut [meat]

Ham (Kinds of ham) H: 28 *with pictures*

Pork P: 679

Cut [television]

Television (Putting a show on the air) T: 111-112

Cut-and-fill construction

Road (Grading) R: 359

Cut-and-fill mining

Mining (Underground mining methods) M: 576

Cut and loop rug

Rugs and carpets (Kinds of rugs and carpets) R: 514-515 *with picture*

Cut glass

Glass (Cutting) G: 217

Cut Knife Hill, Battle of [Canadian history]

Poundmaker P: 722

Cut, tear, and curl method

Tea (Processing tea) T: 62

Cutaneous anthrax

Anthrax A: 545

Cutaneous diphtheria [disease]

Diphtheria (Cause, symptoms, and complications) D: 215-216

Cutaneous sense See *Touch in this index***Cutbank Pass** [Rocky Mountains]

Divide D: 241

Cutch [tree product]

Catechu C: 300

Cuticle [anatomy]Hair (The root and shaft) H: 9 *with diagram, picture on H: 10***Cuticle** [botany]

Leaf (Obtaining the raw materials) L: 155

Cutlass [sword]Pirate *picture on P: 494***Cutlassfish** [fish] Ci: 1201**Cutler, John C.** [American political leader]

Utah (table) U: 245

Cutler, Manasseh [American settler]

Ohio Company (The second Ohio Company) O: 705

Cutler, Nathan [American political leader]

Maine (table) M: 87

Cutlage [botany]Plant (Cuttage) P: 535 *with picture***Cutter** [boat]Coast Guard, United States (Safety) Ci: 734 *with picture*

Sailing (Catboats and sloops) S: 24

Cutter [career]

Clothing (Ready-to-wear clothes) Ci: 704-705

Cutter grade [meat]

Beef (Grades of beef) B: 209

Cutter race [Wyoming]Wyoming *picture on W: 525***Cutthroat trout** [fish]

Trout (True trout) T: 453-454

Cutting [botany]

Fruit (Growing fruit) F: 545

Gardening (Caring for the garden) G: 38

Tree (How trees reproduce) T: 419

Cutting [industrial process]

Diamond (How diamonds are cut to make jewels) D: 182

Glass (Cutting) G: 217

Cutting head [machine]Phonograph (How phonograph records are made) P: 401 *with diagram***Cutting horse**

Cowboy (The roundup) Ci: 1111

Cuttlebone [zoology]

Cuttlefish Ci: 1202

Shell S: 384

Cuttlefish [sea animal] Ci: 1201 *with picture*

Mollusk (Octopuses and squids) M: 695

Shell (Octopuses and squids) S: 388

Cuttlefish bones [book by Montale]

Montale, Eugenio M: 741

Cutty Sark [ship]

Clipper ship Ci: 682i

Cutworm [insect] Ci: 1202

Bogong moth B: 437

Potato (Diseases and insect pests) P: 713

Cuvier, Baron [French zoologist] Ci: 1202Biology (The origins of scientific classification) B: 318; *picture on B: 320*

Evolution (Early theories) E: 432

Zoology (History) Z: 610-611

Cuvier, Georges Léopold See *Cuvier, Baron in this index***Cuvilliers, François** [Flemish architect]Architecture *picture on A: 623***Cuyahoga River** [Ohio]Cleveland (The city) Ci: 663; (Shipping) Ci: 666 *with picture*

Cuyahoga Valley National Park Ci: 1202

Cuyahoga Valley National Park [Ohio]

Ci: 1202

National Park System (table: National parks) N: 48

Cuyler, Kiki [American baseball player]

Baseball (table: Hall of Fame) B: 134

Cuyuna Range [Minnesota]

Minnesota (The early 1900's) M: 604

Cuza, Alexander John [prince of Romania]

Romania (The origins of modern Romania) R: 424

Cuzco See *Cusco in this index***CWA** [U.S. history]

Roosevelt, Franklin Delano (The New Deal) R: 457

Cy Young Award [baseball]

Maddux, Greg M: 29

Cyan [color]Photography (How color film works) P: 423 *with pictures*Printing (Process color printing) P: 802 *with picture***Cyanidation** [industrial process]Gold *diagram on G: 250***Cyanide** [chemical] Ci: 1202

Laetrile L: 26

Cyanite [mineral]

Kyanite K: 398

Cyanoacrylate [adhesive]

Adhesive A: 56

Cyanobacteria [organism] See *Blue-green algae in this index***Cyanogen** [gas]

Gay-Lussac, Joseph Louis G: 71

Cyanolabe [anatomy]

Eye (The retina) E: 462

Cyanosis [disorder] Ci: 1202

Blue baby B: 419

Cyaxares [king of Media]

Media M: 360

Cybele [goddess]

Rhea R: 290

Phrygia P: 431

Cybercrime See *Computer crime in this index***Cyberjaya** [Malaysia]

Putrajaya P: 913

Cybernetics [biology] Ci: 1203

Wiener, Norbert W: 299

Cybernetics [book by Wiener]

Cybernetics Ci: 1203

Cyberpunk

Science fiction (Recent developments) S: 206

Cyberterrorism

Terrorism (Computer-based terrorism) T: 178

Cyberwar

War (Warfare today) W: 26

Cycad [plant] Ci: 1203 *with picture*Plant (Gymnosperms) P: 519-520 *with picture*; (Early plants) P: 540-541; (Classification of plants) P: 546-547 *with picture*Tree (Cycad trees) T: 415; *pictures on T: 413***Cyclades** [islands, Aegean Sea]Aegean Sea A: 84 *with map***Cycladic civilization** [Greek history]

Aegean civilization (The Cycladic culture) A: 82

Painting (Aegean painting) P: 41

Sculpture (Aegean) S: 234 *with picture***Cyclamen** [plant] Ci: 1203**Cycle** [biology]See also *Life cycle in this index*

Environmental pollution (Water pollution)

E: 334; (Soil pollution) E: 334

Generation G: 83

Plant (Plants and the cycle of nature) P: 518

*with diagram***Cycle** [literature]

Drama (Mystery plays) D: 328-329

George, Stefan G: 109

Mythology (The Irish cycles) M: 983

Cycle [physics]

Electric current (Direct and alternating current) E: 168

Electric generator (A simple generator) E: 170-171; (How AC generators work) E: 173

Gasoline engine (Cycle) G: 63

Sound (Frequency and pitch) So: 599 *with diagram***Cycle** [vehicle]Motorcycle M: 877 *with pictures***Cycle of abuse**

Child abuse C: 454

Cycle of Saints [myths]

Irish literature (Heroic tales, romances, and sagas) I: 430

Cycle of the West, The [poem by Neihardt]

Neihardt, John N: 121

Cyclic pitch control

Helicopter (Piloting a helicopter) H: 171

Cyclical unemployment

Unemployment (Types of unemployment)

U: 22

Cycling See *Bicycle; Bicycle racing; Motorcycle in this index***Cyclitis** [disease]

Eye (Diseases of the uveal tract) E: 467

Cyclo-taxi [vehicle]Vietnam (City life) V: 365; *picture on V: 368***Cycloid scale** [zoology]Fish (Scales) F: 160 *with picture***Cyclone** [weather] Ci: 1203 *with diagram*

Air (Air movement) A: 169

Bangladesh *picture on B: 86*

Disaster (table) D: 223

Hurricane H: 452

Pacific Ocean (Tropical cyclones) P: 14

Tornado T: 333

Weather (Synoptic-scale systems) W: 159-161

Wind (Synoptic-scale circulations) W: 329

Cyclonite [explosive] See *RDX in this index***Cyclopedia** See *Encyclopedia in this index***Cyclopedia** [book by Chambers]

Encyclopedia (An age of experiment) E: 268a

Cyclopedia of American Horticulture [book by Bailey]

Bailey, Liberty Hyde B: 31

Cyclops [Greek mythology] Ci: 1204*Odyssey* (Odysseus describes his wanderings) O: 675

Ulysses (Return to Ithaca) U: 17-18

Uranus U: 217

Cyclops [play by Euripides]

Drama (Satyr plays) D: 327

Cyclops [ship]

Bermuda Triangle B: 269

Cyclorama [exhibit]

Theater (Kinds of scenery) T: 239

Cyclosporine [drug] Ci: 1204

Heart (The first heart transplants and artificial hearts) H: 145

Transplant (Preventing rejection) T: 380-381

Cyclotron [machine]

Deuterium (Uses) D: 172

Lawrence, Ernest Orlando L: 145

Particle accelerator (How accelerators work)

P: 184-185 *with diagram***Cygnets** [bird]

Swan So: 1015

Cylinder [engine]Automobile (The engine) A: 949 *with diagrams*Gasoline engine (Cylinders) G: 64 *with pictures***Cylinder** [geometry] Ci: 1204 *with diagram*Geometry *picture on G: 104***Cylinder** [gun]Handgun (Types of handguns) H: 43 *with picture***Cylinder** [printing]Printing (Methods of printing) P: 798 *with diagrams***Cylinder block** [engine]Automobile (The engine) A: 949; *diagram on A: 951*

Gasoline engine (Cylinder block) G: 64

Cylinder head [engine]Gasoline engine (Cylinder head) G: 64 *with pictures***Cylinder lock**

Lock (Types of locks) L: 410-411

Cylinder machine

Paper (Sheet formation) P: 135-136

Cylinder seal [emblem]

Assyria (Art and architecture) A: 821

Persia, Ancient *picture on P: 299***Cylindrical grinding**

Grinding and polishing (Grinding methods) G: 395

Machine tool (Abrasive processes) M: 18-19

Cylindrical lensEye (Astigmatism) E: 464-465 *with picture***Cylindroid** [cylinder]

Cylinder Ci: 1204

Cymbal [musical instrument] Ci: 1205**Cymbeline** [play by Shakespeare]

Shakespeare, William (Cymbeline) S: 365; (Rhetoric) S: 367

Cyme [botany]Inflorescence I: 268b *with picture***Cymric cat**Cat (Long-haired breeds) C: 292; *picture on C: 289***Cymru** See *Wales in this index***Cynwulf** [English poet]

English literature (Old English poetry) E: 314-315

Cynic philosophy [philosophy] Ci: 1205

Diogenes D: 214

Hellenistic Age H: 177

Cynic's Word Book, The [book by Biercel]

Bierce, Ambrose Gwinett B: 295

Cynodont [prehistoric animal]

Mammal (The ancestors of mammals) M: 126

Cynosarges [ancient Greece]

Cynic philosophy Ci: 1205

CYO See *Catholic Youth Organization in this index*

Cypress [painting by Kano Eitoku]
Painting (Japanese painting) P: 47 *with picture*

Cypress [tree] Ci: 1205
Tree (Needleleaf trees) T: 414; *pictures on* T: 424

Cypress Gardens [Charleston]
South Carolina (Places to visit) So: 650

Cypress Gardens [Florida]
Florida (Places to visit) F: 252 *with picture*

Cypriots [people]
Cyprus (People) Ci: 1206

Cypris [zoology]
Barnacle B: 114
Larva L: 78

Cyprus [island, Mediterranean Sea] Ci: 1205
with picture and map
Alphabet (The Cypriots) A: 383
Flag *picture on* F: 202
Greece (The 1950's) G: 364; (The restoration of democracy) G: 365
Makarios III M: 95
Turkey (The Cyprus crisis) T: 512

Cyprus cedar [tree]
Cedar (Needle-leaved cedars) C: 324

Cyrano de Bergerac [play by Rostand]
Cyrano de Bergerac, Savinien de Ci: 1207
Rostand, Edmond R: 484

Cyrano de Bergerac, Savinien de [French author] Ci: 1207 *with portrait*
Science fiction (Forerunners of science fiction) S: 205

Cyrenaic philosophy
Hedonism H: 165

Cyrenaica [former province]
Libya (Independence) L: 268

Cyril, Saint [Christian scholar]
Alphabet (The Cyrillic alphabet) A: 383

Cyril of Alexandria, Saint [Egyptian religious leader] Ci: 1208
Hypatia H: 475

Cyrillic alphabet
Alphabet (The Cyrillic alphabet) A: 383
Moldova (History) M: 690a
Russian language (Alphabet) R: 557 *with pictures*

Cyros
Corsica (History) Ci: 1073

Cyrus the Great [emperor of Persia] Ci: 1208
Army (Ancient armies) A: 726
Bible (Historical accuracy of the Bible) B: 284
Iran (The Achaemenid Empire) I: 405
Jerusalem (Ancient times) J: 100
Jews (Foreign domination) J: 121
Media M: 360
Palestine (Invasions and conquests) P: 104
Persia, Ancient (The Achaemenid Empire) P: 298

Cyrus the Younger [Persian prince]
Xenophon X: 543

Cyst [biology]
Pfiesteria P: 353

Cyst [disorder] Ci: 1208
Acne A: 28
Ear (Diseases) E: 12
Trichina T: 441

Cystic duct [anatomy]
Gallbladder G: 14 *with diagram*

Cystic fibrosis [disease] Ci: 1208
Heredity (table) H: 204
Races, Human (Susceptibility to genetic diseases) R: 58

Cystic fibrosis transmembrane conductance regulator [genetics]
Cystic fibrosis Ci: 1208

Cystitis [disease]
Bladder B: 395

Cystoscope [instrument]
Bladder B: 395

Cytisine [poison]
Laburnum L: 19

Cytokine [chemical]
Immune system (The cell-mediated immune response) I: 88a-88b; (Recent advances) I: 89

Cytokinesis [biology]
Cell (Cell division) C: 330 *with diagram*

Cytokinin [hormone]
Hormone (Plant hormones) H: 337
Plant (Factors affecting plant growth) P: 538

Cytology [microbiology]
Biology (table) B: 317
Cell C: 326

Cytomegalovirus retinitis [disorder]
AIDS (Opportunistic illnesses) A: 163

Cytoplasm [biology]

Bacteria (The structure of bacteria) B: 20 *with diagram*

Cell C: 326; (The cytoplasm) C: 329 *with diagrams*
Chloroplast C: 518
Heredity (How proteins are made) H: 206-208
Life (Cells) L: 276
Protoplasm P: 836

Cytosine [biochemistry]
Cell (DNA—the wondrous molecule) C: 334-335 *with diagram*
DNA D: 258
Heredity (The structure of DNA) H: 205-206
RNA R: 357

Cytoskeleton [biology]
Cell (The cytoplasm) C: 329

Cytotoxic T lymphocyte [physiology]
Immune system (The cell-mediated immune response) I: 88a-88b
Thymus T: 274

Czar [title] Ci: 1208
Ivan IV, the Terrible I: 520
Russia R: 525
Union of Soviet Socialist Republics (History) U: 35

Czar liberator [name for]
Alexander II A: 341

Czech [language]
Czech Republic (Language) Ci: 1210

Czech Republic Ci: 1209 *with picture and map*
See also Czechoslovakia in this index
Bohemia B: 437
Havel, Václav H: 87
Moravia M: 800
North Atlantic Treaty Organization (History) N: 471
Slovakia S: 508b
Standard of living (table) So: 834
Teaching (Teaching around the world) T: 70
See also the list of Related articles in the Czech Republic article

Czech Social Democratic Party [political party]
Czech Republic (Politics) Ci: 1210

Czechoslovakia [former country] Ci: 1215 *with picture*
See also Czech Republic; Slovakia in this index
Benes, Eduard B: 248
Bohemia B: 438
Cold War (The invasion of Czechoslovakia) Ci: 769
Communism (In Eastern Europe) Ci: 896
Czech Republic Ci: 1209; (The creation of Czechoslovakia) Ci: 1213
Havel, Václav H: 87
Hitler, Adolf (The road to war) H: 268
Lidice L: 270
Masaryk, Tomáš Garrigue M: 262
Motion picture (Movies in the 1960's) M: 871
Munich Agreement M: 927
Slovakia S: 508b; (The formation of Czechoslovakia) S: 509
Union of Soviet Socialist Republics (Brezhnev comes to power) U: 39
Warsaw Pact W: 39
World War II (table: The Allies) W: 471; (The failure of appeasement) W: 472

Czechs [people]
Bohemia B: 437
Czech Republic Ci: 1209
Czechoslovakia Ci: 1215

Czerny, Karl [Austrian composer] Ci: 1216

Częstochowa [Poland]
Poland *picture on* P: 609

Czolgosz, Leon F. [American assassin]
McKinley, William (Assassination) M: 341 *with picture*

D

D [letter] D: 1 *with pictures*

D'...

Names beginning D' are alphabetized as single words: D'Arezzo, Guido, appears after Dare, Virginia

D and C [medicine]
Surgery (Some common surgical operations) So: 1006

D and E *See* Dilation and evacuation *in this index*

D-day D: 2

See also Normandy Invasion *in this index*
Amphibious warfare (History of amphibious warfare) A: 442

Eisenhower, Dwight David (Operation Overlord) E: 150
World War II (D-Day) W: 482 *with picture and map*

D quark [physics]
Down quark So: 937

Da capo [music]
Handel, George Frideric (His work) H: 42-43
Opera (Opera seria and opera buffa) O: 797

Da Nang [city, Vietnam] D: 2

Da Vinci, Leonardo [Italian artist] *See* Leonardo da Vinci *in this index*

DAB [broadcasting] *See* Digital audio broadcasting *in this index*

Dab [fish]
Flounder F: 267

Dabbling duck [bird]
Duck (Food) D: 375 *with picture*, (Kinds of ducks) D: 376

Dabčević-Kučar, Savka [Croatian political leader]
Croatia (History) Ci: 1148a-1148b

Dacca [Bangladesh] *See* Dhaka *in this index*

Dace, Horned [fish]
Chub C: 540

Dachau [concentration camp] D: 2
Jews *picture on* J: 124

Dachshund [dog] D: 2 *with picture*
Dog *picture on* D: 270

Dacia [former region]
Domitian D: 306
Romania (Ancestry) R: 417; (Early days) R: 423
Trajan T: 369

Dacko, David [Central African political leader]
Central African Republic (History) C: 353

Dacron [fiber]
Sailing (Sails) S: 24

Dactyl [poetry]
Poetry (table) P: 594

Dactyl [satellite]
Satellite S: 150

Dactylic hexameter [poetry]
Latin literature (Early Latin literature) L: 115

Dadaism [art] D: 2 *with picture*
Painting (Dadaism) P: 80 *with picture*
Breton, André B: 594
Duchamp, Marcel D: 373
Ray, Man R: 152
Schwitters, Kurt S: 190
Sculpture (Assemblages) S: 257 *with pictures*

"Daddy" [poem by Plath]
Plath, Sylvia P: 566

Daddy longlegs [animal] D: 3 *with picture*

Daedalus [Greek mythology] D: 3
Airplane (History) A: 229 *with picture*
Labyrinth L: 19
Minos M: 611

Daehlie, Bjorn [Norwegian skier]
Skiing (The middle and late 1900's) S: 487-488

Deffodil [plant] D: 3 *with picture*
Flower (Garden perennials) F: 280 *with picture*
Narcissus N: 20

Dafne [opera by Peri]
Opera (The development of opera) O: 797

Dafydd ap Gwilym [Welsh poet]
Wales (The arts) W: 11

Da Gama, Vasco [Portuguese explorer] D: 3
with picture and map
Cape of Good Hope C: 188
Exploration (The voyage around Africa) E: 444 *with map*
Geography (Era of exploration) G: 95
India (The coming of the Europeans) I: 130
Scurvy S: 261

Dagger [reference]
Footnote F: 369

Dagger [weapon] D: 4 *with picture*

Dagger moth
Moth *picture on* M: 841

Dagging
Clothing (The Middle Ages) Ci: 698-699

Dagon [former name]
Yangon Y: 551

Dagon [Philistine god]
Samson S: 82

"Dagon" [story by Lovecraft]
Lovecraft, H. P. L: 508

Daguerre, Louis Jacques Mandé [French inventor] D: 4
Communication (The 1800's) Ci: 881
Daguerreotype D: 5
Niépce, Joseph Nicéphore N: 406
Photography (Early developments) P: 425 *with picture*

Daguerreotype [photography] D: 5 *with picture*

- Communication (The 1800's) **Ci**: 881-882 *with picture*
 Daguerre, Louis Jacques Mandé **D**: 4
 Photography (Early developments) **P**: 425 *with picture*
- Dah** [telegraphy]
 Morse code **M**: 819
- Dahl, Anders** [Swedish botanist]
 Dahlia **D**: 5
- Dahl, Carl** [German inventor]
 Paper (History) **P**: 136-137
- Dahl, Roald** [Danish author] **D**: 5
- Dahlem District** [district]
 Berlin (Libraries and museums) **B**: 262
- Dahlia** [plant] **D**: 5 *with picture*
 Flower *picture* on **F**: 280
- Dahlia anemone** [sea animal]
 Animal *picture* on **A**: 486
- Dahomey** (former name, Benin)
 Benin **B**: 249
 French West Africa **F**: 527
- Dai Co Viet**
 Indochina (The Khmer) **I**: 225; (A new kingdom) **I**: 225
- Dai Viet** [Vietnamese history]
 Indochina (A new kingdom) **I**: 225
- Dai butsu** [sculpture]
 Buddhism *picture* on **B**: 668
 Kamakura period **K**: 212
- Dáil Éireann** [Irish government]
 De Valera, Eamon **D**: 173
 Ireland (Parliament) **I**: 417; (The Easter Rising) **I**: 427
 Sinn Féin (History) **S**: 473
- Dailies**
 Motion picture (The rushes) **M**: 855
- Daily double** [betting]
 Horse racing (Betting) **H**: 365
- Daily Express** [newspaper]
 Beaverbrook, Lord **B**: 196
- Daily Reference Value**
 Nutrition (Nutrition guidelines) **N**: 626
- Daily Telegraph** [newspaper]
 Wyoming (Communication) **W**: 531
- Daily Value**
 Nutrition (Nutrition guidelines) **N**: 626
- Daimler, Gottlieb** [German engineer] **D**: 5
 Automobile (The gasoline car) **A**: 963 *with picture*
 Gasoline engine (Development of the gasoline engine) **G**: 66
 Invention (The late 1800's) **I**: 362
 Maybach, Wilhelm **M**: 326
 Motorcycle (History) **M**: 879 *with picture*
- Daimler-Benz AG** [company]
 Automobile (Major producing countries and companies) **A**: 958-959
 DaimlerChrysler AG **D**: 5
 Chrysler Corporation **C**: 540
- Daimler Motor Company**
 DaimlerChrysler AG **D**: 6
- DaimlerChrysler AG** [company] **D**: 5
 Automobile (Major producing countries and companies) **A**: 958-959
 Chrysler Corporation **C**: 540
 Manufacturing (table) **M**: 170
- Daimyo** [Japanese history]
 Japan (Warring states period) **J**: 54
 Samurai **S**: 83
- Daino** [song]
 Lithuania (People) **L**: 388
- Daintree National Park** [Australia]
 National park (table) **N**: 42f
- Dairy Belt** [region, U.S.]
 Milk **M**: 545
- Dairy farm**
 Milk (At a dairy farm) **M**: 546; *picture* on **M**: 545
- Dairy products**
 Food (Food from animals) **F**: 330
 Hormone (Agricultural uses) **H**: 337-338
 Milk (table) **M**: 547
 Nutrition (Kinds of nutrients) **N**: 625; (Nutrition guidelines) **N**: 626
- Dairying** [agriculture] **D**: 6 *with pictures*
 Cattle **C**: 306; (Dairy cattle) **C**: 309 *with pictures*; (Dual-purpose cattle) **C**: 311; (Breeding) **C**: 311-312; (Dairy cows) **C**: 314
 Farm and farming (Specialized livestock farms) **F**: 31-32 *with picture*
 Wisconsin (Changes in agriculture) **W**: 368
- Dairying ant**
 Ant (Dairying ants) **A**: 527 *with picture*
- Daisetsuzan National Park** [Japan]
 National park (table) **N**: 42f
- Daisy** [plant] **D**: 8 *with picture*
 Flower (Variations in flower structure) **F**: 294 *with picture*
- Daisy fleabane** [plant]
 Fleabane **F**: 232
- Daisy Girl Scout**
 Girl Scouts (Daisy Girl Scouts) **G**: 197 *with picture*
- Daisy Miller** [book by James]
 James, Henry (His works) **J**: 26
- Daisy wheel**
 Typewriter (How a typewriter works) **T**: 538-539 *with picture*
- Daisy-wheel printer** [electronic device]
 Printer (Impact printers) **P**: 795
- Dakar** [city, Senegal] **D**: 9 *with picture*
 French West Africa **F**: 527 *with map*
 Senegal (Economy) **S**: 299 *with pictures*
- Dakar, University of**
 Senegal (People) **S**: 297-299 *with picture*
- Dakota** See North Dakota; South Dakota *in this index*
- Dakota Democrat** [newspaper]
 South Dakota (Communication) **So**: 679
- Dakota Indians** See Sioux Indians *in this index*
- Dakota Territory** [U.S. history]
 North Dakota (Territorial days) **N**: 514; (Statehood) **N**: 514
 South Dakota (Territorial days) **So**: 681
- Dakota Water Resources Act** [North Dakota]
 North Dakota (Recent developments) **N**: 516
- Dakwah movement** [Malaysian history]
 Malaysia (Religion) **M**: 98d
- Dal** [food]
 India (Food and drink) **I**: 118
- Daladier, Édouard** [French political leader] **D**: 9
- Dalai Lama** [Tibetan religious leader] **D**: 9
 Bodhisattva **B**: 434
 Lamaism **L**: 49
 Lhasa **L**: 225
 Nobel Prizes (Peace: 1989) **N**: 449
 Tibet (Religion and culture) **T**: 277; (History and government) **T**: 277
- Dalayrac, Nicholas** [French composer]
 Bell (Uses of bells) **B**: 239
- Dale, Charles M.** [American political leader]
 New Hampshire (table) **N**: 223
- Dale, Sir Henry Hallett** [British physiologist]
 Nobel Prizes (Physiology or medicine: 1936) **N**: 444
- Dale, James** [American public figure]
 Boy Scouts (Organization) **B**: 540
- D'Alembert, Jean** [French mathematician]
 Encyclopedia (An age of experiment) **E**: 268a-268b
- D'Alembert's Dream** [book by Diderot]
 Diderot, Denis **D**: 195
- Dalén, Nils** [Swedish physicist]
 Nobel Prizes (Physics: 1912) **N**: 440
- Daley, Richard Joseph** [American political leader] **D**: 9
 Chicago (Political developments in the late 1900's) **C**: 436
- Dalay, Richard M.** [American political leader]
 Chicago (Political developments in the late 1900's) **C**: 436-437
- Daley, Richard Joseph** **D**: 10
- Daley, William M.** [American political leader]
 Clinton, Bill (table) **Ci**: 682d
 Commerce, Department of (table) **Ci**: 871
 Daley, Richard Joseph **D**: 10
- Daley Plaza**
 Chicago (Places to visit) **C**: 430-431 *with picture*
- Dalgliah, Adam** [fictional character]
 James, P. D. **J**: 27
- Dalhart, Vernon** [American singer]
 Country music (The roots of country music) **Ci**: 1098a-1098b
- Dalhousie University**
 King's College, University of **K**: 331
 Nova Scotia *picture* on **N**: 558
- Dali, Salvador** [Spanish painter] **D**: 10 *with pictures*
 Painting (Surrealism) **P**: 81 *with picture*
- Dali Museum**
 Saint Petersburg [Florida] (Description) **S**: 56
- Dalit** [sociology] See Untouchable *in this index*
- Dalla Chiesa, Carlo Alberto** [Italian military leader]
 Italy (Social problems) **I**: 518
- Dallapiccola, Luigi** [Italian composer] **D**: 10
- Dallas** [Texas] **D**: 11 *with pictures and map*
 Texas (table: Average monthly weather) **T**: 198
- Dallas, Alexander J.** [American government official]
 Treasury, Department of the (table) **T**: 407
- Dallas, George Mifflin** [American political leader] **D**: 16
 Dallas (History) **D**: 15
 Polk, James Knox (Election of 1844) **P**: 642
 Vice President of the United States (table) **V**: 351; **V**: 348 *with portrait*
- Dallas Black Dance Theatre**
 Dallas *picture* on **D**: 13
- Dallas Cowboys** [football team]
 Dallas (Recreation) **D**: 14
 Football (National Football League) **F**: 364
- Dallas/Fort Worth International Airport**
 Airport (table) **A**: 245
 Dallas **D**: 11
- Dallas Mavericks** [basketball team]
 Basketball (table) **B**: 150
 Dallas (Recreation) **D**: 14
- Dallas Museum of Art**
 Dallas (Museums and libraries) **D**: 14
- Dallas Stars** [hockey team]
 Dallas (Recreation) **D**: 14
 Hockey (table: National Hockey League) **H**: 281
- Dallas Theatre Center**
 Dallas (Cultural life) **D**: 14
- Dalles** [geology] **D**: 16 *with picture*
- Dallin, Cyrus Edwin** [American sculptor] **D**: 16 *with picture*
 Kansas City *picture* on **K**: 241
 Massasoit *picture* on **M**: 295
- Dall's porpoise** [sea animal]
 Porpoise **P**: 680
- Dall's sheep** [animal]
 Bighorn **B**: 299
- Dalmatia** [region, Croatia]
 Croatia (Land and climate) **Ci**: 1148a
 Yugoslavia (A new nation) **Y**: 579
- Dalmatian** [dog] **D**: 16
 Dog *picture* on **D**: 275
- Dalmatica** [clothing]
 Clothing (Ancient times) **Ci**: 696-698
- Dalmatian pelican** [bird]
 Pelican (Pelicans and people) **P**: 231
- Dalton** [unit of measure] See Atomic weight *in this index*
- Dalton, John** [British chemist] **D**: 16
 Atom (The birth of the modern atomic theory) **A**: 875
 Chemistry (Dalton's atomic theory) **C**: 402 *with picture*
 Physics (Developments in the 1800's) **P**: 440
- Dalton, John M.** [American political leader]
 Missouri (table) **M**: 668
- Dalton, John N.** [American political leader]
 Virginia (table) **V**: 417
- Daltonism** See Color blindness *in this index*
- Dalton's law of partial pressures**
 Dalton, John **D**: 16
- Daltrey, Roger** [British musician]
 Who, The **W**: 296 *with picture*
- Daly, John** [American golfer]
 Golf (British Open) **G**: 264
- Daly, Marcus** [American businessman]
 Montana (Statehood) **M**: 760
- Dam** **D**: 17 *with pictures*
 Beaver (Building dams and canals) **B**: 195 *with diagram*
 China (Recent developments) **C**: 507
 Conservation (Water conservation) **Ci**: 977
 Energy supply (Water power) **E**: 278
 Flood (Other floods) **F**: 237
 Irrigation (Surface water) **I**: 456
 Lake *picture* on **L**: 32
 Reservoir **R**: 258
 Tennessee Valley Authority (The dams) **T**: 158 *with picture*
 See also the list of Related Articles in the Dam article
- Dam** [animal]
 Cattle **C**: 306
 Dog (Kinds of dogs) **D**: 265
 Horse (table: Horse terms) **H**: 343
- Dam, Henrik** [Danish physiologist]
 Nobel Prizes (Physiology or medicine: 1943) **N**: 444
- Dam Square** [Amsterdam]
 Netherlands *picture* on **N**: 141
- Damaged Goods** [play by Brieux]
 Brieux, Eugène **B**: 608

- Damages** [law] D: 22
Contract Ci: 1023
Tort T: 342
- Daman and Diu** [territory, India]
India (India in the 1950's and early 1960's)
I: 133
- Damão** [territory, India] See Daman and Diu in
this index
- Damascus** [Syria] D: 22 with picture
Arabs picture on A: 587
Syria So: 1070 with picture
Trade route (Early trade routes) T: 364
- Damask** [fabric] D: 23
- Damasus I, Saint** [pope]
Pope (table) P: 666
- Damasus II** [pope]
Pope (table) P: 666
- Damavand, Mount** [Iran]
Iran (The Mountains) I: 403
- D'Amboise, Jacques** [American dancer] D: 23
with portrait
- Dame** [title]
Address, Forms of (Officials of the
Commonwealth of Nations) A: 53
Knighthood, Orders of (Honorary orders)
K: 347
- Dame Care** [book by Sudermann]
Sudermann, Hermann So: 957
- Dame school** [education]
Colonial life in America (Education) Ci: 803
Rhode Island (Schools) R: 300
- Damian, Cyrillius** [Austrian inventor]
Accordian A: 22
- Damien de Veuster, Joseph** [Belgian religious
leader] D: 23
Hawaii (Molokai) H: 100-102
- Damnation of Theron Ware, The** [book by
Frederic]
Frederic, Harold F: 497
- Damocles** [Greek courtier] D: 23
- Damon and Pythias** [legendary figures] D: 23
- Damp** [gas] D: 23
- Damp-wood termite** [insect]
Termite (Termites in the United States) T: 174
- Damper** [musical instrument]
Piano (The action) P: 446
- Dampier, William** [English explorer] D: 24
- Dampierre, Guy de** [Flemish nobleman]
Feudalism picture on F: 82
- Damping** [motion]
Compass Ci: 902b
- Damping-off** [plant disease] D: 24
- Damrosch, Leopold** [German-born conductor]
D: 24
- Damrosch, Walter Johannes** [American con-
ductor] D: 24
- Damselfly** [insect]
Insect (Incomplete metamorphosis) I: 293; pic-
tures on I: 280
- Dan Patch** [horse]
Harness racing (History) H: 64
- Dana, Charles Anderson** [American editor]
D: 24
Chicago (A city reborn) C: 435
- Dana, Francis** [American diplomat]
Adams, John Quincy (Education) A: 40
- Dana, John W.** [American political leader]
Maine (table) M: 87
- Dana, Richard Henry, Jr.** [American author]
D: 24
- Danaë** [Greek mythology]
Perseus P: 295
- Danaë** [painting by Rembrandt]
Rembrandt (Early Amsterdam years) R: 229
- Danby, Gordon T.** [American physicist]
Magnetic levitation train (Electrodynamics
maglev) M: 55
- Dance** D: 25 with pictures
See also Ballet, Ballroom dancing in this index
Art and the arts picture on A: 748
Asia picture on A: 783
Careers (Sports and entertainment) C: 230-
231
Flamenco F: 226 with picture
Folk dancing F: 320 with picture
Ice skating (Ice dancing) I: 12 with diagrams
India (Music and dance) I: 120-121
Indian, American (Ceremonies) I: 148; picture
on I: 164
Latin America (Dancing) L: 103
Musical comedy (Elements of musical come-
dy) M: 959
Rhythm R: 320
Sculpture (Indus Valley) S: 235-236; (Royal and
public sculpture) S: 240
Sun dance So: 987
Tango T: 27
Thailand (The arts) T: 224 with picture
United States picture on U: 119
Waltz W: 22
See also the list of Related Articles in the
Dance article
- Dance** [book by Kirstein]
Kirstein, Lincoln Edward K: 337
- Dance** [entomology]
Bee (Finding food) B: 204
- Dance band** [music]
Band (Dance bands) B: 74
- Dance fly**
Insect (Courtship) I: 294
- Dance music**
Popular music (Ragtime, jazz, and blues)
P: 670
- Dance of Death, The** [play by Strindberg]
Strindberg, August So: 929
- Dance of the Happy Shades** [book by Munro]
Munro, Alice M: 928
- Dance of the NW Indians at the Mission of
San Jose de California** [painting by
Stephens]
Indian, American picture on I: 164
- "Dance of the Seven Veils"**
Opera (*Salome*) O: 807 with picture
- Dance 1, The** [painting by Matisse]
Painting (The Fauves) P: 77 with picture
- Dance orchestra**
Orchestra O: 820
- Dance skating**
Roller skating (Competitive roller skating)
R: 403
- Dance song**
Folk music (Kinds of folk music) F: 321
- Dance stick** [sculpture]
Sculpture (The European impact) S: 244 with
picture
- Dance Theatre of Harlem**
Ballet (Ballet in the United States) B: 53-54
Mitchell, Arthur M: 677
- Dance to the Music of Time, A** [books by
Powell]
English literature (Literature after World War
II) E: 322-323
Powell, Anthony P: 726
- Dancer, Stanley F.** [American harness driver]
Harness racing (History) H: 64
- Dancers in Blue Dress** [painting by Severini]
Italy picture on I: 505
- Dances with Wolves** [film]
Motion picture (Best picture: 1990) M: 861
Westerns W: 242
- DanceSport** [competition] See Ballroom dancing
in this index
- Dancing** See Dance in this index
- Dancing at Lughnasa** [play by Friel]
Friel, Brian F: 533
- Dancing Class, The** [painting by Degas]
Degas, Edgar picture on D: 89
Painting (New visual sources) P: 72
- Dancing Rabbit Creek, Treaty of** [U.S. history]
Choctaw Indians C: 519
- Dandelion** [plant] D: 33 with picture
Lawn picture on L: 143
Plant (Seed dispersal) P: 542 with picture
Root diagram on R: 474
- Dandelion Wine** [book by Bradbury]
Bradbury, Ray B: 544
- Dandie Dinmont terrier** [dog] D: 33 with picture
- Dandin** [Indian author]
Sanskrit literature (The Classical period) S: 112
- Dendridge, Ray** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Dandruff** [disorder] D: 33
Hair (Disorders of the hair and scalp) H: 10
Keratin K: 305
- Danegeld** [English history]
William I, the Conqueror W: 308
- Deneleu** [English history]
Alfred the Great A: 348
Vikings (The Danish Vikings) V: 383
- Denes** [people]
See also Vikings in this index
Denmark D: 132
- "Danger of an Unconverted Ministry, The"**
[sermon]
Tennent, Gilbert T: 133
- Dangerous** [film]
Davis, Bette D: 47
- Dangerous Liaisons** [book by Laclos]
- Age of Reason (The orderliness of nature)
A: 139
- Dangling Man** [book by Bellow]
Bellow, Saul B: 244
Diary D: 185
- Daniel** [Biblical figure]
Handwriting on the wall H: 50
- Daniel, Additions to** [book] See Susanna in this
index
- Daniel, Book of** [Old Testament] D: 33 with pic-
ture
- Daniel, Peter V.** [American jurist]
Supreme Court of the United States (table)
So: 1000
- Daniel, Price** [American political leader]
Texas (table) T: 203
- Daniel and Florence Guggenheim Foundation**
Guggenheim, Meyer G: 421
- Daniel Boone** [book by Daugherty]
Daugherty, James Henry D: 43
- Daniel Deronda** [book by Eliot]
Eliot, George E: 237
- Daniel in the Lions' Den** [painting by Rubens]
Daniel, Book of picture on D: 34
- Daniel-Rops, Henri** [French author] D: 34
- Daniell, John F.** [British chemist]
Battery (History) B: 171
- Daniell cell** [electricity]
Battery (History) B: 171
- Daniels, Josephus** [American editor]
Roosevelt, Franklin Delano (Assistant secre-
tary of the Navy) R: 454; (Tragedy strikes)
R: 455
Wilson, Woodrow (table) W: 323
- Danish East India Company** [Danish history]
East India Company E: 40
- Danish landrace** [hog]
Hog (Other breeds) H: 286; (table) H: 286
- Danish pastry** [food]
Pastry P: 194
- Danish-Swedish War** [1657-1660]
Denmark (Wars with Sweden) D: 140
- Danish West India Company**
Virgin Islands (Commercial development)
V: 396
- Danish West Indies**
Virgin Islands (Early settlement) V: 396
- Dannay, Frederic** [American author]
Queen, Ellery Q: 39
- Dannebrog, Order of the**
Medals, decorations, and orders (table)
M: 359; (Europe) M: 358
- D'Annunzio, Gabriele** [Italian author] D: 34
Duse, Eleonora D: 390
Italian literature (Romanticism) I: 495
- Danseur**
Ballet (table) B: 45
- Dante Alighieri** [Italian author] D: 34
See also Divine Comedy in this index
Allegory A: 371
Italian literature (The Middle Ages) I: 494
Virgil (His influence) V: 392
- DANTES** [government program]
Adult education (The government) A: 69
- Danton, Georges-Jacques** [French political
leader] D: 35
French Revolution (The National Convention)
F: 526; (The revolution ends) F: 527
- D'Antonguilla, Rodolfo** [American actor] See
Valentino, Rudolph in this index
- Danton's Death** [play by Büchner]
Büchner, Georg B: 663
- Danube River** [Europe] D: 35 with map
Austria (The land and climate) A: 934
Budapest B: 666 with picture
Bulgaria (The land) B: 691 with picture
Hungary (Rivers and lakes) H: 443 with map;
picture on H: 439
River (table) R: 352
Romania (Surface features) R: 419-420
Serbia (Land and climate) S: 314
Slovakia (Land and climate) S: 508d
Yugoslavia (Rivers and lakes) Y: 578 with map
Water (The challenge of today) W: 132
- Danvers** [Massachusetts]
Salem witchcraft trials S: 61
- Danville** [Virginia]
Virginia (The Civil War and Reconstruction) V: 421
- Danzig** See Gdańsk in this index
- Dao-Ji** [Chinese artist]
Painting (Chinese painting) P: 44-46
- Daoism** [religion] See Taoism in this index
- Daoud Khan, Muhammed** [Afghan political
leader]

- Afghanistan (The mid-1900's) **A**: 96
Daphne [Greek mythology] **D**: 35
 Apollo **A**: 566
Daphne [plant]
 Poisonous plant (Some poisonous plants)
P: 602
Daphnis and Chloë [ballet by Fokine]
 Fokine, Michel *picture on* **F**: 315
Daphnis and Chloë [book by Longus]
 Greek literature (The Greco-Roman Age)
G: 378
 Novel (Ancient Greek and Roman narratives)
N: 572
 Romance **R**: 415
Dapsang See *K2 in this index*
Dapsone [drug]
 Leprosy (Treatment) **L**: 204
D'Aquino, Iva Toguri [American public figure]
 Tokyo Rose **T**: 320
DAR See Daughters of the American Revolution
in this index
Dar es Salaam [city, Tanzania] **D**: 36
 Tanzania **T**: 30 *with picture*
Dar es Salaam, University of
 Tanzania (Education) **T**: 32
Darby [tool]
 Plaster (Plastering) **P**: 552
Darby, Abraham [British engineer]
 Coal (Developments in England) **Ci**: 731-732
 Industrial Revolution (The revolution in iron-
 making) **I**: 249
Darby, Abraham, II [British engineer]
 Industrial Revolution (The revolution in iron-
 making) **I**: 249-250
Darby, William O. (American military leader)
 Rangers **R**: 139
Dardanelles [strait, Turkey] **D**: 36 *with map*
 See also Hellespont *in this index*
 World War I (The Dardanelles) **W**: 459
Dardanus [ancient city]
 Dardanelles **D**: 36
Darden, Colgate W., Jr. [American political
 leader]
 Virginia (table) **V**: 417
Dare, Virginia [American colonist] **D**: 36
 Lost Colony **L**: 472
 North Carolina (Interesting facts) **N**: 473 *with*
picture
D'Arezzo, Guittone [Italian poet]
 Italian literature (The Middle Ages) **I**: 494
Dari [language]
 Afghanistan (Ethnic groups and languages)
A: 92a
Darién Colony [Panamanian history]
 Balboa, Vasco Núñez de (Rise to fame) **B**: 37-
 38
Darién Gap [Central America]
 Pan American Highway (Route) **P**: 114 *with*
map
Darien National Park [Panama]
 National park (table) **N**: 42g
Dario, Rubén [Nicaraguan poet] **D**: 36
 Latin-American literature (Modernism) **L**: 112
 Spanish literature (Modernism) **So**: 762
Darius I [king of Persia] **D**: 37
 Bosphorus **B**: 494
 Greece, Ancient (The Persian wars) **G**: 373
 Iran (The Achaemenid Empire) **I**: 405-406
 Marathon (Causes of the battle) **M**: 191
 Persia, Ancient (The Achaemenid Empire)
P: 298-299 *with picture*
Darius III [king of Persia] **D**: 37
 Alexander the Great (Victory over Darius)
A: 343; (Invasion of Asia) **A**: 342
Darius the Great See Darius I *in this index*
Darius the Mede [Biblical figure]
 Daniel, Book of **D**: 33
Dariyah [village]
 Saudi Arabia (The Saud dynasty) **S**: 160-161
Darjiling [city, India] **D**: 37
Darjiling tea
 Darjiling **D**: 37
 Tea (Processing tea) **T**: 62
Dark Ages [European history] **D**: 37
 See also Middle Ages *in this index*
Dark and Bloody Ground
 Indian wars (Lord Dunmore's War) **I**: 192
Dark Arena, The [book by Puzo]
 Puzo, Mario **P**: 913
Dark at the Top of the Stairs, The [play by
 Inge]
 Inge, William **I**: 270
Dark comedy
 Comedy **Ci**: 867
Dark-eyed junco [bird]
 Junco **J**: 191 *with picture*
Dark-field microscope
 Microscope (Using an optical microscope)
M: 519
Dark lady [English literature]
 Shakespeare, William (The sonnets) **S**: 366
Dark mantle deposit [astronomy]
 Moon (Rilles) **M**: 790
Dark matter [astronomy] **D**: 37
 Brown dwarf **B**: 644
 Cosmology (The future of the universe)
Ci: 1078
 Matter (Dark matter) **M**: 311
 Milky Way (Size of the galaxy) **M**: 551
 Shadow matter **S**: 341
 Universe (Changing views of the universe)
U: 205-206
Dark nebula [astronomy]
 Nebula (Diffuse nebulae) **N**: 116
Dark Night's Passing, A [book by Shiga]
 Japanese literature (The modern period) **J**: 62
Dark Tower series [books by King]
 King, Stephen **K**: 323
Darkness at Noon [book by Koestler]
 Koestler, Arthur **K**: 361
Darkness at Noon [play by Kingsley]
 Kingsley, Sidney **K**: 331
Darley Arabian [horse]
 Horse racing (Thoroughbred horses) **H**: 363
Darling, Ding [American cartoonist] **D**: 38
Darling, Jay Norwood See Darling, Ding *in this*
index
Darling River [Australia]
 Australia (Rivers) **A**: 910
Darling underwing moth
 Moth *picture on* **M**: 841
Darlington, Jennie [American explorer]
 Antarctica (Exploration by air) **A**: 537-538
Darner [insect]
 Insect *picture on* **I**: 280
Darnley, Lord [husband of Mary, Queen of
 Scots]
 Bothwell, Earl of **B**: 510
 Mary, Queen of Scots (Her reign) **M**: 239
Darrieus, Georges [French inventor]
 Turbine (Wind turbines) **T**: 498 *with picture*
Darrieus wind turbine
 Turbine (Wind turbines) **T**: 498 *with picture*
D'Arriola, Don Andres [Spanish military
 leader]
 Pensacola **P**: 272
Darrow, Clarence Seward [American lawyer]
D: 38
 Bryan, William Jennings (Later years) **B**: 655
 Idaho (Early statehood) **I**: 44
 Scopes trial **S**: 209 *with picture*
 Tennessee (The early 1900's) **T**: 154-156
Darshana [religion]
 Philosophy (Oriental philosophy) **P**: 385-386
D'Arsonval, Jacques Arsène [French physiolo-
 gist]
 Electric meter (History) **E**: 177
D'Arsonval galvanometer [instrument]
 Electric meter (History) **E**: 177
Dart
 Darts **D**: 39
 Blowgun **B**: 419
 Inuit (Hunting and fishing) **I**: 354d-354e
Dart [sewing]
 Sewing (Laying out the pattern) **S**: 332; (Darts)
S: 333
Dart, Raymond A. [South African anthropolo-
 gist]
 Prehistoric people (table) **P**: 752
Dart leader [lightning]
 Lightning (How lightning develops) **L**: 300-301
Darter [bird]
 Anhinga **A**: 467
Darter [fish] **D**: 38 *with picture*
 Conservation (Water conservation) **Ci**: 977-978
 Perch **P**: 284
Dartmoor [region, England]
 England *picture on* **E**: 298
Dartmouth [city, Nova Scotia] **D**: 38
Dartmouth College **D**: 39
 Artificial intelligence **A**: 760
 Universities and colleges (The oldest U.S. uni-
 versities and colleges) **U**: 210
Dartmouth College case [U.S. history] **D**: 39
 Supreme Court of the United States (table)
So: 1002
Dartmouth College v. Woodward See
 Dartmouth College case *in this index*
Dartmouth-Lake Sunapee
 New Hampshire (Visitor's guide) **N**: 216
Darts [game] **D**: 39 *with picture*
Darwell, Jane [American actress]
 Motion picture (Best performance by an
 actress in a supporting role: 1940) **M**: 863
Darwin [city, Australia] **D**: 39
 Northern Territory **N**: 526 *with picture*
Darwin, Charles Robert [British biologist] **D**: 39
with portrait
 Anthropology (Early anthropological thought)
A: 548
 Biology (The theory of evolution) **B**: 319; *pic-
 ture on* **B**: 321
 Clothing **Ci**: 686
 Creationism (Creationist beliefs) **Ci**: 1123
 Emotion (Early theories about emotions)
E: 261
 English literature (Victorian literature) **E**: 320-
 321
 Evolution **E**: 426; (History of the theory of evo-
 lution) **E**: 432
 Galapagos Islands **G**: 8
 Galton, Sir Francis **G**: 17
 Heredity (Early ideas about heredity) **H**: 208
 Huxley, Thomas Henry **H**: 459
 Malthus, Thomas Robert **M**: 115
 National park (Other interesting national parks)
N: 42e
 Natural selection **N**: 65
 Races, Human (Evolutionary theory) **R**: 53-54
 Science (Observing nature) **S**: 194; (Scientific
 advances of the 1800's) **S**: 200 *with pic-
 ture*
 Social Darwinism **So**: 551
 Zoology (History) **Z**: 610-611
Darwin, Emma Wedgwood [wife of]
 Darwin, Charles Robert (Darwin's life) **D**: 40
Darwin, Marx, Wagner [book by Barzun]
 Barzun, Jacques **B**: 123
Darwin D. Martin House
 Buffalo (Other interesting places to visit)
B: 678
Das ...
Titles beginning Das appear under their key
words, as in Kapital, Das
Das, Tulsi [Indian poet]
 Ramayana **R**: 133
Daschle, Tom [American political leader] **D**: 41
Dash [communications]
 Telegraph (The Morse telegraph) **T**: 90
Dash [punctuation]
 Punctuation (The dash) **P**: 902
Dasheen See Taro *in this index*
Dasht-e Kavir [region]
 Iran (The Interior Plateau) **I**: 403; (Climate)
I: 404
Dasht-e Lut [region]
 Iran (The Interior Plateau) **I**: 403; (Climate)
I: 404
Dasyurid [animal]
 Mammal (table) **M**: 128 *with picture*
 Marsupial (Kinds of marsupials) **M**: 232
 Marsupial mouse **M**: 232
DAT cassette [recording medium] See Digital
 audiotape cassette *in this index*
Data [information]
 Database **D**: 41
 Spreadsheet **So**: 805
 Statistics **So**: 867
Data compression [electronics]
 Television (Digital television) **T**: 126-127
Data Encryption Standard
 Codes and ciphers (Later developments)
Ci: 751
Data processing
 Computer (Careers) **Ci**: 924a
 Office work **O**: 677
Data storage [computing]
 Computer (Storage devices) **Ci**: 915
Data transmission
 Radio (Data transmission) **R**: 85
Database [information] **D**: 41 *with picture*
 Computer (Personal computers) **Ci**: 909;
 (Database management programs)
Ci: 918; (Computer security) **Ci**: 924
 Computerized instruction (Resource programs)
Ci: 924h
 Information retrieval **I**: 268b
 Map (Database development) **M**: 180;
 (Mapmaking and modern technology)
M: 185
Database management system [software]
 Database **D**: 41

Date Line, International See International Date Line *in this index*

Time (Worldwide time zones) T: 292 *with diagrams*; map on T: 290

Date palm [tree] D: 42 *with pictures*

Food picture on F: 332

Palm (Products of palms) P: 109 *with picture*

Dateline

Newspaper (table) N: 383

Dathina [state]

South Arabia, Federation of So: 639

Dating

Adolescent (Dating and sex) A: 62 *with picture*

Etiquette (Dating etiquette) E: 373

Marriage (Dating and courtship) M: 219

Dating [archaeology]

Archaeology (Dating) A: 598

Fossil (Dating fossils) F: 427

Prehistoric people (Placing prehistoric people in time) P: 754

Radiocarbon R: 97 *with diagrams*

Radiogeology R: 98

Datis [Persian general]

Marathon (The battle) M: 191

Dative case [grammar]

Case (Cases in Latin) C: 272

Datura [botany] D: 43

Jimson weed J: 127

Daturine [drug] See Stramonine *in this index*

Dauberval, Jean [French choreographer]

Ballet (Ballet d'action) B: 51

D'Aubigné, Françoise [wife of Louis XIV]

Maintenon, Marquise de M: 93

Daudet, Alphonse [French author] D: 43

Daugava River [Latvia]

Dvina River D: 393

Latvia (Land and climate) L: 118 *with map*

Daugherty, Harry M. [American government official]

Harding, Warren Gamaliel (Entry into politics)

H: 57; (The smoke-filled room) H: 57;

(table) H: 58; (Government scandals)

H: 58

Coolidge, Calvin (Vice President) Ci: 1032;

(table) Ci: 1032

Justice, Department of (table) J: 203

Daugherty, James Henry [American author] D: 43

Daugherty, Michael [American musician]

Jazz (Recent developments) J: 74

Daughter cell [biology]

Ameba A: 406

Heredity (Sex cells and reproduction) H: 201

Daughter of the Confederacy [nickname,

Winnie Davis]

Davis, Jefferson (Davis's family) D: 47

Daughter of the Regiment, The [opera by

Donizetti]

Opera picture on O: 792

Daughters of Edward Darley Boit, The [paint-

ing by Sargent]

Sargent, John Singer picture on S: 126

Daughters of the American Revolution [orga-

nization] D: 43 *with picture*

African Americans (The Great Depression)

A: 1361

Daughters of the Confederacy, United [organi-

zation] D: 43

Daughters of the Nile [organization]

Masonry (Organization) M: 267

D'Aulaire [American authors] D: 43

D'Aulaire, Edgar Parin [American author]

D'Aulaire D: 43

Caldecott Medal (table: 1940) C: 26

Regina Medal (table: 1970) R: 206

D'Aulaire, Ingrid Mortenson [American author]

D'Aulaire D: 43

Caldecott Medal (table: 1940) C: 26

Regina Medal (table: 1970) R: 206

Daum Glass

Glass (Types of art glass) G: 220

Daumier, Honoré [French artist] D: 44 *with pic-*

ture

Bronze picture on B: 638

Caricature C: 237 *with picture*

Cartoon picture on C: 265

Painting (People) P: 31 *with picture*

Realism picture on R: 171

Dauphin [title] D: 44

Louis XVII L: 476

Dauphin Island [island, Alabama]

Alabama picture on A: 270

Dauphin River [Manitoba]

Lake Manitoba L: 40 *with map*

Dauphiné [former province, France]

Dauphin D: 44

Dausset, Jean Baptiste Gabriel Joachim

[French doctor]

Nobel Prizes (Physiology or medicine: 1980)

N: 445

Dauversière, Sieur de la See Le Royer, Jérôme

in this index

D.A.V. See Disabled American Veterans *in this*

index

Dávalos, Felipe [Mexican illustrator]

Literature for children picture on L: 355

Davenant, Sir William [English playwright]

D: 44

Davenport [Iowa] D: 44

Iowa picture on I: 375; (Exploration and early settlement) picture on I: 393

Davenport, George [English trader]

Davenport D: 44

Davenport, John [American colonial leader]

New Haven (History) N: 229

Davey, Marie Augusta [American actress]

Fiske, Minnie Maddern F: 189

Davey, Martin L. [American political leader]

Ohio (table) O: 699

David [Biblical figure] D: 45 *with pictures*

Amalekites A: 399

Bathsheba B: 165

Bible (Development of the Hebrew Bible)

B: 281-282

Chronicles, Books of C: 539

Goliath G: 267

Jerusalem (Ancient times) J: 100

Jews (The kingdom of Israel) J: 121; picture

on J: 122

Palestine (Early history and settlement) P: 104

Parable P: 141

Psalms, Book of P: 844

Solomon So: 584

David [sculpture by Donatello]

Donatello D: 307

Sculpture (Early Renaissance) S: 252 *with pic-*

ture

Renaissance (The fine arts) R: 235-236 *with*

picture

David [sculpture by Michelangelo]

David picture on D: 45

Michelangelo (Early life) M: 483

David I [king of Scotland] D: 45

David II [king of Scotland] D: 46

Scotland (The House of Stuart) S: 219

David, Francis [Hungarian religious leader]

Unitarians (History) U: 42

David, Jacques Louis [French painter] D: 46

with picture

Clothing picture on Ci: 702

French Revolution picture on F: 526

Painting (History paintings) P: 33;

(Neoclassicism) P: 66-67 *with picture*

Socrates picture on So: 568

David, Saint [Welsh religious leader] D: 46

David, Shield of

Judaism picture on J: 180

David, Star of

Star of David So: 853 *with picture*

Judaism picture on J: 180

David Balfour [book by Stevenson]

Stevenson, Robert Louis (Novels) So: 898

David Copperfield [book by Dickens]

Dickens, Charles (The second phase) D: 188

with picture

English literature (Early Victorian literature)

E: 321

David Harum [book by Westcott]

Westcott, Edward Noyes W: 230

Davidovsky, Mario [American composer]

Classical music (Electronic music) Ci: 650

Davidson, James O. [American political leader]

Wisconsin (table) W: 365

Davidson, Jo [American sculptor] D: 46

Davidson, Robert [Scottish inventor]

Electric railroad (History) E: 188

Davie, Alexander E. [Canadian political leader]

British Columbia (table) B: 627

Davie, Theodore [Canadian political leader]

British Columbia (table) B: 627

Davie, W. R. [American political leader]

North Carolina (table) N: 490

Davies, Arthur Bowen [American artist] D: 46

Ashcan School A: 768

Davies, Sir Louis Henry [Canadian jurist]

Prince Edward Island (table) P: 791

Davies, Myrick [American political leader]

Georgia (table) G: 130

Davies, Robertson [Canadian author] D: 46

Canadian literature (Modern English-Canadian fiction) C: 160 *with picture*

Davis, Benjamin Oliver [American general]

African Americans (World War II [1939-1945])

A: 1361

Davis, Benjamin Oliver, Jr. D: 47

Davis, Benjamin Oliver, Jr. [American general]

D: 47 *with portrait*

African Americans (World War II [1939-1945])

A: 1361

Tuskegee Airmen T: 524

Davis, Bette [American actress] D: 47 *with por-*

trait

Motion picture (Best performance by an

actress: 1935, 1938) M: 862

Davis, Cushman K. [American political leader]

Minnesota (table) M: 602

Davis, D. W. [American political leader]

Idaho (table) I: 42

Davis, Daniel F. [American political leader]

Maine (table) M: 87

Davis, David [American jurist] D: 47

Davis, Deane C. [American political leader]

Vermont (table) V: 333

Davis, Dwight Filley [American statesman]

Coolidge, Calvin (table) Ci: 1032

Hoover, Herbert Clark (table) H: 330

Davis Cup D: 50

Davis, Edmund J. [American political leader]

Texas (table) T: 203

Davis, Ernie [American football player]

Football (table) F: 363

Davis, Floyd [American race driver]

Automobile racing (table: Indianapolis 500 win-

ners) A: 980

Davis, Geena [American actress]

Motion picture (Best performance by an

actress in a supporting role: 1988) M: 863

Davis, George [American baseball player]

Baseball (table: Hall of Fame) B: 134

Davis, Glenn [American football player]

Football (table) F: 363

Davis, Gray [American political leader]

California (table) C: 59

Davis, Harry L. [American political leader]

Ohio (table) O: 699

Davis, Henry Gassaway [American political

leader] D: 47

Davis, Jacob [American businessman]

Strauss, Levi So: 922

Davis, James J. [American government official]

Coolidge, Calvin (Cabinet) Ci: 1032

Hoover, Herbert Clark (table) H: 330

Labor, Department of (table) L: 2

Davis, Jeff [American political leader]

Arkansas (table) A: 712

Davis, Jefferson [Confederate political leader]

D: 47 *with portrait*

Alabama (Places to visit) A: 266 *with picture*

Civil War (Secession) Ci: 617; (Government

and politics) Ci: 623; picture on Ci: 618

Confederate States of America (Government)

Ci: 931

Mississippi (The Civil War and Reconstruction)

M: 642

Seddon, James Alexander S: 279

Davis, Jehu [American political leader]

Delaware (table) D: 109

Davis, Jimmie H. [American political leader]

Louisiana (table) L: 496

Davis, John [American hunter]

- Jazz (Cool jazz) **J**: 72 *with picture*; (Fusion) **J**: 73 *with picture*
- Davis, Nancy** [wife of Ronald Reagan] See Reagan, Nancy Davis *in this index*
- Davis, Paulina Wright** [American social reformer] **D**: 49 *with portrait*
- Davis, Richard Harding** [American journalist] **D**: 49
- War correspondent **W**: 27
- Davis, Robert A.** [Canadian political leader] Manitoba (table) **M**: 159
- Davis, Sammy, Jr.** [American entertainer] Spingarn Medal (table: 1968) **So**: 793
- Davis, Samuel** [Confederate spy] **D**: 50
- Davis, Stuart** [American painter] **D**: 50
- Davis, Thomas** [Irish poet]
- Irish literature (Prose and poetry) **I**: 431
- Davis, Varina Howell** [wife of]
- Davis, Jefferson (Davis's family) **D**: 47
- Davis, Westmoreland** [American political leader]
- Virginia (table) **V**: 417
- Davis, William** [Canadian political leader] Ontario (table) **O**: 783
- Davis, Winnie** [daughter of]
- Davis, Jefferson (Davis's family) **D**: 47
- Davis Cup** **D**: 50
- Tennis (Tennis tournaments) **T**: 165; (The spread of tennis) **T**: 165; (Tennis today) **T**: 168
- Davis lock**
- Soo Canals (The American canals) **So**: 595 *with map*
- Davis Mountain** [Texas]
- Texas (Mountains) **T**: 198
- Davis Strait**
- Davis, John **D**: 48
- Exploration (The search for a northern passage) **E**: 446
- Northwest Passage **N**: 528
- Davison, Sir William** [English government official]
- Brewster, William **B**: 596
- Davission, Clinton** [American physicist]
- Nobel Prizes (Physics: 1937) **N**: 440
- Davy, Edmund** [English chemist]
- Acetylene **A**: 25
- Davy, Sir Humphry** [British chemist] **D**: 51
- Aluminum (History) **A**: 397
- Chlorine **C**: 516
- Electric arc **E**: 165
- Heat (The caloric theory of heat) **H**: 154
- Davy Jones** [legendary figure] See Jones, Davy *in this index*
- Davy Jones's locker**
- Jones, Davy **J**: 158
- Davy lamp**
- Davy, Sir Humphry **D**: 51
- Davys, John** [English explorer]
- Davis, John **D**: 48
- Dawes, Charles Gates** [American political leader] **D**: 51
- Coolidge, Calvin ("Keep Cool with Coolidge") **Ci**: 1033
- Dawes Plan **D**: 51
- Vice President of the United States (table)
- V**: 351; (Growth of the vice presidency) **V**: 353; **V**: 349 *with portrait*
- Dawes, James W.** [American political leader]
- Nebraska (table) **N**: 110
- Dawes, William** [American revolutionary leader] **D**: 51
- Prescott, Samuel **P**: 756a
- Revere, Paul (Paul Revere's ride) **R**: 267
- Revolutionary War in America (Lexington and Concord) **R**: 274
- Dawes Act** [1887]
- Indian, American (In the United States) **I**: 178a-178b
- Indian Affairs, Bureau of **I**: 184
- Indian Territory **I**: 190
- Dawes Commission** [U.S. history]
- Oklahoma (Progress toward statehood) **O**: 732
- Dawes Plan** [German history] **D**: 51
- Coolidge, Calvin (Foreign affairs) **Ci**: 1033
- Ruhr (History) **R**: 518
- Dawkins, Pete** [American football player]
- Football (table) **F**: 363
- Dawn** [book by Wiesel]
- Wiesel, Elie **W**: 299
- Dawn** [sculpture by Michelangelo]
- Michelangelo **M**: 486 *with picture*
- Dawn at the Alamo** [painting by McArdle]
- Alamo picture on **A**: 281
- Dawn Patrol, The** [film]
- Hawks, Howard **H**: 113
- Dawn redwood** [tree]
- Sequoia (The dawn redwood) **S**: 311
- Dawson** [Yukon Territory]
- Klondike **K**: 344 *with picture*
- Yukon Territory (History) **Y**: 585
- Dawson, George Mercer** [Canadian geologist] **D**: 51
- Dawson, Joe** [American race driver]
- Automobile racing (table: Indianapolis 500 winners) **A**: 980
- Dawson, Sir John William** [Canadian geologist] **D**: 51
- Dawson, William M. O.** [American political leader]
- West Virginia (table) **W**: 225
- Dawson City Buildings** [Yukon Territory]
- Canada (table: National historic sites) **C**: 114
- Day** **D**: 51
- Earth (How Earth moves) **E**: 17 *with diagram*
- Sidereal time **S**: 449
- Time (Measuring time by the sun) **T**: 288
- Day** [sculpture by Michelangelo]
- Sculpture (Michelangelo) **S**: 252-253
- Day, Benjamin** [American educator]
- Morse, Samuel Finley Breese (Early years) **M**: 817
- Day, Benjamin Henry** [American publisher] **D**: 52
- Journalism (The growth of U.S. newspapers) **J**: 174
- Day, Clarence** [American author] **D**: 52
- Day, Dorothy** [American social reformer] **D**: 52
- Day, J. Edward** [American government official]
- Kennedy, John Fitzgerald (table) **K**: 266
- Day, Leon** [American baseball player]
- Baseball (table: Hall of Fame) **B**: 134
- Day, Stephen** See Daye, Stephen *in this index*
- Day, Stockwell** [Canadian political leader] **D**: 52
- Day, The** [poem by Parini]
- Italian literature (The baroque period and the Age of Reason) **I**: 494-495
- Day, William R.** [American jurist]
- McKinley, William (table) **M**: 342
- State, Department of (table) **So**: 860
- Supreme Court of the United States (table)
- So**: 1000
- Day after Day** [poems by Quasimodo]
- Quasimodo, Salvatore **Q**: 9
- "Day and Night"** [poem by Livesay]
- Canadian literature (Literature between the world wars) **C**: 159-160
- Day by Day** [book by Lowell]
- Lowell, Robert **L**: 511
- Day care** **D**: 52
- Education (The organization of U.S. education) **E**: 89
- Nursery school **N**: 615
- School (Nursery schools) **S**: 181
- Women's movements (In Western societies)
- W**: 386-387 *with picture*
- Day-care center**
- Day care (Types of day care for children) **D**: 52
- Day-Lewis, Cecil** [Irish-born poet] **D**: 53
- English literature (Poetry between the wars) **E**: 322
- Day-Lewis, Daniel** [Irish actor]
- Motion picture (Best performance by an actor: 1989) **M**: 862-863
- Day lily** [plant] **D**: 53 *with picture*
- Flower (Garden perennials) **F**: 278 *with picture*
- Day marker**
- Lighthouse (Identifying lighthouses) **L**: 294 *with picture*
- Day-neutral plant**
- Plant (Factors affecting plant growth) **P**: 538-539
- Day of Atonement** See Yom Kippur *in this index*
- Day of Doom, The** [poem by Wigglesworth]
- American literature (New England) **A**: 414
- Wigglesworth, Michael **W**: 300
- Day of Rejoicing** [U.S. history]
- Holiday (In the United States) **H**: 290
- Day of the Dead** [holiday] See Día de los muertos *in this index*
- Day of the Locust, The** [book by West]
- West, Nathanael **W**: 198
- Day tank** [furnace]
- Glass (Melting) **G**: 215
- Day with the Cow Column in 1843, A** [journal by Applegate]
- Pioneer life in America (Life on the trail) **P**: 486-487
- Dayaks** [people] **D**: 53
- Borneo (The people and their work) **B**: 490; picture on **B**: 489
- Indonesia (Rural life) **I**: 229
- Dayan, Moshe** [Israeli general] **D**: 53
- Daydream**
- Imagination **I**: 79
- Sleep (What happens without sleep) **S**: 507
- Daye, Matthew** [American printer]
- Daye, Stephen **D**: 54
- Daye, Stephen** [American printer] **D**: 54
- Book (The 1600's and 1700's) **B**: 467
- Massachusetts (Communication) **M**: 287
- Printing (Early printing in North America) **P**: 803
- Dayfly** See Mayfly *in this index*
- Daylight**
- Day **D**: 51
- Daylight saving time** **D**: 54
- Franklin, Benjamin (Other studies) **F**: 489
- Standard time (Time zones) **So**: 835
- Dayne, Ron** [American football player]
- Football (table) **F**: 363
- "Days"** [poem by Emerson]
- Emerson, Ralph Waldo (His poetry) **E**: 259
- Dayton** [Ohio] **D**: 54
- Bosnia-Herzegovina (History) **B**: 492-493
- Dayton** [Tennessee]
- Tennessee (The early 1900's) **T**: 154-156
- Dayton, Jonathan** [American political leader] **D**: 54
- Dayton **D**: 54
- Dayton, William Lewis** [American political leader] **D**: 55
- Dayton Aviation Heritage National Historical Park** [Ohio]
- National Park System (table: National historical parks) **N**: 56-57
- Dayton Wright Aeroplane Company**
- Aviation (World War I [1914-1918]) **A**: 987; (Aviation progress) **A**: 988-989
- Daytona Beach** [Florida] **D**: 55
- Automobile racing picture on **A**: 975
- Dazzle paint**
- Camouflage **C**: 87
- DBS** [electronics] See Direct-broadcast satellite *in this index*
- D.C.** See District of Columbia *in this index*
- DC** See Direct current *in this index*
- DC-3** [airplane]
- Airplane (Engineering improvements) **A**: 237; picture on **A**: 234
- Aviation (The industry comes of age) **A**: 989
- DC-10** [airplane]
- Airplane (Commercial transport planes) **A**: 210 *with picture*
- DCC** [recording medium] See Digital compact cassette *in this index*
- DCC recorder** [machine] See Digital compact cassette recorder *in this index*
- DDT** [insecticide] **D**: 55
- Agriculture (Insecticides) **A**: 159
- Conservation (Renewed interest in conservation) **Ci**: 986
- Environmental pollution (Government action) **E**: 335-336
- Insecticide (Organic insecticides) **I**: 302; (Dangers of insecticides) **I**: 303
- De ...**
- Titles beginning with the Latin word De appear below. Personal names beginning De are alphabetized as single words: De Angeli, Marguerite Lofft appears after Dean.*
- De Amicitia** [book by Cicero]
- Cicero, Marcus Tullius (His works) **Ci**: 552
- De facto segregation**
- Segregation (De facto segregation) **S**: 286
- African Americans (Economic and social progress) **A**: 136n
- De Finibus** [book by Cicero]
- Cicero, Marcus Tullius (His works) **Ci**: 552
- De jure segregation**
- Segregation (Jim Crow laws) **S**: 285
- De Legibus** [book by Cicero]
- Cicero, Marcus Tullius (His works) **Ci**: 552
- De Natura Deorum** [book by Cicero]
- Cicero, Marcus Tullius (His works) **Ci**: 552
- De Officiis**
- Cicero, Marcus Tullius (His works) **Ci**: 552
- De Oratore** [book by Cicero]
- Cicero Marcus Tullius (His works) **Ci**: 552
- Oratory (Classical orators) **O**: 819

De-orbit

Space exploration (Returning to the earth)
So: 701

De Profundis [book by Wilde]

Wilde, Oscar W: 302

De re Metallica [book by Agricola]

Geology (The Renaissance) G: 98

De Republica [book by Cicero]

Cicero, Marcus Tullius (His works) Ci: 552

De rerum natura See *On the Nature of Things*
in this index

De Stijl [art] See *Stijl*, *De in this index*

De Vulgari Eloquentia [essay by Dante]

Dante Alighieri (His works) D: 34-35

DEA See Drug Enforcement Administration
in this index

Deacon [religious title] D: 55

Eastern Orthodox Churches (Clergy) E: 46

Deaconess [religious title]

Deacon D: 55

Dead-air space [construction]

House (Insulation) H: 382-383

Dead End [play by Kingsley]

Kingsley, Sidney K: 331

Dead language

Language (How language changes) L: 64

Dead-leaf mantis [insect]

Animal picture on A: 495

Dead lift [weightlifting]

Weightlifting W: 183

Dead-line [sports]

Football (Canadian football) F: 364-365

Dead of the Desert, The [book by Bialik]

Bialik, Chaim Nachman B: 278

Dead reckoning [navigation]

Airplane (Dead reckoning) A: 226

Columbus, Christopher (Sailing west) Ci: 860

Navigation (Dead reckoning) N: 70

Dead Sea [lake, Israel-Jordan] D: 55 with map

Asia picture on A: 793

Israel (The Rift Valley) I: 482

Jordan River J: 167

West Bank (Land and climate) W: 199 with
picture

Dead Sea Scrolls [manuscripts] D: 56

Bible picture on B: 282

Library (Ancient libraries of animal skins)

L: 259

Old Testament (Development) O: 741

Dead Sea Works [company]

Dead Sea D: 56

Dead Souls [book by Gogol]

Russian literature (Late romanticism) R: 561-

562

Gogol, Nikolai G: 248

Dead wool

Wool (Types of wool) W: 399

Deadbolt

Lock (Types of locks) L: 410-411 with picture

Deadhead

Grateful Dead G: 330

Deadly nightshade [plant] See *Belladonna*

[plant] in this index

Deadweight tonnage

Ship (Nautical measurements) S: 416

Deadwood [South Dakota]

Calamity Jane C: 20

South Dakota (Places to visit) So: 672 with
picture; (Territorial days) So: 681; picture
on So: 683

Deadwood Dick [frontier figure]

Love, Nat L: 508 with picture

Deaf, National Association of the See National
Association of the Deaf in this index

Deafness D: 56 with pictures

Closed captioning Ci: 685

Disabled D: 218 with picture

Dog guide D: 282 with picture

Lip reading L: 344

Speech therapy (Types and causes of speech
defects) So: 773

Deák, Francis [Hungarian political leader]

Hungary (Austria-Hungary) H: 446

Deakin, Alfred [Australian political leader]

Australia (table) A: 925

Dealey Plaza

Dallas (Landmarks) D: 11

Dean

Universities and colleges (Administration)
U: 208

Dean, Daffy [American baseball player]

Dean, Dizzy D: 60

Dean, Dizzy [American baseball player] D: 60

Baseball (table: Hall of Fame) B: 134

Dean, Howard [American political leader]

Vermont (table) V: 333

Dean, James [American actor] D: 60 with por-
trait

Dean, Jay Hanna See *Dean, Dizzy in this index*

Dean, John W., III [American government offi-
cial]

United States, History of the picture on U: 194

Watergate (The break-in and cover-up) W: 144

Dean, Paul [American baseball player]

Dean, Dizzy D: 60

Deane, Norman [pen name]

Creasey, John Ci: 1123

Deane, Silas [American diplomat] D: 60

Paine, Thomas (American revolutionary) P: 22

De Angeli, Marguerite Lofft [American author]
D: 60

Regina Medal (table: 1968) R: 206

Dean's December, The [book by Bellow]

Bellow, Saul B: 244

Dear Abby [newspaper column]

Van Buren, Abigail V: 269

Daar Judas [book by Jeffers]

Jeffers, Robinson J: 75

Dearborn [city, Michigan] D: 60

Ford, Henry (Political and charitable activities)

F: 380

Dearborn, Emma B. [American educator]

Speedwriting So: 775

Dearborn, Henry [American military leader]

D: 61

Dearborn Street plazas

Chicago (Places to visit) C: 430-431

Death D: 61

See also Burial; Funeral customs in this index

Día de los muertos D: 178

Living will L: 398

Medical examiner M: 361

Mythology (What myths are about) M: 974

Palliative care P: 108

Reincarnation R: 208

Safety S: 9

Spiritualism So: 796

Suicide So: 964

Transplant (Sources of donor organs) T: 380

War (Loss of life) W: 25

Death [Greek mythology]

Sisyphus S: 477

Death adder [snake]

Adder A: 47

"Death be not proud" [poem by Donne]

Donne, John (His poetry) D: 308

Death benefit

Insurance (Life insurance) I: 309

Death camas [plant]

Poisonous plant (Some poisonous plants)

P: 602

Death camp [European history] See

Concentration camp in this index

Death cap [fungus]

Mushroom picture on M: 944

Death certificate

Vital statistics (Collecting and publishing vital
statistics) V: 429

Death chamber [punishment]

Electrocution E: 200

Death Comes for the Archbishop [book by

Cather]

Cather, Willa C: 302

Death in the Afternoon [book by Hemingway]

Hemingway, Ernest (Rise to fame) H: 180

Death in Venice [book by Mann]

Mann, Thomas M: 164

Death Kit [book by Sontag]

Sontag, Susan So: 594

Death mask

Mask (Burial masks and death masks) M: 265
with picture

Tutankhamen picture on T: 526

Death of a Salesman [play by Miller]

Miller, Arthur M: 553

American literature (Drama) A: 425

Drama picture on D: 324

United States picture on U: 119

Death of Artemio Cruz, The [book by Fuentes]

Fuentes, Carlos F: 553

Latin-American literature (Recent develop-
ments) L: 113

Death of Cook [painting by Webber]

Cook, James picture on Ci: 1025

Death of General Wolfe, The [painting by

West]

West, Benjamin W: 198

Wolfe, James picture on W: 377

"Death of God" [theology]

Nietzsche, Friedrich (Nietzsche and religion)
N: 406

"Death of Ivan Ilyich, The" [story by L. Tolstoy]

Tolstoy, Leo (Later works) T: 323

Death of Marat, The [painting by David]

French Revolution picture on F: 526

Death of Oenone and Other Poems, The [book
by Tennyson]

Tennyson, Lord (His life) T: 169

Death of Socrates, The [painting by David]

Socrates picture on So: 568

Death of the Heart, The [book by Bowen]

Bowen, Elizabeth B: 519

Death of the Virgin [painting by Van der Goes]

Van der Goes, Hugo picture on V: 280

Death on the Installment Plan [book by Céline]

Céline, Louis-Ferdinand C: 325

Death penalty See Capital punishment in this
index

Death rate [statistics]

Birth and death rates B: 377

Disease (Death rates from diseases in the

United States) D: 233 with diagram

Infant mortality I: 264

Life expectancy L: 280

Death Valley [region, California] D: 62 with pic-
ture and map

California (The Basin and Range Region) C: 50;

(Climate) C: 52

North America picture on N: 464

Rain (Some rainfall records) R: 124 with map

Sea level S: 262

United States (The Western Plateaus, Basins,
and Ranges) U: 125; (Climate) U: 126
with picture

Death Valley National Park [California-Nevada]

D: 63

Death Valley D: 62

National Park System (Areas preserved for
natural features) N: 43; (table: National
parks) N: 48

Death's-head moth [insect] D: 63

Deathwatch [insect] D: 63

De Baca, Ezequiel C. [American political leader]

New Mexico (table) N: 272

DeBakey, Michael Ellis [American doctor] D: 63

Heart (Development of heart surgery) H: 144-
145

Debate [speech] D: 63

Parliamentary procedure (Motions) P: 176

De Beers Consolidated Mines [South Africa]

Rhodes, Cecil John (Gains Rhodesia) R: 317

Debenture [security]

Bond (Kinds of bonds) B: 454

Debiene, André [French scientist]

Actinium A: 30

Debit

Bookkeeping (Double-entry bookkeeping)
B: 472

Debit card [banking]

Bank (Providing a means of payment) B: 89

Credit card Ci: 1125

E-commerce (Business-to-consumer transac-
tions) E: 2

Secret Service, United States S: 278

Deborah [Biblical figure] D: 65

Debouillet sheep

Sheep (Fine-wooled sheep) S: 381-382

De Brazza's guenon [animal]

Monkey picture on M: 728

Debrecen [city, Hungary] D: 65

Debreu, Gerard [American economist]

Nobel Prizes (Economics: 1983) N: 449

De Broglie, Louis Victor [French physicist]

D: 65

Born, Max B: 489

Physics (Quantum theory) P: 441

Quantum mechanics (Wave-particle duality)
Q: 6

Schrödinger, Erwin S: 187

Debs, Eugene Victor [American labor leader]

D: 65

Darrow, Clarence Seward D: 38

Labor movement (Opposition to unions) L: 10-
11

Pullman Strike P: 897

Socialism (Moderate socialism) So: 561 with
picture

Debt D: 65

See also Loan in this index

Bankruptcy B: 97

City government (Budget problems) Ci: 597

- Guaranty G: 411
I.O.U. I: 373
Moratorium M: 800
Debt, National See National debt *in this index*
Debt to asset ratio [economics]
Farm and farming (Financing farm operations) F: 42
Debtor
Collection agency Ci: 774
Debt D: 65
Debtors' prison
Prison (Early prisons) P: 807
Debugging
Computer (Programming a computer) Ci: 923
Debunking biography [literature]
Biography (Modern biography) B: 314
Debussy, Claude [French composer] D: 66
Classical music (The 1900's) Ci: 649
Impressionism (Music, literature, and sculpture) I: 95
Deby, Idriss [Chadian political leader]
Chad (History) C: 368
Debye, Peter Joseph William [Dutch chemist] D: 66
Nobel Prizes (Chemistry: 1936) N: 442
Decade for Women [U.N.]
Women's movements (In developing nations) W: 387
Decadents [literature]
Symbolism So: 1066
Dcaffeinated coffee
Coffee (Kinds of coffee) Ci: 754-755
Dcaffeinated tea
Tea (Tea and health) T: 63
Decal [decoration] D: 66
Decalcomania [decoration]
Decal D: 66
Decalogue See Ten Commandments *in this index*
Decameron [book by Boccaccio]
Boccaccio, Giovanni B: 433
Italian literature (Humanism and the Renaissance) I: 494
Renaissance (Humanism) R: 233-234
Short story S: 434
Decarchy [political science]
Lysander L: 538
Decathlon [sports] D: 66
Track and field (The decathlon, heptathlon, and pentathlon) T: 356; (World track and field records) T: 358-359
Decatur [city, Illinois] D: 67
Jackson, Jesse Louis J: 15
Decatur, Stephen [American military leader] D: 67 *with portrait*
Decatur Staleys [football team]
Halas, George Stanley H: 17
Decay [chemistry] D: 67
Decomposition D: 80
Soil (Plant and animal matter) So: 573
Decay, Tooth See Tooth decay *in this index*
Decay series [radioactivity]
Isotope (Radioactive isotopes) I: 476
Deccan [region]
India (The land) I: 121-122 *with picture and map*
Deceiver of Seville, The [play by Tirso de Molina]
Spanish literature (The 1600's) So: 759-760
Decelean War [413-404 B.C.]
Peloponnesian War P: 232
Deceleration [physics]
Motion (Acceleration) M: 844
Space exploration (Returning to the earth) So: 701
December [month] D: 68 *with pictures*
Calendar (The Romans) C: 30
December Rebellion [1837]
Rebellions of 1837 (In Upper Canada) R: 174
Decembrists [Russian history]
Nicholas I N: 402
Russia (Alexander I) R: 550
Decemvirs [ancient Rome]
Twelve Tables, Laws of the T: 531
Decentralization
Local government (Conflicts in authority) L: 408
Deceptive advertising
Advertising (Advertising associations) A: 77
De Charnisay, D'Auinay [French settler]
New Brunswick (French rivals) N: 196
Deci [prefix]
Metric system (Metric prefixes) M: 439;
(Selection of SI prefixes) M: 440
Decibel [unit of measure] D: 70
Acoustics (Environmental acoustics) A: 29
Ear (The sense of hearing) E: 9
Sound (table) So: 599; (Intensity and loudness) So: 600-601
Deciduous-evergreen forest
Forest (Forest succession) F: 397 *with picture*
Deciduous teeth
Teeth (Deciduous teeth) T: 79 *with picture; picture on* T: 80
Deciduous tree [botany] D: 70
Forest (Temperate deciduous forests) F: 393
Leaf (A leaf begins its life) L: 152
Lumber (Hardwood lumber) L: 517
Plant (Temperate deciduous forests) P: 523; *picture on* P: 526
Tree (Broadleaf trees) T: 414
Wood (Kinds of wood) W: 389-390
Decimal fraction [mathematics]
Division (Division of decimal fractions) D: 250
Fraction (In symbols) F: 445-446
Decimal money system
Penny P: 271
Decimal numeral system See Decimal system *in this index*
Decimal point
Decimal system (Decimals less than one) D: 71 *with diagrams*
Decimal system [mathematics] D: 70
Arabic numerals A: 584
Arithmetic A: 665; (Written arithmetic methods) A: 669
Division (Division of decimal fractions) D: 250
Mathematics (Early civilization) M: 303
Metric system (Advantages of the metric system) M: 436
Numeration systems (The decimal system) N: 605 *with picture*; (Decimal addition) N: 606
Percentage P: 280
Weights and measures (Comparison of measurement systems) W: 185
Zero Z: 594
Decimus Junius Juvenalis [Roman poet] See Juvenal *in this index*
Deciphering See Decrypting *in this index*
Decision [sports]
Boxing (Scoring a fight) B: 528-529
Wrestling (High school and intercollegiate wrestling) W: 505
Decision in Germany [book by Clay]
Clay, Lucius Dubignon Ci: 659
Decision making
Automation (Uses of automation) A: 944
Ethics (Ethical issues) E: 366
Existentialism (What is existentialism?) E: 436-437
Game theory G: 22
Management information systems M: 132
Simon, Herbert Alexander S: 466
Decius [Roman emperor]
Rome, Ancient (table) R: 447
Deck [ship]
Aircraft carrier A: 206 *with pictures*
Ship (The chief parts of a ship) S: 424
Deck officer
Ship (Officers and crew) S: 423
Deckhouse
Tanker T: 28
Declaration [law]
Customs Ci: 1201
Declaration by United Nations [1942]
United Nations (The Atlantic Charter) U: 94
Declaration of Human Rights See Human Rights, Universal Declaration of *in this index*
Declaration of Independence, The [painting by Trumbull]
Painting (History paintings) P: 33
Declaration of Independence [U.S. history] D: 73 *with pictures*
American literature (The revolutionary period [1765-1787]) A: 415
Democracy (American democracy) D: 123
Hancock, John H: 38
Independence Day I: 107
Jefferson, Thomas (The Declaration of Independence) J: 79 *with picture*
Law (Beginnings of U.S. law) L: 136
Mason, George M: 265
National Archives N: 28
Pennsylvania *picture on* P: 266
Revolutionary War in America (The Declaration of Independence) R: 276 *with picture*
United States, History of the (The Declaration of Independence) U: 158
World, History of the (The rise of democracy and nationalism) W: 443
Declaration of London [1909]
Blockade B: 406
Declaration of Paris [1856]
Blockade B: 406
Declaration of Rights [1774]
Continental Congress (The First Continental Congress) Ci: 1021
Declaration of Rights [1776]
Mason, George M: 265
Virginia (Independence and statehood) V: 420
Declaration of Sentiments [1848]
Mott, Lucretia Coffin M: 880
Stanton, Elizabeth Cady So: 839
Woman suffrage (Beginnings of the movement) W: 380
Women's movements (The beginnings of women's movements) W: 385
"Declaration of the Causes and Necessity of Taking up Arms" [U.S. history]
Jefferson, Thomas (The Declaration of Independence) J: 79
Declaration of the Rights of Man See Rights of Man, Declaration of the *in this index*
Declaration on Religious Liberty
Vatican Council II (The work of the council) V: 289-290
Declaration on the Granting of Independence to Colonial Countries and Peoples [UN]
United Nations (Working for self-government) U: 93
Declaration on the Relation of the Church to Non-Christian Religions
Vatican Council II (The work of the council) V: 289-290
Declarative sentence
Sentence (Sentence classifications) S: 303
Declaratory Act [1720]
Grattan, Henry G: 330
Declaratory Act [1766]
Revolutionary War in America (The Quartering and Stamp acts) R: 272
Declawing
Cat (Training) C: 294
Declension [grammar] D: 79
Inflection I: 268a
Declination [astronomy]
Astronomy *diagrams on* A: 842; (Locating objects in space) A: 837-838
Declination [navigation]
Compass (Variation) Ci: 902b
Decline and Fall of the Roman Empire See History of the Decline and Fall of the Roman Empire *in this index*
Decline of the West, The [book by Spengler]
Civilization (Why civilizations rise and fall) Ci: 636
Spengler, Oswald So: 778
Decoder [electronics]
Television (Amplifiers and separators) T: 124 *with diagram*
Decoder Circuitry Act [1990]
Closed captioning Ci: 685
Decoding [cryptology] See Decrypting *in this index*
Decomposition [chemistry] D: 80 *with diagram*
Bacteria (Helpful bacteria) B: 19
Decay D: 67
Ecology (Energy flow) E: 54
Forest (The cycling of chemicals) F: 396
Fungi (The importance of fungi) F: 559
Soil (Plant and animal matter) So: 573
Waste disposal (Land disposal) W: 113
Decompression sickness See Bends *in this index*
Decompression table
Diving, Underwater (Dangers of underwater diving) D: 246-247
Deconditioning [disorder]
Space exploration (Microgravity) So: 701-702
Deconstruction [philosophy]
Criticism (History of literary criticism) Ci: 1146-1147
Derrida, Jacques D: 153
Decorated initial [art]
Illuminated manuscript I: 78
Decoration, Interior See Interior design *in this index*
Decoration Day See Memorial Day *in this index*
Decorations See Medals, decorations, and orders *in this index*
Decorative arts D: 80 *with picture*

Antique A: 557 *with pictures*
 Colonial life in America (Decorative arts)
 Ci: 807 *with pictures*
 Fine arts F: 104
 Glass (How glass is decorated) G: 217 *with pictures*
 Illuminated manuscript I: 78
 Painting (Decoration) P: 34
 Porcelain (Decorating porcelain) P: 676
 Wallpaper W: 18
See also the list of Related Articles in the Decorative arts article

Decorticating [process]
 Sisal S: 476

Decorum, Doctrine of
 Drama (The French theater) D: 333

De Cosmos, Amor [Canadian political leader]
 British Columbia (table) B: 627

De Coster, Charles [Belgian author]
 Belgium (The arts) B: 230

Decoupage [art] D: 81 *with picture*

Decoy
 Hunting (Kinds of hunting) H: 450

Decreasing term insurance
 Insurance (Main kinds of life insurance) I: 309

Decrescendo
 Music (table) M: 954

Decriminalization [law]
 Drug abuse (The legalization debate) D: 365

Decryption
 Codes and ciphers Ci: 749

Decubitus ulcer
 Bedsore B: 199
 Ulcer U: 15

Dedalic style
 Sculpture (Archaic sculpture) S: 245

Dedalus, Stephen [literary figure]
 Joyce, James J: 176

Dedicated computer
 Computer (Dedicated computers) Ci: 910

Dedicated server [computer]
 Computer (Local area networks [LAN's])
 Ci: 922

Dedicated service [telephone]
 Telephone (Business services) T: 98

Dedicated word processor [machine]
 Word processing (History) W: 404

Deductible
 Insurance (Basic types of health insurance)
 I: 312

Deduction
 Flat tax F: 228
 Income tax (Figuring the individual income tax)
 I: 104

Deductive method [logic] D: 81
 Geometry (Geometry as a logical system)
 G: 101; (Greek geometry) G: 105
 Logic L: 425
 Philosophy (Logic) P: 384; (Modern philosophy) P: 387-388
 Science (Mathematics and logic) S: 192-193

Deductive phonics *See* Synthetic phonics *in this index*

De Durão, José de Santa Rita [Brazilian poet]
 Latin-American literature (Colonial literature)
 L: 111-112

De Duve, Christian Rene [Belgian physiologist]
 Nobel Prizes (Physiology or medicine: 1974)
 N: 445

Deed [law] D: 81

Deenie [book by Blume]
 Blume, Judy B: 425

Deep [oceanography] D: 81

Deep battle theory
 Nuclear weapon (The Soviet Union) N: 600

Deep Blue [computer]
 Kasparov, Garry K: 248

Deep brain stimulation system [medicine]
 Parkinson disease (Other treatments) P: 171

Deep Creek Lake
 Maryland (Rivers and lakes) M: 252

Deep-fat frying
 Cooking (Frying) Ci: 1028

Deep Ocean Engineering [company]
 Earle, Sylvia Alice E: 14

Deep see [habitat] D: 82 *with pictures*
 Ocean (The benthos) O: 655 *with picture*; (The land at the bottom of the sea) O: 659 *with map*

Deep-sea angler [fish]
 Animal picture on A: 487
 Fish picture on F: 156

Deep-sea diving *See* Diving, Underwater *in this index*

Deep Sea Drilling Project
 Ocean Drilling Program O: 667

Deep sea vent [oceanography] *See* Hot vent *in this index*

Deep Space 1 [space probe]
 Comet (Composition) Ci: 868
 Space exploration (Probes to asteroids)
 So: 711

Deep waters [oceanography]
 Atlantic Ocean (The ocean depths) A: 864

Deepwater Port Act [1974]
 Tanker (Kinds of tankers) T: 28

Deer [animal] D: 82d *with pictures*
 Animal pictures on A: 479, A: 481, A: 483, A: 495
 Zoo picture on Z: 604

Deer, Ada E. [American government official]
 Indian, American (Political gains) I: 182

Deer fly [insect] D: 86 *with picture*
 Fly (table) F: 310
 Insect picture on I: 282

Deer Hunter, The [film]
 Motion picture (Best picture: 1978) M: 861

Deer mouse [animal]
 Hantavirus H: 54
 Mouse (Deer mice) M: 902

Deer Park, The [book by Mailer]
 Mailer, Norman M: 67

Deer tick [animal] D: 86 *with picture*

Deere, John [American inventor] D: 87
 Agriculture (The invention of new farm equipment) A: 157-158
 Plow (The sulky plow) P: 575

Deere and Company
 Deere, John D: 87

Deerskin [leather]
 Buckskin B: 664

Deerslayer, The [book by Cooper]
 Cooper, James Fenimore Ci: 1034

De Falla, Manuel *See* Falla, Manuel *de in this index*

Defamation [law]
 Libel L: 226

Defassa waterbuck
 Antelope (Kinds of antelope) A: 542-543

Default [economics]
 City government (Budget problems) Ci: 597

Defecation [physiology]
 Alimentary canal A: 368

Defence of Poesie, The [essay by Sidney]
 Sidney, Sir Philip S: 449

Defence of Poetry, A [essay by Shelley]
 Shelley, Percy Bysshe (His writings) S: 391

Defendant [law]
 Court (How civil courts work) Ci: 1102
 Criminal justice system (The courts) Ci: 1143
 Trial (The criminal defendant's rights) T: 437

Defender [sports]
 Soccer (The defenders) So: 545 *with diagram*

Defender, Chicago [newspaper]
 Abbott, Robert Sengstacke A: 6

Defenestration of Prague [European history]
 Thirty Years' War (The Bohemian period)
 T: 260

Defense, Civil *See* Civil defense *in this index*

Defense, Department of [U.S.] D: 87 *with picture*
 Civil service (Federal civil service) Ci: 612
 Gulf War syndrome G: 438
 Hoover Commission H: 332
 Internet (Early development) I: 350e
 Navy, Department of the N: 81
 Pentagon Building P: 274
 Rand Corporation R: 136

Défense, La [Paris]
 Paris (Renewal and new construction) P: 166-167 *with picture*

Defense, Secretary of [U.S.]
 Defense, Department of (Organization) D: 87
 Flag picture on F: 211

Defense Activity for Non-Traditional Education Support
 Adult education (The government) A: 69

Defense and Glorification of the French Language [book by Bellay]
 French literature (The Renaissance) F: 519-520

Defense attorney
 Trial T: 437

Defense Intelligence Agency [U.S.]
 Central Intelligence Agency C: 357

Defense Language Institute
 Monterey M: 764

Defense mechanism [psychology]
 Freud, Sigmund (On behavior) F: 530

Psychotherapy (Analytic psychotherapy) P: 852

Defensesman [sports]
 Hockey (The starting lineup) H: 275

Defensive back
 Football (The defensive team) F: 357-358 *with diagrams*

Defensive driving
 Automobile (Defensive driving) A: 962

Deferent [astronomy]
 Astronomy (Earth-centered theories) A: 835; *diagram on A: 847*

Deferred payment
 Installment plan I: 304

Defibrillator [device] D: 88
 Arrhythmia A: 743
 Heart (Abnormal heart rhythms) H: 142; (Progress in treatment and prevention) H: 145
 Paramedic (Duties) P: 153

Deficiency disease
 Anemia (Insufficient production of red blood cells) A: 458
 Diet (Normal diet) D: 200
 Malnutrition M: 111
 Nutrition (Deficiency diseases) N: 630

Deficient demand unemployment
 Unemployment (Types of unemployment)
 U: 22

Deficit [economics]
 Automobile (The automobile today) A: 972
 Balance of payments (How the balance of payments is determined) B: 35-36
 Budget (Economic effects of the national budget) B: 671
 Bush, George Herbert Walker B: 716

Deficit spending [economics]
 Great Depression (New government policies)
 G: 342

Definite article [grammar]
 Article (The definite article) A: 758

Definite integral
 Calculus (The definite integral) C: 24

Definite proportions, Law of [chemistry]
 Chemistry (Dalton's atomic theory) C: 402

Definition
 Dictionary (What a dictionary tells you) D: 193

DeFirmian, Nick [American chess player]
 Chess (United States chess champions)
 C: 414

Deflation [economics] D: 88
 Inflation I: 267

Deflection [aerodynamics]
 Aerodynamics (Lift) A: 85-86

Deflection yoke [physics]
 Magnetism (In homes) M: 60-60a

Defoe, Daniel [English author] D: 88
 English literature (The rise of the novel) E: 318
 Juan Fernández J: 178
 Literature for children (The 1700's) L: 361
 Novel (The first English novelists) N: 572
 Pillory P: 464
 Robinson Crusoe R: 369

Defoliant [chemical]
 Cotton (Harvesting) Ci: 1090

Defoliation [botany]
 Agent Orange A: 140
 Herbicide (Hazards of herbicides) H: 198

De Forest, John William [American author]
 D: 89

De Forest, Lee [American inventor] D: 89
 Communication (The development of electronics) Ci: 883-884
 Electronics (Early experiments) E: 215 *with picture*
 Radio (The start of broadcasting) R: 92
 Vacuum tube (Development of the vacuum tube) V: 259

Deforestation
 Forest (Deforestation) F: 398 *with picture*
 Amazon rain forest A: 402 *with picture*
 Animal (Animals of the temperate forests)
 A: 478; (How human beings endanger animals) A: 504 *with picture*
 Conservation (Conservation around the world)
 Ci: 988
 Coral reef (Coral reefs and people) Ci: 1049
 Rain forest (The future of rain forests) R: 126d *with picture*

Deformable mirror [astronomy]
 Telescope (Adaptive optical systems) T: 106

Deformation bonding [industrial process]
 Welding (Solid-state bonding) W: 189

Deformity
 Birth defect B: 380

- Disabled **D**: 218
- Defricheur, Le** [newspaper]
Laurier, Sir Wilfrid (Young lawyer) **L**: 123
- Defrosting**
Refrigeration (Defrosting) **R**: 203
- Deganawida** [American Indian leader]
Hiawatha **H**: 221
- Degas, Edgar** [French artist] **D**: 89 *with picture*
Cassatt, Mary **C**: 275 *with picture*
Impressionism (French impressionism) **I**: 94-95
Painting (Edouard Manet and the Impressionists) **P**: 71
- De Gasperi, Alcide** [Italian political leader]
Italy (The Italian republic) **I**: 517-518
- De Gaulle, Charles André Joseph Marie** [French political leader] **D**: 90 *with pictures*
Cold War (The great blocs split) **Ci**: 768
France **F**: 455; (World War II) **F**: 475; (The Fourth Republic) **F**: 475; (The Fifth Republic) **F**: 476; (France under de Gaulle) **F**: 476; (France after de Gaulle) **F**: 477 *with picture*
Kennedy, John Fitzgerald (Other developments) **K**: 266
World War II (The fall of France) **W**: 474-475
- De Gaulle, Placé Charles** [Paris]
Paris (Gardens, squares, and parks) **P**: 162
- De Gaulle, Yvonne Vendroux** [wife of]
De Gaulle, Charles André Joseph Marie (Early life) **D**: 90
- De Gaulle Airport** [Paris]
Paris (Economy) **P**: 165
- Degaussing**
Mine warfare (Kinds of naval mines) **M**: 565
- Degenerative joint disease** See Osteoarthritis *in this index*
- Degerming system**
Corn (The dry-milling industry) **Ci**: 1061
- Degradable plastics**
Plastics (Plastics and the environment) **P**: 560-561
- De Grasse, François Joseph Paul** [French admiral] **D**: 91
Revolutionary War in America (Surrender at Yorktown) **R**: 285
- Degree** [grammar]
Adjective (Comparison of adjectives) **A**: 57
- Degree** [music]
Music (Tone) **M**: 950
- Degree** [unit of measure] **D**: 91
Angle **A**: 463
Circle **Ci**: 558
Compass **Ci**: 902b
Latitude **L**: 116
Longitude (Longitude and location) **L**: 451
Minute **M**: 613
- Degree, College** **D**: 91
School (Colleges and universities) **S**: 182
Universities and colleges (Degrees) **U**: 209
- De Groot, Huig** See Grotius, Hugo *in this index*
- De Havilland, Olivia** [British actress]
Motion picture (Best performance by an actress: 1946, 1949) **M**: 862
- De Havilland Comet** [airplane]
Airplane (The jet age) **A**: 238; *picture on* **A**: 235
Aviation (A new age of flight) **A**: 990
- Dehmelt, Hans Georg** [American physicist]
Nobel Prizes (Physics: 1989) **N**: 441
- De Hooch, Pieter** [Dutch artist] **D**: 92
- Dehorned cattle**
Cattle (Horns) **C**: 307
- Dehumanization of Art, The** [book by Ortega y Gasset]
Ortega y Gasset, José **O**: 859
- Dehumidifier** [machine] **D**: 93 *with diagram*
Air conditioning (Controlling the moisture) **A**: 178
- Dehydrated food** **D**: 93
Fishing industry (Methods of processing) **F**: 186
Food preservation (Drying) **F**: 342-343; (Freeze-drying) **F**: 343; (Modern food preservation) **F**: 344
- Dehydration** [disorder] **D**: 93
Cholera **C**: 520
Vomiting **V**: 447
- Deianira** [Greek mythology]
Hercules (The death of Hercules) **H**: 199
Mythology *picture on* **M**: 980
- Deicer**
Salt (As a deicer) **S**: 72 *with picture*
- Deighton, John** [Canadian pioneer]
Vancouver (History) **V**: 277
- Deighton, Len** [British author] **D**: 93
- Deimos** [moon]
Mars (Satellites) **M**: 226b
- Deinonychus** [dinosaur] **D**: 93
Dinosaur (True dinosaurs) **D**: 206b-211; *picture on* **D**: 207
- Deiphobus** [legendary figure]
Helen of Troy **H**: 168
- Deir el-Bahri** [temple]
Hatshepsut **H**: 86
- Deirdre of the Sorrows** [play by Synge]
Synge, John Millington **So**: 1068
- Deisenhofer, Johann** [German chemist]
Nobel Prizes (Chemistry: 1988) **N**: 443
- Deism** [philosophy] **D**: 93
Age of Reason (Deism) **A**: 139
- Deity**
See the *Deities* section of the list of *Related Articles* in the Religion article
- Dèjà vu** [psychology]
Memory (Deja vu) **M**: 394
- DeJong, Meindert** [American author]
Newbery Medal (table) **N**: 359
Regina Medal (table: 1972) **R**: 206
- Deka** [prefix]
Metric system (Metric prefixes) **M**: 439; (Selection of SI prefixes) **M**: 440
- Deke**
Hockey (Hockey terms) **H**: 275
- Dekker, Eduard Douwes** [Dutch author]
Netherlands (Arts) **N**: 142-144
- Dekker, Thomas** [British author] **D**: 93
- De Klerk, Frederik Willem** [South African political leader] **D**: 94 *with portrait*
Mandela, Nelson **M**: 136
Nobel Prizes (Peace: 1993) **N**: 449
South Africa (The dismantling of apartheid) **So**: 620
- De Kooning, Willem** [American painter] **D**: 94 *with picture*
Painting (Abstract expressionism) **P**: 84-85 *with picture*
- De la Bruyère, Jean** See La Bruyère, Jean *de in this index*
- Delacroix, Eugène** [French painter] **D**: 95
Columbus, Christopher *picture on* **Ci**: 861
Greece *picture on* **G**: 362
Painting (Romanticism) **P**: 68-69 *with picture*
- DELAG** [airline]
Airship (The zeppelins) **A**: 252
- Delahanty, Ed** [American baseball player]
Baseball (table: Hall of Fame) **B**: 134
- De la Madrid Hurtado, Miguel** [Mexican political leader] **D**: 95
Mexico (Recent developments) **M**: 474
- De la Mar, José** [Peruvian general]
Peru (The early republic) **P**: 315
- De la Mare, Walter** [British author] **D**: 95
Regina Medal **R**: 207
- De Lancey, Étienne** [American settler]
Fraunces Tavern **F**: 496
- Delano, Columbus** [American government official]
Interior, Department of the (table) **I**: 325
- Delany, Martin Robinson** [American social reformer] **D**: 95 *with portrait*
African American literature (The 1800's) **A**: 136a
- Delany, Samuel R.** [American author]
Science fiction (Growing popularity) **S**: 205-206
- De la Roche, Mazo** [Canadian author] **D**: 95
Canadian literature (Literature between the world wars) **C**: 159
- Delaroche, Paul** [French artist]
Painting (Art for a new public) **P**: 70
- De la Rosa, Fabian** [Filipino painter]
Philippines (The arts) **P**: 375
- De la Rua, Fernando** [Argentine political leader]
Argentina (Recent developments) **A**: 659
- De la Salle, Saint Jean Baptiste** See Jean Baptiste de la Salle, Saint *in this index*
- Delanay, Robert** [French painter]
Cubism **Ci**: 1181
- De Laval, Carl Gustaf** [Swedish engineer]
Butter (History) **B**: 731
Milking machine **M**: 550
- Delaware** **D**: 96 *with pictures and maps*
Colonial life in America (Development of the Thirteen Colonies) **Ci**: 789 *with map*
Whipping post **W**: 281
See also the list of *Related Articles* in the Delaware article
- Delaware** [breed]
Chicken (table) **C**: 443
- Delaware, Lord** See De La Warr, Lord *in this index*
- Delaware, University of** **D**: 114
Delaware *picture on* **D**: 100
- Delaware Basin Compact** [1961]
Delaware River **D**: 114
- Delaware Bay** [bay, Delaware-New Jersey] **D**: 114
Delaware River **D**: 114
- Delaware Indians** [American Indians] **D**: 114
Indian, American (In the United States) **I**: 178-178a; *picture on* **I**: 156
Indian reservation (History) **I**: 189
New Jersey (Indian days) **N**: 250
Pennsylvania (Colonial days) **P**: 264
- Delaware National Scenic River**
National Park System (table: National parkways and other national parklands) **N**: 56
- Delaware Prophet** [American Indian leader]
Delaware Indians **D**: 114
Pontiac **P**: 657
- Delaware River** [U.S.] **D**: 114
Delaware (Rivers, bays, and lakes) **D**: 104
New York (Rivers) **N**: 306
Philadelphia (The city) **P**: 358
- Delaware Water Gap** [valley, Pennsylvania] **D**: 114
New Jersey (Places to visit) **N**: 240
National Park System (table: National recreation areas) **N**: 49
Pennsylvania (The Appalachian Ridge and Valley Region) **P**: 256 *with picture*
- De La Warr, Lord** [American colonial leader] **D**: 114
Delaware (History) **D**: 110
Jamestown **J**: 28
Virginia (The Jamestown settlement) **V**: 418
- DeLay, Thomas Dale** [American political leader] **D**: 114
- Delayed implantation** [reproduction]
Seal (Birth) **S**: 266
- Delayed speech** [disorder]
Speech therapy (Types and causes of speech defects) **So**: 773
- Delbrück, Max** [German-born American bacteriologist]
Nobel Prizes (Physiology or medicine: 1969) **N**: 445
- Del Cano, Juan Sebastián** [Portuguese explorer]
Magellan, Ferdinand (The end of the voyage) **M**: 47
- Deledda, Grazia** [Italian author]
Nobel Prizes (Literature: 1926) **N**: 446
- Delegate** **D**: 114
Political convention (Delegate selection) **P**: 628 *with picture*
Republic **R**: 253
United Nations (Delegations) **U**: 86
- Delegate primary** [election]
Political convention (Delegate selection) **P**: 628-629
- Delegated powers**
Congress of the United States (Origin of power) **Ci**: 943
Constitution of the United States (The supreme law of the land) **Ci**: 998
- De León, Alonso** [Spanish explorer]
Texas (French exploration) **T**: 204
- De León, Juan Ponce** See Ponce de León, Juan *in this index*
- De León Carpio, Ramiro** [Guatemalan political leader]
Guatemala (Political developments) **G**: 417
- De Lesseps, Ferdinand Marie** [French engineer] **D**: 115
Panama Canal (The French failure) **P**: 125
Suez Canal (History) **So**: 958
- Delete**
Proofreading (Proofreaders' marks) **P**: 822
- Delfshaven** [harbor, Netherlands]
Rotterdam **R**: 488
- Delft** [Netherlands] **D**: 115; **D**: 115
- Delft** [pottery] **D**: 115 *with picture*
- Delftware** [pottery]
Colonial life in America (Furnishings) **Ci**: 797-798
- Delgado, José Matías** [Salvadoran patriot] **D**: 115
El Salvador (Independence) **E**: 252
- Delhi** [city, India] **D**: 115 *with picture*
Asia *picture on* **A**: 770

- Delhi Public Library** [India]
Library (South and Southeast Asia) L: 253
- Delhi Sultanate** [history of India] D: 116
India (Period of invasions) I: 129
Pakistan (The Islamic impact) P: 99
- Delian League** [ancient Greece]
Aristides A: 662
Athens (The Golden Age) A: 857
Pericles (War with Sparta) P: 287
- Delibes, Léo** [French composer] D: 116
Art and the arts *picture on A: 748*
- Delicate Arch** [Utah]
Earth *picture on E: 23*
- Delicate Balance, A** [play by Albee]
Albee, Edward A: 311
- Delicious apple**
Apple (table) A: 571 *with picture*
Fruit (Developing new varieties of fruit) F: 546
- Delilah** [Biblical figure] D: 116
Samson S: 82
- DeLillo, Don** [American author]
Novel (The novel today) N: 575
- Delinquency, Juvenile** See Juvenile delinquency *in this index*
- Delirium** [disorder]
Mental illness (Kinds of mental illnesses) M: 404
- Delirium tremens** [disorder] D: 116
Alcoholism (Effects of alcoholism) A: 337-338
- Delius, Frederick** [British composer] D: 117
- Deliver Us from Evil** [book by Dooley]
Dooley, Thomas Anthony, III D: 309
- Deliverance** [book by Dickey]
Dickey, James D: 189
- Dell Computer Corporation** [company]
Computer (Manufacturing) Ci: 924
Manufacturing (table) M: 170
- Della Chiesa, Giacomo** See Benedict XV *in this index*
- Della Falls**
British Columbia (Rivers, waterfalls, and lakes) B: 624
Waterfall (table: Famous waterfalls of North America) W: 142
- Della Francesca, Piero** [Italian painter] See Piero Della Francesca *in this index*
- Della Gondola, Andrea di Pietro** [Italian architect] See Palladio, Andrea *in this index*
- Della Porta, Giacomo** [Italian architect]
Saint Peter's Basilica (History) S: 53-54
- Della Robbia, Andrea** [Italian sculptor]
Della Robbia, Luca D: 117
- Della Robbia, Luca** [Italian sculptor] D: 117 *with picture*
Sculpture (Early Renaissance) S: 252
- Della Rovere, Francesco** See Sixtus IV *in this index*
- Della Rovere, Giuliano** See Julius II *in this index*
- Della Vos, Victor** [Russian educator]
Vocational education (Early vocational education in schools) V: 435
- Dello Joio, Norman** [American composer] D: 117
- Dells** [geology]
Dalles D: 16 *with picture*
- Delore, Terrence R.** [New Zealand pilot]
Glider (table) G: 230
- Deloria, Vine, Jr.** [American social reformer] D: 117 *with portrait*
- Delorme, Claude** [French aviator]
Airplane (Notable airplane flights) A: 236
- De los Angeles, Victoria** [Spanish singer] D: 118
- Delphi** [ancient city] D: 118
Apollo A: 566
Greece, Ancient (Religion) G: 367
Oracle O: 814
- Delphine** [book by Staël]
Staël, Madame de So: 820
- Delphinium** [plant]
Flower (Garden perennials) F: 278 *with picture*
Larkspur L: 77 *with picture*
- Delphinula shell**
Shell *picture on S: 386*
- Del Río, Andrés** [Mexican chemist]
Vanadium V: 269
- Del Sesto, Christopher** [American political leader]
Rhode Island (table) R: 311
- Delta** [geography] D: 118 *with maps*
Netherlands (The Polders) N: 144
River (Alluvial fans and deltas) R: 353 *with diagram*
- Delta blues** [music]
Popular music (The recording era) P: 671
- Delta Blues Festival**
Mississippi (Annual events) M: 633; *picture on M: 626*
- Delta Blues Museum** [Clarksdale]
Mississippi (Places to visit) M: 632
- Delta Cultural Center** [Helena]
Arkansas (Places to visit) A: 704
- Delta kite**
Kite (Types of kites) K: 339 *with picture*
- Delta Queen** [steamboat]
Mississippi *picture on M: 631*
- Delta wave** [physiology]
Aircraft, Military (Fighters) A: 203
- Delta wing**
Airplane (The wing) A: 213; *picture on A: 215*
- Deltoid muscle** [anatomy]
Human body *diagram on H: 422*
Shoulder S: 439 *with picture*
- Del Toro, Benicio** [Puerto Rican-born actor]
Motion picture (Best performance by an actor in a supporting role: 2000) M: 863
- Del Tredici, David** [American composer]
Classical music (Classical music today) Ci: 651
- Deluge** [Old Testament] D: 118
Ararat A: 591
Deucalion D: 171
Noah N: 439
- Deluge, The** [drawings by Leonardo]
Leonardo da Vinci (Last years) L: 200; *picture on L: 201*
- Delusion** [psychology] D: 118
Abnormal psychology (Theories of abnormal psychology) A: 12
Mental illness (Schizophrenia) M: 405
Schizophrenia S: 176
- Delvalle, Eric Arturo** [Panamanian political leader]
Panama (The Noriega years) P: 121
- Dema** [goddess figure]
Mythology (Jensen's theory) M: 988
- Demand** See Supply and demand *in this index*
- Demand bill** [banking]
Bill of exchange B: 301
- Demand deposit** [banking]
Money (Definitions of the money supply) M: 714
- Demand-pull inflation** [economics]
Inflation (The quantity theory) I: 268
- Demand regulator**
Diving, Underwater (Ambient diving) D: 245
Skin diving (Scuba diving) S: 493 *with picture*
- Demarcation, Line of** See Line of Demarcation *in this index*
- Demarçay, Eugène** [French scientist]
Europium E: 420
- De Maupassant, Guy** [French author] D: 118
French literature (Realism) F: 521
- Deme** [ancient Greece]
Athens (Democracy) A: 857
- Demens, Peter A.** [Russian engineer]
Saint Petersburg [Florida] (Government and history) S: 56
- Dementia** [disorder]
AIDS (Symptoms) A: 163
Mental illness (Dementia) M: 405
Parkinson disease (Symptoms) P: 170
- Demerara** [river]
Guyana (Land) G: 446
- Demerol** [medication]
Analgesic A: 448
- Demeter** [Greek mythology] D: 119
See also Ceres *in this index*
Mysteries M: 972
Persephone P: 295
- Demetrius** [literary figure]
Shakespeare, William (A *Midsummer Night's Dream*) S: 357
- Demetrius I** [king of Macedonia]
Antigonid dynasty A: 555
- Demetrius of Phaleron** [Greek official]
Aesop's fables A: 90
- Demigod** [religion]
Mythology (Greek divinities) M: 979 *with picture*
Saint S: 29
- Demilitarized zone**
Korea (North-South relations) K: 378
- De Mille, Agnes** [American choreographer]
D: 119 *with picture*
Ballet (Ballet in the United States) B: 53-54 *with picture*
- De Mille, Cecil Blount** [American director] D: 119
- De Mille, James** [Canadian author]
Canadian literature (Fiction: 1850-1918) C: 158
- Demineralization** [disorder]
Space exploration (Microgravity) So: 701-703
- Deming, W. Edwards** [American businessman] D: 119
- Demirel, Süleyman** [Turkish political leader]
Turkey (History) T: 509-512
- Demurge**
Gnosticism G: 238
- Demme, Jonathan** [American director]
Motion picture (Best achievement in directing: 1991) M: 862
- Demobilization**
Army, United States (World War II) A: 739
- Democracy** [political science] D: 120 *with picture*
Athens (Democracy) A: 857
Censorship (Political censorship) C: 346
Civil rights Ci: 608
Constitution Ci: 995
Election (Elections in a democracy) E: 158
Freedom of speech F: 506
Freedom of the press F: 507
French Revolution (Terror and equality) F: 526
Government (Aristotle's categories) G: 285; (Democracy) G: 285
Greece, Ancient (Government) G: 372
Patriotism (Foundations of patriotism) P: 198
Political party P: 631
Political science (Democracy and socialism) P: 639
Public opinion (Controlling public opinion) P: 861
Republic R: 253
United States, Government of the (Representative democracy) U: 137; (How democratic is the government?) U: 146
United States, History of the (Government by the people) U: 159
Voting V: 449
World (Forms of government) W: 408
World, History of the (The Greeks) W: 428; (The rise of democracy and nationalism) W: 443
See also *the list of Related Articles in the Democracy article*
- Democracy in America** [book by Tocqueville]
Tocqueville, Alexis de T: 308
- Democratic Action Party** [political party]
Malaysia (Political parties) M: 98b
- Democratic and Social Convention** [political party]
Niger (Government) N: 407
- Democratic centralism** [political theory]
Communism (The role of the Communist Party) Ci: 891
Vietnam (Government) V: 365
- Democratic Constitutional Rally** [political party]
Tunisia (Government) T: 487-488
- Democratic Convention** [1968]
Riot (During the 1900's) R: 349
- Democratic Convention of Romania** [political party]
Romania (Recent developments) R: 426
- Democratic-Farmer-Labor Party** [political party]
Farmer-Labor Party F: 46
Minnesota (Politics) M: 602-603; (The mid-1900's) M: 606
- Democratic Labour Party** [political party]
Barbados (History) B: 104
- Democratic Left Alliance** [political party]
Poland (Politics) P: 605; (Free elections) P: 614-615
- Democratic National Salvation Front** [political party]
Romania (Protests and political change) R: 425-426
- Democratic Party** [South African political party]
South Africa (Political parties) So: 609
- Democratic Party** [U.S. political party] D: 124
Barnburners B: 114
Congress of the United States (How Congress is organized) Ci: 942
Copperheads Ci: 1044
Dixiecrat Party D: 255
Hamer, Fannie Lou H: 29
Locofocos L: 413
New Deal (Results of the New Deal) N: 202
Political convention P: 628
Political party (The Democratic Party) P: 635
President of the United States (The presidential election) P: 762

- Reconstruction (The Republicans lose power)
R: 179; (Effects of Reconstruction)
R: 179-180
- Tammany, Society of T: 22
- Democratic Party of Japan** [political party]
Japan (Recent developments) J: 59
- Democratic People's Republic of Korea** See
North Korea in *this index*
- Democratic Progressive Party**
Taiwan (Government) T: 15-16; (History) T: 18
- Democratic republic** [government]
Democracy D: 120
- Democratic Republic of East Timor** See East
Timor in *this index*
- Democratic Republic of the Congo** See Congo
(Kinshasa) in *this index*
- Democratic Republic of Vietnam** See North
Vietnam in *this index*
- Democratic Republican Party** [Korea]
Korea (South Korea) K: 377
- Democratic-Republican Party** [U.S. history]
D: 128
Adams, John Quincy (Democratic-Republican
Party split) A: 42
Bucktails B: 664
Democratic Party (Origin) D: 125
Federalist Party F: 67
Jefferson, Thomas (Secretary of state) J: 81
Monroe, James (U.S. Senator) M: 736
National Republican Party N: 60
Political convention (The history of national
conventions) P: 630
Political party (Early history) P: 635
Washington, George (Rise of political parties)
W: 104
- Democratic Russia Movement** [reform move-
ment]
Russia (Politics) R: 531
- Democratic socialism**
Communism (European reality in the early
1900's) Ci: 890
- Democratic Union** [political party]
Poland (Free elections) P: 614-615
- "Democratic Vistas"** [essay by Whitman]
Whitman, Walt (His work) W: 294
- Democritus** [Greek philosopher] D: 129
Atom (Development of the atomic theory)
A: 874
Atomism A: 877
Chemistry (Beginnings) C: 400
Leucippus L: 215
Pre-Socratic philosophy (The teachings of
Parmenides) P: 772-773
- Demography** [sociology] D: 129
Geography *picture on* G: 92
Magazine (Other magazines) M: 42-43
Population (Census) P: 673
Sociology (Population characteristics) So: 564
Television (The national networks) T: 114
- Demoiselle** [airplane]
Airplane *picture on* A: 232
- Demoiselle crane** [bird]
Crane *picture on* Ci: 1118
- Demoiselles d'Avignon, Les** [painting by
Picasso]
Painting (Cubism) P: 77
Cubism Ci: 1182 *with picture*
Picasso, Pablo (*Les Demoiselles d'Avignon*)
P: 448b
- De Molay, Jacques** [French religious leader]
DeMolay, Order of D: 129
Knights Templars K: 353
- DeMolay, Order of** [organization] D: 129
Masonry (Organization) M: 267
- Demon** See Devil in *this index*
- Demon, The** [poem by Lermontov]
Russian literature (Late romanticism) R: 561-
562
- Demon stinger**
Fish *picture on* F: 167
- Demondion, Augustus** [British inventor]
Shotgun S: 438
- Demons Tormenting Me** [drawing by Ensor]
Ensor, James *picture on* E: 327
- Demonstration** [politics]
Political convention (Making nominations)
P: 629
- Demonstrative pronoun** [grammar]
Pronoun P: 819
- DEMOS** [political group]
Slovenia (History) S: 512
- De Moscoso, Luis** [Spanish explorer]
De Soto, Hernando (Journey to the
Mississippi) D: 160-161 *with map*
- Demosthenes** [Greek orator] D: 129
Oratory (Classical orators) O: 819
Philip II [of Macedonia] P: 369
- Demotic** [writing]
Greece (Language) G: 353
Greek language (Development of modern
Greek) G: 376-377
Greek literature (Modern Greek literature)
G: 378
Hieroglyphics (Development of hieroglyphic
writing) H: 225-226
- Dempsey, Jack** [American boxer] D: 129 *with
picture*
Boxing (The golden age of U.S. boxing)
B: 533; *picture on* B: 534
- Dempsey, John J.** [American political leader]
New Mexico (table) N: 272
- Dempsey, John N.** [American political leader]
Connecticut (table) C: 967
- Dempster, Arthur Jeffrey** [American physicist]
D: 130
Uranium (History of the use of uranium)
U: 216
- Demultiplexer** [electronic device]
Radio (Stereophonic receivers) R: 89-90
- Demuth, Charles** [American painter] D: 130
Painting (Precisionism) P: 82 *with picture*
- Den** [animal home]
Animal *picture on* A: 501
Bear (Winter sleep) B: 183-184
Fox (Dens) F: 440 *with picture*
Wolf (Young) W: 376
- Den** [scouting]
Boy Scouts (Cub Scouting) B: 536-537
- Denali** See Mount McKinley in *this index*
- Denali National Park** [Alaska] D: 130
Alaska (Places to visit) A: 290
National Park System (table: National parks)
N: 48
- Denali National Preserve** [Alaska]
National Park System (table: National pre-
serves) N: 58
- Denarius** [money] D: 130
Coin collecting *picture on* Ci: 758
- Denatured alcohol**
Alcohol (Ethanol) A: 335
Camphor C: 91
- Dench, Judi** [British actress]
Motion picture (Best performance by an
actress in a supporting role: 1998) M: 863
- Dendrite** [anatomy]
Nervous system (The dendrites) N: 134 *with
diagram*
Brain (Brain cells) B: 551
- Dendrite** [meteorology]
Snow (How snow forms) S: 539
- Dendritic cell** [physiology]
Immune system (Antigen-presenting cells)
I: 88
- Dendrochronology** [archaeology]
Archaeology (Dating) A: 598
- Deneb** [star] D: 130
- Deneen, Charles S.** [American political leader]
Illinois (table) I: 71
- De Nemours, Pierre Samuel du Pont** See Du
Pont de Nemours, Pierre Samuel in *this
index*
- Deng Xiaoping** [Chinese political leader] D: 131
with portrait
China (Deng Xiaoping) C: 506
Communism (China after Mao) Ci: 896
Hu Yaobang H: 402
- Dengue** [disease] D: 131
- Denier** [coin]
Coin collecting *picture on* Ci: 758
- Denier** [measurement]
Nylon (How nylon is made) N: 632-633
- Denim** [fabric] D: 131
Jeans J: 75
Twill T: 531
- De Niro, Robert** [American actor] D: 131 *with
portrait*
Motion picture (Best performance by an actor:
1980) M: 862-863; (Best performance by
an actor in a supporting role: 1974)
M: 863
- Denis, Jean-Baptiste** [French physician]
Blood transfusion (History) B: 417
- Denishewn dance company**
Saint Denis, Ruth S: 33
Shawn, Ted S: 378
- Denison, Merrill** [Canadian author]
Canadian literature (Literature between the
world wars) C: 159-160
- Denison Dam** [Red River, Oklahoma-Texas]
Lake Texoma L: 47 *with map*
- Denitrification**
Nitrogen cycle N: 426
- Denitrifying bacteria**
Nitrogen cycle N: 426 *with diagram*
- Denker, Arnold S.** [American chess player]
Chess (United States chess champions)
C: 414
- Denmark** D: 132 *with pictures and maps*
Christmas (In Denmark, Norway, and Sweden)
C: 531
Flag F: 194; *picture on* F: 206
Greenland G: 383
Norway (Union with Denmark) N: 545
Obscenity and pornography (In other coun-
tries) O: 644
Scandinavia S: 171 *with map*
Standard of living (table) So: 834
Sweden (History) So: 1032-1033
Valentine's Day (In Europe) V: 261
World War II (The conquest of Denmark and
Norway) W: 473
See also the list of Related Articles in the
Denmark article
- Denney, William D.** [American political leader]
Delaware (table) D: 109
- Dennis, Martin** [American inventor]
Leather (History) L: 169
- Dennis, Sandy** [American actress]
Motion picture (Best performance by an
actress in a supporting role: 1966) M: 863
- Dennison, William** [American government offi-
cial]
Lincoln, Abraham (table) L: 323
Ohio (table) O: 699
- Denny, Arthur A.** [American settler]
Seattle (History) S: 275-276
- Denny, Reginald** [American public figure]
Los Angeles (Recent developments) L: 470-
471
- Denominate number** [mathematics] D: 142
Unit U: 42
- Denomination** [cards]
Bridge (Bidding) B: 604
- Denomination** [religion]
Church C: 541
- Denominator** [mathematics]
Fraction (In symbols) F: 445-446
- Denouement**
Literature (Plot) L: 353
- Density** [physical property] D: 142 *with dia-
grams*
Hydrometer H: 471
Star (Mass) So: 845
- Denslow, W. W.** [American illustrator]
Literature for children *picture on* L: 358
- Densmore, James** [American businessman]
Sholes, Christopher Latham S: 433
- Dent, Frederick B.** [American government offi-
cial]
Commerce, Department of (table) Ci: 871
Ford, Gerald Rudolph (table) F: 378
- Dent, John Charles** [Canadian author] D: 143
- Dent, Julia** [wife of Ulysses S. Grant] See
Grant, Julia Dent in *this index*
- Dent corn**
Corn (Kinds of corn) Ci: 1058 *with picture*
- Dental assistant** See Dental hygienist in *this
index*
- Dental Association, American** D: 143
Dentistry (Organizations) D: 145
- Dental Association, Canadian**
Dentistry (Organizations) D: 145
- Dental floss**
Teeth (Cleaning the teeth) T: 81
- Dental hygiene** D: 143
Health (Cleanliness) H: 126
Mouth M: 903
Teeth (Dental checkups) T: 82
- Dental hygienist**
Dental hygiene D: 143
Careers (Health care) C: 223-224 *with picture*
- Dental Hygienists' Association, American**
Dental hygiene (Career) D: 143
- Dental insurance**
Insurance (Other types of health insurance)
I: 312
- Dental pulp**
Dentistry (Endodontics) D: 144
Teeth (Pulp) T: 80 *with picture*
- Dental school**
Dentistry (Careers) D: 145
- Dental Surgery, Doctor of**

248 Dentalia shells

Degree, College (The doctor's degree) D: 92

Dentalia shells

Indian, American (Money) I: 149 *with picture*

Dentin

Ivory (Characteristics of ivory) I: 521

Teeth (Dentin) T: 80 *with diagram*

Dentistry [medicine] D: 143 *with pictures*

Address, Forms of (Other forms) A: 54

Careers (Health care) C: 223-224 *with picture*

Hypnotism (Uses of hypnotism) H: 478

Orthodontics O: 859

Teeth (Dental checkups) T: 82, (Dental decay)

T: 82

Denture

Dentistry (General dentistry) D: 143,

(Prosthodontics) D: 144

Teeth (Dental decay) T: 82-84

Denver [Colorado] D: 146 *with picture and map*

Metropolitan area *map on* M: 443

Denver, James W. [American political leader]

Denver D: 146

Denver Broncos

Football (National Football League) F: 364

Denver International Airport [Denver]

Airport (table) A: 245

Denver Nuggets

Basketball (table) B: 150

Denver Post, The [newspaper]

Bonfils, Frederick Gilmer B: 458

Colorado (Communication) C: 843

Denver Technological Center

Denver (History) D: 148

Deodar cedar [tree]

Cedar (Needle-leaved cedars) C: 324

Deodorant D: 148

Perspiration P: 305

Deodorizer D: 148

De Oñate, Juan See Oñate, Juan de *in this index*

Deontology [philosophy]

Ethics (Modern ethics) E: 366

Deoxyribonucleic acid [biochemistry] See DNA

in this index

Deoxyribose [sugar]

Cell (DNA—the wondrous molecule) C: 334-

335 *with diagram*

DNA D: 258

Heredity (The structure of DNA) H: 205

De Palma, Ralph [American race car driver]

D: 148

Automobile racing (table: Indianapolis 500 win-

ners) A: 980

DePaole, Tomie [American artist/author] D: 148

Regina Medal (table: 1983) R: 206

De Paolo, Peter [American race driver]

Automobile racing (table: Indianapolis 500 win-

ners) A: 980

De Pareja, Juan

Velázquez, Diego *picture on* V: 295

Department [education]

Universities and colleges (Faculty) U: 208

Department [political unit]

France (Local government) F: 455

Department of ...

Departments appear under their key words, as

in Labor, Department of

Department store D: 149

England *picture on* E: 302

Interior design *picture on* I: 327

Retailing (Department stores) R: 265

De Paul, Vincent [French religious leader] See

Vincent de Paul, Saint *in this index*

Dependency [building]

Colonial life in America (Houses) C: 796-797

Dependency [government]

Commonwealth of Nations (Dependencies)

C: 876

World (table) W: 412

Dependency ratio

Population (Age) P: 673

Dependent [economics]

Income tax (Figuring the individual income tax)

I: 104

Dependent clause [grammar]

Clause C: 157

Dependent Pension Bill [1890]

Cleveland, Grover (Veterans' affairs) C: 671

Harrison, Benjamin (Domestic affairs) H: 72-73

Deperduissin Company [France]

Airplane (Other pioneer planes and fliers)

A: 233-234, *picture on* A: 232

Deperduissin recer [airplane]

Airplane *picture on* A: 232

Depersonalization disorder [psychology]

Mental illness (Dissociative disorders) M: 406

Dephlogisticated air

Chemistry (The phlogiston theory) C: 401

Depilatory [chemical] D: 149

Hair (Disorders of the hair and scalp) H: 10

Deportation [law] D: 149

Alien and Sedition Acts A: 367

Holocaust (The camps) H: 296a

Deposit [banking]

Bank (Bank services) B: 88

Certificate of deposit C: 363

Federal Reserve System (Organization) F: 65

Deposit [geology]

Coal (Where coal is found) C: 718 *with map*

Gold (Gold deposits) G: 252

Deposit insurance See Federal Deposit

Insurance Corporation *in this index*

Deposit modifier [additive]

Gasoline (Gasoline blends and additives)

G: 61-62

Deposition [geology]

Geomorphology G: 106

Deposition [law] D: 149

Depository Institutions Deregulation and

Monetary Control Act [1980]

Bank (A boom in money market funds) B: 94

Depreciation [economics] D: 149

Income (Types of income) I: 100

National income (Determining national

income) N: 37-38

Deprés, Josquin [French composer] See

Desprez, Josquin *in this index*

Depressant [medication] D: 149

See also Antianxiety and hypnotic drug *in this*

index

Drug abuse (table: Some commonly abused

drugs) D: 363

Depression [economics] D: 150 *with pictures*

See also Great Depression *in this index*

Deflation D: 88

Economics (Economic stability) E: 63

Gay Nineties (The despair of poverty) G: 72

Germany (The Weimar Republic) G: 167

Keynes, John Maynard K: 308

Recession R: 175

United States, History of the (The underprivi-

leged) U: 179-180

Van Buren, Martin (The Panic of 1837) V: 272

Depression [geology]

Egypt (The Western Desert) E: 125

Depression [psychology] D: 151

Antidepressant A: 553

Bipolar disorder B: 326

Fatigue F: 54

Mental illness (Mood disorders) M: 405

Parkinson disease (Symptoms) P: 170

Seasonal affective disorder S: 272

Serotonin S: 318

Suicide (Causes) S: 964

Depression, Great See Great Depression *in this*

index

DePriest, Oscar [American political leader]

African Americans (The Harlem Renaissance

and other achievements) A: 136k-136l

Deptford trilogy [books by Davies]

Davies, Robertson D: 46

Depth charge [weapon] D: 152

Torpedo (How a torpedo works) T: 340b-340c

Depth indicator [water]

Fathometer F: 54

Depth of field

Eye (Depth perception) E: 463 *with picture*

Photography (Controlling exposure) P: 415-416

with pictures; (Setting the exposure)

P: 416 *with pictures*

Depth perception

Eye (Depth perception) E: 463

Depths [oceanography] See Deep *in this index*

Deputies, Chamber of [government]

Italy (Parliament) I: 499

Deputy

Union of Soviet Socialist Republics (National

government) U: 29

Deputy, The [play by Hochhuth]

German literature (German literature after

1945) G: 142

Hochhuth, Rolf H: 273

Deputy sheriff [office]

Sheriff S: 397

De Quervain's disease

Repetitive strain injury R: 242

De Quincey, Thomas [British author] D: 152

English literature (Romantic prose) E: 320

Der ...

Titles beginning Der appear under their key

words, as in Freischütz, Der

Derrailleur [mechanics]

Bicycle (Power and speed) B: 290-291 *with*

diagram

Derain, André [French artist] D: 152 *with picture*

Fauves F: 56 *with picture*

Derbigny, Pierre [American political leader]

Louisiana (table) L: 496

Derby [race] D: 152

Derby, Earl of [British nobleman]

Derby D: 152

Derby, Earl of [British statesman [1799-1869]]

United Kingdom (table: British prime minis-

ters) U: 72

Derby, Kentucky See Kentucky Derby *in this*

index

Derby, Soap Box [race]

Soap Box Derby So: 543

Derby eland [animal]

Eland E: 156

Deregulation

Aviation (Deregulation of the U.S. airlines)

A: 991

Interstate commerce (Interstate commerce

today) I: 351

Dergue [government]

Eritrea (History) E: 353-354

Deringer, Henry, Jr. [American inventor]

Handgun (Early handguns) H: 45

Derivation [language]

Dictionary (What a dictionary tells you) D: 193

Latin language (Latin and English) L: 114

Derivative [economics]

Bank (Other services) B: 89

Derivative [mathematics]

Calculus (Derivatives) C: 23; (The fundamental

theorem of calculus) C: 25

Derived unit [measurement]

Metric system (Kinds of metric units) M: 436

Derleth, August [American author] D: 152

Dermaptera

Insect (table) I: 299

Dermatitis [disorder] D: 153

Eczema E: 74

Skin (Inflammation) S: 490

Dermatology [medicine] D: 153

Dermis [anatomy]

Human body (The dermis) H: 418

Mammal (Skin and hair) M: 118

Skin (Structure of the skin) S: 488 *with picture*

Dermoptera [zoology]

Mammal (table) M: 128 *with picture*

Dern, George H. [American political leader]

Roosevelt, Franklin Delano (table) R: 458

Utah (table) U: 245

Derna [Libya]

Marine Corps, United States (The 1800's)

M: 208

De Rosset [ship]

Maryland (The War of 1812 and industrial

development) M: 258

Derrick [machine]

Building construction (Constructing a sky-

scraper) B: 683-684

Dredging D: 345

Oklahoma *picture on* O: 728

Ship (Nautical terms) S: 416

Derrida, Jacques [French philosopher] D: 153

- Descartes, René** [French philosopher] D: 154
with picture
Age of Reason A: 138
French literature (Classical prose) F: 520
Geometry (Beginnings of modern geometry) G: 105
Mathematics (Mathematics and the scientific revolution) M: 306-307
Philosophy (Modern philosophy) P: 387-388
with picture
Physics (The Renaissance) P: 438-439
Psychology (Beginnings) P: 849
Science (The scientific revolution) S: 198; picture on S: 200
- Descendant, The** [book by Glasgow]
Glasgow, Ellen G: 210
- Descending aorta** [anatomy]
Aorta A: 562
- Descending colon** [anatomy]
Colon [anatomy] Ci: 785
Intestine (The large intestine) I: 353 with diagram
- Descent from the Cross, The** [painting by Rembrandt]
Painting (Light and shade) P: 35
Rembrandt picture on R: 228
- Descent from the Cross, The** [painting by Van der Weyden]
Painting (The northern Renaissance) P: 57
with picture
- Descent of Man, The** [book by Darwin]
Darwin, Charles Robert (Darwin's theories) D: 40
- Descent stage**
Space exploration (Apollo: Mission to the moon) So: 714-715
- Deschutes National Forest**
Oregon (Interesting facts) O: 827 with picture
- Deschutes River**
Oregon (Rivers, waterfalls, and lakes) O: 840
- Descrambler** [machine] See Set-top box in this index
- Description of New England, A** [book by Smith]
Massachusetts (Early exploration) M: 289
- Description of the World** [book by Polo]
Polo, Marco (Later life) P: 648-649
- Descriptive adjective** [grammar]
Adjective (Classifying adjectives) A: 57
- Descriptive bibliography**
Bibliography B: 288
- Descriptive embryology**
Embryology E: 257
- Descriptive linguistics**
Language (The science of language) L: 66
Linguistics L: 335
- Descriptive soundtrack**
Blindness (Aids for blind people) B: 402-403
- Desdemona** [literary figure]
Shakespeare, William (*Othello*) S: 363
- Desegregation** See Segregation in this index
- Desensitization** [medicine] See Hyposensitization in this index
- Deseret** [U.S. history] D: 154
Mormons (The Mormons in Utah) M: 809
Nevada (Early settlement) N: 174
Utah U: 231; (Territorial days and statehood) U: 246
- Deseret News** [newspaper]
Utah (Communication) U: 245
- Desert** [geography] D: 154 with pictures and map
Animal (Animals of the deserts) A: 482 with pictures and map
Arabs (Land of the Arabs) A: 585; picture on A: 586
Biome (table) B: 323 with map
Bird (Birds of the desert) B: 339 with pictures
Climate (Semiarid and desert climates) Ci: 676b
Dust devil D: 392
Flower (Flowers of the desert) F: 290 with pictures
Irrigation I: 456 with picture
Mexico picture on M: 462
Plant (Deserts) P: 525; (Water storage) P: 541 with picture; picture on P: 527
Rain (Rainfall distribution) R: 124
United States picture on U: 124
World map on W: 417
See also the list of Related Articles in the Desert article
- Desert bluebell**
Flower picture on F: 291
- Desert chicory**
Flower picture on F: 291
- Desert Fox** [nickname]
Rommel, Erwin R: 450
- Desert iguana**
Iguana I: 50
- Desert lark** [bird]
Desert picture on D: 155
- Desert lily**
Flower picture on F: 291
- Desert mallow**
Flower picture on F: 291
- Desert marigold**
Flower (Flowers of the desert) F: 290 with picture
- Desert Storm, Operation** [1991]
Persian Gulf War P: 300a
- Desert tortoise** [animal]
Reptile picture on R: 250
Tortoise T: 342
Turtle (Tortoises) T: 523; picture on T: 522
- Desertas** [islands]
Madeira Islands M: 29
- Deserted Village, The** [poem by Goldsmith]
Goldsmith, Oliver G: 259
English literature (The Johnson circle) E: 319
- Desertification** [conservation]
Desert (How deserts develop and change) D: 156
- Desertion** [law] D: 157
See also Abandonment in this index
Abandonment A: 4
Divorce (Fault divorce) D: 253
- De Seversky, Alexander Procoffiev** [Russian-American engineer] D: 157
- Desha, Joseph** [American political leader]
Kentucky (table) K: 290
- Deshret** [desert]
Egypt, Ancient (The land) E: 135
- De Sica, Vittorio** [Italian director] D: 157
Motion picture (Postwar realism) M: 869 with picture
- Desiderio da Settignano** [Italian sculptor]
Sculpture (Early Renaissance) S: 252
- Desiderius, Abbot** [Italian religious leader]
Monte Cassino M: 762
- Design** [art] D: 157 with pictures
Automobile (Building an automobile) A: 955 with pictures
Careers (Art, design, and communications) C: 220 with picture
Clothing (Ready-to-wear clothes) Ci: 704
Computer (Computer-aided design [CAD] programs) Ci: 919 with pictures
Desktop publishing D: 158 with picture
Industrial design I: 244 with picture
Interior design I: 326
Manufacturing (The main steps in manufacturing) M: 170
Publishing (Designing and printing) P: 869
Textile (Designing a fabric) T: 215 with picture
- Design concept**
Interior design (Developing a plan) I: 329-330
- Design for Living** [play by Coward]
Coward, Noël Ci: 1107
- Design patent** [law]
Patent P: 194
- Designated hitter**
Baseball (Players) B: 125
- Designer food**
Health food (Types of health foods) H: 129
- Designer jeans** [clothing]
Jeans J: 75
- Desire Under the Elms** [play by O'Neill]
O'Neill, Eugene Gladstone (His plays) O: 762
- De Sitter, Willem** [Dutch astronomer] D: 158
- Desizing** [industrial process]
Cotton (Finishing) Ci: 1091
- Desjardins, Alphonse** [Canadian businessman]
Credit union Ci: 1125
- Desktop calculator**
Calculator C: 22 with picture
- Desktop publishing** D: 158 with picture
Electronic publishing E: 205
Inkjet printer I: 273
Printer (Laser printer) P: 795
Printing (Electronic imagesetting) P: 797, (The electronic age) P: 804
Teaching picture on T: 66
- Desktop system** [electronics]
Stereophonic sound system (Types of systems) So: 892
- Desmarest, Nicolas** [French geologist]
Geology (The rock dispute) G: 98-99
- De Smet, Pierre Jean** [Belgian missionary]
D: 159
- Des Moines** [Iowa] D: 159
Iowa (Population) I: 378; (table) I: 388; picture on I: 375
United States picture on U: 112
- Des Moines Art Center** [Des Moines]
Iowa (Museums) I: 379 with picture
- Des Moines Civic Center**
Des Moines picture on D: 159
- Des Moines River**
Iowa (Rivers and lakes) I: 386
- Desmond, Paul** [American saxophonist]
Brubeck, Dave B: 647
Jazz picture on J: 73
- De Soto, Hernando** [Spanish explorer] D: 160
with picture and map
Alabama (Exploration and settlement) A: 275
Chickasaw Indians C: 439
Exploration map on E: 443; (Spain's conquests in the New World) E: 445-446
Florida (Exploration and Spanish settlement) F: 261
Georgia (Exploration) G: 131
Louisiana (Exploration and early settlement) L: 437
Memphis (History) M: 396
Mississippi (Exploration and early settlement) M: 641
North Carolina (Exploration and settlement) N: 490
Oklahoma (Early days) O: 731
Tennessee (Exploration) T: 153
Texas (Spanish exploration) T: 204
- De Soto National Memorial** [Florida]
National Park System (table: National memorials) N: 54
- DeSoto National Wildlife Refuge**
Iowa (Places to visit) I: 384
- Desoxyn** [drug] See Methamphetamine in this index
- Despair** [island, Rhode Island]
Rhode Island (Islands) R: 306
- Desperado** [outlaw]
Western frontier life in America (Crime) W: 238
- Despotism** [political science] D: 161
- Desprez, Josquin** [French composer] D: 161
Classical music (Franco-Flemish music) Ci: 646
- Desroches Island**
British Indian Ocean Territory B: 632
- Dessalines, Jean-Jacques** [Haitian political leader] D: 161
Haiti (History) H: 15-16
- Destalinization** [Soviet history]
Cold War (The spirit of Geneva) Ci: 765
Khrushchev, Nikita Sergeevich (Rise as a Communist) K: 308b-309
- Destiny Laboratory Module** [spacecraft]
International Space Station (History) I: 346b-347 with picture
- De Stijl**
Furniture (De Stijl) F: 582
- Destouches, Henri-Louis** [French author]
Céline, Louis-Ferdinand C: 325
- Destroyer** [ship] D: 162 with pictures
Navy (Destroyers) N: 78 with picture
Navy, United States (Combat ships) N: 84; (Ordnance) N: 84
Warship (Destroyers) W: 40; pictures on W: 43
- Destroyer, The** [Hinduism]
Shiva S: 429
- Destroyer escort** [ship]
Destroyer D: 162
- Destroying angel** [fungus]
Mushroom (Poisonous mushrooms) M: 945 with picture
- Destructional hill** [geography]
Hill H: 230
- Destructive distillation** [chemistry]
Distillation (Destructive distillation) D: 239 with diagram
- Destructive interference** [physics]
Diffraction (How diffraction occurs) D: 201
Interference I: 324 with diagram
Light (Interference) L: 286 with diagram
Sound (Beats) So: 604 with diagram
Waves (Interference) W: 153
- De Sucre, Antonio José** See Sucre, Antonio José de in this index
- Detached retina**
Blindness (Diseases) B: 401
- Detection** [psychology]

Perception (Types of perception) P: 283

Detective [career]

Police (Investigations of crimes) P: 621

Detective story D: 162

Literature for children (Fiction) L: 358-359

Novel (New directions in the novel) N: 573-574

Poe, Edgar Allan P: 589

See also the list of *Related articles in the Detective story article*

Detective Story [play by Kingsley]

Kingsley, Sidney K: 331

Detector [electronics]

Radio (The intermediate-frequency amplifier and detector) R: 89 *with picture*

Traffic (Signals, signs, and markings) T: 367

Detector, Metal

Metal detector M: 425 *with picture*

Détente [international relations]

International relations (New patterns of international relations) I: 345

Russia (The Cold War) R: 554

Union of Soviet Socialist Republics (History) U: 35-39

Detention camp [prison]

Asian Americans (Japanese internment)

A: 812e-812f *with picture*

Canada, History of (World War II) C: 150-151

Segregation (Other segregation in the United States) S: 286

Detergent [additive]

Gasoline (Gasoline blends and additives) G: 61-62

Detergent alcohol

Alcohol (Other alcohols) A: 335

Detergent and soap D: 163 *with pictures*

Phosphate P: 402

Determinant [mathematics] D: 166

Determinate inflorescence [botany]

Inflorescence I: 268b *with picture*

Determinative [linguistics]

Hieroglyphics (Development of hieroglyphic writing) H: 225

Determiner [grammar]

Adjective (Classifying adjectives) A: 57

Determinism [philosophy]

Einstein, Albert (Further scientific work) E: 146b

Fatalism F: 54

Free will F: 500

Metaphysics (Causality) M: 430

Philosophy (Modern philosophy) P: 387-388

Taine, Hippolyte Adolphe T: 15

Determinism, Environmental [philosophy]

London, Jack L: 444

Deterrence [criminology]

Criminal justice system (The correctional system) Ci: 1144

Prison (How prisons operate) P: 806

Sentence S: 304

Deterrence [warfare]

Army (Prevention of war) A: 725

North Atlantic Treaty Organization N: 471

Nuclear weapon (Control of nuclear weapons) N: 600

War (The Cold War era) W: 26

Detmer, Ty [American football player]

Football (table) F: 363

De Tocqueville, Alexis See Tocqueville, Alexis *de in this index*

D'Étoiles, Charles-Guillaume Le Normant [husband of]

Pompadour, Marquise de P: 653

Detonator [explosive] D: 167

Dynamite D: 397

Fuse F: 589

Detoxification

Drug abuse (Treatment of substance use disorders) D: 364

Detroit [Michigan] D: 167 *with pictures and maps*

Automobile (The Detroit pioneers) A: 964

Cadillac, Antoine de la Mothe C: 11

Michigan (Libraries) M: 493 *with picture; picture on M: 489*

Riot (During the 1900's) R: 349

Windsor (Government and history) W: 335

Detroit Gazette [newspaper]

Michigan (Communication) M: 506

Detroit Institute of Arts

Michigan (Museums) M: 493

Detroit Lions

Detroit (Sports) D: 170

Football (National Football League) F: 364

Detroit Metropolitan Wayne County Airport

Airport (table) A: 245

Detroit Pistons

Basketball (table) B: 150

Detroit (Sports) D: 170

Detroit Public Library

Michigan (Libraries) M: 493 *with picture*

Detroit Red Wings

Detroit (Sports) D: 170

Hockey (table: National Hockey League) H: 281

Detroit River [Michigan-Ontario] D: 171

Detroit D: 167; (Shipping) D: 168-169 *with map*

Detroit Tigers

Baseball (table) B: 130

Detroit (Sports) D: 170

Detroit Zoological Park

Detroit (Parks) D: 170

Deucalion [Greek mythology] D: 171

Deuce

Tennis (Scoring) T: 162-163

Deuce set

Tennis (Scoring) T: 162-163

Deukmejian, George [American political leader]

California (table) C: 59

Deusdedit, Saint [pope]

Pope (table) P: 666

Deuterium [isotope] D: 172

Astronomy (Ultraviolet astronomy) A: 844

Energy supply (Nuclear energy) E: 278

Hydrogen (Properties) H: 469

Isotope (Separating isotopes) I: 476

Nuclear energy (Nuclear fusion) N: 583 *with diagram*

Nuclear weapon (Thermonuclear weapons)

N: 597

Deuterium oxide See Heavy water *in this index*

Deuteron [atomic particle]

Deuterium (Properties) D: 172

Isotope (Artificial radioisotopes) I: 477

Star (Hydrogen fusion) So: 846-847

Deuteronomy [Old Testament] D: 172

Pentateuch P: 274

Deutsche mark

Mark M: 213

Deutsches Museum [Munich]

Planetarium (Early planetariums) P: 514-514a; (Modern planetariums) P: 514a

Deutschland See Germany *in this index*

Deutschland [airship]

Airship (The zeppelins) A: 252

Deutschland über Alles [song] D: 172

Deutzia [shrub] D: 172 *with picture*

De Vaca, Cabeza See Cabeza de Vaca, Álvar Núñez *in this index*

Devedasi [dancer]

Dance (Asian theatrical dance) D: 30

De Valera, Eamon [Irish political leader] D: 173

Costello, John Aloysius Ci: 1084a

Ireland (The Irish Free State) I: 427

Irish Republican Army (Division in the IRA) I: 433

Sinn Féin (History) S: 473

De Valois, Ninette [British choreographer] D: 173

Devaluation [economics] D: 173

Devastation of the Indies: A Brief Account, The [book by Las Casas]

Las Casas, Bartolomé de L: 80

Latin-American literature (Colonial literature) L: 111

Developable Column [sculpture by Pevsner]

Pevsner, Antoine *picture on P: 351*

Developing

Photography (Developing the film) P: 410 *with picture; (Developing and printing) P: 419 with pictures*

Developing country D: 173

See also Third World *in this index*

Agriculture (Recent developments) A: 160

AIDS (AIDS around the world) A: 165

Automobile A: 946; (Economic importance) A: 959-960

Bank (Multilateral development banks) B: 91

Economics (Developing economies) E: 64

Education (Vocational education) E: 88;

(Education around the world) E: 94

Energy supply (The 1900s) E: 280

Environmental pollution (Effect of population growth) E: 339

Exports and imports (Import restrictions)

E: 455

Food (Economic reasons) F: 331-332

Food supply F: 345

Globalization (The debate over globalization) G: 233

Hunger H: 449

Industry (How industry varies around the world) I: 258 *with picture*

Local government (Local government in developing countries) L: 409

Medicine (Other countries) M: 368 *with picture*

National park (Development of park resources) N: 42h

Teaching (Teaching around the world) T: 70

Technical assistance T: 73

Technology (Sharing the benefits of technology) T: 77

Third World T: 258

United Nations (Working for progress) U: 87

United Nations Industrial Development

Organization U: 97

Women's movements (In developing nations) W: 387

World (How nations are grouped) W: 407

Developing tank

Photography (Developing black-and-white film) P: 420-421 *with picture*

Development [music]

Classical music (Sonata) Ci: 645

Development of a Bottle in Space [sculpture by Boccioni]

Futurism *picture on F: 590*

Development of Capitalism in Russia, The [book by Lenin]

Lenin, V. I. (Young revolutionist) L: 192

Developmental biology [science]

Evolution (Contributions from other scientific fields) E: 433

Developmental genetics

Genetics (Molecular genetics) G: 86

Developmental method

Reading (The teaching of reading) R: 157

Developmental psychology D: 173

Erikson, Erik Homburger E: 352

Personality (Personality and environment)

P: 303; (Personality development) P: 303

Pestalozzi, Johann Heinrich P: 318

Piaget, Jean P: 445

Psychology (Major fields of psychology) P: 848

Devens, Charles [American government official]

Justice, Department of (table) J: 203

Dever, Paul A. [American political leader]

Massachusetts (table) M: 288

De Verchères, Madeleine See Verchères, Marie Madeleine Jarret *de in this index*

Deviated septum

Nosebleed N: 549

Deviation

Compass (Deviation) Ci: 903

Devise [emblem]

Flag (table) F: 193

Device [medicine]

Pure food and drug laws (Drugs and devices) P: 908

Devil [religion] D: 174

Angel A: 460

Devil worship D: 175

Exorcism E: 438

Mephistopheles M: 411

Witchcraft (History) W: 372

"Devil, The" [story by Tolstoy]

Tolstoy, Leo (Later works) T: 323

Devil and Daniel Webster, The [opera by Moore]

Moore, Douglas Stuart M: 796

"Devil and Daniel Webster, The" [story by Benét]

Benét, Stephen Vincent B: 248

Devil Rays, Tampa Bay [team] See Tampa Bay Devil Rays *in this index*

Devil Tavern [London]

Club Ci: 714

Devil World [poem by Espronceda]

Spanish literature (The 1800's) So: 761

Devil worship [religion] D: 175

Deville, Henri Étienne Sainte-Claire [French chemist]

Aluminum (The first aluminum) A: 397

Devils, New Jersey

Hockey (table: National Hockey League) H: 281

Devil's-darning-needle See Dragonfly *in this index*

Devil's Dictionary, The [book by Bierce]

Bierce, Ambrose Gwinett B: 295

- Devil's General, The** [play by Zuckmayer]
German literature (German literature after 1945) G: 142
- Devils Hole pupfish** [fish]
Pupfish P: 904 *with picture*
Endangered species (table) E: 270
- Devils Island**
French Guiana F: 514 *with picture*
Penal colony P: 235
- Devils Lake** [North Dakota]
North Dakota (Rivers and lakes) N: 508
- Devil's Lake State Park** [park, Wisconsin]
Park *picture* on P: 168
Wisconsin (Places to visit) *picture* on W: 356-357
- Devil's paintbrush** [plant] D: 175 *with picture*
- Devils Postpile National Monument**
[California] D: 175
Basalt *picture* on B: 123
National Park System (table: National monuments) N: 50
- Devil's-snuffbox**
Puffball P: 885
- Devils Tower National Monument** [Wyoming] D: 175
National Park System (table: National monuments) N: 50; (History) N: 58
Wyoming W: 516; (Places to visit) W: 524 *with picture*; (Progress as a state) W: 536
- Devil's Triangle** [Atlantic ocean]
Bermuda Triangle B: 269
- Devil's Trill Sonata** [music by Tartini]
Tartini, Giuseppe T: 48
- Devine, Grant** [Canadian political leader]
Saskatchewan (table) S: 144
- Devine, Joseph M.** [American political leader]
North Dakota (table) N: 513
- Devise** [law]
Will W: 306
- Devoir, Le** [newspaper]
Bourassa, Henri B: 516
- Devolution** [government] D: 175
Scotland (Government) S: 211-212
- Devon rex cat**
Cat (Short-haired breeds) C: 290-291; *picture* on C: 288
- Devonian Period** [geology] D: 175
Earth (The Paleozoic Era) E: 27; (table) E: 30
Fish (The Age of Fishes) F: 171
Prehistoric animal (The first animals with backbones) P: 737; (table) P: 738
- Devonshire, Duke of** [British colonial official] D: 175
- Devonshire, Duke of** [British prime minister]
United Kingdom (table: British prime ministers) U: 72
- De Voto, Bernard Augustine** [American author] D: 175
- De Vries, Hugo** [Dutch botanist] D: 175
Cell (The 1900's) C: 337
Heredity (The birth of genetics) H: 208
- De Vries, Peter** [American author]
Parody P: 178
- DeVries, William C.** [American doctor]
Artificial heart A: 760
- Dew** [weather] D: 176
Dew point D: 176
Weather (Humidity) W: 158
- DEW line** [defense]
North Warning System N: 519
- Dew point** [weather] D: 176
Air (Moisture in the air) A: 167
Cloud (How clouds form) Cl: 711
Humidity H: 433
Weather (Humidity) W: 158
- Dew-point hygrometer** [instrument]
Hygrometer (Other hygrometers) H: 474
- Dew-retting** [industrial process]
Flax (Growing and processing fiber flax) F: 230-231
Linen (Preparing the fibers) L: 334
- Dewan Negara** [legislature]
Malaysia (National government) M: 98a
- Dewan Rakyat** [legislature]
Malaysia (National government) M: 98a
- Dewar, Sir James** [British chemist]
Vacuum bottle V: 257
- Dewar flask** [container]
Liquid air (Making liquid air) L: 347
Vacuum V: 256
Vacuum bottle V: 256
- De Warm, Jacobus** [English general]
Vermont (Exploration and settlement) V: 334
- Dewberry** [plant] D: 176 *with picture*
- Boysenberry B: 543
- Dewclaw**
Deer (Legs and hoofs) D: 83 *with picture*
Dog (Body structure) D: 264-265
- Dewey, George** [American admiral] D: 176
Navy, United States (The Spanish-American War (1898)) N: 88
Spanish-American War (Manila Bay) So: 753
- Dewey, John** [American philosopher] D: 176
James, William J: 27
Pragmatism P: 729
Progressive education (Progressive educators) P: 812-813
- Dewey, Melvil** [American librarian] D: 177
Library (Libraries in the United States) L: 261-262
- Dewey, Nelson** [American political leader]
Wisconsin (table) W: 365; (Statehood) W: 366
- Dewey, Thomas Edmund** [American political leader] D: 177 *with portrait*
New York (table) N: 313
Public opinion poll (History) P: 863
Roosevelt, Franklin Delano (Election of 1944) R: 461
Truman, Harry S. (Vice President) T: 468; (Election of 1948) T: 470
- Dewey Decimal Classification** [library] D: 177
Dewey, Melvil D: 177
Library (Libraries in the United States) L: 261-262
A Guide to Research Skills Research Guide: 29, 38
- De Witt Clinton** [locomotive]
Railroad (Developments in the United States) R: 115
- Dewlap** [biology]
Anole A: 518 *with picture*
Iguana I: 50
- DeWolfe, Florence Kling** [wife of] *See* Harding, Florence Kling *in this index*
- Dexedrine** [medication]
Amphetamine A: 439
Drug abuse (table: Some commonly abused drugs) D: 363
- Dexter, Andrew** [American settler]
Montgomery (Government and history) M: 766
- Dexter, Samuel** [American government official]
Adams, John (table) A: 38
Jefferson, Thomas (table) J: 83
Treasury, Department of the (table) T: 407
- Dexter, Walter F.** [American educator]
Nixon, Richard Milhous (Education) N: 429-430
- Dexter Avenue King Memorial Baptist Church**
Alabama (Places to visit) A: 266
- Dexter cattle**
Cattle (Other dairy cattle) C: 311
- Dexter side**
Heraldry (Expansion) H: 194
- Dextrin** [chemical] D: 177
Starch (Use in foods) So: 855
- Dextrose** [sugar] D: 178
Glucose G: 236
- De Young Memorial Museum** [San Francisco]
California (Museums) C: 41
- Dh**
Baseball (Players) B: 125
- Dhaka** [city, Bangladesh] D: 178
Bangladesh *pictures* on B: 79, B: 82
- Dhal** [food]
Chickpea C: 446
- Dhala** [emirate]
South Arabia, Federation of So: 639
- Dharma** [religion] D: 178
Buddha (Later life) B: 667
Buddhism (The dharma) B: 668
Manu M: 168
- Dharma Chakra** [symbol]
India *picture* on I: 110
- Dharma Commentaries** [religion]
Dharma D: 178
- Dharma Sutras** [religion]
Dharma D: 178
- Dhaulagiri** [mountain, Nepal]
Himalaya (Peaks) H: 233
- Dhiban** [ancient city]
Moabite stone M: 681
- Dhivehi Raajjeyge Jumhooriyyaa** *See* Maldives *in this index*
- DHLPP** [vaccine]
Dog (Medical care) D: 279
- Dhofar** [region]
Oman (Land and climate) O: 758
- Dhole** [dog] D: 178
- Dhoti** [clothing]
Bangladesh (Way of life) B: 80-81
India (Clothing) I: 117
- Dhow** [boat]
Ship (Sailing ships in the 1900's) S: 411 *with picture*
- Dhul-Hijjah** [month]
Calendar (The Islamic calendar) C: 29
'Id al-Adha I: 25
- Dia, Mamadou** [Sengalese political leader]
Senegal (History) S: 299-300
- Dia de la Raza** [custom]
Columbus Day Ci: 865
- Día de los muertos** [holiday] D: 178
Halloween (Halloween around the world) H: 25
November N: 576
- Día de los Reyes Magos** [holiday]
January J: 30
- Die's Story Cloth** [book by Cha]
Literature for children *picture* on L: 383
- Diabetes** [disease] D: 178
Banting, Sir Frederick Grant B: 99
Blindness (Diseases) B: 401
Glucose G: 236
Heredity (Hereditary disorders) H: 204
Hypoglycemia H: 481
Insulin I: 308
Pancreas P: 128
Physical fitness (Glucose tolerance) P: 435
- Diabetes insipidus** [disease]
Diabetes (Diabetes insipidus) D: 180
- Diabetes mellitus** [disease]
Diabetes D: 179
Disease (Metabolic diseases) D: 229
Insulin I: 308
- Diabetic retinopathy** [disorder]
Blindness (Diseases) B: 401
Eye (Diseases of the retina) E: 467
- Diablo** [game]
Top (History of tops) T: 331-332
- Diachronic linguistics**
Linguistics (Comparative and historical linguistics) L: 336
- Diaconate** [religious office]
Deacon D: 55
- Diacritical mark** [language] D: 180
Language (Linguistic terms) L: 63
- Diaghilev, Sergei Pavlovich** [Russian ballet director] D: 180
Ballet (Ballet in Russia) B: 52
Ballets Russes B: 55
Stravinsky, Igor (Early works) So: 922
- Diagnosis** [medicine]
Blood (Diagnostic tests) B: 413
Cancer (Cancer detection and diagnosis) C: 171
Disease (Medical treatment) D: 232
Internal medicine I: 336
Medicine (Diagnosis) M: 364
Oncology O: 761
- Diagnosis related group** [insurance]
Hospital (Recent developments) H: 374
Medicine (The United States) M: 367
- Diagnostic mammography** [medicine]
Mammography M: 130
- Diagonal** [chess]
Chess (The board and the men) C: 412 *with diagram*
- Diagonal stride**
Skiing (Nordic skiing) S: 482; *diagram* on S: 484
- Diagraming** [grammar]
Sentence (Diagraming) S: 304
- Dial**
Clock (Kinds of clocks) Ci: 682i
Sundial So: 990 *with picture*
Telephone (The dialing mechanism) T: 94
- Dial, The** [magazine]
Emerson, Ralph Waldo (His prose works) E: 259
Magazine (History) M: 43-45
- Dial tone**
Telephone (How a telephone works) T: 94
- Dialect** [language] D: 180
Chinese language C: 510
Cockney Ci: 745
England (Language) E: 294-296
German language (German dialects) G: 138
Grammar (Grammar and usage) G: 304
Greek language (Development of ancient Greek) G: 376
Hispanic Americans (Who are the Hispanic

- Americans?) H: 245
 Italian literature (The Middle Ages) I: 494
 Language L: 62
 Pronunciation P: 820
 Speech So: 773
- Dialectic** [philosophy]
 Hegel, G. W. F. (Hegel's dialectic) H: 165
 Philosophy (Terms used in philosophy) P: 384;
 (Modern philosophy) P: 387-389
 Socrates (The Socratic method) So: 568
- Dialectical materialism** [philosophy]
 Materialism M: 300b
 Philosophy (Modern philosophy) P: 387-389
- Dialing mechanism**
 Telephone (The dialing mechanism) T: 94
- Dialogs of the Dead** [work by Fénelon]
 Fénelon, François de Salignac de la Mothe-
 F: 71
- Dialogue** [book by Catherine of Siena]
 Catherine of Siena, Saint C: 303
- Dialogue** [literature]
 Drama (Other parts of drama) D: 325
 Greek literature (Philosophical literature)
 G: 378
 Plato (The dialogues) P: 567
- Dialogue Concerning the Two Chief World
 Systems** [book by Galileo]
 Galileo (Galileo and the Roman Catholic
 Church) G: 11-12
 Relativity (Galilean relativity) R: 209
- Dialogues Concerning Natural Religion** [book
 by Hume]
 Hume, David (Hume's life) H: 432
- Dialysis machine**
 Kidney (Kidney diseases) K: 312
 Nephritis N: 128
 Uremia U: 221
- Diamagnetism** [physics]
 Magnetism (Magnetism in atoms) M: 60b
- Diameter** [geometry] D: 180
 Circle (Parts of a circle) Ci: 558 *with diagram*
 Sphere So: 779 *with diagram*
- Diamond** [baseball]
 Baseball (Baseball terms) B: 124
- Diamond** [gem] D: 180 *with pictures*
 Arkansas (Places to visit) A: 704
 Carbon (Forms of carbon) C: 205 *with diagram*
 Gem (Crystal shape) G: 77 *with picture*; (Index
 of refraction) G: 77; (Sources of gems)
 G: 77-79; (Cutting and polishing) G: 79
 South Africa (Natural resources) So: 616;
 (Discovery of diamonds and gold) So: 618
- Diamond** [road]
 Road (Intersections) R: 358-359
- Diamond** [suit]
 Card game (History) C: 209
- Diamond Head** [volcano, Hawaii]
 Hawaii *picture on* H: 88
 Honolulu (The city) H: 320 *with picture*
- Diamond Match Company**
 Match (The first matches) M: 300-300a
 Ohio (Interesting facts) O: 681
- Diamond point nail**
 Nail (The parts of a nail) N: 3
- Diamond-ring effect** [eclipse]
 Bailly's beads B: 31
- Diamond Shoals** [region, Atlantic]
 Cape Hatteras C: 188
- Diamond Sutra** [book]
 Book (The development of printed books)
 B: 466 *with picture*
 Tang dynasty T: 25
- Diamondback rattlesnake**
 Rattlesnake R: 149
 Snake *picture on* S: 533
- Diamondback terrapin** [turtle]
 Terrapin T: 175 *with picture*
- Diamondbacks, Arizona** [baseball team] *See*
 Arizona Diamondbacks *in this index*
- Diamonds Are Forever** [book by Fleming]
 Fleming, Ian Lancaster F: 233
- Diana** [Roman mythology] D: 183
See also Artemis *in this index*
 Mythology (table) M: 980
- Diane, La** [book by Montemayor]
 Spanish literature (The 1500's) So: 758-759
- Diana, Princess of Wales** [British princess]
 D: 183 *with portrait*
 Charles, Prince C: 382
 Television (Important dates in television)
 T: 126
 William, Prince W: 309
- Diana in Love** [book by Polo]
 Spanish literature (The 1500's) So: 758-759
- Diana of the Crossways** [book by Meredith]
 Meredith, George M: 417
- DIAND** [organization] *See* Indian Affairs and
 Northern Development, Department of *in*
this index
- Dianthus** [botany]
 Pink P: 473
- Diapause** [entomology]
 Hibernation (Other kinds of dormancy) H: 222
 Metamorphosis (The pupa) M: 428-429
 Moth (Migration) M: 839
- Diaper**
 Baby (Clothing the baby) B: 10
 Environmental pollution (Weighing benefits
 and risks) E: 339
- Diaphragm** [anatomy] D: 184 *with diagrams*
 Hiccup H: 223
 Human body (The respiratory system) H: 420;
diagram on H: 422
 Mammal (Internal organ systems) M: 119-120
with diagram
 Respiration (Structures of breathing) R: 260
- Diaphragm** [birth control]
 Birth control (Methods of birth control) B: 378-
 379
- Diaphragm** [photography]
 Camera (How a camera works) C: 80
- Diaphragm** [sound]
 Microphone (Carbon microphones) M: 516
with diagrams
 Speaker So: 768
 Telephone (The transmitter) T: 95 *with picture*
- Diaphysis** [anatomy]
 Bone (Structure of the bones) B: 456
- Diaporthe pod and stem blight** [disease]
 Soybean (Diseases and pests) So: 692
- Diarmuid** [legendary figure]
 Mythology (The Irish cycles) M: 983-984
- Diarrhea** [disorder] D: 184
 Campylobacter C: 97
 Cholera C: 520
 Dehydration D: 93
 Dysentery D: 398
 E. coli E: 2
 Inflammatory bowel disease I: 266
- Diary** [book by Ickes]
 Ickes, Harold Le Claire I: 24
- Diary** [book by Pepys]
 Pepys, Samuel P: 279
 Diary D: 184
- Diary** [literature] D: 184
- Diary of a Young Girl, The** [book by Frank]
 Frank, Anne F: 484
- Dias, Antônio Gonçalves** [Brazilian poet]
 Brazil (The arts) B: 576-577
 Latin-American literature (Romanticism)
 L: 112
- Dias, Bartolomeu** [Portuguese explorer] D: 185
 Cape of Good Hope C: 188
 Exploration (Reaching the tip of Africa) E: 443
with map
- Dia's Story Cloth** [book by Denver Museum of
 Natural History]
 Literature for children *picture on* L: 383
- Diaspore** [Jewish history]
 Jews (Foreign domination) J: 121; (The Jews
 today) J: 125
- Diaspore** [mineral]
 Bauxite (How bauxite forms) B: 174
- Diastase** [enzyme]
 Maltose M: 115
- Diastole** [physiology]
 Heart (Regulating the heart rate) H: 135 *with*
diagram
- Diastolic pressure** [physiology]
 Blood pressure B: 416
 Heart (Regulating blood pressure) H: 136-137
- Diathermy** [medicine] D: 185
- Diatom** [microbiology] D: 185 *with pictures*
 Ocean (Phytoplankton) O: 655 *with picture*;
 O: 656
- Diatomaceous earth**
 Diatom D: 186
- Diatomic molecule** [chemistry]
 Molecule (Individual molecules) M: 692
- Diatomite** [mineral]
 Algae (Other kinds of algae) A: 349
 Diatom D: 186
- Diatonic scale**
 Music (Tone) M: 950 *with diagrams*
- Diatryma** [bird]
 Prehistoric animal (The development of other
 animals) P: 741
- Diaz, Adolfo** [Nicaraguan political leader]
- Nicaragua (The United States and Nicaragua)
 N: 400
- Diaz, Bartolomeu** *See* Dias, Bartolomeu *in this*
index
- Diaz, David** [American artist]
 Caldecott Medal (table: 1995) C: 26
- Diaz, Porfirio** [Mexican political leader] D: 186
 Madero, Francisco Indalecio M: 30
 Mexico (The dictatorship of Porfirio Díaz)
 M: 472, (The Revolution of 1910) M: 472
 Mexico City (Independence) M: 478
- Díaz del Castillo, Bernal** [Spanish author]
 Latin-American literature (Colonial literature)
 L: 111
- Díaz de Vivar, Rodrigo** *See* Cid, The [Spanish
 hero] *in this index*
- Diazepam** [medication]
 Benzodiazepine B: 256
 Tranquilizer T: 370
- Dibao** [newspaper]
 Journalism (The first newspapers) J: 174
 Newspaper (History) N: 386
- Dibdin, Charles** [British performer]
 Circus (The birth of the circus) Ci: 562b
- Dibong** [river, Asia]
 Brahmaputra River B: 548
- Dice** [cooking]
 Cooking (table) Ci: 1029
- Dice** [game] D: 186 *with picture*
- Dicenta, Joaquín** [Spanish dramatist]
 Spanish literature (The 1800's) So: 761
- Dichloro-diphenyl-trichloroethane**
 DDT D: 55
- Dichlorodifluoromethane** [chemical]
 Chlorofluorocarbon C: 517
- Dichroic mirror**
 Television (The television camera) T: 121
- Dichroism**
 Tourmaline T: 348
- Dichromatic vision**
 Color blindness Ci: 827
- Dichtung und Wahrheit** [book by Goethe]
 Goethe, Johann Wolfgang von (Late years)
 G: 248
- Dick, Philip K.** [American author] D: 186
- Dickcissel** [bird] D: 186 *with picture*
 Bird (Birds of grasslands) B: 336 *with picture*
- Dickens, Catherine Hogarth** [wife of]
 Dickens, Charles (Personal life) D: 187
- Dickens, Charles** [British author] D: 187 *with*
pictures
 Child labor C: 455
 Christmas (Other customs) C: 536
 Daudet, Alphonse D: 43
 Detective story (History) D: 163
 English literature (Early Victorian literature)
 E: 321
 Marx, Karl (*Das Kapital*) M: 237
 Novel (Britain) N: 573
 Poe, Edgar Allan (Fiction and theory of fiction)
 P: 590
- Dickens, John** [father of]
 Dickens, Charles (Dickens' life) D: 187
- Dickerson, Denver S.** [American political leader]
 Nevada (table) N: 173
- Dickerson, Mahlon** [American government offi-
 cial]
 Jackson, Andrew (table) J: 11
 New Jersey (table) N: 249
 Van Buren, Martin (table) V: 273
- Dickerson, Philamon** [American political leader]
 New Jersey (table) N: 249
- Dickey, Bill** [American baseball player]
 Baseball (table: Hall of Fame) B: 134
- Dickey, James** [American poet] D: 189
- Dickey, Robert Barry** [Canadian political leader]
 Confederation of Canada (Fathers of
 Confederation) Ci: 935 *with picture*
- Dickinson, Anna Elizabeth** [American orator]
 D: 190 *with portrait*
- Dickinson, Charles** [American lawyer]
 Duel D: 378
 Jackson, Andrew (Business and politics) J: 8
- Dickinson, Don M.** [American government offi-
 cial]
 Cleveland, Grover (table) Ci: 671
- Dickinson, Emily** [American poet] D: 190 *with*
portrait
 American literature (Walt Whitman and Emily
 Dickinson) A: 419 *with portrait*
 Poetry (Rhythm and meter) P: 591-593;
 (Beginnings of modern poetry) P: 597
- Dickinson, Jacob M.** [American government
 official]

- Taft, William Howard (table) T: 11
- Dickinson, John** [American political leader] D: 191
- Articles of Confederation A: 759
- Constitution of the United States (The Constitutional Convention) Ci: 999
- Delaware (Places to visit) D: 102; (table) D: 109
- Jefferson, Thomas (The Declaration of Independence) J: 79
- Pennsylvania (table) P: 263
- Revolutionary War in America (The Declaration of Independence) R: 276
- Dickinson, Luren D.** [American political leader] Michigan (table) M: 507
- Dickinson Mansion**
- Delaware (Places to visit) D: 102
- Dickson, Brian** [Canadian jurist] D: 191
- Dicloxacillin** [medication]
- Antibiotic (table) A: 551
- Dicot** See Dicotyledon in *this index*
- Dicotyledon** [botany] D: 191
- Angiosperm A: 462
- Cotyledon Ci: 1095
- Flower (The classifying of flowers) F: 299; F: 300 with pictures
- Plant (Classification of plants) P: 546-547 with picture; picture on P: 531
- Seed (The parts of a seed) S: 281 with diagram
- Stem (Herbaceous stems) So: 887
- Tree (Broadleaf trees) T: 414
- Dicoumarol** [drug]
- Anticoagulant A: 553
- Dictaphone** [machine]
- See also Dictating machine in *this index*
- Edison, Thomas Alva (Phonograph developments) E: 80-81
- Dictating machine D: 191**
- Edison, Thomas Alva (The Wizard of Menlo Park) E: 78-79
- Dictation**
- Shorthand S: 435
- Dictator** [title]
- Dictatorship D: 191
- Dictatorship** [political science] D: 191
- Autocracy A: 942
- Democracy (Features of democracy) D: 121
- Totalitarianism T: 343
- World War II (The rise of dictatorships) W: 469
- Dictatorship of the proletariat** [political theory]
- Communism (The ideas of Marx) Ci: 890;
- (Lenin's contributions) Ci: 890
- Dictes or Sayings of the Philosophers, The** [book]
- Caxton, William C: 322
- Diction**
- Drama (Other parts of drama) D: 325
- Singing (Training the voice) S: 472-473
- Dictionary** [book] D: 192
- Accent A: 22
- Dictionary of American Biography**
- Ochs, Adolph Simon O: 668
- Dictionary of the English Language, A** [book by Johnson]
- Dictionary (Early English dictionaries) D: 194
- English literature (Samuel Johnson) E: 319
- Johnson, Samuel (Later years) J: 153
- Didactica Magna** [book by Comenius]
- Comenius, John Amos Ci: 867
- Diddle, Bo** [American musician]
- Rock music (Growing popularity) R: 377
- Didelphimorphia** [zoology]
- Mammal (table) M: 128 with picture
- Diderot, Denis** [French philosopher] D: 195
- Age of Reason A: 138
- Drama (France) D: 335
- Encyclopedia (An age of experiment) E: 268a-268b
- French literature (The Age of Reason) F: 520
- Philosophes P: 382
- Didon, Joan** [American author] D: 195 with portrait
- Didius Julianus** [Roman emperor]
- Rome, Ancient (table) R: 447
- Dido** [legendary figure] D: 195
- Aeneid A: 84
- Carthage C: 260
- Didot point** [printing]
- Type (Sizes of type) T: 537
- Didrikson, Babe** See Zaharias, Babe Didrikson in *this index*
- Didymium** [chemical]
- Praseodymium P: 733
- Didymus** [apostle]
- Thomas, Saint T: 262
- Die** [game]
- Dice D: 186 with picture
- Die ...**
- Titles beginning Die appear under their key words, as in Meistersinger, Die*
- Die and diemaking** [industry] D: 195 with diagram
- Embossing E: 256
- Extrusion E: 459 with diagram
- Forging (Machine forging) F: 409-410
- Money (Minting coins) M: 713 with picture
- Silver picture on S: 465
- Tool (Metalworking tools) T: 331
- Toolmaking T: 331
- Wire (How wire is made) W: 343
- Die casting** [industrial process]
- Die and diemaking D: 195
- Cast and casting (Other types of casting) C: 278-279
- Diefenbaker, Edna May Brower** [wife of]
- Diefenbaker, John George (Young lawyer) D: 197
- Diefenbaker, John George** [Canadian political leader] D: 196 with pictures
- Canada, History of (The end of Liberal rule) C: 151; (The new Conservative government) C: 151
- Progressive Conservative Party P: 812
- Diefenbaker, Lake**
- Saskatchewan (Rivers and lakes) S: 138-140
- Diefenbaker, Mary Florence Bannerman** [mother of]
- Diefenbaker, John George (Boyhood and education) D: 196
- Diefenbaker, Olive Freeman Palmer** [wife of]
- Diefenbaker, John George (Young lawyer) D: 197
- Diefenbaker, William** [father of]
- Diefenbaker, John George (Boyhood and education) D: 196
- Diego, Juan** [Mexican public figure]
- Guadalupe Day G: 408
- Diego Garcia** [island, Indian Ocean] D: 198
- Dielectric medium** [insulation]
- Capacitor C: 186
- Insulator, Electric I: 308
- Dielectric strength**
- Materials (Electrical properties) M: 300c
- Diels, Otto** [German chemist]
- Nobel Prizes (Chemistry: 1950) N: 443
- Diem, Ngo Dinh** See Ngo Dinh Diem in *this index*
- Diemaking** See Die and diemaking in *this index*
- Dien Bien Phu** [Vietnam]
- Indochina (Independence) I: 225
- Foreign Legion F: 386
- Dien Bien Phu, Battle of** [1954] D: 198
- Diener, Theodor O.** [Swiss-born scientist]
- Viroid V: 425
- Dieppe**
- World War II (D-Day) W: 482
- Dieresis**
- Diacritical mark D: 180
- Diesel, Rudolf** [German engineer] D: 199
- Diesel engine (History) D: 200
- Transportation (The beginnings of modern transportation) T: 390
- Diesel-electric locomotive**
- Locomotive (Diesel locomotives) L: 414 with picture; (Diesel locomotives) diagram on L: 415
- Diesel-electric ship**
- Ship (The chief parts of a ship) S: 424
- Diesel engine D: 199 with diagrams**
- Diesel, Rudolf D: 199
- Electric power (Other sources of electric power) E: 184
- Fuel injection F: 552
- Ship (Increasing power and speed) S: 413; (The chief parts of a ship) S: 424
- Starter (Diesel starters) So: 857
- Submarine (The power plant) So: 941
- Transportation (The beginnings of modern transportation) T: 390 with picture
- Diesel fuel**
- Fuel (Petroleum) F: 550
- Petroleum (Petroleum as a fuel) P: 332
- Diesel-hydraulic locomotive**
- Locomotive (Diesel locomotives) L: 414-416
- Diesel locomotive**
- Locomotive (Diesel locomotives) L: 414 with picture; (History) L: 417
- Railroad, Model (Locomotives) R: 120-121
- Diesel-mechanical locomotive**
- Locomotive (Diesel locomotives) L: 414-416
- Diet** [government]
- Japan (National government) J: 33
- Parliament (Parliaments in other countries) P: 174
- Diet** [Hungarian history]
- Hungary (The Kingdom of Hungary) H: 445
- Diet** [nutrition] D: 200
- See also Food in *this index*
- Baby (Feeding procedures) B: 9
- Diabetes (Treatment) D: 179
- Dietary supplement D: 200
- Fat (Biological and nutritional importance) F: 52-53
- Fiber, Dietary F: 88
- Food (Why diets differ around the world) F: 331
- Health (Nutrition) H: 125
- Milk (Milk in the human diet) M: 546
- Nutrition N: 624 with pictures
- Pellagra P: 232
- Salt S: 72
- Teeth (A good diet) T: 81
- Vegetarianism V: 295
- Weight control (Diet) W: 182
- Zoo (Caring for zoo animals) Z: 606
- Diet of ...**
- Diets appear under their key words, as in Worms, Diet of*
- Dietary law** [religion]
- Judaism (Customs and ceremonies) J: 181
- Dietary supplement D: 200**
- Health food (Types of health foods) H: 129
- Herbal medicine H: 196
- Nutrition (Evaluate claims about foods and dietary supplements carefully) N: 630
- Dietetic technician**
- Nutrition (Careers in nutrition) N: 631
- Dietetics**
- Diet D: 200
- Home economics (Nutrition, dietetics, and food science) H: 300
- Diethyl ether** See Ether [chemistry] in *this index*
- Diethylstilbestrol** [hormone] See DES in *this index*
- Dietitian** [career]
- Hospital (Professional services departments) H: 371
- Nutrition (Careers in nutrition) N: 631
- Dietrich, Charles H.** [American political leader]
- Nebraska (table) N: 110
- Dietrich, Marlene** [German actress] D: 201 with portrait
- Von Sternberg, Josef V: 448
- Dietrich of Bern** [legendary figure]
- Theodoric T: 252
- Dietz, Ferdinand** [German sculptor]
- Sculpture (European sculpture) S: 253-254
- Difference engine**
- Babbage, Charles B: 2
- Computer (Early punched-card computing devices) Ci: 924a-924b
- Differential** [mechanics]
- Automobile (The drive system) A: 953 with diagram
- Transmission (The differential) T: 378
- Differential anesthetic** [medication]
- Menthol M: 411
- Differential association, Theory of**
- Criminology (History) Ci: 1145-1146
- Differential calculus**
- Calculus C: 22
- Mathematics (Branches of mathematics) M: 303
- Differential distillation** See Fractional distillation in *this index*
- Differential hoist** [mechanics]
- Block and tackle (Endless chain hoist) B: 405 with diagram
- Differential white count test**
- Blood (Blood tests) B: 413-414
- Differentiated staffing system**
- Teaching (Rewards of teaching) T: 69
- Differentiation** [biology]
- Cell (Growth and specialization) C: 332
- Growth (In living things) G: 404
- Reproduction, Human (Origin of tissues and organs) R: 247-248
- Stem cell So: 889
- Diffie, Whitfield** [American engineer]
- Codes and ciphers (Later developments) Ci: 751
- Diffraction** [physics] D: 201

254 Diffraction grating

- Hubble Space Telescope (How the telescope works) H: 403
 Light (Diffraction) L: 286 *with pictures*
 Molecule (Studying molecules) M: 693 *with pictures*
 Sound (Diffraction) So: 603 *with diagram*
 Waves (Diffraction) W: 153, *diagram on* W: 151
- Diffraction grating** [physics]
 Diffraction (Uses of diffraction) D: 201
- Diffusion** [anthropology]
 Culture (Contact with other cultures) Ci: 1189
- Diffusion** [chemistry] D: 201 *with diagrams*
- Diffusion bonding** [industrial process]
 Welding (Diffusion bonding) W: 190
- Diffusion pump**
 Vacuum V: 256
- Diffusionism**
 Sociology (Development of social research) So: 566
- DiFrancesco, Donald T.** [American political leader]
 New Jersey (table) N: 249
- Dig, Archaeological**
 Science picture on S: 191
- Digest**
 Magazine (Consumer magazines) M: 42
- Digest** [law]
 Justinian Code J: 204
- Digester** [machine]
 Aluminum (Refining the bauxite) A: 393
 Paper (Pulping processes) P: 134-135 *with diagram*
- Digestion** See Digestive system in this index
- Digestive system** D: 202 *with diagrams*
 Amphibian (Digestive system) A: 440
 Antacid A: 529
 Bird (The digestive system) B: 365
 Blood (Transporting nutrients and wastes) B: 408 *with diagrams*
 Butterfly (The internal organs) B: 739 *with diagram*
 Cancer (Classification by primary body site) C: 167-168
 Dyspepsia D: 398
 Fiber, Dietary F: 88
 Fish (Digestive system) F: 162 *with diagram*
 Hoatzin H: 271
 Hormone (Metabolic hormones) H: 335
 Human body (The digestive system) H: 419, *diagram on* H: 422
 Inflammatory bowel disease I: 266
 Insect (Digestive system) I: 289 *with diagram*
 Liver (Digestion and use of food) L: 394
 Magnesia M: 54
 Mammal (Internal organ systems) M: 119
 Mastication M: 298
 Michigan (Interesting facts) M: 489
 Nutrition (How the body uses food) N: 624
 Pancreatitis P: 128
 Ruminant R: 519
 Spider (Digestive system) So: 785 *with diagram*
 See also the list of Related Articles in the Digestive System article
- Digestive tract** See Alimentary canal in this index
- Digger pine** [tree]
 Pine (Western pines) P: 469
- Digger wasp** [insect]
 Animal (Providing food) A: 498
 Wasp W: 110 *with picture*
- Digging** [behavior]
 Dog (Why dogs do the things they do) D: 263 *with picture*
- Digging stick** [tool]
 Indian, American (Farming) I: 141
- Digit** [number]
 Arabic numerals A: 584
 Arithmetic A: 665
 Multiplication (Multiplying by one digit) M: 922
 Zero Z: 594
- Digital audio broadcasting**
 Radio (DAB receivers) R: 90, (Broadcasting today) R: 94
- Digital audio tape**
 Communication (The digital age) Ci: 885
 Tape recorder T: 37
- Digital audiotape cassette**
 Tape recorder (Kinds of tape recorders) T: 38
- Digital camcorder**
 Camcorder (Types of camcorders) C: 76
 Internet (Push technology) I: 350c
- Digital camera**
 Camera (Digital cameras) C: 83
 Photography (Cameras) P: 417
- Digital code** [electronics]
 Photoengraving and photolithography P: 405
 Printing (Preparing material for printing) P: 797
 Telecommunications T: 89
- Digital compact cassette**
 Tape recorder (Kinds of tape recorders) T: 38
- Digital compact cassette recorder** [machine]
 Tape recorder (Cassette tape recorders) T: 38
- Digital computer**
 Analog computer A: 448
 Computer Ci: 908
- Digital display**
 Clock (Kinds of clocks) Ci: 682i *with diagram*;
 (Electric clocks) Ci: 683
 Watch (Kinds of watches) W: 114
- Digital hearing aid**
 Deafness (Special devices) D: 58
- Digital imaging**
 X rays (Uses of X rays) X: 540
- Digital inkjet printing**
 Textile (Finishing the fabric) T: 217
- Digital logic unit** [electronics]
 Computer (Microprocessors) Ci: 912
- Digital meter**
 Electric meter (Digital meters) E: 177
- Digital planetarium** [machine]
 Planetarium (Digital projectors) P: 514b
- Digital plotter** [electronic device]
 Mechanical drawing picture on M: 353
- Digital printing**
 Printing (Digital printing) P: 801; (Printing in color) P: 801
- Digital recording**
 Compact disc Ci: 901
 Copyright (Users' rights) Ci: 1047
 Recording industry (History) R: 182
 Tape recorder T: 37; (History) T: 38-39
- Digital rectal examination** [medicine]
 Prostate cancer P: 829
- Digital signal** [electronics]
 Electronics (How electronic circuits process information) E: 213
 Communications satellite (How communications satellites work) C: 888b
- Digital signature** [computing]
 Computer (Computer security) Ci: 924
- Digital subscriber line** [electronics] See DSL in this index
- Digital switch**
 Telephone (Transmitting the telephone signals) T: 96
- Digital synthesizer** [machine]
 Synthesizer So: 1068
- Digital tachometer** [instrument]
 Tachometer T: 4
- Digital technology** D: 203
 Electronics (The digital age) E: 216
- Digital television**
 Television (Digital television) T: 126
 Electronics (The digital age) E: 216
- Digital thermometer**
 Thermometer (Resistance thermometers) T: 255 *with diagram*
- Digital-to-analog converter** [electronics]
 Compact disc (Playback) Ci: 901
- Digital type**
 Type T: 536
- Digital video camera**
 Internet (Push technology) I: 350b-350c
- Digital video effects**
 Television (Putting a show on the air) T: 111-113
- Digital xerography**
 Copying machine (Electrostatic copying) Ci: 1045
- Digitalis** [medication] D: 203
 Heart (Heart failure) H: 143
- Digitized sound file**
 Animation (Preliminary steps in animation) A: 511
- Digitizing**
 Animation (Preliminary steps in animation) A: 511
- Digitizing tablet** [electronic device]
 Computer (A digitizing tablet) Ci: 914
- Digitoxin** [compound]
 Digitalis D: 203
- Digoxin** [compound]
 Digitalis D: 203
- Dihedral wing**
 Airplane (The wing) A: 213
- Dihigo, Martin** [American baseball player]
- Baseball (table: Hall of Fame) B: 134
- Dihong** [river, Asia]
 Brahmaputra River B: 548
- Dik-dik** [animal] D: 204
 Antelope (Habits and appearance) A: 542 *with picture*
- Dike** [conservation]
 Flood (Seacoast floods) F: 237
 Irrigation (Surface irrigation) I: 457 *with picture*
 Levee L: 216
 Netherlands (Climate) N: 145
 Rice pictures on R: 322; (Preparing the ground) R: 325 *with picture*
 Tokyo (The city) T: 313
- Dilacor** [drug]
 Calcium channel blocker C: 21
- Dilantin** [drug]
 Anticonvulsant A: 553
- Di Lasso, Orlando** See Lasso, Orlando Di in this index
- Dilation and evacuation** [medicine]
 Abortion (Abortion methods) A: 14-15
- Dilator muscle** [anatomy]
 Eye (The uveal tract) E: 460-461 *with picture*
- "Dilbert"** [comic strip]
 Adams, Scott A: 44 *with picture*
- Dili** [city, East Timor]
 East Timor E: 40 *with picture and map*
- Dill** [plant] D: 204
- Dillinger, John Herbert** [American criminal] D: 204
- Dillingham, Paul** [American political leader]
 Vermont (table) V: 333
- Dillingham, William P.** [American political leader]
 Vermont (table) V: 333
- Dillon, Clarence Douglas** [American government official]
 Johnson, Lyndon Baines (table) J: 151
 Kennedy, John Fitzgerald (table) K: 266
 Treasury, Department of the (table) T: 407
- Dillon, Diane** [American artist]
 Caldecott Medal (table: 1976, 1977) C: 26
 Literature for children pictures on L: 375, L: 382
- Dillon, Leo** [American artist]
 Caldecott Medal (table: 1976, 1977) C: 26
 Literature for children pictures on L: 375, L: 382
- Dillon, Richard C.** [American political leader]
 New Mexico (table) N: 272
- Dilmun** [ancient civilization]
 Bahrain (History) B: 30
- Diltiazem** [drug]
 Calcium channel blocker C: 21
- Di Luna, Count** [opera character]
 Opera (*Il Trovatore*, II) O: 808
- DiMaggio, Joe** [American baseball player] D: 204
 Baseball (table: Hall of Fame) B: 134; (table: Modern major league records) B: 137; (Depression and war) B: 136 *with picture*
- Diman, Byron** [American political leader]
 Rhode Island (table) R: 311
- Dimbula tea**
 Tea (Processing tea) T: 62
- Dime** [money] D: 204
 Money (United States currency today) M: 709-711 *with pictures*
- Dime novel**
 Book (The 1800's) B: 467-468
 United States, History of the (The Gilded Age) U: 180 *with picture*
- Dimenhydrinate** [medication]
 Dramamine D: 342
- Dimension**
 Fourth dimension F: 438
- Dimension stone** [building material]
 Building stone B: 685
 Materials (Stone) M: 300c-300d
 Quarrying Q: 7
- Dimensions of Time and Silence** [music by Penderecki]
 Penderecki, Krzysztof P: 236
- Dimeter** [poetry]
 Poetry (table) P: 594
- Dimethyl sulfoxide** See DMSO in this index
- Dimetrodon** [extinct reptile] D: 204
 Evolution picture on E: 429
 Prehistoric animal picture on P: 738
- Diminished interval**
 Music (Harmony) M: 951
- Diminuendo**
 Music (table) M: 954

- Dimitrov, Filip** [Bulgarian political figure]
Bulgaria (Political changes) **B: 693**
- Dimitrov, Georgi** [Bulgarian political leader]
Bulgaria (Communist rule) **B: 693**
- Dimitry, Alexander** [American educator]
Louisiana (Schools) **L: 482-483**
- Dimmer**
Theater (Lighting methods) **T: 240-241**
- Dimmesdale, Arthur** [literary figure]
Hawthorne, Nathaniel (His novels) **H: 115**
- Dimmick, Mary** [wife of]
Harrison, Benjamin (Life in the White House)
H: 73; (Later years) H: 73
- Dimond, Francis M.** [American political leader]
Rhode Island (table) **R: 311**
- DIN system**
Photography (Speed) **P: 418**
- Dinaric Alps** [mountains, Europe]
Croatia (Land and climate) **Ci: 1148a with map**
- Diné** [people]
Navajo Indians **N: 69**
- Dine, Jim** [American artist] **D: 204**
Painting (Pop art) **P: 86**
- Diner** [film]
Levinson, Barry **L: 219**
- Dinesen, Isak** [Danish author] **D: 205**
- Dingiswayo** [Mthethwa king]
Shaka **S: 343**
- Dingley, Nelson, Jr.** [American political leader]
Maine (table) **M: 87**
- Dingley Act** [1897]
Gay Nineties (Industrial growth) **G: 72-73**
- Dingo** [dog] **D: 205**
Animal picture on **A: 482**
Australia (Introduced species) **A: 915**
Conservation (Australia) **Ci: 989-990**
- Dinh** [dynasty]
Vietnam (Independence) **V: 370**
- Dinitrogen monoxide** [gas] See Nitrous oxide in this index
- Dinka** [people] **D: 205**
Sudan (People) **So: 952**
- Dinkins, David Norman** [American political leader] **D: 205**
New York City (A time of change) **N: 343**
- Dinner Party, The** [play by Simon]
Simon, Neil **S: 467**
- Dinner Party, The** [sculpture by Chicago]
Sculpture (As a record of history) **S: 228-229 with picture; S: 260**
- Dinner Table, The** [painting by Matisse]
Matisse, Henri **M: 310**
- Dinnerware**
Ceramics (Kinds of ceramic products) **C: 359**
- Dinoflagellate** [biology] **D: 205**
Algae (Other kinds of algae) **A: 349**
Ocean (Phytoplankton) **O: 655; picture on O: 656**
Pfiesteria **P: 353**
Red tide **R: 190**
- Dinos Painter** [Greek artist]
Painting (Mythology paintings) **P: 34 with picture; (Greek painting) P: 42**
- Dinosaur** [extinct animal] **D: 206 with pictures**
Alberta (Interesting facts) **A: 313**
Earth (The Mesozoic Era) **E: 27**
Evolution (Contributions from other scientific fields) **E: 433**
Fossil (Understanding ancient plants and animals) **F: 423 with pictures; (Recording changes in the earth) F: 424-425; picture on F: 427**
Meteor (Impact craters and basins) **M: 432**
Prehistoric animal (Dinosaurs) **P: 737; (The Age of Mammals) P: 740; (The study of prehistoric animals) P: 741; pictures on P: 739**
Reptile (The evolution of reptiles) **R: 252**
See also the list of Related Articles in the Dinosaur article
- Dinosaur National Monument** [Colorado-Utah] **D: 214**
National Park System (table: National monuments) **N: 50**
- Dinosaur Provincial Park** [Alberta]
Alberta (Places to visit) **A: 320**
- Dinosaurs, Age of** See Mesozoic Era in this index
- Dinsmoor, Samuel** [American political leader]
New Hampshire (table) **N: 223**
- Dinsmoor, Samuel, Jr.** [American political leader]
New Hampshire (table) **N: 223**
- Dinviddie, Robert** [British colonial official] **D: 214**
- Washington, George (Messenger to the French) **W: 93**
- Diocese** [religion]
Archbishop **A: 601**
Bishop **B: 381**
Roman Catholic Church (Church organization) **R: 405**
- Diocletian** [Roman emperor] **D: 214**
Rome, Ancient (Temporary recovery) **R: 448**
Sebastian, Saint **S: 277**
- Diocletian, Baths of** [ruins]
Rome (Baths) **R: 433**
- Diocletianus, Gaius Aurelius Valerius** [Roman emperor] See Diocletian in this index
- Diode** [electronics]
Computer chip (Structure) **Ci: 924e**
Electronics (Diodes) **E: 210 with diagram**
Vacuum tube (Kinds of vacuum tubes) **V: 258**
- Diode laser** [physics]
Laser (Semiconductor lasers) **L: 85 with diagram**
- Diodorus of Tyre** [Phoenician philosopher]
Phoenicia (Decline) **P: 395**
- Diociscous plant**
Flower (Variations in flower structure) **F: 294**
- Diogenes** [Greek philosopher] **D: 214**
Cynic philosophy **Ci: 1205**
- Diol** [chemistry]
Glycol **G: 237**
- Diola** [people]
Senegal (People) **S: 297**
- Diomed** [horse]
Horse (table: Famous horses in history and legend) **H: 361**
- Diomedes** [Greek mythology]
Hercules (The twelve labors) **H: 198-199**
- Dion, Céline** [Canadian singer]
Canada picture on **C: 112**
- Dionaea** See Venus's-flytrap in this index
- Dione** [satellite]
Satellite (The middle-sized icy satellites) **S: 150a**
Saturn (table) **S: 152 with picture**
- Dionne quintuplets**
Quintuplets **Q: 43**
- Dionysia** [custom]
Drama (Greek drama) **D: 326**
- Dionysius II** [king of Syracuse]
Damocles **D: 23**
- Dionysius, Saint** [pope]
Pope (table) **P: 666**
- Dionysius Exiguus** [Greek scholar]
A.D. **A: 31**
B.C. **B: 178**
Calendar (Some calendars today) **C: 29**
Christian Era **C: 523**
- Dionysius the Elder** [Greek military leader] **D: 214**
- Dionysus** [Greek mythology] **D: 215**
See also Bacchus in this index
Bacchus **B: 15**
Midas **M: 521**
Mythology (Greek divinities) **M: 979; (table) M: 980**
- Dionysus, Theater of** [ancient Greece] See Theater of Dionysus in this index
- Diophantus** [mathematician]
Algebra (History) **A: 359**
- Diopside** [gem] **D: 215**
Gem picture on **G: 78**
- Dior, Christian** [French fashion designer] **D: 215**
- Dior, House of** [fashion house]
Dior, Christian **D: 215**
Saint Laurent, Yves **S: 41**
- Diorama** [exhibit]
Daguerre, Louis Jacques Mandé **D: 4**
- Dioscorus** [antipope]
Pope (table) **P: 666**
- Diouf, Abdou** [Senegalese political leader]
Senegal (History) **S: 299-300**
- Dioxin** [chemical] **D: 215**
Agent Orange **A: 141**
Herbicide (Hazards of herbicides) **H: 198**
Incinerator **I: 100**
- Dip** [astronomy]
Horizon **H: 335**
- Dipendra** [Nepalese prince]
Nepal (History) **N: 126-127**
- Diphtheria** [disease] **D: 215**
Croup **Ci: 1157**
Löffler, Friedrich August Johannes **L: 420**
- Diphtheria toxoid**
Diphtheria (Prevention) **D: 216**
- Diphthong** [language] **D: 216**
- Dipvali** [festival]
Feasts and festivals (In Hinduism) **F: 58**
- Diplocaulus** [animal]
Prehistoric animal picture on **P: 738**
- Diplodocus** [dinosaur] **D: 216**
Dinosaur **D: 206; (True dinosaurs) D: 206b-209 with picture**
Reptile picture on **R: 251**
- Diploid cell** [biology]
Reproduction (How genes are transferred) **R: 242**
- Diploma**
Degree, College **D: 91**
Graduation **G: 297**
- Diplomacy** **D: 216**
Foreign policy **F: 386**
Herald **H: 194**
International relations (Diplomacy) **I: 344**
Logan Act **L: 423**
Peace (Diplomacy) **P: 207**
State, Department of **So: 858**
See also the list of Related Articles in the Diplomacy article
- Diplomat** [career]
Diplomacy **D: 216**
- Diplomatic asylum**
Asylum **A: 851**
- Diplomatic corps** [diplomacy] **D: 217**
Foreign Service (Service) **F: 388**
- Diplomatic hands** [writing]
Paleography **P: 103**
- Diplomatic immunity**
Diplomacy (Diplomatic immunity) **D: 216**
Extraterritoriality **E: 459**
- Diplomatic Reception Room**
White House picture on **W: 288**
- Diplopod** [zoology]
Arthropod **A: 752 with picture**
- Diplura** [entomology]
Insect (table) **I: 299**
- Dipole** [antenna]
Antenna (Receiving antennas) **A: 543-544 with pictures**
- Dipole** [physics]
Magnetism (Magnetic poles) **M: 59; (How magnetism works) M: 60a-60b with diagrams**
- Diponegoro** [Javanese political leader]
Indonesia (The rise of nationalism) **I: 237**
- Dipper** [bird] **D: 217 with picture**
Bird picture on **B: 328**
- Dipper dredge**
Dredging **D: 345**
- Dipper gourd**
Gourd **G: 281 with picture**
- Dipping** [industrial process]
Rubber (Shaping) **R: 505**
- Dipping the flag**
Flag (Raising and lowering the flag) **F: 219**
- DiPrete, Edward D.** [American political leader]
Rhode Island (table) **R: 311**
- Diprotodont** [animal]
Mammal (table) **M: 128 with picture**
Marsupial (Kinds of marsupials) **M: 232**
- Diptera** [entomology]
Insect (table) **I: 300; pictures on I: 282**
- Dipterocarp** [tree]
Rain forest (Asia) **R: 126b**
- Dirac, Paul Adrien Maurice** [British physicist] **D: 217**
Antimatter **A: 556**
- Dirac equation** [physics]
Dirac, Paul Adrien Maurice **D: 217**
- Dirce** [Greek mythology]
Farnese Bull **F: 46**
- Direct Action Day** [1946]
India (Independence and partition) **I: 133**
Pakistan (The nationalist movement) **P: 99**
- Direct-broadcast satellite**
Communications satellite **Ci: 888a**
Television (Satellite television) **T: 110b; (Satellites) T: 123**
- Direct Communications Link** See Hot line in this index
- Direct current** [electricity]
Electric current (Direct and alternating current) **E: 168**
Electric generator (Direct current generators) **E: 173**
Electric motor **E: 179**
Electricity (Direct and alternating current) **E: 193**
Electronics (Diodes) **E: 210-212**

256 Direct current generator

Tesla, Nikola (The alternating current system) T: 180
 Vacuum tube (Kinds of vacuum tubes) V: 258

Direct current generator
 Electric generator E: 170; (Direct current generators) E: 173 *with diagrams*

Direct current motor
 Electric motor E: 179; (DC motors) E: 181 *with picture*

Direct current tach generator [machine]
 Governor G: 294

Direct democracy
See also Pure democracy *in this index*
 Government (Democracy) G: 285; (Ancient times) G: 290

Direct deposit deduction
 Bank (Providing a means of payment) B: 89

Direct drive
 Transmission *picture on* T: 378

Direct drive system
 Phonograph (Parts of a phonograph) P: 400-401

Direct evidence
 Evidence (Kinds of evidence) E: 426

Direct extrusion [industrial process]
 Extrusion E: 459

Direct-fired furnace
 Furnace (Sources of heat) F: 567

Direct initiative [political science]
 Initiative and referendum (The initiative) I: 271-272

Direct investment
 Investment (Kinds of investments) I: 366

Direct-mail advertising
 Advertising (Direct mail) A: 74 *with picture*

Direct market
 Livestock (Marketing livestock) L: 398
 Meat packing (Kinds of markets) M: 350

Direct marketing
 Mail-order business M: 66

Direct melt process
 Fiberglass (How fiberglass is made) F: 89

Direct-port fuel injection system
 Automobile (The engine) A: 949-950

Direct primary [political science]
 Primary election (Direct and indirect) P: 777

Direct reduction system [industrial process]
 Iron and steel (How iron is made) I: 440-441 *with diagram*

Direct reward [psychology]
 Aggression A: 141

Direct sales
 Sales (Other types of selling) S: 62

Direct sampling [science]
 Astronomy (Direct sampling) A: 846

Direct Selling Association D: 217

Direct tax
 Taxation (Property taxes) T: 52

Direct-to-plate [process] *See* Computer-to-plate *in this index*

Directed verdict
 Trial (Reaching a verdict) T: 437

Direction
 Photography (Direction) P: 413

Directional drilling
 Petroleum (Methods of drilling) P: 338-339; *picture on* P: 340

Directional selection [biology]
 Evolution (Natural selection) E: 428

Directly reduced iron
 Iron and steel (Direct reduction) I: 441 *with diagram*

Directoire style
 Clothing (The 1700's) Ci: 701-702

Director
 Drama (Early realism) D: 338
 Motion picture (How motion pictures are made) M: 848 *with pictures*;
 (Preproduction) M: 849-852; (Shooting the movie) M: 853-854; (The rushes) M: 855; (table. Best achievement in directing) M: 862
 Opera (The stage director) O: 794
 Television (Planning and preparation) T: 110c-110d
 Theater T: 232; (The director) T: 235
 Universities and colleges (Administration) U: 208
See also the list of Related Articles in the Motion Picture and Theater articles

Director system [instrument]
 Range finder R: 139

Directors, Board of
 Corporation (Business corporations) Ci: 1070

Director's viewfinder
 Television (Planning and preparation) T: 110c-111

Directory [computing]
 Information retrieval (Research) I: 269

Directory [French history]
 France (The French Revolution) F: 474
 French Revolution (The revolution ends) F: 527

Directory assistance
 Telephone (Operator services) T: 98

Directrix [geometry]
 Cylinder Ci: 1204
 Parabola P: 141 *with diagram*

Dirigible [airship] *See* Airship *in this index*

Dirksen, Everett McKinley [American political leader] D: 218
 Ford, Gerald Rudolph (House minority leader) F: 375 *with picture*

Dirksen and Hart Senate Office Buildings
 [Washington, D.C.]
 Washington, D.C. *map on* W: 76

Dirndl [clothing]
 Austria (Way of life) A: 931

Dirty bomb
 Terrorism (Nuclear attacks) T: 178

Dis Pater [Roman mythology]
 Pluto P: 581

Disability, National Organization on
 Disabled (table) D: 222

Disability insurance
 Insurance (Other types of health insurance) I: 312; (Social insurance) I: 314
 Social security [OASDHI] So: 553
 Workers' compensation W: 405

Disabled [people] D: 218 *with pictures*
 Bus (Bus regulations) B: 715
 Civil rights (Major changes in the field of civil rights) Ci: 610
 Education (Special education) E: 88 *with picture*;
 (Education for whom?) E: 107
 Interior design *picture on* I: 331
 Keller, Helen Adams K: 255
 Library (Services for special groups) L: 241
 Medicaid M: 361
 Multiple sclerosis M: 920
 Physical education (During the 1900's) P: 433
 Physical therapy P: 435
 Reading (Reading problems) R: 161
 Special education So: 770
 Vocational rehabilitation V: 435
See also the list of Related Articles in the Disabled article

Disabled American Veterans [organization] D: 223
 Veterans' organizations (In the United States) V: 344-345

Disabled Sports USA
 Disabled (table) D: 222

Disaccharide [chemistry]
 Carbohydrate (Kinds of carbohydrates) C: 203 *with diagram*;
 (How the body uses carbohydrates) C: 204
 Saccharides S: 4
 Sugar (Kinds of sugar) So: 959

DiSalle, Michael V. [American political leader]
 Ohio (table) O: 699

Disallowance [law]
 Colonial life in America (Colonial government) Ci: 794

Disarmament *See* Arms control *in this index*

Disarmament, Committee on [UN]
 United Nations (Arms control) U: 92-93

Disaster D: 223
 Civil defense Ci: 605
 Earthquake (table. Largest earthquakes) E: 38
 Federal Emergency Management Agency F: 64
 Flood F: 236 *with pictures*
 Hurricane (table) H: 455

Disaster area
 Civil defense (Recovery) Ci: 605-606

Disaster relief
 Army (Internal security and civilian aid) A: 725
 CARE C: 213
 Civil defense Ci: 605
 National Guard N: 37
 Public health (Supplying disaster services) P: 857
 Red Cross (The American Red Cross) R: 185;
 (The Canadian Red Cross) R: 186

Disaster services *See* Civil defense *in this index*

Disasters of War, The [prints by Goya]
 Goya, Francisco G: 295

Disbudding

Gardening (Caring for the garden) G: 35-36 *with picture*

Disc [electronics]
 Compact disc Ci: 901

Disc brake
 Automobile (The brake system) A: 954 *with diagram*
 Brake (Hydraulic brakes) B: 560-561 *with diagram*

Disc jockey [career]
 Radio (Entertainment) R: 85
 Rap music R: 141

Disc player [machine]
 Laser (Recording, storing, and transmitting information) L: 82

Discaled Carmelites [religious group]
 Religious life (Religious life in the 1500's and 1600's) R: 227

Discharge, Military
 Military discharge M: 543

Disciple [religion]
 Apostles A: 566

Disciples of Christ [religious group] D: 223

Disciplinæ [book by Varro]
 Encyclopedia (The first reference works) E: 268a

Discipline [education]
 Curriculum (Curriculum content) Ci: 1197

Disclosing tablet [dental hygiene]
 Teeth (Cleaning the teeth) T: 81-82

Disco
 Popular music (New forms of rock) P: 671
 Rock music (Disco and punk) R: 380

Discoid lupus erythematosus [disease]
 Lupus L: 526

Discount [economics] D: 223
 Installment plan (How the plan works) I: 304
 Rebate R: 173

Discount interest [economics]
 Interest (Discount interest) I: 321

Discount rate [economics]
 Federal Reserve System (Managing the economy) F: 65-66
 Inflation (Monetary policy) I: 268-268a
 Interest (The discount rate) I: 323
 Money (The role of the Federal Reserve System) M: 716

Discount store D: 224
 Retailing (Discount stores) R: 265

Discounting [economics]
 Cost-benefit analysis Ci: 1079

Discours [poems by Ronsard]
 Ronsard, Pierre de R: 450

Discourse on Method [book by Descartes]
 Descartes, René D: 154
 French literature (Classical prose) F: 520

"Discourse on the Origin and Foundations of Inequality"
 Rousseau, Jean-Jacques (His ideas) R: 492

"Discourse on the Sciences and the Arts"
 Rousseau, Jean-Jacques (Early life) R: 492

Discourse on Two New Sciences [book by Galileo]
 Galileo (Galileo and the Roman Catholic Church) G: 11-12

Discourse on Woman [book by Mott]
 Mott, Lucretia Coffin M: 880

Discourses [essays by Reynolds]
 Reynolds, Sir Joshua R: 289

Discourses on Davila [book by Adams]
 Adams, John (Vice President) A: 37

Discovery
 Camp Fire Boys and Girls (Club programs) C: 88-89

Discovery [law]
 Court (How civil courts work) Ci: 1102

Discovery [ship]
 Cook, James (Final voyage) Ci: 1026
 Hudson, Henry (North American voyages) H: 404
 Jamestown J: 28

Discovery [space shuttle]
 European Space Agency E: 418
 Glenn, John Herschel, Jr. (Later career) G: 227
 International Space Station (History) I: 346b
 Space exploration (Back into space) So: 726

Discovery Day [holiday]
 Klondike K: 344

Discovery method
 Education (How people learn) E: 96
 Social studies (Methods) So: 557

Discovery of the Mississippi [painting by Powell]
 De Soto, Hernando *picture on* D: 161

Discovery space

Shakespeare, William (The stage) S: 352 *with picture*

Discreet Charm of the Bourgeoisie, The [film]
Buñuel, Luis 8: 700

Discrete transistor [electronics]
Transistor T: 372

Discretionary income

Income (Uses of personal income) I: 101-102

Discrimination [psychology]

Perception (Types of perception) P: 283

Discrimination [sociology]

See also Sex discrimination in this index

AIDS (Discrimination) A: 164b

City (The people) Ci: 589-590

Civil rights (Protecting the rights of minorities)
Ci: 609

Civil Rights Act of 1964 Ci: 611

Disabled (Attitudes toward people with disabilities) D: 221-222

Equal Employment Opportunity Commission
E: 345

Gray Panthers G: 335

Hispanic Americans (Hispanic Americans in the late 1900's) H: 255; (Concerns about education) H: 258

Homosexuality (Attitudes toward homosexuality) H: 307

Housing (Housing since 1900) H: 391-392

India (Social structure) I: 116

Lévesque, René L: 218

Minority group M: 608

Open housing O: 789

Poverty (The causes of poverty) P: 724

Racial discrimination

Affirmative action A: 91

African Americans (The growth of discrimination) A: 136i; (During the early 1900's) A: 136j; (The civil rights movement) A: 136m

Apartheid A: 563

Asian Americans (History of Asian immigration) A: 812d

Civil rights (The struggle for the rights of blacks) Ci: 609; (Civil rights in Canada) Ci: 610

Ghetto (Ghettos today) G: 181

Hispanic Americans (Who are the Hispanic Americans?) H: 245; (Immigration restrictions and growing discrimination) H: 252

Oriental exclusion acts O: 855

Prejudice P: 755

Races, Human R: 53; (Race and discrimination) R: 59

Slavery (Effects of slavery) S: 503-504

United States, History of the (Poverty and discrimination) U: 191

Religious discrimination

Freedom of religion F: 505

Inquisition I: 277

Northern Ireland (The civil rights movement) N: 525

Discus throw [sport] D: 224 with pictures

Track and field (Throwing events) T: 356; (World track and field records) T: 358-359

Discus Thrower, The [statue]

Europe picture on E: 392

Discussion

Debate D: 63

Discussion show [television] See Talk show in this index

Disease D: 225 with pictures

Bacteria (Harmful bacteria) B: 19

Disabled D: 218

Dog (Medical care) D: 279

Drug (Drugs that fight infection) D: 351; (Drugs that prevent infectious diseases) D: 351

Enzyme (Structure) E: 341; (Uses) E: 341

Fever F: 83

Fungal disease F: 558

Genetic testing G: 85

Insect (Harmful insects) I: 284

Microbiology (Fields of microbiology) M: 513

Public health (Health planning) P: 856; (Furnishing support services for health workers) P: 857

Animal diseases

Balance of nature (Disease and parasites) B: 35

Livestock (Prevention of disease) L: 397

Veterinary medicine V: 345

Diseases in human beings

Allergy (The allergic threshold) A: 374

Animal (Animals and people) A: 471-472

Blood (Protecting against disease) B: 410

Brain (Infectious diseases) B: 557

Circulatory system (Disorders of the circulatory system) Ci: 561

City (Description) Ci: 578; (Description) Ci: 585-587

Deafness (Causes of hearing loss) D: 57

Epidemic E: 343

Eye (Diseases of the eye) E: 466

Health (Medical and dental care) H: 126

Heredity (Hereditary disorders) H: 204

Inoculation I: 276

Nervous system (Disorders of the nervous system) N: 136

Nutrition (Nutrition and disease) N: 630

Palliative care P: 108

Parasite (Parasites that feed on people and animals) P: 154

Quarantine Q: 7

Races, Human (Susceptibility to genetic diseases) R: 58

Virus V: 426

History

Colonial life in America (Health and medicine) Ci: 809

Jenner, Edward J: 91

Koch, Robert K: 360

Pioneer life in America (Health) P: 483

Plant diseases

See Plant disease in this index

Research

Bacteriology (Controlling bacterial diseases) B: 22

Gnotobiotics G: 238

Pathology P: 196

See also the list of Related articles in the Disease article

Disease Control and Prevention, Centers for [U.S.] See Centers for Disease Control and Prevention in this index

Disguise

Mask M: 263 *with pictures*

Disguised symbolism [art]

Campin, Robert C: 91

Van Eyck, Jan V: 282

Dish [electronics]

Antenna (Dish antennas) A: 543-544 *with picture*

Telescope (Radio telescopes) T: 106

Television (Satellites) T: 123; *picture on* T: 117

Dish [engineering]

Solar energy (Parabolic dish systems) So: 579

Dish [pottery]

Pottery *picture on* P: 717

Stoneware So: 911

Dish garden

Gardening (Collections of house plants) G: 36

Dishcloth gourd [plant]

Gourd G: 281

Dishonorable discharge

Military discharge M: 543

Disinfectant D: 235

Bacteria (Protection against harmful bacteria) B: 20

Deodorizer D: 148

Hypochlorous acid H: 480

Ultraviolet rays (Uses of ultraviolet rays) U: 17

Water (Purifying and treating water) W: 126

Disinformation

Central Intelligence Agency C: 356

Disjoint set [mathematics]

Set theory (Kinds of sets) S: 321 *with diagram*

Disk [anatomy] See Intervertebral disk in this index

Disk [blood]

Osler, Sir William O: 863

See also Platelet in this index

Disk [electronic device] See Computer storage disk; Floppy disk; Hard disk in this index

Disk [sun]

Sun (Evolution of the sun) So: 982

Disk brake See Disc brake in this index

Disk cutter [tool]

Tunnel (How tunnels are built) T: 490 *with diagram*

Disk drive [electronic device]

Computer (Storage devices) Ci: 915

Disk flower [botany]

Composite family Ci: 904

Disk harrow [tool]

Harrow H: 77

Disk jellyfish [sea animal]

Animal *picture on* A: 486

Disk magnet

Magnetism M: 58

Disk plow

Plow (Other types of bottoms) P: 576 *with picture*

Disk-tumbler lock

Lock (Mechanical locks) L: 411

Diskette [electronic device] See Floppy disk in this index

Dislocation [injury] D: 235

First aid (Fractures and dislocations) F: 140

Hip H: 238

Joint J: 155

Dismal Swamp [region, North Carolina-Virginia] D: 235 *with picture*

Peat P: 225

Dismal Swamp Canal [waterway, North Carolina-Virginia]

Atlantic Intracoastal Waterway A: 863

Disney, Walt [American producer] D: 235 *with pictures*

Animation (Walt Disney) A: 514; (Animation in the mid-1900's) A: 514a

United States *picture on* U: 118

Walt Disney Company W: 20

Disney-MGM Studios Theme Park

Walt Disney Company W: 20

Disney World Resort See Walt Disney World Resort in this index

Disneyland [Anaheim, California]

Amusement park A: 446

California (Places to visit) C: 46 *with picture*

Disney, Walt (TV and theme park ventures) D: 237 *with picture*

Walt Disney Company W: 20

Disneyland [painting by Lindner]

Lindner, Richard *picture on* L: 332

Painting (Mass) P: 35

Disneyland Paris Theme Park [France]

Walt Disney Company W: 20

Disneyland Resort [Anaheim]

Walt Disney Company W: 20

Disney's California Adventure [theme park]

Walt Disney Company W: 20

Disorderly conduct [crime]

Breach of the peace B: 587

Crime (table) Ci: 1137

Dispatch office

Airport (The passenger terminal) A: 244

Dispatcher [occupation]

Fire department (Communication systems) F: 125 *with picture*

Dispersion [chemistry]

Colloid Ci: 777

Emulsion E: 264

Dispersion [physics]

Light (Dispersion) L: 290

Gem (Index of refraction) G: 77

Dispersive wave

Waves (How waves move) W: 152

Displaced person

Holocaust (After the Holocaust) H: 296b

Immigration I: 80

Refugee R: 203

Stolen Generation So: 907

World War II (Displaced persons) W: 496 *with picture*

Displaced Persons Act [1948]

Immigration (A temporary decline—1930-1965) I: 82-83

Displacement

Aircraft carrier (The United States carrier fleet) A: 206

Ship (Nautical measurements) S: 416

Displacement behavior D: 237

Personality (Freud's psychoanalytic theory) P: 302-303

Displacement hull

Motorboat racing (Hull designs) M: 876 *with picture*

Displacer piston

Stirling engine So: 902 *with diagrams*

Display

Radar (The display) R: 71 *with diagram*

Display ad

Advertising (Newspapers) A: 74

Newspaper (Preparing advertisements) N: 383

Disposable contact lens

Contact lens (Soft contact lenses) Ci: 1020

Disposable diaper

Baby (Clothing the baby) B: 10

Clothing (Clothing materials) Ci: 704

Disposable income

Income (Uses of personal income) I: 101-102

Disposable nonwoven [textile]

Textile (Nonwovens) T: 215

Disposal, Waste See Waste disposal in this index

Disposer, Garbage [machine]

Garbage disposer G: 28

Disputed question [philosophy]

Scholasticism (The scholastic method) S: 179

Disquisitiones Arithmeticae [book by Gauss]

Number theory N: 605

Disraeli, Benjamin [British political leader]

D: 237 with portrait

Conservative Party Ci: 992

United Kingdom (Gladstone and Disraeli) U: 69

Disraeli: A Picture of the Victorian Age [book by Maurois]

Maurois, André M: 317

Disruptive coloration [zoology]

Protective coloration P: 831

Dissected Till Plains

Missouri (Land regions) M: 662; (Natural resources) M: 665

Dissection [biology]

Anatomy A: 448b

Medicine (The Renaissance) M: 373

Dissent See Civil disobedience; Social protest in this index

Dissenting opinion

Supreme Court of the United States (Written opinions) So: 999

Dissertation [education]

Degree, College (The doctor's degree) D: 92

Dissociation [chemistry]

Base B: 123

Dissociative disorder [psychology]

Mental illness (Dissociative disorders) M: 406

Dissolve [photography]

Television (Putting a show on the air) T: 111-113

Dissolve unit [machine]

Audio-visual materials (Filmstrips and slides) A: 882

Dissonance

Classical music (The 1900's) Ci: 649

Harmony H: 63

Music (Harmony) M: 951-952

Distaff

Spinning So: 794

Distal muscular dystrophy [disease]

Muscular dystrophy (Other muscular dystrophies) M: 937

Distance

Astronomy (Units of distance) A: 837

Calculus (Differential calculus) C: 22

Metric system (The metric system at a glance) M: 438 with pictures

Weights and measures (table: Length and distance) W: 185

Work W: 404

Distance education See Distance learning in this index

Distance learning [education] D: 238

Audio-visual materials (Multisensory materials) A: 883

Careers (Distance learning programs) C: 217

South Africa (Education) So: 612

Distance receiving senses [anatomy]

Senses (External senses) S: 301

Distemper [disease] D: 238

Cat (Veterinary care) C: 295

Distillate

Distillation D: 238

Distillate oil

Fuel (Petroleum) F: 550

Petroleum (Petroleum as a fuel) P: 332

Distillation [chemistry] D: 238 with diagrams

Corn (The fermentation and distilling industry) Ci: 1062

Evaporation (Uses of evaporation) E: 423

Perfume (Plant substances) P: 286

Petroleum (Refining petroleum) P: 343-344 with diagram

Water (Distillation) W: 127

Distilled alcoholic vinegar

Vinegar (Kinds of vinegar) V: 387

Distilled water

Distillation D: 238

Water (Distillation) W: 127

Distilling [liquor] D: 239

Alcoholic beverage (Distilled beverages) A: 336

Corn (The fermentation and distilling industry) Ci: 1062

Distillation (Simple distillation) D: 238-239

Whiskey W: 282

Distinct evolutionary lineage [biology]

Evolution (Evolution of new species) E: 429

Distinguished Flying Cross

Earhart, Amelia E: 14

Medals, decorations, and orders (table) M: 357 with picture

Distinguished Military Graduate [education]

Reserve Officers Training Corps (Army ROTC) R: 258; (Air Force ROTC) R: 258

Distinguished Service Cross

Medals, decorations, and orders (table) M: 357 with pictures

Distinguished Service Medal

Medals, decorations, and orders (table) M: 357 with pictures; (Civilian awards) M: 355-357

Distortion

Aberration A: 10

Map M: 176; (Map projections) M: 179-180; (Map projections) M: 182 with diagrams

Distractibility [disorder]

Learning disabilities (Types) L: 165

Distress signal

Flag (Raising and lowering the flag) F: 219

Signaling (Distress signals) S: 455

Distribution [economics]

Economics E: 57; (Economic problems) E: 58

Manufacturing (Distribution and sales) M: 171

Marketing (Distribution) M: 214

Trade (The use of markets) T: 362

United States, History of the (Distribution, sales, and communication) U: 178

Distribution [physics]

Lighting (Quantity of light) L: 297

Distribution of wealth [economics]

Capitalism (Equalizing the distribution of wealth) C: 195

Economics (Distribution of incomes) E: 61 with diagram

Income (Distribution of income) I: 101 with diagram

Latin America (Rural life) L: 97

Distribution substation

Electric power (Distribution) E: 185 with diagram; picture on E: 182

Distributive Law of Multiplication over Addition

Algebra (Basic algebra) A: 354

Distributor [business]

Motion picture (Distribution) M: 860

Distributor [mechanics]

Gasoline engine (Ignition system) G: 65

Ignition (The conventional electronic ignition system) I: 49-50 with diagram

District [firefighting]

Fire Department (Paid departments) F: 128

District attorney D: 240

District court [law] D: 240

Court (Federal courts) Ci: 1102

Supreme Court of the United States (Authority of the Supreme Court) So: 998-999

United States, Government of the (Lower court system) U: 144

District fair

Fair (Agricultural fairs) F: 7

District of Columbia [books by Dos Passos]

Dos Passos, John D: 311

District of Columbia [district, U.S.] D: 240

Flag picture on F: 213

Washington, D.C. W: 70; (History) W: 85-86

Districing

Apportionment A: 574

Disulfiram [drug] D: 240

Alcoholism (Treatment) A: 338

Drug abuse (Treatment of substance use disorders) D: 364

Dit [telegraphy]

Morse code M: 819

Ditch

Drainage (Surface drainage) D: 320 with diagram

Diuretic [medication] D: 240

Drug (Other kinds of drugs) D: 352

Edema E: 75

Diurnal libration [astronomy]

Moon (Libration) M: 785 with diagram

Diurnal tide

Tide (Tidal patterns) T: 282

Diurnal torpidity [zoology]

Hibernation (Other kinds of dormancy) H: 222

Divan [poem by Hafiz]

Iran (The arts) I: 402-403

Dive [maneuver]

Submarine (Diving) So: 941

Dive [water sport]

Diving D: 242 with pictures

Diver See Loon in this index

Divergence [mathematics]

Series (Working with infinite series) S: 317

Divergence [physics]

Laser (Characteristics of laser light) L: 84

Divergent plate boundaries [geology]

Plate tectonics (Plate interactions) P: 562

Diverging lens [optics]

Lens (Creating an image) L: 196

Diversification [industry]

Industry (Industrial organization) I: 261

Diversified farming

Agriculture (Diversified farms) A: 149

Farm and farming (Mixed farms) F: 32

Diversified occupation

Cooperative education Ci: 1037

Diversifying selection [biology]

Evolution (Balancing or diversifying) E: 429

Diversion [law]

Road (How roads and highways are paid for) R: 360

Diverticulitis [disease] D: 240 with diagrams

Colostomy Ci: 850

Fiber, Dietary F: 88

Diverticulosis [disorder]

Diverticulitis D: 240

Fiber, Dietary F: 88

Diverticulum [anatomy]

Diverticulitis D: 240 with picture

"Diverting History of John Gilpin, The" [poem by Cowper]

Literature for children (The rise of illustration) L: 363 with picture

Divertissement

Ballet (table) B: 45; (Kinds of ballet) B: 48

Divestiture [economics]

Nationalization N: 63

Divide [geology] D: 241 with diagram

River (Divides) R: 353 with picture

Valley V: 265

Divide-down [game]

Division (Fun with division) D: 252

Divided government

United States, Government of the (How effective is the government?) U: 146

Divided highway

Road (Primary highways) R: 358

Dividend [economics]

Insurance (Dividends) I: 310

Investment (table) I: 366; (Stocks) I: 368

Stock, Capital (Stockholders) So: 903

Dividend [mathematics]

Arithmetic (Division) A: 668

Division (Writing division) D: 248

Divider [instrument] D: 241

Divination [superstition] D: 241

Inca (Religion) I: 96-97

Divine, Father [American religious leader]

D: 241 with portrait

Merrill, James M: 419

Divine Comedy [poem by Dante] D: 242

Allegory A: 371

Giardi, John Ci: 551

Dante Alighieri D: 34

Italian literature (The Middle Ages) I: 494

Italy (Literature) I: 504

Longfellow, Henry Wadsworth (Translations, lyric poems and dramatic poems) L: 451

Michelangelo (The Last Judgment) M: 486

Poetry (Medieval poetry) P: 596

Virgil (His influence) V: 392

Divine Liturgy [religion]

Eastern Orthodox Churches (Services) E: 46

Liturgy L: 392

Mass M: 269

Divine Office [religion]

Benedictines B: 248

Bible (The Bible in worship) B: 287

Eastern Orthodox Churches (Services) E: 46

Divine proportion See Golden section in this index

Divine Revelation, Constitution of

Vatican Council II (The work of the council) V: 289

Divine right of kings D: 242

England (The first Stuarts) E: 308

French Revolution (Background) F: 524-525

Government (Sovereignty) G: 282

King K: 319

Petition of Right P: 327

Diving [sport] D: 242 *with pictures*
Olympic Games (Summer Olympic Games)
O: 746e-747

Diving, Underwater D: 245 *with pictures*
Archaeology (Working underwater) A: 597
with picture

Bathyscaph B: 165
Helium *picture on* H: 176
Hyperbaric oxygen therapy H: 475
Skin diving S: 492 *with pictures*

Diving beetle [insect]
Beetle (Predacious diving beetles) B: 217; *pic-
ture on* B: 218
Water beetle W: 133

Diving bell [diving vessel]
Diving, Underwater (History) D: 247 *with pic-
ture*

Diving mask
Diving, Underwater (Ambient diving) D: 245

Diving plane
Submarine So: 939; (Diving) So: 941

Diving suit
Diving, Underwater (Ambient diving) D: 245
with picture; (History) D: 247
Helium *picture on* H: 176

Divining rod [magic]
Hazel H: 123

Divinity school See *Seminary in this index*

"Divinity School Address" [speech by
Emerson]
Emerson, Ralph Waldo (His prose works)
E: 259

Divino Afflante Spiritu [encyclical]
Pius XII P: 503

Divinsky, Nathan J. [Canadian scholar]
Campbell, Kim (Education and entry into politi-
cal life) C: 90c

Division [biology]
Classification, Scientific (Groups in classifica-
tion) Ci: 654-655

Division [firefighting]
Fire Department (Paid departments) F: 128

Division [mathematics] D: 248 *with pictures*
Algebra (Division) A: 355
Algorithm A: 366
Arithmetic (Division) A: 668 *with picture*;
(Arithmetic of small fractions) A: 668;
(Arithmetic of negative numbers) A: 668-
669

Cancellation C: 166
Decimal system (Division) D: 72 *with diagrams*
Fraction F: 444; (Equivalent fractions) F: 446-
447 *with diagram*; (Division) F: 448-449
Logarithms (Division) L: 424

Division [military] D: 247
Air force (The organization of air forces) A: 183
Army, United States (table) A: 737
Brigade B: 608
Infantry (Divisions) I: 265
Navy (The organization of navies) N: 77

Division of church and state See *Church and
state in this index*

Division of Information Services
Library (Special libraries) L: 250

Division of labor
Factory (Kinds of factories) F: 5
Industrial Revolution *diagram on* I: 248
Mass production M: 269
Technology (Agriculture and civilization) T: 74
Trade (Trade and specialization) T: 361
United States, History of the (Improved pro-
duction methods) U: 176-177
Women's movements (Origins of women's
traditional roles) W: 383

Division of Labor [book by Durkheim]
Durkheim, Émile D: 389

Divisionism [art]
Painting (Postimpressionism) P: 75-76 *with
picture*

Divisor [mathematics]
Division (Writing division) D: 248

Divorce [law] D: 253
Abandonment A: 4
Alienation of affections A: 368
Alimony A: 369
Annulment A: 518
Desertion D: 157
Eastern Orthodox Churches (Marriage) E: 47
Family (Development of the family) F: 21-22;
(Challenges and opportunities) F: 24
Marriage M: 219
Nevada (Legal gambling and easy divorce)
N: 176
Vital statistics (Collecting and publishing vital

statistics) V: 429-430

Diwali [festival]
Feasts and festivals (In Hinduism) F: 58
India (Hinduism) I: 116

Dix, Dorothea Lynde [American social reformer]
D: 255 *with portrait*
Civil War (Hospitals) Ci: 630
Mental illness (Humane treatment) M: 408

Dix, John Adams [American political leader]
Buchanan, James (table) B: 661
Fort Dix F: 412
New York (table) N: 313
Treasury, Department of the (table) T: 407

Dix, John Alden [American political leader]
New York (table) N: 313

Dix, Otto [German artist]
Beckmann, Max B: 197

Dixie [nickname, southern U.S.] D: 255
"Dixie" [song] D: 255
Emmett, Daniel Decatur E: 260

Dixie Highway [U.S.] D: 255

Dixie Mountaineers [musical group]
Country music *picture on* Ci: 1098

Dixiecrat Party [U.S. history] D: 255
Democratic Party (The Fair Deal) D: 127
Thurmond, Strom T: 273

Dixieland [region] See *Dixie in this index*

Dixieland jazz
Jazz (Early jazz) J: 70

Dixon, Frank M. [American political leader]
Alabama (table) A: 274

Dixon, George [British explorer]
Queen Charlotte Islands Q: 39

Dixon, Jeremiah [British astronomer]
Mason and Dixon's Line M: 266

Dixon, Joseph [American inventor] D: 255

Dixon, Joseph M. [American political leader]
Montana (table) M: 757

Dixon, Sharon Pratt [American political leader]
See *Kelly, Sharon Pratt in this index*

Dizygotic twins See *Fraternal twins in this
index*

Dizziness [disorder] D: 255

Djakerta See *Jakarta in this index*

Djenné [Mali] See *Jenne in this index*

Djarma-Songhai [people]
Niger (People) N: 407-408

Djibouti [country, Africa] D: 256 *with pictures
and map*

Flag *picture on* F: 198

Djibouti [city, Africa] D: 257; D: 256 *with picture*

Djugashvili, Ekaterine Gheledze [mother of]
Stalin, Joseph (Boyhood and education)
So: 825

Djugashvili, Iosif See *Stalin, Joseph in this
index*

Djugashvili, Vissarion Ivanovich [father of]
Stalin, Joseph (Boyhood and education)
So: 825

DME [instrument]
Airplane (Radio navigation) A: 227

Dmitriy [Russian nobleman]
Russia (The rise of Moscow) R: 548; (The
Time of Troubles) R: 549

Dmowski, Roman [Polish political leader]
Poland (The struggle against foreign rule)
P: 612

DMSO [drug] D: 257

DMT [drug]
Hallucinogenic drug H: 26

DNA [genetics] D: 258
Antiviral drug A: 560
Bacteria (The structure of bacteria) B: 20;
(How bacteria reproduce) B: 21
Biochemistry (Biochemical research) B: 310
Biology (The growth of modern biology)
B: 319-320
Botany (Later developments) B: 509
Cancer (How damaged genes cause cancer)
C: 169
Cell C: 327; (The nucleus) C: 328; (Producing
proteins) C: 333-334 *with diagrams*;
(DNA—the wondrous molecule) C: 334
with diagrams; (The 1900's) C: 337-338
with picture

Clone Ci: 684
Crick, Francis H. C. Ci: 1130
DNA fingerprinting D: 258
Evolution (Mutation) E: 427; (Contributions
from other scientific fields) E: 433
Franklin, Rosalind Elsie F: 492
Gene G: 81
Gene mapping G: 81
Genetic engineering (How genes are reintro-

duced into cells) G: 84a *with diagrams*
Genetic testing (How genes carry information)
G: 85

Heredity H: 200; (The flow of genetic informa-
tion) H: 205 *with picture*; (The chemistry
of genes) H: 209; (The era of genetic
engineering) H: 209

Human body (Chemical elements and mole-
cules) H: 417

Human Genome Project H: 427
Life L: 277; (Nucleic acids) L: 278

Mitochondria M: 679
Molecular biology (The beginning of molecular
biology) M: 691-692

Mutation M: 968
Prehistoric people (Analysis of the genetic
materials) P: 754

Protein (How the body uses proteins) P: 832-
833

Quinolone Q: 43
Races, Human (Mutation) R: 58

Reproduction (How genes are transferred)
R: 242

RNA R: 357
Science (Achievements of the mid-1900's)
S: 202 *with picture*

Virus (The structure of a virus) V: 426
Watson, James Dewey W: 147

DNA analysis See *DNA fingerprinting in this
index*

DNA fingerprinting [criminology] D: 258
Crime laboratory (Analyzing the evidence)
Ci: 1141

Fingerprinting (History) F: 107

DNA gyrase [enzyme]
Quinolone Q: 43

DNA typing See *DNA fingerprinting in this
index*

DNase [drug]
Cystic fibrosis Ci: 1208

D'Nealian handwriting
Handwriting (Handwriting systems) H: 48-49
with picture

Dnepr-Prpyat Lowland [region]
Ukraine (The land) U: 9 *with map*

Dnepr River [Europe] D: 258
Ukraine (Rivers and lakes) U: 10 *with map*;
picture on U: 5

Dneproges Dam [Ukraine]
Dnepr River D: 258

Dnepetrovsk [city, Ukraine] D: 259

Dnestr River [Europe]
Moldova (Land and climate) M: 690-690a
Ukraine (Rivers and lakes) U: 10 *with map*

Dniro River [Europe] See *Dnepr River in this
index*

Dnister River [Ukraine] See *Dnepr River in this
index*

Dnyapro River [Europe] See *Dnepr River in this
index*

D.O. [degree]
Medicine (A career as a doctor) M: 370

Osteopathic medicine (Careers in osteopathic
medicine) O: 867

Do Androids Dream of Electric Sheep? [book
by Dick]
Dick, Philip K. D: 186

Do-it-yourself divorce
Divorce (No-fault divorce) D: 253-254

Do Quang Em [Vietnamese artist]
Vietnam (The arts) V: 366

Do the Right Thing [film by Lee]
Lee, Spike L: 179

Do With Me What You Will [book by Oates]
Oates, Joyce Carol O: 639

Doak, Samuel [American religious leader]
Tennessee (Schools) T: 138

Doak, William N. [American government offi-
cial]
Hoover, Herbert Clark (table) H: 330

Labor, Department of (table) L: 2

Dobbins [ship]
United States Coast Guard Academy (History)
U: 199

Dobbins, James C. [American government offi-
cial]
Pierce, Franklin (table) P: 456

Dobell, William [Australian painter]
Australia (Painting) A: 906-907

Döbereiner, Johann [German chemist]
Furfural F: 566

Doberman pinscher [dog] D: 259 *with picture*

Dobermann, Louis [German dog breeder]
Doberman pinscher D: 259

- Dobie, J. Frank** [American author] D: 259
- Dobrovolsky, Georgi T.** [Soviet cosmonaut]
Astronaut (Accidents in space) A: 830; (table) A: 830
Space exploration (Salyut and Skylab) So: 721
- Dobruja** [region, Romania]
Romania (Land regions) R: 420 *with map*
- Dobson, John** [British architect]
Architecture (The Industrial Revolution) A: 625
- Dobsonfly** [insect]
Hellgrammite H: 177 *with picture*
- Doby, Larry** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Dobzhansky, Theodosius** [Russian-born American biologist]
Evolution (The synthetic theory) E: 432
- Docetaxel** [drug]
Taxol T: 56
- Dock** [plant] D: 259
- Dock** [shipping]
Dry dock D: 369
- Dockery, Alexander M.** [American political leader]
Missouri (table) M: 668
- Docket** [law]
Clerk of court Ci: 662b
- Docking** [space exploration]
Space exploration (Working in space) So: 704;
(Space stations) So: 721
- Docking, George** [American political leader]
Kansas (table) K: 234
- Docking, Robert** [American political leader]
Kansas (table) K: 234
- Docking pilot**
Ship (Navigating a ship) S: 423
- Docking well**
Warship (Amphibious warfare ships) W: 40
- Docklands** [area]
London (Dealing with problems) L: 442-443
- Dockwra, William** [English merchant]
Postal services (The creation of the Penny Post) P: 706
- Doctor** [degree]
Address, Forms of (Other forms) A: 54
Caps and gowns (Doctor's degree) C: 199 *with picture*
Degree, College (The doctor's degree) D: 92
- Doctor** [medicine] See *Physician in this index*
- Doctor blade** [machine]
Printing (Flexographic printing) P: 799; *diagram on* P: 800
- Doctor Brodie's Report** [book by Borges]
Borges, Jorge Luis B: 487
- Doctor Dolittle** [literary figure]
Lofting, Hugh L: 420 *with picture*
- Dr. Faustus** [book by Mann]
Mann, Thomas M: 164
- Doctor Faustus** [play by Marlowe] See *Tragicall History of Doctor Faustus, The in this index*
- Dr. J** [nickname]
Erving, Julius E: 355
- Dr. Jekyll and Mr. Hyde** [book by Stevenson]
Stevenson, Robert Louis (Novels) So: 898
- Doctor No** [book by Fleming]
Fleming, Ian Lancaster F: 233
- Doctor of ...**
Doctors appear under the key words in their titles, as in Chiropractic, Doctor of
- Dr. Strangelove** [film]
Kubrick, Stanley K: 391
Motion picture (Movies in the 1960's) M: 871 *with picture*
- Doctor Thorne** [book by Trollope]
Trollope, Anthony T: 449
- Dr. Zhivago** [book by Pasternak]
Pasternak, Boris P: 192
Russian literature (Modern Soviet literature) R: 564
- Doctorfish** [fish] D: 259 *with picture*
- Doctorow, E. L.** [American novelist] D: 260
American literature (Experimental styles) A: 424-425
- Doctors Without Borders** D: 259
Nobel Prizes (Peace: 1999) N: 449
- Doctrine and Covenants** [book by Smith]
Community of Christ C: 899
Mormons (Church doctrines) M: 806
- Doctrine of decorum**
Drama (The French theater) D: 333
- Doctrine of implied powers** [U.S. history]
Hamilton, Alexander (Secretary of the treasury) H: 32
- Doctrine of the Two Swords** [religious document]
- Church and state (The Middle Ages) C: 542
- Documentary**
Motion picture M: 847
Television (Commercial television) T: 110
- Documentary hands** [writing]
Paleography P: 103
- Documentary photography**
Photography (The photographic revolution) P: 427-428 *with picture*
- Documents Sales Service**
Government Printing Office G: 293
- Dodd, Sonora Louise Smart** [American public figure]
Father's Day F: 54
- Dodd, William Edward** [American historian] D: 260
- Dodder** [plant] D: 260
Plant (Photosynthesis) P: 538 *with picture*
- Dodecahedron** [geometry]
Polyhedron P: 650 *with diagram*
- Dodecanese Islands** (Aegean Sea)
Aegean Sea A: 84 *with map*
Rhodes R: 316
- Decaphonic music**
Dallapiccola, Luigi D: 10
- Dodge, David L.** [American businessman]
Peace (The 1800's and early 1900's) P: 206
- Dodge, Grenville M.** [American engineer]
Cheyenne (History) C: 417
- Dodge, Henry** [American political leader]
Wisconsin (Territorial days) W: 366
- Dodge, Horace Elgin** [American businessman]
Dodge brothers D: 260
Automobile (The Dodge brothers) A: 965
- Dodge, John Francis** [American businessman]
Dodge brothers D: 260
Automobile (The Dodge brothers) A: 965
- Dodge, Mary Elizabeth Mapes** [American author] D: 260
- Dodge, Nehemiah** [American businessman]
Providence (Government and history) P: 840
Rhode Island (Industrial growth) R: 313
- Dodge, Seril** [American businessman]
Rhode Island (Industrial growth) R: 313
- Dodge brothers** [American businessmen] D: 260
Automobile (The Dodge brothers) A: 965
- Dodge City** [Kansas] D: 260 *with picture*
Conservation picture on Ci: 986
Kansas K: 217; (Places to visit) K: 226 *with picture*; (The great cattle towns) K: 237
- Dodge Company**
Dodge brothers D: 260
- Dodgers, Brooklyn** [baseball team] See *Brooklyn Dodgers in this index*
- Dodging**
Photography (Printing black-and-white photographs) P: 421-422
- Dodgson, Charles Lutwidge** See *Carroll, Lewis in this index*
- Dodo** [extinct bird] D: 260 *with picture*
Bird (Extinct birds) B: 369-370 *with picture*
- Dodoma** [city, Tanzania] D: 261
Tanzania T: 30
- Dodona** [ancient Greece]
Oracle O: 814
- Dodsworth** [book by Lewis]
Lewis, Sinclair L: 221
- Dodsworth** [play by Howard]
Howard, Sidney H: 400
- Doe** [animal]
Deer D: 82d *with picture*
Goat G: 239
- Doe, Elizabeth "Baby"** [American public figure]
Colorado (Statehood) Ci: 845-847
- Doe, Samuel K.** [Liberian military leader]
Liberia (History) L: 231-232
- Doenitz, Karl** [German admiral] D: 261
Nuremberg Trials (The trials) N: 612-613
World War II (Victory in Europe) W: 484
- Doer, Gary** [Canadian political leader]
Manitoba (table) M: 159
- Doerr, Bobby** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Dog** D: 262 *with pictures*
Canine parvovirus C: 177
Distemper D: 238
Dog guide D: 282 *with pictures*
Evolution (Artificial selection) E: 432
Flea (Controlling fleas) F: 232
Heart *diagram on* H: 146
Heridity (Chromosomes and genes) H: 201
Hunting (Kinds of hunting) H: 450
Mammal *diagrams on* M: 120
- Pet P: 319 *with picture*
See also the list of breeds of purebred dogs in the Dog article
- Dog-day cicada** [insect]
Cicada (Types of cicadas) Ci: 551
- Dog flea**
Insect *picture on* I: 282
- Dog guide** D: 282 *with pictures*
Tennessee T: 135 *with picture*
- Dog paddle**
Swimming (The basic strokes) So: 1043-1044
- Dog racing** [sport] D: 283 *with picture*
Sled dog S: 506
- Dog-rose plant**
Brier B: 608
- Dog salmon** See *Chum salmon in this index*
- Dog show**
Dog (Dog competitions) D: 280
- Dog sled** [vehicle]
Alaska (Visitor's guide) A: 290 *with picture*
Inuit (Transportation) I: 354c; *pictures on* I: 354d
Sled S: 505
Sled dog S: 505
Iditarod I: 47
- Dog sport**
Dog (Dog competitions) D: 280-281
- Dog Star** See *Sirius in this index*
- Dog tag** [military]
Civil War (The enlisted men) Ci: 620
- Dog tick**
Rocky Mountain spotted fever R: 394 *with picture*
Tick T: 279
- Dog violet** [plant]
Violet V: 388
- Dogbane** [plants] D: 283 *with picture*
- Doge** [Italian history] D: 283
- Dogen** [Japanese religious leader]
Zen Z: 593
- Doges' Palace**
Venice (The city) V: 306-307 *with picture and map*
- Dogfight** [warfare]
Air force (World War I) A: 185
Air Force, United States (World War I) A: 194
Airplane (World War I [1914-1918]) A: 234
Korean War (The air war) K: 382
World War I (The war in the air) W: 460-461 *with picture*
- Dogfish** [fish] See *Bowfin in this index*
- Dogfish** [shark] D: 283 *with picture*
- Doggett, Thomas** [British humorist]
Rowing (History) R: 494
- Doggett Coat and Badge** [award]
Rowing (History) R: 494
- Doghhouse**
Dog (Sleeping quarters) D: 278
- Doghhouse** [industry]
Glass (Glass terms) G: 222
- Dogmatic Constitution on the Church** [religion]
Vatican Council II (The work of the council) V: 289
- Dogpatch** [fictional place]
Capp, Al C: 197
- Dogtooth** [anatomy]
Teeth (Permanent teeth) T: 79-80
- Dogtooth violet** [plant] D: 284 *with picture*
Flower (Flowers of woodlands and forests) F: 284-285 *with picture*
- Dogwood** [botany] D: 284 *with picture*
Flower (Variations in flower structure) F: 294 *with picture*
Tree *pictures on* T: 421
- Dogwood Festival**
Connecticut (Visitor's guide) Ci: 960
- Doha** [city, Qatar] D: 284
Qatar Q: 2 *with picture and map*
- Doheny, Edward L.** [American businessman]
Teapot Dome T: 72
- Doherty, Peter Charles** [Australian physiologist]
Nobel Prizes (Physiology or medicine: 1996) N: 445
- Doi moi** [Vietnamese history]
Vietnam (Economy) V: 369; (Recent developments) V: 372
- Doisy, Edward Adelbert** [American chemist]
Nobel Prizes (Physiology or medicine: 1943) N: 444
- Dojo**
Judo (Learning judo) J: 184
Karate (Karate training) K: 246
- Dolbear, Amos E.** [American inventor] D: 284

Dolce stil nuovo

Italian literature (The Middle Ages) I: 494

Dolce Vita, La [film]

Fellini, Federico F: 68

Doldrums [weather]

Atlantic Ocean (Winds) A: 866

Calms, Regions of (The doldrums) C: 69

Climate (Atmospheric circulation) Ci: 676a

Trade wind T: 365

Wind (General circulation) W: 329 *with diagram*

Dole, Elizabeth Hanford [American public figure] D: 284 *with portrait*

Dole, Robert Joseph (Political career) D: 285

Dole, Robert Joseph [American political leader] D: 285 *with portrait*

Bush, George Herbert Walker (The Republican nomination) B: 719

Clinton, Bill (The 1996 election) Ci: 682f

Dole, Sanford Ballard [American businessman] D: 285

Hawaii (The Republic of Hawaii) H: 108

Dole, Vincent [American doctor]

Methadone M: 433

Dolgoruki, Yuri [Russian prince]

Moscow (History) M: 826

Dolin, Anton [British dancer] D: 285

Dollittle, Doctor [literary figure]

Lofting, Hugh L: 420 *with picture*

Doll [toy] D: 286 *with pictures*

Indiana (Interesting facts) I: 197 *with picture*

Kachina K: 208

Papier-mâché (How to make a papier-mâché doll) P: 139 *with pictures*

Puppet P: 904 *with pictures*

United States *picture on U: 116*

Doll collecting

Doll (Doll collecting) D: 293 *with picture*

Doll theater

Drama (Japan) D: 336-337

Dollar [money] D: 294 *with pictures*

Money (The first United States currency)

M: 708; (United States currency today)

M: 709-712 *with pictures; picture on*

M: 704

Dollar Decade See *Roaring Twenties in this index*

Dollar diplomacy [economics] D: 295

Taft, William Howard (Foreign affairs) T: 11

Dollar spot [plant disease]

Lawn (Controlling diseases, pests, and weeds) L: 144; *picture on L: 143*

Dollfuss, Engelbert [Austrian political leader]

Austria (After World War I) A: 939

Dollhouse D: 295 *with picture*

Dollier de Casson, François [Canadian religious leader]

Saint Lawrence Seaway (Early canals) S: 44

Doll's House, A [play by Ibsen]

Ibsen, Henrik (His plays) I: 4

Dolly [sheep]

Biology (Current research and issues) B: 320-321

Clone Ci: 684

Heridity (The era of genetic engineering)

H: 209

Dollywood [theme park]

Tennessee (Places to visit) T: 144

Dolmen [archaeology]

Megalithic monuments M: 383

Dolmuş [taxi]

Istanbul (Economy) I: 491

Dolomite [mineral] D: 296

Dolomites [mountains, Italy]

Alps (Chief ranges of the Alps) A: 385

Dolores, Mission [U.S. history]

San Francisco (Residential districts) S: 93 *with map; (Settlement by Europeans) S: 97*

Dolostone [rock]

Dolomite D: 296

Dolphin [fish] D: 300

Animal (A table of animal intelligence) A: 493

Fish *picture on F: 152*

Dolphin [sea animal] D: 296 *with pictures*

See also *River dolphin in this index*

Killer whale K: 316

Mammal *pictures on M: 117*

Porpoise P: 679

Tuna T: 485

Whale (Dolphins and porpoises) W: 258

Zoo (Interesting facts about zoo animals)

Z: 605

Dolphin, The [poem by Lowell]

Lowell, Robert L: 511

Dolphin figure

Swimming (Synchronized swimming)

So: 1047-1048

Dolphin Hotel [Walt Disney World]

Graves, Michael *picture on G: 330*

Dolphin kick

Swimming (The basic kicks) So: 1043

Dolphins, Miami See *Miami Dolphins in this index*

Dom Casmurro [book by Machado de Assis]

Brazil (The arts) B: 576-577

Latin-American literature [Realism] L: 112

Dom Pedro IV Square

Lisbon *picture on L: 348*

Domagk, Gerhard [German doctor] D: 300

Sulfa drug (Development of sulfa drugs)

So: 965-966

Domain [computing]

Internet (How the Internet works) I: 350c

Domain name [electronics]

Internet (How the Internet works) I: 350c-350d

Domain of the variable

Algebra (Sets and variables) A: 350-351

Dombey and Son [book by Dickens]

Dickens, Charles (The second phase) D: 188

Dome [architecture]

Architecture (Roman architecture) A: 616; *picture on A: 610*

Byzantine art (Architecture) B: 749

Vault V: 291

Dome, Church of the [Paris]

Napoleon I (The Hundred Days and Waterloo) N: 18 *with picture*

Dome mountain [geology]

Mountain (Dome mountains) M: 893

Dome of the Rock [Jerusalem]

Jerusalem (The Old City) J: 95 *with map; (Islamic sites) J: 96; (Muslim rule) J: 101; picture on J: 94a*

Muslims *picture on M: 964a*

Domesday Book [English history] D: 300

Book *picture on B: 465*

Census (Early censuses) C: 349

England (The Norman Conquest) E: 305

Norman Conquest N: 455

Domestic animal

Animal (Animals and people) A: 471

Cat C: 284

Domestic economy

Home economics (History) H: 300

Domestic ferret [animal]

Ferret F: 76

Domestic Manners of the Americans [book by

Frances Trollope]

Trollope, Anthony T: 449

Domestic system [economics] See *Cottage*

industry in this index

Domestic trade

International trade I: 347

Trade T: 361

Domestic tragedy

Drama (England) D: 334-335

Tragedy T: 368

Domestic violence D: 301

Restraining order R: 263

Domestica [plum]

Plum (Kinds of plums) P: 577

Domestication

Agriculture (History of agriculture) A: 155

Animal (Animals and people) A: 471

Civilization (How civilizations develop) Ci: 636

Dog (History) D: 281

Mammal (How people use mammals) M: 118

Plant (How people have changed plants)

P: 542

Prehistoric people (The rise of agriculture)

P: 751-753

Domiciliary

Veterans Affairs, Department of (History)

V: 343-344

Dominance [zoology] D: 301 *with picture*

Animal (Group living) A: 502

Balance of nature (Behavior) B: 35

Dog (Behavior) D: 277

Mammal (Group life) M: 125

Wolf (Habits) W: 375

Dominance hierarchy

Animal (Group living) A: 502

Squirrel (Territories and groups) So: 816

Dominant [music]

Music (Tone) M: 950-951; (Harmony) M: 951-

952 *with diagram*

Dominant disease

Genetic testing (Genes associated with disease) G: 85

Dominant gene

Heredity (Patterns of heredity) H: 202

Dominant gene abnormality

Muscular dystrophy M: 936

Dominant group [sociology]

Minority group M: 608

Domingo, Plácido [Spanish singer] D: 301

Dominguez, Francisco Atanasio [Spanish explorer]

Utah (Early exploration) U: 246

Dominic, Saint [Italian religious leader] D: 301

Dominicans D: 305

Dominica [country] D: 302 *with picture and map*

Flag *picture on F: 201*

Dominican See *Dominicans in this index*

Dominican Family See *Dominicans in this index*

Dominican Republic [country] D: 303 *with pictures and maps*

Cold War (The battle for the neutral nations) Ci: 769

Flag *picture on F: 201*

Organization of American States O: 854

Standard of living (table) So: 834

World War II (table: The Allies) W: 471

Dominicans [religious group] D: 305

Dominic, Saint D: 301

Friar F: 532

Religious life (Religious life in the Middle

Ages) R: 226

Dominion Day [holiday] See *Canada Day in this index*

Dominion Educational Association

Canadian Education Association C: 156

Dominion Foundries and Steel, Ltd.

Hamilton (History) H: 31-32

Dominion of New England [U.S. history]

Colonial life in America (Plymouth Colony)

Ci: 789

Dominion Police See *Royal Canadian Mounted*

Police in this index

Dominique

Chicken (table) C: 443

Domino, Fats [American musician]

Rock music (Growing popularity) R: 377

Domino theory [international relations]

Cold War (The death of Stalin) Ci: 764-765

Vietnam War V: 373

Dominoes [game] D: 306 *with picture*

Domitian [Roman emperor] D: 306

Agricola, Gnaeus Julius A: 144

Domitius, Lucius See *Nero in this index*

Domitius Ahenobarbus, Gnaeus [father of]

Nero N: 130

Domo

Uruguay (Recreation) U: 225

Domostroy [book]

Russian literature (Muscovite literature) R: 559

Domtoren [church tower]

Utrecht U: 252

Domus Aurea [ruins]

Rome (Other remains) R: 433

Don Álvaro or the Force of Destiny [play by

Saavedra]

Spanish literature (The 1800's) So: 761

Don Cossacks [people]

Sholokhov, Mikhail S: 433

Don Giovanni [opera by Mozart]

Opera (Recitative and arias) O: 792; (*Don*

Giovanni) O: 803 *with picture*

Mozart, Wolfgang Amadeus (Operas) M: 906-

907, (His style) M: 907

Don Gonzalo [literary figure]

Don Juan D: 306

Don José [opera character]

Opera (*Carmen*) O: 802

Don Juan [literary figure] D: 306

See also *Don Giovanni in this index*

Opera (*Don Giovanni*) O: 803

Tirso de Molina T: 298

Don Juan [play by Molière]

Molière M: 694

Don Juan [poem by Byron]

Byron, Lord (Byron's life) B: 748; (Byron's

poetry) B: 748

Don Juan and the Love for Geometry [play by

Frisch]

Frisch, Max F: 535

Don Juan Tenorio [play by Zorrilla]

Don Quixote [book by Cervantes] D: 306 *with picture*

Amadis of Gaul A: 399

Cervantes, Miguel de C: 363

Novel (Early novels) N: 572

Proverb P: 839

Spanish literature (The 1600's) So: 759

Don River [Russia] D: 307

Don Rodrigo [opera by Ginastera]

Ginastera, Alberto G: 191

Don Segundo Sombra [book by Güiraldes]

Latin-American literature (The early 1900's) L: 113

Doña Bárbara [book by Gallegos]

Latin-American literature (The early 1900's) L: 113

Doña Paz [ship]

Shipwreck (table: Major shipwrecks) S: 428

Donaghey, George Washington [American political leader]

Arkansas (table) A: 712

Donahay, A. Victor [American political leader]

Ohio (table) O: 699

Donald Duck [cartoon character]

Disney, Walt (The first Disney cartoons)

D: 235-236 *with picture*

Donaldson, Jesse M. [American government official]

Truman, Harry S. (table) T: 469

Doñana National Park [Spain]

National park (table) N: 42f; (Other interesting national parks) N: 42e-42h

Donat, Robert [British actor]

Motion picture (Best performance by an actor: 1939) M: 862

Donatello [Italian sculptor] D: 307 *with picture*

Dragon picture on D: 319

Renaissance (The fine arts) R: 235-236 *with picture*

Sculpture (Early Renaissance) S: 252 *with picture*

Donati, Gemma [wife of]

Dante Alighieri (His life) D: 34

Donati, Giuseppe [Italian musician]

Ocarina O: 646

Donation Land Law [1850]

Oregon (Provisional and territorial governments) O: 848

Donation of Constantine [document]

Sylvester I, Saint So: 1065

Donation of Pepin [European history]

Pepin the Short P: 277

Rome (Early days) R: 434

Donbas [region]

Ukraine (The Central Plateau) U: 9

Donegall Square [district]

Belfast B: 224d *with picture*

Do-ne-ho-ga-we [American government official]

Parker, Ely Samuel P: 170

Donelson, Andrew Jackson [nephew of]

Jackson, Andrew (Jackson's family) J: 8; (Life in the White House) J: 11

Donelson, Emily [niece of]

Jackson, Andrew (Life in the White House) J: 11 *with picture*

White House hostesses W: 291

Donelson, John [American pioneer]

Tennessee (Territorial years) T: 153

Donelson, John [nephew of]

Jackson, Andrew (Jackson's family) J: 8

Donelson, Samuel [brother-in-law of]

Jackson, Andrew (Jackson's family) J: 8

Donepezil [drug]

Alzheimer's disease (Treatment) A: 399

Donets River [Ukraine]

Don River D: 307

Donetsk D: 307

Donetsk [city, Ukraine] D: 307

Dong Son [people]

Vietnam (History) V: 369

Doniphan, Alexander W. [American military leader]

Mexican War (Doniphan's victories) M: 446

Donizetti, Gaetano [Italian composer] D: 307

Opera (*Lucia di Lammermoor*) O: 804

Donjon [defense]

Castle (Structure) C: 280

Donkey [animal] D: 307 *with picture*

Democratic Party picture on D: 125

"Donkey Serenade, The" [music by Friml]

Friml, Rudolf F: 534

Donna Anna [opera character]

Opera (*Don Giovanni*) O: 803

"Donna è mobile, La" [aria]

Opera (*Rigoletto*) O: 806

Donne, Ann More [wife of]

Donne, John (His life) D: 308

Donne, John [English poet] D: 308

Brodsky, Joseph B: 635

English literature (Metaphysical and Cavalier poets) E: 317; (Prose writings) E: 317

Metaphysical poets M: 429

Donnell, Forrest C. [American political leader]

Missouri (table) M: 668

Donnelly, Ignatius [American political leader]

D: 308

Donnelly, Phil M. [American political leader]

Missouri (table) M: 668

Donner Pass [California] D: 308

Dono, Paolo di [Italian painter] See Uccello,

Paolo in this index

Donohue, Mark [American race car driver]

Automobile racing (table: Indianapolis 500 winners) A: 980

Donor [law]

Trust fund (How a trust fund works) T: 474

Donor, Blood See Blood donor *in this index*

Donor, Organ See Organ donation *in this index*

Donor site [medicine]

Skin grafting S: 494

Donovan, Raymond J. [American government official]

Labor, Department of (table) L: 2

Reagan, Ronald Wilson (table) R: 169

Donovan, William J. [American government official]

Strategic Services, Office of So: 920

"Don't fire until you see the whites of their eyes" [quotation]

Revolutionary War in America (Bunker Hill)

R: 274-275

"Don't give up the ship" [quotation]

Lawrence, James L: 146

Donus [pope]

Pope (table) P: 666

Doodlebug [insect]

Ant lion A: 529 *with picture*

Dooley, Mr. [literary figure]

Dunne, Finley Peter D: 385

Dooley, Thomas Anthony, III [American doctor]

D: 309

Doolittle, Hilda [American poet] D: 309

American literature (Modernist poetry) A: 421

Doolittle, James Harold [American military leader] D: 309

Airplane (table) A: 232

World War II (The tide turns) W: 486

Doolittle Raid [1942]

World War II (The tide turns) W: 486

Doom palm [tree]

Doom palm D: 314

Doomsday Book See Domesday Book *in this index*

"Doonesbury" [comic strip]

Trudeau, Garry T: 460 *with picture*

Door

House (Interior construction) H: 382 *with diagram*

Pioneer life in America (A pioneer settlement) P: 479-481

Door chime

Electric bell E: 165 *with diagram*

Door County [Wisconsin]

Wisconsin (Places to visit) W: 356 *with picture*

Door in the Wall, The [book by De Angeli]

De Angeli, Marguerite Lofft D: 60

Door of Hope [China]

Doll (The early 1900's) D: 291

Dopamine [biochemistry] D: 309

Alcoholism (Causes of alcoholism) A: 337

Brain (The brain's chemical messengers)

B: 556; (Brain chemistry and mental illness) B: 556; (How drugs affect brain chemistry) B: 556; (Other brain disorders)

B: 558

Drug abuse (Methamphetamine) D: 362

Mental illness (Chemical imbalances in the brain) M: 406

Parkinson disease (Symptoms) P: 170

Ritalin R: 350

Schizophrenia S: 176

Dopamine receptor [biochemistry]

Dopamine D: 309

Dopamine receptor agonist [drug]

Parkinson disease (Treatment with drugs) P: 171

Dopant [electronics]

Electronics (Types of electronic circuits)

E: 210; (Solid-state components) E: 210

Semiconductor (Doped crystals) S: 291

Doped silicon [electronics]

Computer chip (Structure) Ci: 924e

Electronics (Types of electronic circuits)

E: 209-210; (Solid-state components) E: 210

Semiconductor (Doped crystals) S: 291

Transistor (Transistor materials) T: 372-373

Doppler, Christian [Austrian physicist]

Doppler effect D: 309

Doppler effect [physics] D: 309

Astronomy (Optical astronomy) A: 838-840

Log (The Doppler sonar speed log) L: 421

Planet (Planets in other solar systems) P: 512

Radar (Continuous-wave radar) R: 69

Redshift R: 192

Sound (How sound behaves) So: 601-602 *with diagram*

Ultrasound (Animal uses of ultrasound) U: 16

Sun (Analyzing electromagnetic radiation) So: 983-984

Weather (Weather radar) W: 162

Doppler radar

Meteorology (How meteorologists measure the atmosphere) M: 433

Radar (Continuous-wave radar) R: 69

Tornado (Forecasting tornadoes) T: 334

Weather (Weather radar) W: 162 *with pictures*

Wind shear W: 333

Doppler sonar speed log [measuring device]

Log (The Doppler sonar speed log) L: 421 *with picture*

Dorado [fish] See Dolphin [fish] *in this index*

Dorais, Gus [American football player]

Football (Changes in the game) F: 366

Dorand, René [French inventor]

Helicopter (The first practical helicopters) H: 173

Dorcas gazelle [animal]

Gazelle G: 74

Desert picture on D: 155

Dorchester [district, Boston]

Boston (The south side) B: 500

Dorchester, Baron See Carleton, Sir Guy *in this index*

Dorchester Heights [Massachusetts]

Boston (Resistance and revolution) B: 503

Revolutionary War in America (The evacuation of Boston) R: 275 *with map*

Doré, Gustave [French artist] D: 309 *with picture*

Dore metal

Assaying (Dry assaying) A: 817

Dorfman, Ariel [Chilean author]

Chile (The arts) C: 463

Dorgan, T. A. [American cartoonist]

Slang (Sources of slang) S: 500

Doria, Andrea [Genoese admiral]

Barbarossa B: 105

Dorians [ancient people] D: 310

Greece, Ancient (History) G: 372

Sparta (History) So: 766

Doric column [architecture]

Architecture (Classical Greek architecture) A: 615

Column (The Greek orders) Ci: 865 *with picture*

Doric order [architecture]

Architecture (table) A: 608-609 *with picture*

Dorion, Marie [American Indian] D: 310

Dorion, Pierre [French explorer]

Dorion, Marie D: 310

South Dakota (Exploration and fur trade)

So: 681

Doris [Greek mythology]

Nereids N: 130

Dorking

Chicken (English class chickens) C: 441; (table) C: 443

Dormancy

Estivation E: 361

Germination G: 173

Hibernation (Warm-blooded hibernators)

H: 221

Plant (Germination) P: 536

Seed (How seeds are spread) S: 282

Dormant volcano

Volcano (Classifying volcanic activity) V: 442

Dormer window

Window W: 334

Dormition of the Virgin, Church of the

[Greece]

Byzantine art picture on B: 750

- Dormitory**
Universities and colleges (Residence) U: 209
- Dormouse** [animal] D: 310 *with picture*
- Dorn, Friedrich Ernst** [German chemist]
Radon (Chemical properties) R: 100
- Dornier** [airplane]
Airplane (Engineering improvements) A: 237;
picture on A: 233
- Dorothy Chandler Pavilion**
Los Angeles (The arts) L: 466 *with picture*
- Dörpfeld, Wilhelm** [German archaeologist]
Troy (The archaeological Troy) T: 455
- Dorr, Thomas Wilson** [American social reformer]
Dorr Rebellion D: 310
Rhode Island (The Dorr Rebellion) R: 313
- Dorr Rebellion** [U.S. history] D: 310
Rhode Island (The Dorr Rebellion) R: 313
- Dorris, Michael** [American author]
Indian, American (Achievements in the arts) I: 181
- D'Ors, Eugenio** [Spanish author]
Spanish literature (The Generation of 1898) So: 762
- Dorsal fin** [zoology]
Fish (Fins) F: 160-161 *with picture*
Dolphin (The bodies of dolphins) D: 297
- Dorset** [people]
Nunavut (Early history) N: 611
- Dorset sheep**
Sheep (Medium-wooled sheep) S: 382
- Dorsett, Tony** [American football player]
Football (table) F: 363
- Dorsey, Hugh M.** [American political leader]
Georgia (table) G: 130
- Dos Passos, John** [American author] D: 311
American literature (Realist fiction) A: 422
Impressionism (Music, literature, and sculpture) I: 95
Lost Generation L: 472
- Dos Santos, José Eduardo** [Angolan political leader]
Angola (History) A: 465-466
- Dosage indicator cap**
Packaging P: 18
- Dosanjh, Ujjal** [Canadian political leader]
British Columbia (table) B: 627
- Dose** [radiology]
Radiation (Effects of radiation) R: 79
- Dose equivalent** [radiology]
Radiation (Dose) R: 79-80
- Doshi, Balkrishna** [Indian architect]
India (Architecture and sculpture) I: 119
- Dosimeter** (instrument)
Electroscope E: 218
- Dost Muhammad Khan** [emir of Afghanistan]
Afghanistan (United Afghanistan) A: 95
- Dostoevsky, Fyodor** [Russian writer] D: 311
with portrait
Nihilism N: 421
Novel (Russia) N: 573
Russian literature (The 1860's and 1870's) R: 562
- Dot** [communications]
Telegraph (The Morse telegraph) T: 90
- Dot** [tile]
Mah-jongg M: 64 *with picture*
- Dot-matrix printer** [electronic device]
Printer (Impact printers) P: 795
- Dots per inch** [measure]
Type T: 536
- Doty, James D.** [American businessman]
Madison (Government and history) M: 31
- Douala** [city, Cameroon] D: 311
Cameroon (People) C: 85
- Douala** [people]
Douala D: 311
- Douay Bible**
Bible (Early English translations) B: 286
Vulgate V: 453
- Double** [baseball]
Baseball (Reaching base) B: 129
- Double** [mathematics]
Addition (Addition facts) A: 49
- Double, The** [book by Dostoevsky]
Dostoevsky, Fyodor D: 311
- Double action**
Harp H: 65
- Double-action principle**
Steam engine (Watt's engine) So: 881
Watt, James W: 148
- Double-action revolver** (gun)
Handgun (Types of handguns) H: 43
- Double-action semiautomatic pistol**
Handgun (Types of handguns) H: 43
- Double agent** [spy]
Espionage (Counterespionage) E: 358
- Double balloon**
Balloon (Long-distance balloon flights) B: 62
- Double bass** [musical instrument] *See* Bass *in this index*
- Double-blind method** [science]
Disease (Research) D: 234
- Double burden** [sociology]
Women's movements (In Eastern Europe and the former Soviet republics) W: 387;
(Impact of women's movements) W: 387
- Double condenser**
Projector P: 816
- Double-convex lens** [optics]
Lens (A positive lens) *diagram on* L: 196
Magnifying glass M: 62
- Double coverage**
Football (The defensive team) F: 357-358
- Double-cross hybrids** [botany]
Corn (Development of hybrids) Ci: 1063
- Double dagger** [reference]
Footnote F: 369
- Double-deck elevator**
Elevator (Special kinds of elevators) E: 234
- Double-digit inflation**
Inflation (Severe inflation) I: 267
- Double-entry bookkeeping**
Bookkeeping (Double-entry bookkeeping) B: 472; (History) B: 473
- Double escapement**
Piano (History) P: 447-448
- Double fault**
Tennis (The serve) T: 163
- Double helix** [biology]
Cell (DNA—the wondrous molecule) C: 334-335
DNA D: 258
Hereditry (The structure of DNA) H: 205-206;
(The chemistry of genes) H: 209
Molecular biology (The beginning of molecular biology) M: 691-692
- Double Helix, The** [book by Watson]
Watson, James Dewey W: 147
- Double Hook, The** [book by Watson]
Canadian literature (Modern English-Canadian fiction) C: 160
- Double horn** [musical instrument]
French horn F: 516
- Double-hung window**
Window W: 334
- Double indemnity** [insurance]
Insurance (Life insurance) I: 309
- Double jeopardy** [law]
Constitution of the United States (Amendment 5) Ci: 1012
Fifth Amendment F: 95
- Double knit**
Textile (Knitted fabrics) T: 214; (The age of modern textiles) T: 219
- 007** [literary figure]
Fleming, Ian F: 233
- Double orange daisy** [plant]
Fleabane F: 232
- Double play**
Baseball (Baseball terms) B: 124
- Double rhyme**
Poetry (table) P: 594
Rhyme R: 320
- "Double Shuffle"** [Canadian history]
Macdonald, Sir John Alexander (Associate provincial prime minister) M: 7
- Double star** *See* Binary star *in this index*
- Double stitch**
Crochet Ci: 1148d
- Double-team**
Basketball (Defensive strategies) B: 147 *with picture*
- Double trailer** [truck]
Truck T: 456; *picture on* T: 459
- Double weave**
Weaving (Fancy weaves) W: 174
- Doubleday, Abner** [American sportsman]
D: 312
Baseball (The Abner Doubleday Theory) B: 132
- Doubleday, Page, and Company**
Dreiser, Theodore D: 346
- Doublet** [clothing]
Clothing (The Renaissance) Ci: 700
Fashion (The origins of fashion) F: 50
- Doublet** [gem]
Gem (Imitation and synthetic gems) G: 79
- Doubling** [cards]
- Bridge (Bidding) B: 604
- Doubleton** [money] D: 312
- Doubling Thomas**
Thomas, Saint T: 262
- Douc langur** [animal]
Monkey *picture on* M: 728
- Doud, Mamie Geneva** [wife of Dwight D. Eisenhower] *See* Eisenhower, Mamie Doud *in this index*
- Douerlein, Fred** [American glassblower]
Glass (table) G: 218
- Dough**
Bread B: 588
- Dough conditioner**
Bread (How yeast bread is made) B: 588
- Doughboy** [soldier]
United States, History of the (A new place in the world) U: 184 *with picture*
- Dougherty, Dennis J. Cardinal** [American religious leader]
Cardinal (table: American cardinals) C: 211
- Doughnut** [food] D: 312
- Doughty, Thomas** [American painter]
Hudson River School H: 406 *with picture*
- Doughty, Thomas** [English sea captain]
Drake, Sir Francis (Voyage around the world) D: 321
- Douglas** [city, Isle of Man]
Man, Isle of M: 131
- Douglas** [former city]
Juneau J: 194
- Douglas, Alfred** [British public figure]
Queensberry, Marquess of Q: 39
- Douglas, Buster** [American boxer]
Boxing (Recent developments) B: 535
Tyson, Mike T: 542
- Douglas, Donald Wills** [American businessman]
Aviation (Aviation progress) A: 988
- Douglas, Helen Gahagan** [American political leader]
Nixon, Richard Milhous (U.S. senator) N: 430
- Douglas, Sir James** [Canadian government official] D: 312
British Columbia (The colonial period) B: 630;
picture on B: 629
- Douglas, John Sholto** *See* Queensberry, Marquess of *in this index*
- Douglas, Melvyn** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1963, 1979) M: 863
- Douglas, Michael** [American actor]
Motion picture (Best performance by an actor: 1987) M: 862-863
- Douglas, Norman** [British author] D: 312
- Douglas, Stephen Arnold** [American political leader] D: 312 *with portrait*
Buchanan, James (The struggle over slavery) B: 660
Civil War (Developments in the political party system) Ci: 616
Davis, Jefferson (Secretary of war) D: 48
Democratic Party (The slavery issue) D: 125
Kansas-Nebraska Act K: 243
Lincoln, Abraham (Success in politics) L: 314;
(Reentry into politics) L: 317; (The debates with Douglas) L: 317
- Douglas, Thomas** *See* Selkirk, Earl of *in this index*
- Douglas, Thomas C.** [Canadian political leader]
Saskatchewan (table) S: 144; (Political changes) S: 147
- Douglas, William L.** [American political leader]
Massachusetts (table) M: 288
- Douglas, William Orville** [American jurist]
D: 313
Ford, Gerald Rudolph (House minority leader) F: 375
Truman, Harry S. (Vice President) T: 468
- Douglas Dam** [Tennessee]
Tennessee *picture on* T: 135
- Douglas-fir** [tree] D: 313 *with picture*
Tree *pictures on* T: 424
Fir F: 119
Oregon (Natural resources) O: 841
Plant *picture on* P: 520
Spruce (Kinds) So: 809
- Douglas-Horne, Sir Alec** [British political leader]
D: 312
- Douglass, Frederick** [American social reformer]
D: 313 *with portrait*
African American literature (The 1800's) A: 136a
African Americans (The antislavery movement) A: 136f *with picture*

- American literature (Nonfiction prose) A: 418
National Park System (table: National historic sites) N: 52-53
- Douglass College**
Rutgers, The State University of New Jersey R: 568
- Doukhobors** [religious group] D: 314
- Doum palm** [tree] D: 314
- Douppioni** [fiber]
Silk (Douppioni) S: 460
- Douro River** [Spain-Portugal]
Portugal (Rivers) P: 690
- Douroucoulis** [animal]
Monkey picture on M: 728
- Dove** [bird] D: 314 *with picture*
Bird (Birds of Europe and Asia) B: 346-347 *with picture*
Pigeon P: 458 *with pictures*
Turtle dove T: 524 *with picture*
- Dove** [ship]
Maryland (Exploration and settlement) M: 256
- Dove, Arthur Garfield** [American artist] D: 314
- Dove, Rita** [American poet] D: 315
African American literature (Recent developments) A: 136a
African Americans (Achievements) A: 136p
Poet laureate (table: Poets laureate of the United States) P: 590
- Dovekie** [bird]
Auk A: 890 *with picture*
- Dover** [city, Delaware] D: 315
- Dover** [city, England] D: 315
- Dover, Cliffs of** [England]
Dover D: 315
Earth (The Mesozoic Era) picture on E: 29
Rock (Organic sediments) R: 372
United Kingdom (The English Lowlands) U: 59-61
- Dover, Strait of** [channel, England-France]
D: 315 *with map*
English Channel E: 311 *with map*
- "Dover Beach"** [poem by Arnold]
Arnold, Matthew A: 742
- Dover Castle**
Citadel picture on Ci: 567
- Doves** [U.S. history]
Johnson, Lyndon Baines (The widening Vietnam War) J: 150-151
Vietnam War (Reactions in the United States) V: 375
- Dovetail** [carpentry]
Log cabin L: 422
- Dow, Charles H.** [American journalist]
Dow Jones averages D: 316
- Dow, Herbert Henry** [American businessman]
D: 315
- Dow Chemical Company**
Dow, Herbert Henry D: 315
Polystyrene P: 651
- Dow Jones & Company**
Dow Jones averages D: 315
- Dow Jones averages** [economics] D: 315
- Dow process** [chemistry]
Magnesium (How magnesium is obtained) M: 54
- Dowden, Edward** [English literary critic]
Shakespeare, William (Romantic criticism) S: 369
- Dower** [law] D: 316
- Dowland, John** [English composer] D: 316
- Dawn** [feather]
Bird (Feathers) B: 362
Camping (Sleeping bags) C: 93
Duck (The features of a duck) D: 374
Feather (Kinds and parts of feathers) F: 59 *with diagram*
- Down** [sports]
Football (Advancing the ball) F: 360
Rugby football (Rugby League) R: 511-512
- Down, John Langdon Haydon** [British doctor]
Down syndrome D: 316
- Down and Out in Paris and London** [book by Orwell]
Orwell, George O: 860
- Down East**
Maine M: 68
- Down payment** [economics]
Installment plan (How the plan works) I: 304
- Down quark** [physics]
Quark Q: 7
Subatomic particle (Elementary particles) So: 937, (Theoretical research) So: 938
- Down syndrome** [disorder] D: 316
Birth defect (Prevention and treatment) B: 380
- Mental retardation (Causes) M: 410
Mutation M: 969
- Downers**
Drug (Anxiety and hypnotic drugs) D: 352
- Downey, John G.** [American political leader]
California (table) C: 59
- Downforce**
Automobile racing (Formula One racing) A: 976-977
- Downhill race**
Skiing (Alpine competitions) S: 486-487
- Downhill skiing**
Skiing (Alpine skiing) S: 482 *with picture*; (Ski equipment and clothing) S: 483; *diagrams on S: 484*
- Downing the Nigh Leader** [painting by Remington]
Remington, Frederic R: 230
Western frontier life in America picture on W: 233
- Downloading** [electronics]
Computer (The Internet) Ci: 920-921
Computerized instruction (Resource programs) Ci: 924h-925
Internet (Glossary of Internet terms) I: 350a; (Publishing) I: 350a-350b
- Downshift**
Transmission (How a manual transmission works) T: 378
- Downtown**
City (Description) Ci: 589
- Downturn**
Business cycle B: 727
- Downy hawthorn** [tree]
Hawthorn H: 114
- Downy mildew** [fungus]
Grape (Diseases and pests) G: 320
Mildew M: 541 *with picture*
Parasite picture on P: 154
- Downy woodpecker** [bird]
Animal picture on A: 479
- Dowry** [custom]
Africa (Marriage and the family) A: 108
India (Family life) I: 114
Marriage (Marriage in other cultures) M: 222
- Dowser**
Divination D: 241
- Doxorubicin** [drug]
Antibiotic (Other kinds of antibiotics) A: 550
- Doxycycline** [medication]
Antibiotic (table) A: 551
- Doyle, Arthur Conan** [British author] D: 316 *with portrait*
Holmes, Sherlock H: 295
- Doyle, Roddy** [Irish author]
Irish literature (Fiction and poetry) I: 433
Novel (The novel today) N: 575
- D'Oyly Carte, Richard** [British producer] D: 317
Gilbert and Sullivan G: 190
- D'Oyly Carte Opera Company**
D'Oyly Carte, Richard D: 317
- Dozen**
Duodecimal system D: 386
- DP** See Displaced person in this index
- Dr. ...**
Names beginning with Dr. are alphabetized together with names beginning with Doctor
- Drabble, Margaret** [English author] D: 317
- Drachma** [money] D: 317 *with pictures*
- Draco** [Greek legislator] D: 317
Law (The influence of ancient Greece) L: 133
- Draco lizard** See Flying dragon in this index
- Draconian Code** [ancient Greece]
Draco D: 317
- Dracula** [book by Stoker] D: 317
Stoker, Bram S: 906
Transylvania T: 402
Vampire V: 268
- Draft** [banking] D: 317
Bill (In bookkeeping) B: 300
Bill of exchange B: 301
Commercial paper Ci: 872
Negotiable instrument (Forms) N: 119
- Draft** [measurement]
Ship (Nautical terms) S: 416 *with diagram*
- Draft** [sports]
Baseball (Minor leagues) B: 130-131
Football (Professional competition) F: 364
Hockey (Professional leagues) H: 279-280
- Draft, Military D: 318**
Army (The rise of modern armies) A: 727
Army, United States (The Civil War [1861-1865]) A: 738, (World War I) A: 739, (World War II) A: 739
- Borden, Sir Robert Laird (Conscription crisis) B: 486
- Canada, History of (The conscription issue) C: 149
- Civil War (The draft) Ci: 618
- Conscientious objector Ci: 974
- King, William Lyon Mackenzie (Third term as prime minister) K: 327
- Military training (Compulsory military training) M: 544
- Montreal (The war issue) M: 778
- New York (Growing prosperity) N: 316-318 *with picture*
- Nixon, Richard Milhous (The national scene) N: 433-434
- Progressive Conservative Party P: 812
- Quebec (World War I) Q: 32
- Riot (During the 1800's) R: 348-349
- Selective Service System S: 289
- World War I (The United States enters the war) W: 462
- World War II (In the United States and Canada) W: 494
- Draft horse**
Horse (table: Some types and breeds of horses) H: 343; (Draft horses) H: 346 *with pictures*
- Draft riots** [U.S. history]
New York (Growing prosperity) N: 316-318 *with picture*
- Drafter** [career]
Careers (Technical and mathematical occupations) C: 232
Mechanical drawing (Information in the drawing) M: 353 *with picture*
- Drafting** See Mechanical drawing in this index
- Drafting machine**
Mechanical drawing (Creating a drawing) M: 354
- Drag** [manufacturing]
Cast and casting (How castings are made) C: 278 *with diagram*
- Drag** [physics]
Aerodynamics (Principles of aerodynamics) A: 85 *with diagram*; (Shock waves) A: 88 *with diagram*
Airplane (Principles of flight) A: 220
Kite (How kites fly) K: 339 *with diagram*
Streamlining So: 924
- Drag racing** [sport]
Automobile racing (Drag racing) A: 978 *with picture*
Hot rod H: 374a
Motorboat racing (Types of racing) M: 877
- Drag rope**
Balloon (Recreational uses) B: 59-60
- Drag strip**
Automobile racing (Drag racing) A: 978
- Drag-type tachometer** [instrument]
Tachometer T: 4
- Dragging** [computing]
Computer (A mouse) Ci: 912-914
- Dragline** [cable]
Lumber (Transporting logs) L: 518
- Dragline** [machine]
Mining (Surface mining methods) M: 574-575
- Dragline** [zoology]
Spider (How spiders use silk) So: 786
- Drago, Luis Maria** [Argentine statesman] D: 318
- Drago Doctrina** [international relations]
Drago, Luis Maria D: 318
- Dragon** [legendary animal] D: 318 *with picture*
- Dragon** [sculpture by Pfaff]
Sculpture S: 260 *with picture*
- Dragon** [tile]
Mah-jongg M: 64 *with picture*
- Dragon** [weapon]
Guided missile picture on G: 423
- Dragon and the Unicorn, The** [book by Rexroth]
Rexroth, Kenneth R: 288
- Dragon in the Sea, The** [book by Herbert]
Herbert, Frank H: 197
- Dragon of Komodo** [reptile] See Komodo dragon in this index
- Dragonfly** [insect] D: 319 *with picture*
Animal picture on A: 492
Insect (Wings) I: 288; (Incomplete metamorphosis) I: 293 *with picture*; *pictures on I: 280*
- Dragons of Eden, The** [book by Sagan]
Sagan, Carl Edward S: 18
- Dragon's Teeth** [book by Sinclair]

- Sinclair, Upton S: 469
Dragster [automobile]
 Automobile racing (Drag racing) A: 978
Drain [electronics]
 Transistor (Metal oxide semiconductor field effect transistors) T: 373-374 *with diagram*
Drain [plumbing]
 House *diagram* on H: 383
Drain auger [tool]
 Plumbing (The drainage system) P: 578-579
Drain tile [building construction]
 House *diagram* on H: 383
Drainage [agriculture] D: 320 *with diagrams*
Drainage basin [geography]
 River (Drainage basins) R: 353
Drainage divide [geography]
 Basin B: 141
Drainage net
 River (Drainage basins) R: 353
Drainage system
 Plumbing (The drainage system) P: 578 *with diagram*
Drainpipe
 Plumbing (The drainage system) P: 578 *with diagram*
Drais, Karl von [German inventor]
 Bicycle (Early bicycles) B: 292
Draisine
 Bicycle (Early bicycles) B: 292 *with picture*
Drake [bird]
 Duck D: 374
Drake, Edwin Laurentine [American businessman]
 Pennsylvania *picture* on P: 266
 Petroleum (Beginnings of the oil industry) P: 347
Drake, Sir Francis [English sea captain] D: 320 *with pictures and map*
 California (Spanish and English exploration) C: 60
 Exploration *map* on E: 443
 Oregon (Exploration and settlement) O: 846
 Saint Augustine S: 30
 Spanish Armada (Background to battle) So: 755
Drake, Francis M. [American political leader]
 Iowa (table) I: 391
Drakensberg [mountains, Africa] D: 323 *with picture*
 Lesotho (Land) L: 207
 South Africa *picture* on So: 611
Dram [unit of measure]
 Apothecaries' weight A: 567
Drama [literature] D: 324 *with pictures*
See also Theater in this index
 American literature (The world wars and depression (1914-1945)) A: 420-422;
 (Literature since 1945) A: 422-425
 Arabic literature (Drama) A: 584
 Canadian literature (Modern Canadian drama) C: 161
 Comedy Ci: 867
 Copyright (Works protected) Ci: 1046
 English literature (Early English drama) E: 316;
 (Elizabethan drama) E: 317; (Jacobean drama) E: 317; (Restoration drama) E: 318; (Later Victorian literature) E: 321;
 (Literature after World War II) E: 322-323
 Expressionism (Expressionist writing) E: 456
 Greek literature (Drama) G: 377
 Mask (Theatrical masks) M: 265
 Mystery play M: 972
 Pulitzer Prizes (table) P: 894
 Realism (In drama) R: 172
 Theater T: 232
 Tragedy T: 367
 United States *picture* on U: 119
See also the list of Related Articles in the Drama article
Dramamine [medication] D: 342
Dramatic irony
 Irony I: 455
Dramatic monologue [poetry]
 English literature (Later Victorian literature) E: 321
 Poetry (Dramatic poetry) P: 591
Dramatic Order Knights of Khorassan [organization]
 Knights of Pythias K: 352
Dramatic poetry
 Poetry (Dramatic poetry) P: 591; (Renaissance poetry) P: 596
Dramatic soprano
 Opera (The singers) O: 792
Dramatic tenor
 Opera (The singers) O: 792
Dramatist
 Drama D: 324
 Theater T: 233
See also the list of playwrights in the Related Articles of the Drama article
Dramatists Guild Quarterly, The [magazine]
 Writing (Scriptwriting) W: 512
Dramaturge [occupation]
 Theater (Interpreting the script) T: 235-236
Drape [scenery]
 Theater (Kinds of scenery) T: 239
Draped Reclining Woman [sculpture by Moore]
 Hirshhorn Museum and Sculpture Garden *picture* on H: 243
Draper, Charles S. [American scientist]
 Inertial guidance (History) I: 263-264
Draper, Eben S. [American political leader]
 Massachusetts (table) M: 288
Draper, William Henry [Canadian political leader]
 Macdonald, Sir John Alexander (Early public career) M: 7
Drapery [geology]
 Cave (Speleothems) C: 319 *with diagram*
Draper's Letters [book by Swift]
 Swift, Jonathan (Swift's other works) So: 1040-1041
Draughts [game]
 Checkers C: 391 *with picture*
Drava River [Europe]
 Croatia (Land and climate) Ci: 1148a *with map*
Dravidian [language]
 Dravidians D: 342
 India (Languages) I: 114
 Language (Other language families) L: 65 *with map*
Dravidians [people] D: 342
 Asia (The people) A: 781
 India (Ancestry) I: 111; (The Aryans) I: 128
 Religion (Hinduism) R: 220
Draw [sports]
 Boxing (Scoring a fight) B: 528
 Football (table) F: 356
 Hockey (Hockey terms) H: 275
 Lacrosse (Women's lacrosse) L: 24
Draw Dominoes [game]
 Dominoes D: 306
Draw poker [game]
 Poker P: 603
Draw-table
 Furniture (England) F: 573 *with picture*
Draw weight
 Archery (Bows) A: 601-602
Drawbridge
See also Moveable bridge in this index
 Castle (Structure) C: 280 *with picture*
Drawee [banking]
 Bill of exchange B: 301
Drawer [banking]
 Bill of exchange B: 301
Drawing [art] D: 342 *with pictures*
 Cartoon (Developing the idea) C: 266 *with pictures*
Drawing [gambling]
 Lottery L: 473
Drawing [industrial process]
 Aluminum (Drawing) A: 395
 Cotton (Spinning) C: 1091
 Glass (Drawing) G: 215; *pictures* on G: 216
 Nylon (How nylon is made) N: 632-633
 Wire (How wire is made) W: 343
Drawing, Mechanical *See* Mechanical drawing *in this index*
Drawing on film
 Animation (Drawing on film) A: 514
Drawn game
 Chess (How chess is played) C: 413
Drawn sliver [yarn]
 Cotton (Spinning) Ci: 1091
Drayton, John [American political leader]
 South Carolina (table) So: 658
Drayton, Michael [English poet] D: 344
Dreadlock [hairstyle]
 Rastafarians R: 145
Dreadnought [ship]
 Battleship (The modern battleship) B: 172
 Navy (Engineering advances) N: 79-80
 Warship (The birth of the modern battleship) W: 41; *picture* on W: 43
 World War I (A build-up of military might) W: 453-454
Dream D: 344
 Nightmare N: 421
 Sleep (What happens during sleep) S: 506;
 (Sleep among animals) S: 506
Dream Days [book by Grahame]
 Grahame, Kenneth G: 301
Dream of Gerontius, The [music by Elgar]
 Elgar, Sir Edward William E: 235
Dream of Oengus, The [story]
 Irish literature (Heroic tales, romances, and sagas) I: 430
Dream of the Red Chamber [book by Cao Xueqin]
 Chinese literature (Drama and fiction) C: 512
Dream Play, A [play by Strindberg]
 Drama (Expressionism) D: 339
 Strindberg, August So: 929
Dream Team
 Basketball (Basketball today) B: 155
 Olympic Games (The recent games) O: 753 *with picture*
Dreaming [religion]
 Aborigines (Aboriginal life) A: 14
Dreaming sleep
 Sleep (What happens during sleep) S: 506;
 (The need for sleep) S: 507
Dreamland and Other Poems [book by Mair]
 Mair, Charles M: 94
Dreamtime [religion] *See* Dreaming [religion] *in this index*
DreamWorks SKG [film studio]
 Animation (The animation revival) A: 514b
 Spielberg, Steven So: 792
Dred, A Tale of the Great Dismal Swamp [book by Stowe]
 Stowe, Harriet Beecher (Other works) So: 916
Dred Scott Decision [U.S. history] D: 345 *with picture*
 Civil War (The Dred Scott Decision) Ci: 616
 Missouri (The Civil War) M: 671; *picture* on M: 670
 Supreme Court of the United States (Civil rights) So: 1001; (table) So: 1002
 Taney, Roger Brooke T: 24
 United States, History of the (Political and institutional splits) U: 173-174
Dredge [net]
 Oyster (Oyster harvesting) O: 892 *with picture*
Dredging D: 345
 Mining (Surface mining methods) M: 574-575 *with picture*
Dreifuss, Ruth [Swiss political leader]
 Switzerland (Recent developments) So: 1061
Dreiser, Theodore [American author] D: 346
 American literature (Naturalists) A: 419-420
 Naturalism (Naturalism in fiction) N: 65
 Novel (The United States) N: 573
Drennan, William [Irish poet]
 Emerald Isle E: 258
Dresden [Germany] D: 346
Dresden china D: 346 *with picture*
 Dresden D: 346
 Porcelain (German porcelain) P: 677 *with picture*
Dresden Opera House
 Germany *picture* on G: 155
Dresser, Heinrich [German scientist]
 Aspirin A: 816
Dress [clothing] *See* Clothing *in this index*
Dress Macpherson plaid
 Tartan *picture* on T: 47
Dress Menzies plaid
 Tartan *picture* on T: 47
Dress parade
 Theater (Costume design) T: 242-243
Dress rehearsal
 Opera (Rehearsing a production) O: 796
 Television (Planning and preparation) T: 110c-111
 Theater (Rehearsing) T: 236-237
Dress shoe
 Shoe (Kinds of shoes) S: 431 *with pictures*
Dress Stewart plaid
 Tartan *picture* on T: 47
Dressage
 Horse (Dressage) H: 357 *with picture*
Dressage spur [riding equipment]
 Horse (Spurs) H: 351
Dressed lumber
 Lumber (Kinds of lumber) L: 517
Dresser, Paul [American composer]
 Dreiser, Theodore D: 346
Dressing [bandage]
 Bandage B: 75

Dressing [industrial process]

Fur (Dressing) F: 563

Meat packing (Slaughtering and dressing) M: 351

Dressler, Marie [American actress]

Motion picture (Best performance by an actress: 1930-31) M: 862

Sennett, Mack picture on S: 301

Dressmaking

Clothing (The 1900's) Ci: 703; Ci: 706

Drew, Adrian E. [American aviator]

Airplane (table) A: 232

Drew, Charles Richard [American physician]

Blood (History of blood research) B: 414

Drew, Daniel [American businessman]

Fisk, James F: 189

Gould, Jay G: 280

Drew, George A. [Canadian political leader]

Diefenbaker, John George (Member of Parliament) D: 197

Ontario (table) O: 783

Drew, George F. [American political leader]

Florida (table) F: 260

Drew, Georgianna [American actress]

Barrymore B: 119

Drew, John [Irish-born American actor]

Barrymore B: 119

Drew, Nancy [literary figure]

Stratemeyer, Edward So: 920

Drew, Thomas S. [American political leader]

Arkansas (table) A: 712

Drexel, Anthony Joseph [American financier]

Philadelphia (A growing city) P: 367

Drexel, Catherine Mary [American religious leader] See Drexel, Saint Katharine in this index**Drexel, Saint Katharine** [American religious leader] D: 347 with portrait**Drexel, Morgan & Company** [bank]

Morgan, John Pierpont M: 802

Drey [nest]

Squirrel (Obtaining shelter) So: 816

Dreyer, Carl [Danish director]

Denmark (Arts) D: 136

Motion picture (The movies talk) M: 867

Dreyfus, Alfred [French public figure] See Dreyfus affair in this index**Dreyfus, Lee S.** [American political leader]

Wisconsin (table) W: 365

Dreyfus affair [French history] D: 347

Holocaust (Before the Holocaust) H: 296

Jews (The Zionist movement) J: 123-124

Zionism (Movement to Palestine) Z: 599

Zola, Émile Z: 602

Dreyfusards [French history]

Dreyfus affair (Efforts to clear Dreyfus's name)

D: 347-348

Dreyfuss, Richard [American actor]

Motion picture (Best performance by an actor: 1977) M: 862-863

DRG [insurance] See Diagnosis related group in this index**Dribble** [sports]

Basketball picture on B: 146

Soccer (The forwards) So: 545; (table) So: 546; (Dribbling) So: 548

Dried food See Dehydrated food in this index**Dried fruit** [food]

Date palm (Uses) D: 42

Fig F: 96

Prune P: 841

Raisin R: 130

Drift [geology]

Minnesota (Land regions) M: 596; (Natural resources) M: 599

Drift, Continental [geology] See Continental drift in this index**Drift fishing**

Fishing F: 175

Drift mine

Coal (Underground mining) Ci: 722 with diagram

Mining (Mining terms) M: 577

Drift net

Fishing industry (Nets) F: 183-185

Porpoise P: 680

Drift Prairie [North Dakota]

North Dakota (Land regions) N: 506; (Rivers and lakes) N: 508

Drift tube [machine]

Particle accelerator (How accelerators work) P: 184-185 with diagram

Drifter [illustration by Kent]

Kent, Rockwell picture on K: 271

Drifting Apart [play by Herne]

Herne, James A. H: 212

Drifting Clouds [book by Futabateil]

Japanese literature (The modern period) J: 62

Driftless Area

Illinois (Land regions) I: 64

Drill [farm machine]

Agriculture (The invention of new farm equipment) A: 157 with picture

Farm and farming (Planting) F: 35-36 with picture; picture on F: 34

Invention (The Age of Reason) I: 360-361

Oats (Growing oats) O: 641 with picture

Tull, Jethro T: 483

Wheat (Planting) W: 271 with picture

Drill [tool] D: 348

Diamond (Industrial uses) D: 182

Industrial Revolution (The steam engine) I: 249

Machine tool (Metal removal) M: 17

Mining (Kinds of mining) M: 574

Screw (Uses) S: 225

Woodworking (Drilling) W: 398 with pictures

Drill-and-practice program

Computerized instruction (Types of programs) Ci: 924h

Teaching (Guiding and assisting student learning) T: 66

Drill press [machine]

Drill D: 348

Drilling [excavation]

See also Boring [excavation] in this index

Gas [fuel] (Producing gas) G: 53; picture on G: 54

Petroleum (Drilling an oil well) P: 337-341 with pictures

Drillship

Ocean Drilling Program O: 667 with picture

Petroleum (Offshore drilling) P: 340 with picture

"Drink to Me Only With Thine Eyes" [song]

Jonson, Ben J: 160

Drinker, Philip [American inventor]

Iron lung I: 453

Drinking

Alcoholism A: 337

Automobile (Problems of safety) A: 948-949

Crime (table) Ci: 1137

Drip irrigation

Irrigation (Trickle irrigation) I: 458 with picture

Driscoll, Alfred E. [American political leader]

New Jersey (table) N: 249

Driskill Mountain

Louisiana (Land regions) L: 490

Drive [psychology]

See also Motivation in this index

Adler, Alfred A: 58

Hull, Clark Leonard H: 412

Sales (Characteristics needed) S: 65

Drive, The [sculpture]

Dallas picture on D: 14

Drive-in

New Jersey N: 231

Drive shaft

Automobile (The drive system) A: 952-953

Transmission (Transmissions and drives) T: 375

Drive system

Automobile (The drive system) A: 953 with diagram

Phonograph (Parts of a phonograph) P: 400-401

Drive-through restaurant

Restaurant (Fast-service restaurants) R: 262

Drive-through zoo

Zoo (Cageless zoos) Z: 606

Drive train

Automobile (The power train) A: 952 with diagram

Transmission T: 375

Driveline [mechanism]

Truck (Common features of trucks) T: 458

Driver

Golf (Golf clubs) G: 262 with picture

Driver, William [American sea captain]

Flag (Flags of the United States and Canada) F: 208

Driver ant [insect]

Animal picture on A: 480

Ant (Army ants) A: 526

Driver education

Automobile (Driving safely) A: 960-961

Driving

Automobile (Driving safely) A: 960

Breath testing B: 591

Safety (Safety in transportation) S: 14

Driving force [physics]

Aerodynamics (Lift and drag in a sailboat)

A: 87 with diagram

Driving Miss Daisy [film]

Motion picture (Best picture: 1989) M: 861

Driving under the influence [crime] See Driving while intoxicated in this index**Driving wheels**

Automobile (The power train) A: 952 with diagram

Driving while intoxicated [crime] D: 348**Drizzle**

Rain (Characteristics of rain) R: 122

Drnovšek, Janez [Slovenian political leader]

Slovenia (History) S: 512

Droeshout, Martin [English engraver]

Shakespeare, William picture on S: 345

Droll Stories [book by Balzac]

Balzac, Honoré de B: 70

Drolleries [art]

Illuminated manuscript I: 78

Dromedary [animal] D: 348

Camel C: 76; picture on C: 78

Dromio [literary figure]Shakespeare, William (*The Comedy of Errors*) S: 356**Drone** [entomology]

Bee (The honey bee colony) B: 201 with picture; (Division of labor) B: 205 with picture

Termite (Life and habits) T: 173-174

Drone pipe [musical instrument]

Bagpipe B: 26 with picture

Drop [scenery]

Theater (Kinds of scenery) T: 239

Drop ball

Soccer (table) So: 546; (Fouls) So: 546-547

Drop forging

Forging (Machine forging) F: 409-410

Drop-kicking

Rugby football (Rugby Union) R: 510

Drop-off center

Recycling (Collecting materials) R: 184

Dropout center [education]

Alternative school (Features of alternative schools) A: 388-389

Dropped goal

Rugby football (Rugby Union) R: 510

Dropper line [tackle]

Fishing industry (Hooks) F: 185 with picture

Dropwindsonde [instrument]

Weather (Weather balloons, airplanes, and ships) W: 163

Drosophila melanogaster [insect]

Fruit fly F: 549

Heredity (Chromosomes and genes) H: 201

Drought [weather] D: 349

Famine (Drought) F: 26

Water (Water shortages) W: 122 with picture

Drown proofing

Swimming (Water safety) So: 1042-1043

Drowned valley [geography]

Valley (Kinds of valleys) V: 265

Drowning D: 349**Drug** D: 350 with pictures

Biological clock B: 315

Brain (How drugs affect brain chemistry)

B: 556

Cancer (Drug therapy) C: 172

Dietary supplement D: 200

Disease (Medical treatment) D: 232

Heart (Treatment) H: 138; (Heart failure) H: 143

Herbal medicine H: 196

Hypnotism (Inducing hypnosis) H: 477

Indian, American (Hunting, gathering, and fishing) I: 141

Marine biology (What marine biologists do) M: 204

Ocean (Medicines) O: 654

Pain (Treating pain) P: 22

Pharmacology P: 354

Placebo P: 505

Plant (Medicines) P: 518

Pure food and drug laws P: 907

Rain forest (Scientific value) R: 126c

Safety (In the bathroom) S: 10

Weight control (Drugs) W: 183

See also the list of Related articles in the Drug article

Drug abuse D: 361 with pictures

Adolescent (Alcohol and drug abuse) A: 63; (Risk taking) A: 64

- AIDS (How HIV is transmitted) **A**: 163-164;
(Education) **A**: 164a
- Asia (Plants) **A**: 798-799
- Barbiturate (Dangers of barbiturates) **B**: 107
- Blood doping **B**: 415
- City (Social problems) **Ci**: 591
- Cocaine **Ci**: 742
- Crime (table) **Ci**: 1137
- Depressant **D**: 150
- Dopamine **D**: 309
- Drug (Analgesics) **D**: 352; (Drugs today) **D**: 360
- Drug Enforcement Administration **D**: 366
- Drug testing **D**: 366
- Ecstasy **E**: 66
- Hashish **H**: 82
- Health (Health hazards) **H**: 126-127
- Heroin **H**: 213
- Inhalant **I**: 271
- Mental illness (Substance use disorders)
M: 406
- Methadone **M**: 433
- Morphine **M**: 816
- Narcotic **N**: 21
- New York City (Social problems) **N**: 332-333
- Olympic Games (Charges of steroid use)
O: 753; (The recent games) **O**: 753-754
- Opium (Opium addiction) **O**: 811
- Prostitution **P**: 830
- Tobacco **T**: 305
- See also the list of Related articles in the Drug abuse article*
- Drug Abuse Prevention and Control Act**
[1970]
- Drug (U.S. drug laws) **D**: 357-358
- Drug addiction** *See* Drug abuse *in this index*
- Drug Amendments Act** [1962]
- Drug (U.S. drug laws) **D**: 357
- Food and Drug Administration **F**: 340
- Drug dependence**
- Drug (Effect on the body) **D**: 354
- Drug Enforcement Administration** **D**: 366
- Drug abuse (Combating drug abuse) **D**: 364-365
- Drug injection** [execution] *See* Lethal injection *in this index*
- Drug metabolism**
- Drug (Action in the body) **D**: 353-354
- Drug testing** **D**: 366
- Drug abuse (Reducing demand) **D**: 364-365
- Drug therapy**
- Mental illness (Somatic therapy) **M**: 407;
(Recent developments) **M**: 409
- Psychiatry (Somatic therapy) **P**: 845
- Drug tolerance**
- Drug (Effect on the body) **D**: 354
- Drug trafficking**
- Colombia (Recent developments) **Ci**: 784
- Drug abuse (Combating drug abuse) **D**: 364-365
- Drug Enforcement Administration **D**: 366
- Druggist** [career]
- Pharmacy **P**: 354
- Drugstore beetle** [insect]
- Deathwatch **D**: 63
- Druids** [religious group] **D**: 367
- Gaul **G**: 70
- Mistletoe **M**: 676
- Drum** [electronics]
- Videotape recorder (Recording) **V**: 361 *with diagram*
- Drum** [fish] **D**: 367 *with pictures*
- Kingfish **K**: 329
- Drum** [machine]
- Tire (Assembling a tire) **T**: 297
- Drum** [musical instrument] **D**: 367
- Bongo drums **B**: 458 *with picture*
- Conga drum **Ci**: 937 *with picture*
- Dance (Ritual ethnic dances) **D**: 27
- Indian, American *pictures on I*: 156, *I*: 160
- Inuit *picture on I*: 354f
- Jazz (Drums) **J**: 69 *with picture*
- Krupa, Gene **K**: 389
- Music (Percussion instruments) **M**: 950; *pictures on M*: 949
- Drum and bugle corps** [marching band] **D**: 368
- Drum brake**
- Automobile (The brake system) **A**: 954 *with diagram*
- Brake (Hydraulic brakes) **B**: 560-561 *with diagram*; (Hydraulic brakes) **B**: 562
- Drum drying**
- Food preservation (Drying) **F**: 342-343
- Drum majorette**
- Baton twirling **B**: 167
- Drum Point Lighthouse** [Maryland]
- Lighthouse *picture on L*: 294
- Drum scanner** [machine]
- Photoengraving and photolithography
(Capturing the image) **P**: 405
- "Drum Taps"** [poems by Whitman]
- Whitman, Walt (His work) **W**: 294
- Drumfish** [fish]
- Drum **D**: 367 *with picture*
- Drumhead**
- Drum **D**: 367
- Drumlin** [geology]
- Glacier (How glaciers shape the land) **G**: 204-205 *with diagram*
- Hill **H**: 230
- New York (Land regions) **N**: 304-306
- Drummond, William** [English colonial official]
- North Carolina (Exploration and settlement)
N: 490-492
- Drummond, William Henry** [Canadian poet]
- D**: 368
- Drums Along the Mohawk** [book by Edmonds]
- Edmonds, Walter Dumaux **E**: 83
- Drums at Dusk** [book by Bontemps]
- Bontemps, Arna Wendell **B**: 463
- "Drunken Boat, The"** [poem by Rimbaud]
- Rimbaud, Arthur **R**: 341
- Drunken driving** *See* Driving while intoxicated *in this index*
- Drunkenness**
- Alcoholism **A**: 337
- Breath testing **B**: 591
- Crime (Types of crimes) **Ci**: 1136; (table)
Ci: 1137
- Drupe** [botany] **D**: 368
- Fruit (Simple fruits) **F**: 548; *pictures on F*: 547
- Drupelet** [botany]
- Blackberry **B**: 392
- Loganberry **L**: 423 *with picture*
- Raspberry **R**: 144 *with picture*
- Drury, Ernest C.** [Canadian political leader]
- Ontario (table) **O**: 783
- Drury Lane Theatre** [London]
- Garrick, David **G**: 45
- Druses** [people] **D**: 368
- Lebanon (Ethnic groups and religion) **L**: 171;
(War and terrorism) **L**: 173-174
- Syria (Religion) **So**: 107f
- DRV** [nutrition] *See* Daily Reference Value *in this index*
- Dry bean**
- Bean (Kinds of beans) **B**: 181
- Dry beer**
- Beer **B**: 211
- Dry-bulb thermometer**
- Hygrometer (The psychrometer) **H**: 473
- Dry bulk carrier**
- Ship (Dry bulk carriers) **S**: 420; *picture on S*: 422
- Dry chemical extinguisher**
- Fire extinguisher (Dry chemical extinguishers)
F: 130
- Dry cleaning** **D**: 368
- Dry cow**
- Cattle (Breeding) **C**: 312
- Dry dock** [shipping] **D**: 369
- Ship (Launching and outfitting a ship) **S**: 425
- Dry-erase board**
- Audio-visual materials (Visual materials) **A**: 882
- Eraser **E**: 349
- Dry farming** **D**: 369
- Agriculture (Expansion in the United States)
A: 158
- Farm and farming (Water management) **F**: 33
- Dry fruit**
- Fruit (Simple fruits) **F**: 548; *pictures on F*: 547
- Dry gangrene** [disease]
- Gangrene **G**: 27
- Dry hole**
- Petroleum (table) **P**: 331; (Drilling an oil well)
P: 337
- Dry ice** **D**: 369
- Carbon dioxide **C**: 206
- Food, Frozen (Dry-ice freezing) **F**: 338
- Rainmaking (Rainmaking methods) **R**: 129
- Refrigeration (Dry ice) **R**: 201
- Weather (How people affect the weather)
W: 170
- Dry kiln**
- Lumber (Seasoning lumber) **L**: 519
- Dry lake**
- Nevada (Natural resources) **N**: 169
- Dry lot**
- Dairying (Feeding) **D**: 7
- Dry measure**
- Weights and measures (Volume and capacity)
W: 186
- Dry milling** [agriculture]
- Corn (Corn in industry) **Ci**: 106f
- Dry milling** [industrial process]
- Leather *picture on L*: 168
- Dry painting** [art]
- Sand painting **S**: 107
- Dry-plate process**
- Photography (The beginnings of modern photography) **P**: 426
- Dry point** [art]
- Engraving (Dry point) **E**: 326
- Dry-press process** [industrial process]
- Brick (Forming bricks) **B**: 597-598 *with picture*
- Dry rot** [plant disease]
- Rot **R**: 485
- Dry run**
- Television (Planning and preparation) **T**: 110c-111
- Dry salting** [food]
- Fishing industry (Methods of processing)
F: 186
- "Dry Salvages, The"** [poem by Eliot]
- Eliot, T. S. (His works) **E**: 237-238
- Dry sand mold** [manufacturing]
- Cast and casting (Types of molds) **C**: 278
- Dry-sump engine**
- Gasoline engine (Lubrication system) **G**: 66
- Dry Tortugas National Park** [Florida] **D**: 369
- National Park System (table: National parks)
N: 48
- Dry valley**
- Antarctica (Land regions) **A**: 532 *with picture*
- Dry wall**
- House (table) **H**: 380
- Wallboard **W**: 17
- Dry-wood termite** [insect]
- Termite (Termites in the United States) **T**: 174
- Dryad** [Greek mythology]
- Mythology (Greek divinities) **M**: 979
- Dryden, John** [English author] **D**: 370
- English literature (Restoration literature) **E**: 318
- Poetry (Neoclassical poetry) **P**: 597
- Shakespeare, William (Neoclassical criticism)
S: 369
- Drying**
- Food preservation (Drying) **F**: 342
- Drying oil**
- Linseed oil **L**: 339
- Oil (Fixed oils) **O**: 707
- Dryland farming**
- See also* Dry farming *in this index*
- Agriculture (Expansion in the United States)
A: 158
- Nebraska (The Great Plains) **N**: 104
- Drysdale, Don** [American baseball player]
- Baseball (table: Hall of Fame) **B**: 134; (table:
Modern major league records) **B**: 137
- Drysdale, Russell** [Australian painter]
- Australia (Painting) **A**: 906-907
- DSL** [electronics]
- Internet (How the Internet works) **I**: 350c
- Telephone (Modems) **T**: 97
- DTP** *See* Desktop publishing *in this index*
- DT's** *See* Delirium tremens *in this index*
- Du Fu** [Chinese poet]
- Chinese literature (Poetry) **C**: 511-512
- Du You** [Chinese scholar]
- Encyclopedia (The first reference works)
E: 268a
- Dual citizenship**
- Citizenship (Dual citizenship) **Ci**: 570
- Dual Monarchy** *See* Austria-Hungary *in this index*
- Dual nationality** *See* Dual citizenship *in this index*
- Dual presidency**
- President (Types of presidential government)
P: 756b
- Dual-purpose cattle**
- Cattle (Dual-purpose cattle) **C**: 311
- Dual rake** [machine]
- Rake (The side-delivery rake) **R**: 131 *with picture*
- Dualism** [philosophy]
- Descartes, René (His philosophy) **D**: 154
- Metaphysics (Mind and body) **M**: 430
- Duane, William J.** [American government official]
- Jackson, Andrew (table) **J**: 11, (Jackson's second Administration) **J**: 12
- Treasury, Department of the (table) **T**: 407

- Duarte** [Portuguese prince]
Henry the Navigator H: 191
- Duarte, José Napoleón** [Salvadoran political leader]
El Salvador (Recent developments) E: 252
- Duarte, María Eva** [Argentine political leader]
See Perón, Eva Duarte de in *this index*
- Duarte Peak** [mountain]
West Indies (Land and climate) W: 204
- Dub** [music]
Rap music R: 141
- Dub** [poetry]
English literature (Recent English poetry) E: 323
- Du Barry, Madame** [French public figure] D: 370
with *portrait*
Fragonard, Jean Honoré F: 451
- Dubayy** [state]
United Arab Emirates U: 43
- Dubayy** [city, United Arab Emirates]
United Arab Emirates U: 43
- Dubček, Alexander** [Czechoslovak political leader]
Communism (In Eastern Europe) Ci: 896
Czech Republic (The 1960's) Ci: 1214
Czechoslovakia (The 1960's) Ci: 1216
Slovakia (The 1960's) S: 509
Socialism (The New Left) So: 561
- Du Bellay, Joachim** [French poet] D: 370
French literature (The Renaissance) F: 519-520
- Dubhe** [star]
North Star *picture on* N: 519
- Dubinsky, David** [American labor leader] D: 370
- Dublin** [city, Ireland] D: 370 with *picture*
Ireland I: 416 with *picture*; (Surface features) I: 422, *pictures on* I: 417, I: 427, I: 428
- Dublin, University of** [Ireland] D: 371
Ireland (Education) I: 420-421 with *picture*
- Dubliners** [book by Joyce]
Irish literature (James Joyce) I: 432
Joyce, James J: 176
- Dubnium** [element] D: 371
Transuranium element T: 401
- DuBois, Blanche** [literary figure]
Williams, Tennessee W: 311
- Dubois, Eugène** [Dutch anthropologist] D: 372
Java fossils J: 66
Prehistoric people (table) P: 752
- Dubois, François** [French painter]
Huguenots *picture on* H: 411
- Du Bois, Guy Pène** [American painter] D: 372
- Du Bois, W. E. B.** [American historian] D: 372
with *portrait*
African Americans (The rise of new black leaders) A: 136j with *picture*
American literature (Nonfiction writers) A: 420
Niagara Movement N: 394
Washington, Booker T. (Opposition to Washington) W: 89
- Du Bois, William Pène** [American author]
Du Bois, Guy Pène D: 372
Newbery Medal (table) N: 359
- Dubos, René Jules** [French-American microbiologist] D: 372
- Dubuffet, Jean** [French painter] D: 372
- Dubuque** [Iowa] D: 373
- Dubuque, Julien** [French-Canadian frontiersman] D: 373
Iowa (Exploration and early settlement) I: 393;
picture on I: 394
- Du Buque Visitor** [newspaper]
Iowa (Communication) I: 391
- Ducet** [money] D: 373
- Duccio di Buoninsegna** [Italian painter] D: 373
Jesus Christ *picture on* J: 106
Pilate, Pontius *picture on* P: 462
- Duce, Il** See Mussolini, Benito in *this index*
- Duchamp, Marcel** [French painter] D: 373 with *picture*
Dadaism D: 2
Mobile M: 682
Painting (Europeans in America) P: 84
Sculpture (Assemblages) S: 257 with *picture*
- Ducharme, Réjean** [Canadian author]
Canadian literature (Modern literature: 1945 to the present) C: 160
- Du Châtelet, Marquise** [French author] See Châtelet, Marquise du in *this index*
- Duchenne muscular dystrophy** [disease]
Muscular dystrophy (Duchenne muscular dystrophy) M: 936
Heredity (table) H: 204
- Duchess** [title]
Duke D: 380
- Nobility (In the United Kingdom) N: 450
- Duchess of Alba** [painting by Goya]
Goya, Francisco *picture on* G: 295
- Duchess of Maffi, The** [play by Webster]
English literature (Jacobean drama) E: 317
Webster, John W: 177
- Duck** [bird] D: 374 with *pictures*
Bird (As a source of food and raw materials) B: 330 with *picture*
Mallard M: 110 with *picture*
Poultry P: 720
- Duck** [fabric]
Canvas C: 184
- Duck hawk** [bird] See Peregrine falcon in *this index*
- Duckbill** See Platypus in *this index*
- Duckbill dinosaur** See Hadrosaur in *this index*
- Ducking**
Boxing *picture on* B: 529
- Ducking stool** [punishment] D: 377
Colonial life in America (Crime and punishment) Ci: 795
- Duckling** [bird]
Duck (The features of a duck) D: 374 with *picture*; (Ducklings) D: 375
- Duckpins** [game]
Bowling (Other kinds of bowling) B: 525
- Ducktail**
Hairdressing (The 1900's) H: 12-13
- Duckweed** [plant] D: 377
- Duclot, Louis** [American journalist]
Louisiana (Communication) L: 495
- Duco** [lacquer]
Painting (Synthetic resins) P: 40
- Ducommun, Elie** [Swiss statesman]
Nobel Prizes (Peace: 1902) N: 447
- Duct** [building construction]
House (Heating and air conditioning) H: 383
- Ducted propeller** [engineering] D: 377 with *picture*
- Ductility** [physical property] D: 377
Alloy (Characteristics of alloys) A: 377
Copper (Ductility) Ci: 1042
Gold (Physical properties) G: 249
Malleability M: 110
Metal (What metal is) M: 425
- Ductless gland** See Endocrine gland in *this index*
- Ductus arteriosus** [anatomy]
Heart (Abnormal openings in the heart) H: 141
- Dude ranch** D: 377
- Dudley, E. B.** [American political leader]
North Carolina (table) N: 490
- Dudley, Lord Guildford** [husband of]
Grey, Lady Jane G: 391
- Dudley, Robert** See Leicester, Earl of in *this index*
- Dudley, Thomas** [American colonial official] D: 378
- Due process of law** D: 378
Civil rights (Due process) Ci: 608
Constitution of the United States (Amendment 5) Ci: 1012; (Amendment 14) Ci: 1013
Freedom (Social freedom) F: 501
Holmes, Oliver Wendell, Jr. (Supreme Court justice) H: 295
Magna Carta (Promises in the charter) M: 53
Trial (The criminal defendant's rights) T: 437
- Duel** [combat] D: 378
- Du Fay, Charles François** [French physicist]
Electricity (Experiments with electric charge) E: 196
- Dufey, Guillaume** [French composer]
Classical music (Secular music) Ci: 646
- Duff, James H.** [American political leader]
Pennsylvania (table) P: 263
- Duff, Sir Lyman Poore** [Canadian jurist] D: 378
- Dufferin and Ava, Marquess of** [British statesman] D: 379
- Dufferin Terrace**
Quebec (Upper Town) Q: 34
- Duffy, Hugh** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Dufrost de Lajemmerais, Marie-Marguerite**
Youville, Saint Marguerite d' Y: 574
- Duffy, Raoul** [French painter] D: 379 with *picture*
Painting (Color) P: 35
- Dug Hill Ridge**
Maryland (Land regions) M: 250
- Dugin, Andrej** [German illustrator]
Literature for children *picture on* L: 355
- Dugina, Olga** [German illustrator]
Literature for children *picture on* L: 355
- Dugong** [sea animal] D: 379 with *picture*
Mammal (table) M: 128
- Dugout** [baseball]
Baseball (Foul territory) B: 127
- Dugout** [boat]
Canoeing (History) C: 182
Indian, American (Indians of the Southeast) I: 157
Ship *picture on* S: 404
Transportation (Water transportation) T: 384-385
- Du Gua, Pierre** See Monts, Sieur de in *this index*
- Duhalde, Eduardo** [Argentine political leader]
Argentina (Recent developments) A: 659
- DUI** [crime] See Driving while intoxicated in *this index*
- Duiker** [animal]
Antelope A: 541
- Duino Elegies** [poems by Rilke]
Rilke, Rainer Maria R: 341
- Duisburg** [Germany] D: 379
- Dukakis, Michael Stanley** [American political leader] D: 379 with *portrait*
Bush, George Herbert Walker (The Republican nomination) B: 719
Democratic Party (Mixed results) D: 128
Massachusetts (table) M: 288
Sacco-Vanzetti case S: 5
- Dukakis, Olympia** [American actress]
Motion picture (Best performance by an actress in a supporting role: 1987) M: 863
- Dukas, Paul Abraham** [French composer] D: 380
- Duke** [title] D: 380
Nobility (In the United Kingdom) N: 450
- Duke, Charles Moss, Jr.** [American astronaut]
Space exploration (Other moon landings) So: 719
- Duke, James Buchanan** [American businessman] D: 380
North Carolina (Economic progress) N: 493
- Duke, Patty** [American actress]
Motion picture (Best performance by an actress in a supporting role: 1962) M: 863
- Duke cherry** [plant]
Cherry C: 409 with *picture*
- Duke Endowment** D: 380
- Duke of Gloucester Street**
Williamsburg *picture on* W: 313
- Duke of Mantua** [opera character]
Opera (*Rigoletto*) O: 806
- Duke University** D: 380
North Carolina *picture on* N: 477
- Dukenfield, William Claude** See Fields, W. C. in *this index*
- Dukhobors** [religious group]
Dukhobors D: 314
- Dukun** [healer]
Bomoh B: 454
- DUKW** [military transport]
World War II (Weapons of World War II) *picture on* W: 485
- Dulbecco, Renato** [American physiologist]
Nobel Prizes (Physiology or medicine: 1975) N: 445
- Dulcimer** [musical instrument] D: 380 with *pictures*
Piano (History) P: 447
- Dulcy** [play by Connelly and Kaufman]
Connelly, Marc C: 972
- Dulle Griete**
Cannon *picture on* C: 179
- Dulles, Allen W.** [American government official]
Warren Report W: 37
- Dulles, Avery Cardinal** [American religious leader]
Cardinal (table: American cardinals) C: 211
- Dulles, John Foster** [American statesman] D: 381
Cold War (The death of Stalin) Ci: 764; (The spirit of Geneva) Ci: 765
Diplomacy (History) D: 216-217
Eisenhower, Dwight David (Foreign affairs) E: 152
- Dulles International Airport**
Washington, D.C. (Transportation) W: 84-85
- Duluth** [Minnesota] D: 381
Minnesota (The early 1900's) M: 604
- Duluth, Sieur** [French explorer]
Duluth D: 381
Minnesota (Exploration) M: 603
- Duma** [legislature] D: 381
Lenin, V. I. (Revolt) L: 192

Russia (National government) R: 531 *with picture*; (The Revolution of 1905) R: 552
 Union of Soviet Socialist Republics (The February Revolution) U: 35
Dumas, Alexandre, père [1802-1870, French author] D: 382
 Novel (France) N: 573
Dumas, Alexandre, fils [1824-1895, French author] D: 382
Du Maurier, Daphne [English author] D: 382
Du Maurier, George [English artist and author] D: 382
Du Maurier, Sir Gerald [English actor]
 Du Maurier, Daphne D: 382
Dumb rabies [disease]
 Rabies (Symptoms in animals) R: 49
Dumb supper [custom]
 Halloween (Halloween in the United States) H: 25
Dumbarton Oaks [1944] D: 382
 United Nations (The Dumbarton Oaks Conference) U: 94
Dumdum bullet
 Bullet B: 694
Dumdum fever See Kala-azar *in this index*
Dumézil, Georges [French scholar]
 Mythology (Mythology and society) M: 988
Dumky [music by Dvořák]
 Dvořák, Antonín D: 394
Dummer, Henry E. [American lawyer]
 Lincoln, Abraham (Study) L: 314
Dummy [cards]
 Bridge (The play) B: 604 *with diagram*
Dummy [puppet]
 Puppet (Dummies) P: 906
 Ventriloquism V: 309 *with picture*
Dummy spur [riding equipment]
 Horse (Spurs) H: 351
Dumont, Gabriel [Canadian revolutionary]
 D: 383 *with portrait*
Dump [sanitation]
 Environmental pollution (Solid waste) E: 334
Dump rake [machine]
 Rake (The dump rake) R: 130
Dump truck
 Truck (Kinds of trucks) T: 457; *pictures on* T: 459
Dumping [economics]
 Tariff (Why tariffs are levied) T: 43
Dumpling [food]
 Food (Interesting facts about food) F: 329
Dun See Mayfly *in this index*
Dún Laoghaire [Ireland] D: 383
Dunant, Jean Henri [Swiss social reformer]
 D: 383
 Red Cross (Beginnings) R: 187
Dunaway, Faye [American actress]
 Motion picture (Best performance by an actress: 1976) M: 862
Dunbar, Battles of [Scottish history]
 Scotland (Fight for independence) S: 219;
 (War with the king) S: 220
Dunbar, Paul Laurence [American author]
 D: 383 *with portrait*
 African American literature (The 1800's) A: 136a
 American literature (Realist poetry) A: 421
Duncan [literary figure]
 Shakespeare, William (*Macbeth*) S: 363
Duncan I [king of Scotland] D: 383
 Macbeth M: 5
 Scotland (Beginning of the Scottish kingdom) S: 219
Duncan, Charles W., Jr. [American government official]
 Carter, Jimmy (table) C: 257
 Energy, Department of (table) E: 276
Duncan, Donald F. [American inventor]
 Yo-yo Y: 566
Duncan, Isadora [American dancer] D: 383 *with picture*
 Dance (European and American theatrical dance) D: 31
Duncan, Joseph [American political leader]
 Illinois (table) I: 71
Duncan, Robert [American poet] D: 384
 American literature (Poetry) A: 423
Duncan, Sara Jeannette [Canadian author]
 Canadian literature (Fiction: 1850-1918) C: 158
Duncan Dam
 British Columbia (The mid-1900's) B: 630
Duncan Phyfe furniture
 Phyfe, Duncan P: 431
Dunciad, The [poem by Pope]

Pope, Alexander P: 667
 English literature (Swift and Pope) E: 318
Dundee [city, Scotland] D: 384
Dundurn Castle [Ontario]
 Hamilton (Cultural life) H: 31 *with map*
Dune [geology] D: 384
 Denmark (The Western Dune Coast) D: 137
with picture
 Desert (Desert land and climate) D: 156
 Sand S: 106
Dune trilogy [books by Herbert]
 Herbert, Frank H: 197
Dunes [Netherlands]
 Netherlands (The land) N: 144
Dung beetle [insect]
 Animal (Providing food) A: 498
 Scarab S: 173
Dungeness crab [sea animal]
 Crab C: 1115
Dungeons and Dragons [game]
 Game (Board games) G: 21-22
Dunham, Katherine [American dancer] D: 384
with picture
Duniway, Abigail Jane Scott [American social reformer] D: 385 *with portrait*
 Oregon (The early 1900's) O: 848
Dunk
 Basketball (Basketball terms) B: 145; *picture on* B: 147
Dunkerque [France] D: 385 *with picture*
Dunkerque, Battle of [1940]
 Dunkerque D: 385 *with picture*
 Alexander of Tunis, Earl A: 342
 World War II (The invasion of the Low Countries) W: 473 *with picture*
Dunkers [religious group]
 Brethren, Church of the B: 594
Dunkirk See Dunkerque *in this index*
Dunkleosteus [fish]
 Fish (The first fish) F: 171
 Prehistoric animal (The first animals with backbones) P: 737
Dunklin, Daniel [American political leader]
 Missouri (table) M: 668
Dunlap, Frances [wife of]
 Lowell, James Russell (Teacher and editor) L: 510
Dunlap, Robert [American political leader]
 Maine (table) M: 87
Dunlap, William [American dramatist] D: 385
Dunlop, John Boyd [Scottish inventor] D: 385
 Tire (History) T: 298
Dunlop, John T. [American government official]
 Ford, Gerald Rudolph (table) F: 378
 Labor, Department of (table) L: 2
Dunlora Academy
 Richmond, University of R: 334
Dunmore, Lord [British colonial official]
 Cornstalk C: 1066
 Revolutionary War in America (Fighting in the Southern Colonies) R: 275
 Washington, George (The coming revolution) W: 96-97
Dunn, James [American actor]
 Motion picture (Best performance by an actor in a supporting role: 1945) M: 863
Dunn, Winfield [American political leader]
 Tennessee (table) T: 152
Dunnart [animal]
 Marsupial mouse M: 233
Dunne, Edward F. [American political leader]
 Illinois (table) I: 71
Dunne, Finley Peter [American journalist]
 D: 385
Dunning, Charles A. [Canadian political leader]
 Saskatchewan (table) S: 144
Dunning, John Ray [American physicist] D: 386
Dunning, Paris C. [American political leader]
 Indiana (table) I: 214
Dunninger [American magician]
 Magician (Mentalist magic) M: 52
Dunquerque See Dunkerque *in this index*
Duns Scotus, John [Medieval theologian]
 D: 386
 Scholasticism (History) S: 179
Dunsany, Lord [Irish author] D: 386
 Irish literature (Drama) I: 432
Dunsmuir, James [Canadian political leader]
 British Columbia (table) B: 627
Dunstable
 Nashua N: 22
Dunstable, John [English composer]
 Classical music (Secular music) C: 646
Dunstan, Saint [English religious leader] D: 386

Dunster, Henry [American educator]
 Bay Psalm Book B: 176
Duodecimal system [mathematics] D: 386
Duodenal ulcer [disorder]
 Stomach (Peptic ulcers) So: 908
 Ulcer U: 15 *with picture*
Duodenum [anatomy]
 Pancreas P: 128
 Stomach So: 907 *with diagram*
Duong Thu Huong [Vietnamese author]
 Vietnam (The arts) V: 366-368
Dupatta [clothing]
 Pakistan (Clothing) P: 96
Duperrey, Louis [French explorer]
 Truk Islands T: 465
Dupin, Amantine-Aurore-Lucile See Sand, George *in this index*
Du Plessis, Armand Jean See Richelieu, Cardinal *in this index*
Duplessis, Maurice [Canadian political leader]
 Quebec (table) Q: 29; (Politics) Q: 30; (World War II) Q: 32
 Trudeau, Pierre Elliott (Entry into public life) T: 462
Duplex
 Housing (Kinds of housing) H: 389-390
Duplex system
 Telegraph (Service expansion and improvement) T: 91-92
Duplexer [electronics]
 Radar (The duplexer) R: 71 *with diagram*
Duplicate bridge [cards]
 Bridge B: 604; (Duplicate bridge) B: 605
Duplicator [machine] D: 386
See also Copying machine *in this index*
 Office work (Distributing information) O: 677
Du Pont, Eleuthère Irénée [American businessman] D: 387
 Delaware (Places to visit) D: 102; (Statehood) D: 112
DuPont Company D: 387
 Chlorofluorocarbon C: 517
 Delaware (Manufacturing) D: 107
 Du Pont, Eleuthère Irénée D: 387
 Teflon T: 87
 Wilmington W: 315
Du Pont de Nemours, Pierre Samuel [1739-1817, French economist] D: 387
 Louisiana Purchase (Trouble begins) L: 502
 Physiocrats P: 445
Du Pont de Nemours, Pierre Samuel [1870-1954, American philanthropist]
 Delaware (The early 1900's) D: 112
Du Pont de Nemours, Pierre Samuel, IV
 [American political leader]
 Delaware (table) D: 109
Du Pont de Nemours, Thomas Coleman
 [American businessman]
 Delaware (Transportation) D: 108
Duppa, Darrel [American settler]
 Phoenix P: 395
Dupré, Jacques [American political leader]
 Louisiana (table) L: 496
Dupuy, Michel [Canadian diplomat]
 United Nations (table) U: 86
Dura mater [anatomy]
 Brain (How the brain is protected) B: 552
 Membrane (Fibrous membranes) M: 391
Durable goods
 Industry (Other systems of classification) I: 261
 Manufacturing (Kinds of manufacturing) M: 169
Durable nonwoven [textile]
 Textile (Nonwovens) T: 215
Durable power of attorney [law]
 Euthanasia (Active and passive euthanasia) E: 421
Durable power of attorney for health care [law]
 Death (The right to die) D: 61
Dureck, Fanny [Australian swimmer]
 Swimming (History) So: 1048
Duralumin [metal] D: 387
Durán, Roberto [Panamanian boxer]
 Boxing (Recent developments) B: 535 *with picture*
Durand, Asher B. [American artist]
 Hudson River School H: 406
Durant, Ariel [American historian]
 Durant, Will D: 387
Durant, Henry Fowle [American educator]
 Wellesley College W: 194
Durant, Will [American historian] D: 387

- Durant, William Crapo** [American businessman] D: 387
Automobile (William Crapo Durant) A: 965
General Motors Corporation G: 83
- Durante, Jimmy** [American entertainer] D: 388
- Duras, Marguerite** [French author]
French literature (Recent French literature) F: 523
- Duration** [philosophy]
Bergson, Henri B: 258
- Durban** [city, South Africa] D: 388
South Africa picture on So: 611
- Durbin, Winfield T.** [American political leader]
Indiana (table) I: 214
- Dürer, Albrecht** [German artist] D: 388 with pictures
Bookplate B: 474 with picture
Four Horsemen of the Apocalypse F: 437 with picture
Germany (Painting and sculpture) G: 155
Horse picture on H: 361
Painting (Albrecht Dürer) P: 58 with picture
Witchcraft picture on W: 373
- Durga** [Hindu goddess]
Hinduism (Divinities) H: 236 with picture
- Durham** [England] D: 388
- Durham** [North Carolina] D: 388
- Durham, Earl of** [British statesman] D: 389
- Durham Report**
Durham, Earl of D: 389
- Durkheim, Émile** [French sociologist] D: 389
Mythology (Mythology and society) M: 988
Sociology (Development of social research) So: 566
- Durkin, Martin P.** [American government official]
Eisenhower, Dwight David (table) E: 152
Labor, Department of (table) L: 2
- Durmast oak** [tree]
Oak (Other oaks) O: 636
- Duroc** [animal]
Hog (Kinds of hogs) H: 285 with picture; (table) H: 286
- Durocher, Leo** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Durra** [grain]
Sorghum (Grain sorghums) So: 596
- Durrani, Ahmad Shah** [Afghan tribal leader]
Afghanistan (United Afghanistan) A: 95
Kandahar K: 212
- Durrell, Gerald** [English naturalist] D: 389
- Durrell, Lawrence** [British author] D: 389
- Dürrenmatt, Friedrich** [Swiss author] D: 389
Drama (Later German-language drama) D: 340
German literature (German literature after 1945) G: 142
- Dursban** [insecticide]
Insecticide (Dangers of insecticides) I: 303
- Durum wheat** [plant]
Wheat (Species of wheat) W: 269 with picture
Grass (Cereals) G: 326
- D'Urville, Jules Dumont** [French explorer]
Antarctica (Early exploration) A: 535-536
- Duryea, Charles E.** [American inventor]
Duryea brothers D: 390
- Duryea, J. Frank** [American inventor]
Duryea brothers D: 390
Automobile racing (Growth of organized automobile racing) A: 979
- Duryea brothers** [American inventors] D: 390
Automobile (The birth of the automobile industry) A: 963-964 with picture
- Du Sable, Jean Baptiste Point** [American pioneer] D: 390 with portrait
Chicago (Exploration and early settlement) C: 434
- Du Sable Museum of African-American History**
Chicago (Museums) C: 428-429
- Dušan, Stefan** [king of Serbia]
Serbia (History) S: 314
- Duse, Eleonora** [Italian actress] D: 390
- Dushanbe** [city, Tajikistan] D: 390
- Dusk** See *Sunset in this index*
- Düsseldorf** [city, Germany] D: 390
- Dust** D: 390
Air cleaner (Uses) A: 175
- Dust** [agriculture]
Tea (Grades of tea) T: 63
- Dust Bowl** [region, U.S.] D: 391 with picture and map
Conservation (The rise of the conservation movement) Ci: 985-986
Drought D: 349
- Kansas (The Great Depression) K: 238 with picture
Oklahoma (The 1930's) O: 732-734
Route 66 R: 493
Water (Water shortages) W: 122
- Dust devil** D: 392
Mars (Dust storms) M: 226b
- Dust jacket**
Book (Inside a book) B: 464
- Dust mite** [animal] D: 392 with picture
- Dust storm** D: 392
Dust Bowl D: 391
Mars (Dust storms) M: 226b
- Dust Which Is God, The** [book by Benét]
Benét, William Rose B: 248
- Dusting** See *Crop-dusting in this index*
- Dusting** [behavior]
Bird (Feather care) B: 354-355
- Dutch** [people]
Netherlands N: 138
- Dutch Antilles** See *Netherlands Antilles in this index*
- Dutch Belted cattle**
Cattle (Other dairy cattle) C: 311
- Dutch doll**
Doll (The 1800's) D: 289
- Dutch door** [architecture]
Colonial life in America (Houses) Ci: 796-797
- Dutch East India Company** [Dutch history] D: 392
Flag picture on F: 209
Hudson, Henry (North American voyages) H: 404
Indonesia (The coming of the Europeans) I: 237; (Dutch rule) I: 237
Netherlands (Prosperity and power) N: 148
South Africa (Arrival of Europeans) So: 617
- Dutch East Indies** [former name, Indonesia]
Indonesia (Dutch rule) I: 237
- Dutch elm disease** [plant disease] D: 392
Elm (Diseases) E: 245
Wilt W: 328
- Dutch Harbor** [Alaska]
Aleutian Islands A: 340
- Dutch language**
Belgium (Languages) B: 229
Netherlands (Language) N: 139
- Dutch literature**
Netherlands (Arts) N: 142
- Dutch oven** [cookware] D: 393
- Dutch pins**
Bowling (Modern forms of bowling) B: 525
- Dutch Reformed Church** [religious group]
Netherlands (Religion) N: 142
Reformed Church in America R: 199
South Africa (Religion) So: 612
- Dutch Republic** [Dutch history]
Netherlands (Freedom from Spain) N: 148
William I, Prince of Orange W: 308
- Dutch West India Company** [Dutch history] D: 393
Minuit, Peter M: 613
Netherlands (Prosperity and power) N: 148-149
New Netherland N: 277
New York (Exploration and settlement) N: 314
Patron system P: 199
- Dutch West Indies** See *Netherlands Antilles in this index*
- Dutch windmill**
Windmill W: 333
- Dutchman** [play by Baraka]
Baraka, Amiri B: 103
- Dutchman's-breeches** [plant] D: 393 with picture
Flower picture on F: 285
- Dutert, Ferdinand** [French architect]
Architecture picture on A: 625
- Dutra, Eurico Gaspar** [Brazilian political leader]
Brazil (Return to constitutional government) B: 585
- Dutton, Henry** [American political leader]
Connecticut (table) Ci: 967
- Duty** [economics]
See also *Tariff in this index*
Customs Ci: 1201
Smuggling S: 521
- Duval, David** [American golfer]
Golf (British Open) G: 264
- Duval, Gabriel** [American jurist]
Supreme Court of the United States (table) So: 1000
- DuVal, William P.** [American political leader]
Florida (Territorial days) F: 262
- Duvalier, François** [Haitian political leader] D: 393
Haiti (History) H: 15-16
- Duvalier, Jean-Claude** [Haitian political leader]
Haiti (History) H: 15-16
- Duvall, Robert** [American actor]
Motion picture (Best performance by an actor: 1983) M: 862-863
- Du Vigneaud, Vincent** [American chemist]
Nobel Prizes (Chemistry: 1955) N: 443
- Duvoisin, Roger Antoine** [American artist] D: 393
- Duxbury** [Massachusetts]
Standish, Miles So: 836
- DVD** [storage device] D: 393
Communication (In recording) Ci: 886
Compact disc (Other formats) Ci: 902
Computer (DVD-ROM drives) Ci: 916; picture on Ci: 913
Electronics (Digital circuits) E: 213-214; (The digital age) E: 216
Laser [Recording, storing, and transmitting information] L: 82
Motion picture (Distribution) M: 860
Television (Video entertainment systems) T: 110c
- DVD-Audio**
Recording industry (In a recording studio) R: 181; (History) R: 182
- DVD-ROM** [electronics]
Multimedia M: 919
DVD D: 393
- Dvina River** [Russia] D: 393
See also *Daugava River in this index*
- D.V.M.** [degree]
Veterinary medicine (Careers in veterinary medicine) V: 346
- Dvořák, Antonín** [Czech composer] D: 394
Czech Republic (The arts) Ci: 1211
- Dwarf** [biology] D: 394 with picture
Evolution (Genetic drift) E: 429
Tree picture on T: 411
- Dwarf Cavendish**
Banana B: 72
- Dwarf cornel** [plant] See *Bunchberry in this index*
- Dwarf galaxy** [astronomy]
Universe U: 205
- Dwarf mammoth** [animal]
Mammoth M: 130
- Dwarf nova** [astronomy]
Nova N: 553
- Dwarf poinciana** [tree]
Poinciana P: 600
- Dwarf star** [astronomy]
See also *Brown dwarf; White dwarf in this index*
Star So: 840
- Dwelling** See *House; Housing; Shelter in this index*
- DWI** [crime] See *Driving while intoxicated in this index*
- Dwight, John** [English sculptor] D: 395
- Dwight, Reginald Kenneth** [British singer] See *John, Elton in this index*
- Dwight D. Eisenhower** [ship]
Aircraft carrier (The United States carrier fleet) A: 206
- Dwight D. Eisenhower Library** [Abilene]
Kansas (Libraries) K: 221 with picture
- Dwight D. Eisenhower System of Interstate and Defense Highways** See *Federal Interstate Highway System in this index*
- Dwight Mission** [Russellville]
Arkansas (Schools) A: 699
- Dwinell, Lane** [American political leader]
New Hampshire (table) N: 223
- Dy** [symbol]
Dysprosium D: 398
- Dyaks** See *Dayaks in this index*
- Dye** D: 395 with picture
Batik B: 165
Cell (Looking at a cell) C: 327
Color (Mixing colorants) Ci: 819-820
Fur (Dyeing) F: 563
Ink I: 272
Lake L: 35
Laser (Dye lasers) L: 85
Leather (Final processing) L: 168
Phoenicia (Trade and manufacturing) P: 393
Pigment P: 461
Textile (Finishing the fabric) T: 217 with picture
Tie dyeing T: 282
Wool (Making fabric) W: 401

See also the list of Related articles in the Dye article

Dye laser

Laser (Dye lasers) L: 85

Dye-polymer [recording]

Compact disc (CD-R) Ci: 902a

Dyer, Elisha [American political leader]

Rhode Island (table) R: 311

Dyer, Mary [American religious leader] D: 396

Dying Captive, The [sculpture by Michelangelo]

Michelangelo (The tomb of Julius II) M: 484

Dying Gaul [sculpture]

Galatia G: 8

"Dying Swan, The" [ballet]

Pavlova, Anna P: 202

Dylan, Bob [American musician] D: 397

Baez, Joan B: 25

Rock music (Expanding styles and sounds) R: 378

Dymaxion house

Fuller, Buckminster F: 554

Dynamic [art]

Sculpture (Form and treatment) S: 230-231

Dynamic efficiency

Industry (Performance) I: 262

Dynamic metamorphism

Metamorphic rock M: 428

Metamorphism M: 428

Dynamic meteorologist

Weather (Careers in weather) W: 170

Dynamic microphone

Microphone (Ribbon microphones) M: 517
with diagram

Dynamic pump

Pump (Dynamic pumps) P: 899

Dynamics [music]

Music (Indicating expression) M: 955

Dynamics [physics] D: 397

Mechanics M: 354

Physics (Mechanics) P: 437

Dynamics, Group See Group dynamics in this index

Dynamics of Faith [book by Tillich]

Tillich, Paul T: 287

Dynamics of Living Matter, The [book by Loeb]

Loeb, Jacques L: 420

Dynamite [explosive] D: 397 with picture

Nitroglycerin N: 426

Nobel, Alfred Bernhard N: 439

Dynamo [machine]

Electric generator E: 170

Electricity picture on E: 197

Dynamolectric

Electric generator E: 170

Dynamometer [instrument]

Horsepower (Brake horsepower) H: 367

Dyne [unit of measure] D: 397

Metric system (Non-SI metric units) M: 440

Dynode [electronics]

Photomultiplier tube P: 430

D'Youville, Saint Marguerite [Canadian religious leader] See Youville, Saint Marguerite d' in this index

Dysart, A. Allison [Canadian political leader]

New Brunswick (table) N: 196

Dysarthria [disorder]

Aphasia A: 565

Dyscolos [play by Menander]

Menander M: 397

Dysentery [disease] D: 398

Dysgraphia [disorder]

Learning disabilities (Types) L: 165

Dyslexia [disability] D: 398

Aphasia A: 565

Learning disabilities (Types) L: 165

Reading (Reading problems) R: 161

Dysmenorrhea [disorder]

Menstruation (Effects of menstruation) M: 404

Dyspepsia [disorder] D: 398

Indigestion I: 223

Dysphasia [disorder]

Learning disabilities (Types) L: 165

Dyspraxia [disorder]

Learning disabilities (Types) L: 165

Dysprosium [element] D: 398

Dystopia See Antitopian fiction in this index

Dystrophin [protein]

Muscular dystrophy (Duchenne muscular dystrophy) M: 936

Dystrophy, Muscular [disease] See Muscular dystrophy in this index

Dzanga-Ndoki National Park [Central African Republic/Congo (Brazzaville)]

National park (table) N: 42f

Dzindzichashvili, Roman [American chess player]

Chess (United States chess champions) C: 414

Dzong [religion]

Bhutan (People) B: 277 with picture

Dzongkha [language]

Bhutan (People) B: 277

Dzongtap [office]

Bhutan (Government) B: 277

E

E [letter] E: 1 with pictures

E. B. Crocker Art Museum [Sacramento]

Sacramento (Education and cultural life) S: 6

E-book [computer file]

Audio-visual materials (Computers) A: 883

Internet (Publishing) I: 350a-350b

Library (The growth of information and technology) L: 238

E-business See E-commerce in this index

E-cash See Electronic money in this index

E. coli [bacteria] E: 2

Food poisoning F: 340

Genetic engineering (Uses of genetic engineering) G: 84a

E-commerce [business] E: 2

Codes and ciphers (Modern applications of cryptography) Ci: 752

Internet (Glossary of Internet terms) I: 350a; (Business transactions) I: 350b

Retailing (Nonstore retailing) R: 265

Sales tax S: 62

E. I. du Pont de Nemours and Company See

DuPont Company in this index

"E lucevan le stelle" [aria]

Opera (Tosca) O: 807

E-mail [communication] E: 2

Careers (Finding job opportunities) C: 217 with picture

Communication (The development of the Internet) Ci: 886 with picture

Computer (Internet service providers [ISP's] and online services) Ci: 921-922

Etiquette (Internet etiquette) E: 374

Internet (Communications) I: 350-350a;

(Glossary of Internet terms) I: 350a

Medicine (Computers and electronic communication) M: 370

Modem M: 686

Office work (Distributing information) O: 677

Online service O: 763

Postal services (Technological advancements) P: 707

Telephone (Modems) T: 97-98

E-mail bomb [program]

Computer (Computer security) Ci: 924

Internet (Security) I: 350e

E=mc² [physics] E: 2

Einstein, Albert (Famous theories) E: 146-146b

Nuclear energy (Artificial fission) N: 590

Physics (Einstein and relativity) P: 441-442

Star (Converting mass to energy) So: 846

Subatomic particle (Elementary particles)

So: 937

Relativity (Mass-energy relationship) R: 211

E-money See Electronic money in this index

E Pluribus Unum E: 3

Great Seal of the United States (The face) G: 348

E-ticket

Airport (Airline passenger services) A: 246

E-trading

Investment (How investors buy stocks) I: 369

Eads, James Buchanan [American engineer]

New Orleans (Civic improvements) N: 285

Eads Bridge [Saint Louis]

Mississippi River (History) M: 648-649

Saint Louis (The metropolitan area) S: 47

Eagle [bird] E: 3 with pictures

Bird (Birds of the desert) B: 339 with picture

Eagle [coin] E: 6

Eagle [ship]

Coast Guard, United States picture on Ci: 737

United States Coast Guard Academy (The course of instruction) U: 199

Eagle [spacecraft]

Armstrong, Neil Alden A: 723

Astronaut (Achievements in space) A: 829-830 with picture

Space exploration (Landing on the moon)

So: 717 with pictures

Eagle [sports]

Golf (table) G: 261

Eagle, James Philip [American political leader]

Arkansas (table) A: 712

Eagle Mountain

Minnesota (Land regions) M: 596

Eagle Peak [mountain]

Yellowstone National Park Y: 557

Eagle Scout

Boy Scouts (Boy Scouting) B: 537-539

Eagleburger, Lawrence Sidney [American government official]

State, Department of (table) So: 860

Eagles [musical group]

Rock music (Rock goes pop) R: 379

Eagles, Fraternal Order of E: 6

Eagles, Philadelphia See Philadelphia Eagles in this index

Eaglet [bird]

Eagle (Young eagles) E: 4

Eagleton, Thomas Francis [American political leader] E: 6

Eakins, Thomas [American painter] E: 6 with picture

Painting (Painting outside France) P: 72-73

Whitman, Walt picture on W: 294

EAM [organization]

Greece (World War II) G: 363-364

Eames, Charles [American designer] E: 6

Furniture (The retro style) F: 584, picture on F: 583

Eames chair

Eames, Charles E: 6

Furniture (The retro style) F: 584, picture on F: 583

Eanes, Gil [Portuguese explorer]

Henry the Navigator H: 191

Ear [anatomy] E: 7 with pictures

See also Hearing in this index

Animal picture on A: 469

Deafness (Types of hearing loss) D: 57

Insect diagram on I: 286

Reproduction, Human (Development of organs and organ systems) R: 248

Reptile (Sense organs) R: 251-252

See also the list of Related Articles in the Ear article

Ear [botany]

Corn (Appearance) Ci: 1057

Ear canal [anatomy]

Ear (The outer ear) E: 7

Ear mites

Cat (Veterinary care) C: 295

Ear shell See Abalone in this index

Eardrum [anatomy]

Ear (The outer ear) E: 7; (The middle ear) E: 7-8 with diagrams; diagram on E: 10

Deafness (Types of hearing loss) D: 57; (Medical treatment) D: 58

Otoscope O: 870

Eared seal

Seal (Eared seals) S: 265

Earhart, Amelia [American aviator] E: 14 with picture

Airplane (Fliers of the golden age) A: 237

Earl [title]

Nobility (In the United Kingdom) N: 450

Thane T: 229

Earl, Anthony S. [American political leader]

Wisconsin (table) W: 365

Earl of Leicester [painting]

Clothing picture on Ci: 700

Earle, George Howard [American political leader]

Pennsylvania (table) P: 263

Earle, Sylvia Alice [American biologist] E: 14

Exploration (Deep-sea exploration) E: 451 with picture

Earless seal

Seal (Earless seals) S: 266

Earlobe

Ear (The outer ear) E: 7

Early, Jubal Anderson [Confederate general] E: 15

Civil War (Cavalry maneuvers) Ci: 632

Maryland (The Civil War) M: 258-259

Early, Peter [American political leader]

Georgia (table) G: 130

272 Early American style

Early American style

- Furniture (Early American furniture) F: 579
 - with picture; picture on F: 569
- Interior design (Style) I: 327
- Early Autumn** [book by Bromfield]
 - Bromfield, Louis B: 636
- Early Bird** [spacecraft]
 - Communications satellite (History) Ci: 888b-889
 - Intelsat, Ltd. I: 319
 - Television (Technological advances) T: 125-126
- Early childhood education** E: 15
 - Careers (Teaching) C: 231
 - Education (The organization of U.S. education) E: 89
 - Head Start H: 124
 - Intelligence (Modifying intelligence) I: 318
 - Kindergarten K: 317
 - Montessori method M: 764a
 - Nursery school N: 615
 - School (Nursery schools) S: 181 with picture; (Kindergartens) S: 181
- Early civilization**
 - World, History of the (Early centers of civilization) W: 422 with pictures and map
- Early Head Start** [program]
 - Head Start H: 124
- Early human being** See Prehistoric people in this index
- Early Hunters** [U.S. history]
 - West Virginia (Indian days) W: 226
- Early saxifrage** [plant]
 - Saxifrage S: 168 with picture
- "Early to bed and early to rise"** [quotation]
 - Poor Richard's Almanac P: 659
- Early voting**
 - Voting (Methods of voting) V: 450
- Earned income**
 - Income (Sources of income) I: 101
- Earned Income Tax Credit** [federal program]
 - Welfare (Other welfare programs) W: 191
- Earned-run average**
 - Baseball (Baseball terms) B: 124
- Earnhardt, Dale** [American race driver] E: 15
 - Automobile racing (table: NASCAR Winston Cup champions, 1980, 1986, 1987, 1990-91, 1993-94) A: 981
- Earnings**
 - Careers (Probable earnings) C: 216
- Earp, Wyatt** [American frontiersman] E: 15 with portrait
 - Masterson, Bat M: 297
 - Wichita (History) W: 298
- Earphones**
 - Headphones H: 125
 - Stereophonic sound system (Headphones) So: 892-893
- Earring** [ornament]
 - Jewelry J: 116 with picture
 - Ring R: 342
- Earth** [astrology]
 - Astrology (The earth) A: 826
- Earth** [philosophy]
 - Empedocles E: 261
- Earth** [planet] E: 16 with pictures and maps
 - Animal (When animals developed on the earth) A: 503
 - Astronomy (Observing the sky) A: 835
 - Earthquake (Exploring the earth's interior) E: 38
 - Element, Chemical E: 219
 - Eratosthenes E: 349
 - Geography (Forces that change the earth) G: 93
 - Geology G: 97
 - Geomorphology G: 106
 - Heat (Sources of heat) H: 149
 - Magnetism (The magnetism of the earth) M: 60c
 - Mantle M: 168
 - Moon M: 782
 - Pendulum (Other pendulums) P: 237-238
 - Planet P: 507 with pictures
 - Plate tectonics P: 561 with diagram
 - Sun So: 974
 - Tide T: 280 with diagrams
 - World W: 406 with map
- Earth** [soil] See Soil in this index
- Earth-and-rock-fill dam**
 - Dam (Embankment dams) D: 18
- Earth Day** E: 32

- Environmental pollution picture on E: 339
- Earth-fill dam**
 - Dam (Embankment dams) D: 18 with picture
- Earth goddess**
 - Mythology (African mythology) M: 982-983
- Earth lodge** [dwelling]
 - Indian, American (Shelter) I: 136d; (Before European contact) I: 158-159; picture on I: 138
 - Omaha Indians O: 757
- Earth mover** [construction vehicle]
 - Tire picture on T: 298
- Earth Observing System** [satellites]
 - Air (The study of air) A: 174
 - Planet (Earth) P: 511
- Earth science** E: 32
- Earth Star** [diamond]
 - Diamond picture on D: 181
- Earth Summit** [conference]
 - Environmental pollution (Government action) E: 335-336
- Earth tunnel**
 - Tunnel (Earth tunnels) T: 490
- Earthenware**
 - Porcelain P: 675
 - Pottery (Earthenware) P: 716 with picture
- Earthquake** [geology] E: 33 with pictures and map
 - Alaska (Statehood) A: 303-304 with picture
 - Armenia (History) A: 718b-719
 - Beijing (History) B: 223-224
 - California (The late 1900's) C: 63 with picture
 - Disaster (table) D: 223
 - Earth (Earthquakes) E: 24
 - El Salvador (Recent developments) E: 252
 - Egypt (Recent developments) E: 133-134
 - Flood (Seacoast floods) F: 237
 - Geophysics G: 106
 - Insurance (Insurance today) I: 316
 - Kobe K: 360
 - Los Angeles (Recent developments) L: 470-471 with picture
 - Managua M: 132
 - Mexico (Recent developments) M: 474 with picture
 - Mexico City (Recent developments) M: 478-479
 - Missouri (Exploration and settlement) M: 669
 - Moment magnitude M: 697
 - New Zealand (Earthquakes) N: 353
 - Oakland (Government and history) O: 637
 - Plate tectonics (Plate interactions) P: 562; (History of tectonic theory) P: 564-565
 - Richter magnitude R: 334
 - Ring of Fire R: 342
 - Safety (During an earthquake) S: 15
 - San Andreas Fault S: 83
 - San Francisco (Earthquake and fire) S: 98 with picture; (Another earthquake) S: 99
 - San Jose (History) S: 101
 - Seattle (Recent developments) S: 276
 - Seismograph S: 288
 - Seismology S: 288
 - Tokyo (Earthquake and reconstruction) T: 319
 - Tsunami T: 475
 - Turkey (Recent developments) T: 512
- Earthsea trilogy** [book by Le Guin]
 - Le Guin, Ursula K. L: 185
- Earthshine** [astronomy]
 - Moon (Phases) M: 783-784
- Earthworm** E: 39 with pictures
 - Animal picture on A: 507
 - Brain (In invertebrates) B: 559
 - Egg (Other kinds of eggs) E: 116
 - Heart (Hearts of animals) H: 146 with diagram
 - Worm picture on W: 501
- Earwax**
 - Ear (The outer ear) E: 7
- Earwicker, Humphrey Chimpden** [literary figure]
 - Joyce, James J: 177
- Earwig** [insect] E: 39
 - Insect (Family life) I: 294-295; picture on I: 281
- Easement** [law]
 - Property P: 827
- Easing**
 - Sewing (Seams) S: 332
- Easley, Mike** [American political leader]
 - North Carolina (table) N: 490
- East** [international relations]
 - Cold War Ci: 762

- East, The** See Far East in this index
- East African Community** [alliance]
 - Kenya (Building the new nation) K: 304; (Kenya today) K: 304
 - Tanzania (History) T: 34-35
 - Uganda (History) U: 4
- East African Rift** [geology]
 - Plate tectonics (Plate interactions) P: 562 with diagram
- East Alabama** [former city]
 - Montgomery (Government and history) M: 766
- East Antarctica**
 - Antarctica (Land regions) A: 532
- East Asia**
 - See also Far East in this index
 - Asia (Way of life in East Asia) A: 785 with pictures
- East Bengal** See Bangladesh in this index
- East Berlin** [Germany] See Berlin in this index
- East Block** [building]
 - Ottawa (The Parliament buildings) O: 872
- East Boston** [island, Massachusetts]
 - Boston (East Boston) B: 498
- East Carolina University** [North Carolina]
 - North Carolina, University of N: 495
- East Chicago** [Indiana]
 - Gary G: 47
- East China Sea**
 - China Sea C: 508 with map
- "East Coker"** [poem by Eliot]
 - Eliot, T. S. (His works) E: 237-238
- East End** [district]
 - London (Outlying areas) L: 430 with map
- East Falkland** [island, Atlantic]
 - Falkland Islands F: 15
- East Flanders** [province, Belgium]
 - Flanders F: 227 with map
- East Germany** See Germany in this index
- East Greenland Current**
 - Arctic Ocean (Currents, water masses, and tides) A: 643 with map
- East Gulf Coastal Plain** [region, U.S.]
 - Georgia (Land regions) G: 124
 - Louisiana (Land regions) L: 490
 - Mississippi (Land regions) M: 634
- East India Company** [European history] E: 40
 - See also British East India Company; Dutch East India Company in this index
 - Indian Rebellion I: 187
 - Mumbai (History) M: 925
- East Indiamen**
 - Ship (East Indiamen) S: 409 with picture
- East Indian lotus** [plant]
 - Flower picture on F: 292
- East Indies** [islands, Southeast Asia] E: 40
- East Jerusalem**
 - Jerusalem (East Jerusalem) J: 95
 - Israel (City life) I: 481
 - West Bank W: 199
- East Los Angeles**
 - Los Angeles (East Los Angeles) L: 461 with picture
- East of Eden** [book by Steinbeck]
 - Steinbeck, John So: 885
- East Okoboji Lake**
 - Iowa (Rivers and lakes) I: 386
- East Pacific Rise** [ocean ridge]
 - Ocean (Deep-sea peaks, valleys, and plains) O: 662 with map
 - Pacific Ocean (The ocean floor) P: 14
- East Pakistan** See Bangladesh in this index
- East River** [New York]
 - New York City (The city) N: 323; (Transportation) N: 334
- East Roman Empire** See Byzantine Empire in this index
- East Room**
 - White House (Public rooms) W: 286-290 with diagram
- East Sea** See Japan, Sea of in this index
- East Shawnee Trail**
 - Oklahoma (After the Civil War) O: 731-732
- East Slavs** [people]
 - Russia (Early days) R: 547
 - Slavs (East Slavs) S: 505
 - Ukraine (Ancestry) U: 6; (Kievan Rus) U: 12
- East Texas oil field**
 - Texas (Mining) T: 201-202
- East Texas Oil Museum** [Texas]
 - Texas (Places to visit) T: 194

East Timor E: 40 *with picture and map*
Flag *picture on* F: 202

Human rights (Peacekeeping) H: 428a
Indonesia (Indonesia under Suharto) I: 238-239; (The Lesser Sunda Islands) I: 234 *with map*

United Nations (Working for self-government) U: 93-94

Eastchester [New York]

Mount Vernon M: 890

Eastend Fossil Research Station

Saskatchewan (Places to visit) S: 136

Easter [religion] E: 42 *with pictures*

Greece (Religion) *picture on* G: 356

Holy Week H: 299

Lent L: 196b

Nicene Councils N: 402

Palm Sunday P: 109

Easter egg

Alberta (Interesting facts) A: 313 *with picture*

Decorative arts *picture on* D: 80

Easter (Easter customs) E: 44

Fabergé, Peter Carl F: 2 *with picture*

Ukraine (The arts) U: 9 *with picture*

Easter egg rolling [custom]

Hayes, Rutherford Birchard (Life in the White House) H: 121

Easter Island E: 44 *with picture*

Pacific Islands (Polynesia) P: 3

Sculpture (Pacific Islands sculpture) S: 241-242

Easter lily [plant] E: 45

Easter (Easter symbols) E: 43-44

Easter Monday [history] *See* Easter Rebellion *in this index*

Easter Monday [painting by De Kooning]

De Kooning, Willem *picture on* D: 94

"Easter Parade" [song by Berlin]

Berlin, Irving B: 266

Easter Rising [1916]

Ireland (The Easter Rising) I: 427

Irish literature (The Irish literary revival) I: 431-432

Sinn Féin (History) S: 473

Easter Seal Society, National

Disabled (table) D: 222

Easterly wind [weather]

Weather (Planetary-scale systems) W: 158-159

Eastern Band of Cherokee

Cherokee Indians C: 409

Eastern bloc

Cold War C: 762

Eastern bluebird

Bluebird B: 422 *with picture*

Eastern Cape [province, South Africa]

South Africa (Provincial government) So: 609

Eastern Catholic Churches [religion] E: 45

Roman Catholic Church (Split with the East)

R: 407

Trinity T: 447

Eastern chimpanzee

Chimpanzee C: 471

Eastern coachwhip [snake]

Snake *picture on* S: 532

Eastern Coal Field

Kentucky (Mining) K: 288

Eastern Conference

Hockey (table: National Hockey League)

H: 281

Eastern coral snake

Snake *picture on* S: 533

Eastern cottonmouth [snake]

Snake *picture on* S: 533

Eastern cottonwood [tree]

Cottonwood Ci: 1095

Tree *pictures on* T: 421

Eastern Desert *See* Arabian Desert *in this index*

Eastern diamondback rattlesnake

Rattlesnake R: 149

Snake *picture on* S: 533

Eastern Europe

Europe (The breakup of Communism) E: 416;

(Health care) E: 404

Cold War Ci: 762; (The Cold War after 1980)

Ci: 770

Communism (In Eastern Europe) Ci: 896

Germany (East Germany) G: 170; (West

Germany) G: 170

Helsinki Accords H: 180

Jews (Eastern European religious movements)

J: 123

Library (Eastern Europe and Russia) L: 252

Nationalism (Different forms of nationalism)

N: 62

North Atlantic Treaty Organization N: 471

Union of Soviet Socialist Republics (History)

U: 35-37; (Threats to unity) U: 40

Warsaw Pact W: 39

Women's movements (In Eastern Europe and

the former Soviet republics) W: 387

See also the index entries under the names of various Eastern European countries, such as Bulgaria

Eastern Front [World War I]

World War I (The Eastern Front) W: 456

Germany *picture on* G: 167

Eastern garter snake

Snake *picture on* S: 532

Eastern gray kangaroo

Kangaroo K: 213

Eastern gray squirrel [animal]

Squirrel (Tree squirrels) So: 815 *with picture*

Eastern grip

Tennis *pictures on* T: 164

Eastern Hemisphere [geography]

Hemisphere H: 181 *with picture*

Eastern hemlock [tree]

Hemlock H: 182

Tree *pictures on* T: 425

Eastern kingbird

Kingbird K: 328 *with picture*

Eastern larch [tree]

Larch L: 75

Eastern lowland gorilla

Gorilla G: 275

Eastern massasauga [snake]

Snake *picture on* S: 533

Eastern meadowlark [bird]

Meadowlark M: 345 *with picture*

Eastern milk snake

Milk snake M: 550

Eastern mole [animal]

Mole (The eastern mole) M: 690b

Eastern moon snail

Shell *picture on* S: 386

Eastern Mountains [region, British Columbia]

British Columbia (Land regions) B: 622

Eastern Orthodox Churches [religious group]

E: 45

Belarus (People) B: 224a

Bulgaria (Religion) B: 691

Byzantine art B: 749

Christianity (The split between East and West)

C: 526

Grace G: 296

Greece (Religion) G: 356 *with picture*

Icon I: 24 *with picture*

Monasticism (Christian monasticism) M: 700-

701

Painting (Early Christian and Byzantine art)

P: 49

Patriarch P: 196

Religion (Christianity) R: 222

Religious life (The Eastern Orthodox

Churches) R: 227

Roman Catholic Church (Conflict with the

East) R: 406; (Split with the East) R: 407

Slavs (East Slavs) S: 505; (South Slavs)

S: 505

Ukraine (Religion) U: 8 *with picture*

World, History of the (The Byzantine Empire)

W: 434

Eastern quoll [animal]

Quoll *picture on* Q: 44

Eastern redcedar [tree]

Juniper J: 197

Tree *pictures on* T: 425

Eastern Rite Churches [religion] *See* Eastern

Catholic Churches *in this index*

Eastern Semi [people]

Sami S: 79

Eastern Shore [region, Maryland-Virginia]

Virginia (Land regions) V: 410

Eastern Star [organization] E: 47

Eastern tent caterpillar [insect]

Tent caterpillar T: 171

Eastern Time Zone

Time (Time zones in the United States and

Canada) T: 289 *with map*

Eastern Townships [region, Quebec]

Quebec (Land regions) Q: 22; (Natural

resources) Q: 26

Eastern Turkstan

Turkestan (Chinese Turkstan) T: 501

Eastern white pine [tree]

Pine (Eastern pines) P: 468; *picture on* P: 470

Tree *pictures on* T: 425

Eastern wood-pewee [bird]

Pewee P: 352 *with picture*

Eastern yellow-bellied racer [snake]

Snake *picture on* S: 532

Eastern Zhou period [Chinese history]

Zhou dynasty Z: 595

Eastern zodiac

Zodiac (The Eastern zodiac) Z: 602

Eastland [ship]

Shipwreck (table: Major shipwrecks) S: 428

Chicago (Tragedy and racial conflict) C: 435

Eastman, George [American businessman]

E: 47

Eastman Kodak Company E: 47

Eastman School of Music E: 47

Photography (The beginnings of modern pho-

tography) P: 426

Rochester (Government and history) R: 370-

371

Eastman, Linda [wife of]

McCartney, Paul M: 332

Eastman Kodak Company E: 47

Rochester (Economy) R: 370

Eastman School of Music E: 47

Eastman Symphonic Wind Ensemble

Band (Wind ensembles) B: 74

Eastwood, Clint [American actor/director] E: 47

Motion picture (Best achievement in directing:

1992) M: 862

"Easy Chair, The" [newspaper column]

De Voto, Bernard Augustine D: 175

Easy money policy

Inflation (Monetary policy) I: 268

Easy open/reseal cap

Packaging P: 18

Eating *See* Food; Restaurant *in this index*

Eaton, Alden [American businessman]

Dude ranch D: 377

Eaton, Benjamin H. [American political leader]

Colorado (table) Ci: 844

Eaton, Dorman Bridgman [American govern-

ment official]

Arthur, Chester Alan (Civil service reform)

A: 756

Eaton, Horace [American political leader]

Vermont (table) V: 333

Eaton, Howard [American businessman]

Dude ranch D: 377

Eaton, John H. [American government official]

Jackson, Andrew (Split with Calhoun) J: 11;

(table) J: 11

O'Neale, Peggy O: 761

Eaton, Peggy [American public figure] *See*

O'Neale, Peggy *in this index*

Eaton, Theophilus [American colonial leader]

E: 48

Eaton, Timothy [Canadian businessman] E: 48

Eaton, Willis [American businessman]

Dude ranch D: 377

Eaton & Company

Eaton, Timothy E: 48

Eaton Free School [U.S. history]

Virginia (Schools) V: 402

Eaton's of Canada Limited

Eaton, Timothy E: 48

Eatonville [Florida]

African Americans (During the late 1800's)

A: 136i-136j

Eau de Cologne [perfume]

Cologne Ci: 777

Eau d'or [perfume]

Lily of the valley L: 304

Eaves

House (table) H: 380

Roof R: 451

Eavesdropping

Wiretapping W: 345

EBay [company]

E-commerce (Business-to-consumer transac-

tions) E: 2

Ebbo [French religious leader]

Martin Luther King, Jr., National Historic Site M: 235

Ebenezer onion
Onion picture on O: 763

Ebenezer Society
Amanites A: 400

Eberhart, Adolph O. [American political leader]
Minnesota (table) M: 602

Eberhart, Richard [American poet] E: 48

Ebey's Landing National Historical Reserve [Washington]
National Park System (table: National parkways and other national parklands) N: 56

Ebla [ancient kingdom] E: 48

Ebola hemorrhagic fever [disease]
Ebola virus E: 48

Ebola virus E: 48

Ebonics [dialect]
African Americans (Developments in education) A: 136q
Dialect D: 180

Ebony [magazine]
Johnson, John Harold J: 143

Ebony [wood] E: 48

Eboracum
York [England] Y: 568

Ebro, Battle of the [1938]
Spanish Civil War (Progress of the war) So: 756a-756b

Ebro River [Spain]
Spain (The Ebro Basin) So: 740 with map

EBV See Epstein-Barr virus in this index

EC [organization] See European Community in this index

ECA [government agency]
Marshall Plan M: 231

Eccles, Sir John Carew [Australian biologist]
Nobel Prizes (Physiology or medicine: 1963) N: 445

Ecclesiastes [Old Testament] E: 49

Ecclesiastical History of the English People [book by Bede]
Bede, Saint B: 199
Caedmon C: 12
English literature (Old English prose) E: 315
Jutes J: 204

Ecclesiastical treaty
Treaty (Ecclesiastical treaties) T: 409

Ecclesiasticus [Bible]
Bible (Development of the Christian Old Testament) B: 282

Eccrine gland
Skin (Hair, nails, and glands) S: 489

Ecevit, Bülent [Turkish political leader]
Turkey (Political changes) T: 512

ECG See Electrocardiograph in this index

Echegaray y Eizaguirre, José [Spanish dramatist]
Nobel Prizes (Literature: 1904) N: 445
Spanish literature (The 1800's) So: 761

Echeverría, Esteban [Argentine poet]
Latin-American literature (Romanticism) L: 112

Echeverría Álvarez, Luis [Mexican political leader]
Mexico (The 1970's) M: 474

Echidna [animal] E: 49
Animal picture on A: 479
Anteater A: 541
Australia (Native animals) A: 914 with picture

Echinacea [plant] E: 49
Herbal medicine H: 196

Echinoderm [zoology] E: 49
Animal (A classification of the animal kingdom) A: 507 with picture
Invertebrate I: 366
Starfish So: 855

Echinus [architecture]
Column (The Greek orders) Ci: 865

Echo [Greek mythology]
Echo E: 49
Narcissus N: 20

Echo [sound] E: 49 with diagrams
Radar R: 64
Sound (Reflection) So: 602

Echo 1 [satellite]
Communications satellite (History) Ci: 888b-889
Satellite, Artificial (History) S: 150g

Echo ranging [measurement]
Fathometer F: 54
Sonar (How sonar works) So: 591

Echo River [Kentucky]
Mammoth Cave National Park M: 130

Echo sounder [instrument]
Exploration (Deep-sea exploration) E: 451

Echocardiography [medicine]
Heart (Valve disease) H: 141-142

Echoes of Time and the River [music by Crumb]
Crumb, George Ci: 1159

Echolalia [psychology]
Autism (Symptoms) A: 941

Echolocation
Bat (How bats navigate) B: 160
Bird (Hearing) B: 365
Dolphin (The bodies of dolphins) D: 297-298; (Research on dolphins) D: 300
Ear (The ears of animals) E: 12-13
Mammal (Senses) M: 120
Ultrasound (Animal uses of ultrasound) U: 16
Whale (Senses) W: 260

Echovirus 7 [virus]
Amyotrophic lateral sclerosis A: 447

Eck, Johann [German theologian] E: 50
Luther, Martin (The break with the Roman Catholic Church) L: 528

Eckert, J. Presper, Jr. [American engineer] E: 50
Computer (The first electronic computers) Ci: 924b with picture
Electronics (The vacuum tube era) E: 215
Mauchly, John William M: 312

Eckhart, Johannes [German theologian] E: 50

Eckhart, Meister See Eckhart, Johannes in this index

Eclampsia [disorder]
Preeclampsia P: 734
Pregnancy (Preeclampsia) P: 735

Eclectic Reader [book by McGuffey]
McGuffey, William Holmes M: 336 with picture

Eclecticism [psychology]
Psychology (Modern psychology) P: 850

Eclipse [astronomy] E: 51 with pictures
Baily's beads B: 31
Corona Ci: 1066
Moon (Eclipses) M: 784
Penumbra P: 276
Sun (History of modern solar study) So: 986

Eclipse [horse]
Horse (table: Famous horses in history and legend) H: 361

Eclipsing binary [astronomy]
Algol A: 366
Eclipse E: 51

Ecliptic
Astronomy (How the stars move) A: 835
Planet (Observing the planets) P: 507-508

Ecliptic plane [astronomy]
Moon (Rotation and orbit) M: 783
Oort cloud O: 788

Eclologies [poems by Virgil]
Virgil (His works) V: 391

ECM
Machine tool (Electrochemical machining) M: 19

Eco, Umberto [Italian author]
Novel (The novel today) N: 575

Ecofact [archaeology]
Archaeology (What archaeologists study) A: 595 with picture; (Evaluation) A: 598-599

École des Beaux-Arts [school, Paris] E: 52
Painting (The 1800's) P: 67

École des Beaux-Arts de l'Indochine [school]
Vietnam (The arts) V: 366

École Nationale Supérieure des Beaux-Arts [school, Paris] See École des Beaux-Arts in this index

Ecological anthropology
Anthropology (Cultural anthropology) A: 547

Ecological efficiency
Ecology (Energy flow) E: 54-55

Ecological niche
Ecology (The role of a species) E: 54

Ecological succession
Ecology (Changes in communities) E: 54
Forest (Forest succession) F: 397 with pictures

Ecology [biology] E: 53 with pictures
Zoology (What zoologists study) Z: 610
Divisions
Biology B: 316 with picture; (The growth of

modern biology) B: 319-320

Botany (Plant habitats) B: 508; (Later developments) B: 509

Limnology L: 308

Environment
Environment (Abiotic environment) E: 329
Biome B: 322 with map
Habitat H: 3
Natural resources N: 64

Food chain
Decay D: 67
Elton, Charles Sutherland E: 253

Organization of nature
Ecology (Ecosystems) E: 54
Adaptation A: 45
Balance of nature B: 34
Forest (Competition and cooperation) F: 396
Plant (Plants and the cycle of nature) P: 518

Problems and solutions
Environmental pollution E: 330
Pest control (Effects of pesticide use) P: 318
Wetland W: 253
Wildlife conservation (Methods of wildlife conservation) W: 304

Ecology, Human
Sociology (Population characteristics) So: 564

ECOMOG [military group]
Sierra Leone (History) S: 452

Econometrics E: 57
Economics (Research today) E: 65
Tinbergen, Jan T: 295

Economic Advisers, Council of [U.S.] E: 57
President of the United States (The executive branch) P: 764

Economic Analysis, Bureau of [U.S.]
Commerce, Department of (Functions) Ci: 871

Economic and Monetary Union
European Union (Internal affairs) E: 418-419

Economic and Social Council
United Nations (The six major UN organs) U: 78; (Other main organs) U: 84; picture on U: 86

Economic anthropology
Anthropology (Social anthropology) A: 547

Economic Association, American
Economics (Careers in economics) E: 65

Economic blindness
Blindness B: 401

Economic Consequences of the Peace, The [book by Keynes]
Keynes, John Maynard K: 308a

Economic Cooperation Administration [U.S.]
history]
Marshall Plan M: 231

Economic determinism E: 57
Sociology (Early sociological thought) So: 566

Economic development
Democracy (Making democracy work) D: 122

Economic Development Administration
Puerto Rico (Puerto Rico today) P: 884

Economic entomology [science]
Entomology (What entomologists study) E: 328

Economic freedom
Freedom (Kinds of freedom) F: 501; (Limits on economic freedom) F: 502

Economic geography
Geography (Human geography) G: 94

Economic growth
City (Economy) Ci: 590
Economics (Measuring economic growth) E: 59
Solow, Robert Merton So: 586

Economic history
History (Approaches to history) H: 261

Economic Interpretation of the Constitution [book by Beard]
Beard, Charles and Mary B: 187

Economic liberalism
Liberalism (Liberalism today) L: 228
Smith, Adam S: 515

Economic miracle [German history]
Germany (Economy) G: 159; (West Germany) G: 170

Economic Opportunity Act [1964]
Adult education (In the 1900's) A: 69
Unemployment (Fighting unemployment) U: 23
Vocational education (The 1900's) V: 435

Economic Recovery Tax Act [1981]

- Inheritance tax I: 271
 Kemp, Jack French K: 258
 Reagan, Ronald Wilson (Events at home) R: 167
- Economic rights**
 Human rights (Types of human rights) H: 428
- Economic sanctions** [political science] *See* Sanctions, Economic *in this index*
- Economic stability**
 Economics (Economic stability) E: 63
- Economic unification**
 Germany (Economy) G: 159-160
- Economically active population**
 Labor force L: 3
- Economics** E: 57 *with pictures*
 Advertising (Effects of advertising) A: 78
 Automobile (Economic importance) A: 959
 Capitalism C: 193
 Communism (The centrally planned economy) Ci: 891
 Econometrics E: 57
 Economic determinism E: 57
 Globalization G: 232b
 Great Depression G: 338
 Income I: 100
 Inflation I: 266
 Input-output analysis I: 276
 Interest (Economic activity) I: 322
 International relations (Treaties) I: 344
 Money (Money and the economy) M: 714
 National income N: 37
 Physiocrats P: 444
 Price P: 774
 Science (The social sciences) S: 194
 World (Economic systems) W: 408
See also the list of Related Articles in the Economics article
- Economics: An Introductory Analysis** [book by Samuelson]
 Samuelson, Paul Anthony S: 82
- Economies of scale** [economics]
 Industry (Industrial organization) I: 261
- Economist**
 Economics (Careers in economics) E: 65
 Careers (Life, physical, and social sciences) C: 225-226
- Ecosystem**
 Balance of nature (Ecosystems) B: 34
 Biodiversity (Kinds of biodiversity) B: 311
 Coral reef Ci: 1048a
 Ecology (Ecosystems) E: 54 *with diagram*
 Environmental pollution E: 330
 Forest F: 390
 Invasive species (Managing invasive species) I: 354k
 Marine biology (Biological oceanographers) M: 205
 National park (Canada) N: 42c
 Rain forest (Scientific value) R: 126c
- Ecosystem diversity**
 Biodiversity (Kinds of biodiversity) B: 311
- ECSC** *See* European Coal and Steel Community *in this index*
- Ecstasy** [drug] E: 66
 Brain (How drugs affect brain chemistry) B: 556
 Drug abuse (Club drugs) D: 363; (table: Some commonly abused drugs) D: 363
 Hallucinogenic drug H: 26
- Ecstasy of Rita Joe, The** [play by Ryga]
 Canadian literature (Modern Canadian drama) C: 161
- Ectoderm** [biology]
 Coelom Ci: 753
 Reproduction, Human (Origin of tissues and organs) R: 247-248
- Ectopic pregnancy** [disorder]
 Fallopian tube F: 18
 Pelvic inflammatory disease P: 233
 Pregnancy (An ectopic pregnancy) P: 735
- Ectothermic animal** *See* Cold-blooded animal *in this index*
- Écu** [coin]
 Money *picture on* M: 708
- ECU** [monetary unit]
 European Monetary System E: 418
- Ecuador** [country] E: 67 *with pictures and maps*
 Bolívar, Simón B: 441
 El Niño E: 245
 Food *picture on* F: 329
 Galapagos Islands G: 7
 Indian, American (Indians of the Andes) I: 173
 Latin America (Border disputes) L: 108
 World War II (table: The Allies) W: 471
See also the list of Related Articles in the Ecuador article
- Ecumenical council** [religion]
 Vatican Council I V: 289
 Vatican Council II V: 289
 Constantine the Great Ci: 993
 Roman Catholic Church (The recognition of Christianity) R: 406
- Ecumenical movement** [religion]
 Baum, William Wakefield Cardinal B: 174
 Christianity (Christianity today) C: 527
 Protestantism (The unity movement) [the 1800's and 1900's] P: 835
 Religion (Religion today) R: 223
 World Council of Churches W: 450
- Ecumenical patriarch** [title]
 Eastern Orthodox Churches (Organization) E: 46
 Patriarch P: 196
- Eczema** [disorder] E: 74
 Allergy A: 373
 Asthma (Causes) A: 825
 Dust mite D: 392
 Skin (Inflammation) S: 490
- Edam cheese**
 Cheese (Hard cheese) C: 392 *with picture*
- Edaphosaurus** [reptile]
 Prehistoric animal *picture on* P: 738
- EDB** [chemical compound]
 Bromine B: 636
- Edda** [Icelandic literature] E: 74
 Brunhild B: 652
 Mythology (Teutonic mythology) M: 984
Nibelungenlied (The background) N: 395
 Scandinavian literature (Beginnings) S: 171
- Eddington, Sir Arthur Stanley** [British astronomer] E: 74
 Campbell, William Wallace C: 91
 Relativity (Distortions in space-time) R: 212
- Eddo** [plant] *See* Elephant's-ear *in this index*
- Eddy, Howard** [Canadian lawyer]
 Campbell, Kim (Provincial legislator) C: 90c
- Eddy, Mary Baker** [American religious leader] E: 75 *with portrait*
 Christian Scientists C: 523
- Eddy, William A.** [American inventor]
 Kite (The bowed kite) K: 339
- Eddy current** [electromagnetism]
 Foucault, Jean Bernard Léon F: 429
- Eddy current** [fluid mechanics]
 Gulf Stream (The path of the Gulf Stream) G: 438
 Streamlining So: 924 *with diagram*
- Edelman, Gerald Maurice** [American physiologist]
 Nobel Prizes (Physiology or medicine: 1972) N: 445
- Edelweiss** [plant] E: 75 *with picture*
- Edema** [disorder] E: 75
 Diuretic D: 240
 Lymphatic system (Return of interstitial fluid) L: 534
 Protein (Proteins in the diet) P: 832
- Eden** [Old Testament] E: 76
 Adam and Eve A: 32
 Paradise P: 143
- Eden, Sir Anthony** [British political leader] E: 76
 Macmillan, Harold M: 25
 United Kingdom (Economic recovery—and collapse) U: 72
- Eden Park**
 Cincinnati (The arts) Ci: 555 *with map*; (Parks and playgrounds) Ci: 556
- Edentate** [zoology] E: 76
 Mammal (table) M: 128 *with picture*
- Ederle, Gertrude Caroline** [American swimmer] E: 76 *with portrait*
 English Channel E: 311
- Edgar** [king of England]
 Dunstan, Saint D: 386
 England (table) E: 308
- Edgar** [literary figure]
 Shakespeare, William (*King Lear*) S: 363
- Edgar** [opera by Puccini]
 Puccini, Giacomo P: 870
- Edgar, Jim** [American political leader]
 Illinois (table) I: 71
- Edgar Allan Poe Museum**
 Richmond (Other interesting places to visit) R: 332 *with picture*
 Virginia (Libraries and museums) V: 402-403
- Edgar Allan Poe National Historic Site** [Pennsylvania]
 National Park System (table: National historic sites) N: 52
- Edgar Huntly** [book by Brown]
 Brown, Charles Brockden B: 642
- Edgardo di Ravenswood** [opera character]
 Opera (*Lucia di Lammermoor*) O: 804
- Edge, The** [Irish musician]
 U2 U: 2
- Edge, Walter E.** [American political leader]
 New Jersey (table) N: 249
- Edge Island** [island, Arctic]
 Svalbard So: 1013
- Edge of the Storm, The** [book by Yáñez]
 Latin-American literature (The mid-1900's) L: 113
- Edge of the Sword, The** [book by De Gaulle]
 De Gaulle, Charles André Joseph Marie (Early life) D: 90
- Edge of Tomorrow, The** [book by Dooley]
 Dooley, Thomas Anthony, III D: 309
- Edger-feeder** [machine]
 Postal services (Sorting) P: 703; *picture on* P: 704
- Edger saw** [machine]
 Lumber (Sawing logs) L: 519; *picture on* L: 520
- Edgerton, Harold Eugene** [American inventor] E: 76
- Edgerton, Sidney** [American government official]
 Montana (The gold rush) M: 758
- Edgewater Park** [district]
 New York City (The Bronx) N: 328-329
- Edgeworth, Kenneth E.** [Irish scientist]
 Kuiper belt K: 392
- Edgeworth, Maria** [Irish author]
 Irish literature (Prose and poetry) I: 431
- Edgeworth-Kuiper belt** [astronomy] *See* Kuiper belt *in this index*
- Edging candytuft** [plant]
 Candytuft C: 177
- EDI** *See* Kirlian photography *in this index*
- Edible bolete** [fungus]
 Mushroom (Nonpoisonous mushrooms) M: 943-945 *with picture*
- Edible Woman, The** [book by Atwood]
 Atwood, Margaret A: 880
- Edict of ...**
Edicts appear under their key words, as in
 Worms, Edict of
- Edinburgh** [Scotland] E: 76 *with picture*
 Scotland S: 211 *with picture*
 United Kingdom (table: Average monthly weather) U: 62; *picture on* U: 48
- Edinburgh** [ship]
 Salvage S: 77
- Edinburgh, Duke of** *See* Philip, Prince *in this index*
- Edinburgh, University of** [Scotland] E: 77
- Edinburgh Castle**
 Edinburgh E: 77 *with picture*
- Edinburgh International Festival of the Arts**
 Scotland (The arts) S: 215-217
 United Kingdom (The arts) U: 58
- Edinburgh Review** [magazine]
 Macaulay, Thomas Babington M: 5
- Ediphone** [dictating machine]
 Edison, Thomas Alva (Phonograph developments) E: 81
- Edirne** [Turkey] E: 77
- Edison, Charles** [American political leader]
 Edison, Thomas Alva (Family and friends) E: 81
 New Jersey (table) N: 249
 Roosevelt, Franklin Delano (table) R: 458
- Edison, Nancy Elliott** [mother of]
 Edison, Thomas Alva (Boyhood) E: 78
- Edison, Samuel** [father of]
 Edison, Thomas Alva (Boyhood) E: 78
- Edison, Thomas Alva** [American inventor] E: 77 *with pictures*
 Cable (Electric power cables) C: 6
 Communication (Famous first words) Ci: 884 *with picture*
 Deafness D: 57
 Edison Schools E: 83
 Electric light (History) E: 176

Goldenrod G: 256
 Invention (The late 1800's) I: 362-363; *picture on I: 360*
 Latimer, Lewis Howard L: 90
 Motion picture (The invention of motion pictures) M: 864
 Phonograph (History) P: 401
 Sound (The recording of sound) So: 606
 Telegraph (Service expansion and improvement) T: 91-92
 Telephone (The Bell System) T: 100
 Tesla, Nikola (The alternating-current system) T: 180
 Vacuum tube (Development of the vacuum tube) V: 259
 Voting machine (History) V: 451
 Western Union W: 241

Edison effect [physics]
 Vacuum tube (Development of the vacuum tube) V: 259

Edison General Electric Company
 General Electric Company G: 83

Edison National Historic Site [West Orange, New Jersey]
 Edison, Thomas Alva (Honors) E: 82
 National Park System (table: National historic sites) N: 52

Edison Schools E: 82

Edit decision list [computer file]
 Motion picture (Computer editing) M: 856

EDITH [program]
 Fire drill F: 130

Edith Cavell, Mount [Alberta]
 Jasper National Park *picture on J: 65*

Editing [motion picture]
 Motion picture M: 846

Editing [publishing]
 Clothing (Fashion writers and artists) Ci: 706
 Composition (Your final editing) Ci: 905
 Encyclopedia (Editing the manuscript) E: 267;
 (Basic steps in the preparation of a World Book article) E: 268 *with picture*
 Literature for children (Children's editors) L: 365
 Magazine (How magazines are produced) M: 43
 Newspaper (The editorial department) N: 381;
 (Writing and editing stories) N: 383
 Publishing (Editing the manuscript) P: 868

Edition
 Newspaper (table) N: 383

Editor *See* Editing *in this index*

Editor in chief [occupation]
 Newspaper (The editorial department) N: 381

Editorial [journalism] E: 83
 Journalism (Influencing public opinion) J: 172
 Newspaper (The editorial department) N: 381-382, (Writing editorials and features) N: 383
 Pulitzer Prizes (Prizes in journalism) P: 887-888

Editorial cartoon
 Cartoon (Editorial cartoons) C: 263 *with picture*; (Developing the idea) C: 266
 Block, Herbert Lawrence B: 404 *with picture*
 Carpetbaggers *picture on C: 247*
 Nast, Thomas N: 24
 Republican Party *pictures on R: 254, R: 256*

"Editor's Easy Chair" [column by Howells]
 Howells, William Dean H: 402

"Editor's Study" [column by Howells]
 Howells, William Dean H: 402

EDM [manufacturing]
 Machine tool (Advanced machine tool operations) M: 19 *with picture*

Edmonds, Sarah Emma Evelyn [Union soldier] E: 83

Edmonds, Walter Dumaux [American author] E: 83

Edmondson, J. Howard [American political leader]
 Oklahoma (table) O: 730

Edmonton [Alberta] E: 83 *with pictures and map*
 Alberta (table: Average monthly weather) A: 324; *picture on A: 313*

Edmonton City Centre Airport
 Edmonton (Economy) E: 85

Edmonton Eskimos
 Football (Canadian Football League) F: 364

Edmonton Oilers
 Hockey (table: National Hockey League) H: 281

Edmontosaurus [extinct animal]
 Dinosaur (True dinosaurs) D: 206b-206c

Edmund [literary figure]
 Shakespeare, William (*King Lear*) S: 363

Edmund I [king of England]
 England (table) E: 308

Edmund II [king of England]
 England (table) E: 308

Edmunds Anti-Polygamy Act [1882]
 Arthur, Chester Alan (Other legislation) A: 757

Edo [former name, Tokyo]
 Japan (Tokugawa period) J: 55
 Tokugawa Ieyasu T: 311
 Tokyo (Early development) T: 318 *with picture*

Edo [people]
 Benin B: 250

Edo era [Japanese history] *See* Tokugawa *in this index*

Edom [ancient country] E: 85
 Esau E: 356
 Obadiah, Book of O: 642

Edred [king of England]
 England (table) E: 308

Edsel [automobile]
 Automobile (World War II and the postwar years) A: 968-970

Education E: 86 *with pictures*
See also Teaching; Higher education *in this index*
 Academic freedom A: 20
 Adolescent (Adjusting to school life) A: 63;
 (Education) A: 64
 African Americans (Developments in education) A: 136q
 AIDS (Education) A: 164a
 Alternative school A: 388
 Audio-visual materials A: 882
 Baby boom generation (Effects of the baby boom) B: 11
 Bilingual education B: 300
 Career education C: 213
 Computerized instruction Ci: 924h
 Cooperative education Ci: 1037
 Curriculum Ci: 1197
 Democracy (Education and democracy) D: 122
 Disabled (Special education) D: 220 *with pictures*
 Early childhood education E: 15
 Edison Schools E: 82
 Europe (Education) E: 391
 Fire department (Fire prevention and fire safety) F: 124-125
 Ford Foundation (Programs) F: 382
 Foundations (Education) F: 430
 Grading G: 297
 Head Start H: 124
 Hispanic Americans (Education) H: 256 *with picture*; (Concerns about education) H: 258
 Home economics (Family and consumer sciences education and communications) H: 300
 Home schooling H: 301
 Indian, American (Social and economic progress) I: 180-181
 Learning disabilities L: 165
 Library (School libraries) L: 244
 Literacy L: 350
 Montessori method M: 764a
 Moral education M: 799
 Motion picture M: 846
 Multiculturalism M: 918
 Museum (Special services) M: 939
 New mathematics N: 255
 Parent education P: 156
 Parent-teacher organizations P: 157
 Physical fitness (Developing physical fitness) P: 435
 Public opinion (Educational agencies) P: 860
 Reading (The importance of reading) R: 155-156, (The teaching of reading) R: 157
 School S: 180 *with pictures*
 Sex education S: 336
 Social work (Fields of social work) So: 558
 Special education So: 770
 State government (State services) So: 864
 Suzuki method So: 1013
 Teaching T: 65 *with pictures*
 Winnetka Plan W: 339
 Women's movements (The beginnings of women's movements) W: 385

History
 City (Description) Ci: 585-587
 Coeducation Ci: 752
 Colonial life in America (Education and religion) Ci: 803 *with picture*
 Creationism (The 1900's) Ci: 1123
 Egypt, Ancient (Education) E: 136-137
 Greece, Ancient (Education) G: 367
 High school H: 228
 Laurier, Sir Wilfrid (The Manitoba school issue) L: 125
 Mann, Horace M: 164
 McGuffey, William Holmes M: 336 *with picture*
 Pestalozzi, Johann Heinrich P: 318
 Pioneer life in America (Education) P: 484 *with picture*
 Progressive education P: 812 *with picture*
 United States, History of the (Education reform) U: 171
See also the list of Related articles in the Education article and the Education sections of specific country articles, such as Mexico (Education)

Education, Adult *See* Adult education *in this index*

Education, Agricultural *See* Agricultural education *in this index*

Education, American Council on
 American Council on Education A: 409

Education, Board of
 Education (Control and support of U.S. education) E: 91
 School (Public school districts) S: 182 *with picture*; (The growth of the public school system) S: 184
 Teaching (Employment practices) T: 68

Education, Department of [U.S.] E: 110 *with pictures*
 Education (The federal government and education) E: 92
 Washington, D.C. *map on W: 76*

Education, Doctor of
 Degree, College (The doctor's degree) D: 92

Education, Early Childhood *See* Early childhood education *in this index*

Education, Secretary of [U.S.]
 Education, Department of E: 110
 Flag *picture on F: 211*

Education, Society for the Advancement of
 Society for the Advancement of Education So: 563

Education, Vocational *See* Vocational education *in this index*

Education Act [1870]
 United Kingdom (Gladstone and Disraeli) U: 69

Education Amendments Act [1972]
 Education (Education for whom?) E: 107-108
 Sex discrimination (Changes in laws) S: 335-336
 Sexual harassment S: 337
 Women's movements (Legal gains) W: 386

Education Amendments Act [1976]
 Vocational education (The 1900's) V: 435

Education Association, National *See* National Education Association of the United States *in this index*

Education for All Handicapped Children Act [1975]
 Disabled (Attitudes toward people with disabilities) D: 221
 Education (Education for whom?) E: 107-108
 Special education So: 770

Education of Henry Adams, The [book by Adams]
 Adams, Henry Brooks A: 33
 American literature (Nonfiction writers) A: 420

Education of Young Children, National Association for the *See* National Association for the Education of Young Children *in this index*

Education Week, American E: 111

Educational and Cultural Affairs, Bureau of
 United States Information Agency U: 200

Educational blindness
 Blindness B: 401

Educational Communications and Technology, Association for
 Library (School library standards) L: 245

Educational Consolidation and Improvement Act [1981]

- Elementary and Secondary Education Act E: 224
- Educational foundations and endowments**
See Foundations in *this index*
- Educational guidance**
Guidance (Educational guidance) G: 422
- Educational psychology** E: 111
Herrbart, Johann Friedrich H: 197
Learning L: 162
Psychology (Major fields of psychology) P: 848
See also the list of *Related Articles in the Educational Psychology Article*
- Educational Research Association, American**
Educational psychology (Careers in educational psychology) E: 111
- Educational software**
Computer (Educational software) Ci: 920
Computerized instruction (How computerized instruction works) Ci: 924h
- Educational television**
Television (Public television) T: 110a
- Educational Testing Service** (U.S.)
National Assessment of Educational Progress N: 29
- Educational theory**
Education (What should be taught?) E: 105
- Eduskunta** [government]
Finland (Government) F: 109 with picture
- EDVAC** [computer]
Computer (The first electronic computers) Ci: 924b-924c
- Edward** [1330-1376, the Black Prince] E: 111 with portrait
Duke D: 380
England (The Hundred Years' War) E: 306
Poitiers, Battle of P: 603
- Edward** [1767-1820, British prince]
Victoria (Early years) V: 355
- Edward** [ship]
Barry, John B: 119
- Edward I** [king of England] E: 112 with portrait
Bruce, Robert B: 648
England (The beginnings of Parliament) E: 306
Model Parliament M: 684
Parliament (History) P: 174
Philip IV picture on P: 369
Plantagenet P: 550
Prince of Wales P: 794
Scotland (Fight for independence) S: 219
Storytelling (The Middle Ages) So: 914
Wales (Revolts against England) W: 12-13
Wallace, Sir William W: 17
- Edward II** [king of England] E: 112
Plantagenet P: 550
Prince of Wales P: 794
Scotland (Fight for independence) S: 219
- Edward II** [play by Marlowe]
Marlowe, Christopher M: 216
- Edward III** [king of England] E: 112
Bruce, Robert B: 648
Crécy, Battle of Ci: 1124
England (The Hundred Years' War) E: 306
France (A period of wars) F: 473
Garter, Order of the G: 46
Hundred Years' War H: 437
John of Gaunt J: 134
Plantagenet P: 550
Salic law S: 66
Scotland (Fight for independence) S: 219
- Edward IV** [king of England] E: 112 with portrait
England (The Wars of the Roses) E: 306
Henry VI [of England] H: 187
Warbeck, Perkin W: 34
Wars of the Roses W: 38; [English political leader] W: 44
York Y: 568
- Edward IV** [literary figure]
Shakespeare, William (*Richard III*) S: 356
- Edward V** [king of England] E: 112 with portrait
Richard III R: 329
Tower of London T: 349
- Edward VI** [king of England] E: 113 with portrait
Cranmer, Thomas C: 1121
England (The English Reformation) E: 307
Grey, Lady Jane G: 391
Henry VIII [king of England] H: 188
Tudor, House of T: 481
- Edward VII** [British king] E: 113 with portrait
Buchanan, James (Life in the White House) B: 661
Diamond (Famous diamonds) D: 182
- Royal Canadian Mounted Police (History) R: 497
Windsor W: 334
- Edward VII Peninsula** [Antarctica]
Exploration (The exploration of Antarctica) E: 450
- Edward VIII** [British king] E: 113 with portrait
United Kingdom ("Peace in our time") U: 70
- Edward, Lake** [Africa]
Lake Edward L: 37
- Edward, Prince** [1964- , British prince]
Elizabeth II (The royal family) E: 240
- Edward the Confessor** [king of England] E: 114 with picture
England (The Anglo-Saxon period) E: 304-305
London (The Middle Ages) L: 439-440
Norman Conquest N: 455
Westminster Abbey W: 243
William I, the Conqueror W: 308
- Edward the Elder** [king of England]
Edward I E: 112
England (table) E: 308
- Edward the Martyr** [king of England]
Edward I E: 112
England (table) E: 308
- Edvardian literature**
English literature (Literature before World War I) E: 322
- Edwardsians, The** [book by Sackville-West]
Sackville-West, Victoria Mary S: 5
- Edwards, Edward I.** [American political leader]
New Jersey (table) N: 249
- Edwards, Edwin W.** [American political leader]
Louisiana (table) L: 496
- Edwards, Glen W.** [American pilot]
Edwards Air Force Base E: 114
- Edwards, Henry W.** [American political leader]
Connecticut (table) Ci: 967
- Edwards, James B.** [American political leader]
Energy, Department of (table) E: 276
Reagan, Ronald Wilson (table) R: 169
South Carolina (table) So: 658; (Recent developments) So: 662
- Edwards, John C.** [American political leader]
Missouri (table) M: 668
- Edwards, Jonathan** [American theologian]
E: 114 with portrait
American literature (New England) A: 414
Great Awakening G: 335
Missionary (History) M: 621
- Edwards, Ninian** [American political leader]
Illinois (table) I: 71; (Early national period) I: 72-74
- Edwards Air Force Base** [California] E: 114
- Edwig** [king of England]
Dunstan, Saint D: 386
England (table) E: 308
- Edwin of the Iron Shoes** [book by Muller]
Muller, Marcia M: 915
- EEA** [trade agreement] See European Economic Area in *this index*
- EEC** See European Economic Community in *this index*
- EEG** See Electroencephalograph in *this index*
- Eel** [fish] E: 114 with picture and map
Deep sea (Fish) D: 82b-82c with picture
Fish pictures on F: 149, F: 156
- Eel River** [Indiana]
Indiana picture on I: 196
- Eelcat** [fish]
Catfish C: 301
- Eelgrass** [plant] E: 115
- Eells, Cushing** [American educator]
Washington (Schools) W: 50-51
- Eelworm** [animal] E: 115
- EEOC** See Equal Employment Opportunity Commission in *this index*
- EEPROM chip** [electronics]
Computer chip (Memory chips) Ci: 924f
- EER** See Energy efficiency ratio in *this index*
- Eesti Vabariik** See Estonia in *this index*
- Eeyore** [literary figure]
Milne, A. A. M: 556
- EEZ** [law] See Exclusive economic zone in *this index*
- Efate** [island, Vanuatu]
Vanuatu V: 284
- Effective demand** [economics]
Keynes, John Maynard K: 308
- Effector** [anatomy]
Nervous system (How the nervous system works) N: 132 with diagram; diagram on N: 135
- Effelsberg telescopes** [Germany]
Telescope (Types of radio telescopes) T: 106
- Effi Briest** [book by Fontane]
Fontane, Theodor F: 327
- Efficiency** [business]
Sales (Characteristics needed) S: 65
- Efficiency** [physics] E: 115
Machine (Efficiency) M: 14
- Efficient cause** [philosophy]
Aristotle (Philosophy of nature) A: 664
- Effigy Mounds National Monument** [Iowa]
E: 115
Iowa (Places to visit) I: 384
National Park System (table: National monuments) N: 50
- Efflorescence** [discoloration]
Hydrate H: 462
- Effluent**
Sewage S: 329
- Effort arm** [mechanics]
Lever L: 217
- Eft** [animal]
Newt N: 388 with picture
- EFT** [banking] See Electronic funds transfer in *this index*
- EFTA** See European Free Trade Association in *this index*
- Egan, William A.** [American political leader]
Alaska (table) A: 300
- Egbert** [king of Wessex] E: 115
England (The Anglo-Saxon period) E: 304
- Egede, Hans** [Norwegian religious leader]
Greenland (History) G: 385
- Egg** [food]
Poultry (Marketing poultry and eggs) P: 721
Bird (As a source of food and raw materials) B: 330
Chicken (Producing eggs) C: 443 with pictures
Easter (Easter symbols) E: 43-44
Farm and farming picture on F: 40
Food (Interesting facts about food) F: 329; (Food from animals) F: 330
Nutrition (Proteins) N: 625
Spawn S: 767
Vegetarianism V: 295
- Egg** [reproduction] E: 116 with pictures
Cell (Sizes of cells) C: 328; (Meiosis) C: 331; (Before 1900) C: 337
Clone Ci: 684
Corn (How the plant reproduces) Ci: 1058
Evolution (Mutation) E: 427-428
Fallopian tube F: 17
Fertilization F: 78
Plant (Flowers) P: 531; (How plants reproduce) P: 532
- Animal reproduction**
Animal (Sexual reproduction) A: 496 with diagram
Bird (Laying and hatching eggs) B: 357 with pictures; (The reproductive system) B: 366
Butterfly (The egg) B: 740 with picture
Dinosaur (Reproduction and growth) D: 211
Fish (Spawning and care of the eggs) F: 169 with pictures
Fly (Egg) F: 310 with picture
Frog (Eggs) F: 538 with pictures
Ichneumon wasp I: 24 with picture
Insect (Reproduction) I: 292 with picture
Lobster (Young) L: 406
Ostrich (How the ostrich lives) O: 868 with picture
Prehistoric animal (The move onto land) P: 737
Reproduction (Through sexual reproduction) R: 242; (How reproduction has evolved) R: 243 with picture
Reptile (Reproduction) R: 252, picture on R: 251
Spider (Eggs) So: 790 with pictures
Tadpole picture on T: 6
Tick T: 279 with picture
Trap-door spider picture on T: 402
Turtle (Young) T: 521 with pictures
- Human reproduction**
Embryo E: 257
Heredity (Chromosomes and genes) H: 201
Human body (The reproductive system) H: 425 with picture

- Menstruation (The menstrual cycle) **M**: 404
with pictures
- Ovary **O**: 881
- Reproduction, Human (The human reproductive system) **R**: 244-245 with pictures; (Fertilization) **R**: 246;
(Development of the embryo) **R**: 246-248 with picture
- Sexuality (Before birth) **S**: 338
- Egg cell** [botany]
Seed (How seeds develop) **S**: 281
- Egg-laying mammal**
Mammal (Reproduction) **M**: 123-124
- Egg sac** [zoology]
Spider (How spiders use silk) **So**: 786-787;
(Eggs) **So**: 790 with pictures
- Egg shell** [zoology]
Egg (The shell) **E**: 116
- Egg tempera** [painting medium] See *Tempera in this index*
- Egg timer**
Hourglass **H**: 379
- Egg tooth** [zoology]
Bird (Laying and hatching eggs) **B**: 357-359
- Egg Tree, The** [book by Milhous]
Milhous, Katherine **M**: 543
- Eggers, Otto R.** [American architect]
Jefferson Memorial **J**: 88
- Egglayer** [zoology]
Aquarium, Home (Choosing fish and plants) **A**: 578a
- Eggleston, Edward** [American author] **E**: 118
- Eggplant** [plant] **E**: 118 with picture
- Egliński, Richard** [American artist]
Caldecott Medal (table: 1987) **C**: 26
- Eglantine** [plant] **E**: 119
- Eglise du Dôme** [Paris]
Napoleon I (The Hundred Days and Waterloo) **N**: 18 with picture
- Egmont** [play by Goethe]
Goethe, Johann Wolfgang von (Middle years) **G**: 247
- Ego** [psychology] **E**: 119
Freud, Sigmund (On the mind) **F**: 530
Personality (Freud's psychoanalytic theory) **P**: 302
Psychoanalysis (Psychoanalytic theory) **P**: 846
- Egocentrism** [psychology]
Adolescent (Intellectual development) **A**: 61-62
- Egoist, The** [book by Meredith]
Meredith, George **M**: 417
- Egret** [bird] **E**: 119 with pictures
- Egypt** **E**: 120 with pictures and maps
Arab-Israeli conflict **A**: 582
Arab League **A**: 582b
Arabs (Since independence) **A**: 589
Cold War (Trouble at Suez) **Ci**: 765
Fraction (History) **F**: 450
Gaza Strip **G**: 74
Middle East (Palestine) **M**: 533
Muslims (Colonialism) **M**: 964d
Nile River **N**: 422 with picture and map
Standard of living (table) **So**: 834
Sudan (History) **So**: 955
Suez Canal **So**: 957 with map
Suez crisis **So**: 958
United Arab Republic **U**: 45 with map
United Kingdom (European unity) **U**: 71-72
United Nations (Peacekeeping operations) **U**: 90-91
World War II (table: The Allies) **W**: 471
See also the list of Related Articles in the Egypt article
- Egypt, Ancient** **E**: 135 with pictures and map
Book (Early books) **B**: 465
Education (The beginning of formal education) **E**: 97
Family (Ancient families) **F**: 21-22
Geometry (History) **G**: 105
Golden Age **G**: 255
Mediterranean Sea (History of the Mediterranean) **M**: 382
Mythology (Egyptian mythology) **M**: 976 with pictures
Pharaoh hound **P**: 354
Pythagorean theorem (Origins) **P**: 921
Shield **S**: 400
Agriculture
Egypt, Ancient (Agriculture) **E**: 138
Food (Ancient times) **F**: 336
Irrigation (History) **I**: 459
World, History of the picture on **W**: 422
- Art and architecture**
Egypt, Ancient (Arts and sciences) **E**: 139
with picture; pictures on **E**: 140
Alabaster pictures on **A**: 280
Architecture (Egyptian architecture) **A**: 612
with picture
Bed (History) **B**: 197 with picture
Bronze picture on **B**: 638
Furniture (Ancient Egypt) **F**: 570 with picture
Ivory (Ivory carving) **I**: 521
Jewelry (Early jewelry) **J**: 117
Paint (The history of paint) **P**: 26
Painting (Egyptian painting) **P**: 40; (Aegean painting) **P**: 41
Papyrus **P**: 141
Pottery picture on **P**: 717
Pyramids (Egyptian pyramids) **P**: 916 with pictures
Relief picture on **R**: 213
Sculpture (Kinds of sculpture) **S**: 230;
(Egyptian) **S**: 234 with picture
Shelter (Ancient times) **S**: 393
Sphinx (Egyptian sphinxes) **So**: 780 with picture
- History**
Egypt, Ancient (History) **E**: 142
Agriculture (The Middle East) **A**: 155
Exploration (Ancient exploration) **E**: 440 with map
Hittites (History) **H**: 269
Kush **K**: 394
Nubia **N**: 578
Phoenicia (Foreign control) **P**: 394
Tutankhamen **T**: 525
World, History of the (The Nile Valley) **W**: 424
- Language and literature**
Egypt, Ancient (The people) **E**: 136
Alphabet (The Egyptians) **A**: 382 with pictures
Hieroglyphics **H**: 225 with pictures
Library (Ancient libraries of papyrus) **L**: 258
Writing (Phoneticization) **W**: 513
- Religion**
Egypt, Ancient (Religion) **E**: 137-138
Cat (History) **C**: 296 with picture
Embalming (Ancient embalming) **E**: 255
Funeral customs (History) **F**: 558
Linen (History) **L**: 335
Mummy **M**: 925 with pictures
Osiris **O**: 863 with picture
Scarab **S**: 173
Seth **S**: 323
- Social and cultural life**
Egypt, Ancient (Life of the people) **E**: 136-137
Beard **B**: 186
Clothing (Ancient times) **Ci**: 696 with pictures
Hairdressing (Ancient times) **H**: 11 with picture
Perfume (History) **P**: 287
Ring **R**: 342 with picture
Tomb **T**: 326
Women's movements (In ancient societies) **W**: 384
- Technology and science**
Egypt, Ancient (Sciences) **E**: 139
Calendar (History) **C**: 30
Clock picture on **Ci**: 682j
Drug (Drugs in ancient times) **D**: 358
Glass (Early times) **G**: 217-218 with picture
Heart (Interesting facts about the heart) **H**: 133 with picture
Invention (The first civilizations) **I**: 358;
(Ancient Greece) **I**: 358
Leather (History) **L**: 169 with picture
Map (Ancient maps) **M**: 181
Mathematics (Early civilization) **M**: 303
Medicine (The ancient Middle East) **M**: 372
Numeration systems (The Egyptian numeral system) **N**: 607
Scale, Weighing (Balances) **S**: 169
Science (Early civilizations) **S**: 196
Surveying **So**: 1010
- Transportation**
Egypt, Ancient (Trade and transportation) **E**: 139
Ship (History) **S**: 403; (Egyptian ships) **S**: 403-404 with pictures
Transportation (The first great civilizations) **T**: 386
See also the list of Related Articles in the Egypt, Ancient article
- Egypt, Plagues of**
Moses (The Exodus) **M**: 828-829
- Egyptian cat**
Wildcat **W**: 301
- Egyptian cobra** [snake]
Asp **A**: 814 with picture
- Egyptian lotus**
Lotus **L**: 473 with picture
- Egyptian Mau cat**
Cat (Short-haired breeds) **C**: 290-291
- Egyptian Museum**
Cairo picture on **C**: 18
- Egyptian numerals**
Numeration systems (The Egyptian numeral system) **N**: 607
- Egyptian privet** [shrub]
Henna **H**: 185
- Egyptian vulture** [bird]
Vulture (Old World vultures) **V**: 454 with picture
- Egyptian water lily** [plant]
Lotus **L**: 473 with picture
- Egyptology**
Egypt, Ancient (Learning about ancient Egypt) **E**: 144
- Egypt's Liberation: The Philosophy of the Revolution** [book by Nasser]
Nasser, Gamal Abdel **N**: 24
- Ehécatl** [Aztec god]
Aztec (Religion) **A**: 1000
- Ehrenburg, Ilya** [Russian author]
Russian literature (Modern Soviet literature) **R**: 564
- Ehringhaus, J. C. B.** [American political leader]
North Carolina (table) **N**: 490
- Ehrlich, Paul** [German bacteriologist] **E**: 145
Medicine (The medical revolution) **M**: 376
- Ehrlich, Paul Ralph** [American biologist] **E**: 145
- Ehrlichman, John D.** [American government official]
Watergate **W**: 144
- Eichmann, Adolf** [Nazi leader] **E**: 145
Wallenberg, Raoul **W**: 17
War crime (World War II) **W**: 27
- Eider down** [feathers]
Eider duck **E**: 145
- Eider duck** [bird] **E**: 145
Duck (Food) **D**: 375-376
- Eidetic imagery**
Memory (Exceptionally good memory) **M**: 393
- Eielson, Carl Ben** [American aviator] **E**: 145
Wilkins, Sir Hubert **W**: 306
- Eiffel, Gustave** [French engineer] **E**: 145
Eiffel Tower **E**: 146
Statue of Liberty (The statue) **So**: 873;
(Construction and dedication) **So**: 877;
picture on **So**: 874
- Eiffel Tower** [Paris] **E**: 145 with picture
Eiffel, Gustave **E**: 145
Paris (Gardens, squares, and parks) **P**: 162-163
with map; picture on **P**: 161
- Eigen, Manfred** [German chemist]
Nobel Prizes (Chemistry: 1967) **N**: 443
- Eiger** [mountain, Switzerland]
Alps picture on **A**: 385
- Eight, The** See *Ashcan School in this index*
- 8 1/2** [film]
Fellini, Federico **F**: 68
- Eight-ball** [game]
Billiards (Pool) **B**: 306
- Eight Comedies and Eight Entremeses** [book by Cervantes]
Cervantes, Miguel de (His literary career) **C**: 363-364
- Eight-hour day**
Wages and hours (Hours) **W**: 3
- Eight Hour Day** [Australian holiday]
Labor Day **L**: 2
- 8-millimeter film**
Motion picture (The film) **M**: 857
- 8-millimeter videotape**
Camcorder (Types of camcorders) **C**: 76
Videotape recorder (History) **V**: 361
- 800 service**
Telephone (Business services) **T**: 98
- Eight-spotted forester moth**

- Moth picture on M: 841
- Eighteen Poems** [book by Thomas]
Thomas, Dylan T: 261
- 18-wheeler** [vehicle] See Tractor-semitrailer in this index
- 1812 Overture** [music by Tchaikovsky]
Tchaikovsky, Peter Ilich T: 61
- 1837: The Farmers' Revolt** [play by Salutin]
Canadian literature (Modern Canadian drama) C: 161
- Eighteenth Amendment** [U.S. Constitution]
Constitution of the United States Ci: 1014
Prohibition (The movement toward prohibition) P: 815
Roaring Twenties (Changing attitudes) R: 363
United States, History of the (Change and problems) U: 185
Volstead Act V: 445
Woman's Christian Temperance Union W: 381
- Eighteenth Dynasty** [ancient Egypt]
Pharaoh P: 353
- Eightfold Path** [religion]
Buddhism (The dharma) B: 668
- Eightfold way theory** [physics]
Gell-Mann, Murray G: 77
- Eighth Amendment** [U.S. Constitution]
Constitution of the United States Ci: 1012
Bail B: 31
Citizenship (The Constitution) Ci: 571
- Eighth Crusade** [1270]
Louis IX L: 474
- Eighth U.S. Army, Korea**
Army, United States (Organization of the Army) A: 736-737
- Eijkman, Christiaan** [Dutch physiologist]
Nobel Prizes (Physiology or medicine: 1929) N: 444
Vitamin (History) V: 432
- Eikon** See Icon in this index
- Eilat** See Elat in this index
- Ein ...**
Titles beginning with the German word Ein appear under their key words, as in
Deutsches Requiem, Ein
- Ein Kerem** [area]
Jerusalem (West Jerusalem) J: 95 with map
- Einhard** [Frankish government official]
Charlemagne C: 378
- Einhorn, Alferd** [German chemist]
Procaine P: 810
- Einsatzgruppen** [German history]
Holocaust ("The Final Solution") H: 296a
- Einstein, Albert** [German-American physicist]
E: 146 with pictures
See also Relativity in this index
Autograph picture on A: 943
Big bang B: 297
Democracy (Famous quotations about democracy) D: 120
 $E=mc^2$ E: 2
Eclipse (The study of eclipses) E: 52
Energy (Energy and matter) E: 274
Force (Gravitation) F: 370
Gravitation (Einstein's theory of gravitation) G: 332
Laser (History) L: 86
Light (Photons) L: 284
Motion (Modifications of Newton's laws) M: 845
Newton, Sir Isaac (Personal characteristics) N: 390
Nuclear energy (Artificial fission) N: 590, (The development of nuclear weapons) N: 590
Photon P: 430
Physics (Quantum theory) P: 441; (Einstein and relativity) P: 441; picture on P: 442
Quantum mechanics (Quantum nature of light) Q: 6
Radiation (The quantum theory) R: 81
Science (Expressing findings mathematically) S: 195; (Science in the early 1900's) S: 201; picture on S: 203
Star (Converting mass to energy) So: 846
String theory So: 929
- Einstein, Eduard** [son of]
Einstein, Albert (First marriage) E: 146
- Einstein, Hans Albert** [son of]
Einstein, Albert (First marriage) E: 146 with picture
- Einstein, Maria** [sister of]
Einstein, Albert (Early years) E: 146 with picture
- Einstein, Mileva Maric** [wife of]
Einstein, Albert (Early years) E: 146 with picture
- Einstein on the Beach** [opera by Glass and Wilson]
Glass, Philip G: 224
- Einstein theory** [physics] See Relativity in this index
- Einstein tower** [Potsdam, Germany]
Mendelsohn, Eric M: 399 with picture
- Einsteinium** [element] E: 147
Transuranium element T: 401
- Einthoven, Willam** [Dutch physiologist] E: 147
Electrocardiograph E: 200
- Éire** See Ireland in this index
- Eiriksson, Leif** See Ericson, Leif in this index
- Eisai** [Japanese religious leader]
Zen Z: 593
- Eisenhower, David** [American public figure]
Camp David C: 88
Eisenhower, Dwight David (Eisenhower's family) E: 148-149; picture on E: 155
Nixon, Richard Milhous picture on N: 435
- Eisenhower, Dwight David** [U.S. President]
E: 148 with pictures
Advertising (Political effects) A: 79 with picture
Camp David C: 88
Cold War (The spirit of Geneva) Ci: 765; (The spirit of Camp David) Ci: 766; (The U-2 incident) Ci: 766; picture on Ci: 768
Lodge, Henry Cabot, Jr. L: 419
Nixon, Richard Milhous N: 428; (The 1952 campaign) N: 430 with picture
Republican Party (The Eisenhower years) R: 257
Truman, Harry S. (Foreign affairs) T: 471
Union of Soviet Socialist Republics (Relations with the United States) U: 39
United Nations (Peaceful uses of nuclear energy) U: 89
Vietnam War (The divided country) V: 373-374
World War II (The invasion of Italy) W: 482; (D-Day) W: 482-483 with picture
- Eisenhower, John Shelton Doud** [son of]
Eisenhower, Dwight David (Eisenhower's family) E: 148-149; picture on E: 155
- Eisenhower, Julia Nixon** [daughter of]
Nixon, Richard Milhous picture on N: 435
- Eisenhower, Mamie Doud** [wife of Dwight D. Eisenhower]
Advertising picture on A: 79
Eisenhower, Dwight David (Boyhood) E: 148 with pictures; pictures on E: 150
First ladies (table) F: 142
Nixon, Richard Milhous picture on N: 431
- Eisenhower Doctrine** [international relations]
Cold War (The Eisenhower Doctrine) Ci: 765
Eisenhower, Dwight David (Crises in the Middle East and Asia) E: 154
- Eisenhower dollar** [money]
Dollar (The United States dollar) D: 295 with picture
- Eisenhower Expressway**
Chicago (The West Side) C: 424
- Eisenhower Library and Museum** [Abilene]
Kansas (Libraries) K: 221 with picture; (Places to visit) K: 226
- Eisenhower Memorial Tunnel** [Colorado]
Rocky Mountains (History) R: 396
- Eisenhower National Historic Site** [Pennsylvania]
National Park System (table: National historic sites) N: 52
- Eisenhower Theater** [Washington, D.C.]
Kennedy Center for the Performing Arts K: 270
- Eisenstaedt, Alfred** [American photographer]
E: 155 with picture
- Eisenstein, Sergei Mikhailovich** [Soviet director] E: 156
Motion picture (Filmmaking in Europe) M: 866-867
- Eisteddfod** [Welsh festival]
Bard B: 109
Wales (The arts) W: 11; picture on W: 12
- EITC** [federal program] See Earned Income Tax Credit in this index
- Éitoku, Kano** [Japanese artist]
Painting (Japanese painting) P: 47 with picture
- Ejaculation** [physiology]
Reproduction, Human (The human reproductive system) R: 244-246
- Ejido** [farm]
Mexico (Agriculture) M: 465-466
- Ekaterinoslav** [former name]
Dnepropetrovsk D: 259
- Ekeberg, Anders** [Swedish chemist]
Tantalum T: 29
- EKG** [medicine]
Electrocardiograph E: 200
- Ekkehard** [Swiss religious leader]
German literature (Early German literature) G: 139
- EI** See Elevated railroad in this index
- EI ...**
Personal names beginning EI appear under their key words, as in Greco, EI. Place names are alphabetized as single words: EI Paso appears after Elon College
- EI Aaiun** [Western Sahara] E: 156
- Elagabalus** [Roman emperor]
Rome, Ancient (table) R: 447
- Elaine** [legendary figure]
Galahad, Sir G: 7
Lancelot, Sir L: 56
- EI Al** [airline]
Israel (Transportation and communication) I: 486
- EI Alamein** [Egypt] E: 156
World War II (In northern Africa) W: 480
- Elam** [ancient country]
Susa So: 1012
- Elamites** [ancient people]
Cuneiform Ci: 1192
Iran (Early days) I: 405
Persia, Ancient (Early civilization) P: 298
- Eland** [animal] E: 156
Animal picture on A: 476
Antelope (Habits and appearance) A: 542 with picture
- Elaphrothrips tuberculatus** [insect]
Thrips T: 270
- Elapid** [snake]
Snake (Fangs and venom glands) S: 528; (Elapids) S: 534
Snakebite (Types of poisonous snakes) S: 536
- ELAS** [military]
Greece (World War II) G: 363-364
- Elastic clause** [government]
Congress of the United States (Origin of power) Ci: 943
- Elastic fluid**
Fluid F: 304
- Elastic modulus**
Elasticity E: 156
- Elasticity** [physical property] E: 156
Hooke, Robert H: 324
Materials (Rubber) M: 300d
Mechanics M: 354
Rubber R: 500; (The chemistry of rubber) R: 501
Spring So: 806
Textile (Knitted fabrics) T: 214
- Elasticity, Principle of** [economics]
Taxation (Elasticity) T: 54
- Elastin** [protein]
Connective tissue Ci: 972
- Elastomer**
Materials (Rubber) M: 300d
Rubber (Synthetic rubber) R: 504
- Elastomeric fiber**
Textile (Manufactured fibers) T: 213
- Elat** [Israel] E: 156
Israel (The Six-Day War) I: 488
- Elavil** [drug]
Antidepressant A: 553
- El Azúcar, Lake** [Mexico]
Rio Grande (Lower course) R: 347
- Elba** [island, Mediterranean] E: 157
Napoleon I (Exile to Elba) N: 18
- Elbaite** [mineral]
Tourmaline T: 347
- Elba River** [Europe] E: 157
- Elbert, Samuel** [American political leader]
Georgia (table) G: 130
- Elberta peach**
Peach (Cultivars) P: 210
- Elbow** [anatomy] E: 157 with diagrams
Arm A: 717
- Elbrus, Mount** See Mount Elbrus in this index

Elburz Mountains [mountains, Iran]
Iran (The Mountains) I: 403

El Camino Real [road, California] E: 157
California (Transportation) C: 57

El Camino Real [road, Mexico-U.S.]
El Camino Real E: 157
Las Cruces L: 80
New Mexico (Interesting facts) N: 257;
(Transportation) N: 271

El Caney, Battle of [1898]
Spanish-American War (Land battles) So: 754

El Capitan
Yosemite National Park (Rock masses) Y: 570

El Chichón [volcano, Mexico]
Volcano (table) V: 441 *with map*

Elder [religion]
Presbyterians P: 756a

Elder [tree] E: 157 *with picture*

Elder Edda [poems]
Edda E: 74
Sigurd S: 455

Elder statesman
Statesman So: 867

Elderberry [shrub]
Elder picture on E: 157

Elderly See Geriatrics; Old age *in this index*

Elderly Couple [painting by Gossaert]
Clothing picture on Ci: 699

El Dorado [legendary place] E: 158
Exploration (Spain's conquests in the New
World) E: 445
Gold (History of gold) G: 253
Raleigh, Sir Walter (His fall) R: 132
El Dorado E: 158

"Eldorado" [poem by Poe]
Poe, Edgar Allan (Poetry and poetic theory)
P: 589-590

Eleanor of Aquitaine [1122-1204] E: 158
Henry II [of England] H: 185

Eleanor Roosevelt National Historic Site [New
York]
National Park System (table: National historic
sites) N: 52

Elecampane [plant] E: 158 *with picture*

Elect [religion]
Calvin, John (Calvinism) C: 71

Election [religion]
Predestination P: 734

Election [voting] E: 158
City government (Influencing city government)
Ci: 597
Communism (The party state) Ci: 891
Corrupt practices Ci: 1072
Democracy (Free elections) D: 121 *with pic-
ture*
Election campaign E: 159
House of Representatives (Size) H: 385
Parliamentary procedure (Electing officers)
P: 175
President of the United States (The presiden-
tial election) P: 762
Primary election P: 777
Proportional representation P: 828
Recall R: 174
Senate (Qualifications and election) S: 294
Supreme Court of the United States (Election
issues) So: 1001; (table) So: 1002
Term limits T: 173
Watergate W: 144

Election Act [1970]
Trudeau, Pierre Elliott (The national scene)
T: 464

Election campaign [politics] E: 159 *with picture*
Advertising (Political effects) A: 79 *with pic-
ture*
Federal Election Commission F: 63
Political action committee P: 627
Political convention (Convention activities)
P: 629
Political party (Raising funds) P: 633
Prime minister of Canada (How the prime min-
ister is chosen) P: 778d
Television (Effects on society) T: 117
United States, Government of the (How
democratic is the government?) U: 146-
147

Election Day E: 161
Election campaign (Getting out the vote)
E: 160
November N: 576
United States, History of the picture on U: 160

Election Day at the State House [painting by
Krimmel]
United States, History of the picture on U: 160

Election of 2000 E: 161
Ballot B: 63
Bush, George Walker (The election) B: 722f
Bush v. Gore B: 723
Christopher, Warren Minor C: 537
Florida (The early 2000's) F: 265
Green party G: 380
Supreme Court of the United States (Election
issues) So: 1001

Elective Affinities [book by Goethe]
Goethe, Johann Wolfgang von (Late years)
G: 247

Elective system [education]
Curriculum (Curriculum content) Ci: 1197
High school (High schools in the United
States) H: 228

Elector
Election (Elections in a democracy) E: 158

Electoral College (U.S.) E: 161
Constitution of the United States (Article II,
Section 1) Ci: 1008; (Amendment 12)
Ci: 1013; (Amendment 23) Ci: 1015-1016
Election of 2000 (On Election Day) E: 161
Electoral Commission E: 164
Government (The U.S. federal system) G: 287
Presidential succession P: 771
United States, History of the (Setting up the
government) U: 162
Vice President of the United States (Election)
V: 350

Electoral Commission (U.S. history) E: 164
Davis, David D: 47
Hayes, Rutherford Birchard (The election dis-
pute) H: 120

Electorate
Voting (Voting behavior) V: 450

Electra [legendary figure] E: 164

Electra [play by Sophocles]
Sophocles So: 595

Electra complex [psychology]
Electra E: 165
Oedipus complex O: 676

Electret [electronics]
Microphone (Capacitor microphones) M: 517

Electric arc [electricity] E: 165

Electric arc furnace
Iron and steel (The electric furnace process)
I: 444; (The birth of modern steelmaking)
I: 451

Electric arc welding
Welding (Arc welding) W: 189 *with picture*

Electric automobile See Electric car *in this
index*

Electric battery See Battery *in this index*

Electric bell E: 165 *with diagram*

Electric car [automobile] E: 165 *with pictures*
Automobile (The electric car) A: 963 *with pic-
ture*
Edison, Thomas Alva (Primary and storage bat-
teries) E: 80

Electric catfish [fish]
Catfish C: 301
Electric fish E: 170

Electric chair [execution]
Electrocution E: 200

Electric charge [electricity]
Atom (Electric charge) A: 872
Electricity (Electric charge) E: 191 *with dia-
gram*
Electromagnetic waves E: 202
Electroscope E: 218
Leyden jar L: 224
Lightning (How lightning develops) L: 300
Volt V: 446

Electric circuit E: 166 *with diagrams*
Brain B: 550a
Computer chip Ci: 924e
Electricity (Electric circuits) E: 194 *with dia-
gram*
Electronics (How an electronic system works)
E: 208
Ground G: 400
House (Electrical wiring) H: 382

Electric clock
Clock (Electric clocks) Ci: 683 *with diagram*

Electric current E: 167
Diathermy D: 185
Electric circuit E: 166

Electric generator (Basic principles) diagrams
on E: 170

Electricity (Electric current) E: 193 *with dia-
gram*; (Electric circuits) E: 194

Electrode E: 200

Electrolysis E: 201

Electromagnet E: 202

Electromagnetism E: 203

Electronics E: 206

Fuel cell F: 551

Gold (Other uses) G: 251

Inductance I: 239

Lenz's law L: 197 *with diagram*

Magnetism (Magnetism and electricity)
M: 60a

Magneto M: 62

Motion picture (The sound track) M: 858

Ohm's law O: 707

Rheostat R: 290

Telephone (How a telephone works) T: 94-
95

Transformer T: 371

Transistor T: 372

Electric-discharge lamp
Electric light (Gaseous-discharge lamps)
E: 174

Electric eel [fish] E: 168 *with picture*
Electric fish E: 170
Fish picture on F: 166

Electric eye [electronics] E: 169 *with pictures*
Burglar alarm B: 704
Electronics (Light-sensing devices) E: 213

Electric field [physics] E: 169
Electricity (Electric charge) E: 191
Electrophoresis E: 218
Particle accelerator (How accelerators work)
P: 184-185
Quantum field theory Q: 5
Radiation (Electromagnetic radiation) R: 75
Relativity (The Michelson-Morley experiment)
R: 210
Volt V: 446

Electric fish [zoology] E: 170

Electric force [physics]
Force (The electromagnetic force) F: 370
Quantum field theory Q: 5

Electric furnace [industry]
Iron and steel (The electric furnace process)
I: 444; (How steel is made) I: 442 *with
diagrams*

Electric fuse See Fuse *in this index*

Electric generator (machine) E: 170 *with pic-
tures*
Armature A: 718
Electric railroad (History) E: 188
Electricity (Sources of current) E: 194
Lenz's law L: 197
Locomotive (Diesel locomotives) L: 414-415
Magneto M: 62
Tesla, Nikola (The alternating-current system)
T: 180

Electric guitar [musical instrument]
Guitar G: 435; G: 436 *with pictures*
Music (Electronic instruments) M: 950

Electric heating
Heating (Electric power) H: 160 *with diagram*

Electric induction See Induction, Electric *in this
index*

Electric insulator See Insulator, Electric *in this
index*

Electric light E: 174 *with pictures*
Edison, Thomas Alva E: 77 *with picture; pic-
ture on E: 81*
Environmental pollution (Individual efforts)
E: 338
Fire (Light) F: 122
Flashlight F: 228
Fluorescent lamp F: 305
Lamp (Electric lamps) L: 54
Latimer, Lewis Howard L: 90
Neon N: 123 *with picture*
Sun lamp So: 987

Electric lock
Lock (Electric locks) L: 412

Electric locomotive
Locomotive (Electric locomotives) L: 416 *with
pictures*; (History) L: 417; picture on
L: 415

Electric meter [instrument] E: 176 *with pictures*

Electric motor [machine] E: 178 *with pictures*
Armature A: 718

- Electric generator (Electromagnetism) E: 171
 Starter (Automobile starters) So: 857
 Technology (The development of electronics) T: 75
 Tesla, Nikola (The alternating-current system) T: 180
- Electric power** E: 182 *with pictures*
 Cable (Coaxial cables) C: 5; (Electric power cables) C: 6 *with picture*
 Coal (Electric power production) Ci: 719; (Recent developments) Ci: 732
 Decibel D: 70
 Edison, Thomas Alva (The Wizard of Menlo Park) E: 78-79
 Heating (Electric power) H: 160
 Magnetic amplifier M: 55
 Nuclear energy N: 579
 Rural Electrification Administration R: 521
 Solar energy So: 576
 Tennessee Valley Authority (Electric power) T: 159
 Transformer T: 371
 Windmill W: 333
- Electric railroad** E: 187 *with pictures*
 Elevated railroad E: 233
 Locomotive (History) L: 417
 Subway So: 949
- Electric range**
 Range (Electric ranges) R: 137 *with picture*; (History) R: 138-139
- Electric ray** [fish] E: 189 *with picture*
- Electric razor**
 Razor (Electric razors) R: 154
- Electric refrigerator**
 Refrigeration (The electric refrigerator) R: 201 *with diagram*
- Electric rocket**
 Rocket (Electric rockets) R: 389 *with diagram*
- Electric shock**
 Electricity (Electrical safety) E: 195
 First aid (Removing the cause of breathing failure) F: 138
 Shock treatment S: 429
- Electric sign**
 Neon N: 123 *with picture*
- Electric spectacular** [display]
 Advertising (Outdoor signs) A: 75
- Electric storage heater**
 Heating (Electric power) H: 160
- Electric switch** E: 189 *with diagram*
 Electricity (Controlling electric current) E: 195
- Electric tachometer** [instrument]
 Tachometer T: 4
- Electric traction elevator**
 Elevator (How elevators work) E: 234
- Electric train** See *Electric railroad in this index*
- Electric transformer** See *Transformer in this index*
- Electric typewriter**
 Typewriter (Kinds of typewriters) T: 538
- Electric watch**
 Watch (History) W: 115
- Electric wave**
 Radio (From sound waves to electric waves) R: 86; (Transmitting radio waves) R: 87 *with diagram*
- Electric welding**
 Welding (Fusion welding) W: 189; (Arc welding) W: 189
- Electrical burn** [injury]
 Burn (First-aid care) B: 708
- Electrical discharge machining** [industry]
 Machine tool (Advanced machine tool operations) M: 19 *with picture*
- Electrical energy**
 Energy E: 273
- Electrical engineering**
 Engineering (Electrical engineering) E: 286 *with picture*
- Electrical hygrometer** [instrument]
 Hygrometer (Other hygrometers) H: 474
- Electrical properties**
 Materials (Electrical properties) M: 300c
- Electrical resistance**
 Materials (Electrical properties) M: 300c; (Physical bonds) M: 301
 Ohm O: 706
 Thermometer (Resistance thermometers) T: 255
- Electrical storm**
 Lightning L: 299 *with pictures*
- Electrical thermometer** See *Resistance thermometer in this index*
- Electrical Workers, International Brotherhood of** E: 189
 Labor movement (table) L: 8
- Electrical Workers, National Brotherhood of**
 Electrical Workers, International Brotherhood of E: 189
- Electrician** [career]
 Building trade (Career opportunities) B: 686
- Electricity** E: 190 *with pictures*
 See also *Electric circuit*; *Electric current*; *Electric power in this index*
 Ceramics (Kinds of ceramic products) C: 359
 Electric field E: 169
 Electrochemistry E: 200
 Electromagnetic waves E: 202
 Electromagnetism E: 203
 Electron E: 203
 Electronics E: 206
 Engineering (Electrical engineering) E: 286
 Fire prevention (In homes and schools) F: 131 *with picture*
 Invention (The Industrial Revolution) I: 361
 Lightning L: 299
 Magnetism (Magnetism and electricity) M: 60a; (Experimenting with magnetism) M: 60d; (Electricity and magnetism) M: 61
 Materials (Electrical properties) M: 300c; (Semiconductors) M: 301
 Metric system (Electricity) M: 440
 Physics (Electricity and magnetism) P: 437; (Developments in the 1800's) P: 440
 Safety (Safety with electricity) S: 11
 Science (The Age of Reason) S: 199-200
 Superconductivity So: 993
Electromotive sources
 Electric generator E: 170
 Electromotive force E: 203
 Fuel cell F: 551
 Piezoelectricity P: 458
Measurement
 Electric meter E: 176
Uses
 Electric railroad E: 187
 Energy supply (The Industrial Revolution) E: 280
 Heating (Electric power) H: 160
 Skyscraper (Service areas) S: 498
 See also *the list of Related Articles in the Electricity article*
- Electrics** [obsolete term]
 Electricity (Early discoveries) E: 196
- Electrification, Rural**
 Rural Electrification Administration R: 521
- Electroanalysis** [chemistry]
 Electrochemistry E: 200
- Electrocardiogram** [medicine]
 Electrocardiograph E: 200
 Heart (Symptoms and diagnosis) H: 137
 Stress test So: 927
- Electrocardiograph** [instrument] E: 199 *with picture*
 Cardiology C: 212
 Einthoven, Willem E: 147
 Heart (Symptoms and diagnosis) H: 137; (Invention of new medical instruments) H: 144
 Stress test So: 927
- Electrochemical carbon-monoxide detector** [instrument]
 Carbon-monoxide detector C: 207
- Electrochemical cell** See *Battery in this index*
- Electrochemical machining**
 Machine tool (Electrochemical machining) M: 19
- Electrochemical series** [chemistry] See *Electromotive series in this index*
- Electrochemistry** E: 200
 Chemistry (Development of physical chemistry) C: 404-405
 Nervous system (How neurons carry impulses) N: 134-135
- Electroconvulsive therapy** [medicine]
 Depression D: 151
 Mental illness (Somatic therapy) M: 407
 Psychiatry (Somatic therapy) P: 845
 Shock treatment S: 429
- Electrocution** [execution] E: 200
 Capital punishment (table) C: 193
- Electrode** [electricity] E: 200
 Battery (How batteries work) B: 168; (Secondary batteries) B: 170
 Electricity (Sources of current) E: 194
 Electrocardiograph E: 200
 Electrocution E: 200
 Electrolysis (How electrolysis works) E: 200-201
 Fuel cell F: 551 *with diagram*
 Graphite G: 323
 Iron and steel (The electric furnace process) I: 444; *diagrams on* I: 443
 Particle accelerator (How accelerators work) P: 184
 Vacuum tube (How a vacuum tube works) V: 258
- Electrodialysis** [electricity]
 Water (Electrodialysis) W: 128 *with diagram*
- Electrodynamic magnetic levitation train**
 Magnetic levitation train M: 55
- Electrodynamic wattmeter** [instrument]
 Wattmeter W: 149
- Electroencephalogram** See *Electroencephalograph in this index*
- Electroencephalograph** [instrument] E: 200
 Brain (Disorders of the brain) B: 556
 Dream (The biology of dreams) D: 344
 Sleep (What happens during sleep) S: 506
- Electroforming** [industrial process]
 Electroplating E: 218
- Electro galvanizing** [industrial process]
 Galvanizing G: 17
- Electroluminescent panel**
 Electric light (Electroluminescent panels) E: 176
- Electrolysis** [chemistry] E: 201 *with diagram*
 Alkali A: 369
 Aluminum (Smelting the alumina) A: 393
 Anodizing A: 518
 Clausius, Rudolf Julius Emmanuel Ci: 657
 Copper (Electrolytic refining) Ci: 1043; (How copper metal is produced) Ci: 1041 *with diagrams*
 Electrochemistry E: 200
 Hydrogen (Preparation of hydrogen) H: 469
 Magnesium (How magnesium is obtained) M: 54
 Manganese (Sources) M: 139
 Metallurgy (Electrolysis) M: 427
 Ore O: 825
 Silver (Extracting and refining silver) S: 465
 Sodium (Extracting sodium) So: 569
 Submarine (Life aboard a submarine) So: 941
- Electrolysis** [grooming]
 Depilatory D: 149
 Hair (Disorders of the hair and scalp) H: 10
- Electrolyte** [chemistry] E: 202
 Battery (How batteries work) B: 168; (Secondary batteries) B: 170
 Electricity (Sources of current) E: 194
 Electrochemistry E: 200
 Electrolysis (How electrolysis works) E: 200-201
 Fuel cell F: 551
- Electrolytic cell** [electricity]
 Electrolysis (How electrolysis works) E: 200-201
- Electrolytic reduction** See *Electrolysis in this index*
- Electromagnet** E: 202
 See also *Electromagnetism in this index*
 Electric generator (Parts of a generator) E: 171; (How AC generators work) E: 173
 Electric motor (Basic principles) E: 179
 Electricity (Electricity and magnetism) E: 196
 Linear electric motor L: 334 *with diagrams*
 Magnetic levitation train M: 55
 Magnetism (Kinds of magnets) M: 59-60; M: 58; (Uses of magnets and magnetism) M: 60-60a; (Experimenting with magnetism) *diagram on* M: 60d
 Microphone (Ribbon microphones) M: 517
 Particle detector (Scintillators) P: 187
 Quantum field theory Q: 5
 Radio (Early development) R: 91
 Tape recorder (Erasing and recording) T: 37
 Telegraph (Development of the telegraph) T: 90
 Telephone (The receiver) T: 95 *with diagram*
 Videotape recorder (Recording) V: 361
- Electromagnetic discharge imaging** See *Kirlian photography in this index*

Electromagnetic energy [physics]

Electricity (Electricity and magnetism) E: 196

Electromagnetic field [physics]

Kirlian photography K: 336

Light (The electromagnetic theory) L: 292

Electromagnetic force

Force (The electromagnetic force) F: 370

Standard Model So: 833

String theory So: 929

Electromagnetic induction See Induction,
Electromagnetic in this index**Electromagnetic lock**

Lock (Electric locks) L: 412

Electromagnetic magnetic levitation train

Magnetic levitation train M: 55

Electromagnetic pump

Pump (Electromagnetic pumps) P: 899

Electromagnetic radiation [physics]

Astronomy (Electromagnetic radiation) A: 838

Electricity (Electricity and magnetism) E: 196

Fluorescence F: 304

Galaxy (Emissions from galaxies) G: 8b

Gamma rays G: 23

Light (Electromagnetic waves) L: 285

Observatory (Observatories with telescopes)
O: 644

Photon P: 430

Physics (Electricity and magnetism) P: 437;
(Developments in the 1800's) P: 440; (The
beginning of modern physics) P: 440-441Radiation R: 74; (Electromagnetic radiation)
R: 75 with pictures

Spectrum So: 772

Star (Color and temperature) So: 843-844

Sun (Sun terms) So: 976

Supernova So: 994

Telescope (What telescopes do) T: 102

Thermometer (Radiation thermometers) T: 255

Weather satellite W: 171

Electromagnetic spectrum [physics]

Astronomy (Electromagnetic radiation) A: 838

Color (The relation between color and light)
Ci: 817

Electromagnetic waves E: 202 with diagram

Galaxy (Emissions from galaxies) G: 8b

Radiation (Electromagnetic radiation) R: 75-76

Star (Color and temperature) So: 843-844

Sun (Sun terms) So: 976

Electromagnetic theory of light [physics]

Light (The electromagnetic theory) L: 292

Science (Scientific advances of the 1800's)
S: 200**Electromagnetic transducer** [device]

Seismograph S: 288

Electromagnetic waves [physics] E: 202 with
diagram

Antenna A: 543

Color (The relation between color and light)
Ci: 817Communication (The development of electron-
ics) Ci: 883

Electricity (Electricity and magnetism) E: 196

Hertz, Heinrich Rudolph H: 217

Irradiation I: 455

Light (Electromagnetic waves) L: 285 with dia-
gram

Maxwell, James Clerk M: 319

Radar (How radar works) R: 68

Radiation (Electromagnetic radiation) R: 75

Radio R: 83

Relativity (The Michelson-Morley experiment)
R: 210Television (Transmitting television signals)
T: 122

Wireless communication W: 344

Electromagnetism [physics] E: 203

Ampère, André Marie A: 439

Electric generator (Electromagnetism) E: 171

Electricity E: 190; (Electricity and magnetism)
E: 196; (Electricity and magnetism) E: 197

Faraday, Michael F: 28

Henry, Joseph H: 189

Light (The electromagnetic theory) L: 292

Oersted, Hans Christian O: 676

Superconductivity So: 993

Subatomic particle (Fundamental forces)

So: 936; (Theories of forces) So: 937-938

Electromechanical engraving [printing]

Printing (Gravure cylinders) P: 800

Electrometer (instrument)

Electroscope E: 218

Electromotive force [physics] E: 203

Electric circuit E: 166

Electric current (Conductors and insulators)
E: 168

Electric generator (Basic principles) E: 170

Electronics (How a circuit works) E: 208

Ohm's law O: 707

Electromotive series [chemistry] E: 203**Electron** [atomic particle] E: 203Atom (The parts of an atom) A: 870 with dia-
grams; (Electric charge) A: 872; (Chemical
behavior) A: 872; (The forces within an
atom) A: 873 with diagrams

Baryon B: 122

Bond B: 454

Electricity (Electric charge) E: 191 with dia-
gram; (The electronic age) E: 198

Electromotive series E: 203

Electronics (Electronic circuits) E: 208; (Early
experiments) E: 215

Element, Chemical (Electron shells) E: 223

Faraday, Michael F: 28

Force (Kinds of force) F: 370

Gamma rays G: 23

Lepton L: 205

Magnetism (Magnetization) M: 59;

(Magnetism in atoms) M: 60b

Materials (The role of bonds) M: 301

Matter (Structure of matter) M: 310

Millikan, Robert Andrews M: 555

Nuclear energy (Atoms and nuclei) N: 581
with diagram

Oxidation O: 888

Particle accelerator (Uses of accelerators)
P: 184

Plasma P: 552

Quantum mechanics (Quantized orbits) Q: 6

Radiation (Radiation and radioactivity) R: 75;
(Particle radiation) R: 76; (Causes of radia-
tion) R: 78

Relativity (General relativity) R: 211

Rutherford, Ernest R: 569

Schrödinger, Erwin S: 187

Semiconductor (Semiconductor crystals)
S: 291Subatomic particle So: 936; (Kinds of sub-
atomic particles) So: 937

Television (The television camera) T: 121

Thomson, Sir Joseph John T: 264

Transistor (Transistor materials) T: 372

Vacuum tube (How a vacuum tube works)
V: 258X rays (Penetrating power) X: 541; (How X
rays are produced) X: 542

Zeeman effect Z: 592

Electron-antineutrino [subatomic particle]

Baryon B: 122

Electron beam

Electron microscope E: 204

Electron cloud model [physics]

Atom diagram on A: 875

Electron diffraction [physics]Molecule (Studying molecules) M: 693; picture
on M: 694**Electron gun** [electronics]Television (The television camera) T: 121; (The
picture tube) T: 124 with diagramVacuum tube (Kinds of vacuum tubes) V: 258-
259**Electron microscope** [instrument] E: 204 with
pictures

Botany picture on B: 508

Cell (Looking at a cell) C: 327; picture on
C: 338Electronics (Medicine and research) E: 207
with pictureMicroscope (Other kinds of microscopes)
M: 519Mineral (Determining the structure of crystals)
M: 571

Molecule (Studying molecules) M: 693

Zworykin, Vladimir Kosma Z: 614

Electron multiplier [electronics]

Image orthonon I: 79

Electron-neutrino [atomic particle]

Astronomy (Neutrino astronomy) A: 845

Lepton L: 205

Neutrino N: 154

Electron pair [physics]

Gamma rays G: 23

Electron probe microanalyzerMineral (Determining the structure of crystals)
M: 571**Electron shell** [physics]Atom (The electrons) A: 871; diagrams on
A: 872

Electron E: 204

Element, Chemical (Electron shells) E: 223

Matter (Structure of matter) M: 310-311

Radiation (Causes of radiation) R: 78

X rays (In X-ray tubes) X: 542

Electron theory [physics]Chemistry (Development of physical chem-
istry) C: 404-405

Lorentz, Hendrik Antoon L: 454

Electron transport chain [biochemistry]

Respiration (Cellular respiration) R: 261

Electron tube

Electronics (Electron tubes) E: 210

Vacuum tube V: 258

Electroneutrality, Principle of [chemistry]

Ion (Behavior of ions) I: 371

Electronic age

Electronics E: 206

Electronic atlas

Atlas (Electronic atlases) A: 868

Electronic benefit transfer

Food Stamp Program F: 344

Electronic calculatorArithmetic (Calculation tools) A: 669; picture
on A: 665

Calculator C: 21 with pictures

Electronics (How an electronic system works)
E: 208 with picture**Electronic card catalog** [reference]A Guide to Research Skills Research
Guide: 28-30**Electronic circuit**Electronics (Electronic circuits) E: 208 with pic-
ture; (How electronic circuits process
information) E: 213**Electronic combination lock**

Lock (Electric locks) L: 412

Electronic commerce See E-commerce in this
index**Electronic component**

Electronics E: 206 with pictures

Electronic control circuit

Ignition (The direct fire ignition system) I: 49

Electronic Control Company

Eckert, J. Presper, Jr. E: 50

Electronic controller

Electric car (How electric cars work) E: 165

Electronic digital computer

Computer Ci: 908

**Electronic, Electrical, Salaried, Machine, and
Furniture Workers, International Union of**

Labor movement (table) L: 8

Electronic encyclopedia

Encyclopedia (Today's encyclopedias) E: 268b

Electronic engineering

Electronics (Careers in electronics) E: 214

Electronic flash [photography]

Edgerton, Harold Eugene E: 76

Photography (Direction) P: 413-414; (Artificial
lighting devices) P: 419 with picture**Electronic funds transfer**

Bank (Electronic banking) B: 89

Electronic game See Video game in this index**Electronic ignition**Ignition (The conventional electronic ignition
system) I: 49-50 with diagram**Electronic imagesetting**

Printing (Typesetting) P: 797

Electronic Labyrinth [film]

Lucas, George L: 513

Electronic mail See E-mail in this index**Electronic mailbox** [computer file]

E-mail E: 2

Electronic meter

Water meter W: 135

Electronic money

Bank (Electronic banking) B: 89-90

Electronic music E: 204

Berio, Luciano B: 259

Classical music (Electronic music) Ci: 650 with
picture

Jazz (Recent developments) J: 74

Music (Electronic instruments) M: 950

Synthesizer So: 1068

Electronic navigation

Log (Electronic navigation devices) L: 421

- Navigation (Electronic navigation) N: 71 *with picture*
- Electronic newspaper**
Newspaper (Recent trends) N: 386-387
- Electronic Numerical Integrator And Computer** See ENIAC *in this index*
- Electronic organ** (musical instrument)
Organ (Electronic organs) O: 852
- Electronic page** [publishing]
Encyclopedia (Preparing for the press) E: 267
- Electronic printing**
Printing (Digital printing) P: 801
- Electronic publishing** E: 205
Internet (Publishing) I: 350a
Publishing (Reference books) P: 868
- Electronic sewing machine**
Sewing machine (Kinds of sewing machines) S: 333
- Electronic signature**
Contract C: 1023
- Electronic stroboscope** (instrument)
Edgerton, Harold Eugene E: 76
- Electronic support aircraft**
Aircraft, Military (Special-mission aircraft) A: 203
- Electronic surveillance**
Radio (Special uses) R: 85
Wiretapping W: 345
- Electronic typewriter**
Typewriter (Kinds of typewriters) T: 538
Word processing W: 403
- Electronic watch**
Watch (Electronic watches) W: 114 *with pictures*
- Electronics** E: 206 *with pictures*
Computer (The first electronic computers) C: 924b
Dallas (Manufacturing) D: 15 *with picture*
Electricity (Controlling electric current) E: 195
Electronic music E: 204
Industrial arts (Industrial arts courses) I: 242-243
Invention (The early and middle 1900's) I: 363
Massachusetts (The mid-1900's) M: 293
McLuhan, Marshall M: 343
Semiconductor S: 291
Transistor T: 372
See also the list of Related Articles in the Electronics article and Circuit, Electronic, *in this index*
- Electronics industry**
Electronics (The electronics industry) E: 214
- Electronvolt** [unit of measure]
Cosmic rays C: 1076
Particle accelerator (How accelerators work) P: 184
Subatomic particle (Elementary particles) So: 937
- Electrophoresis** E: 218
Biochemistry (Investigative methods) B: 310-311
- Electroplaque** [muscle cell]
Electric eel E: 168
- Electroplating** (industrial process) E: 218 *with diagram*
Aluminum (Electrochemical finishes) A: 396
Electrotyping E: 219
Gold (Electrowinning) G: 253
Iron and steel (Finishing) I: 447-448
Phonograph (How phonograph records are made) P: 401
Silver (Extracting and refining silver) S: 465
- Electroscope** [instrument] E: 218
Cosmic rays (Cosmic ray research) C: 1077
- Electroshock** See Electroconvulsive therapy *in this index*
- Electrostatic attraction** [electricity]
Induction, Electric I: 240
- Electrostatic copying**
Copying machine (Electrostatic copying) C: 1045-1046 *with diagrams*
Electricity (Static electricity) E: 192
- Electrostatic generator**
Van de Graaff generator V: 279
- Electrostatic microphone**
Microphone (Capacitor microphones) M: 517
- Electrostatic precipitator**
Air cleaner (Types of air cleaners) A: 175-176
Air conditioning (Cleaning the air) A: 177-178; *picture on A: 180*
Deodorizer D: 148
Electricity (Static electricity) E: 192
Electrostatic reciprocator [machine]
Automobile *picture on A: 956*
- Electrotyping** [printing] E: 219
Electroplating E: 218
- Electroweak theory** [physics]
Subatomic particle (The Standard Model) So: 938
- Electrowinning** (industrial process)
Gold (Electrowinning) G: 253; *diagram on G: 250*
- Electrum** [metal]
Gold (Gold deposits) G: 252
Money (The first coins) M: 705
- "Elegiac Stanzas Suggested by a Picture of Peele Castle"** [poem by Wordsworth]
Wordsworth, William (Later career) W: 404
- Elegiac verse** [poetry]
Greek literature (Lyric poetry) G: 377
- Elegies** [poems by Donne]
Donne, John (His poetry) D: 308
- Elegies of Chu** [poems]
Chinese literature (Beginnings) C: 511
- Elegies to the Spanish Republic** (paintings by Motherwell)
Motherwell, Robert M: 843 *with picture*
Painting (Abstract painting) P: 34; (Composition) P: 35
- Elegy** [poetry]
Greek literature (Lyric poetry) G: 377
Poetry (Lyric poetry) P: 591
- "Elegy Written in a Country Churchyard"** [poem by Gray]
Gray, Thomas G: 334 *with picture*
- Elektra** [opera by Strauss]
Strauss, Richard So: 922
- Elektron**
Amber A: 404
- Element** [mathematics]
Determinant D: 166
Set theory S: 321
- Element, Chemical** E: 219 *with picture*
Atom A: 870; (The properties of atoms) A: 871 *with diagrams*
Chemistry (Fundamental ideas of chemistry) C: 398-399
Compound C: 906
Geochemistry G: 90
Isotope I: 476
Life (The chemical basis of life) L: 277
- Element 102** See Nobelium *in this index*
- Element 104** See Rutherfordium *in this index*
- Element 105** See Dubnium *in this index*
- Element 106** See Seaborgium *in this index*
- Element 107** See Bohrium *in this index*
- Element 108** See Hassium *in this index*
- Element 109** See Meitnerium *in this index*
- Element 110** E: 224
Transuranium element T: 401
- Element 111** E: 224
Transuranium element T: 401
- Element 112**
Transuranium element T: 401
- Element 114**
Transuranium element T: 401
- Element 116**
Transuranium element T: 401
- Element 118**
Transuranium element T: 401
- Elementary and Secondary Education Act** [1965] E: 224
Education (Development of U.S. education) E: 102-104
Parent-teacher organizations (Local parent advisory committees) P: 158
- Elementary backstroke**
Swimming (The basic strokes) So: 1043-1044
- Elementary particle** [physics]
See also Subatomic particle *in this index*
String theory So: 929
Subatomic particle So: 936; (Elementary particles) So: 937
- Elementary school** E: 224 *with pictures*
Careers (Teaching) C: 231
Early childhood education (Formal education programs) E: 15
Education (The organization of U.S. education) E: 89
Language arts L: 67
Library (Elementary school libraries) L: 244
Pet (Pets in school) P: 320
- Physical education (Elementary school programs) P: 432 *with picture*
Rhythm band R: 320
School (Elementary schools) S: 181 *with picture*
Teaching (Teaching as a profession) T: 65; (Becoming a teacher) T: 67-68; (Job opportunities) T: 68
See also the Education section of specific countries, such as France (Education)
- Elementary Treatise on Chemistry** [book by Lavoisier]
Lavoisier, Antoine Laurent L: 129
- Elements** [book by Euclid]
Euclid E: 376
Geometry (Greek geometry) G: 105
Mathematics (The Greeks) M: 306
Number theory N: 605
- Elements, The** [painting by MacDonald]
Group of Seven *picture on G: 403*
Painting (Composition) P: 35
- Elements of Newton's Philosophy** [book by Voltaire]
Châtelet, Marquise Du C: 387
- Elephant** [animal] E: 226 *with pictures*
Animal pictures on A: 469, A: 477, A: 486
Circus (At the circus) C: 562 *with picture*
Conservation *picture on C: 989*
Ear (The ears of animals) E: 12-13 *with picture*
Endangered species (Wildlife trade) E: 269-270
Heart (Birds and mammals) H: 146-147
Ivory I: 521
Mammal *diagram on M: 122; (table) M: 128 with picture*
Mastodon M: 298
Zoo (Interesting facts about zoo animals) Z: 605
- Elephant, Order of the** [award]
Knighthood, Orders of (Honorary orders) K: 347 *with pictures*
- Elephant bird** [extinct bird] E: 232 *with picture*
- Elephant Butte Dam** [Rio Grande, New Mexico]
Rio Grande (Upper course) R: 346 *with map*
Rio Grande Project R: 347
- Elephant Butte Reservoir** [lake, New Mexico]
New Mexico (Land regions) N: 266-268
- Elephant man's disease** See Neurofibromatosis *in this index*
- Elephant-nose mormyrid** [fish]
Fish (Bony fish) F: 147; *picture on F: 157*
- Elephant seal** [sea animal]
Seal (The body of a seal) S: 266; (Birth) S: 266; (Food) S: 267; (Diving) S: 267
- Elephant shrew** [animal] E: 232 *with picture*
Mammal (table) M: 129 *with picture*
- Elephanta Caves**
India (Architecture and sculpture) I: 119
- Elephantiasis** [disease] E: 233
Edema E: 76
Filaria F: 99
- "Elephant's Child, The"** [story by Kipling]
Limpopo River L: 309
- Elephant's-ear** [plant] E: 233 *with picture*
- Eleusinian Mysteries** [religion]
Demeter D: 119
Mysteries M: 972
- Eleuthera** [island, Bahamas]
Bahamas (Land and climate) B: 29 *with map*
- Eleutherius, Saint** [pope]
Pope (table) P: 666
- Elevated railroad** E: 233 *with picture*
Chicago (Downtown Chicago) C: 420-421; *picture on C: 428*
Transit T: 374
- Elevating-platform truck**
Fire department (Fire trucks) F: 125-126 *with picture*
- Elevation** [measurement]
Bench mark B: 247
Climate (The role of altitude) C: 676
Sea level S: 262
- Elevator** [airplane]
Airplane (The tail) A: 214 *with pictures; picture on A: 214; (Basic movements and controls) A: 222-223 with diagrams*
Airship (Control) A: 251
Glider (The tail assembly) G: 229
- Elevator** [machine] E: 233 *with diagram*
Otis, Elisha Graves O: 870
Skyscraper (Service areas) S: 498

Elevator, Grain See Grain elevator in this index

Elevator stage

Theater (Changing scenery) T: 240

11-plus examination

England (Education) E: 297

Eleventh Amendment

[U.S. Constitution]
Constitution of the United States C: 1013

Elf [Norse mythology] E: 235

ELF [political movement] See Eritrean Liberation Front in this index

Elf owl [bird]

Animal picture on A: 483

Bird (Birds of the desert) B: 339 with picture

Owl O: 883 with picture; picture on O: 885

Elfreth's Alley [street]

Philadelphia (Downtown Philadelphia) P: 359

Elfstedentocht [race]

Netherlands (Holidays and recreation) N: 141

Elgar, Sir Edward William [British composer]

E: 235

El Gezira [region, Sudan]

Sudan (Central Sudan) So: 954

Elgin, Earl of [1766-1841, British diplomat]

Elgin Marbles E: 236

Elgin, Earl of [1811-1863, British statesman]

E: 236

Elgin Marbles [sculpture] E: 236

Parthenon P: 183

El Greco See Greco, El in this index

El Guettar, Battle of [1943]

Patton, George Smith, Jr. (African invasion)
P: 199

Elhuyer, Fausto de [Spanish chemist]

Tungsten T: 487

Elhuyar, Juan José de [Spanish chemist]

Tungsten T: 487

Elia: A Mystery Play of the Sufferings of Israel

[play by Sachs]

Sachs, Nelly S: 5

Elia [pen name] See Lamb, Charles in this index

Eliena skipper [insect]

Butterfly picture on B: 734

Eliezer, Israel ben See Ba'al Shem Tov in this index

Elijah [Biblical figure] E: 236

Malachi, Book of M: 95

Elijah [music by Mendelssohn]

Mendelssohn, Felix (His music) M: 399-400

Elijah Muhammad See Muhammad, Elijah in this index

Elimination [physiology] E: 236

Colostomy C: 850

Drug (Elimination from the body) D: 354

Fiber, Dietary F: 88

Incontinence I: 105

Space exploration (Meeting basic needs in space) So: 703

Eliot, Gertrude Belle [American biochemist]

E: 236

Eliot, Charles William [American educator]

E: 237

Harvard University (History) H: 80-81

Eliot, George [British author] E: 237 with portrait

English literature (Later Victorian literature)

E: 321

Novel (Britain) N: 573

Eliot, John [American missionary] E: 237

Eliot, Lewis [fictional character]

Snow, C. P. S: 539

Eliot, T. S. [British author] E: 237 with portrait

American literature (Modernist poetry) A: 421

English literature (Poetry between the wars)

E: 322

Metaphysical poets M: 430

Poetry (Poetry of the 1900's) P: 597

Elipctic plane [astronomy]

Oort cloud O: 788

Elisey [poem by Maykov]

Russian literature (The classical movement)
R: 559-560

Elisha [Biblical figure] E: 238

Elision [poetry]

Poetry (table) P: 594

Elissa [legendary figure] See Dido in this index

Elite [sociology]

Panama (Way of life) P: 116-117

Pareto, Vilfredo P: 159

Elxir of life

Alchemy A: 333

Eliza [literary figure]

Uncle Tom's Cabin U: 20

Elizabeth [empress of Russia]

Russia (Music) R: 536; (table: Czars and

empresses) R: 549

Seven Years' War (In Europe) S: 328

Elizabeth [wife of Francis Joseph]

Francis Joseph F: 481

Elizabeth [wife of Albert I]

Albert I A: 311

Elizabeth [city, New Jersey] E: 238

Elizabeth [ship]

Drake, Sir Francis (Voyage around the world)

D: 321

Elizabeth I [queen of England] E: 238 with portrait

Boleyn, Anne B: 440

Church of England (History) C: 543

Drake, Sir Francis D: 320

Duel D: 378

England (The reign of Elizabeth I) E: 307 with

picture

Henry VIII [king of England] H: 188

India (The coming of the Europeans) I: 130

Knox, John (Later career) K: 358

Leicester, Earl of L: 186

Mary I M: 239

Mary, Queen of Scots (Her death) M: 239

New Year's Day (Early customs) N: 289

Protestantism (The conservative reform move-

ments [the 1500's]) P: 834

Raleigh, Sir Walter (Raleigh and Elizabeth I)

R: 131

Shakespeare, William picture on S: 350

Spanish Armada (Background to battle)

So: 755

Tudor, House of T: 481

Virginia V: 398; (Early days) V: 418

Elizabeth II [queen of United Kingdom] E: 239

with pictures

Australia (Government) A: 895

Canada, History of picture on C: 154

Canada, Government of C: 130

Charles, Prince C: 382

Diefenbaker, John George picture on D: 197

England (Government) E: 292-293

Flag (Flags of individuals) F: 195 with picture;

picture on F: 214

Knighthood, Orders of picture on K: 347

New Zealand (Government) N: 346

Penny picture on P: 271

Philip, Prince P: 371

Trudeau, Pierre Elliott picture on T: 463

United Kingdom picture on U: 50

Elizabeth, Saint [mother of John the Baptist]

E: 241

Elizabeth, the Queen Mother

Elizabeth II (Early life) E: 239

George VI G: 108

Elizabeth and Essex [book by Strachey]

Strachey, Lytton So: 917

Elizabeth City State University

North Carolina, University of N: 495

Elizabeth Islands [Massachusetts]

Massachusetts (Islands) M: 282

Elizabeth of York [wife of]

Henry VII [of England] H: 187

Elizabeth the Queen [play by Anderson]

Anderson, Maxwell A: 452

Elizabethan Age [English history]

Drama (Elizabethan, Jacobean, and Caroline

drama) D: 331-332 with picture

Elizabeth I E: 238

England (The arts) E: 298

English literature (The beginning of Modern

English) E: 316

Shakespeare, William S: 345; (England of

Shakespeare's day) S: 350; (The

Elizabethan theater) S: 352 with pictures

Elizabethan Poor Law [1601]

Welfare (Early welfare laws) W: 191

Elizabethan revival

Furniture (Historical revivals) F: 581

Elizabethan theater

Drama (Elizabethan theaters) D: 331

English literature (Elizabethan drama) E: 317

Globe Theatre G: 233

Shakespeare, William (The Elizabethan the-

ater) S: 352 with pictures

Elizabethtown [New Jersey]

Elizabeth E: 238

Elk [animal] E: 241 with picture

Moose M: 798

Elk Hills [California]

Teapot Dome T: 72

Elk Island National Park [Alberta]

Canada (table: National parks and national park

reserves) C: 113

Elkington, Steve [American golfer]

Golf (PGA Championship) G: 265

Elkins, Stephen B. [American government official]

Harrison, Benjamin (table) H: 72

Elkins Act [1903]

Roosevelt, Theodore (Domestic problems)

R: 470

Elko

Nevada (table: Average monthly weather)

N: 169

Elks, Benevolent and Protective Order of

E: 242

Elks National Foundation

Elks, Benevolent and Protective Order of

E: 242

Elks National Home [Bedford, Virginia]

Elks, Benevolent and Protective Order of

E: 242

Ellerbe, William H. [American political leader]

South Carolina (table) So: 658

Ellery, William [American patriot] E: 242

Ellery Queen's Mystery Magazine [magazine]

Queen, Ellery Q: 39

Ellesmere Island [Northwest Territories] E: 242

Nunavut (Land and resources) N: 608 with

map

Peary, Robert Edwin ("The Pole at last!")

P: 224

Ellice Islands [islands, Pacific]

Gilbert Islands G: 190

Kiribati (History) K: 335

Tuvalu T: 527

Ellicott, Andrew [American surveyor]

Washington, D.C. (Building the city) W: 85-86

Elling, Lars [Norwegian illustrator]

Literature for children picture on L: 354

Ellington, Buford [American political leader]

Tennessee (table) T: 152

Ellington, Duke [American musician] E: 242

with picture

African Americans picture on A: 136k

Jazz (The 1920's) J: 70 with picture; (The

swing era) J: 70-71 with picture

Popular music picture on P: 670

Ellington, Edward Kennedy See Ellington,

Duke in this index

Elliot, Gilbert John Murray Kynynmond

[British statesman]

Minto, Earl of M: 613

Elliot Lake

Ontario (The mid-1900's) O: 786

Elliott [ship]

Destroyer picture on D: 162

Elliott, Andrew C. [Canadian political leader]

British Columbia (table) B: 627

Elliott, Bill [American race car driver]

Automobile racing (table: NASCAR Winston

Cup champions, 1988) A: 981

Elliott Bay

Seattle (The city) S: 272; (History) S: 275-276;

picture on S: 275

Ellipse [mathematics] E: 243 with diagrams

Astronomy (Sun-centered theories) A: 835

Climate (Changes in the earth's orbit) C: 677

Kepler, Johannes K: 305

Orbit O: 819 with diagram

Planet (How planets move) P: 508-509

Ellipse, The [Washington, D.C.]

Washington, D.C. map on W: 76; picture on

W: 82

Elliptical galaxy

Galaxy (Shapes of galaxies) G: 8a with picture

Elliptical geometry

Geometry (Non-Euclidean geometry) G: 104

Elliptical orbit

Planet (How planets move) P: 508-509 with

diagram

Space exploration (Kinds of earth orbits) dia-</

- Ellis, William Webb** [English rugby player]
Rugby football (History) R: 513
- Ellis Island E: 243 with picture**
Immigration (The first wave) I: 81-82 with picture
Races, Human picture on R: 59
- Ellis Island Immigration Museum** [New York]
Ellis Island E: 244 with picture
- Ellis-Van Creveld syndrome** [disorder]
Evolution (Genetic drift) E: 429
- Ellison, Harlan** [American author] E: 244
- Ellison, Ralph** [American author] E: 244
African American literature (The 1900's)
A: 136a
American literature (Fiction and other prose)
A: 424 with portrait
Novel (After World War II) N: 574
- Ellora** [India]
India (Architecture and sculpture) I: 119 with picture
- Ellsworth, Lincoln** [American explorer] E: 244
Antarctica (Exploration by air) A: 537
Exploration (Arctic exploration) E: 449-450
- Ellsworth, Oliver** [American jurist] E: 244
- Ellsworth, William W.** [American political leader]
Connecticut (table) Ci: 967
- Elm** [tree] E: 244 with picture
Dutch elm disease D: 392
Tree pictures on T: 421
Wood picture on W: 389
- El Malpais National Monument** [New Mexico]
National Park System (table: National monuments) N: 50
- Elmen, G. W.** [American engineer]
Permalloy P: 290
- Elmendorf Air Force Base** [Alaska]
Anchorage A: 450
- Elmer Gantry** [book by Lewis]
Lewis, Sinclair L: 221
- Elmira System**
Prison (During the 1800's) P: 807
- El Misti** [volcano, Peru] E: 245
- El Morro Fortress** [San Juan]
Puerto Rico (Places to visit) P: 877 with picture
- El Morro National Monument** [New Mexico]
National Park System (table: National monuments) N: 50
- El Niño** [current] E: 245 with maps
Atlantic Ocean (Climate) A: 864-866
Climate (Changes in ocean circulation)
Ci: 676d
Ocean (Discoveries) O: 664
Pacific Ocean (Climate) P: 14
South America (Climate) So: 630-631
- El norte** [weather]
Norther N: 520
- ELN** See National Liberation Army in this index
- Elodea** [plant] E: 246
- Elohim** [Hebrew god] E: 246
God G: 243
Jehovah J: 88
- El Paso** [city, Texas] E: 246
Juárez J: 178
- El Petén** [Guatemala]
Maya (The Preclassic Period) M: 325
- Elrod, Samuel H.** [American political leader]
South Dakota (table) So: 680
- Elsa** [lioness]
Adamson, Joy A: 45
- El Salvador** [country] E: 248 with pictures and maps
See also Central America in this index
Hispanic Americans (Central American migration) H: 254
Romero, Oscar Arnulfo R: 449
War (Stalemates) W: 25
World War II (table: The Allies) W: 471
- El Segundo blue butterfly**
Endangered species picture on E: 271
- Ellsler, Fanny** [Austrian dancer]
Ballet (Romantic ballet) B: 51
- El Teniente** [mine, Chile]
Chile (Mining) C: 466
- Ethron, Leo** [American political leader]
Iowa (table) I: 391
- Elton, Charles Sutherland** [British biologist]
E: 253
- El Toro Marine Corps Air Station** [California]
E: 253
- Elul** [month]
Calendar (The Hebrew calendar) C: 29
- Elver** [fish]
Eel (Life cycle) E: 114-115
- Elves** See Elf in this index
- Elvis Presley Birthplace** [Tupelo]
Mississippi (Places to visit) M: 632 with picture
- Ely, Eugene** [American aviator]
Navy, United States ("The Great White Fleet")
N: 88
- Ely, Joseph B.** [American political leader]
Massachusetts (table) M: 288
- Ely Cathedral**
Norman architecture picture on N: 455
- Élysée Palace**
Paris (Famous buildings) P: 163-164 with map
- Elysian Fields** [Greek mythology] See Elysium in this index
- Elysium** [Greek mythology] E: 253
Hades H: 4
- Elytis, Odysseus** [Greek poet]
Greek literature (Modern Greek literature)
G: 378
Nobel Prizes (Literature: 1979) N: 446
- Elyton Land Company** [U.S. history]
Birmingham B: 375
- Elytra** [entomology]
Beetle 8: 214; (The thorax) 8: 216 with diagram
- El Yunque** [mountain, Puerto Rico]
Puerto Rico (Places to visit) P: 877; (Climate)
P: 880 with picture
- Elzevir, Louis** [Dutch publisher] E: 253
- Emancipation** [U.S. history]
Proslavery movement P: 828
Slavery (The decline of slavery) S: 504
- Emancipation Day** [holiday]
August A: 886
- Emancipation Proclamation** [U.S. history]
E: 253 with pictures
African Americans (The Civil War) A: 136g-136h with picture
Civil War (The Emancipation Proclamation)
Ci: 621
Executive order E: 436
Lincoln, Abraham (The Emancipation Proclamation) L: 323
United States, History of the (The Emancipation Proclamation) U: 175
- Emancipator, The** [newspaper]
Tennessee T: 135 with picture
- Emanuel, David** [American political leader]
Georgia (table) G: 130
- Emanuel, Max** [Bavarian prince]
Blenheim, Battle of B: 400
- Embalming** [funeral] E: 255
Funeral customs (Preparation of the body)
F: 557
Mummy M: 925
- Embankment dam**
Dam (Embankment dams) D: 18
- Embarcadero**
San Francisco (Downtown San Francisco)
S: 92-93
- Embargo** [law] E: 255
Bush, George Herbert Walker (Persian Gulf War) B: 721
Embargo Act E: 256
International relations (Nonmilitary sanctions)
I: 345
Iraq (Recent developments) I: 415
Sanctions, Economic S: 106
United States, History of the (Jefferson and foreign policy) U: 164
- "Embargo, The"** [poem by Bryant]
Bryant, William Cullen (His early works) B: 655
- Embargo Act** [1807] E: 256
Jefferson, Thomas (Commercial retaliation)
J: 86
Maine (The Revolutionary War) M: 89
Massachusetts (Progress as a state) M: 292
War of 1812 (American reaction) W: 29
- Embarkation for Cythera, The** [painting by Watteau] See *Island of Cythera, The* in this index
- Embassy** [diplomacy]
Ambassador A: 404
Diplomacy (Diplomatic duties) D: 216
State, Department of So: 858
- Embdn** [bird]
- Goose (Kinds of geese) G: 270 with picture
- Embedded computer**
Computer (Embedded computers) Ci: 910
- Emberley, Ed** [American artist]
Caldecott Medal (table: 1968) C: 26
- Embezzlement** [law] E: 256
- Embioptera** [entomology]
Insect (table) I: 300
- Emblem**
Girl Scouts G: 196 with picture; (Pathfinders)
G: 199 with picture
Symbol So: 1065
- Embolism** [disorder] E: 256
Diving, Underwater (Dangers of underwater diving) D: 246
Phlebitis P: 391
Stroke (Causes) So: 930
- Embolismic month**
Calendar (The Hebrew calendar) C: 29
- Embolus** [physiology]
Embolism E: 256
- Embossing** [decoration] E: 256
Aluminum (Mechanical finishes) A: 396
- Embrace at Maipú, The** [painting by Subercaseaux]
Argentina picture on A: 657
- Embree, Elihu** [American journalist]
Tennessee T: 135
- Embroidered rug**
Rugs and carpets (Other methods) R: 516
- Embroidery** [handicraft] E: 256 with picture
Crewel Ci: 1129 with picture
Mexico picture on M: 457
Needlepoint N: 118 with pictures
Sampler S: 81 with picture
- Embryo** [biology] E: 257
Abortion A: 14
Animal (Sexual reproduction) A: 496-497
Baby (The developing baby) B: 4
Corn (How the plant develops) Ci: 1057 with diagram
Cotyledon Ci: 1095
Egg (How embryos develop) E: 117-118
Embryology E: 257
Evolution (Embryology) E: 431
Fish (How fish live) F: 165 with picture
Germination G: 173
Growth (Early development) G: 404-405
Haeckel, Ernst Heinrich H: 5
Heart (Interesting facts about the heart)
H: 133 with picture
Plant P: 517; (Seeds) P: 531-532 with pictures; (In seed plants) P: 532-534 with diagrams; (Germination) P: 536
Pregnancy P: 734a
Reproduction, Human R: 244 with picture; (Development of the embryo) R: 246-247 with diagrams
Seed (The parts of a seed) S: 281 with diagrams
Stem cell So: 889
- Embryo transfer** [biology]
Breeding (Animal breeding) B: 592-593
Infertility (Treatment) I: 265
- Embryogenesis** [biology]
Embryology E: 257
- Embryology** [biology] E: 257
Baer, Karl Ernst von B: 25
Biology (table) B: 317
Evolution (Embryology) E: 431
Zoology (What zoologists study) Z: 610
- Emerald** [gem] E: 257
Colombia (Mining) Ci: 782
Gem picture on G: 78; (Value of gems) G: 79
South America (Mining) So: 635
- Emerald Buddha, Temple of the** [Bangkok]
Bangkok (The city) B: 77 with picture
- Emerald cuckoo**
Bird (Birds of Africa) B: 348 with picture
- Emerald Isle** [nickname, Ireland] E: 258
Ireland I: 416 with picture
- Emerald toucanet** [bird]
Toucan picture on T: 345
- Emerald tree boa** [snake]
Boa B: 426
- Emergency**
Civil defense Ci: 605
Emergency room E: 258
Fire department F: 123
First aid F: 136 with pictures
Telephone (Operator services) T: 98

286 Emergency Banking Act

Trauma center T: 405
Emergency Banking Act [1933]
 New Deal (Helping savers and investors) N: 200
Emergency brake
 Brake (Mechanical brakes) B: 560
Emergency core cooling system
 Nuclear energy (Hazards and safeguards) N: 587-588
Emergency management See Civil defense in this index
Emergency Management Agency, Federal [U.S.] See Federal Emergency Management Agency in this index
Emergency Medical Services E: 258
 Fire department (Emergency medical operations) F: 124
 Trauma center T: 405
Emergency medical technician
 Emergency Medical Services E: 258
Emergency Medical Technician-Paramedic
 Medicine [Other careers in medicine] M: 371; picture on M: 377
 Paramedic P: 153
Emergency medicine
 Emergency Medical Services E: 258
Emergency operating center
 Civil defense (How civil defense is administered) Ci: 605
Emergency Planning Canada
 Civil defense (Civil defense in other countries) Ci: 606
Emergency powers
 President of the United States (Chief executive) P: 764
Emergency room [medicine] E: 258 with picture
 Hospital (Hospital units) H: 372 with picture
Emergent [tree]
 Rain forest (Structure and growth) R: 126a
Emergent literacy
 Reading (Developing good readers) R: 159-160
Emerson, Frank C. [American political leader]
 Wyoming (table) W: 532
Emerson, John [American doctor]
 Dred Scott Decision (The background of the case) D: 345
Emerson, Lake, and Palmer [musical group]
 Rock music (Rock goes pop) R: 379
Emerson, Lee E. [American political leader]
 Vermont (table) V: 333
Emerson, Ralph Waldo [American author]
 E: 258
 American literature (Nonfiction prose) A: 418 with portrait
 April [Quotations] A: 577
 Brown, John (Harpers Ferry) B: 643-644
 Essay (Formal essays) E: 359
 New Thought N: 288
 Revolutionary War in America R: 270
 Thoreau, Henry David (His life) T: 265-266
 Transcendentalism T: 371
 Unitarians (History) U: 42-43
Emery [rock] E: 259
Emetic [medication] E: 259
Emetic russula [mushroom]
 Mushroom picture on M: 944
Emetine [chemical]
 Ipecac I: 397
Emf See Electromotive force in this index
Emi Koussi [mountain, Chad]
 Chad (Land and climate) C: 366-367
Emigration
 Immigration I: 80
 Ireland (Ancestry and population) I: 418
Émigrés [French history] E: 260
 French Revolution (The revolution begins) F: 525; (The Legislative Assembly) F: 526
Émile [book by Rousseau]
 Rousseau, Jean-Jacques (His ideas) R: 492
Emin Pasha [German explorer] E: 260
 Stanley and Livingstone (Stanley's explorations) So: 837-838
Eminent domain [law] E: 260
 City planning (Governmental authority) Ci: 601
 Urban renewal (The role of government) U: 220
Eminent Victorians [book by Strachey]
 Biography (Modern biography) B: 314
 Strachey, Lytton So: 917
Emir [title]
 Bahrain (Government) B: 29

Kuwait (Government) K: 395
 United Arab Emirates (Government) U: 43
Emirates Tower One [Dubayy, United Arab Emirates]
 Skyscraper (table) S: 498
Emission control
 Air pollution (Control of air pollution) A: 199
 Automobile (Environmental impact) A: 949; (The exhaust system) A: 952
 Global warming (Emissions targets) G: 232b
Emission line [physics]
 Astronomy (Optical astronomy) A: 838-840
 Star (Color and temperature) So: 843-844
 Sun (Analyzing electromagnetic radiation) So: 983; (History of modern solar study) So: 986
 Telescope (Analyzing spectra) T: 105
Emission nebula [astronomy]
 Nebula (Diffuse nebulae) N: 116
Emission permit
 Environmental pollution (Government action) E: 335
Emission reduction unit
 Global warming (Agreement on global warming) G: 232b
Emission standards [law]
 Automobile (Environmental impact) A: 949
Emitter [electronics]
 Transistor (How transistors work) T: 373 with diagram
 Vacuum tube (How a vacuum tube works) V: 258
Emma [queen of the Netherlands]
 Wilhelmina W: 306
Emma [book by Austen]
 Austen, Jane A: 892
 English literature (Romantic prose) E: 320
 Literature (Judging literature) L: 352-353
Emma Willard School [Troy, New York]
 Willard, Emma Hart W: 307
Emmentaler [cheese]
 Cheese (Kinds of cheese) C: 392
Emmerson, Henry R. [Canadian political leader]
 New Brunswick (table) N: 196
Emmerson, Louis L. [American political leader]
 Illinois (table) I: 71; (Prohibition and the Great Depression) I: 75
Emmet, Robert [Irish patriot] E: 260 with portrait
Emmett, Daniel Decatur [American composer]
 E: 260
 "Dixie" D: 255
Emmy [award]
 Television (Television awards) T: 116
Emollient [cosmetic]
 Lanolin L: 68
Emory University E: 260
Emotion [psychology] E: 260
 Allergy (Emotional factors) A: 373
 Brain (In producing emotions) B: 555
 Child (Special problems of childhood) C: 451
 Clothing (Communication) Ci: 688-689
 Lie detector L: 271
 Literature (Theme) L: 353
 Perception (Learning, emotion, and motivation) P: 283
 Trauma T: 404
Emotional cycle
 Biorhythm B: 326
Emotional lability [disorder]
 Learning disabilities (Types) L: 165
Emotional memory [acting]
 Theater (Observation and imagination) T: 238
Emotionally disturbed children
 Special education (Children with emotional disturbances) So: 771
Empathy
 Sales (Characteristics needed) S: 65
Empedocles [Greek philosopher] E: 261
 Air (The study of air) A: 174
 Chemistry (Beginnings) C: 400
 Color (Early theories of color vision) Ci: 825
 Geology (The ancient Greeks) G: 97
 Pre-Socratic philosophy (The teachings of Parmenides) P: 772-773
Empennage
 Airplane (The tail) A: 214
 Glider (The tail assembly) G: 229
Emperor [grape]
 Grape (European grapes) G: 319-320
Emperor [title] E: 261

Emperor Franz Joseph at a Ball in Vienna
 [painting by Gause]
 Dance picture on D: 29
Emperor Jones, The [play by O'Neill]
 O'Neill, Eugene Gladstone (His plays) O: 762
Emperor penguin [bird]
 Animal (Incubation) A: 498-500; picture on A: 484
 Bird (Birds of the ocean and the Antarctic) B: 344 with picture
 Penguin (The body of a penguin) P: 238 with picture
Emperor snapper [fish]
 Fish picture on F: 155
"Emperor Waltz, The" [music by Strauss]
 Strauss, Johann, Jr. So: 921
Emphatic form [grammar]
 Conjugation Ci: 951
 Tense T: 171
Emphysema [disease] E: 261 with diagrams
 Bronchodilator B: 636
 Smoking (Why smoking is dangerous) S: 520
Empire [apple]
 Apple (table) A: 571 with picture
Empire [political unit] E: 262
 Indian, American (Empires and states) I: 144
"Empire Builder"
 Hill, James Jerome H: 231
Empire State
 New York N: 291; (Growing prosperity) N: 316
Empire State Building [New York City] E: 262
 New York City (A visitor's guide) N: 338
 Skyscraper (table) S: 498 with picture
Empire State of the South [nickname]
 Georgia G: 112
Empire State Plaza
 Albany (Description) A: 309
 New York picture on N: 291
Empire style [clothing]
 Clothing (The 1700's) Ci: 701-702
Empire style [furniture]
 Furniture (The Empire style) F: 580 with picture
 White House picture on W: 288
Empiricism [philosophy] E: 262
 Bacon, Francis B: 18
 Hume, David H: 432
 Locke, John (His philosophy) L: 413
 Philosophy (Epistemology) P: 383-384; (Modern philosophy) P: 387-388
 Positivism P: 697
 Psychology (Beginnings) P: 849
Employee benefits See Benefit in this index
Employee relations [business] See Personnel management in this index
Employee Retirement Income Security Act [1974]
 Bentsen, Lloyd Millard, Jr. B: 255
 Pension (History) P: 274
Employee Stock Ownership Plan E: 263
Employer of last resort [economics]
 Unemployment (Fighting unemployment) U: 23
Employers' liability
 Workers' compensation W: 405
Employment
 For a list of articles on career opportunities, see the Related articles in the Careers article
 Affirmative action A: 91
 Career education C: 213
 Careers C: 214
 City Ci: 574
 Civil service Ci: 612
 Cooperative education Ci: 1037
 Disabled (In community life) D: 220
 Drug testing D: 366
 Employment Service, United States E: 263
 Family (Changes) F: 23 with picture
 Job Corps J: 129
 Labor, Department of (Functions) L: 2
 Old age (Employment and other activities) O: 739
 Women's movements (On women's lives) W: 387
Employment agency E: 263
 Careers (Finding job opportunities) C: 217-218
Employment and Training Administration [U.S.]
 Employment Service, United States E: 263
Employment Assistance Program

- Indian, American (In the United States) **I**: 179
- Employment interview**
Careers (Being interviewed) **C**: 219
- Employment Service, United States** **E**: 263
Disabled (table) **D**: 222
Labor force (The government and the labor force) **L**: 3
- Employment Standards Administration** [U.S.]
Fair Labor Standards Act **F**: 8
- Emporia Gazette** [newspaper]
White, William Allen **W**: 285
- Empower America** [organization]
Kemp, Jack French **K**: 258
- Empresario**
Texas (American settlement) **T**: 206
- Empress** [title]
Emperor **E**: 261
- Empress Hotel**
Victoria **V**: 357
- Empress of Heaven** [Taoist deity]
Religion *picture on* **R**: 221
- Empress of Ireland** [ship]
Shipwreck (table: Major shipwrecks) **S**: 428
- "Empty calorie" food**
Nutrition (Limit intake of sodium and sugar) **N**: 628
- Empty-nest family**
Family (Varieties of families) **F**: 20
- Empty Quarter** (region, Arabia)
Saudi Arabia (The Rub al Khali) **S**: 158 *with map*
- Yemen (Land) **Y**: 562
- Empty set** [mathematics]
Set theory (Kinds of sets) **S**: 321
- EMS** [medicine] See Emergency Medical Services *in this index*
- Ems dispatch** [German history]
Franco-Prussian War (Events leading up to the war) **F**: 483
- EMT** [occupation] See Emergency medical technician *in this index*
- EMT-Paramedic** See Emergency Medical Technician-Paramedic *in this index*
- Emu** (bird) **E**: 264 *with picture*
Australia *picture on* **A**: 916
- EMU** [organization] See Economic and Monetary Union *in this index*
- Emulation program**
Computer (Compiling or assembling a program) **Ci**: 923
- Emulsification**
Alcohol (Other alcohols) **A**: 335
Margarine (How margarine is made) **M**: 198
- Emulsifier** See Emulsifying agent *in this index*
- Emulsifying agent** [chemistry]
Emulsion **E**: 264
Food additive (Kinds of additives) **F**: 339
- Emulsion** [chemistry] **E**: 264
Photography (Exposing the film) **P**: 410;
(Printing black-and-white photographs) **P**: 421; (Developing color film) **P**: 422-424 *with pictures*
- En passant rule**
Chess (The moves) **C**: 413
- Ena Tunnel** [Japan]
Tunnel (table) **T**: 491
- Enabling act** [law] **E**: 264
South Dakota (Statehood) **So**: 683
- Enamel** [paint]
Enamel **E**: 264
- Enamel** [porcelain] **E**: 264 *with picture*
Porcelain (Painting) **P**: 676
- Enamel** [tooth]
Teeth (Enamel) **T**: 81 *with diagram*
Ivory (Characteristics of ivory) **I**: 521
- Enamels and Cameos** [poems by Gautier]
Gautier, Théophile **G**: 71
- Enamelware** [metal]
Enamel **E**: 264 *with picture*
- Encampment Among the Islands of Lake Huron** [painting by by Kane]
Indian, American *picture on* **I**: 154
- Encaustic painting**
Painting (Encaustic painting) **P**: 36; *picture on* **P**: 39
- Enceladus** [satellite]
Satellite (Currently active satellites) **S**: 150a
Saturn (table) **S**: 152
- Encephalitis** [disease] **E**: 265
Brain (Infectious diseases) **B**: 557
Nervous system (Disorders of the nervous system) **N**: 136
- Enchilada** [food]
Mexico (Food and drink) **M**: 455
- Enciphering** See Encrypting *in this index*
- Encke's Comet** [astronomy]
Comet (table) **Ci**: 868
- Enclave** [political unit] **E**: 265
- Enclosed seed** [botany]
Plant (Seeds) **P**: 531-532 *with pictures*
Seed (Kinds of seeds) **S**: 281
- Enclosing trap**
Trapping (Kinds of traps) **T**: 403 *with picture*
- Encoder** [electronics]
Television (The television camera) **T**: 121-122; *diagram on* **T**: 124
- Encoding** [cryptology] See Encrypting *in this index*
- Encomienda system**
Latin America (Colonial rule) **L**: 106
Indian, American (In Latin America) **I**: 178
- Encounter group**
Sensitivity training **S**: 302
- Encryption**
Codes and ciphers **Ci**: 749
Computer (Computer security) **Ci**: 924
Internet (Communications) **I**: 350-350a
- Encryption technology**
Internet (Communications) **I**: 350-350a
- Enculturation**
Culture **Ci**: 1186
- Encyclical** [religion] **E**: 265
Pope (The papacy today) **P**: 665
Roman Catholic Church (John Paul II) **R**: 412
- Encyclopaedia Britannica**
Encyclopedia (An age of experiment) **E**: 268a-268b
- Encyclopedia** **E**: 265 *with pictures*
Age of Reason (Influence of the Age of Reason) **A**: 139
Electronics *picture on* **E**: 206
- Encyclopedia** [book by Diderot] See *Encyclopédie* *in this index*
- Encyclopedia Americana**
Encyclopedia (Today's encyclopedias) **E**: 268b
- Encyclopedia of Associations** [reference]
A Guide to Research Skills Research Guide: 34
- Encyclopedia of the Philosophical Sciences** [book by Hegel]
Hegel, G. W. F. (Hegel's writings) **H**: 165
- Encyclopédie** [book by Diderot]
Age of Reason (Influence of the Age of Reason) **A**: 139
Diderot, Denis **D**: 195
Encyclopedia (An age of experiment) **E**: 268a-268b
French literature (The Age of Reason) **F**: 520
- End** [sports]
Curling (The game) **Ci**: 1195
Football (The offensive team) **F**: 356 *with diagrams*; (The defensive team) **F**: 357 *with diagrams*
- End, The** [etching by Kollwitz]
Kollwitz, Käthe *picture on* **K**: 363
- End of the Chapter** [book by Galsworthy]
Galsworthy, John **G**: 17
- End of the Pier, The** [book by Grimes]
Grimes, Martha **G**: 393
- End of the Trail, The** [sculpture by Fraser]
Oklahoma *picture on* **O**: 723
- End-of-train device**
Railroad (Rolling stock) **R**: 107-108
- End paper**
Book (Inside a book) **B**: 464
Paperwork (End papers) **P**: 138
- End rhyme**
Rhyme **R**: 320
- End stage**
Theater (The stage) **T**: 233-234
- End zone**
Football (The field) **F**: 354-355 *with diagram*
- Endangered species** [conservation] **E**: 269
See also Rare species; Threatened species *in this index*
African hunting dog **A**: 136s *with picture*
Animal (Animals of the grasslands) **A**: 476;
(Animals of the temperate forests) **A**: 478; (Animals of the tropical forests) **A**: 480; (The future of animals) **A**: 504
Aquarium, Public (Conservation) **A**: 578b
Biodiversity (Protecting biodiversity) **B**: 311
- Bird (Endangered species) **B**: 370 *with pictures*
- Blue whale **B**: 421
- Chimpanzee (The life of a chimpanzee) **C**: 471-473
- Condor **Ci**: 929
- Conservation (To maintain the quality of life) **Ci**: 976; (Biodiversity conservation) **Ci**: 976
- Deer (Endangered species) **D**: 86
- Eagle (The bald eagle) **E**: 5
- Elephant **E**: 226
- Hunting (Opposition to hunting) **H**: 450
Invasive species **I**: 354j
- Mammal (The future of mammals) **M**: 127
- National Wildlife Refuge System **N**: 61
- Panda (Protecting pandas) **P**: 129
- Poaching **P**: 587
- Rhinoceros (Protecting the rhinoceros) **R**: 295
- Schaller, George Beals **S**: 173
- Wildlife conservation **W**: 303; (Classifications of scarce wildlife) **W**: 304
- World Wildlife Fund **W**: 500
- Zoo **Z**: 603; (Wildlife conservation) **Z**: 604
- Endangered Species Act** [1973]
Animal (Laws) **A**: 505
Conservation (Renewed interest in conservation) **Ci**: 986-987
- Endangered species (Protecting endangered species) **E**: 270
- Fish and Wildlife Service **F**: 175
- Trapping (Trapping and wildlife conservation) **T**: 403
- Wildlife conservation (Wildlife conservation today) **W**: 305
- Endara, Guillermo** [Panamanian political leader]
Panama (The Noriega years) **P**: 121
- Endeavour** [ship]
Cook, James (First Pacific voyage) **Ci**: 1025
- Endeavour** [space shuttle]
Astronaut (Achievements in space) **A**: 829-830
International Space Station (History) **I**: 346b
Jemison, Mae Carol **J**: 90
Space exploration *picture on* **So**: 695
- Endecott, John** [American colonial leader]
E: 271
Massachusetts Bay Colony **M**: 295
Pear (History) **P**: 216
Salem (History) **S**: 61
- Endemic disease**
Disease (Spread of infectious diseases) **D**: 228
Epidemic **E**: 343
- Endemic typhus** [disease]
Typhus (Murine typhus) **T**: 541
- Endery Abyssal Plain**
Southern Ocean (The ocean floor) **So**: 688a
- Endery Land** [region, Antarctica] **E**: 272
Antarctica (Early exploration) **A**: 535-536
- Enders, John Franklin** [American bacteriologist]
E: 272
Measles **M**: 345
- Endicott, William C.** [American government official]
Cleveland, Grover (table) **Ci**: 671
- Endive** [plant] **E**: 272 *with pictures*
- Endless chain** [mechanics]
Block and tackle (Endless chain hoist) **B**: 405 *with diagram*
- Endocarditis** [disease]
Heart (Inflammatory heart disease) **H**: 142
Mitral valve prolapse **M**: 679
- Endocardium** [anatomy]
Heart (Chambers, valves, and inner lining) **H**: 133; (Inflammatory heart disease) **H**: 142
- Endocarp** [botany]
Fruit (How botanists classify fruits) **F**: 546-548
- Endocrine gland** [anatomy]
Disease (Metabolic diseases) **D**: 229
Gland (Endocrine glands) **G**: 207 *with diagram*
Hormone (Human hormones) **H**: 335
Human body (The endocrine system) **H**: 425; *diagram on* **H**: 422
Infertility (Causes) **I**: 265
Weight control (Diseases and other causes) **W**: 182
- Endoderm** [biology]
Coelom **Ci**: 753
Reproduction, Human (Origin of tissues and organs) **R**: 247-248
- Endodermis** [botany]

288 Endodontics

Root (The outer tissues) R: 474 *with diagrams*

Endodontics

Dentistry (Endodontics) D: 144

Endogamy

Marriage (Marriage in other cultures) M: 222

Endogenous pyrogen [physiology]

Fever F: 83

Endometriosis [disease] E: 272

Infertility (Causes) I: 265

Endometrium [anatomy]

Reproduction, Human (The human reproductive system) R: 244-245

Endoplasmic reticulum [biology]

Cell (The cytoplasm) C: 329 *with diagrams*

Endorphin [physiology] E: 272

Acupuncture A: 31

Narcotic N: 21

Placebo P: 505

Endorsement [banking]

Check (How the checking system works)

C: 390-391

Negotiable instrument (Endorsement) N: 119

Note (Liability of the maker) N: 550

Endoscope [instrument] E: 273 *with pictures*

Fiber optics (Uses of optical fibers) F: 88-89

Inflammatory bowel disease (Diagnosis and treatment) I: 266

Endosperm [botany]

Bran B: 562

Corn (How the plant develops) Ci: 1057 *with diagram*

Flour (How white flour is milled) F: 268-269

Germination G: 173

Plant (Seeds) P: 531-532 *with pictures*; (In seed plants) P: 532-534 *with diagrams*

Seed (The parts of a seed) S: 281 *with diagram*

Wheat (Food for people) W: 266-267 *with diagram*; (Structure) W: 267-268 *with diagram*

Endothermic animal See Warm-blooded animal in this index

Endothermic mixture [physics]

Refrigeration (Ice refrigeration) R: 200-201

Endothermic reaction [physics]

Refrigeration (Ice refrigeration) R: 200

Endotoxin [poison]

Toxin T: 351

Endowment E: 273

Private school P: 808a

Endowment for International Peace

Carnegie, Andrew (Carnegie's contributions to society) C: 242

Endsheet

Bookbinding (Forming a book) B: 470

Endurance [ship]

Shackleton, Sir Ernest Henry S: 341

Endurance exercise

Aerobics A: 85

Endurance racing

Automobile racing (Sports car racing) A: 977 *with picture*

Motorboat racing (Types of racing) M: 877

Enduro [race]

Motorcycle (Motorcycling as a sport) M: 879

Endymion [Greek mythology] E: 273

Selene S: 289

Endymion [poem by Keats]

Keats, John (His life) K: 253, (His work) K: 253-254

Enemy Aliens

World War II (In the United States and Canada) W: 494-495 *with picture*

Enemy of the People, An [play by Ibsen]

Ibsen, Henrik (His plays) I: 4

Energie [rocket]

Space exploration (The Soviet space shuttle) So: 726

Energization [psychology]

Motivation M: 875

Energy [physics] E: 273 *with diagram*

See also Nuclear energy; Solar energy in this index

Astronomy (Electromagnetic radiation) A: 838

Biomass B: 322

Calorie C: 70

Cell (The work of a cell) C: 332 *with diagram*

$E=mc^2$ E: 2

Einstein, Albert (Famous theories) E: 146-146b

Ecology (Energy flow) E: 54

Efficiency E: 115

Electricity E: 190

Energy supply E: 277 *with pictures*

Entropy E: 328

Food (Producing energy) F: 330

Foot-pound F: 353

Fuel F: 550

Heat (Heat and energy) H: 154; *diagram on* H: 150

Joule J: 169

Machine (Principles of machines) M: 13

Matter M: 310

Metric system (Mechanics) M: 437-440

Nutrition (Kinds of nutrients) N: 625

Particle detector (How particle detectors work) P: 186

Perpetual motion machine P: 293

Physics (Developments in the 1800's) P: 440

Planck, Max Karl Ernst Ludwig P: 507

Quantum mechanics (Quanta of energy) Q: 6

Radiation R: 74

Relativity (Mass-energy relationship) R: 211;

(General relativity) R: 211-212

Solar energy So: 576

Star (Converting mass to energy) So: 846

Sun So: 975; (Energy output) So: 976

Thermodynamics T: 253

Thermography T: 253

Uranium U: 214

Water power W: 139

Waves W: 150

Work W: 405

Energy, Conservation of See Conservation of energy in this index

Energy, Department of [U.S.] E: 276 *with pictures*

Coal (Coal research) Ci: 730

Conservation (Renewed interest in conservation) Ci: 986-987

Idaho National Engineering and Environmental

Laboratory I: 46

National laboratory N: 40

Washington, D.C. map on W: 76

Energy, Pyramid of

Ecology (Energy flow) E: 54-55

Energy, Secretary of [U.S.]

Energy, Department of E: 276

Flag picture on F: 211

Energy Administration, Federal [U.S.]

Energy, Department of (History) E: 276

Energy assistance [federal program]

Welfare (Other welfare programs) W: 191

Energy conservation

Conservation (Energy conservation) Ci: 983 *with picture*

Energy crisis

Automobile (The rise of international automaking) A: 972

California (The beginning of the 2000's) C: 64

Coal Ci: 716

Conservation (Renewed interest in conservation) Ci: 986-987 *with picture*

Daylight saving time D: 54

Gas [fuel] (The worldwide gas industry) G: 59

Nixon, Richard Milhous (Events at home) N: 435-436

Petroleum (The future of the petroleum industry) P: 349

United States, History of the (Pollution and conservation) U: 193

Energy Efficiency Ratio

Air conditioning (Electric power requirements) A: 180

Energy-equivalent of mass [physics]

Energy (Energy and matter) E: 274

Energy level [physics]

Atom (The forces within an atom) A: 873 *with diagrams*

Element, Chemical (The periodic table of the elements) E: 219

Energy Policy Act [1992]

Nuclear energy (The spread of nuclear capability) N: 591

Energy Reorganization Act [1974]

Nuclear Regulatory Commission N: 596

Energy Research and Development Administration [U.S.]

Energy, Department of (History) E: 276

Nuclear energy (The spread of nuclear capability) N: 591

Energy Resource Tribes, Council of

Indian, American (In the United States) I: 179; (Social and economic progress) I: 180-181

Energy supply E: 277 *with pictures*

Coal Ci: 716; (Recent developments) Ci: 732

Conservation (Energy conservation) Ci: 983

Electricity (Recent developments) E: 198

Energy, Department of (Functions) E: 276

Global warming (Causes of global warming) G: 232

Industry (Problems and challenges) I: 259

Ocean (The importance of the ocean) O: 653-654

Petroleum (Petroleum conservation) P: 346

United States, History of the (Pollution and conservation) U: 193

Waste disposal (Incineration) W: 113

Wind power W: 331

Enesco, Georges [Romanian composer]

Romania (The arts) R: 419

Enewetak [atoll, Pacific] E: 283

World War II (Island hopping in the Central Pacific) W: 488-489

Enfleurage [industrial process]

Perfume (Plant substances) P: 286

Enflurane [drug]

Halothane H: 27

Enforcement Acts See Force bill in this index

Enforcement of law See Law enforcement in this index

Enfranchisement [Canadian history]

Indian, American (In Canada) I: 178

"Enfranchisement of Women" [essay by Mill]

Mill, Harriet Taylor M: 552

Eng [conjoined twin]

Conjoined twins Ci: 950 *with picture*

Engagement

Marriage (Dating and courtship) M: 219

Engagement ring

Marriage (Dating and courtship) M: 219

Ring R: 342 *with picture*

Engel v. Vitale [U.S. history]

Religious education (Public schools) R: 225

School prayer S: 186

Supreme Court of the United States (table) So: 1002

Engelmann spruce [tree]

Plant picture on P: 520

Spruce (Kinds) So: 809

Tree pictures on T: 425

Engels, Friedrich [German philosopher] E: 283

with portrait

Communism (The ideas of Marx) Ci: 890

Marx, Karl (Marx's life) M: 236

Materialism M: 300b

Socialism (Karl Marx) So: 560

Engine E: 283

See also Gasoline engine; Internal-combustion engine in this index

Airplane (Power for flight) A: 217; *picture on* A: 219

Automobile (How an automobile works)

A: 949 *with diagrams*

Flywheel F: 313

Motorboat racing (Engine designs) M: 876

Rotary engine R: 485

Ship (The chief parts of a ship) S: 424

Starter So: 857

Thermodynamics T: 253

Transmission T: 375

Turbine T: 495

See also the list of Related Articles in the Engine article

Engine [firefighting]

Fire department (Firefighting) F: 123

Engine [railroad] See Locomotive in this index

Engine 382 [locomotive]

Locomotive picture on L: 415

Engine analyzer [machine] E: 283

Engine block See Cylinder block in this index

Engine company

Fire department (Firefighting) F: 123

Engine instruments

Airplane picture on A: 222

Engineer [profession]

Army, United States (Engineers) A: 735

Engineering E: 284, (Engineering careers) E: 288

Railroad (Railroad systems) R: 112-113

Recording industry (In a recording studio) R: 181 *with picture*

- Ship (Officers and crew) S: 423
Engineer Heartfield, The [painting by Grosz]
 Grosz, George *picture on* G: 401
- Engineered materials**
 Materials M: 300b
- Engineering E: 284 with pictures**
 Automobile (Building an automobile) A: 955
 Biomedical engineering B: 324
 Careers (Technical and mathematical occupations) C: 232
 Electronics E: 206; (Careers in electronics) E: 214
 Ergonomics E: 349
 Manufacturing (The main steps in manufacturing) M: 170
 Photography (Scientific photography) P: 429
See also the list of Related Articles in the Engineering article
- Engineering, National Academy of**
 National Academy of Sciences N: 27
- Engineering Institute of Canada**
 Engineering (table) E: 289
- Engineering survey**
 Surveying (Other surveys) So: 1011
- Engineering technician**
 Engineering (Education and training) E: 289
- Engineering technologist**
 Engineering (Education and training) E: 289
- Engineers, Corps of [U.S.] E: 291 with picture**
 Army, United States (Organization of the Army) A: 736-737
 Everglades (Saving the Everglades) E: 424
 Washington (Recent developments) W: 68-69
- Engineers, International Union of Operating**
 E: 291
 Labor movement (table) L: 8
- Engineers and the Price System, The** [book by Veblen]
 Veblen, Thorstein Bunde V: 291
- England E: 292 with pictures and maps**
See also England, History of; Great Britain; United Kingdom *in this index*
 Ballet (Ballet in England) B: 53
 Bank B: 88
 Christmas (In England, Ireland, Scotland, and Wales) C: 530 *with picture*
 Classical music (History) Ci: 645-646
 Cotton (History) Ci: 1092
 English Channel E: 311
 Flag *pictures on* F: 217
 Furniture (England) F: 573 *with picture*
 Glass (The Middle Ages) G: 218-219 *with picture*
 Halloween (Halloween customs and symbols) H: 24a; (History) H: 25
 John Bull J: 133
 New Year's Day (Early customs) N: 289
 Painting (Romanticism) P: 68; (The Pre-Raphaelite Brotherhood) P: 71
 Porcelain (English porcelain) P: 677
 Pottery *picture on* P: 717
 Road (The first roads) R: 361
 United Kingdom U: 48 *with picture*
 Valentine's Day (Early Valentine customs) V: 261
See also English ... *in this index, and the list of Related Articles in the England article*
- England, Bank of**
 Bank of England B: 96
- England, Commonwealth of** [English history]
 Cromwell, Oliver (Rise to power) Ci: 1151-1152
 England (The Civil War) E: 308-309
- England, History of**
 England (History) E: 303 *with pictures*
 Anglo-Saxon *Chronicle* A: 464
 Anglo-Saxons A: 464 *with maps*
 Bill of rights (English Bill of Rights) B: 302
 Coal (History of coal use) Ci: 731
 Coffee house Ci: 755
 Domesday Book D: 300
 East India Company E: 40
 Equity E: 348
 Exploration (The French and English in North America) E: 446
 Glorious Revolution G: 234
 Golden Age G: 255
 Gunpowder Plot G: 442
 Hampton Court Conference H: 36
 Hastings, Battle of H: 83
 Hudson's Bay Company H: 407
- Hundred Years' War H: 437
 Lancaster L: 55
 Laud, William L: 121
 Law (The Middle Ages) L: 134-135
 Long Parliament L: 448
 Magna Carta M: 53
 Model Parliament M: 684
 Netherlands (Wars with England and France) N: 149
 Norman Conquest N: 455
 Petition of Right P: 327
 Plantagenet P: 550
 Renaissance (Political background) R: 237
 Restoration R: 263
 Rye House Plot R: 574
 Shakespeare, William (The English ruler) S: 351
 Spanish Armada So: 755
 Stuart, House of So: 931
 Wales (History) W: 12
 Wars of the Roses W: 38
 Wat Tyler's Rebellion W: 113
 Welfare (Early welfare laws) W: 191
 York Y: 568
See also the list of Related Articles in the England article and specific topics, such as Civil War [England], in this index
- "England expects that every man will do his duty"**
 Nelson, Horatio (Victory at Trafalgar) N: 122
- Engler, John** [American political leader]
 Michigan (table) M: 507
- Englert, François** [Belgian physicist]
 Higgs, Peter Ware H: 227
- English, George W.** [American jurist]
 Impeachment (History) I: 91-92
- English, James E.** [American political leader]
 Connecticut (table) Ci: 967
- English, National Council of Teachers of**
 Teaching (Teachers organizations) T: 69
- English, William Hayden** [American political leader] E: 311
- English Bards and Scotch Reviewers** (poem by Byron)
 Byron, Lord (Byron's life) B: 748; (Byron's poetry) B: 748
- English bond**
 Brick (Bonds) B: 599 *with picture*
- English Channel** [England-France] E: 311 *with map*
 Channel Tunnel C: 375
 Dover, Strait of D: 315
 Ederle, Gertrude Caroline E: 76
 England (The land) E: 299
 Great Britain G: 337
 Tunnel (History) T: 491-492
 United Kingdom U: 49; *picture on* U: 73
- English Civil War** *See* Civil War, English *in this index*
- English class** [breeds]
 Chicken (Kinds of chickens) C: 441; (table) C: 443
- English cocker spaniel** [dog] E: 311
 Dog *picture on* D: 269
- English Congregational Church** [religious group]
 Baptists B: 101
- English East India Company** *See* British East India Company *in this index*
- English elm** [tree]
 Elm (Kinds) E: 244-245
- English Fairy Tales** [book by Jacobs]
 Jacobs, Joseph J: 20
- English foxhound** [dog] E: 312 *with picture*
- English grammar**
 Grammar G: 303
- English hawthorn** [tree]
 Hawthorn H: 114 *with picture*
- English history** *See* England, History of *in this index*
- English holly** [tree]
 Holly H: 292
- English horn** [musical instrument] E: 312
 Music (Wind instruments) M: 949 *with picture*
- English ivy** [plant]
 Ivy (Common, or English, ivy) I: 522 *with picture*
 Gardening (Some popular house plants) G: 37 *with picture*
- English language E: 312**
 Accent A: 22
 Anglo-Saxons A: 464
 Canada (Languages) C: 106
 Closed captioning Ci: 685
 Cockney Ci: 745
 Dialect D: 180
 England (Language) E: 294, (The Norman Conquest) E: 305
 French language F: 516
 German language G: 137
 India (Languages) I: 114
 Indian, American (Native Americans and the English language) I: 150
 Irish literature I: 430
 Language (Indo-European) L: 64
 Phonetics (An international phonetic alphabet) P: 400; (Phonetics and spelling) P: 400
 Pidgin English P: 452
 Pronunciation P: 820
 Shakespeare, William S: 345; (Shakespeare's style) S: 367
 United Kingdom (Language) U: 55
 Universal language U: 205
 Vocabulary V: 434
- English laurel** [shrub] *See* Cherry laurel *in this index*
- English literature E: 314 with pictures**
 Bible (Translations of the Bible) B: 285-286
 Classicism (England) Ci: 653
 Drama (England) D: 334; (British drama) D: 338; (Later British drama) D: 340
 Novel (The rise of the English novel) N: 572; (The 1800's) N: 572
 Realism (In fiction) R: 171-172
 Satire S: 150h
See also the list of Related Articles in the English literature article
- English neoclassical style**
 Furniture (English neoclassical furniture) F: 579 *with picture*
- English notation**
 Chess (Chess notation) C: 413 *with picture*
- English oak** [tree]
 Oak (Other oaks) O: 636 *with picture*
 Tree *picture on* T: 427
- English Patient, The** [film]
 Motion picture (Best picture: 1996) M: 861
- English round hand**
 Handwriting (Later writing styles) H: 50
- English Rugby Union**
 Rugby football (History) R: 513
- English saddle**
 Horse (The saddle) H: 351 *with picture*
 Saddle S: 7 *with picture*
- English setter** [dog] E: 325
 Dog *picture on* D: 268
 Setter S: 323
- English Social History** [book by Trevelyan]
 Trevelyan, George Macaulay T: 436
- English sonnet**
 Poetry (Forms) P: 595
- English sparrow** [bird] *See* House sparrow *in this index*
- English springer spaniel** [dog] E: 325
 Dog *picture on* D: 269
- English Stage Company** [organization]
 Theater (Britain) T: 247-248
- English system** [measurement] *See* Inch-pound system *in this index*
- English toy spaniel** [dog] E: 325 *with picture*
- English Traits** [book by Emerson]
 Emerson, Ralph Waldo (His prose works) E: 259
- English walnut** [tree]
 Walnut W: 18 *with pictures*
 Nut (Kinds of nuts) N: 621 *with picture*
- English yew** [tree]
 Yew Y: 565
- Engram** [religion]
 Scientology S: 208
- Engraving** [art] E: 325 *with pictures*
See also Photoengraving and photolithography *in this index*
 Etching E: 364
 Glass (Copper-wheel engraving) G: 217 *with picture*
 Graphic arts G: 323
 Schongauer, Martin S: 179
- Engraving and Printing, Bureau of [U.S.] E: 327**
 Money (Printing paper money) M: 714 *with pictures*

Washington, D.C. (South of the Mall) W: 75;
map on W: 76; picture on W: 78

Enhanced radiation bomb See Neutron bomb
in this index

Enhanced recovery [industrial process]
Petroleum (table) P: 331; (Enhanced recovery)
P: 342 with picture

ENI [company]
Manufacturing (table) M: 170

ENIAC [computer]
Computer (The first electronic computers)
Ci: 924b with picture

Eckert, J. Presper, Jr. E: 50

Electronics (The vacuum tube era) E: 215

Mauchly, John William M: 312

Enid [Oklahoma] E: 327

Enigma [machine]
Codes and ciphers (Cipher machines) Ci: 750

Enigma Variations, The [music by Elgar]
Elgar, Sir Edward William E: 235

Enkephalin [physiology]
Endorphin E: 272

Narcotic N: 21

Enkidu [literary figure]
Gilgamesh, Epic of G: 190

Enlarging
Photography (Printing black-and-white photographs) P: 421-422 with picture

Enlightened despot [political science]
Despotism D: 161

Enlightenment See Age of Reason in this index

Enlisted personnel
Rank, Military (table) R: 140

Ennead [Egyptian mythology]
Mythology (The Great Ennead) M: 976 with pictures

Enneads [lectures by Plotinus]
Plotinus P: 574

Ennius, Quintus [Roman poet]
Latin literature (Early Latin literature) L: 115

Enobarbus [literary figure]
Shakespeare, William (*Antony and Cleopatra*) S: 364

Enoch Pratt Free Library [Baltimore]
Baltimore (Education) B: 68

Maryland (Libraries) M: 244

Enola Gay [airplane]
World War II (The atomic bomb) W: 492

Enormous Room, The [book by Cummings]
Cummings, E. E. Ci: 1191

Enquiry Concerning Human Understanding, An [book by Hume]
Hume, David (Hume's life) H: 432

Enquiry Concerning Political Justice, An [book by Godwin]
Godwin, William G: 246

Enquiry Concerning the Principles of Morals, An [book by Hume]
Hume, David (Hume's life) H: 432

Enriched bread
Bread (The food value of bread) B: 589;
(History) B: 589

Enriched flour
Flour (How white flour is milled) F: 268-269

Wheat (Food for people) W: 266-267

Enriched rice
Rice (Food) R: 323

Enriched uranium
Uranium (Refining and processing uranium ore) U: 215

Enrichment plant
Nuclear energy (Fuel preparation) N: 586

Enrico Ashton [opera character]
Opera (*Lucia di Lammermoor*) O: 804

Enright, Elizabeth [American author] E: 327

Enriquez de Harana, Beatriz [mistress of]
Columbus, Christopher (Years of waiting)
Ci: 858

Enrobing [process]
Candy (Chocolate candies) C: 176

Enrollment Act [1863]
Army, United States (The Civil War [1861-1865]) A: 738

Enron Corporation E: 327
Business (Recent developments) B: 726

Ensemble [music]
Chamber music C: 370

Classical music (Chamber music) Ci: 643

Opera (Ensembles) O: 792 with picture

Ensemble playing [drama]
Theater (Creating a role) T: 238

Ensign [flag]
Flag (table) F: 193; (Military flags) F: 195-208 with pictures

Ensign [rank]
Coast Guard, United States (Training an officer) Ci: 736

Rank, Military (table) R: 140

Ensign staff
Flag (table) F: 193

Ensor, James [Belgian painter] E: 327 with picture

Entablature [architecture]
Architecture (table) A: 608-609 with picture;
(Minoan architecture) A: 615

Column Ci: 865

Entail [law]
Jefferson, Thomas (Virginia lawmaker) J: 79

Entailment [semantic relation]
Semantics S: 290

Entebbe [city, Uganda]
Kampala K: 212

Commando Ci: 871

Entente, Council of the [alliance]
Burkina Faso (History) B: 707

Entente Cordiale [alliance]
France (The Third Republic) F: 474-475

Germany (Foreign policy) G: 166

Russia (World War I) R: 552

United Kingdom (Gladstone and Disraeli) U: 69

World War I (A system of military alliances)
W: 454-455

Entered Apprentice
Masonry (The lodges and degrees of Masonry) M: 267

Enterococcus [bacteria]
Antibiotic (Resistance to antibiotics) A: 551;
(History) A: 552

Enterprise [nuclear aircraft carrier]
Aircraft carrier (The United States carrier fleet)
A: 206-207

Navy, United States (The nuclear age Navy)
N: 89

Virginia (Interesting facts) V: 399

Enterprise [space shuttle]
Space exploration (The shuttle era begins)
So: 723

Enterprise [steamboat]
Kentucky (Transportation) K: 289

Enterprise union [labor]
Labor movement (In other countries) L: 14-15

Enterprise zone [government]
United Kingdom (City life) U: 55

Entertainer, The [play by Osborne]
Osborne, John O: 861

Entertainment
See also Recreation in this index
Careers (Sports and entertainment) C: 230 with picture

Journalism (Entertaining the public) J: 172

Public speaking (Approach to a speech) P: 865

Radio (Radio programming) R: 85

Television T: 110

Entisol [soil]
Soil (How soils are classified) So: 575 with map

Entomologist
Entomology (What entomologists study)
E: 328

Entomology E: 328
See also Insect in this index
Biology (table) B: 317

Zoology (What zoologists study) Z: 610

Entrechât
Ballet (table) B: 45

Entrepreneur balloon, L' [aircraft]
Aircraft, Military picture on A: 204

Entrepreneur [economics]
Industrial Revolution (Life before the Industrial Revolution) I: 246-247

Schumpeter, Joseph Alois S: 189

Entrepreneurial system [economics]
Capitalism (How capitalism differs from central planning) C: 193-194

Entropy [physics] E: 328
Heat (Disorder) H: 150

Entry
Space exploration (table) So: 696

Entry barrier [economics]
Industry (Industrial organization) I: 261

Monopoly and competition (Causes and effects of monopolies) M: 731-732

Entry of Christ into Brussels, The [painting by Ensor]
Ensor, James E: 327

Entwistle, John [British musician]
Who, The W: 296 with picture

Enumerator
Census (United States censuses) C: 346;
(Conducting censuses) C: 347-348

Enunciation [speech]
Pronunciation P: 820

Envelope E: 328
Letter writing (The envelope address) L: 211 with pictures

Postal Service, United States (Stamps and other mailing materials) P: 699

Postal services (The creation of the Penny Post) P: 706

Envelope [aircraft]
Airship (Nonrigid airships) A: 250 with diagram

Environment E: 329
Adaptation A: 45

Animal (The bodies of animals) A: 488

Baby (Growth and development) B: 6

Balance of nature (Ecosystems) B: 34

Behavior (Environment) B: 220

City (Physical environment) Ci: 577

Conservation Ci: 974

Deafness (Environmental factors) D: 57

Ecology E: 53

Extinct animal (Causes of extinction) E: 457

Gaia G: 6

Genetic engineering (Concerns about genetic engineering) G: 85

Heredity (Heredity and natural selection)
H: 203; (Heredity and environment)
H: 205 with picture

Intelligence (The roles of heredity and environment) I: 318

Life (Living things and their environment)
L: 275

Mental retardation (Causes) M: 410

Motivation M: 875

National park (Changes in the environment)
N: 42h

Ocean (As an influence on climate) O: 654

Personality (Personality and environment)
P: 303

Plant (Where plants live) P: 522; (Factors affecting plant growth) P: 538

Public health (Ensuring environmental safety)
P: 856 with picture

Races, Human (Climatic adaptations) R: 58

Racism (The science of race) R: 62

State government (State services) So: 864

Territoriality T: 176

United Nations (Controlling the environment)
U: 89

Environment, Minister of the [office]
Canada, Government of (The Cabinet) C: 132, diagram on C: 137

Environmental acoustics [science]
Acoustics A: 28

Sound (Modern acoustics) So: 606

Environmental art
Christo C: 537

Environmental assessment
Conservation (Renewed interest in conservation) Ci: 986-987

Environmental Control Law [1970]
Vermont (The late 1900's) V: 337

Environmental Defense Fund [organization]
E: 329

Environmental determinism See Determinism, Environmental in this index

Environmental engineering
Engineering (Environmental engineering)
E: 286 with picture

Environmental Hazards, Bureau of
Public health (Ensuring environmental safety)
P: 856

Environmental impact statement E: 329
Conservation (Renewed interest in conservation) Ci: 986-987

Road (Planning) R: 358

Environmental injustice
Racism (Types of racism) R: 62

Environmental Policy, Office on
Conservation (Recent developments) Ci: 988

Environmental Protection Agency E: 340

Environmental Policy Act, National [1970]
Conservation (Renewed interest in conserva-

tion) Ci: 986-987

Environmental impact statement E: 329

Environmental pollution E: 330 *with pictures*
See also Air pollution; Water pollution *in this index*

Algae A: 349

Animal (Pollution) A: 504

Cancer (Genes damaged by substances in the environment) C: 170

Chemistry (The chemical industry) C: 405-406

City (The people) Ci: 586-587 *with picture*;
(Description) Ci: 589; (City problems)
Ci: 590-591

Coast Guard, United States (Protection of the environment) Ci: 735

Coral reef (Coral reefs and people) Ci: 1049

Detergent and soap (The development of detergents) D: 165-166

Disease (Environmental and occupational diseases) D: 230

Earth Day E: 32

Ecology E: 53

Electric power (Fossil-fueled steam electric power plants) E: 183-184

Energy supply (Environmental effects) E: 281

Engineering (Environmental engineering)
E: 286

Environmental Defense Fund E: 329

Environmental impact statement E: 329

Environmental Protection Agency E: 340

Forest (Deforestation) F: 398

Genetic engineering (Uses of genetic engineering) G: 84a-84b

Global warming (Limiting global warming)
G: 232a

Green party G: 381

Greenpeace G: 386

Hazardous wastes H: 122

Health (Environmental health hazards) H: 127

Industry (Environmental pollution) I: 260

Insecticide (Organic insecticides) I: 302

Mediterranean Sea (History of the Mediterranean) M: 382

Mercury (Mercury in the environment) M: 414

Moscow (Social problems) M: 825

Natural resources (Conservation and development) N: 64

Nuclear energy (The industry and the environment) N: 589

Oxide O: 889

Pest control (Effects of pesticide use) P: 318

Petroleum (Recent developments) P: 348-349

Plastics (Plastics and the environment) P: 560

Radon R: 100

Rain (Characteristics of rain) R: 122-123

Recycling R: 184

Sanitation S: 111

Seal (Threats to seal populations) S: 268

Sierra Club S: 450

Smog S: 519

Technology (Challenges of technology) T: 76
with picture

United States, History of the (Pollution and conservation) U: 193

Waste disposal W: 112

Wildlife conservation (Scientific value) W: 303-304

World (Threats to the environment) W: 418

Environmental Protection Agency [U.S.]
E: 340

Asbestos (History) A: 766

Automobile (Environmental impact) A: 949

Coal (Government regulation) Ci: 729-730

Conservation (Renewed interest in conservation) Ci: 986-987

Environmental pollution (Government action)
E: 335

Gasoline engine (Air pollution controls) G: 66

Herbicide (Hazards of herbicides) H: 198

Incinerator I: 100

Nixon, Richard Milhous (The national scene)
N: 433-434

Thermal pollution T: 253

Environmental Quality, Council on

President of the United States (The executive branch) P: 764

Environmental racism

Racism (Types of racism) R: 62

Environmental scientist

Careers (Life, physical, and social sciences)

C: 225-226

Environmental sculpture

Sculpture (Environmental sculpture) S: 259-260

Environmental theater

Theater (The auditorium) T: 233

Environmentalist See Conservationist *in this index*

Envoi

Ballade B: 43

Envoûtement

Magic (Contagious magic) M: 50

Envoy [diplomat]

Treaty (Negotiation) T: 409

Envoy extraordinary [diplomat]

Diplomacy (Diplomatic representatives) D: 216

Enzyme E: 340 *with diagram*

Antiviral drug A: 560

Biochemistry (Biochemical research) B: 310

Biosynthesis B: 326

Blood (Red blood cells) B: 408

Catalysis C: 297

Cell (Growth and specialization) C: 332;
(Producing proteins) C: 333

Digestive system D: 202

Disease (Bacterial diseases) D: 227

Food (Regulating body processes) F: 331

Fungi (How a fungus lives) F: 559

Genetics (Molecular genetics) G: 86

Heredity H: 200; (The flow of genetic information) H: 205

Human body (Chemical elements and molecules) H: 417

Nutrition (Proteins) N: 625

Reptile (Skin) R: 251

Stomach (The stomach's work) So: 907

Trace elements T: 353

Vitamin (How vitamins work) V: 432

Enzyme replacement therapy [treatment]

Gaucher's disease G: 68

Eocene Epoch [geology]

Earth (The Cenozoic Era) E: 28-29; (table)
E: 30

Prehistoric animal (table) P: 740

Eohippus [extinct animal]

Extinct animal (Types of extinction) E: 457

Horse (Origins of the horse) H: 360 *with picture*

Prehistoric animal (The development of placental) P: 741

EOKA [organization]

Cyprus (History) Ci: 1207

Eon [geology]

Earth (Age of Earth) E: 26

Eoraptor [dinosaur] E: 341

Eos [Greek mythology]

Aurora A: 891 *with picture*

EOS [satellites] See Earth Observing System *in this index*

Eosin [dye]

Resorcinol R: 259

Eosinophil [cell]

Blood (Protecting against disease) B: 410

Immune system (Other white blood cells) I: 88

Eötvös, Loránd [Hungarian physicist]

Relativity (Principle of equivalence) R: 212

EPA [organization] See Environmental Protection Agency *in this index*

Epaminondas [Greek general]

Boeotia B: 435

Messenia M: 423

Pelopidas P: 232

Thebes T: 251

Epaphus [Greek mythology]

Io I: 370

EPCOT Center [Florida]

Florida (Places to visit) F: 252 *with picture*

Monorail *picture on* M: 732

Walt Disney Company W: 20

Epee [weapon]

Fencing (The epee) F: 70 *with picture*

Ephedra [herb]

Drug abuse (Over-the-counter drugs) D: 361

Dietary supplement D: 200

Ephemeroptera [entomology]

Insect (table) I: 299

Ephesians, Epistle to the [New Testament]

E: 341

Ephesus [ancient city] E: 341

Turkey (Tourism) T: 509 *with picture*

Ephesus, Council of [431]

Cyril of Alexandria, Saint Ci: 1208

Roman Catholic Church (Conflict with the East) R: 406-407

Ephialtes [Greek political leader]

Pericles P: 287

Ephod [clothing]

High priest H: 228

Ephor [official]

Greece, Ancient (Government) G: 372

Ephraim [Biblical figure]

Joseph (Settling his family in Egypt) J: 168

Ephrata Cloisters [Pennsylvania]

Colonial life in America (Places to visit) Ci: 800
with picture

Pennsylvania (Places to visit) P: 254 *with picture*

Ephron, Nora [American writer] E: 342

Epibatæ [ancient Greece]

Marine (History) M: 204

Epibenthic sled [machine]

Deep sea (Deep-sea exploration) D: 82c

Epic [poetry] E: 342

Fiction (History) F: 90

French literature (Narrative poetry) F: 518

German literature (Epic poetry) G: 139

Greek literature (Epic poetry) G: 377

Literature for children (Folk literature) L: 357

Mythology (Mythical beings) M: 974

Novel (Ancient Greek and Roman narratives)
N: 572

Poetry (Narrative poetry) P: 591; (Medieval poetry) P: 596

Spanish literature (The 1400's) So: 758-759
See also the list of Related articles in the Epic article

Epic Center [Wichita]

Wichita (History) W: 298

Epic of Gilgamesh See Gilgamesh, Epic of *in this index*

Epic of the Wheat [novels]

Norris, Frank N: 457

Epic theater

Drama (Epic theater) D: 339

Brecht, Bertolt B: 591

Epicanthic fold [eye]

Races, Human (The three-race theory) R: 53

Epicardium [anatomy]

Heart (Outer lining and muscle) H: 133

Epicerter [geology]

Earthquake (How an earthquake begins) E: 33-34 *with diagram*

Epicondylitis, Lateral [disorder]

Repetitive strain injury R: 242

Epicotyl [botany]

Germination G: 173

Plant (Germination) P: 536 *with picture*

Seed (How seeds sprout) S: 283

Epictetus [Greek philosopher] E: 342

Greek literature (The Greco-Roman Age)
G: 378

Epicleureanism [philosophy]

Epicurus E: 342

Hedonism H: 165

Hellenistic Age H: 177

Lucretius L: 514

Philosophy (Terms used in philosophy) P: 384;
(Ancient philosophy) P: 386-387

Epicurus [Greek philosopher] E: 342

Atom (Development of the atomic theory)
A: 874

Atomism A: 877

Materialism M: 300a

Philosophy (Ancient philosophy) P: 386-387

Radiation (History) R: 80

Epicycle [astronomy]

Astronomy (Earth-centered theories) A: 835;
diagram on A: 847

Epicyclic gear

Gear G: 75

Epidauros [ruins, Greece] E: 342

Epidemic [medicine] E: 343

Centers for Disease Control and Prevention
C: 351

Disease (Spread of infectious diseases) D: 228

Influenza (Flu epidemics) I: 268b

Leprosy (History) L: 204

Plague P: 506

Public health (History) P: 857

Epidemic typhus [disease]

Rickettsia R: 335

Typhus (Epidemic typhus) T: 540

Epidemiologic study [medicine]

- Disease (Research) D: 234
- Epidemiologist** [occupation]
Careers (Life, physical, and social sciences) C: 225-226
- Epidemic E: 343
- Epidemiology**
Occupational medicine O: 647
- Epidermis**
Human body (The epidermis) H: 418
Keratin K: 305
Leaf (Obtaining the raw materials) L: 155
Plant (Leaves) P: 530 *with picture*
Root (The outer tissues) R: 474 *with diagrams*
Skin (Structure of the skin) S: 488 *with picture*
Stem (Herbaceous stems) So: 887
Tissue (Plant tissues) T: 299
- Epididymis**
Testicle T: 181
- Epidural anesthesia**
Childbirth (Methods of childbirth) C: 456-457
- Epiglottis** [anatomy]
Croup Ci: 1157
Hiccup H: 223
Throat T: 271
Trachea T: 353
- Epigram** [poetry] E: 343
Greek literature (The Hellenistic Age) G: 378
Martial M: 233
- Epigram, The** [book by Keller]
Keller, Gottfried K: 254
- Epigraphy** [writing]
Paleography P: 103
- Epilepsy** [disorder] E: 343
Brain (Other brain disorders) B: 558
First aid (Convulsion and epileptic seizure) F: 140
Nervous system (Disorders of the nervous system) N: 136
Penfield, Wilder Graves P: 238
- Epimetheus** [Greek mythology]
Pandora P: 130
- Epimetheus** [satellite]
Saturn (table) S: 152
- Epinephrine** [hormone] E: 343
See also Adrenalin *in this index*
Anaphylactic shock A: 448
Inhalant I: 271
- Epiniion** [poetry]
Greek literature (Lyric poetry) G: 377
- Epiphanas** [Seleucid king] *See* Antiochus IV *in this index*
- Epiphany** [literary device]
Short story S: 434
- Epiphany** [religion] E: 344
Christmas (Religious practices) C: 533-534; *picture on* C: 532
January J: 30
- Epiphyseal cartilage** [anatomy]
Giant G: 183
- Epiphyseal growth plate**
Bone (Development of bones) B: 456 *with diagram*
- Epiphysis** [anatomy]
Bone (Structure of the bones) B: 456 *with diagram*
- Epiphyte** [botany] E: 344 *with picture*
Amazon rain forest A: 401
Bromeliad B: 636
Rain forest (Structure and growth) R: 126a
Spanish moss So: 764; So: 764
- Epipsychidion** [poem by Shelley]
Shelley, Percy Bysshe (His writings) S: 391
- Epipubic bone**
Marsupial (Characteristics of marsupials) M: 232
- Epirus** (region)
Greece (Epirus) G: 358
- Episcopal Church** [religious group] E: 344
Anglicans A: 463
Protestantism (The conservative reform movements [the 1500's]) P: 834
- Episiotomy** [surgery]
Childbirth (Methods of childbirth) C: 456
- Episode**
Drama (Tragedy) D: 326
Fugue F: 553
- Episodios nacionales** [book by Galdós]
Spanish literature (The 1800's) So: 761-762
- Epistaxis** [disorder]
Nosebleed N: 549
- Epistemology**
Philosophy (Epistemology) P: 383-384
- Epistle** [literature] E: 344
- Epistle of James** [New Testament] *See* James, Epistle of *in this index*
- "Epistle to Doctor Arbuthnot, An"** [poem by Pope]
Pope, Alexander P: 667
- Epistle to Philemon** [New Testament] *See* Philemon, Epistle to *in this index*
- Epistle to the Ephesians** [New Testament] *See* Ephesians, Epistle to the *in this index*
- Epistle to the Galatians** [New Testament] *See* Galatians, Epistle to the *in this index*
- Epistle to the Hebrews** [New Testament] *See* Hebrews, Epistle to the *in this index*
- Epistle to the Philippians** [New Testament] *See* Philippians, Epistle to the *in this index*
- Epistle to the Romans** [book by Barth]
Barth, Karl B: 120
- Epistle to the Romans** [New Testament] *See* Romans, Epistle to the *in this index*
- Epistles** [book by Horace]
E Pluribus Unum E: 3
Horace H: 334
Latin literature (The Augustan Age) L: 116
- Epistles** [New Testament]
Bible (Books of the New Testament) B: 282-283
New Testament (Books) N: 287
- Epistles of Paul** [New Testament]
Jesus Christ (Early life) J: 104
Paul, Saint (Paul's letters and ideas) P: 201
- Epistles of Peter** [New Testament] *See* Peter, Epistles of *in this index*
- Epistles to the Corinthians** [New Testament] *See* Corinthians, Epistles to the *in this index*
- Epistles to the Thessalonians** [New Testament] *See* Thessalonians, Epistles to the *in this index*
- Epistolary novel** [literature]
Epistle E: 344
- Epitaph of a Small Winner** [book by Machado de Assis]
Latin-American literature (Realism) L: 112
- Epithalamion** [poem by Spenser]
Spenser, Edmund (Spenser's other poems) So: 778
- Epithelial tissue** [anatomy]
Human body (Cells and tissues) H: 417-418
Cancer (Classification by tissue) C: 168-169
- Epithelioma** [disorder] E: 345
- Epithelium** [anatomy] E: 345
Biopsy B: 326
Cervical cancer C: 364
Epithelioma E: 345
Tissue (Animal tissues) T: 299
- Epizootic**
Veterinary medicine (On farms and ranches) V: 345
- EPLF** [political party] *See* Eritrean People's Liberation Front *in this index*
- EPO** [hormone] *See* Erythropoietin *in this index*
- Epoch** [geology]
Earth (Age of Earth) E: 26
Prehistoric animal (The world of prehistoric animals) P: 736
- Epode** [poetry]
Ode O: 673
Poetry (Lyric poetry) P: 591
- Epodes** [poems by Horace]
Horace H: 334
- Epoetin alfa** [drug]
Anemia (Anemia of renal disease) A: 458
- Epoxy**
Adhesive A: 56
Plastics (table) P: 556; (Growth of the plastics industry) P: 560
- EPR paper** [physics]
Einstein, Albert (Further scientific work) E: 146b
- Epsilon Lyrae** [star]
Lyra L: 537
- Epsom Derby** [race]
Derby D: 152
Horse racing (Types of horse races) H: 364
- Epsom salt** [medication] E: 345
Laxative L: 148
- Epstein, Brian** [British businessman]
Beatles B: 190
- Epstein, Sir Jacob** [British sculptor] E: 345
- Epstein-Barr virus** E: 345
- Mononucleosis M: 731
- Equal area projection** [map]
Map (Map projections) M: 182-183 *with diagram*
- Equal-arm balance**
Scale, Weighing (Balances) S: 169
- Equal Credit Opportunity Act** [1974]
Bank (Changes in banking laws) B: 94
Women's movements (Legal gains) W: 386
- Equal employment opportunity**
Women's movements (Contemporary women's movements) W: 386
- Equal Employment Opportunity Act** [1972]
Equal Employment Opportunity Commission E: 345
- Equal Employment Opportunity Commission** [U.S.] E: 345
Civil Rights Act of 1964 Ci: 611
Poverty (Measures to improve job opportunities) P: 725
- Equal Pay Act** [1963]
Sex discrimination (Changes in laws) S: 335
Women's movements (Legal gains) W: 386
- Equal protection**
Constitution of the United States (Amendment 14) Ci: 1013
- Equal Rights Amendment** E: 345
Civil rights (The struggle for women's rights) Ci: 609-610
National Organization for Women N: 42
Paul, Alice P: 200
Schlafly, Phyllis Stewart S: 176
Women's movements (Legal gains) W: 386
- Equal rights feminists**
Women's movements (The beginnings of women's movements) W: 385
- Equal Rights Party** [U.S. history]
Lockwood, Belva Ann Bennett L: 413
- Equal sets** [mathematics]
Set theory (Kinds of sets) S: 321 *with diagram*
- Equal time provision**
Television (The Federal Communications Commission) T: 118
- Equalitarianism** [sociology]
Asia (Life in China) A: 786-787
- Equality** [law]
Democracy D: 120
- Equality, Sexual** [sociology]
Women's movements (Impact of women's movements) W: 387
- Equality State**
Wyoming W: 517
- Equalizer** [electronics]
Stereophonic sound system (Parts of a stereo system) So: 892
- Equals sign**
Addition (Writing addition) A: 49
- Equanil** [drug]
Tranquilizer T: 370
- Equation**
Algebra (Statements and equations) A: 351
Geometry (Analytic geometry) G: 104-105
Mathematics M: 302
- Equator** [geography] E: 346 *with maps*
Earth (Earth's size and shape) E: 18
Ecuador E: 67
Latitude L: 116 *with diagram*
Map (Geographic grids) M: 178 *with diagram*
Rain (Rainfall distribution) R: 124
Weather (Planetary-scale systems) W: 158-159
- Equatorial Countercurrent**
Atlantic Ocean (Moving ocean waters) A: 866
- Equatorial Guinea** [country] E: 346 *with map*
Flag *picture on* F: 198
Guinea G: 429
- Equatorial Islands** *See* Line Islands *in this index*
- Equatorial jet** [wind]
Jet stream J: 115 *with map*
- Equatorial mount** [astronomy]
Telescope (Controlling a telescope) T: 105
- Equatorial Star, Order of the** [Gabon]
Medals, decorations, and orders (table) M: 359
- Equestrian order** (ancient Rome) E: 347
- Equestrian sports**
See also Horseback riding *in this index*
Circus (The birth of the circus) Ci: 562b
Horse (Horse shows and sports) H: 356 *with pictures*
Olympic Games (Summer Olympic Games) O: 746e-746f

- Equiangular polygon** [geometry]
Polygon P: 650 *with diagram*
- Equilateral polygon** [geometry]
Polygon P: 650 *with diagram*
- Equilateral triangle**
Triangle (Kinds of triangles) T: 438 *with diagram*
- Equilibrium** [physics]
Force (Concurrent forces) F: 370
Gravity, Center of G: 333
Lever (Law of equilibrium) L: 217
Statics So: 867
- Equilibrium, Chemical** [chemistry] E: 347
- Equilibrium, Law of** [physics]
Lever (Law of equilibrium) L: 217
- Equilibrium price** [economics]
Price (Demand and supply) P: 774
Supply and demand So: 996
- Equilibrium theory, General** [economics]
Arrow, Kenneth Joseph A: 743
- Equinoctial year**
Year Y: 554
- Equinox** [astronomy] E: 348 *with diagram*
Hipparchus H: 239
March M: 194
September S: 308
- Equitable Life Assurance Society**
Insurance (table) I: 315
- Equitation competition**
Horse (Horse shows) H: 356
- Equites** [ancient Rome]
Equestrian order E: 347
Rome, Ancient (The people) R: 437
- Equity** [law] E: 348
Common law Ci: 875
Mortgage M: 820
Taxation (Equity) T: 54
Trial (History) T: 438
- Equity, Court of** [law]
Equity E: 348
- Equity account**
Bookkeeping (Accounts) B: 472
- Equivalence, Principle of** [physics]
Gravitation (Einstein's theory of relativity) G: 332
Relativity (Principle of equivalence) R: 212
- Equivalent fraction** [mathematics]
Fraction (Equivalent fractions) F: 446-447 *with diagrams*
- Equivalent projection** [cartography] *See* Equal area projection *in this index*
- Equivalent sets** [mathematics]
Set theory (Kinds of sets) S: 321
- Equus**
Horse (Origins of the horse) H: 360
- Equus** [play by Shaffer]
Shaffer, Peter S: 342
- ER** [medicine] *See* Emergency room *in this index*
- "ER"** [television program]
Television picture on T: 110a
- Er** [symbol]
Erbium E: 349
- ERA** *See* Equal Rights Amendment *in this index*
- ERA** [baseball]
Baseball (Baseball terms) B: 124
- Era** [time]
Earth (Age of Earth) E: 26
Prehistoric animal (The world of prehistoric animals) P: 736
- Ere of Good Feeling** [U.S. history]
Madison, James (The growth of nationalism) M: 36
Monroe, James (Monroe's Administration) M: 736
United States, History of the (Growing nationalism) U: 165
- Érard, Sébastien** [French piano maker]
Piano (History) P: 447-448
- Eraser** E: 349
Rubber (First uses) R: 500-501
- Erasmus, Desiderius** [Dutch philosopher] E: 349 *with portrait*
Etiquette (Books on etiquette) E: 374
Holbein, Hans, the Younger H: 290
Humanism (The spread of humanism) H: 431
Luther, Martin (Reformation leader) L: 528
Renaissance (Desiderius Erasmus and Saint Thomas More) R: 237-238 *with picture*
Spanish literature (The 1500's) So: 758
Zwingli, Huldreich (His life) Z: 614
- Erato** [Greek mythology]
Muses M: 937
- Eratosthenes** [Greek mathematician] E: 349
Geography (Beginnings) G: 95
Map (Ancient maps) M: 181
Physics (The Greeks) P: 438
Sieve of Eratosthenes S: 452
- Erbakan, Necmettin** [Turkish political leader]
Turkey (Political changes) T: 512
- Erbe, Norman A.** [American political leader]
Iowa (table) I: 391
- Erbium** [element] E: 349
- Ercilla y Zúñiga, Alonso de** [Spanish poet]
Araucanian Indians A: 592
Chile (The arts) C: 463
Latin-American literature (Colonial literature) L: 111
Spanish literature (The 1500's) So: 758-759
- ERDA** *See* Energy Research and Development Administration *in this index*
- Erdich, Louise** [American author]
Indian, American (Achievements in the arts) I: 181
- Ere ibeji** [wooden figure]
Sculpture (Personal sculpture) S: 241
- Erebus** [ship]
Exploration (The exploration of Antarctica) E: 450
- Erebus, Mount** *See* Mount Erebus *in this index*
- Erec** [poem by Chrétien de Troyes]
Hartmann von Aue H: 79
- Erechtheum** [ruins, Athens]
Acropolis A: 29
Athens (The Acropolis and its buildings) A: 856
- Erectile dysfunction** [physiology] *See* Impotence *in this index*
- Erection** [physiology]
Impotence I: 94
Reproduction, Human (The human reproductive system) R: 244-246
- Eremetical religious life**
Religious life (The Eastern Orthodox Churches) R: 227
- Erevan** [Armenia] *See* Yerevan *in this index*
- Erewhon** [book by Butler]
Butler, Samuel B: 729
Utopia U: 252
- Erg** [geography]
Sahara (Land and climate) S: 20-21
- Ergogenic aid** [sports]
Blood doping B: 416
- Ergonomic keyboard**
Keyboard K: 308
- Ergonomics** [science] E: 349
Disease (Environmental and occupational diseases) D: 230
Repetitive strain injury R: 242
- Ergonovine** [medication]
Ergot E: 350
- Ergot** [fungus] E: 350
Migraine M: 538
Plant (Diseases) P: 543
Rye (Ergot) R: 574
- Ergotamine** [medication]
Ergot E: 350
- Ergotism** [disease]
Ergot E: 350
Plant (Diseases) P: 543
Rye (Ergot) R: 574
- Ergotoxine** [medication]
Ergot E: 350
- Erhard, Ludwig** [German political leader]
Germany (West Germany) G: 170
- Eric the Red** [Norse explorer] E: 350
Exploration (Viking exploration) E: 442
Greenland (History) G: 385
Iceland (Early days) I: 23
Norway (The Viking period) N: 545
Vikings (The Norwegian Vikings) V: 382
- Erickson, Arthur Charles** [Canadian architect]
E: 350
Architecture picture on A: 607
Canada picture on C: 111
- Erickson, John E.** [American political leader]
Montana (table) M: 757
- Erickson, Milton H.** [American scientist]
Hypnotism (Scientific studies) H: 479-480
- Ericson, Leif** [Norse explorer] E: 350
Exploration (Viking exploration) E: 442
United States, History of the (The Vikings) U: 150
Vikings (The Norwegian Vikings) V: 382
- Ericson, Thorwald** [brother of] Ericson, Leif E: 351
- Ericsson, John** [Swedish-American engineer] E: 351
Monitor and Merrimack M: 725
Propeller P: 826
Ship (Development of the ship propeller) S: 412
- Erie** [Pennsylvania] E: 351
- Erie, Lake** *See* Lake Erie *in this index*
- Erie Canal** [waterway, New York] E: 351 *with map*
Buffalo (History) B: 678-679
Canal (History) C: 164
Cement and concrete (History) C: 345
Hudson River H: 406
Michigan (Territorial period) M: 509
New York (Transportation) N: 311; (Growing prosperity) N: 316 *with picture*
New York State Barge Canal System N: 345 *with map*
Pioneer life in America (Crossing the Appalachians) P: 477-478
Rochester (Government and history) R: 370
Saint Lawrence Seaway (Early canals) S: 44
Transportation (Development of inland transport) T: 389
United States, History of the (Expansion and the economy) U: 168-169
Westward movement in America (The Old Northwest) W: 247-248
- Erie Railroad**
Gould, Jay G: 280
Railroad (Expansion in the United States) R: 115
- Erigeron** [medication]
Fleabane F: 232
- Erik Dorn** [book by Hecht]
Hecht, Ben H: 164
- Erikson, Erik Homburger** [American psychoanalyst] E: 352
Developmental psychology (Psychoanalytic theory) D: 174
- Eriksson, Leif** *See* Ericson, Leif *in this index*
- Erin** *See* Ireland *in this index*
- "Erin"** [poem by Drennan]
Emerald Isle E: 258
- Erinyes** [Greek mythology] *See* Furies *in this index*
- Eris** [Greek mythology]
Trojan War (The beginning of the war) T: 449
- Eritrea** [country] E: 352 *with picture and map*
Ethiopia (Haile Selassie) E: 371
Flag picture on F: 198
- Eritrean Liberation Front** [political movement]
Eritrea (History) E: 353-354
- Eritrean People's Liberation Front** [political party]
Eritrea (History) E: 353-354
- Erlach, Johann Bernhard Fischer von** *See* Fischer von Erlach, Johann Bernhard *in this index*
- Erlanger, Joseph** [American physiologist]
Nobel Prizes (Physiology or medicine: 1944) N: 444
- ERM** [economics] *See* Exchange Rate Mechanism *in this index*
- Ermine** [animal] E: 354
Fur (table) F: 561
Heraldry picture on H: 195
Weasel W: 155
- Ernaux, Annie** [French author]
French literature (Recent French literature) F: 523
- Ernest Augustus** [duke of Brunswick]
Brunswick B: 652
- Ernst, Max** [German painter] E: 354
Painting (Europeans in America) P: 84
Surrealism So: 1010 *with picture*
- Ernst, Richard Robert** [Swiss chemist]
Nobel Prizes (Chemistry: 1991) N: 443
- Ernst-Reuter-Platz** [landmark]
Berlin (The downtown areas) B: 260-261
- Erofeev, Venedikt** [Russian author]
Russian literature (Modern Soviet literature) R: 564-565
- Erofeev, Viktor** [Russian author]
Russian literature (Modern Russian literature) R: 565

- Eroica** [music by Beethoven]
Beethoven, Ludwig van (The second period) B: 214
- Eros** [asteroid] E: 354 *with picture*
Asteroid (Measuring asteroids) A: 824
- Eros** [Greek mythology] *See* Cupid *in this index*
- Erosion** [conservation] E: 355
Alfalfa (As a cover crop) A: 346-347
Conservation (Soil conservation) Ci: 976-979
Desert (How deserts develop and change) D: 156
Dust storm D: 392
Earth (Sedimentary rocks) E: 21, *picture on* E: 22
Farm and farming (Soil management) F: 33
Geomorphology G: 106
Glacier (How glaciers shape the land) G: 204-205 *with diagrams*
Gold (Types of deposits) G: 252
Grass G: 324
Humus H: 437
Lyell, Sir Charles L: 533
Seven Natural Wonders of the World (The Grand Canyon) S: 324
Soil (Soil conservation) So: 576
Water (How water shapes the earth) W: 121
- Erosion-corrosion**
Corrosion Ci: 1072
- Erosion mountain** [geology]
Mountain (Erosion mountains) M: 893
- Erratic** [rock]
Earth *picture on* E: 29
- Erromango** [island, Vanuatu]
Vanuatu V: 284
- Error** [sports]
Baseball (Reaching base) B: 129
Bowling (Scoring) B: 521-522
- Error signal**
Servomechanism S: 320
- Ershad, H. M.** [Bangladeshi political leader]
Bangladesh (The new nation) B: 86
- Erdute and Interesting Letters** [book by Feijoo]
Spanish literature (The 1700's) So: 760
- Eruption** [anatomy]
Teeth (Deciduous teeth) T: 79
- Eruption** [geology]
Mount Saint Helens M: 888 *with picture*
Volcano (The eruption of a volcano) V: 438 *with pictures*; (Classifying volcanic eruptions) V: 442
- Ervin, Sam J., Jr.** [American government official]
Watergate (The break-in and cover-up) W: 144
- Erving, Julius** [American basketball player]
E: 355
Basketball *picture on* B: 154
- Erymanthus, Boar of** [Greek mythology]
Hercules (The twelve labors) H: 198-199
- Eryops** [extinct animal] E: 355
Prehistoric animal (The move onto land) P: 737; *picture on* P: 738
- Erysipelas** [disease] E: 355
- Erythema** [disorder] E: 356
- Erythroblastosis fetalis** [disorder]
Deafness (Birth defects) D: 57
Rh factor R: 289
- Erythrocyte** *See* Red blood cell *in this index*
- Erythrolabe** [anatomy]
Eye (The retina) E: 462
- Erythromycin** [medication] E: 356
Whooping cough (Treatment and prevention) W: 296
- Erythropoietin** [hormone]
Anemia (Anemia of renal disease) A: 458
Blood (How the body maintains its blood supply) B: 410-411
Blood doping B: 415
Cancer (Biological response modifiers) C: 172-173
Kidney (Other functions of the kidneys) K: 312
- Es** [symbol]
Einsteinium E: 147
- ESA** [organization] *See* European Space Agency *in this index*
- Esaki, Leo** [Japanese physicist]
Nobel Prizes (Physics) 1973) N: 441
- Esalen Institute**
Sensitivity training S: 302
- Eserhaddon** [king of Assyria]
Assyria (History) A: 822
- Babylon (The Old Babylonian Empire) B: 11-12
- Esau** [Biblical figure] E: 356
- Edom E: 85
- Hittites (History) H: 269-270
- Isaac I: 461
- Jacob J: 19
- Escalante, Silvestre Velez de** [Spanish religious leader]
Utah (Early exploration) U: 246
- Escalante Desert**
Utah (Deserts) U: 242
- Escalator** [machine] E: 356 *with diagrams*
Conveyor belt (Uses) Ci: 1024
New York (Interesting facts) N: 291
- Escalator clause**
Labor movement (Arranging contracts) L: 6-5
- Escales** [music by Ibert]
Ibert, Jacques I: 2
- Escamillo** [opera character]
Opera (*Carmen*) O: 802 *with picture*
- Escape** [books by Bromfield]
Bromfield, Louis B: 636
- Escape** [wrestling]
Wrestling *picture on* W: 506
- Escape from Freedom** [book by Fromm]
Fromm, Erich F: 541
- Escape velocity**
Orbit O: 819
Space exploration (Overcoming gravity) So: 699-701
- Escape wheel**
Clock (Mechanical clocks) Ci: 682j
Watch (Mechanical watches) W: 114
- Escapement**
Clock (Mechanical clocks) Ci: 682j *with diagram*
Pendulum (Clock pendulums) P: 237
Watch (Mechanical watches) W: 114
- Escapement** [conservation]
Salmon (Salmon conservation) S: 70
- Escargot** [food]
Snail (Useful and harmful snails) S: 523
- Escarole** [plant]
Endive E: 272 *with picture*
- Eschatological Messiah** [Judaism]
Messiah M: 423
- Eschatology**
Mythology (The end of the world) M: 985
- Escheat** [law] E: 357
Feudalism (The principles of feudalism) F: 82
Heir H: 167
Will W: 306
- Eschenbach, Wolfram von** [German poet]
Wolfram von Eschenbach W: 378
- Escher, M. C.** [Dutch artist] E: 357 *with picture*
- Escherichia coli** [bacterial] *See* *E. coli* *in this index*
- Escobar, Marisol** [American sculptor] *See* Marisol *in this index*
- Escobedo, Danny** [American public figure]
Escobedo v. Illinois E: 357
- Escobedo v. Illinois** [U.S. history]
Escobedo v. Illinois E: 357
See also Miranda v. Arizona *in this index*
- Escorial** [Spain] E: 357
Architecture (Later Renaissance architecture) A: 621
Spain (Architecture) So: 739
- Escrime** [sport]
Martial arts (Martial arts in other countries) M: 234
- Escrow** [law] E: 357
- Escrow agent**
Escrow E: 357
- Escudo** [money]
Money *picture on* M: 707
- Escutcheon**
Heraldry (Elements of a coat of arms) H: 194 *with pictures*
- Esdaile, James** [British doctor]
Hypnotism (Scientific studies) H: 479
- Esdraelon, Plain of** [region, Israel]
Israel (The Coastal Plain) I: 482
- Esdraas** [Bible]
Bible (Development of the Christian Old Testament) B: 282
- ESEA** *See* Elementary and Secondary Education Act *in this index*
- Esfahan** *See* Isfahan *in this index*
- Eshkol, Levi** [Israeli political leader] E: 357
- Esker** [geology]
- Glacier (How glaciers shape the land) G: 204-205 *with diagram*
- Eskie** [dog] *See* American Eskimo dog *in this index*
- Eskimo** [people] *See* Inuit *in this index*
- Eskimo curlew** [bird]
Curlew Ci: 1195
- Eskimo dog** *See* American Eskimo dog *in this index*
- ESOP** [economics]
Employee Stock Ownership Plan E: 263
- Esophagus** [anatomy] E: 358
AIDS (Opportunistic illnesses) A: 163
Alimentary canal A: 368 *with diagram*
Heartburn H: 147
Human body (The mouth, esophagus, and stomach) H: 419; *diagram on* H: 422
Mouth M: 903 *with diagram*
Stomach So: 907 *with diagram*
Throat T: 271
- ESP** *See* Extrasensory perception *in this index*
- España** *See* Spain *in this index*
- Española** *See* Hispaniola *in this index*
- Esparto** [plant]
Atlas Mountains A: 869
- Espenschied, Lloyd** [American engineer]
Cable (Telephone cables) C: 7
Coaxial cable (History) Ci: 740
- Esperanto** [language] E: 358
Language (Universal languages) L: 66
- Esperanto** [literature]
Spanish literature (The Generation of 1898) So: 762
- Espinel, Vicente** [Spanish author]
Spanish literature (The 1600's) So: 759
- Espionage** E: 358
Central Intelligence Agency C: 356
Intelligence service I: 319
War (Information and intelligence) W: 24
World War II (Spies and saboteurs) W: 493
- Espionage Act** [1917]
Sedition S: 280
- Espiritu Santo** [island, Vanuatu]
Vanuatu V: 284
- Espanade** [dance by Taylor]
Taylor, Paul T: 57
- Espoo** [city, Finland]
Tapiola T: 41
- Esposito, Phil** [Canadian hockey player] E: 358
- Esposito, Raffaele** [Italian baker]
Pizza P: 505
- Esposizione Universale di Roma** [world's fair]
Rome (Period of construction) R: 435 *with picture*
- Espressivo**
Music (table) M: 954
- Espronceda, José de** [Spanish poet]
Spanish literature (The 1800's) So: 761
- Espy, Mike** [American government official]
E: 359
- Esquiline Hill**
Rome R: 429
- Esquivel, Manuel** [Belize political leader]
Belize (History) B: 238
- ESRO** [alliance]
European Space Agency E: 418
- Essais** [book by Montaigne]
Essay (Personal essays) E: 359
- Essay** [literature] E: 359
American literature (Essays) A: 425
Composition Ci: 905
English literature (Addison and Steele) E: 318
- Essay Concerning Human Understanding, An** [book by Locke]
Locke, John (His philosophy) L: 413
Philosophy (Modern philosophy) P: 387-388
- Essay of Dramatic Poesy, An** [essay by Dryden]
Dryden, John D: 370
Shakespeare, William (Neoclassical criticism) S: 369
- Essay on Criticism, An** [poem by Pope]
Pope, Alexander P: 667
- Essay on General Grammar** [book by Proudhon]
Proudhon, Pierre Joseph P: 838
- Essay on Man, An** [poem by Pope]
English literature (Swift and Pope) E: 318
Pope, Alexander P: 667
- Essay on Rime** [book by Shapiro]
Shapiro, Karl Jay S: 373

- Essay on the Dramatic Character of Sir John Falstaff, An** [essay by Morgann]
Shakespeare, William (Neoclassical criticism) S: 369
- Essay on the Principle of Population** [book by Malthus]
Malthus, Thomas Robert M: 115
Birth control (The birth control movement) B: 378
- Essay Towards the Present and Future Peace of Europe** [book by Penn]
Peace (From the 1400's to the 1700's) P: 206
Penn, William (Arrested again) P: 242
- Essays** [book by Emerson]
Emerson, Ralph Waldo (His prose works) E: 259
- Essays in Criticism** [book by Arnold]
Arnold, Matthew A: 742
- Essays of Elia** [book by Lamb]
Lamb, Charles (His essays) L: 50
- Essays on the Generation of Animals** [book by Harvey]
Harvey, William H: 81
- Essen** [city, Germany] E: 359
- Essence** [chemistry]
Extract E: 457
Oil (Volatile oils) O: 707
Perfume P: 286
- Essence** [philosophy]
Santayana, George S: 115
- Essence d'orient** [animal product]
Pearl (Imitation pearls) P: 218
- Essence of Christianity, The** [book by Feuerbach]
Feuerbach, Ludwig Andreas F: 83
- Essenes** [religious group] E: 360
Dead Sea Scrolls D: 56
Jews (The Hellenistic period) J: 121-122
Library (Ancient libraries of animal skins) L: 259
- Essential amino acid**
Nutrition (Proteins) N: 625
Protein (The structure of proteins) P: 832
- Essential fatty acids**
Fat (Biological and nutritional importance) F: 52-53
Milk (Fats) M: 546
- Essential hypertension** [disorder]
Hypertension (Causes) H: 475-476
- Essential oil** [botany]
Chaparral C: 376
Perfume (Plant substances) P: 286
- Essequibo** [river]
Guyana (Land) G: 446
- Essex** [ship]
Porter, David P: 682
- Essex, Earl of** [English nobleman [1566-1601]]
Elizabeth I (Later years) E: 239
- Essex Institute**
Massachusetts (Libraries) M: 274
- Essex Steam Train**
Connecticut (Places to visit) Ci: 960
- Essex Transcript** [newspaper]
Liberty Party L: 233
- Essien-Udom, E. U.** [Nigerian anthropologist]
Anthropology (The middle and late 1900's) A: 549
- Established Church** See Church of England in this index
- Established church** [U.S. history]
Colonial life in America (Religion) Ci: 804
- Establishment, The**
Power (Systems of power) P: 727-728
- Estaing, Comte d'** [French admiral]
Revolutionary War in America (France's entry into the Revolutionary War) R: 283;
(Savannah and Charleston) R: 283
- Estancia** [ranch]
Argentina (Rural life) A: 650
Uruguay (Way of life) U: 223-224
- Estate** [law] E: 360
Escheat E: 357
Executor E: 436
- Estate by curtesy** [law]
Dower D: 316
- Estate plan** [law]
Will (Estate plan) W: 307
- Estate tax**
Inheritance tax I: 271
Taxation (Other taxes) T: 53
- Estates-Generel** [French history] E: 360
- Philip IV P: 370
- Estéban** See Estevanico in this index
- Estébanez Calderón, Serafín** [Spanish author]
Spanish literature (The 1800's) So: 761-762
- Ester** [chemistry] E: 360
Methanol M: 434
- Esterházy von Galantha, Nikolaus Joseph** [Austrian nobleman]
Haydn, Joseph H: 117
- Estevanico** [Moroccan explorer] E: 360
African Americans (The years of slavery) A: 136d
Cibola, Seven Cities of Ci: 551
- Esther** [Biblical figure]
Esther, Book of E: 361
Purim P: 909
- Esther, Additions to the Book of** [Bible]
Bible (Development of the Christian Old Testament) B: 282
- Esther, Book of** [Old Testament] E: 361
- Esthetics** See Aesthetics in this index
- Estienne family** [French history]
Book (The spread of printed books) B: 467
- Estimate, Board of**
New York City (Government) N: 339-340
- Estimated tax**
Income tax (Paying the individual income tax) I: 104
- Estimating** [mathematics]
Addition (Estimating) A: 51
Subtraction (How to borrow) So: 947
- Estivation** [zoology] E: 361
Fish (How fish rest) F: 166-167
Hibernation (Other kinds of dormancy) H: 222
Lungfish L: 525
Mammal (Hibernation) M: 125-126
Reptile (Hibernation) R: 252
Toad (The life of a toad) T: 303-304
- Estonia** [country] E: 361 with pictures and map
Environmental pollution picture on E: 330
Flag picture on F: 206
Standard of living (table) So: 834
Tallinn T: 21
Union of Soviet Socialist Republics (World War II) U: 37; (Threats to unity) U: 40-41
World War II (The invasion of the Soviet Union) W: 477
- Estonia** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Estournelles de Constant, Paul Henri d'** [French statesman]
Nobel Prizes (Peace: 1909) N: 447
- Estrada, Joseph Ejercito** [Filipino political leader]
Philippines (Recent developments) P: 380-381
- Estrada Palma, Tomás** [Cuban political leader]
Cuba (The Platt Amendment) Ci: 1177
- Estradiol** [hormone]
Estrogen E: 364
- Estrela** [mountain]
Portugal (Land regions) P: 690
- Estrogen** [hormone] E: 364
Adolescent (Physical development) A: 60-61
DES D: 153
Hormone (Growth and sex hormones) H: 336
Hormone replacement therapy H: 338
Menstruation (The menstrual cycle) M: 404
Osteoporosis (Causes) O: 867-868
Ovary O: 881
Pregnancy (How pregnancy affects women) P: 734b
Steroid (The sex steroids) So: 894
Tamoxifen T: 23
- Estrogen receptor** [protein]
Tamoxifen T: 23
- Estrous cycle** [reproduction] E: 364
Mammal (Mating) M: 122
- Estrus** [reproduction]
Cat (Reproduction) C: 293
Dog (Social and moral responsibilities) D: 279
Estrous cycle E: 364
- Estuary** [geography] E: 364
River (Estuaries) R: 352 with diagram
- E.T.: The Extra-Terrestrial** [film]
Motion picture picture on M: 847; (A new generation of filmmakers) M: 872
Spielberg, Steven So: 792
- ETA** See Euskadi ta Askatasuna in this index
- "État c'est moi, L'"** [quotation]
Louis XIV L: 474
- États Beligiques Unis** [Belgian history]
- Belgium (The Brabant Revolution) B: 233
- Etchemin Indians** [American Indians]
Maine (Indian days) M: 89
- Etching** [art] E: 364 with pictures
Glass (Etching) G: 217
Graphic arts G: 323
- Etching** [printing]
Printing (Gravure cylinders) P: 800
- Eteocles** [literary figure]
Antigone A: 554
- Eternal City**
Rome R: 428
- "Ethan Brand"** [story by Hawthorne]
Hawthorne, Nathaniel (His stories and sketches) H: 114
- Ethane** [gas] E: 365
Hydrogenation H: 470
Natural gas liquids N: 64
- Ethanediol** See Ethylene glycol in this index
- Ethanol** See Ethyl alcohol in this index
- Ethelbald** [king of England]
England (table) E: 308
- Ethelbert** [king of England]
England (table) E: 308; (The Germanic invasions) E: 304
- Ethelred I** [king of England]
England (table) E: 308
- Ethelred II** [king of England]
England (The Anglo-Saxon period) E: 304-305; (table) E: 308
Vikings (The Danish Vikings) V: 383
- Ethelwulf** [king of England]
England (table) E: 308
- Ether** [chemistry] E: 365
Gasoline (Gasoline blends and additives) G: 61-62
Long, Crawford Williamson L: 446
Morton, William Thomas Green M: 821
- Ether** [physics] E: 365
Light (The electromagnetic theory) L: 292
Lorentz, Hendrik Antoon L: 454
Physics (Developments in the 1800's) P: 440
Relativity (The Michelson-Morley experiment) R: 210; (Special relativity) R: 210
- Ethereal match**
Match (Early fire-making devices) M: 300
- Etherege, Sir George** [English author] E: 365
- Ethical and Political Science, Academy of**
Institute of France I: 305
- Ethics** [philosophy] E: 365
Aristotle (Ethics and politics) A: 664
Hume, David (Hume's thought) H: 432
Kant, Immanuel (Kant's ideas) K: 244
Medical ethics M: 361
Medicine (Current issues in medicine) M: 377
Moore, G. E. M: 796
Philosophy (Ethics) P: 384-385
Plato (Ethics) P: 568
Religion (A code of conduct) R: 216
- Ethics, Congressional**
Congress of the United States (Congressional ethics) Ci: 948
- Ethics, The** [book by Spinoza]
Spinoza, Baruch So: 795
- Ethiopia** [country] E: 367 with pictures and maps
Christmas (In Africa) C: 533 with picture
Eritrea E: 352
Exploration (The exploration of Africa) E: 449
Flag picture on F: 198
Haile Selassie I H: 8
Immigration (Africa) I: 85
Italo-Ethiopian War I: 495
League of Nations (Why the League failed) L: 160
World War II (Allies) W: 470-471; (table: The Allies) W: 471
- Ethiopian lily** [plant]
Calla C: 67
- Ethiopian Orthodox Church**
Ethiopia (Religion) E: 369 with picture
Christmas (In Africa) C: 533 with picture
- Ethiopian People's Democratic Revolutionary Front** [political party]
Ethiopia (Recent developments) E: 372
- "Ethiopian songs"**
Foster, Stephen Collins F: 428
- Ethmoid bone**
Face F: 3
Nose N: 548
- Ethmoid sinus** [anatomy]

- Sinus S: 474 *with diagram*
Ethnic cleansing [Balkan history]
 Bosnia-Herzegovina (History) B: 492-493
 Milošević, Slobodan M: 556
Ethnic dancing *See* Folk dancing *in this index*
Ethnic group [sociology] E: 372
See also Minority group *in this index*
 Asia (Peoples of Asia) A: 772
 Asian Americans A: 812b
 Culture (Culture and society) Ci: 1188
 Europe (Ethnic groups) E: 387
 Minority group M: 608
 New York City (Ethnic groups) N: 331
 Races, Human (Race and ethnic or national identity) R: 59
 Segregation (Other segregation in the United States) S: 286
 Stereotyping So: 893
 Tribe T: 440
Ethnic pluralism *See* Cultural pluralism *in this index*
Ethnic stratification
 Minority group (Racial or ethnic stratification) M: 609
Ethnocentrism [anthropology] E: 372
 Anthropology A: 546
 Culture (Ethnocentrism and cultural relativism) Ci: 1188
 Education (Development of U.S. education) E: 102-103
 Mores M: 802
 Sumner, William Graham So: 973
Ethnography E: 372
 Culture (How people study culture) Ci: 1189
Ethnolinguistics
 Sapir, Edward S: 122
Ethnology [anthropology]
 Ethnography E: 372
Ethogram [zoology]
 Ethology E: 373
Ethology [zoology] E: 373
 Biology (table) B: 317
 Lorenz, Konrad Zacharias L: 454
 Sociobiology So: 563
 Zoology (History) Z: 610-611
Ethyl acetate [poison]
 Butterfly (How to collect butterflies) B: 742
Ethyl alcohol [chemical]
See also Alcoholic beverage *in this index*
 Alcohol (Ethanol) A: 335
 Alcoholic beverage A: 335
 Brazil (Energy sources) B: 581
 Environmental pollution (Scientific efforts) E: 336
 Synthetic fuel So: 1068
Ethyl cellulose [chemical]
 Cellulose (Industrial uses) C: 341
Ethyl ether *See* Ether [chemistry] *in this index*
Ethyl-tert-butyl ether [chemical]
 Gasoline (Gasoline blends and additives) G: 61-62
Ethylbenzene [chemical]
 Plastics (Making synthetic resins) P: 556
Ethylene [chemical] E: 373
 Banana (How bananas grow) B: 72-73
 Butane and propane B: 728
 Hormone (Other growth regulators) H: 337
 Hydrogenation H: 470
 Polyethylene P: 649
Ethylene dibromide [chemical]
 Bromine B: 636
 Insecticide (Dangers of insecticides) I: 303
Ethylene glycol [chemical]
 Alcohol (Ethanediol) A: 335
 Antifreeze A: 554
 Glycol G: 237
Etiology, Concept and Prophylaxis of Childbirth Fever, The [book by Semmelweis]
 Semmelweis, Ignaz Philipp S: 293
Etiquette E: 373
 Address, Forms of A: 53
 Letter writing L: 209
 Post, Emily Price P: 698
Etiquette [book by Post]
 Etiquette (Books on etiquette) E: 374
 Post, Emily Price P: 698
Etna, Mount *See* Mount Etna *in this index*
Étoile, Place de l'
 Paris (Gardens, squares, and parks) P: 162
Eton College [English secondary school] E: 374
 United Kingdom *picture on* U: 56
Etosha Game Park [Namibia]
 Namibia (Land and climate) N: 9
 National park (table) N: 42f
Etowah Mounds
 Georgia (Places to visit) G: 122
Etrog [tree]
 Citron Ci: 573
Etruria [ancient region]
 Etruscans E: 374 *with map*
Etruscan [language]
 Etruscans (Language and culture) E: 374
Etruscans [ancient people] E: 374 *with picture and map*
 Alphabet (The Etruscans) A: 383
 Italy (End of the Roman Empire) I: 512-513
 Painting (Etruscan painting) P: 42
 Rome, Ancient (Beginnings) R: 444-445 *with picture*
 Sculpture (Etruscan sculpture) S: 246
Ets, Marie Hall [American artist]
 Caldecott Medal (table: 1960) C: 26
Étude [music] E: 375
Etymologist [career]
 Etymology E: 375
Etymology [language] E: 375
Etymon [language]
 Etymology (Etymons and cognates) E: 375
Etzel [legendary figure]
Nibelungenlied N: 395
Eu [symbol]
 Europium E: 420
Eubacteria [biology]
 Archaea A: 593
Euboea [region]
 Greece (Central Greece and Euboea) G: 358
Eucalyptus [tree] E: 376 *with picture*
 Australia (Native plants) A: 914; (Forestry and fishing) A: 920; *pictures on* A: 916
 Tasmania (Natural resources) T: 49
Eucaryotic cell
 Life (Cells) L: 276-277
Eucharist *See* Communion *in this index*
Eucharist, Celebration of the *See* Mass *in this index*
Eucharistic liturgy [religion]
 Roman Catholic Church (The Eucharist or Mass) R: 404
Eucken, Rudolf [German philosopher]
 Nobel Prizes (Literature: 1908) N: 445
Euclid [Greek mathematician] E: 376
 Geometry (Euclidean geometry) G: 103;
 (Greek geometry) G: 105
 Mathematics (Branches of mathematics) M: 303; (The Greeks) M: 306
 Number theory N: 605
 Radiation (History) R: 80
Euclidean geometry [mathematics]
 Geometry (Types of geometry) G: 103
 Mathematics (Branches of mathematics) M: 303
 Trigonometry T: 442
Euclid's algorithm
 Algorithm A: 366
Eucelomate [biology]
 Coelom Ci: 753
Eudoxus of Cnidus [Greek mathematician]
 Mathematics (The Greeks) M: 306
Eugene I, Saint [pope]
 Pope (table) P: 666
Eugene II [pope]
 Pope (table) P: 666
Eugene III [pope] E: 376
 Pope (table) P: 666
Eugene IV [pope] E: 377
 Pope (table) P: 666
Eugene [Oregon] E: 376
Eugène [play by Jodelle]
 French literature (The Renaissance) F: 519-520
Eugene of Savoy, Prince [Austrian prince]
 Blenheim, Battle of B: 400
Eugene Onegin [opera by Tchaikovsky]
 Tchaikovsky, Peter Ilich (His music) T: 61-62
Eugene Onegin [poem by Pushkin]
 Pushkin, Alexander (His works) P: 911-912
 Russian literature (Early romanticism) R: 560-561
Eugene O'Neill National Historic Site [California]
 National Park System (table: National historic sites) N: 52
Eugenia [satellite]
 Satellite S: 150
Eugenics [science] E: 377
 Galton, Sir Francis G: 17
 Genetic testing (Promises and challenges of genetic testing) G: 86
Eugénie Marie de Montijo [wife of Napoleon III] E: 377
Eugenist
 Eugenics E: 377
Eugenius [Roman emperor]
 Rome, Ancient (table) R: 447
Euglena [microorganism] E: 377 *with picture*
 Protozoan (Flagellates) P: 837
Euhedral crystal
 Crystal (Crystallization) Ci: 1166
Euhemerus [Greek scholar]
 Mythology (Euhemerus's theory) M: 986
Eukaryotic cell [biology]
 Archaea A: 593
 Cell (table) C: 327
Eulachon [fish] E: 377 *with picture*
Eulalius [antipope]
 Pope (table) P: 666
Eulenspiegel, Till [legendary figure] E: 378
Euler, Leonhard [Swiss mathematician] E: 378
 Mathematics (Developments in the 1700's) M: 307
Euler, Ulf Svante von [Swedish physiologist]
 Nobel Prizes (Physiology or medicine: 1970) N: 445
Euler-Chelpin, Hans Karl August Simon von [German chemist]
 Nobel Prizes (Chemistry: 1929) N: 442
Euler Crater
 Moon *picture on* M: 789
Euler's circle [mathematics]
 Set theory S: 321
"Eulogy of Saint Columba, The" [poem by Forgaill]
 Irish literature (Early Irish literature) I: 430
Eumenides [play by Aeschylus]
 Furies F: 566 *with picture*
Euphonium [musical instrument]
 Tuba T: 477
Euphorbiaceae [botany]
 Spurge So: 810
Euphoria [psychiatry]
 Bipolar disorder B: 327
 Cocaine (Physical and psychological effects) C: 742
Euphrates River [Asia] E: 378 *with map*
 Iraq (The land) I: 411
 River (table) R: 352
 Syria (The valleys and plains) So: 1073
Euphrosyne [Greek mythology]
 Graces G: 296 *with picture*
Euphues: The Anatomy of Wit [book by Lyly]
 Lyly, John L: 533
 Novel (Early novels) N: 572
Euphuism [literature]
 Lyly, John L: 533
E.U.R. [world's fair]
 Rome (Period of construction) R: 435 *with picture*
Eurafricans [people]
 Swaziland (People) So: 1017-1018
Eurasia [continent]
See also Asia; Europe *in this index*
 Asia (The land) A: 792
 Bird (Birds of Europe and Asia) B: 346 *with pictures*
 Continent Ci: 1021
 Europe (The land) E: 394-395
Eurasian Besin [geography]
 Arctic Ocean (Depth and the ocean floor) A: 642-643
Eurasian lynx [animal]
 Lynx L: 536 *with picture*
Eurasian musk thistle [plant]
 Invasive species (Managing invasive species) I: 354k
Eurasian nutcracker [bird]
 Nutcracker N: 622
Eurasian plate [geology]
 Plate tectonics (Convergent plate boundaries) P: 562-563 *with diagram*
Eurasian rook [bird]
 Rook R: 451
Eurasian seven-spotted lady beetle [insect]
 Invasive species (Managing invasive species) I: 354k

Euratom See European Atomic Energy Community *in this index*

Eureka: A Prose Poem [essay by Poe] Poe, Edgar Allan (Poe's life) P: 589

Eureka Springs [Arkansas] Arkansas (Places to visit) A: 704; (Springs) A: 708

Euripides [Greek dramatist] E: 378

Drama (Tragedy) D: 326-327

Greek literature (Drama) G: 377

Sophocles So: 595

Euro [currency] E: 378

Balance of payments (Balance of payments and exchange rates) B: 36

Europe (Recent developments) E: 416

European Economic and Monetary Union E: 417

European Monetary System E: 418

European Union (Internal affairs) E: 418-419; (Formation of the European Union) E: 420

Germany (Recent developments) G: 172

Money *pictures on M*: 704

Netherlands (Recent developments) N: 150

Peseta P: 317

Eurobank [economics]

Eurodollar E: 379

Eurodollar [economics] E: 379

Europa [astronomy] E: 379 *with picture*

Galileo G: 13

Jupiter (Satellites) J: 200

Satellite (Currently active satellites) S: 150a

Europa [Greek mythology] E: 379 *with picture* Cadmus C: 12

Europe E: 380 *with pictures and maps*

Asia (The land) A: 792

Conservation (Europe) Ci: 989

Language (Indo-European) L: 64 *with map*

Petroleum (Europe) P: 332

Wheat (Europe) W: 272 *with map*

Agriculture

Europe (Agriculture) E: 405-407 *with pictures and map*

Agriculture (Europe) A: 153

Art and architecture

Europe (The arts) E: 392 *with pictures*

Painting (Medieval painting) P: 48 *with pictures*; (The Renaissance) P: 51 *with pictures*; (The 1600's and 1700's) P: 58 *with pictures*; (The 1800's) P: 67 *with pictures*; (The 1900's in Europe) P: 77 *with pictures*

Porcelain (European porcelain) P: 677

Sculpture (The European impact) S: 244

Communications and mass media

Advertising (Advertising in other countries) A: 78

Newspaper (In Europe) N: 386

Television (In Europe) T: 116

Education

Library (Libraries of the world) L: 252

Finance and banking

Bank (Europe) B: 92

Health and welfare

Welfare (Welfare around the world) W: 191

History

Europe (History) E: 408 *with pictures and maps*

Arabs (Ottoman and European rule) A: 588

Christianity (The Middle Ages) C: 526

Classicism Ci: 653

Communism (European reality in the early 1900's) Ci: 890

Feudalism F: 81

Immigration (Immigration to the United States) I: 81; (Europe) I: 85

Indian, American I: 136

Industrial Revolution I: 246

Jews (Jews in Christian Europe) J: 122

Luther, Martin (Luther's place in history) L: 528

Muslims (Colonialism) M: 964d

Plague (History of plague) P: 506

Radicalism (In Europe) R: 82

Reformation R: 195

Slavery (The Middle Ages) S: 501

Tariff (Modern tariff policies) T: 44

Trade route (Early trade routes) T: 364

United States, History of the (European discovery) U: 150

World, History of the (Medieval Europe)

W: 432; (The spread of Western civilization) W: 438 *with pictures and map*

Manufacturing

Europe (Industry) E: 402-404 *with pictures and map*

Automobile (Major producing countries and companies) A: 958-959

Manufacturing (In Europe) M: 169

Textile (In Europe) T: 218

Natural resources

National park (table) N: 42f

People

Europe (People) E: 386 *with pictures and maps*; (Ways of life) E: 388 *with pictures and maps*

Clothing (The Middle Ages) Ci: 698; (The Renaissance) Ci: 700 *with pictures*; (The 1700's) Ci: 701-702; *pictures on Ci: 694*

Population (World population) P: 672

Prehistoric people (The development of *Homo sapiens*) P: 746

Physical features

Europe (The land) E: 394 *with pictures and maps*

Continental divide Ci: 1022

Technology and science

Telephone (The telephone industry) T: 99

Transportation

Railroad (In other countries) R: 113-114

See also the list of Related articles in the Europe article

Europe [ship]

Ship *picture on S*: 410

Europe, Council of [alliance] E: 417

Flag *picture on F*: 216

Switzerland (After the wars) So: 1061

Europe, The U.S. Army

Army, United States (Organization of the Army) A: 736-737

Europe After the Rain [painting by Ernst]

Surrealism *picture on So*: 1010

European aspen [tree]

Aspen A: 815

European Atomic Energy Community

European Union (Formation of the European Community) E: 420

Monnet, Jean M: 730

Nuclear energy (The first peaceful uses) N: 591

European Bank for Reconstruction and Development

Foreign aid (Regional development programs) F: 385

European bark beetle [insect]

Dutch elm disease D: 392 *with picture*

European Baseball Federation

Baseball (Baseball around the world) B: 131-132

European bison [animal] *See* Wisent *in this index*

European blackbird

Thrush *picture on T*: 271

European catfish

Catfish C: 301

European Central Bank

European Union (Formation of the European Union) E: 420

European Coal and Steel Community [alliance]

European Union (Beginnings) E: 420

Monnet, Jean M: 730

European Commission

European Union (Governing institutions) E: 419

European Community [alliance]

See also European Economic Community; European Union *in this index*

Cold War (The growing strength of Europe) Ci: 768; (The Cold War in the 1970's) Ci: 669-770

De Gaulle, Charles André Joseph Marie (The Fifth Republic) D: 91

Europe (Toward European unity) E: 415

European Free Trade Association E: 417

European Union E: 418; (Formation of the European Community) E: 420

France (France under de Gaulle) F: 476-477

Monnet, Jean M: 730

Norway (Social and economic changes) N: 547

United Kingdom (Economic recovery—and collapse) U: 72-73

European corn borer [insect]

Corn borer Ci: 1064

European Council

European Union (Governing institutions) E: 419

European Court of Justice

European Union (Governing institutions) E: 419-420

Luxembourg L: 532

European cowslip [plant]

Cowslip Ci: 1113

European cranberry bush [plant] *See* Snowball *in this index*

European Currency Unit

European Monetary System E: 418

European Economic and Monetary Union

E: 417

Europe (Recent developments) E: 416

European Economic Area [trade agreement]

Common market Ci: 875

European Economic Community [alliance]

Europe (Toward European unity) E: 415

France (France under de Gaulle) F: 476-477

International relations (Treaties) I: 344

United Kingdom (European Unity) U: 71-72; (Economic recovery—and collapse) U: 72

European elk [animal]

Elk (The European elk) E: 242

European flea

Flea (Kinds of fleas) F: 232 *with picture*

European Free Trade Association [alliance]

E: 417

Austria (Foreign trade) A: 936-937

Common market Ci: 875

Iceland (Recent developments) I: 24

European goldfinch [bird]

Goldfinch G: 257 *with picture*

European horsechestnut [tree]

Horsechestnut H: 366 *with picture*

European house spider

House spider H: 388

European Investment Bank

Foreign aid (Regional development programs) F: 385

European Laboratory for Particle Physics *See*

CERN *in this index*

European larch [tree]

Larch L: 76

Tree picture on T: 426

European mole [animal]

Mole (The European mole) M: 690b

European Monetary System [economics]

E: 418

European Union (Increasing cooperation)

E: 420

European Organization for Nuclear Research

See CERN *in this index*

European Parliament

European Union (The European Parliament) E: 420

Luxembourg L: 532

European Plain [region, Europe]

Europe (The Great European Plain) E: 395

Russia (The European Plain) R: 539 *with picture*

European plan [travel]

Hotel (Kinds of hotels) H: 376-377

European plum

Plum (Kinds of plums) P: 577 *with picture*

European polecat

Ferret F: 76

European rabbit

Rabbit (European rabbits) R: 46

European race [theory]

Races, Human (The geographical-race theory) R: 54

European Recovery Program *See* Marshall

Plan in this index

European red mite [animal]

Apple (Pests and diseases) A: 571

European robin [bird]

Robin R: 367

European Southern Observatory [Chile]

Telescope (Reflecting telescopes) T: 104-105

European Space Agency E: 418

Hubble Space Telescope (How the telescope works) H: 403

International Space Station I: 346b

Space exploration (Probes to comets) So: 711; (The International Space Station) So: 722; (Spacelab missions) So: 725; (European

nations) So: 727
 United States, History of the (The International Space Station) U: 195
European Space and Research Organization
 European Space Agency E: 418
European sparrowhawk [bird]
 Sparrowhawk So: 765
European starling [bird]
 Starling So: 856 *with picture*
European Union [organization] E: 418
See also European Community; European Economic Community *in this index*
 Austria (Foreign trade) A: 936-937
 Balance of payments (Balance of payments and exchange rates) B: 36
 Denmark (Recent developments) D: 141
 Euro E: 378
 Europe E: 382 *with picture*; (Toward European unity) E: 415-416
 European Economic and Monetary Union E: 417
 European Monetary System E: 418
 Flag *picture on* F: 216
 Foreign aid (Regional development programs) F: 385
 France (International trade) F: 470
 Germany (Economy) G: 159-160
 Greece (The restoration of democracy) G: 365
 International trade (Government trade policies) I: 348-349
 Italy (Economy) I: 509
 Luxembourg L: 532
 Norway (Recent developments) N: 547
 Portugal (Foreign trade) P: 692
 United Kingdom (Thatcher resigned) U: 73
 Western European Union W: 231
European Union, Treaty on [1992]
 Europe (Toward European unity) E: 415-416; *picture on* E: 382
 European Union (Formation of the European Union) E: 420
European viper [snake]
 Reptile (Lizards and snakes) R: 250-251
European white birch [tree]
 Birch (Paper birch) B: 327
Europeans [people]
 Africa (Peoples of Africa) A: 104
 Races, Human (The geographical-race theory) R: 54-55 *with map*
Europium [element] E: 420
Europoort
 Rotterdam R: 489
Eurovision [television]
 Europe (Communication) E: 405
Euryale [Greek mythology]
 Gorgons G: 275
Eurydice [Greek mythology] E: 421
 Orpheus O: 858
Eurystheus [Greek mythology]
 Hercules (The twelve labors) H: 198
Eurythmics [musical group]
 Rock music (Rock videos) R: 380
Eusden, Laurence [English poet]
 Poet laureate (table: Poets laureate of the United Kingdom) P: 590
Eusebius, Saint [pope]
 Pope (table) P: 666
Euskadi ta Askatasuna [political group]
 Basques B: 156
Euskara [language]
 Basques B: 156
Eustachian tube [anatomy]
 Adenoids A: 55
 Cleft palate Ci: 661
 Ear (The middle ear) E: 7-8 *with diagram*, (Diseases) E: 12
 Mastoid M: 298
Eustis, William [American political leader]
 Massachusetts (table) M: 288
Euterpe [Greek mythology]
 Muses M: 937
Euthanasia [death] E: 421
 Death (The right to die) D: 61
 National Right to Life Committee N: 60
 Palliative care P: 108
Euthyphro [book by Plato]
 Plato (The dialogues) P: 567, (The early dialogues) P: 568, (The theory of forms) P: 568
 Socrates (Socrates' life) So: 567-568
Eutrophication [biology] E: 421

Environmental pollution (Water pollution) E: 334
 Phosphorus P: 403
 Water pollution (Disruption of natural processes) W: 138; *diagram on* W: 137
Eutychian, Saint [pope]
 Pope (table) P: 666
Euwe, Max [Dutch chess player]
 Chess (World chess champions) C: 414
eV [unit of measure] *See* Electronvolt *in this index*
"Ev and Jerry Show"
 Ford, Gerald Rudolph (House minority leader) F: 375 *with picture*
EVA [space exploration] *See* Extravehicular activity *in this index*
Eva Luna [book by Allende]
 Latin-American literature (Recent developments) L: 113
Evacuation
 Civil defense (Evacuation) Ci: 605
Evangelical and Reformed Church [religious group]
 United Church of Christ U: 47
Evangelical Foreign Missions Association
 Missionary (Organization) M: 621
Evangelical Lutheran Church [religious group]
 Denmark (Religion) D: 135-136
Evangelical Lutheran Church in America [religious group] E: 422
 Lutherans (Lutheranism in America) L: 529
Evangelical United Brethren [religious group]
 United Methodist Church U: 75
Evangelical United Front [religion]
 Evangelicalism E: 422
Evangelicalism [religion] E: 422
 Protestantism (The Methodist movement [the 1700's]) P: 835
Evangelicals [religion]
 Anglicans (Episcopalians) A: 463-464
Evangeline [poem by Longfellow]
 Acadia A: 21
 Grand Pré G: 309
 Longfellow, Henry Wadsworth (Author and world celebrity) L: 450; (Narrative poems) L: 450
 Nova Scotia N: 555
Evangeline Trail
 Nova Scotia (Places to visit) N: 560
Evangelization of Peoples, Congregation for the [organization]
 Missionary (Organization) M: 621
Evans, Sir Arthur John [British archaeologist]
 E: 422
 Knossos K: 355
Evans, Billy [American umpire]
 Baseball (table: Hall of Fame) B: 134
Evans, Dale [American actress]
 Rogers, Roy R: 400
Evans, Daniel J. [American political leader]
 Washington (table) W: 65
Evans, David *See* Edge, The, *in this index*
Evans, Donald L. [American government official]
 Bush, George Walker (table) B: 723
 Commerce, Department of (table) Ci: 871
Evans, Edmund [British engraver]
 Caldecott, Randolph C: 26
 Literature for children (The rise of illustration) L: 363
Evans, Janet [American swimmer]
 Swimming (History) So: 1048
Evans, John G. [American political leader]
 South Carolina (table) So: 658
Evans, John V. [American political leader]
 Idaho (table) I: 42
Evans, Larry [American chess player]
 Chess (United States chess champions) C: 414
Evans, Mary Ann *See* Eliot, George *in this index*
Evans, Melvin [American government official]
 Virgin Islands (Progress under the United States) V: 397
Evans, Oliver [American inventor] E: 422
 Automobile (The steam car) A: 962
 Flour (History) F: 269
 Steam engine (Modern steam engines) So: 881
Evans, Rudolph [American sculptor]
 Jefferson Memorial J: 88

Evans, Timothy [American political leader]
 Chicago (Political developments in the late 1900's) C: 436-437
Evans, Walker [American photographer] E: 422
 Agee, James A: 140
 Photography (The photographic revolution) P: 427-428
Evans and Sutherland Corporation
 Planetarium (Digital projectors) P: 514b
Evans-Pritchard, E. E. [British anthropologist]
 Anthropology (Entering the community) A: 547
 Ethnography E: 373
Evanston [Illinois]
 Northwestern University N: 535
Evansville [Indiana]
 Indiana (Average monthly weather) I: 210
Evaporated milk
 Milk (table) M: 547
Evaporating pond
 Salt (Salt from the sea) S: 72-73
Evaporation [physics] E: 422 *with diagrams*
 Heat (Changes in state) H: 153
 Ocean (Composition) O: 654, (Sediments) O: 654
 Vapor V: 285
Evaporator
 Dehumidifier D: 93 *with diagram*
 Refrigeration (The electric refrigerator) R: 201 *with diagram*
Evaporator [pan]
 Maple syrup (Production) M: 188 *with picture*
Evaristus, Saint [pope]
 Pope (table) P: 666
Evarts, William Maxwell [American lawyer]
 E: 423
Eve [Biblical figure]
 Adam and Eve A: 32
 Eden E: 76
"Eve of Saint Agnes, The" [poem by Keats]
 Keats, John (His work) K: 253-254
Evalina [book by Burney]
 Burney, Fanny B: 709
Evalyn, John [English author]
 English literature (Restoration prose) E: 318
Evening [sculpture by Michelangelo]
 Michelangelo M: 486 *with picture*
Evening grosbeak [bird]
 Grosbeak G: 398
Evening on Karl Johans Gate [painting by Munch]
 Norway *picture on* N: 540
Evening Post [newspaper]
 Bryant, William Cullen (His later career) B: 656
Evening primrose [plant] E: 423
 Flower F: 300; *pictures on* F: 286, F: 291, F: 300
Evening shoe
 Shoe (Kinds of shoes) S: 431
Evening star [astronomy] E: 423
Evenings on a Farm near Dikanka [book by Gogol]
 Gogol, Nikolai G: 248
Event horizon [physics]
 Black hole (Characteristics of black holes) B: 388
Eventing
 Horse (Eventing) H: 358, *picture on* H: 357
Ever the Winds of Chance [book by Sandburg]
 Sandburg, Carl S: 108
Everest, Frank K., Jr. [American aviator]
 Airplane (table) A: 232
Everest, Sir George [British colonial leader]
 Mount Everest M: 884
Everest, Mount *See* Mount Everest *in this index*
Everett, Edward [American political leader]
 E: 423
 Fillmore, Millard (table) F: 102
 Gettysburg Address G: 176
 Lincoln, Abraham (The Gettysburg Address) L: 323
 Massachusetts (table) M: 288
Everglades [region, Florida] E: 424 *with map*
 Florida (Land regions) F: 254; *picture on* F: 242
Everglades National Park [Florida] E: 424
 Florida (Places to visit) F: 252; *picture on* F: 256
 National Park System (table: National parks) N: 48
 United States *picture on* U: 121
Evergreen [tree] E: 425

- Forest (Temperate evergreen forests) F: 393;
(Boreal forests) F: 396; (Mountain evergreen forests) F: 395; *picture on* F: 397
- Plant (Gymnosperms) P: 519-520 *with picture*
- Pruning P: 841
- Tree (Broadleaf trees) T: 414
- See also the list of Related Articles in the Evergreen article*
- Evergreen huckleberry** [shrub]
Huckleberry H: 404
- Evergreen State**
Washington W: 46
- Everlasting flower** [plant]
Immortelle I: 86
- Evers, Charles** [American civil rights leader]
Evers, Medgar E: 425
Mississippi (The mid-1900's) M: 644-645; *picture on* M: 643
- Evers, Johnny** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Evers, Medgar** [American civil rights leader]
E: 425
Evers-Williams, Myrlie E: 425
Mississippi (The mid-1900's) M: 644 *with picture*
- Evers-Williams, Myrlie** [American civil rights leader] E: 425
Spingarn Medal (table: 1998) So: 793
- Evert, Chris** [American tennis player] E: 425
Tennis (Tennis today) T: 168-169 *with picture*
- Every Good Boy Deserves Favor** [play by Stoppard]
Stoppard, Tom So: 911
- Every Man a King** [book by Long]
Long, Huey Pierce L: 446
- Every Man in his Humour** [play by Jonson]
Jonson, Ben J: 160
- Everybody's Magazine**
Magazine (History) M: 43-45
- Everyman** [play by Hofmannsthal]
Hofmannsthal, Hugo von H: 284
- Everything Book, The** [book by Fleming]
Literature for children *picture on* L: 366
- Everything That Rises Must Converge** [book by O'Connor]
O'Connor, Flannery O: 668
- Eves, Ernie** [Canadian political leader]
Ontario (table) O: 783; (Recent developments) O: 787
- Evesham, Battle of** [1265]
Henry III H: 186
- Eviction** [law] E: 425
- Evidence** [law] E: 425
Crime laboratory (How evidence is handled) Ci: 1140-1141
Criminal justice system (Pretrial procedures) Ci: 1143
Search warrant S: 269
Trial (Presenting evidence) T: 437
- Evidence** [oratory]
Debate (The evidence) D: 64
- Evidential breath tester** [machine]
Breath testing B: 591
- Evil eye** [magic] E: 426
Witchcraft (Witchcraft as sorcery) W: 371
- Evil spirit**
Devil D: 174
Exorcism E: 438
- Evita** *See* Perón, Eva Duarte de *in this index*
- Evita** [musical]
Lloyd-Webber, Andrew L: 403
- Evolution** E: 426 *with pictures*
Adaptation A: 45
Anaximander A: 449
Animal (The origin and development of animals) A: 503
Anthropology (Early anthropological thought) A: 548
Biology (Current research and issues) B: 320
Bird (The development of birds) B: 369
Creationism (Creationist beliefs) Ci: 1123
Darwin, Charles Robert D: 39
Exobiology E: 437
Extinct animal (Types of extinction) E: 457
Fossil (Tracing the development of life) F: 423
Genetics (Population genetics) G: 87
Gould, Stephen Jay G: 281
Haeckel, Ernst Heinrich H: 5
Hamilton, William Donald H: 33
Hand (Animal hands) H: 40
Heredity (Heredity and natural selection) H: 203
Horse (Origins of the horse) H: 360 *with picture*
Human being (Human physical development) H: 414
Invertebrate I: 366
Island (How life develops on islands) I: 473
Lamarck, Chevalier de L: 50
Life (Modern theories) L: 278
Mammal (The evolution of mammals) M: 126
Morgan, Lewis Henry M: 804
Mutation M: 969
Natural selection N: 65
Paleontology P: 103
Pragmatism P: 729
Prehistoric animal (Evolution and extinction) P: 742
Prehistoric people P: 743
Primate (The evolution of primates) P: 778b *with diagram*
Races, Human (Evolutionary theory) R: 53; (Natural selection) R: 57
Reproduction (How reproduction has evolved) R: 243
Reptile (The evolution of reptiles) R: 252
Science (To philosophical thought) S: 192; (Scientific advances of the 1800's) S: 200
Scopes trial S: 209
Social Darwinism So: 551
Sociology (Early sociological thought) So: 566
Spencer, Herbert So: 777
Teilhard de Chardin, Pierre T: 88
Wallace, Alfred Russel W: 15
See also the list of Related Articles in the Evolution article
- Evolution, The Modern Synthesis** [book by Huxley]
Huxley, Sir Julian Sorell H: 459
- Evolutionary biology**
Biology (table) B: 317
- Evolutionary psychology**
Psychology (Major fields of psychology) P: 848
- Evtushenko, Evgeny** *See* Yevtushenko, Yevgeny *in this index*
- Evzone** [soldier]
Athens (Landmarks) A: 854
- Ewald, Johannes** [Danish dramatist]
Scandinavian literature (The 1700's) S: 171
Denmark (Arts) D: 136
- Ewe** [animal]
Sheep (The body of the sheep) S: 380
- Ewe** [language]
Togo (People) T: 309-310
- Ewell, Richard Stoddert** [Confederate general]
E: 434
- Ewing, Buck** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Ewing, Thomas** [American government official]
Harrison, William Henry (table) H: 76
Interior, Department of the (table) I: 325
Taylor, Zachary (table) T: 60
Treasury, Department of the (table) T: 407
Tyler, John (table) T: 534
- Ewing, William L. D.** [American political leader]
Illinois (table) I: 71
- Ewing's sarcoma** [disease]
Cancer (Cancer in children) C: 169
- Ex parte Milligan** [U.S. history] E: 434
Supreme Court of the United States (table) So: 1002
- Ex post facto** [law] E: 435
Civil rights (Due process) Ci: 608
Constitution of the United States (Article I, Section 9) Ci: 1007-1008
- Exa** [prefix]
Metric system (Metric prefixes) M: 439
- Examination, Physical**
Cancer (Cancer checkups) C: 171
Medicine (Diagnosis) M: 364 *with pictures*
- Examinations** *See* Testing *in this index*
- Examiner** [newspaper, U.S.]
Clay, Cassius Marcellus Ci: 658
- Examiner, The** [newspaper, England]
Hunt, Leigh H: 450
- Excelibur** [legendary sword] E: 435
Arthur, King A: 757
- Excavation** [archaeology]
Archaeology (Excavating sites) A: 597 *with pictures*
- Excavation** [construction]
Building construction (Constructing a skyscraper) B: 683
- House (The foundation) H: 380
- Excellence in Education, National Commission on**
Education (How can performance be improved?) E: 105
- Excelsior State** [nickname]
New York N: 291
- Except for Me and Thee** [book by West]
West, Jessamyn W: 198
- Except the Lord** [book by Cary]
Cary, Joyce C: 270
- Excepted service**
Civil service (Federal civil service) Ci: 612
- Exception report** [business]
Management information systems M: 132
- Exceptional children**
Gifted children G: 188
Special education So: 770
- Exchange, Bill of** *See* Bill of exchange *in this index*
- Exchange, Stock** *See* Stock exchange *in this index*
- Exchange program** [international relations]
Fulbright Scholarship F: 554
Scholarship (International scholarships) S: 178
- Exchange rate** [economics] E: 435
Balance of payments (Balance of payments and exchange rates) B: 36
European Economic and Monetary Union E: 417
Devaluation D: 173
Economics (World finance) E: 64
European Monetary System E: 418
Gold standard G: 254
Money (International finance) M: 716
- Exchange Rate Mechanism** [economics]
European Monetary System E: 418
- Exchange student** [education]
Fulbright Scholarship F: 554
Scholarship (International scholarships) S: 178
- Exchange-traded fund** [investment]
American Stock Exchange A: 430
- Excimer laser** [physics]
Laser (Other kinds of lasers) L: 85
- Excipient**
Drug (Developing the finished product) D: 356
- Excise** [tax] E: 435
Inland revenue I: 273
Internal revenue I: 337
Sales tax S: 66
Taxation (Taxes on transactions) T: 53
- Excitation** [physics]
Radiation (Effects of radiation) R: 79
- Excitatory postsynaptic potential**
Nervous system (Transmission across synapses) N: 135
- Excited state** [physics]
Atom (Electron energy levels) A: 873 *with diagram*
Laser (Producing laser light) L: 83-84 *with diagrams*
Light (Sources of light) L: 283
- Exciter** [machine]
Electric generator (How AC generators work) E: 173
Electric power (Sources of electric power) E: 182 *with diagram*
- Exciter lamp**
Motion picture (The projector) M: 859 *with diagram*
- Exclamation point** [punctuation]
Punctuation (The exclamation point) P: 902
- Exclamatory sentence**
Sentence (Sentence classifications) S: 303
- Exclusion** [economics]
Income tax (Figuring the individual income tax) I: 104
- Exclusion Acts** *See* Oriental Exclusion Acts *in this index*
- Exclusion principle** [physics]
Pauli, Wolfgang P: 201
- Exclusive economic zone** [law]
Fishing industry F: 181
High seas H: 229
Law of the Sea Convention L: 141
Ocean (Who owns the ocean?) O: 665-666
Territorial waters T: 176
- Exclusive jurisdiction, Principle of**
Labor movement (Organizing workers) L: 4
- Excommunication** [religion] E: 435

300 Excretion

- City (The people) **Ci**: 582-584
 Middle Ages (The power of the church)
M: 525
- Excretion** [physiology]
 Elimination **E**: 236
- Excursion, The** [poem by Wordsworth]
 Wordsworth, William (Later career) **W**: 404
- Execution** [civil law]
 Debt **D**: 65
- Execution** [criminal law] See Capital punishment
in this index
- Executioner's Song, The** [book by Mailer]
 Mailer, Norman **M**: 67
- Executions of 3rd May, 1808, The** [painting by Goya]
 Goya, Francisco **G**: 295
 Painting (Social expression) **P**: 34;
 (Romanticism) **P**: 68-69 *with picture*
- Executive** [government] **E**: 435
See also Executive department *in this index*
 President **P**: 756b
- Executive agreement** [international relations]
 Treaty (Negotiation) **T**: 409
- Executive Branch of the Government, Commission on Organization of the** See Hoover Commission *in this index*
- Executive department** [U.S.]
 Constitution of the United States (Article II)
Ci: 1008
 Executive **E**: 435
 President of the United States (The executive departments) **P**: 764
 United States, Government of the (The executive branch) **U**: 140
- Executive editor** [occupation]
 Newspaper (The editorial department) **N**: 381
- Executive Mansion** [U.S.] See White House *in this index*
- Executive Office** [U.S.]
 Homeland Security, Office of **H**: 301
 President of the United States (The executive branch) **P**: 764
 United States, Government of the (The Executive Office of the President) **U**: 140
 Washington, D.C. map on **W**: 76
- Executive order** **E**: 436
 President of the United States (Chief executive) **P**: 764
- Executive Order 9066** [U.S. history]
 Asian Americans (Japanese internment)
A: 812e-812f
- Executive president**
 President **P**: 756b
- Executive privilege**
 President of the United States (The Watergate scandal) **P**: 769
 Presidential assistant **P**: 770
 Supreme Court of the United States (table)
So: 1002
- Executive producer**
 Motion picture (How motion pictures are made) **M**: 848
- Executor** [law] **E**: 436
 Administrator **A**: 58
 Probate **P**: 809
 Will (Administration) **W**: 306
- Exekias** [Greek painter]
 Painting (Greek painting) **P**: 42 *with picture*
- Exemplary Novels** [stories by Cervantes]
 Cervantes, Miguel de (His literary career)
C: 363-364
- Exempt carrier**
 Truck (Industrial uses) **T**: 456
- Exemption** [economics]
 Customs **Ci**: 1201
 Flat tax **F**: 228
 Income tax (Figuring the individual income tax)
I: 104
- Exercise**
 Aerobics **A**: 85
 Aging (Overcoming aging) *picture on* **A**: 142
 Dance (Recreational reasons) **D**: 26
 Diabetes (Treatment) **D**: 179
 Dog (Exercise and play) **D**: 279
 Fibromyalgia **F**: 90
 Gymnastics **G**: 447 *with pictures*
 Health (Exercise) **H**: 125
 Isometrics **I**: 475
 Jogging **J**: 130
 Muscle (Skeletal muscles) **M**: 933-934
 Physical education **P**: 432 *with picture*

- Physical fitness (Developing physical fitness)
P: 435 *with pictures*
- Physical therapy (Aids in physical therapy)
P: 435
- Running **R**: 520
- Space exploration (Microgravity) **So**: 701-703
- Weight control (Physical inactivity) **W**: 181;
 (Exercise) **W**: 183
- Exercise stress test** See Stress test *in this index*
- Exhaust manifold**
 Automobile (The exhaust system) **A**: 952; *diagram on* **A**: 950
 Gasoline engine (Exhaust system) **G**: 65
- Exhaust stroke**
 Automobile (The engine) **A**: 949
- Exhaust system**
 Automobile (The exhaust system) **A**: 952
 Catalytic converter **C**: 298
- Exhaust trail**
 Conrail **Ci**: 1023
- Exhaust valve**
 Gasoline engine (Valves) **G**: 64 *with pictures*
- Exhaustion** [physiology]
 Stress (How stress affects the body) **So**: 926-927
- Exhaustion, Method of** [mathematics]
 Mathematics (The Greeks) **M**: 306
- Exhibit, Science**
 Science projects (Preparing an exhibit) **S**: 207
- Exhibition**
 Fair **F**: 6
 Museum (Exhibition and care of materials)
M: 939
- Exhibition Hall**
 National Archives **N**: 28 *with picture*
- Exhibition Place**
 Toronto (Landmarks) **T**: 336-337
- Exhibitor**
 Motion picture (Exhibition) **M**: 860
- Exile** [punishment] **E**: 436
- Eximbank** [U.S.] See Export-Import Bank of the United States *in this index*
- Existence** [philosophy] See Being *in this index*
- Existential theory** [psychology]
 Abnormal psychology (Theories of abnormal psychology) **A**: 12
- Existentialism** [philosophy] **E**: 436
 American literature (Southern fiction) **A**: 424
 Dostoevsky, Fyodor **D**: 311
 French literature (Existentialism) **F**: 523
 Heidegger, Martin **H**: 166
 Jaspers, Karl **J**: 65
 Kierkegaard, Søren Aabye **K**: 313
 Novel (Existentialism) **N**: 574
 Philosophy (Modern philosophy) **P**: 387-390
 Sartre, Jean-Paul **S**: 127
- Existentialism and Humanism** [book by Sartre]
 Sartre, Jean-Paul **S**: 127
- Existing light** [photography] See Natural light *in this index*
- Exit Drills in the Home**
 Fire drill **F**: 130
- Exit poll**
 Public opinion poll (History) **P**: 863
- Exobiology** [biology] **E**: 437
 Biology **B**: 316
 Life (The search for life on other planets)
L: 279
- Exocarp** [botany]
 Fruit (How botanists classify fruits) **F**: 546
- Exocrine gland** [anatomy]
 Gland **G**: 207, (Exocrine glands) **G**: 208
- Exodus** [Old Testament] **E**: 438
 Bible (The Bible as a historical source) **B**: 284-285
 Jews (The Exodus) **J**: 121
 Moses (The Exodus) **M**: 828-829
 Passover **P**: 192
 Pentateuch **P**: 274
 Red Sea **R**: 190
- Exogamy**
 Marriage (Marriage in other cultures) **M**: 222
- Exon, J. James** [American political leader]
 Nebraska (table) **N**: 110
- Exophthalmos** [disorder]
 Goiter **G**: 248
 Graves' disease **G**: 331
- Exorcism** [magic] **E**: 438
- Exoskeleton** [zoology]
 Ant (The bodies of ants) **A**: 521

- Arthropod **A**: 753
- Beetle **B**: 214; (The life cycle of beetles)
B: 216
- Butterfly (The bodies of butterflies) **B**: 738;
 (The larva) **B**: 740-741
- Crayfish **Ci**: 1122 *with picture*
- Crustacean **Ci**: 1162
- Insect (Skeleton) **I**: 286
- Molting **M**: 696
- Skeleton (Animal skeletons) **S**: 480
- Exosphere** [atmosphere]
 Air (The exosphere) **A**: 173 *with diagram*
 Moon **M**: 783; (The exosphere of the moon)
M: 788
- Exotic river**
 River (Sources of river water) **R**: 351
- Exotic shorthair cat**
 Cat (Short-haired breeds) **C**: 290-291
- Exotoxin** [poison]
 Toxin **T**: 351
- Expandable balloon**
 Balloon (Gas balloons) **B**: 58 *with picture*
- Expandable clay**
 Clay **Ci**: 658
- Expanding universe**
 Big bang **B**: 297
 Gravitation (Predictions of general relativity)
G: 332
 Universe (Changing views of the universe)
U: 205-206
- Expansion** [economics]
 Business cycle **B**: 727
 Depression (Causes and prevention) **D**: 150-151
- Expansion** [mathematics]
 Binomial theorem **B**: 310
- Expansion** [physics] **E**: 438 *with diagram*
 Heat (Changes in size) **H**: 152
- Expansion bolt** [hardware]
 Bolt **B**: 449 *with picture*
 Climbing (Technical climbing) **Ci**: 680 *with picture*
- Expansion joint** [construction]
 Heat (Changes in size) **H**: 152 *with diagrams*
- Expansion slot** [electronics]
 Computer (Parts of computers) **Ci**: 911-912
with picture
- Expansionism**
 Imperialism **I**: 92
- Expatriation**
 Citizenship (Expatriation) **Ci**: 571
- Expectations theory** [economics]
 Inflation (The expectations theory) **I**: 268
- Expedition of Humphry Clinker, The** [book by Smollett]
 English literature (The rise of the novel)
E: 318-319
 Novel (The first English novelists) **N**: 572
 Smollett, Tobias George **S**: 521
- Expedition style**
 Mountain climbing (Styles of mountain climbing) **M**: 897
- Expeller pressing** [industrial process]
 Vegetable oil (Production) **V**: 294
- Expenditure** [economics]
 Budget (Estimating expenditures) **B**: 670
 Recession (Causes of recession) **R**: 175
- Expensive People** [book by Oates]
 Oates, Joyce Carol **O**: 639
- "Experience"** [essay by Emerson]
 Emerson, Ralph Waldo (His prose works)
E: 259
- Experience** [philosophy]
 Dewey, John **D**: 177
 Empiricism **E**: 262
 Hume, David (Hume's thought) **H**: 432
 Kant, Immanuel (Kant's ideas) **K**: 244
 Locke, John (His philosophy) **L**: 413
 Phenomenology **P**: 356
- Experience chart**
 Reading (The language-experience method)
R: 158 *with picture*
- Experiment** [science]
 Animal experimentation **A**: 510
 Animal rights movement **A**: 510
 Drug (Creating a new drug) **D**: 355 *with picture*
 Psychology (Experimentation) **P**: 849
 Science **S**: 191; (Conducting experiments)
S: 195
 Science projects (Kinds of science projects)
S: 206

Experiment station

Agricultural experiment station **A**: 145

Experimental embryology

Embryology **E**: 257

Experimental group

Psychology (Experimentation) **P**: 849

Experimental Novel, The [book by Zola]

Naturalism (Naturalism in fiction) **N**: 65

Experimental psychology

Science (Scientific advances of the 1800's) **S**: 200-201

Experimental theater

Drama (Modern drama since World War II) **D**: 340

Experiments in Art and Technology [project]

Rauschenberg, Robert **R**: 150

Expert system [computer science]

Artificial intelligence (Knowledge representation and reasoning) **A**: 760

Computer (Artificial intelligence [AI] software) **Ci**: 920

Expert witness

Crime laboratory (Presenting the evidence) **Ci**: 1141

Expiration [physiology]

Diaphragm **D**: 184

Lung (Gas exchange in the lungs) **L**: 523-524

Respiration (The process of breathing) **R**: 260 *with diagram*

Exploits River

Newfoundland and Labrador (Rivers and lakes) **N**: 370 *with map*

Exploration E: 439 *with pictures and maps*

Deep sea (Deep-sea exploration) **D**: 82c

Ocean (Exploring the ocean) **O**: 662 *with pictures*

Portugal (The age of exploration) **P**: 693

United States, History of the (America before colonial times) **U**: 150 *with picture*

World, History of the (The age of exploration) **W**: 440

See also the list of Related Articles in the Exploration article

Exploration, Age of [European history]

Portugal **P**: 686; (The age of exploration) **P**: 693

Exploration geochemistry

Geochemistry **G**: 90

Exploration of Space, The [book by Clarke]

Clarke, Arthur C. **Ci**: 642

Exploration Place [Wichita]

Kansas (Places to visit) **K**: 226

Explorationist [career]

Gold (Gold deposits) **G**: 252

Prospecting **P**: 829

Explorer

Exploration **E**: 439

Explorer 1 [spacecraft]

Eisenhower, Dwight David (The space age) **E**: 154

Rocket (The space age) **R**: 391

Satellite, Artificial (History) **S**: 150g

Space exploration (The space race begins) **S**: 707-708

Van Allen belts **V**: 269

Von Braun, Wernher **V**: 448

Explosion

Fallout **F**: 18

Fire (Kinds of fire) **F**: 120-121

Explosive E: 454

Coal (Strip mining) **Ci**: 721; (The room-and-pillar system) **Ci**: 723-725

Mine warfare **M**: 563

Plastic explosive **P**: 553

See also the list of Related Articles in the Explosive article

Explosive bonding [industrial process]

Welding (Solid-state bonding) **W**: 189

Explosive train

Ammunition (How shells explode) **A**: 436

Expo 67 [Montreal, Quebec]

Architecture *picture on* **A**: 610

Expo 74 [Spokane, Washington]

Spokane (Government and history) **S**: 798

Expo 86 [Vancouver, British Columbia]

British Columbia (The late 1900's) **B**: 630-631

Expo 92 [Seville, Spain]

Seville **S**: 329

Exponent [mathematics]

Algebra (Terms used in algebra) **A**: 351; (Multiplication) **A**: 355

Decimal system (The decimal system and number words) **D**: 70-71

Logarithms **L**: 423

Numeration systems (The decimal system) **N**: 605-606

Power **P**: 728

Scientific notation **S**: 207

Square **So**: 811

Export-Import Bank of the United States

E: 454

Export Pipeline

Pipeline (In other countries) **P**: 491

Export subsidy [trade]

Tariff (Offsetting unfair trade practices) **T**: 43

Exports and imports [economics] **E**: 454

Balance of payments (How the balance of payments is determined) **B**: 35-36

Customs **Ci**: 1201

Devaluation **D**: 173

Economics (World trade) **E**: 63-64

Export-Import Bank of the United States **E**: 454

Free trade **F**: 499

Free trade zone **F**: 500

Gross domestic product (Measuring the GDP) **G**: 399

Tariff (Offsetting unfair trade practices) **T**: 43

World Trade Organization **W**: 451

Expos, Montreal *See Montreal Expos in this index***Exposition** [fair]

Fair **F**: 6

Exposition [literature]

Drama (The structure of drama) **D**: 325

Literature (Plot) **L**: 353

Exposition [music]

Classical music (Sonata) **Ci**: 645; (Fugue) **Ci**: 645

Fugue **F**: 553

Exposition of the System of the Universe

[book by Laplace]

Laplace, Marquis de **L**: 74

Exposure [photography]

Photography (Exposing the film) **P**: 410;

(Exposure) **P**: 415 *with pictures*;

(Developing and printing) **P**: 420-424 *with pictures*

Exposure [social practice]

Family (Development of the family) **F**: 21-22

Exposure meter [instrument]

Photography (Exposure meters) **P**: 418

Exposure sheet

Animation (Preliminary steps in animation) **A**: 511

"Express, The" [poem by Spender]

Spender, Stephen **So**: 778

Express authority [law]

Agent **A**: 140

Express mail

Postal Service, United States (Classes of mail) **P**: 699

Express repeal [law]

Repeal **R**: 241

Express service

Airmail **A**: 207

Wells, Fargo & Company **W**: 195

Expressed powers *See Delegated powers in this index***Expression** [mathematics]

Algebra (Terms used in algebra) **A**: 351

Expression [music]

Music (Indicating expression) **M**: 955

Expression, Freedom of

Academic freedom **A**: 20

Expression of the Emotions in Man and Animals, The [book by Darwin]

Darwin, Charles Robert (Darwin's theories) **D**: 40

Emotion (Early theories about emotions) **E**: 261

Expressionism [art] **E**: 455

See also Abstract expressionism in this index

Drama (Expressionism) **D**: 339 *with picture*

German literature (Expressionism) **G**: 142

Germany (Motion pictures) **G**: 156; (Painting and sculpture) **G**: 155 *with picture*

Motion picture (Filmmaking in Europe) **M**: 866 *with picture*

Munch, Edvard **M**: 926 *with picture*

Opera (The search for new forms) **O**: 799-800

Painting (Expressionism) **P**: 78 *with picture*

Expressive criticism

Criticism (Kinds of literary criticism) **Ci**: 1146

Expressway [road]

See also Freeway in this index

City (Description) **Ci**: 589 *with picture*

Road (Primary highways) **R**: 358

Traffic (Traffic problems) **T**: 366-367

Expropriation [law]

Eminent domain **E**: 260

Extempore speech

Public speaking (Delivering the speech) **P**: 866

Extended family

Africa (Marriage and the family) **A**: 108-109

Arabs (Family life) **A**: 586

Family (Varieties of families) **F**: 20 *with picture*; (Non-Western families) **F**: 24

Indian, American (Family life) **I**: 136b-136c

Korea (Way of life) **K**: 370

Latin America (Family life) **L**: 97

Extended spectrum penicillin [drug]

Penicillin (Forms of penicillin) **P**: 240

Extended term insurance

Insurance (Main kinds of life insurance) **I**: 309-310

Extended-wear contact lens

Contact lens (Soft contact lenses) **Ci**: 1020

Extension agent [agricultural specialist]

Agricultural experiment station **A**: 145

Extension programs [education] **E**: 456

Adult education (Colleges and universities) **A**: 69

Cooperative Extension System **Ci**: 1037

Education (Adult education) **E**: 88-89

Extension service [education]

Agricultural education (Colleges and universities) **A**: 144

Extension programs **E**: 456

Farm and farming (Obtaining management assistance) **F**: 43-44

Extensional tectonics [geology]

Satellite (Formation of satellites) **S**: 150; (Recently active satellites) **S**: 150a

Extensive farming

Agriculture (Kinds of agriculture) **A**: 148

Extensor

Muscle (Skeletal muscles) **M**: 933

Extensor pollicis brevis [anatomy]

Human body *diagram on* **H**: 422

Exterminating trap

Trapping (Kinds of traps) **T**: 403 *with pictures*

External Affairs, Ministry of [Canadian government]

Foreign policy (The executive) **F**: 387; (The executive) **F**: 387

External auditory canal [anatomy]

Ear (The outer ear) **E**: 7; *diagrams on* **E**: 8, **E**: 10

External beam radiotherapy [medicine]

Cancer (Radiation therapy) **C**: 172

External-combustion engine

Heat (Changing heat into motion) **H**: 153

Internal-combustion engine **I**: 336

External defibrillator [device]

Defibrillator **D**: 88

External fertilization

Animal (Sexual reproduction) **A**: 496 *with diagram*

Fertilization **F**: 78

Fish (How fish reproduce) **F**: 169

Reproduction (How reproduction has evolved) **R**: 243

External parasite [organism]

Cattle (Diseases) **C**: 312-314

External senses [anatomy]

Senses (External senses) **S**: 301 *with diagrams*

Extinct animal E: 456

Animal (Why species become extinct) **A**: 503

Biodiversity (Protecting biodiversity) **B**: 311

Bird (Extinct birds) **B**: 369 *with pictures*

Conservation (Biodiversity conservation) **Ci**: 976

Dinosaur (Why dinosaurs died out) **D**: 213

Earth (The Paleozoic Era) **E**: 27

Endangered species **E**: 269

Evolution (Contributions from other scientific fields) **E**: 433

Fossil **F**: 422 *with pictures*

Mammal (The future of mammals) **M**: 127

Prehistoric animal (Evolution and extinction) **P**: 742

Reptile (The evolution of reptiles) R: 252
Wildlife conservation W: 303

Extinct volcano
Volcano (Classifying volcanic activity) V: 442

Extinction [conservation] See Extinct animal;
Endangered species in *this index*

Extortion [crime] E: 457

Extra [sports]
Cricket (Scoring) Ci: 1132

Extra point
Football (Scoring) F: 362

Extract E: 457
Herbal medicine H: 196
Meat extract M: 350
Perfume P: 286

Extracted materials
Materials (Extracted materials) M: 300d

Extraction [chemistry]
Solvent So: 587

Extraction [dentistry]
Orthodontics O: 859

Extraction unit [industry]
Gas [fuel] (Transmitting and distributing gas) G: 53

Extractive
Wood (The composition of wood) W: 390

Extractive industry
Industry (Other systems of classification) I: 161

Extractive reserve [area]
Rain forest (Saving rain forests) R: 126d

Extracts from the Virginia Charters [book by Mason]
Mason, George (Early life) M: 266

Extracurricular activities
Curriculum (Curriculum content) Ci: 1197
High school (High schools in the United States) H: 228
Universities and colleges (Extracurricular activities) U: 210

Extradition [law] E: 457
Constitution of the United States (Article IV, Section 2) Ci: 1010
Political prisoner P: 638
Treaty (Kinds of treaties) T: 408-409

Extragalactic nebula [astronomy]
Nebula N: 116

Extrajudicial confession [law]
Confession Ci: 936

Extramural jurisdiction [government]
Metropolitan area (Metropolitan area plans) M: 443

Extranet [computing]
E-commerce (Business-to-business transactions) E: 2
Computer (Extranets) Ci: 923

Extrasensory perception E: 457
Clairvoyance Ci: 637
Mind reading M: 563
Parapsychology P: 153
Psychical research P: 846
Telepathy T: 93

Extraterrestrial intelligence E: 458
SETI Institute S: 323

Extraterrestrial state
Spiritualism (Beliefs) So: 796

Extraterritorial powers [government] See
Extramural jurisdiction in *this index*

Extraterritoriality [law] E: 459
Diplomacy (Diplomatic immunity) D: 216
Japan (Renewed relations with the West) J: 56

Extravehicular activity [space exploration]
Aldrin, Buzz A: 339
Space exploration (Leaving the spacecraft) So: 704 with pictures; (Voskhod and Gemini: The first multiperson space flights) So: 714
White, Edward Higgins, II W: 284
World, History of the picture on W: 446

Extreme Football League
Football (New professional leagues) F: 368

Extreme skiing
Skiing (Alpine competitions) S: 486-487

Extreme Ultraviolet Explorer [satellite]
Astronomy (Ultraviolet astronomy) A: 844

Extrema ultraviolet rays [physics]
Astronomy (Ultraviolet astronomy) A: 844
Telescope (Ultraviolet telescopes) T: 108

Extrema unction See Anointing of the sick in *this index*

Extrovert [psychology] E: 459
Jung, Carl Gustav (His theories) J: 195

Extrusion [industrial process] E: 459 with *diagram*
Aluminum (Extruding) A: 395
Ceramics (Making ceramics) C: 360
Die and die-making D: 195
Iron and steel (Extruding) I: 447
Plastics (Making plastic products) P: 557-558 with *picture*
Polypropylene P: 651
Polystyrene P: 651
Polyvinyl chloride P: 652
Rubber (Shaping) R: 505
Soybean (Soy meal) So: 690

Extrusive rock [geology]
Igneous rock I: 48
Rock (Extrusive rock) R: 371

Exus
Devil worship D: 175

Exxon Corporation See Exxon Mobil Corporation in *this index*

Exxon Mobil Corporation E: 459
Manufacturing (table) M: 170
Standard Oil Company So: 834

Exxon Valdez [ship]
Alaska (Recent developments) A: 304
Bush, George Herbert Walker (National affairs) B: 720
Coast Guard, United States (The Coast Guard since World War II) Ci: 738-739
Exxon Mobil Corporation E: 459
Sea otter S: 263

ExxonMobil [company] See Exxon Mobil Corporation in *this index*

Eyadema, Gnassingbe [Togolese political leader]
Togo (History) T: 310-311

Eyck, Hubert van [brother of]
Van Eyck, Jan V: 282

Eyck, Jan van [Flemish painter] See Van Eyck, Jan in *this index*

Eye [anatomy] E: 460 with *pictures*
See also Vision in *this index*
Animal picture on A: 469
Blind spot B: 400
Cat (Head) C: 286-287 with *pictures*
Color (The roles of the eyes and brain) Ci: 818-819
Compound eye Ci: 906 with *diagrams*
Contact lens Ci: 1020 with *picture*
First aid (Eye injury) F: 140
Fish (Sight) F: 164
Frog (Senses) F: 537 with *picture*
Human body picture on H: 417
Insect (Eyes and antennae) I: 287 with *diagrams*
Iritis I: 434
Lighting (What is good lighting) L: 297
Ophthalmology O: 810
Optometry O: 814
Owl (Appearance) O: 884
Perception (The nervous system) P: 283
Planarian P: 506 with *picture*
Reading (How we read) R: 156
Reproduction, Human (Development of organs and organ systems) R: 248
Reptile (Sense organs) R: 251 with *pictures*
Sty So: 935
Sun lamp So: 987
Tears T: 72 with *picture*
See also the list of Related Articles in the Eye article

Eye [botany]
Tuber T: 477

Eye [weather]
Hurricane H: 452 with *pictures*

Eye agate [mineral]
Agate A: 138

Eye bank [medicine] E: 470

Eye bolt [hardware]
Bolt B: 449 with *picture*

Eye disease
Eye (Diseases of the eye) E: 466
See also the Disorders of the Eye section in the Related Articles in the Eye article

Eye of god [symbol]
Latin America (Handicrafts) L: 103

Eye of Providence [emblem]
United States, Government of the picture on U: 137

Eye rhyme See Visual rhyme in *this index*

Eye transplant
Eye bank E: 470

Eyed brown [butterfly]
Butterfly (Satyrs and wood nymphs) B: 736

Eyed click beetle
Beetle picture on B: 218

Eyeglasses See Glasses in *this index*

Eyelash
Eye (The outer parts) E: 460

Eyelid
Eye (The outer parts) E: 460; (Diseases of the outer parts) E: 466

Eyepiece
Microscope (How and optical microscope works) M: 517
Telescope (Optical telescopes) T: 103

Eyes of the Interred, The [book by Asturias]
Asturias, Miguel Angel A: 851

Eyeshine
Cat (Head) C: 286-287

Eyesight See Vision in *this index*

Eyespot [zoology]
Eye (Eyes of animals) E: 469 with *picture*
Moth (Giant silkworm moths and royal moths) M: 841 with *pictures*; picture on M: 837
Protozoan (Structure) P: 837
Starfish So: 855

Eyestrain [disorder]
Lighting (Lighting problems) L: 297-298

Eyetooth
Teeth (Permanent teeth) T: 79-80

Eyewall [meteorology]
Hurricane H: 452 with *diagram*

Eylau, Battle of [1807]
Army picture on A: 727

Eyre, Edward John [British explorer]
Australia (Exploring the interior) A: 924; map on A: 923
Exploration (Exploring Australia's interior) E: 448 with *map*

Eyre, Lake See Lake Eyre in *this index*

Eyrie [nest] See Aerie in *this index*

Eyry [nest] See Ayrie in *this index*

Eysturoy [island]
Faroe Islands F: 47

Ezana [king of Aksum]
Aksum A: 255
Ethiopia (The Aksum Kingdom) E: 371

Ezekiel [Biblical figure]
Ezekiel, Book of E: 470
Jews (Foreign domination) J: 121

Ezekial, Book of [Old Testament] E: 470

Ezra [Biblical figure]
Ezra, Book of E: 470
Scribe S: 226

Ezra, Book of [Old Testament] E: 470

F

F [letter] F: 1 with *pictures*

F [symbol]
Fluorine F: 306

F-5E Tiger II [military aircraft]
Jet propulsion picture on J: 113

F-14 Tomcat [aircraft]
Aircraft, Military picture on A: 205

F-15 [airplane]
Air Force, United States (Fighters) A: 191

F-15 Eagle [airplane]
Air Force, United States picture on A: 191
Missouri picture on M: 665

F-16 [airplane]
Air Force, United States (Fighters) A: 191; picture on A: 193
Airplane picture on A: 211

F-22 [airplane]
Air Force, United States picture on A: 192

F-86 Sabre [airplane]
Korean War (The air war) K: 382

F-100 Super Sabre [airplane]
Airplane (Supersonic airplanes) A: 238; picture on A: 235

F-111 [airplane]
Air Force, United States (Fighters) A: 191

F-111, The [painting by Rosenquist]
Rosenquist, James Albert R: 481

- F-117** [airplane]
Air Force, United States (Fighters) A: 191;
(The Persian Gulf War) A: 196
Aircraft, Military (Bombers) A: 202 *with picture*
- F clef**
Music (Indicating pitch) M: 953 *with picture*
- F-stop** [photography]
Camera (How a camera works) C: 80
Photography (Controlling exposure) P: 415;
(Setting the exposure) P: 416 *with pictures*
- Fa Ngum** [Laotian political leader]
Indochina (A new kingdom) I: 225
- FAA** See Federal Aviation Administration *in this index*
- Faber, Eberhard** [American businessman] F: 2
- Faber, Red** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Fabergé, Peter Carl** [Russian jeweler] F: 2 *with picture*
Decorative arts *picture on* D: 80
- Fabian, Saint** [pope]
Pope (table) P: 666
- Fabian Society** [British history] F: 2
Shaw, George Bernard (Early life) S: 378
Socialism (Moderate socialism) So: 561
Webb, Sidney and Beatrice W: 175
- Fabius Maximus, Quintus** [Roman military leader] F: 2
Fabian Society F: 2
- Fable** [literature] F: 2 *with picture*
See also Allegory; Parable *in this index*
Aesop's fables A: 90
Fiction (History) F: 90
Folklore (Folk tales) F: 324
La Fontaine, Jean de L: 29 *with picture*
Literature for children (Folk literature) L: 357 *with picture*
- Fable, A** [book by Faulkner]
Faulkner, William F: 55
- Fable for Critics, A** [poem by Lowell]
Lowell, James Russell (Literary success) L: 510
- Fables** [book by La Fontaine]
La Fontaine, Jean de L: 29
- Fables** [book by Lobel]
Lobel, Arnold L: 404
- Fables in Slang** [essays by Adel]
Adel, George A: 54
- Fabliaux** [poetry]
French literature (Narrative poetry) F: 518-519
- Fabre, Jean Henri Casimir** [French naturalist]
F: 3
- Fabric** See Textile *in this index*
- Fabric brightener**
Bleach B: 399
- Fabrica** [book by Vesalius]
Vesalius, Andreas V: 341
- Fabricating industry**
Industry (Other systems of classification) I: 261
- Fabricating ingot** [metallurgy]
Aluminum (Casting the molten aluminum) A: 393-394
- Facade** [architecture]
Architecture (table) A: 608-609 *with picture*
- Facade** [poems by Sitwell]
Sitwell, Edith S: 478
Walton, Sir William W: 22
- Facade theater**
Drama (The Roman stage) D: 328; (The Italian stage) D: 330 *with picture*
- Face** [anatomy] F: 3
- Face** [geometry]
Polyhedron P: 650 *with diagrams*
- Face** [mining]
Coal (The room-and-pillar system) Ci: 723-725
- Face** [printing]
Type T: 537 *with pictures*
- Face** [weaving]
Rugs and carpets (Materials used in rugs and carpets) R: 513
- Face brick**
Brick (Building bricks) B: 597
- Face fly** [insect] F: 4 *with picture*
- Face mask**
Skin diving (Kinds of skin diving) S: 493 *with pictures*
- Face-off**
Hockey (The rink) H: 274-275; (Playing the game) H: 277 *with picture*
Lacrosse (Men's lacrosse) L: 24
- Face value** [economics]
Insurance (Life insurance) I: 309
- Investment (table) I: 366, (Indirect investments) I: 367-368
- Money (The rebirth of paper money) M: 709
- Facelifting** [medicine]
Plastic surgery (Methods of plastic surgery) P: 553
- Facer-canceler** [machine]
Postal services (Sorting) P: 703; *picture on* P: 704
- Facet** [gem]
Diamond (How diamonds are cut to make jewels) D: 182 *with pictures*
Gem (Cutting and polishing) G: 79
Lapidary L: 73
- Facial bone**
Skull S: 495
- Facial disk** [anatomy]
Northern harrier N: 520
Owl (Appearance) O: 884 *with picture*
- Facing** [sewing]
Sewing (Facings) S: 333
- Facioscapulohumeral muscular dystrophy** [disease]
Muscular dystrophy (Facioscapulohumeral and limb-girdle muscular dystrophies) M: 937
- Facsimile machine** See Fax machine *in this index*
- Fact**
Addition (Addition facts) A: 49
Debate (Propositions) D: 63
- Factor** [mathematics] F: 4
Algebra (Multiplication) A: 355
Numeration systems (The decimal system) N: 605-606
- Factor analysis** [statistics]
Thurstone, Louis Leon T: 273
- Factorial** [mathematics]
Permutations and combinations (By using symbols and formulas) P: 291
Series S: 316
- Factorial series** [mathematics]
Series S: 316
- Factoring**
Algebra (Factoring) A: 356
- Factory F: 5** *with picture*
Culture (Invention) Ci: 1189
Industrial Revolution I: 246 *with picture*
Lighting (In offices, stores, and factories) L: 296
Sweatshop So: 1019
Technology (The Industrial Revolution) T: 75
United States, History of the (Expansion and the economy) U: 168
World, History of the (The Industrial Revolution) W: 444 *with picture*
- Factory Act** [1833]
United Kingdom (The era of reform) U: 68
- Factory and shop lumber**
Lumber (Softwood lumber) L: 517
- Factory farm** [agriculture]
People for the Ethical Treatment of Animals P: 277
- Factory ship**
Fishing industry *pictures on* F: 186
Whale (Hunting techniques) W: 263 *with picture*
- Faculae** [astronomy]
Climate (Activity on the sun's surface) Ci: 676d
- Faculty** [education]
Universities and colleges (Faculty) U: 208
- Fad**
Custom Ci: 1200
Fashion F: 50
- Fadden, Sir Arthur** [Australian political leader]
Australia (table) A: 925
- Fadhli** [sultanate]
South Arabia, Federation of So: 639
- Fading scarlet waxy cap** [mushroom]
Mushroom *picture on* M: 944
- Fado** [music]
Portugal (The arts) P: 689-690
- Faena**
Bullfighting (The order of the bullfight) B: 695-696 *with picture*
- Faenza** [Italy] See Faience *in this index*
- Faerie Queene, The** [poem by Spenser]
English literature (Elizabethan poetry) E: 316-317
Poetry (Renaissance poetry) P: 596
Spenser, Edmund S: 778
- Faero Islands** [Atlantic] See Faroe Islands *in this index*
- Fafnir** [legendary figure] F: 5
- Fagg, Bernard** [British archaeologist]
Nok N: 451
- Fagin** [literary figure] F: 5
- Fagundes, João Alvarez** [Portuguese explorer]
Nova Scotia (Exploration and settlement) N: 568
- Fahd** [king of Saudi Arabia] F: 5 *with portrait*
Saudi Arabia (Continued progress) S: 161-162, (Recent developments) S: 162
- Fahlberg, Constantin** [American chemist]
Saccharin S: 4
- Fahrenheit, Gabriel Daniel** [German physicist]
F: 6
- Fahrenheit 451** [book by Bradbury]
Bradbury, Ray B: 544
- Fahrenheit scale**
Celsius scale C: 341 *with picture*
- FAI** [French government]
Aviation (The first flying regulations) A: 987
- Faience** [pottery] F: 6 *with picture*
- Failure**
Learning (Motivation) L: 164
- Fainting** [disorder] F: 6 *with picture*
First aid (Fainting) F: 140
- Fair F: 6**
- Fair, A. A.** [pen name]
Gardner, Erle Stanley G: 39
- Fair ball**
Baseball (Outs by batters) B: 128-129
- Fair catch**
Football (table) F: 356
- Fair-comment doctrine** [law]
Libel L: 226
- Fair Deal** [U.S. history] F: 7
Democratic Party (The Fair Deal) D: 127
Truman, Harry S. (Problems at home) T: 472
- Fair employment practices**
Equal Employment Opportunity Commission E: 345
- Fair Employment Practices Committee** [U.S.]
World War II (In the United States and Canada) W: 494
- Fair Housing Act** [1968] See Civil Rights Act of 1968 *in this index*
- Fair housing laws** [U.S.]
Open housing O: 789
- Fair Labor Standards Act** [1938] F: 8
Child labor (U.S. federal laws) C: 455
Minimum wage M: 574
New Deal (The final measures) N: 202
- Fair Lane** [estate]
Dearborn D: 60
- Fair Maid of February** [plant]
Snowdrop S: 541 *with picture*
- Fair Oaks, Battle of** [1862]
Civil War (table) Ci: 624, (The peninsular campaign) Ci: 626
Lee, Robert Edward (Opening campaigns) L: 178
- Fair Packaging and Labeling Act** [1966]
Consumerism (The right to information) Ci: 1018
- Fair Park** [Dallas]
Dallas (Cultural life) D: 14
Texas (Places to visit) T: 194
- Fair preponderance** [law]
Evidence (Burden of proof) E: 426
- Fair territory**
Baseball (The field) B: 126 *with diagram*
- Fair-trade laws** [law] F: 8
- Fair use principle**
Plagiarism P: 505
- Fair Wages Resolution**
King, William Lyon Mackenzie (Education) K: 325
- Fairbanks** [Alaska] F: 8 *with picture*
- Fairbanks, Charles Warren** [American political leader] F: 8 *with portrait*
Fairbanks F: 8
Vice President of the United States (table) V: 351
Wilson, Woodrow (Election of 1916) W: 324
- Fairbanks, Douglas, Sr.** [American actor] F: 9 *with picture*
- Fairbanks, Douglas, Jr.** [American actor] F: 9
- Fairbanks, Erastus** [American political leader]
Vermont (table) V: 333
- Fairbanks, Horace** [American political leader]
Vermont (table) V: 333
- Fairbanks, Richard** [American businessman]
Massachusetts (Interesting facts) M: 271
Postal services (Postal service in the United States) P: 706
- Fairburn, William Armstrong** [American inventor]

Match (The first matches) M: 300-300a
Fairchild, Charles S. [American government official]
 Cleveland, Grover (table) Ci: 671
 Treasury, Department of the (table) T: 407
Fairchild, David Grandison [American botanist] F: 9
Fairchild, Lucius [American political leader] Wisconsin (table) W: 365
Fairchild, Sherman Mills [American inventor] F: 9
Fairchild Tropical Garden [Florida] Fairchild, David Grandison F: 9
Fairfax, George William [American colonist] Washington, George (Washington the surveyor) W: 93
Fairfield, Cicily Isabel [British author] See West, Rebecca *in this index*
Fairfield, John [American political leader] Maine (table) M: 87
Fairless, Benjamin Franklin [American businessman] F: 9
Fairy Good Time, A [book by Gallant] Gallant, Mavis G: 13
Fairy Honourable Defeat, A [book by Murdoch] Murdoch, Iris M: 930
Fairmount Park
 Park (Kinds of parks) P: 168
 Philadelphia (Downtown Philadelphia) P: 359; (Recreation) P: 364 *with picture*
Fairway
 Golf (The course) G: 260-261 *with picture*
Fairway wood [golf] Golf (Golf clubs) G: 262 *with picture*
Fairweather, Mount
 Alaska (Land regions) A: 292
 British Columbia (Land regions) B: 622
Fairy F: 9 *with pictures*
 Elf E: 235
 Halloween (Halloween symbols) H: 24b
Fairy Falls (falls, Washington) F: 12
 Waterfall (Famous waterfalls of North America) W: 142
Fairy fly
 Insect *picture on* I: 278
Fairy lantern [plant] Mariposa lily M: 212 *with picture*
Fairy penguin
 Penguin (The body of a penguin) P: 238
Fairy ring
 Fairy F: 10
 Mushroom (Fairy rings) M: 942 *with picture*
Fairy-ring mushroom
 Mushroom (Nonpoisonous mushrooms) M: 943 *with picture*
Fairy slipper
 Flower *picture on* F: 284
Fairy tale
 Andersen, Hans Christian A: 451
 Fairy F: 10
 Literature for children (Folk literature) L: 357 *with picture*
Fairy tern [bird] Tern T: 174
Fairywren [bird] Bird (Birds of Australia and the Pacific Islands) B: 349 *with picture*
Faisal [king of Saudi Arabia] F: 12
 Saudi Arabia (The new kingdom) S: 161; (Continued progress) S: 161-162
Faisal I [king of Iraq] F: 12
 Iraq (British rule) I: 413
Faisal II [king of Iraq] Iraq (Independence) I: 413
Faith
 See also Religion *in this index*
 Luther, Martin (Justification by faith) L: 527
Faith healing [religion] F: 12
 Christian Scientists (Beliefs) C: 523
 Eddy, Mary Baker E: 75
 Lourdes L: 507
Faith 7 [spacecraft] Cooper, Leroy Gordon, Jr. Ci: 1035
Fake fur See Artificial fur *in this index*
Fakir [religious group] F: 12
 Dervish D: 153
Fala [dog] Franklin Delano Roosevelt Memorial F: 493 *with picture*
Falabella
 Horse (Kinds of horses) H: 343
Falange Española [political party] F: 12
 Fascism (Fascism in other countries) F: 50

Spain (Civil war) So: 750
 Spanish Civil War So: 756
Falciparum, P. [protozoan] Malaria (Symptoms) M: 96
Falcon [bird] F: 12 *with pictures*
 Animal pictures on A: 489, A: 505
 Bird pictures on B: 329, B: 365
 Falconry F: 14
Falcon Dam (Rio Grande, Mexico-U.S.) Rio Grande (Lower course) R: 347
Falconry [sport] F: 14
Falcons, Atlanta
 Football (National Football League) F: 364
Faldo, Nick [British golfer] Golf (British Open) G: 264
Fale [dwelling] Samoa (People) S: 80a; *picture on* S: 80b
Faleiro, Ruy [Portuguese geographer] Magellan, Ferdinand (Planning the expedition) M: 46
Falkenhayn, Erich von [German general] World War I (The Western Front) W: 455-456; (The Battle of Verdun) W: 458
Falkland, Viscount [English government official] Falkland Islands F: 15
Falkland Current
 Atlantic Ocean (Currents) A: 866
Falkland Islands (Atlantic) F: 15
 Argentina (Recent developments) A: 659
 United Kingdom (Thatcher) U: 73
Fall [accident] Safety (Safety at home) S: 9-10
Fall [season] See Autumn *in this index*
Fall [sports] Wrestling *picture on* W: 506
Fall, Albert Bacon [American political leader] F: 15
 Teapot Dome T: 72
 Harding, Warren Gamaliel (table) H: 58; (Government scandals) H: 58
 Interior, Department of the (table) I: 325
Fall, The [book by Camus] Camus, Albert C: 97
Fall cankerworm [insect] Cankerworm C: 177
Fall line [geography] F: 15 *with map*
 Piedmont Region P: 453
 United States (The Coastal Lowlands) U: 121
 Waterfall W: 141
Fall of America: Poems of These States, The [poems by Ginsberg] Ginsberg, Allen G: 192
Fall of the Alamo [painting by Onderdonk] Crockett, Davy *picture on* Ci: 1148d
"Fall of the House of Usher, The" [story by Poe] Poe, Edgar Allan (Fiction and theory of fiction) P: 590
Fall River [city, Massachusetts] F: 16
Fall River, Battle of [1778] Fall River F: 16
Fall River Legend [ballet] De Mille, Agnes D: 119
Falla, Manuel de (Spanish composer) F: 16
Fallacy [logic] F: 16
Fallen arch [disorder] Flatfoot F: 229
Fallen Timbers, Battle of [1794] Indian wars (Other Midwestern conflicts) I: 192-193 *with map*
 Indiana (Territorial days) I: 215
 Little Turtle L: 392
 Ohio (Exploration and settlement) O: 700
 Wayne, Anthony W: 154
Faller [job] Lumber (Cutting down trees) L: 518
Fallersleben, Hoffmann von [German composer] Deutschland über Alles D: 172
Falling bodies, Law of [physics] F: 16 *with diagrams*
 Calculus (Differential calculus) C: 22
 Galileo (Mature scientific career) G: 11
Falling star See Meteor *in this index*
Falling Up [book by Silverstein] Silverstein, Shel S: 466
Fallingwater house
 Pennsylvania (Places to visit) P: 254
 United States *picture on* U: 117
 Wright, Frank Lloyd (Later career) W: 507
Fallopian tube [anatomy] F: 17
 Pregnancy (An ectopic pregnancy) P: 735
 Reproduction, Human (The human reproductive system) R: 244-245 *with diagram*

Human body (The reproductive system) H: 425; *diagram on* H: 422
 Hysterectomy H: 482
 Infertility (Causes) I: 265
 Menstruation (The menstrual cycle) M: 404 *with diagrams*
 Pelvic inflammatory disease P: 232
Fallot, Etienne-Louis [French physician] Heart (Blockage of blood flow) H: 141
Fallout [radioactivity] F: 18 *with map*
 Civil defense (The fallout shelter program) Ci: 606
 Nuclear weapon (Residual nuclear radiation) N: 599
Fallout shelter
 Civil defense (The fallout shelter program) Ci: 606
 Fallout (The fallout hazard) F: 19
Fallow deer
 Deer (table) D: 85; (Asian and European deer) D: 86
Fallow land [farming] Dry farming D: 369
Falls [botany] Iris I: 429 *with picture*
Falls See Waterfall *in this index*
Falls City
 Louisville L: 504
Falls of Saint Anthony [falls, Mississippi River] Hennepin, Louis H: 185
 Minnesota *picture on* M: 605
Falmouth [former name] Portland [Maine] P: 683
Falmouth Gazette [newspaper] Maine (Communication) M: 86-87
False Antipathy, The [play by La Chaussée] Drama (France) D: 335
False color [electronics] Remote sensing R: 231
False Dmitriy [czar of Russia] Russia (table: Czars and empresses) R: 549; (The Time of Troubles) R: 549
False dogwood [plant] Soapberry So: 543
False face See Mask *in this index*
False Face Society
 Indian, American (Shamans) I: 147-148; (Before European contact) I: 154-156
 Mask (Ceremonial masks) M: 263-264
False gavia [reptile] Crocodile Ci: 1150
False imprisonment [law] F: 19
False Messiah
 Messiah M: 423
False nettle [plant] Boehmeria B: 435
False rib [anatomy] Rib R: 320
False teeth
 Dentistry (Prosthodontics) D: 144
 Teeth (Dental decay) T: 82-84
False topaz [mineral] Quartz (Types) Q: 8
Falstaff [opera by Verdi] Opera (Giuseppe Verdi) O: 798
 Verdi, Giuseppe V: 316
Falstaff, Sir John [literary figure] Drama *picture on* D: 324
 Shakespeare, William (*Henry IV*) S: 359 *with picture*; (*The Merry Wives of Windsor*) S: 361
Falun Gong [spiritual movement] Beijing (History) B: 223-224
 China (Recent developments) C: 507
Fame, Hall of See Hall of Fame,.... *in this index*
Famenne [region, Belgium] Belgium (The Ardennes) B: 231
Familia, La [family] Family (Varieties of families) F: 20-21
Familiar
 Witchcraft (Witchcraft as sorcery) W: 371
Familiar Quotations [book by Bartlett] Bartlett, John B: 120
Family [biology] F: 19
 Animal (The scientific classification of animals) A: 472-473
 Classification, Scientific (Groups in classification) Ci: 654-655
Family [crime] Mafia M: 41
Family [sociology] F: 20 *with pictures*
 Adolescent (Family relationships) A: 62
 Arabs (Family life) A: 586

- Asian Americans (Who Asian Americans are) A: 812b
- Birth control B: 378
- Budget (Personal and family budgets) B: 669
- China (Family life) C: 483
- City (The people) Ci: 582-584
- Disabled (In family life) D: 219
- Early childhood education (Activities planned by families) E: 15
- Home economics H: 300
- Income (Distribution of income) I: 101 *with diagrams*
- Indian, American (Family life) I: 136b; (The preservation of Indian culture) I: 180
- Juvenile delinquency (What causes delinquency?) J: 206
- Marriage M: 219 *with picture*
- Parent P: 156
- Parent education P: 156
- Social work (Family and child welfare) So: 558
- Welfare (Criticism of the welfare system) W: 191
- Women's movements (On attitudes and values) W: 388
- See also the list of Related articles in the Family article*
- Family, The** [sculpture by Marisol]
Sculpture S: 260 *with picture*
- Family and consumer sciences** *See* Home economics *in this index*
- Family and Court of Ludovico Gonzaga II** [painting by Mantegna]
Renaissance picture on R: 232
- Family, Career and Community Leaders of America** [organization] F: 25
- Family Circle**
Magazine (table) M: 45
- Family compact** [Canadian history]
Canada, History of (Growing discontent) C: 145
- Rebellions of 1837 (In Upper Canada) R: 174
- Family day-care**
Day care (Types of day care for children) D: 52
- Family Group** [sculpture by Moore]
Moore, Henry M: 797
- Family History Library of the Genealogical Society of the Church of Jesus Christ of Latter-day Saints** [Salt Lake City]
Genealogy G: 82
- Family law**
Law (Private law) L: 130
- Family name**
Name N: 5
- Family of Charles IV, The** [painting by Goya]
Goya, Francisco G: 295
- "Family of Man, The"** [photography exhibit]
Steichen, Edward So: 884
- Family of Saltimbanques, The** [painting by Picasso]
Picasso, Pablo (The Rose Period) P: 448a *with picture*
- Family planning** *See* Birth control *in this index*
- Family practice**
Medicine (Primary care physicians) M: 366;
(Canada) M: 367
- Family relations**
Home economics (Human development and family studies) H: 300
- Family resource program** *See* Family support program *in this index*
- Family restaurant**
Restaurant (Full-service restaurants) R: 262
- Family Service America** F: 25
- Social work (Family and child welfare) So: 558
- Family Support Act** [1988]
Clinton, Bill (Steps to the presidency) Ci: 682c
- Family support program**
Early childhood education (Activities planned by families) E: 15
- Parent education (Family support programs) P: 157
- Family therapy** [psychology]
Psychotherapy (Group therapy) P: 852
- Family tree** [ancestry]
Genealogy G: 82
- Pedigree P: 228
- Famine** F: 26
- Great Irish Famine G: 343
- Famine** [book by O'Flaherty]
O'Flaherty, Liam O: 679
- Famine Emergency Commission** [U.S.]
Hoover, Herbert Clark (Elder statesman) H: 330-331
- Famous Men** [work by St. Jerome]
Jerome, Saint J: 93
- Fan F:** 27 *with picture*
- Fan-in-fin system**
Helicopter (Single-rotor helicopters) H: 170-171
- Fan Kuan** [Chinese artist]
Painting (Landscapes and seascapes) P: 32-33 *with picture*
- Fan Si Pan** [mountain, Vietnam]
Vietnam (Northern Vietnam) V: 368
- Fan worm** [sea animal]
Animal picture on A: 486
- Fancher, Frederick B.** [American political leader]
North Dakota (table) N: 513
- Fancy Free** [ballet]
Ballet (Ballet in the United States) B: 53-54
- Fandango** [dance]
Folk dancing F: 320
- Faneuil, Peter** [American businessman] F: 27
- Faneuil Hall**
Boston (Downtown Boston) B: 496; *picture on* B: 498
- Faneuil, Peter F: 27
- Faneuil Hall Marketplace**
Boston picture on B: 500
- Massachusetts picture on M: 271
- Fang** [people]
Equatorial Guinea (People) E: 346; (History) E: 347
- Gabon (People) G: 3
- Fang** [zoology]
See also Canine teeth *in this index*
- Animal picture on A: 494
- Rattlesnake R: 149
- Snake (Fangs and venom glands) S: 528 *with picture*
- Snakebite S: 536
- Spider (Cheliceræ) So: 784 *with diagrams*
- Fangio, Juan M.** [Argentine race driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Fanjet** [airplane] *See* Turbofan *in this index*
- Fannie Mae** *See* Federal National Mortgage Association *in this index*
- Fannin, J. W.** [American military leader]
Alamo (Early days) A: 280
- Fannin, Paul** [American political leader]
Arizona (table) A: 687
- Fannings**
Tea (Grades of tea) T: 62-63
- Fanny and Alexander** [film]
Bergman, Ingmar B: 257
- Fanon, Frantz Omar** [Algerian author] F: 27
- Fantail pigeon** [bird]
Pigeon picture on P: 459
- Fantasia** [music] F: 27
- Classical music (Free form) Ci: 645
- Fantasia in C major** [music by Schumann]
Schumann, Robert (His works) S: 188
- Fantastic Four** [cartoon characters]
Comics Ci: 870
- Fantasy** [literature]
Literature for children (Fiction) L: 358 *with picture*
- Fantasy Castle** [Disneyland]
California picture on C: 46
- Fantasy piece** [music]
Fantasia F: 27
- Fantasy variations** [philosophy]
Phenomenology P: 357
- Fante** [people]
Ghana (People) G: 178
- Fantin-Latour, Henri** [French painter]
Manet, Edouard picture on M: 138
- Fantus, Bernard** [American physician]
Blood (History of blood research) B: 414
- FAO** *See* Food and Agriculture Organization *in this index*
- Faqih** [title]
Iran (Government) I: 399
- Far Away and Long Ago** [book by Hudson]
Hudson, William Henry H: 405
- Far East** [region, Asia] F: 27
- Asia (Way of life in East Asia) A: 785 *with pictures*
- Cat (History) C: 296
- Cold War (Communist expansion in Asia) Ci: 764; (The Far East) Ci: 766
- Library (Australia and the Far East) L: 253
- Orient O: 855
- Far from the Madding Crowd** [book by Hardy]
Hardy, Thomas H: 59
- Far side**
Moon (Rotation and orbit) M: 783; *map on* M: 787
- "Far Side, The"** [cartoon]
Cartoon picture on C: 264
- Larson, Gary L: 78
- Far ultraviolet rays**
Astronomy (Ultraviolet astronomy) A: 844
- Far Ultraviolet Spectrographic Explorer** [satellite]
Astronomy (Ultraviolet astronomy) A: 844
- Far West** [city, Missouri]
Mormons (Mormons in the Middle West) M: 808
- Young, Brigham (Mormon leader) Y: 571
- Far West** [U.S. history]
Western frontier life in America (Building the frontier) W: 232-233
- Westward movement in America (Exploring and settling the Far West) W: 248 *with pictures*
- Farabi, al-** [Arab philosopher]
Syria (The arts) So: 1072
- Farabundo Marti National Liberation Front** [political group]
El Salvador (Recent developments) E: 252
- Farad** [unit of measure] F: 28
- Capacitor (Capacitance) C: 186
- Farad, Wali** [American religious leader] *See* Fard, Wallace D. *in this index*
- Faraday, Michael** [British physicist] F: 28
- Electric generator (Basic principles) E: 170
- Electric motor (History) E: 181
- Electricity (Electricity and magnetism) E: 197
- Electrolysis (Laws of electrolysis) E: 201
- Gas [physics] (History) G: 49
- Invention (The Industrial Revolution) I: 361
- Magnetism (Electricity and magnetism) M: 61
- Physics (Developments in the 1800's) P: 440
- Radio (Early development) R: 91
- Rubber (The chemistry of rubber) R: 501
- Science picture on S: 201
- Faraday's laws** [chemistry]
Electrolysis (Laws of electrolysis) E: 201
- Farallon Islands** [San Francisco]
California (Coastline) C: 50
- FARC** *See* Revolutionary Armed Forces of Colombia *in this index*
- Farce** [literature]
Comedy Ci: 867
- Drama (Comedy) D: 325; (Farces and interludes) D: 330
- Farcy** [disease]
Glanders G: 210
- Fard, Wallace D.** [American religious leader]
Black Muslims B: 389
- Nation of Islam N: 27
- "Farewell Address"**
Washington, George (Farewell Address) W: 106
- Farewell to Arms, A** [book by Hemingway]
Hemingway, Ernest (Rise to fame) H: 180
- Farewell-to-spring** [plant]
Godetia G: 245
- Fargo** [North Dakota] F: 28
- North Dakota (table: Average monthly weather) N: 509; *picture on* N: 497
- Fargo, William George** [American businessman] F: 28
- Wells, Fargo & Company W: 195
- Farina, Giuseppe** [Italian race driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Farjeon, Eleanor** [British author] F: 28
- Regina Medal (table: 1959) R: 206
- Farley, James Aloysius** [American political leader] F: 28
- Roosevelt, Franklin Delano (Election of 1932) R: 456
- Farley, John M. Cardinal** [American religious leader]
Cardinal (table: American cardinals) C: 211
- Farm and farming** F: 29 *with pictures*
- See also* Agriculture *in this index*
- Agribusiness A: 143
- Aquaculture A: 578
- Automobile (Impact on society) A: 947-948
- Bird (In nature) B: 330; (As a source of food and raw materials) B: 330
- Careers (Farming, fishing, and forestry) C: 222 *with picture*
- Dairying (Dairy farms) D: 6 *with picture*
- Deere, John D: 87
- FFA F: 84
- Global warming (Changes in crop yields) G: 232a

- Housing (Farm housing) H: 390
 Livestock L: 396
 Pet (Farm pets) P: 320 *with picture*
 Slavery (Development of slavery) S: 501
Farm life in other lands
 Africa (Rural life) A: 110-112 *with pictures*;
 (Agriculture) A: 126
 Arabs (Economy) A: 587-588
 China (Rural life) C: 483 *with picture*;
 (Agriculture) C: 498 *with picture*
 Collective farm Ci: 775
 Europe (Agriculture) E: 405-406 *with pictures and map*; (Prehistoric times) E: 408; *picture on* E: 388
 Inca (Food, clothing, and shelter) I: 95
 Middle East (Way of life) M: 530 *with picture*; (Agriculture) M: 532
 Nigeria *picture on* N: 410
 Women's movements (In developing nations) W: 387
Farm life in the United States
 Agriculture, Department of A: 161
 American Farm Bureau Federation A: 409
 Cooperative (History) Ci: 1036
 Gay Nineties (Industrial growth) G: 72-73
 Grange, National G: 310
 National Farmers Organization N: 35
 National Farmers Union N: 35
 Pioneer life in America (Stages of settlement) P: 477; (Food) P: 481
 United States (Rural life) U: 112; *picture on* U: 98
Farming methods
 Drainage D: 320
 Dry farming D: 369
 Farm and farming (Modern crop production) F: 33 *with pictures*
 Food (Geographic reasons) F: 331; (Production) F: 334
 Food supply (Limited agricultural resources) F: 348; (Methods to increase the food supply) F: 349
 Irrigation I: 456 *with pictures*
 Manure M: 172
 Soil (Soil conservation) So: 576
 Soil Conservation Service So: 576
 Soybean (Soybean farming) So: 691
 Water (Water for irrigation) W: 118 *with picture*
Farming problems
 Farm and farming (Farm management) F: 41
 Drought D: 349
 Fungicide F: 560
 Insect (Harmful insects) I: 284; (Insect control) I: 284-285
 Locust L: 419 *with picture*
History
 City (Advances in technology) Ci: 577
 Colonial life in America (Farming) Ci: 809 *with picture*
 Dust Bowl D: 391 *with picture and map*
 Great Depression (The farm depression of the 1920's) G: 339
 Indian, American (Farming) I: 141; (The first farmers) I: 152; (Before European contact) I: 169
 Nonpartisan League N: 452
 Plant (How people have changed plants) P: 542
 Townshend, Viscount T: 350
 United States, History of the (Expansion and the economy) U: 168 *with picture*; (The war-torn South) U: 179 *with picture*; (The farmers) U: 180; (Agriculture and labor) U: 187
 Western frontier life in America (Life in the country) W: 237
- Farm Bureau**
 American Farm Bureau Federation (Organization) A: 409
- Farm Bureau Federation, American** See American Farm Bureau Federation *in this index*
- Farm cooperative**
 Cuba (Agriculture) Ci: 1174
- Farm Credit Administration** [U.S.]
 Farm Credit System F: 45
- Farm Credit Bank**
 Farm Credit System (Organization) F: 45
- Farm Credit System** [U.S.] F: 45
- Farm machinery**
 Agriculture (The invention of new farm equipment) A: 157-158 *with pictures*
 Farm and farming *pictures on* F: 34
- Illinois (Manufacturing) I: 69 *with picture*
- Farm Security Administration** [U.S. history]
 New Deal (table) N: 201
- Farm Service Agency** [U.S.]
 Agricultural Stabilization and Conservation Service A: 145
- Farm Show, The** [drama]
 Canadian literature (Modern Canadian drama) C: 161
- Farm Workers Association, National**
 Chavez, Cesar Estrada C: 389
- Farm Workers of America, United** See United Farm Workers of America *in this index*
- Farm Workers Organizing Committee, United**
 Chavez, Cesar Estrada C: 389
- Farman, Henri** [French aviator]
 Airplane (Other pioneer planes and fliers) A: 233
 Aviation (The first airlines) A: 988
- Farman, Joseph C.** [British scientist]
 Ozone hole O: 894
- Farman, Maurice** [French aviator]
 Aviation (The first airlines) A: 988
- Farmer** See Farm and farming *in this index*
- Farmer, James Leonard** [American social reformer] F: 46 *with portrait*
- Farmer, Nancy** [American author]
 Literature for children (Fiction) L: 358
- Farmer-Labor Party** [U.S. history] F: 46
 Humphrey, Hubert Horatio (Early life) H: 436
 Labour Party (In other countries) L: 16-17
 Minnesota (Politics) M: 602; (The early 1900's) M: 604-606
- Farmers' Alliance** [U.S. history]
 Kansas (Spirit of Reform) K: 237
 Lease, Mary Elizabeth L: 166
 Populism (Origins) P: 674
- Farmers' Educational and Cooperative Union of America**
 National Farmers Union N: 35
- Farmers Home Administration** [U.S.] F: 46
 Housing (Housing since 1900) H: 391-392
- Farmers Market**
 Los Angeles (Visitor's guide) L: 468; *picture on* L: 467
- Farmers' Museum** [Cooperstown, New York]
 New York (Places to visit) N: 302
- Farmers of America, Future** See FFA *in this index*
- Farmers Organization, National**
 National Farmers Organization N: 35
- Farmers Union, National** [organization]
 National Farmers Union N: 35
- Farming** See Farm and farming *in this index*
- Farnese, Alessandro** [pope]
 Paul III P: 199
- Farnese Bull** [sculpture] F: 46 *with picture*
- Farnham, Roswell** [American political leader]
 Vermont (table) V: 333
- Farnsworth, Daniel D. T.** [American political leader]
 West Virginia (table) W: 225
- Farnsworth, Philo Taylor** [American inventor] F: 46
 Baird, John Logie B: 31
 Television (Early development) T: 125
- Farnsworth-Munsell test**
 Color blindness Ci: 827
- Faroe Islands** [islands, Atlantic] F: 47 *with map*
 Denmark D: 132
- Farouk I** See Faruk I *in this index*
- Farquhar, George** [English author] F: 47
 Theater *picture on* T: 242
- Farquhar Islands**
 British Indian Ocean Territory B: 632
- Farquharson, Donald** [Canadian political leader]
 Prince Edward Island (table) P: 791
- Ferragut, David Glasgow** [American admiral] F: 47 *with portrait*
 Admiral A: 59
 Alabama (The Civil War and Reconstruction) A: 276; *picture on* A: 277
 Civil War (Capture of New Orleans) Ci: 629; (Battle of Mobile Bay) Ci: 632
 Lincoln, Abraham (Election of 1864) L: 323-324
 Louisiana *picture on* L: 497
 Porter, David P: 682
- Farrekhan, Louis** [American religious leader] F: 48 *with portrait*
 African Americans (Black politics today) A: 136q-136r
 Black Muslims B: 389
 Chavis, Benjamin Franklin, Jr. C: 389
- Nation of Islam N: 27
- Farrar, Frank L.** [American political leader]
 South Dakota (table) So: 680
- Farrell, James T.** [American author] F: 48
 American literature (Realist fiction) A: 422
- Farrow** [zoology]
 Hog (table) H: 284; (Farrowing) H: 287
- Farsi** [language]
 Iran (Language) I: 401
- Farsightedness** [disorder] F: 48
 Eye (Farsightedness) E: 464 *with pictures*
 Glasses (Prescription glasses) G: 224
- Farthing** [money] F: 48
 Penny P: 271
- Farthingale**
 Clothing (The Renaissance) Ci: 700
- Faruk I** [king of Egypt] F: 48
 Egypt (Republic) E: 132
- Farwell, Leonard J.** [American political leader]
 Wisconsin (table) W: 365
- FASB** [organization] See Financial Accounting Standards Board *in this index*
- Fasces** [symbol] F: 48 *with picture*
- Fascia** [building construction]
 House *diagram on* H: 383
- Fascism** [political science] F: 49
 Italy (Italy under Mussolini) I: 517 *with picture*
 Mussolini, Benito (Fascist dictator) M: 967
 Nazism N: 92
 Spanish Civil War So: 756
 World War II (Economic problems) W: 469
- Fashion F: 50** *with pictures*
 Clothing (Decoration) Ci: 689; (The Renaissance) Ci: 700 *with pictures*; (The 1900's) Ci: 703
 Custom Ci: 1200
 Hairdressing H: 11 *with pictures*
 Italy *picture on* I: 510
- Fashion coordinator**
 Clothing (Fashion coordinators) Ci: 706
- Fashion designer**
 Clothing (Ready-to-wear clothes) Ci: 704; (Fashion designers) Ci: 706 *with picture*
- Fashion illustrator**
 Clothing (Fashion writers and artists) Ci: 706
- Fashion model**
 Modeling (Kinds of models) M: 684 *with picture*
- Fashion show**
 Clothing (Fashion coordinators) Ci: 706
 Modeling (Kinds of models) M: 684
- Fashionable doll**
 Doll (Porcelain dolls) D: 290
- Fast** [religion] F: 52
 Islam (The Five Pillars of Islam) I: 463-464
 Ramadan R: 132
- Fast ball**
 Baseball (Pitching) B: 127
 Johnson, Walter J: 154
- Fast break**
 Basketball (Offensive strategies) B: 146
- Fast breeder reactor**
 Nuclear energy (Nuclear fission) N: 582-583
- Fast-food restaurant**
 McDonald's Corporation M: 335
 United States (Food) U: 115
- Fast nova** [astronomy]
 Nova N: 553
- Fast-pitch softball**
 Softball (Types of softball) So: 571
- Fast reactor** [nuclear reactor]
 Nuclear energy (Nuclear fission) N: 582-583; (Advanced fission reactors) N: 594
- Fast-service restaurant**
 Restaurant (Kinds of restaurants) R: 262
- Fastnacht** [custom]
 Mardi Gras M: 197
 Shrove Tuesday S: 442
- Fat** [substance] F: 52 *with diagram*
 Cancer (Nutrition) C: 171
 Cholesterol (Factors that cause high cholesterol levels) C: 520
 Detergent and soap (How soap is made) D: 164
 Fat substitute F: 53
 Food (Producing energy) F: 330
 Heart (Risk factors) H: 137
 Lipid L: 344
 Liver (Digestion and use of food) L: 394
 Lymphatic system (Absorption of fats) L: 535
 Milk (Fats) M: 546
 Nutrition (Fats) N: 625; (Nutrition guidelines) N: 626
 Oil (Fixed oils) O: 707

Physical fitness (Body fat) P: 434
Tallow T: 21
Fat-free milk See Skim milk *in this index*
Fat lamp
Lamp (Fat or oil lamps) L: 52 *with pictures*
Fat liquoring (industrial process)
Leather (Final processing) L: 168
Fat-soluble vitamin
Lipid (Kinds of lipids) L: 345
Nutrition (Vitamins) N: 626
Vitamin (Kinds of vitamins) V: 430
Fat substitute (nutrition) F: 53
Fat Tuesday See Mardi Gras *in this index*
Fata Morgana (mirage)
Mirage M: 615
Fatalism (belief) F: 54
Fatback (fish)
Menhaden M: 400
Fates (mythology) F: 54
Mythology (Greek divinities) M: 979
Fathead (fish)
Redfish R: 191
Father See Parent *in this index*
Father (religion)
Trinity T: 447
Father, The (play by Strindberg)
Strindberg, August S: 929
Father Abraham (nickname)
Lincoln, Abraham (Assassination) L: 326
Father Christmas
Christmas (In England, Ireland, Scotland, and Wales) C: 530
Santa Claus (How the Santa Claus legend began) S: 113
Father Divine See Divine, Father *in this index*
Father Frost (legendary figure)
Jack Frost J: 2
Father of bluegrass music (nickname)
Monroe, Bill M: 733
Father of English history
Bede, Saint B: 199
Father of history
Herodotus H: 213
Father of medicine
Hippocrates H: 239
Father of New France
Champlain, Samuel de C: 373
Father of Psyche Sacrificing at the Temple of Apollo, The (painting by Claude)
Classicism picture on Ci: 653
Painting (Composition) P: 35; (Classicism) P: 61
Father of the blues
Handy, W. C. H: 50
Father of the Constitution
Madison, James M: 32
Father of the Country
Washington, George W: 90
Father of the Waltz
Strauss, Johann, Sr. S: 921
Fatherland Front (Bulgarian history)
Bulgaria (The world wars) B: 693
Fathers and Sons (book by Turgenev)
Nihilism N: 422
Russian literature (Early realism) R: 562
Turgenev, Ivan T: 500
Father's Day (custom) F: 54
Washington (Interesting facts about Washington) W: 47
Fathers of Confederation
Confederation of Canada (Moves toward confederation) Ci: 933-934
Mowat, Sir Oliver M: 903
Quebec Conference Q: 38
Tupper, Sir Charles T: 493
Fathers of Confederation (painting by Woods)
Canada, History of picture on C: 141
Fathom (unit of measure) F: 54
Fathom Five National Park (Ontario)
Canada (table: National marine parks and conservation areas) C: 113
National park (Canada) N: 42c
Fathometer (instrument) F: 54
Shipwreck S: 429
Fatigue (disorder) F: 54
Chronic fatigue syndrome C: 538
Lactic acid L: 25
Fatigue, Metal (engineering) See Metal fatigue *in this index*
Fatigue strength (engineering)
Materials (Mechanical properties) M: 300b
Fatiha (religion)
Islam (The Five Pillars of Islam) I: 463
Fatima (daughter of Muhammad)

Fatimid dynasty F: 55
Muhammad (Early life) M: 910
Qom Q: 4
Fátima, Our Lady of (religion) F: 55
Fatimid dynasty (Muslim history) F: 55
Cairo (History) C: 17
Egypt (Muslim rule) E: 130
Muslims (The fall of the Abbasids) M: 964c
Fattening (agriculture) See Finishing *in this index*
Fatty acid
Cell (Producing energy) C: 332-333 *with diagram*
Fat (Structure) F: 52
Fat substitute F: 54
Food (Producing energy) F: 330
Lard L: 76
Metabolism (Catabolism) M: 424
Nutrition (Fats) N: 625
Tallow T: 21
Triglyceride T: 442
Fatty oil
Oil (Fixed oils) O: 707
Faubus, Orval E. (American political leader)
Arkansas (table) A: 712; (The mid-1900's) A: 714
Eisenhower, Dwight David (Civil rights) E: 153-154
Little Rock (History) L: 392
Faucet (plumbing)
Plumbing (How faucets work) P: 579 *with diagram*
Fauchard, Pierre (French scientist)
Dentistry (Early dentistry) D: 144-145
Faulkner, William (American author) F: 55 *with portrait*
American literature (Modernist fiction) A: 421-422 *with portrait*
Mississippi, University of M: 646
Novel (New directions in the novel) N: 573-574
Fault (geology)
California (Land regions) C: 48
Earth (Earthquakes) E: 24
Earthquake (How an earthquake begins) E: 33-34 *with diagram*; (Where and why earthquakes occur) E: 36 *with diagrams*
Hot springs H: 374b
Lake (How lakes are formed) L: 32
Petroleum (How petroleum was formed) P: 334-335; picture on P: 336
Plate tectonics (Transform plate boundaries) P: 563
Satellite (Formation of satellites) S: 150
Fault (sports)
Horse (Jumping) H: 357
Tennis (The serve) T: 163
Fault-block mountain (geology)
Mountain (Fault-block mountains) M: 893 *with diagram*
Fault divorce
Divorce (Fault divorce) D: 253
Faun (Roman mythology) F: 56 *with picture*
Satyr S: 153
Faun, House of the (Pompeii)
Atrium picture on A: 877
Fauna (biology) F: 56
Fauna (Roman mythology)
Fauna F: 56
Fauntleroy, Betsy (American colonist)
Washington, George (Only foreign trip) W: 93
Faunus (Roman mythology)
Faun F: 56
Fauquier, Francis (American political leader)
Jefferson, Thomas (Education) J: 77-78
Fauré, Gabriel Urbain (French composer) F: 56
Fauset, Jesse Redmon (American author)
American literature (The Harlem Renaissance) A: 422
Feust (German magician) F: 56
Faust (literary figure)
See also Doctor Faustus *in this index*
Mephistopheles M: 411
Faust (opera by Gounod)
Opera (Faust) O: 804
Gounod, Charles G: 281
Faust (play by Goethe)
Goethe, Johann Wolfgang von (Late years) G: 248
Faust F: 56
German literature (Characteristics of German literature) G: 138-139; (The Storm and Stress movement) G: 140-141
Gounod, Charles G: 281

Mephistopheles M: 411
Faustulus (legendary figure)
Romulus and Remus R: 450
Faustus See Faust *in this index*
Fauves (art) F: 56 *with picture*
Derain, André D: 152
Matisse, Henri M: 309 *with picture*
Painting (The Fauves) P: 77 *with picture*
Fauvism See Fauves *in this index*
Favaloro, René (Argentine physician)
Heart (Development of heart surgery) H: 144-145
Favela
Brazil (City life) B: 573-574 *with picture*
Favell Museum of Western Art and Indian Artifacts (Klamath Falls)
Oregon (Museums) O: 831
Favre, Brett (American football player) F: 56
Football picture on F: 368
Favrile glass (glassware)
Tiffany, Louis Comfort T: 283
Fawkes, Guy (English public figure) F: 57
Gunpowder Plot G: 442
Fawkes, John Pascoe (Australian colonist)
Melbourne (History) M: 389
Fawn (animal)
Deer D: 82d
Fax (electronics)
Fax machine F: 57
Fax board (electronics)
Fax machine (Multifunction fax machines) F: 57-58
Fax machine (communications) F: 57
Communication picture on Ci: 887
Telecommunications T: 89
Telephone (Fax machines) T: 98; picture on T: 94
United States, History of the (The spread of high technology) U: 194
Fayetteville State University
North Carolina, University of N: 495
Fayetteville Street Mall
Raleigh R: 131
Faylakah (island, Kuwait)
Kuwait (Land and climate) K: 395 *with map*
Fazenda (estate)
Brazil (The Central and Southern Plateaus) B: 580
FBI See Federal Bureau of Investigation *in this index*
FBI Academy
Federal Bureau of Investigation (Other services) F: 62 *with picture*
FBI Identification Division
Federal Bureau of Investigation (Other services) F: 62
FBI Laboratory
Federal Bureau of Investigation (Other services) F: 62
FC-2 (airplane)
Fairchild, Sherman Mills F: 9
FCA (government agency)
Farm Credit System F: 45
FCA (organization)
Fellowship of Christian Athletes F: 69
FCC See Federal Communications Commission *in this index*
FCCLA (organization) See Family, Career and Community Leaders of America *in this index*
FDA See Food and Drug Administration *in this index*
FDIC See Federal Deposit Insurance Corporation *in this index*
FDR Memorial (Washington, D.C.) See Franklin Delano Roosevelt Memorial *in this index*
Fe (symbol)
Iron (Properties) I: 435
Fealty, Oath of (European history)
Homage H: 300
Fear (emotion)
Anxiety A: 562
Child (Unrealistic fears) C: 451
Emotion (Early theories about emotions) E: 261; (Modern theories about emotion) E: 261
Mental illness (Anxiety disorders) M: 405
Panic disorder P: 130
Phobia P: 392
Fear and Trembling (book by Kierkegaard)
Kierkegaard, Søren Aabye (His philosophy) K: 313
"Fear Street" series (books by Stine)
Stine, R. L. So: 901

Fearful Symmetry: A Study of William Blake

- [book by Frye]
 Frye, Northrop F: 549
Fearn, John [British explorer]
 Nauru (History) N: 69
Feast in the House of Levi [painting by Veronese]
 Painting (The Renaissance in Venice) P: 55-56
 with picture
Feast of Dedication See Hanukkah in this index
Feast of Fast-Breaking
 Feasts and festivals (In Islam) F: 58
 Islam (Holidays and celebrations) I: 465
Feast of King Belshazzar, The [play by Calderón de la Barca]
 Spanish literature (The 1600's) So: 759-760
Feast of Lights See Hanukkah in this index
Feast of Sacrifice
 Feasts and festivals (In Islam) F: 58
 Islam (Holidays and celebrations) I: 465
Feast of Saint Nicholas See Saint Nicholas, Feast of in this index
Feast of Saint Nicholas, The [painting by Steen]
 Steen, Jan picture on So: 883
Feast of Santa Lucia
 December D: 68
Feast of Tabernacles [custom]
 Sukkot So: 965
Feast of the Assumption [custom]
 Assumption A: 820
Feast of the Chrysanthemums [custom]
 Chrysanthemum C: 540
Feast of the Redeemer [custom]
 Venice (The people) V: 307
Feast of the Rose Garlands, The [painting by Dürer]
 Dürer, Albrecht D: 388
Feast of Weeks [custom]
 Shavuot S: 377
Feasts and festivals F: 58
 See also the list of Related Articles in the Feasts and Festivals article
Feather F: 59 with pictures
 Bird (As a source of food and raw materials) B: 330; (Feather care) B: 354; (Feathers) B: 362 with picture; picture on B: 352
 Chicken (Kinds of chickens) C: 441
 Indian, American pictures on I: 138, I: 144
 Peacock picture on P: 212
 Pigeon (The body of a pigeon) P: 458-459
 Skin (Animal skin) S: 491
Feather art
 Indian, American picture on I: 146
Feather moss [plant]
 Moss M: 834
Feather River [California]
 Sacramento River S: 6
Feather star [sea animal]
 Deep sea (Invertebrates) D: 82a-82b
 Sea lily S: 262
Feathering propeller
 Airplane (Propellers) A: 217 with pictures
 Propeller (The airplane propeller) P: 826
Feathers and Tails [book by Kherdian]
 Literature for children picture on L: 358
Featherstonhaugh, George W. [American explorer]
 Minnesota (The Louisiana Purchase) M: 603-604
Featherweight class
 Boxing (table) B: 530
Feather-winged beetle [insect]
 Beetle B: 215
Feathery
 Golf (Beginnings) G: 264
Feature [archaeology]
 Archaeology (What archaeologists study) A: 595 with picture; (Evaluation) A: 598
Feature story
 Newspaper (Writing editorials and features) N: 383
Feature syndicate
 Journalism (News services) J: 171
 News service N: 379
 Newspaper (Writing editorials and features) N: 383
Feboldson, Febold [legendary figure] F: 59
Febronianism [religion]
 Pope (The 1700's and 1800's) P: 665
February [month] F: 60 with pictures
 Calendar (The Romans) C: 30
 Julian calendar J: 187
 Leap year L: 162

- February Revolution** [1848]
 France (The revolutions of 1830 and 1848) F: 474
 Revolution of 1848 R: 269
February Revolution [1917]
 Lenin, V. I. (The road to power) L: 193
 Russia (The February Revolution) R: 553
 Union of Soviet Socialist Republics (The February Revolution) U: 35
Fecal occult blood test
 Cancer (Cancer checkups) C: 171
Feces [physiology]
 Alimentary canal A: 368
 Incontinence I: 105
Fed See Federal Reserve System in this index
Fedchenko Glacier
 Tajikistan (Land and climate) T: 18a
Federal Aid in Wildlife Restoration Act [1937]
 Conservation (The rise of the conservation movement) Ci: 985-986
Federal Alliance of Land Grants [organization]
 Hispanic Americans (Political developments) H: 255-256
Federal Assembly
 Russia (National government) R: 531
Federal Aviation Administration [U.S.] F: 62
 Airplane (Learning to fly) A: 226; (Building an airplane) A: 228
 Airport A: 242; (Kinds of airports) A: 243
 Aviation (Aviation agencies) A: 985; (A new age of flight) A: 990-991; (Careers in aviation) A: 992
 Transportation, Department of (Agencies) T: 400; (History) T: 400
 Washington, D.C. map on W: 76
Federal Board for Vocational Education [U.S. history]
 Veterans Affairs, Department of (History) V: 343-344
Federal budget See National budget in this index
Federal Bureau of Investigation [U.S.] F: 62 with picture
 Crime (Crime in the United States) Ci: 1138
 Crime laboratory (History) Ci: 1141-1142
 Hoover, J. Edgar H: 331
 Police (Federal law enforcement agencies) P: 622
 Reno, Janet R: 240
 Washington, D.C. map on W: 76
Federal chancellor [office]
 Germany (Executive) G: 147
Federal Civil Defense Act [1950]
 Civil defense (History) Ci: 606
Federal Communications Act [1934]
 Wiretapping W: 345
Federal Communications Commission [U.S.] F: 63
 Monitoring station M: 725
 Radio (Government regulation of radio) R: 91
 Radio, Amateur (Licenses) R: 96
 Telephone (The telephone industry) T: 99; (Competition in the U.S. telephone industry) T: 101
 Television (Commercial stations) T: 114; (The Federal Communications Commission) T: 118
Federal Constitutional Court [government]
 Germany (Courts) G: 147
Federal Council on the Arts and the Humanities [U.S.]
 National Foundation on the Arts and the Humanities N: 36
Federal court
 Court (Federal courts) Ci: 1102, picture on Ci: 1103
 United States, Government of the (The judicial branch) U: 141
Federal Court [Malaysia]
 Malaysia (Courts) M: 98b
Federal Court of Canada
 Canada, Government of (The courts) C: 138
Federal Deposit Insurance Corporation [U.S.] F: 63
 Bank (Regulation of U.S. banks) B: 92; (The savings and loan crisis) B: 94
 Insurance (Other government insurance programs) I: 314
 New Deal (Helping savers and investors) N: 200-201
Federal Deposit Insurance Corporation Improvement Act [1991]
 Bank (The savings and loan crisis) B: 94-95
Federal detention center

- Prison (Types of correctional institutions) P: 805
Federal disaster area
 Federal Emergency Management Agency F: 64
Federal district [political unit] F: 63
Federal District, Department of the [government]
 Mexico City (City government) M: 478
Federal Election Campaign Act [1974]
 Hatch Political Activities Act H: 85
Federal Election Commission [U.S.] F: 63
Federal Emergency Management Agency [U.S.] F: 64
 Civil defense (History) Ci: 606
 Fire Department (Recent developments) F: 128-129
Federal Emergency Relief Administration [U.S. history]
 New Deal (table) N: 201
Federal Employees, National Federation of
 American Federation of Government Employees A: 410
Federal Employees' Compensation Act [1916]
 Workers' compensation W: 405
Federal Employees' Retirement System
 Pension (Federal civilian pensions) P: 273
Federal Energy Administration [U.S.]
 Energy, Department of (History) E: 276
Federal Express [company]
 Postal services picture on P: 707
Federal Farm Board [U.S.]
 Hoover, Herbert Clark (Champion of prosperity) H: 329
Federal Farm Credit Board [U.S.]
 Farm Credit System F: 45
Federal Food, Drug, and Cosmetic Act [1938]
 Drug (U.S. drug laws) D: 357
 Food additive (Government regulations) F: 340
 Food and Drug Administration F: 340
 Pure food and drug laws P: 907
Federal funds rate
 Interest (The federal funds rate) I: 323
Federal government See Federalism; United States, Government of the in this index
Federal government debt See National debt in this index
Federal Hall [New York City] F: 64
 L'Enfant, Pierre Charles L: 191
 National Park System (table: National memorials) N: 54
Federal Highway Administration [U.S.] F: 64
 Transportation, Department of (Agencies) T: 400
Federal Home Loan Mortgage Corporation [U.S.] F: 64
Federal Housing Administration [U.S.] F: 64
 Housing (Other housing programs) H: 391
 Housing and Urban Development, Department of (History) H: 393
 Mortgage M: 821
Federal Insecticide, Fungicide, and Rodenticide Act [1947]
 Pest control (Effects of pesticide use) P: 318
Federal Insurance Administration
 Insurance (Other government insurance programs) I: 314
Federal Insurance Contributions Act
 Pension (Social security) P: 272-273
 Social security (Financing Social Security) So: 555
Federal Interstate Highway System
 Road (How roads and highways are paid for) R: 360
Federal Investment Review Agency [Canada]
 Trudeau, Pierre Elliott (The national scene) T: 464
Federal Job Information Centers
 Civil service (Federal civil service) Ci: 612
Federal Land Bank Association [U.S.]
 Farm Credit System (Organization) F: 45
Federal Land Credit Association
 Farm Credit System (Organization) F: 45
Federal Library and Information Center Committee
 Library (United States government libraries) L: 248-249
Federal Lighthouse Service
 Coast Guard, United States (New duties) Ci: 737
 Lighthouse (History) L: 295
Federal Maritime Commission [U.S.] F: 64
Federal Mediation and Conciliation Service [U.S.] F: 64

- Federal National Mortgage Association** [U.S.] F: 65
- Federal Open Market Committee** [U.S.] Federal Reserve System (Organization) F: 65
- Federal Parliament** [Australia] Parliament (Parliaments in other countries) P: 174
- Federal Power Commission** [U.S.] Energy, Department of (History) E: 276
- Federal president** [office] Germany (Executive) G: 147
- Federal prison** Prisons, Federal Bureau of P: 808a
- Federal Railroad Administration** [U.S.] Railroad (Railroad systems) R: 112-113
- Federal Reports Act** [1942] Census (Conducting censuses) C: 347
- Federal Republic of Germany** See Germany in this index
- Federal Reserve Act** [1913] Bank (The national banking system) B: 93 Glass, Carter G: 224 Money (The rebirth of paper money) M: 709
- Federal Reserve Bank** [U.S.] Federal Reserve System (Organization) F: 65 Money (The role of the Federal Reserve System) M: 716
- Federal Reserve note** Money (United States currency today) M: 709-712 with pictures
- Federal Reserve System** [U.S.] F: 65 with map Bank (Central banks) B: 91; (Regulation of U.S. banks) B: 92; (The national banking system) B: 93 Clearinghouse C: 660 Deflation D: 88 Depression (Monetary policy) D: 151 Economics (Economic stability) E: 63 Greenspan, Alan G: 386 Inflation (Monetary policy) I: 268 Interest (Government policy) I: 322; (The federal funds rate) I: 323 Margin M: 198 Money (United States currency today) M: 709; (The role of the Federal Reserve System) M: 716 with diagram Unemployment (Fighting unemployment) U: 23 Washington, D.C. map on W: 76 Wilson, Woodrow (Legislative program) W: 322-323
- Federal Savings and Loan Insurance Corporation** [U.S.] Bank (The savings and loan crisis) B: 94
- Federal Security Agency** [U.S.] Health and Human Services, Department of (History) H: 128
- Federal Security Service** [agency] Russia (Courts) R: 532
- Federal style** Architecture (Neoclassical architecture) A: 623-624 Furniture (Early American furniture) F: 579 with picture; picture on F: 569
- Federal system** [political science] See Federalism in this index
- Federal Trade Commission** [U.S.] F: 66 Advertising (Regulation of advertising) A: 77 Antitrust laws A: 560 Consumerism (The right to information) Ci: 1018 Industry (Government regulation) I: 260 Monopoly and competition (History) M: 732 Packaging (Packaging regulations) P: 19 Sales (Regulation of selling) S: 64 Textile (In the United States and Canada) T: 218 Washington, D.C. map on W: 76 Wilson, Woodrow (Legislative program) W: 322-323
- Federal Trade Commission Act** [1914] Antitrust laws A: 560
- Federal Triangle** Washington, D.C. (Executive branch buildings) W: 75
- Federal Unemployment Tax Act** [1939] Unemployment insurance (United States plan) U: 24
- Federal waterfowl refuges** [Wyoming] Wyoming (Places to visit) W: 524
- Federalism** [political science] F: 66 Constitution of the United States (The supreme law of the land) Ci: 998 Democracy (Controls on power) D: 121 Devolution D: 175 Government (Systems of government) G: 287; (The U.S. federal system) G: 287 Local government (Local government in other countries) L: 408 Political party (Organizing the government) P: 632 State government So: 862 Supreme Court of the United States (Federalism) So: 1000 United States, Government of the (Federalism) U: 137
- Federalist, The** [book by Hamilton, Madison, and Jay] F: 66 Hamilton, Alexander (Early political career) H: 32 Jay, John J: 67 Madison, James (Constitutional Convention) M: 33 United States, History of the (Adopting the Constitution) U: 161-162
- Federalist Party** [U.S. history] F: 67 Adams, John (Vice President) A: 37; (Difficulties with France) A: 37-38 Constitution of the United States (Ratifying the Constitution) Ci: 1001 Democratic-Republican Party D: 128 Hamilton, Alexander (Secretary of the treasury) H: 32-33 Jefferson, Thomas (Secretary of state) J: 81 Madison, James (Congressman) M: 34; (Progress of the war) M: 35-36 Political party (Early history) P: 635 United States, History of the (Establishing political parties) U: 163; (Decline of the Federalists) U: 165 Washington, George (Rise of political parties) W: 104
- Federated city** Metropolitan area (Metropolitan federation) M: 444
- Federated States of Micronesia** See Micronesia, Federated States of in this index
- Federation** [political unit] See also Federalism in this index Indian, American (Federations) I: 143
- Fédération Aéronautique Internationale** Aviation (The first flying regulations) A: 987 National Aeronautic Association N: 27
- Federation Council** Russia (National government) R: 531
- Federation Cup** Tennis (Tennis tournaments) T: 165
- Fédération Internationale de Football Association** Soccer (Soccer competition) So: 548 World Cup W: 450
- Fédération Internationale de la Lutte Amateur** [organization] Wrestling (Amateur wrestling) W: 505
- Fédération Internationale de l'Automobile** Automobile racing (Racing organizations) A: 976; (Formula One racing) A: 976-977; (Growth of organized automobile racing) A: 979-980
- Fédération Internationale de Natation** [organization] Diving (Diving meets) D: 243 International Olympic Committee I: 343 Swimming (Swimming as a sport) So: 1044
- Fédération Internationale de Ski** Skiing (Skiing as a sport) S: 486 Snowboarding S: 541
- Fédération Internationale des Échecs** Chess (Tournament competition) C: 414; (History) C: 415 Kasparov, Garry K: 248
- Fédération Internationale des Sociétés d'Avion** Rowing (Competition) R: 494
- Federation of ...** Federations appear under their key words, as in South Arabia, Federation of
- Fedor I** [czar of Russia] Russia (The Time of Troubles) R: 549; (table: Czars and empresses) R: 549
- Fedor II** [czar] Russia (table: Czars and empresses) R: 549
- Fedor III** [czar] Russia (table: Czars and empresses) R: 549
- Fee** [law] F: 67
- Fee-for-service plan** [medicine] Medicine (The United States) M: 367
- Fee simple** [law] Estate E: 360 Fee F: 67
- Fee tail** [law] Estate E: 360 Fee F: 67
- Feed** [livestock] F: 67 Alfalfa (As livestock feed) A: 346 with picture Beef (Food value) B: 211 Cattle (Feeding) C: 312 Corn (Livestock feed) Ci: 1057 with picture; (The mixed-feed industry) Ci: 1061 Dairying (Feeding) D: 7 Grain (Uses) G: 301 Hay H: 115 Livestock (Feed) L: 397 Silo S: 463 Soybean So: 689 Vetch V: 343
- Feed crop** Farm and farming (Processing and storage) F: 37
- Feed lot** See Feedlot in this index
- Feedback** Automation (How automation works) A: 945 with diagram Cybernetics Ci: 1203
- Feeder** [agriculture] Cattle (Feeder cattle) C: 314
- Feeder** [machine] Glass (Glass terms) G: 222
- Feeder cattle** [animal] Cattle (Feeder cattle) C: 314 Ranching (Life on a cattle ranch) R: 134
- Feeding center** [anatomy] Weight control (Causes of obesity) W: 181
- Feedlot** [agriculture] Cattle picture on C: 313 Colorado (Agriculture) Ci: 843 Farm and farming (Livestock finishing) F: 40 Food supply (Reducing the demand for feed grain) F: 350 Livestock (Feed) L: 397
- Feedstocks** [manufacturing] Recycling (Uses for recycled materials) R: 184
- Feeler** [entomology] See Antennae in this index
- Feet** See Foot in this index
- Feijoadá** [food] Brazil (Food and drink) B: 574
- Feijoo, Benito Jerónimo** [Spanish author] Spanish literature (The 1700's) So: 760
- Feingold, Russell Dana** [American political leader] McCain, John Sidney, III M: 331
- Feininger, Lyonel** [American painter] F: 67 with picture Painting (Expressionism) P: 78-79
- Feinstein, Dianne** [American political leader] F: 68 with portrait
- Feint** [boxing] Boxing (Boxing skills) B: 530
- Feisal** See Faisal in this index
- Feitsui Dam** [Taiwan] Dam picture on D: 18
- Fekke, Robert** [American painter] F: 68 Colonial life in America (Painting) Ci: 807 with picture
- Felafel** [food] Chickpea C: 446 Israel (Food and drink) I: 481
- Felch, Alpheus** [American political leader] Michigan (table) M: 507
- Feldberg** [mountain, Germany] Black Forest B: 386
- Feldspar** [mineral] F: 68 Crystal (Classifying crystals) Ci: 1166-1167 with picture Granite G: 311 Mineral picture on M: 566
- Felibrige** [French literature] Mistral, Frédéric M: 676
- Feliciano Country** [region] Louisiana (Places to visit) L: 488
- Feline enteritis** [disorder] See Panleukopenia in this index
- Feline immunodeficiency virus** Cat (Veterinary care) C: 295
- Feline leukemia** [disease] Cat (Veterinary care) C: 295
- Felix I, Saint** [pope] Pope (table) P: 666
- Felix II** [antipope] Pope (table) P: 666
- Felix III, Saint** [pope]

Pope (table) P: 666
Felix IV, Saint [pope]
 Pope (table) P: 666
Felix V [antipope]
 Pope (table) P: 666
Felix the Cat [cartoon]
 Animation (Pioneers of American animation)
 A: 514
Felker, Samuel D. [American political leader]
 New Hampshire (table) N: 223
Fellahin [people]
 Egypt (Rural life) E: 123 *with picture*
Feller, Bob [American baseball player] F: 68
 Baseball (table: Hall of Fame) B: 134;
 (Depression and war) B: 136
Fellini, Federico [Italian director] F: 68
 Motion picture (The art film revival) M: 870
Fellow [education] See Fellowship *in this index*
Fellow travelers
 Russian literature (The period of rebirth)
 R: 564
Fellowcraft
 Masonry (The lodges and degrees of
 Masonry) M: 267
Fellowship [education] F: 69
 Scholarship S: 178
 Universities and colleges (Faculty) U: 208
Fellowship of Christian Athletes [organization]
 F: 69
Fells Point [Baltimore]
 Baltimore (Other interesting places to visit)
 B: 69
Felon [European history]
 Feudalism (Justice under feudalism) F: 82
Felony [law] F: 69
 Burglary B: 704
 Crime (Felonies and misdemeanors) Ci: 1136
Felsite [geology]
 Rock (Extrusive rock) R: 371
Felt [fabric] F: 69
 Clothing (Clothing materials) Ci: 704
Felt pause [poetry]
 Poetry (Rhythm and meter) P: 591-593
Felt-tip pen
 Pen (Soft-tip pens) P: 234 *with picture*
Felting
 Wool W: 399
Felton, John [English military leader]
 Buckingham, Duke of B: 663
Felton, Rebecca L. [American political leader]
 Georgia (The early 1900's) G: 134
FEMA [U.S.] See Federal Emergency
 Management Agency *in this index*
Female
See also Girl *in this index*
 Growth (Growth rate) G: 405
 Heredity (Chromosomes and sexual determi-
 nation) H: 202; (Sex-linked genes) H: 202
 Reproduction, Human (The human reproduc-
 tive system) R: 244 *with diagram*
 Sex ratio S: 336
 Sexuality (Biological factors) S: 337
 Steroid (The sex steroids) So: 894
Female circumcision
 Circumcision Ci: 561
Female Eunuch, The [book by Greer]
 Greer, Germaine G: 387
Female genital mutilation
 Circumcision Ci: 561
Female pattern baldness
 Baldness B: 38
Female Review, The [book about Sampson]
 Sampson, Deborah S: 81
Feminine gender [grammar]
 Gender G: 80
 Noun (Gender) N: 553
Feminine Mystique, The [book by Friedan]
 Friedan, Betty F: 532
 Women's movements (Decline after 1920)
 W: 385-386
Femininity
 Sexuality (Sex and gender) S: 338; (Gender
 roles) S: 338a
Feminism F: 69 *with picture*
 French literature (Recent French literature)
 F: 523
 Friedan, Betty F: 532
 Greer, Germaine G: 387
 Grimké, Sarah Moore G: 393
 History (Approaches to history) H: 261
 Steinem, Gloria So: 886
 United States, History of the (The spreading
 drive for equality) U: 193
 Walker, Alice W: 14

Women's movements W: 383
Feminist literary criticism [literature]
 Criticism (History of literary criticism) Ci: 1146-
 1147
Femoral artery [anatomy]
 Artery (Principal arteries) A: 751
 Human body *diagram* on H: 422
 Leg (Blood and nerve supply) L: 182
Femoral nerve [anatomy]
 Human body *diagram* on H: 422
Femto [prefix]
 Metric system (Metric prefixes) M: 439
Femur [anatomy]
 Leg L: 181 *with diagram*
 Frog picture on F: 537
 Hip H: 238 *with diagram*
 Human body *diagram* on H: 422
 Knee K: 345
 Pelvis P: 233
Fen [geography]
 Wetland W: 253
Fen [money]
 Yuan Y: 575
Fence rider
 Cowboy (On the ranch) Ci: 1110-1111
Fences [play by Wilson]
 Drama picture on D: 341
 Wilson, August W: 316
Fencing [sport] F: 70 *with pictures*
 Olympic Games (Summer Olympic Games)
 O: 746e-746f
Fend
 Rugby football (Rugby Union) R: 510
Fénelon, François de Salignac de la Mothe-
 [French author] F: 71
 French literature (Classical prose) F: 520
Fenestron [device]
 Helicopter (Single-rotor helicopters) H: 170-
 171
Feng-hsien cave
 China picture on C: 490
Fenian cycle [Irish literature]
 Mythology (The Irish cycles) M: 983-984
 Irish literature (Heroic tales, romances, and
 sagas) I: 430-431
Fenian movement [Irish history] F: 71
 Confederation of Canada (Approval of confed-
 eration) Ci: 934-935
Fenian Ram [submarine]
 Holland, John Philip H: 292
Fenian Society [organization]
 Holland, John Philip H: 292
Fennec [animal] F: 71 *with picture*
 Fox (Fennecs) F: 441
Fennel [plant] F: 72 *with picture*
Fenner, Arthur [American political leader]
 Rhode Island (table) R: 311
Fenner, James [American political leader]
 Rhode Island (table) R: 311
Fennoscandia [region, Europe]
 Scandinavia S: 171
Fens [region, England]
 England (The English Lowlands) E: 300-301
 United Kingdom (The English Lowlands)
 U: 59-61 *with map*
Fenton, Reuben Eaton [American political
 leader]
 New York (table) N: 313
Feodor [brother of]
 Peter I, the Great (Early life) P: 323
Feoktistov, Konstantin P. [Soviet cosmonaut]
 Space exploration (Voskhod and Gemini: The
 first multiperson space flights) So: 714
FERA [U.S. history]
 New Deal (table) N: 201
Ferber, Edna [American author] F: 72
Fer-de-lance [snake] F: 72 *with picture*
 Viper V: 391
Ferdinand [literary figure]
 Shakespeare, William (*The Tempest*) S: 365
Ferdinand I [Holy Roman emperor]
 Austria (The Habsburgs) A: 937-938
 Habsburg, House of H: 3
Ferdinand I [king of Romania]
 Romania (The origins of modern Romania)
 R: 424; (Depression and fascism) R: 424
Ferdinand I [king of the Two Sicilies]
 Bourbon (In Naples and Sicily) B: 516-517
 Sicilies, Kingdom of the Two Sicilies S: 447
Ferdinand II [Holy Roman emperor] F: 72
 Thirty Years' War (The Bohemian period)
 T: 260
Ferdinand III [Holy Roman emperor] F: 72
Ferdinand IV [king of Spain] See Ferdinand I

[king of the Two Sicilies] *in this index*
Ferdinand V [king of Castile and Aragon] F: 73
 Boabdil B: 427
 Castile and Aragon C: 279
 Columbus, Christopher (Years of waiting)
 Ci: 858; (Trouble, settlement, and explo-
 ration) Ci: 862; (Third voyage westward)
 Ci: 862; (Fourth voyage westward)
 Ci: 863; (Final days) Ci: 863
 Granada G: 304
 Isabella I I: 461
 Ponce de León, Juan (Florida expeditions)
 P: 655
 Spain (Union of the Spanish kingdoms)
 So: 747
Ferdinand VII [king of Spain]
 Spain (Loss of the empire) So: 749
 Latin America (The wars of independence)
 L: 107
 Napoleon I (Fall from power) N: 17-18
Ferdinand, King [literary figure]
 Shakespeare, William (*Love's Labour's Lost*)
 S: 358
Fergana Valley [region, Uzbekistan]
 Uzbekistan (Land and climate) U: 254
Ferguson, George H. [Canadian political leader]
 Ontario (table) O: 783
Ferguson, James E. [American political leader]
 Texas (table) T: 203; (The early 1900's) T: 207-
 208
Ferguson, Miriam A. [American political leader]
 Texas (table) T: 203; (The early 1900's) T: 207-
 208
Ferguson plaid
 Tartan picture on T: 47
Feria
 Peru (Recreation) P: 310
Ferlinghetti, Lawrence [American poet] F: 73
Fermat, Pierre de [French mathematician] F: 73
 Geometry (Beginnings of modern geometry)
 G: 105
 Mathematics (Mathematics and the scientific
 revolution) M: 306-307
Fermat's last theorem [mathematics]
 Fermat, Pierre de F: 73
Ferment [chemistry]
 Fermentation F: 73
Fermentation [chemistry] F: 73
 Alcoholic beverage (Fermented beverages)
 A: 336
 Antibiotic (Production) A: 552 *with diagram*
 Brewing (Fermentation) B: 595 *with picture*
 Cider Ci: 552
 Distilling D: 239
 Food preservation (Other methods) F: 343;
 (Early methods) F: 344
 Fungi (The importance of fungi) F: 559
 Gluten G: 237
 Silo S: 463
 Tea (Processing tea) T: 62
 Vinegar (Making vinegar) V: 386
 Whiskey W: 282
 Wine (How wine is made) W: 337-338 *with
 pictures*
Fermented liquor
 Brewing B: 595
Fermi, Enrico [American physicist] F: 73
 Chicago, University of (Research program)
 C: 438
 Physics (Uncovering the secrets of the atom)
 P: 442
 Radiation (The nuclear age) R: 81
 Science (Achievements of the mid-1900's)
 S: 202 *with picture*; picture on S: 203
 Szilard, Leo So: 1077
 Uranium (History of the use of uranium)
 U: 216-217
Fermi National Accelerator Laboratory
 [Batavia, Illinois] F: 74
 Chicago (Industry) C: 431-432
 Electricity picture on E: 198
 Illinois (The mid-1900's) I: 75-76; picture on
 I: 53
 Neutrino N: 154
 Particle accelerator (How accelerators work)
 P: 184-186
 Particle detector picture on P: 187
Fermileb [Batavia, Illinois] See Fermi National
 Accelerator Laboratory *in this index*
Fermion [subatomic particle] F: 74
 Boson B: 494
 Subatomic particle (Kinds of subatomic parti-
 cles) So: 937
Fermium [element] F: 74

- Transuranium element T: 401
Fern [plant] F: 74 *with pictures*
 Coal *picture on* Ci: 716
 Evolution (Evolution of new species) E: 429-430
 Fractal F: 443
 Plant (Ferns) P: 520 *with pictures*; (In ferns and mosses) P: 534 *with pictures*; (Classification of plants) P: 546-547 *with picture*
 Pteridophyte P: 853
 Spore (Plant spores) So: 801 *with diagram*
 Tree (Tree ferns) T: 415
Fern-tree jacaranda [tree]
 Jacaranda J: 2
Fernald, Bert M. [American political leader]
 Maine (table) M: 87
Fernandez, Dolores Clara [American activist]
 See Huerta, Dolores Fernandez *in this index*
Fernández, Juan [Spanish explorer]
 Juan Fernández J: 178
Fernández de Lizardi, José Joaquín [Mexican author]
 Latin-American literature (The 1800's) L: 112
 Mexico (Literature) M: 459
Fernández Reyna, Leonel [Dominican Republic political leader]
 Dominican Republic (History) D: 304-305
Fernández y Félix, Miguel *See* Victoria, Guadalupe *in this index*
Fernandine Island
 Galapagos Islands G: 7 *with map*
Fernandinos [people]
 Equatorial Guinea (People) E: 346
Fernando Po [island, Equatorial Guinea] *See* Bioko *in this index*
Ferney [estate]
 Voltaire (Later years) V: 446-447
Ferrara, Duke of [Italian nobleman] *See* Alfonso II d'Este *in this index*
Ferrari [automobile]
 Automobile *picture on* A: 969
 Sports car (History) So: 803
Ferraro, Geraldine Anne [American political leader] F: 76 *with portrait*
 Democratic Party (Mixed results) D: 128 *with picture*
 Mondale, Walter Frederick (Political career) M: 702
Ferré, Luis A. [Puerto Rican political leader]
 Puerto Rico (Puerto Rico today) P: 884
Ferre, Maurice [American political leader] F: 76 *with portrait*
 Hispanic Americans (Political developments) H: 255-256
 Miami (History) M: 480
Ferrell, Rick [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Ferrer, José [American actor]
 Motion picture (Best performance by an actor: 1950) M: 862
Ferret [animal] F: 76 *with picture*
Ferric alum [chemical]
 Invisible ink I: 369
Ferric chloride [chemical]
 Invisible ink I: 369
Ferric oxide *See* Iron oxide *in this index*
Ferrimagnetic material [physics]
 Magnetism (Magnetism of materials) M: 60b *with diagram*
Ferris, G. W. Gele [American engineer]
 Ferris wheel F: 77
Ferris, Jean Leon Gerome [American painter]
 Penn, William *picture on* P: 243
 Plymouth Colony *picture on* P: 583
Ferris, Woodbridge N. [American political leader]
 Michigan (table) M: 507
Ferris wheel F: 77 *with picture*
Ferrite [alloy]
 Magnetism (Permanent magnets) M: 60
Ferromagnetic material [physics]
 Magnetism (Magnetism of materials) M: 60b *with diagram*
 Materials (Magnetic properties) M: 300c
Ferromanganese [metal]
 Manganese (Industrial uses) M: 139
Ferrosilicon process [chemistry]
 Magnesium (How magnesium is obtained) M: 54
Ferrous alloy [chemistry]
 Alloy (Alloys of iron) A: 377
Ferrous sulfate [chemical] F: 77
Ferrovandium [alloy]
 Vanadium V: 268
Ferry [boat] F: 77 *with picture*
 Ship (Other passenger vessels) S: 417; (Specialized types of vessels) S: 422
 Transportation *picture on* T: 391
Ferry, Elisha P. [American political leader]
 Washington (table) W: 65
Ferry Building
 San Francisco (Downtown San Francisco) S: 92-93
Ferry Farm
 Washington, George (Boyhood) W: 92
Ferryland [settlement]
 Newfoundland and Labrador (Colonization) N: 375
FERS *See* Federal Employees' Retirement System *in this index*
Fertile Crescent [region, Asia] F: 78 *with map*
 Arabs (Land of the Arabs) A: 585
 Asia (The Tigris-Euphrates Valley) A: 804 *with pictures*
 Prehistoric people (The rise of agriculture) P: 751
Fertility control *See* Birth control *in this index*
Fertility doll
 Doll (Doll festivals and customs) D: 287 *with picture*
Fertility drug
 Fertilization F: 78
 Infertility (Treatment) I: 265
 Multiple birth (Fertility drugs) M: 920
Fertility rate [statistics]
 Birth and death rates B: 377
Fertilization [biology] F: 78
 Animal (Sexual reproduction) A: 496
 Baby (Before birth) B: 4
 Cell (Meiosis) C: 331-332
 Corn (How the plant reproduces) Ci: 1058
 Embryo E: 257
 Evolution (Mutation) E: 427-428
 Fallopian tube F: 17
 Fish (How fish reproduce) F: 169
 Flower (Fertilization) F: 296
 Heredity (Sex cells and reproduction) H: 201
 Human body (The reproductive system) H: 425
 Infertility (Treatment) I: 265
 Pollen (Fertilization) P: 646
 Reproduction (Through sexual reproduction) R: 242; (How reproduction has evolved) R: 243
 Reproduction, Human R: 244 *with pictures*; (Fertilization) R: 246
 Seed (Seed development in angiosperms) S: 281-282
 Sex (Before birth) S: 338
Fertilized egg [reproduction]
 Heredity (Sex cells and reproduction) H: 201
Fertilizer [agriculture] F: 78 *with pictures*
 Agriculture (Agricultural chemicals) A: 159
 Compost Ci: 905
 Conservation (Soil conservation) Ci: 979-980
 Cropping system Ci: 1153
 Environmental pollution (Soil pollution) E: 334; (Agriculture) E: 337; *picture on* E: 333
 Farm and farming (Soil management) F: 33
 Food supply (Limited agricultural resources) F: 348; (Making farmland more productive) F: 349
 Gardening (Planning the garden) G: 31-34
 Indian, American (Farming) I: 141-142
 Lawn (Preparing the soil) L: 142; (Fertilizing) L: 144
 Phosphate P: 402
See also the list of Related Articles in the Fertilizer article
Fès [Morocco] *See* Fez *in this index*
Fescue [plant] F: 80
Fessenden, Reginald Aubrey [Canadian-born physicist]
 Communication (The development of electronics) Ci: 883-884
 Radio (Early development) R: 91-92
Fessenden, William Pitt [American political leader] F: 80
 Lincoln, Abraham (table) L: 323
Feste [literary figure]
 Shakespeare, William (*Twelfth Night*) S: 360
Festinger, Leon [American psychologist]
 Social psychology So: 552
Festival
 Feasts and festivals F: 58
Festival of Light
 Sweden (Holidays) So: 1026; *picture on* So: 1025
Festival of Nations
 Montana *picture on* M: 751
Festival of the Sun
 Indian, American *picture on* I: 174
Festival of Two Worlds [arts festival]
 Menotti, Gian Carlo M: 403
Festival USA
 Bicentennial Celebration, American B: 289
Fetal alcohol syndrome [disorder]
 Mental retardation (Environmental factors) M: 410
Fetal hemoglobin [physiology]
 Thalassemia T: 228
Fetal monitor [medicine]
 Childbirth (Methods of childbirth) C: 456
Fête galante [painting]
 Painting (Rococo painting) P: 65
 Rococo R: 396
Fêtes Galantes [poems by Verlaine]
 Verlaine, Paul V: 317
Fetid horehound [plant]
 Horehound H: 335
Fetish [magic] F: 80 *with picture*
 Blackfeet Indians B: 393
 Congo (Brazzaville) (People) Ci: 939
 Doll D: 286
 Magic (Magic objects) M: 49
 Mythology (African mythology) M: 982-983 *with picture*
Fetish [psychology]
 Fetish F: 80
Fetterman, W. J. [American soldier]
 Wyoming (Indian and settler conflicts) W: 534
Fetus [reproduction]
 Abortion A: 14
 Baby (The developing baby) B: 4 *with pictures*
 Embryo E: 257
 Growth (Early development) G: 404-405
 Preeclampsia P: 734
 Pregnancy P: 734a
 Reproduction, Human R: 244 *with picture*; (Development of the embryo) R: 246-248 *with picture*; (Growth of the fetus) R: 248
 Toxoplasmosis T: 351
 Umbilical cord U: 18
F feud [quarrel] F: 81
Feudal aid [European history]
 Feudalism (The principles of feudalism) F: 82
Feudal incident [European history]
 Feudalism (The principles of feudalism) F: 82
Feudalism [European history] F: 81 *with picture*
 Army (Armies in the Middle Ages) A: 727
 Castle C: 280
 Charlemagne (Administration and influence) C: 379
 City (Government) Ci: 585
 Democracy (The Middle Ages) D: 122
 Estate E: 360
 Europe (The Middle Ages) E: 409-410
 Freedom (The Middle Ages) F: 502
 Government (The Middle Ages) G: 290
 Homage H: 299
 Hundred Years' War H: 437
 Knights and knighthood K: 348
 Law (The Middle Ages) L: 134-135
 Middle Ages (Feudal Europe) M: 524
 Painting (Medieval painting) P: 48
 Primogeniture P: 780
 Scotland (Struggles with England) S: 219
 World, History of the (Medieval Europe) W: 432
Feuerbach, Ludwig Andreas [German philosopher] F: 83
Feulner, Edwin [American political figure]
 Heritage Foundation H: 211
Fever [disorder] F: 83
 Deafness (Diseases) D: 57
 Disease (Immune responses) D: 231-232
Fever blister [disorder]
 Cold sore Ci: 761
Feverfew [plant] F: 83
 Pyrethrum P: 920
Few, William [American political leader] F: 83
Few Figs from Thistles, A [book by Millay]
 Millay, Edna St. Vincent M: 553
Fey, Charles [American inventor]
 Slot machine S: 508a
Feynman, Richard Phillips [American physicist]
 F: 83
 Subatomic particle (The Standard Model) So: 938
Fez [city, Morocco] F: 84
 Morocco (Arab conquest) M: 814

- Fez** [hat] F: 84
Morocco (Way of life) M: 811-812
- Fez, Treaty of** [1912]
Morocco (French and Spanish control) M: 814-815
- Fezzan** [former province]
Libya (Independence) L: 268
- FFA** [organization] F: 84 *with pictures*
Agricultural education (Youth programs and organizations) A: 145
- FHA** See Federal Housing Administration *in this index*
- FHWA** [U.S.] See Federal Highway Administration *in this index*
- FIA** See Fédération Internationale de l'Automobile *in this index*
- Fianna** [Irish legend]
Mythology (The Irish cycles) M: 983-984
- Fianna Fáil** [political party]
De Valera, Eamon D: 173
Ireland (Politics) I: 417; (The Irish Free State) I: 427; (The Republic of Ireland) I: 427-428
Sinn Féin (History) S: 473
- Fiat** [law] F: 86
- Fiat money**
Money (How the money supply is determined) M: 714
- Fiat S.p.A.** [company]
Automobile (The birth of the automobile industry) A: 963
Italy (Manufacturing) I: 511-512 *with picture*
Manufacturing (table) M: 170
- Fiber** F: 86 *with pictures*
Acetate A: 25
Agriculture (Chief agricultural products) A: 147
Composite materials Ci: 904
Cotton Ci: 1086
Materials (Biological materials) M: 300d
Plastics (To replace natural fibers and hides) P: 555
Polyester P: 649
Spandex So: 753
Textile (Sources of textile fibers) T: 212
- Fiber, Dietary** [nutrition] F: 88
Colon cancer Ci: 785
Diverticulitis D: 240
Food (How the body uses food) F: 330
Laxative L: 148
Nutrition (Include fiber) N: 628
- Fiber amplifier** [machine]
Laser (Recording, storing, and transmitting information) L: 82
- Fiber content**
Clothing (Protecting the public) Ci: 705
- Fiber crop** [agriculture]
Crop Ci: 1153
- Fiber flax**
Flax (Growing and processing fiber flax) F: 230 *with pictures*
- Fiber hemp** [plant]
Hemp H: 184
- Fiber-optic bronchoscope** [instrument]
Bronchoscope B: 637
- Fiber-optic gyro** [device]
Inertial guidance (Strap-down systems) I: 263
- Fiber optics** [physics] F: 88 *with pictures*
Cable (Fiber-optic cables) C: 5 *with diagrams*;
(Telephone cables) C: 7
Communication (The digital age) Ci: 885 *with picture*
Endoscope E: 273
Gastroscope G: 67
Glass (Specialty glasses) G: 212
Gyroscope (Optical gyroscopes) G: 454
Internet (How the Internet works) I: 350c
Invention (Recent developments) I: 364
Laser (Recording, storing, and transmitting information) L: 82
Planetarium (Modern planetariums) P: 514a-514b
Physics (Physics today) P: 442-443
Telephone (Transmitting the telephone signals) T: 96 *with diagram*; (Improvements in telephone technology) T: 101
Television (Coaxial cable and fiber-optic cable) T: 123
- Fiberboard** [building material]
Wallboard W: 17
- Fiberglass** F: 89 *with diagram*
Energy supply picture on E: 281
Glass (Kinds of glass) G: 212; (Drawing) G: 215; *picture on G: 211*
Interior design (Choosing patterns and textures) I: 332
- Fiberglass-reinforced plastics**
Materials (Composite materials) M: 300d
- Fiberglass wool**
Fiberglass (How fiberglass is made) F: 89
- Fibiger, Johannes Andreas Grib** [Danish bacteriologist]
Nobel Prizes (Physiology or medicine: 1926) N: 444
- Fibonacci, Leonardo** [Italian mathematician]
F: 89
Decimal system (Spread of the decimal system) D: 73
Mathematics (Arab mathematics) M: 306
- Fibonacci sequence** [mathematics]
Fibonacci, Leonardo D: 89
- Fibrillation** [disorder]
Drug (Antiarrhythmics) D: 351
Digitalis D: 204
Heart (Diagnosis and treatment) H: 139;
(Abnormal heart rhythms) H: 142
- Fibrillin** [protein]
Marfan syndrome M: 198
- Fibrin** [physiology] F: 90
Anticoagulant A: 553
Blood (Controlling bleeding) B: 411; *picture on B: 412*
- Fibrinogen** [protein]
Blood (Platelets) B: 408; (Controlling bleeding) B: 411
Fibrin F: 90
Liver (Other functions) L: 394
Plasma (Functions of plasma) P: 551 *with picture*
- Fibroid** [disorder]
Hysterectomy H: 482
- Fibrolite** [mineral]
Sillimanite S: 463
- Fibromyalgia** [disorder] F: 90
- Fibrous glass** See Fiberglass *in this index*
- Fibrous membrane** [anatomy]
Membrane M: 391
- Fibrous root** [botany]
Plant (Roots) P: 529 *with picture*
Root (Kinds of roots) R: 473 *with diagram*
Vegetable (Roots) V: 292
- Fibula** [anatomy]
Human body diagram on H: 422
Leg (The leg) L: 182 *with diagram*
- Fibula** [ornament]
Clothing (Ancient times) Ci: 696-697 *with picture*
Pin P: 466 *with picture*
- FICA** See Federal Insurance Contributions Act *in this index*
- Ficciones** [stories by Borges]
Borges, Jorge Luis B: 487
Latin-American literature (The mid-1900's) L: 113
- Fichte, Johann Gottlieb** [German philosopher]
F: 90
Political science (Liberalism) P: 639
- Fiction** [literature] F: 90
Arabic literature (Fiction) A: 583
English literature (Elizabethan fiction) E: 317
Literature L: 352
Literature for children (Fiction) L: 358
Novel N: 571
Poe, Edgar Allan (Fiction and theory of fiction) P: 590
Romance R: 414
Writing (Fiction) W: 511
- Fictional biography**
Biography (Forms of biography) B: 312
- Fictive kin**
Family (Family relationships) F: 21
- Fiddle** [violin]
Country music (The instruments) Ci: 1098
Violin (History) V: 390
- Fiddleneck** [plant]
Flower (Flowers of summer-dry regions) F: 288 *with picture*
- Fiddler crab** [sea animal] F: 91 *with picture*
Biological clock (Other rhythms) B: 315
Crab Ci: 1115
Crustacean pictures on Ci: 1164
- Fiddler on the Roof** [musical]
Musical comedy (The modern musical emerges) M: 960
- Fiddler's House, The** [play by Colum]
Colum, Padraic Ci: 851
Irish literature (Drama) I: 432
- FIDE** [organization] See Fédération Internationale des Échecs *in this index*
- Fidelio** [opera by Beethoven]
Beethoven, Ludwig van (The second period) B: 214
- Fidelity bond** [insurance]
Bonding B: 455
Insurance (Other kinds of property and liability insurance) I: 313-314
- Fiduciary bond**
Bonding B: 456
Insurance (Other kinds of property and liability insurance) I: 313-314
- Fiedler, Arthur** [American conductor] F: 91
- Fief** [European history]
Fee F: 67
Feudalism F: 81
Middle Ages (The Carolingian Empire) M: 524
- Field** [database]
Database D: 41 *with picture*
- Field** [flag]
Flag diagram on F: 194
- Field** [physics]
Quantum field theory Q: 5
Waves W: 152
- Field, Ben** [American businessman]
Pullman, George Mortimer P: 897
- Field, Cyrus West** [American businessman]
F: 92
Cable (Telegraph cables) C: 6
- Field, David Dudley, Jr.** [American lawyer] F: 92
- Field, Eugene** [American author] F: 92
- Field, James G.** [American political leader]
Populism (The People's Party) P: 674-675
- Field, Marshall, I** [American businessman] F: 91
- Field, Marshall, II** [son of Marshall Field] F: 91
- Field, Marshall, III** [American philanthropist]
F: 91
- Field, Marshall, IV** [American publisher] F: 91
- Field, Marshall, V** [American businessman]
F: 91
- Field, Rachel** [American author] F: 92
- Field, Richard** [English printer]
Shakespeare, William (His first poems) S: 347
- Field, Sally** [American actress]
Motion picture (Best performance by an actress: 1979, 1984) M: 862
- Field, Stephen Johnson** [American jurist] F: 92
- Field archery**
Archery (Field archery) A: 603
- Field artillery**
Artillery (Field artillery) A: 762 *with picture*
- Field bindweed** [plant]
Bindweed B: 309
- Field coil**
Electric motor (Parts of an electric motor) E: 179
- Field cradle**
United States picture on U: 113
- Field cricket** [insect]
Cricket Ci: 1130 *with picture*
Insect picture on I: 280
- Field crop** [agriculture]
Farm and farming (Specialized crop farms) F: 30
- Field effect transistor**
Transistor (Metal oxide semiconductor field effect transistors) T: 373 *with diagram*
- Field-emission display** [electronics]
Electronics (Electronics today) E: 216-217
Television (Flat-panel, large-screen television) T: 128
- Field-emission microscope** [instrument]
Atom (How scientists study atoms) A: 874
- Field Enterprises, Inc.**
Field, Marshall, V F: 91
- Field glasses**
Binoculars B: 309
- Field goal**
Football (Scoring) F: 362
Rugby football (Rugby League) R: 511-512
- Field guide** [book]
Bird (Bird watching) B: 367
- Field Guide to the Birds** [book by Peterson]
Peterson, Roger Tory P: 326
- Field hand**
Slavery (Functions of slaves) S: 503 *with picture*; (Conditions of slavery) S: 503
- Field hockey** [sport] F: 92 *with picture*
Hockey (Beginnings) H: 281
Indian, American (Recreation) I: 142
- Field Hockey Association, United States**
Field hockey (History) F: 93
- Field Hockey Association of America**
Field hockey (History) F: 93
- Field holler**
Blues B: 424

Field-ion microscope [instrument]
Ion microscope I: 372 *with picture*

Field judge [sports]
Football (The officials) F: 362

Field lines [physics]
Cosmic rays (Galactic cosmic rays) Ci: 1076
Sun (Sun terms) So: 976 *with picture*
Van Allen belts V: 269
See also Flux lines *in this index*

Field magnet
Electric motor (Parts of an electric motor)
E: 179

Field marshal [rank]
Marshal M: 228

Field Museum [Chicago] F: 94
Chicago (Museums) C: 428
Dinosaur picture on D: 210

Field mushroom
Mushroom (Nonpoisonous mushrooms)
M: 943 *with picture*

Field observation
Sociology (Field observation) So: 566

Field of vision
Blindness B: 401

Field painting
Painting (Abstract expressionism) P: 84-85

Field particle [physics]
Quantum field theory Q: 6

Field position [sports]
Football (table) F: 356

Field research [anthropology]
Boas, Franz B: 427

Field round [contest]
Archery (Field archery) A: 603

Field sobriety test [law enforcement]
Driving while intoxicated D: 348

Field spaniel [dog] F: 94 *with picture*

Field strength [physics]
Weber W: 176

Field structure
Electric generator (Parts of a generator) E: 171
with diagrams; (How AC generators work)
E: 173
Electric motor (Parts of an electric motor)
E: 179

Field study [research]
Zoology (How zoologists work) Z: 610

Field trial
Dog (Dog competitions) D: 280-281 *with picture*

Fielder
Baseball (Player positions) B: 127; (Fielding)
B: 128
Cricket (The fielding side) Ci: 1134

Fielder, James E. [American political leader]
New Jersey (table) N: 249

Fielder's choice
Baseball (Reaching base) B: 129

Fielder's glove
Baseball (Equipment) B: 125 *with picture*

Fielding, Henry [British author] F: 94 *with portrait*
English literature (The rise of the novel)
E: 318-319

Novel (The first English novelists) N: 572
Police (Early law enforcement in England)
P: 624

Fielding, William S. [Canadian political leader]
Nova Scotia (table) N: 567

Fields, W. C. [American actor] F: 95 *with picture*

Fields, William J. [American political leader]
Kentucky (table) K: 290

Fieldstone Center
Battle Creek B: 172

Fieldwork
Anthropology (How anthropologists work)
A: 547-548

Fiery searcher beetle
Beetle picture on B: 218

Fiery skipper [insect]
Butterfly (Skippers) B: 733-734

Fieschi, Sinobaldo *See* Innocent IV *in this index*

Fiesta [celebration]
Latin America picture on L: 100
Mexico (Holidays) M: 457

FIFA *See* Fédération Internationale de Football
Association *in this index*

Fife [musical instrument] F: 95

Fifer, Joseph W. [American political leader]
Illinois (table) I: 71

Fifteenth Amendment [U.S. Constitution] F: 95
Constitution of the United States Ci: 1014
Force bill F: 371
Reconstruction (The impeachment of

Johnson) R: 178

Fifth Amendment [U.S. Constitution] F: 95
Constitution of the United States Ci: 1012
Due process of law D: 378
Privacy, Right of P: 808a

Fifth Avenue [street]
New York City (Manhattan) N: 323-325; *picture on N: 330*

Fifth axiom [geometry]
Geometry (Euclidean geometry) G: 103-104

Fifth Business [book by Davies]
Davies, Robertson D: 46

Fifth column [military] F: 96
Propaganda P: 823

Underground U: 21

Fifth Crusade [1217-1221]
Crusades (Other Crusades) Ci: 1161

Fifth of July, The [play by Wilson]
Wilson, Lanford W: 317

Fifth Republic
De Gaulle, Charles André Joseph Marie (The
Fifth Republic) D: 91
France (Government) F: 455; (The Fifth
Republic) F: 476

Fifth wheel [mechanism]
Truck (Kinds of trucks) T: 457

Fifth-wheel trailer [vehicle]
Trailer (Recreational trailers) T: 368

50° summer isotherm [meteorology]
Arctic (Arctic lands) A: 636 *with map*

Fifty-Four Forty or Fight [U.S. history] F: 96
British Columbia (The border dispute) B: 628-
630

Polk, James Knox (Election of 1844) P: 642
Washington picture on W: 67

51 Pegasi [star]
Planet (The first discoveries) P: 512

Fig [fruit] F: 96 *with picture*
Invasive species (How species become inva-
sive) I: 354j
Tree picture on T: 427

Fig wasp [insect]
Fig F: 96

Figari, Pedro [Uruguayan artist]
Uruguay (The arts) U: 225

Figaro [literary figure]
Opera (*Barber of Seville, The*) O: 801 *with pic-
ture*; (*Marriage of Figaro, The*) O: 805-
806

Figg, James [British boxer]
Boxing (The beginning of modern boxing)
B: 533

Fighter [airplane]
Air force (Aircraft and missiles) A: 183 *with
picture*

Air Force, United States (Fighters) A: 191
Aircraft, Military (Fighters) A: 203 *with pic-
tures*

Airplane (Military planes) A: 212

Fighter [career]
Boxing B: 527 *with picture*

Fighter-bomber
Aircraft, Military (Bombers) A: 202 *with picture*
Bomber (Kinds of bombers) B: 453 *with pic-
ture*

Fighting Irish
Notre Dame, University of (The campus)
N: 551

Fightingfish F: 96 *with picture*
Fish picture on F: 157

Figueiredo, João Baptista [Brazilian political
leader]
Brazil (Under military rule) B: 586

Figueres, José [Costa Rican political leader]
Costa Rica (Revolutions and reforms) Ci: 1084

Figure number [mathematics]
Series (Working with odd numbers) S: 317-
318

Figurative painting [art]
Painting (New image painting) P: 87 *with pic-
ture*

Figure [wood]
Wood W: 389 *with pictures*

Figure-ground perception
Gestalt psychology G: 175

Figure of speech [language] F: 97
Slang (Figures of speech) S: 500

Figure skating
Ice skating I: 10; (Figure skating) I: 11 *with pic-
tures*; (History) I: 16

Olympic Games (Winter Olympic Games)
O: 746d

Roller skating (Competitive roller skating)
R: 403

Figured bass [music]
Bach, Johann Sebastian (His works) B: 16

Figurehead
Folk art (Sculpture) F: 317; *picture on F: 319*

Figwort family [botany] F: 97
Flower F: 300 *with picture*

Fiji [country] F: 97 *with pictures and map*
Flag picture on F: 202

Pacific Islands (Recreation) P: 6-7 *with picture*

Filament [biology]
Flower (The stamens) F: 293-294 *with pic-
tures*
Plant (Flowers) P: 531 *with picture*

Filament [electricity]
Edison, Thomas Alva (The Wizard of Menlo
Park) E: 78-79
Electric light (The filament) E: 174; *picture on
E: 176*
Electricity (A simple circuit) E: 194
Vacuum tube (How a vacuum tube works)
V: 258

Filament [physiology]
Alzheimer's disease (Diagnosis) A: 398-399

Filament [textile]
Fiber F: 87
Textile (Sources of textile fibers) T: 212;
(Making the yarn) T: 215
Thread T: 269 *with picture*

Filament winding [industrial process]
Composite materials (Polymer composites)
Ci: 904

Filarie [animal] F: 99 *with picture*
Manson, Sir Patrick M: 167

Filature [factory]
Silk (Reeling) S: 460

Filbert [tree] F: 99 *with pictures*
Hazel E: 122
Nut (Kinds of nuts) N: 621 *with picture*

Fildes, Sir Luke [British artist]
Painting (Painting outside France) P: 72

File [chess]
Chess (The board and the men) C: 412 *with
diagram*

File [computing] *See* Computer file *in this index*

File [heraldry]
Heraldry picture on H: 195

File [tool]
Woodworking (Cutting) W: 397-398 *with pic-
tures*

File clam [animal]
Biology picture on B: 316

File snake
Snake (File snakes) S: 535

File transfer protocol [computing] *See* FTP pro-
gram *in this index*

Filefish
Fish picture on F: 155
Triggerfish T: 442

Filene, Edward Albert [American businessman]
Credit union Ci: 1125

Filfa [island, Mediterranean]
Malta M: 113 *with map*

Filibuster [pirate]
Pirate P: 494

Filibustering [politics] F: 99
Cloture Ci: 707

Senate (Considering legislation) S: 295

Filid [poets]
Irish literature (Early Irish literature) I: 430;
(Poetry) I: 430

Filion, Herve [Canadian harness driver]
Harness racing (History) H: 64

Filioque [religion]
Eastern Orthodox Churches (Doctrines) E: 46

Filipepi, Allesandro *See* Botticelli, Sandro *in
this index*

Filipino [language]
Philippines (Languages) P: 374

Filipinos [people]
Asian Americans (History of Asian immigra-
tion) picture on A: 812d-812e
Philippines P: 372

Fill dam
Dam (Embankment dams) D: 18 *with picture*

Fille mal gardée, La [ballet]
Ballet (Ballet d'action) B: 51

Filled-system thermometer
Thermometer (Thermal expansion thermome-
ters) T: 254

Filler
Plastics (Making synthetic resins) P: 556-557
Rubber (Compounding and mixing) R: 505

Filler metal
Welding (Fusion welding) W: 189

Filler tube

Plumbing (How toilets work) P: 579 *with diagrams*

Filles du Feu, Les [poems by Nerval]
Nerval, Gérard de N: 131

Fillet

Hairdressing (Ancient times) H: 11 *with picture*

Fillet [architecture]

Column (The Greek orders) Ci: 865 *with diagram*

Fillet [fish]

Fishing industry (Methods of processing)
F: 186

Filling [dentistry]

Teeth (Dental decay) T: 82-83 *with pictures*

Filling [food processing]

Food preservation (Canning) F: 341-342 *with picture*

Filling [weaving]

Textile (Woven fabrics) T: 214

Velvet V: 297

Fillmore, Abigail Powers [wife of Millard Fillmore]

First ladies (table) F: 142

Fillmore, Millard (Fillmore's family) F: 101 *with picture*; (Life in the White House) F: 102 *with portrait*

Fillmore, Caroline Carmichael McIntosh [wife of Millard Fillmore]

Fillmore, Millard (Later years) F: 102

Fillmore, Mary Abigail [daughter of]

Fillmore, Millard (Fillmore's family) F: 101; (Life in the White House) F: 102
White House hostesses W: 291

Fillmore, Millard [U.S. President] F: 100 *with pictures*

Vice President of the United States (table)
V: 351

Fillmore, Millard Powers [son of]

Fillmore, Millard (Fillmore's family) F: 101

Fillmore, Nathaniel [father of]

Fillmore, Millard (Early life) F: 100

Fillmore, Phoebe Millard [mother of]

Fillmore, Millard (Early life) F: 100

Filly [animal]

Horse (table: Horse terms) H: 343
Horse racing (Thoroughbred horses) H: 363-364

Film

See also Motion picture *in this index*

Camera C: 80

Eastman Kodak Company E: 47

Edison, Thomas Alva (Motion pictures) E: 80

Motion picture (The film) M: 857 *with diagrams*

Photoengraving and photolithography
(Capturing the image) P: 405-406

Photography (Exposing the film) P: 410;
(Developing the film) P: 410 *with picture*;
(Film) P: 417; (Developing and printing)
P: 420-424 *with pictures*

Polyester P: 649

Silver nitrate S: 465

Videotape recorder V: 360

Film advance

Camera (How a camera works) C: 80; *diagram*
on C: 82

Film chain [machine]

Television (Telecine) T: 122

Film City [nickname]

Rochester (Government and history) R: 370-371

Film festival

Motion picture (Festivals and awards) M: 861

Film music

India (Music and dance) I: 120

Motion picture (Adding music and sound
effects) M: 866

Film Society of Lincoln Center

Lincoln Center for the Performing Arts L: 327

Film speed

Photography (Speed) P: 418

Filmon, Gary [Canadian political leader]

Manitoba (table) M: 159

Filmstrip F: 103

Audio-visual materials (Filmstrips and slides)
A: 882

Filmy dome spider

Spider (table) So: 790; *picture on So: 788*

Filocolo [book by Boccaccio]

Boccaccio, Giovanni B: 433

Filostrato [poem by Boccaccio]

Boccaccio, Giovanni B: 433

Filter [electronics]

Computer (Internet service providers (ISP's)

and online services) Ci: 921-922

Internet (Concerns about material) I: 350d

Filter [mechanical device] F: 103

Air cleaner (Types of air cleaners) A: 175

Air conditioning (Cleaning the air) A: 177; *picture on A: 180*

Aquarium, Home (Basic equipment) A: 578

with picture

Photography (Filters) P: 419

Polarized light (How light is polarized) P: 617
with diagrams

Filter factor [measurement]

Photography (Filters) P: 419

Filter feeding [zoology]

Animal (Filtering mechanisms) A: 490

Filter stripe [electronics]

Television (The television camera) T: 121

Filtrage

Information retrieval (Research) I: 269

Filtration [water treatment]

Water (Purifying and treating water) W: 126;
diagram on W: 124

Filtration air cleaner

Air cleaner (Types of air cleaners) A: 175

Fimbriation

Flag (table) F: 193

Fin [airplane]

Airplane (The tail) A: 214 *with pictures*

Airship (Control) A: 251 *with diagram*

Glider (The tail assembly) G: 229

Fin [zoology]

Animal (Fins, tails, and flippers) A: 490 *with picture*

Fish (Fins) F: 160 *with picture*

Fin whale F: 103

Whale (Rorquals) W: 255-258 *with picture*; *diagram on W: 259*; (Reproduction) W: 260-261

FINA [organization] See Fédération

Internationale de Natation *in this index*

Final Act of the Conference on Security and Cooperation in Europe See Helsinki Final Act *in this index***Final cause** [philosophy]

Aristotle (Philosophy of nature) A: 664

Final drive

Transmission (The final drive) T: 378

Final Settlement With Respect to Germany, Treaty on the [1990]

Germany (The unification of East and West
Germany) G: 171

Final solution [German history]

Heydrich, Reinhard H: 220

Holocaust ("The Final Solution") H: 296a

Nazism (Expansion, war, and collapse) N: 93

Finance

Budget B: 669

Business (Specialized departments) B: 725-726

Economics E: 57

Money (International finance) M: 716

Finance, Minister of [office]

Canada, Government of (The Cabinet) C: 132

Finance bill [economics]

Bill of exchange B: 301

Finance charge [economics]

Installment plan (How the plan works) I: 304

Finance company [economics] F: 103

Installment plan (How the plan works) I: 304

Finance Corporation, International See International Finance Corporation *in this index***Financial accounting**

Accounting (Fields of accounting) A: 23

Financial Accounting Standards Board

Accounting (Financial reports) A: 23

Financial aid

Education (The federal government and education) E: 92; (Financial support) E: 95

Financial audit [business]

Audit A: 884

Financial capital

Capital C: 192

Financial Control Board

Washington, D.C. (Government changes)
W: 87-88

Financial District

New York City (Manhattan) N: 323-324;

(Finance) N: 334; (A visitor's guide) N: 338

Financial futures [economics]

Commodity exchange (Financial futures)
Ci: 874

Financial Institutions Reform, Recovery and Enforcement Act [1989]

Bank (The savings and loan crisis) B: 94

Financial report

Accounting (Financial reports) A: 23

Financial services

Bank (Diversification and mergers) B: 95

Financial Services Modernization Act [1999]

Bank (Diversification and mergers) B: 95

Financier, The [book by Dreiser]

Dreiser, Theodore D: 346

Finasteride [drug]

Baldness B: 39

Finca [plantation]

El Salvador (Economy) E: 251

Finch [bird] F: 103

Bird (As pets) B: 331 *with picture*

Evolution (Geographic distribution of species)

E: 430-431 *with picture*

Island (How life develops on islands) I: 473

Linnet L: 338

Science *picture on S: 201*

Finch, Cliff [American political leader]

Mississippi (table) M: 640

Finch, Peter [Australian actor]

Motion picture (Best performance by an actor;
1976) M: 862-863

Finch, Robert Hutchison [American government official]

Health and Human Services, Department of
(table) H: 128

Finch, Stanley W. [American government official]

Federal Bureau of Investigation (History) F: 62

Findings [fasteners]

Clothing (The 1900's) Ci: 703-704

Findlay, William [American political leader]

Pennsylvania (table) P: 263

Findley, John [American frontiersman]

Boone, Daniel (Tales of a hunter's paradise)
B: 477; (Boone in Kentucky) B: 477

Fine [law] F: 104**Fine, John S.** [American political leader]

Pennsylvania (table) P: 263

Fine-adjustment knob

Microscope (Parts of an optical microscope)
M: 519 *with picture*

Fine arts F: 104

Aesthetics A: 90

Antique A: 557

Art and the arts A: 745

Fine Arts, Academy of [France]

Institute of France I: 305

Fine Arts, Palace of

San Francisco *picture on S: 95*

Fine cut

Motion picture (The rough and fine cuts)
M: 855-856

Fine Gael [political party]

Ireland (Politics) I: 417; (The Republic of
Ireland) I: 427

Fine-wooled sheep

Sheep (Fine-wooled sheep) S: 381

Wool (Sources of wool) W: 399

Fineness [metallurgy]

Gold (Gold alloys) G: 251

Fingal's Cave [music by Mendelssohn]

Mendelssohn, Felix (His life) M: 399

Finger [anatomy]

Hand H: 39; (Parts of the hand) H: 40 *with diagram*

Finger [botany]

Banana (How bananas grow) B: 72

Finger, Charles Joseph [American author] F: 104**Finger alphabet**

Sign language S: 454 *with picture*

Finger board

Guitar G: 435; *diagrams on G: 436*

Violin (Parts of the violin) V: 389 *with pictures*

Finger Lakes [New York] F: 104

New York (Lakes) N: 306-307

Finger painting [art] F: 105 *with pictures***Finger puppet**

Puppet (Hand puppets) P: 904

Finger spelling

Deafness (Special language techniques) D: 58

Finger weaving

Weaving (Weaving without a loom) W: 174

Fingered limpet [sea animal]

Animal *picture on A: 486*

Fingernail

Nail (anatomy) N: 4

Fingerprinting [criminology] F: 106 *with pictures*

- Crime laboratory (Collecting the evidence)
Ci: 1140 *with picture*; (History) Ci: 1141-1142
- Federal Bureau of Investigation (Other services) F: 62
- Fingers, Rollie** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Finial** [ornament]
Flag *picture on* F: 194
- Finish carpentry**
Carpentry C: 246
- Finished floor**
House (Interior construction) H: 382
- Finished market lumber**
Lumber (Hardwood lumber) L: 517-518
- Finisher** [career]
Clothing (Ready-to-wear clothes) Ci: 704-705
Dry cleaning (How clothes are dry cleaned) D: 368-369
- Finishing** [agriculture]
Farm and farming (Livestock care) F: 39;
(Livestock finishing) F: 40
- Finishing** [industrial process]
Iron and steel (Shaping and finishing steel) I: 445-447 *with diagrams*
Cotton (Finishing) Ci: 1091 *with pictures*
Leather (Final processing) L: 168-169 *with picture*
- Finishing** [weaving]
Basket making (Methods) B: 141
- Finishing** [woodworking]
Woodworking (Sanding and finishing) W: 398
- Finite series** [mathematics]
Series S: 316; (Working with finite series) S: 316
- Finite set** [mathematics]
Set theory (Kinds of sets) S: 321
- Finite verb**
Verb (Finite and nonfinite verbs) V: 315
- Fink, Mike** [American frontiersman] F: 107 *with picture*
- Finkelstein, Yona** [Russian political leader] See Primakov, Yevgeny Maksimovich *in this index*
- Finland** F: 108 *with pictures and maps*
Euro E: 378
Flag *picture on* F: 206
Lapland L: 74
Russo-Finnish wars R: 565
Sami S: 78
Scandinavia S: 171 *with map*
Union of Soviet Socialist Republics (World War II) U: 37
World War II (table: The Axis) W: 471; (table: Military casualties) W: 497
See also the list of Related Articles in the Finland article
- Finland, Gulf of**
Baltic Sea B: 65 *with map*
- Finlandia** [music by Sibelius]
Sibelius, Jean S: 444
- Finlay, Carlos Juan** [Cuban biologist] F: 118
- Finlay Park** [Columbia]
South Carolina *picture on* So: 649
- Finless porpoise**
Porpoise P: 680
- Finn cycle** See Fenian cycle *in this index*
- Finn MacCool** [legendary figure] F: 119
Giant's Causeway G: 184
Irish literature (Heroic tales, romances, and sagas) I: 430-431
Mythology (The Irish cycles) M: 983-984
- Finnegans Wake** [book by Joyce]
Joyce, James J: 177
Fable F: 3
Irish literature (James Joyce) I: 432
- Finney, Charles Grandison** [American religious leader]
Revivalism R: 268
- Finney, Joan** [American political leader]
Kansas (table) K: 234; (Economic and political changes) K: 238-239
- Finnish spitz** [dog] F: 119 *with picture*
- Finns** [people]
Finland (Early years) F: 117
Sami (History) S: 80
Sauna S: 163
- Finsen, Niels Ryberg** [Danish doctor]
Nobel Prizes (Physiology or medicine: 1903) N: 444
- Fiord** [geography] F: 119
Canada (Land regions) C: 112-115
Denmark (Land regions) D: 137-138 *with picture*
- Europe *picture on* E: 395
Iceland (The inland plateau) I: 22
Norway N: 536 *with picture*; (Coast and islands) N: 542 *with map*
- Fiordland** [park, New Zealand]
National park (New Zealand) N: 42d; (table) N: 42f
- Fiorelli, Giuseppe** [Italian archaeologist]
Pompeii (Excavations) P: 654
- Fiqh** [religion]
Islam (The Shari'a) I: 465
Shari'a S: 374
- Fir** [tree] F: 119 *with pictures*
Tree *pictures on* T: 424
- Firbolgs** [legendary people]
Mythology (The Irish cycles) M: 983
- Fire** F: 120 *with pictures*
Arson A: 745
Baltimore (History) B: 69-70
California (The late 1900's) C: 63-64
Camping (Building a campfire) C: 94 *with picture*
Chicago (The Great Chicago Fire) C: 435 *with picture*
Combustion Ci: 867
Disaster (table) D: 223
Earthquake (How earthquakes cause damage) E: 34-35
Electricity (Electrical fire) E: 196
Empedocles E: 261
Fire department F: 123 *with picture*; (Fire prevention and fire safety) F: 124-125
Florida (The late 1900's) F: 264-265
Heat (Sources of heat) H: 149
Heraclitus H: 194
London (War, plague, and fire) L: 441
Los Angeles (Recent developments) L: 470-471
National park (Management of fire and wildlife) N: 42i
Persian Gulf War (Consequences of the war) P: 300d-301 *with picture*
Prehistoric people (How they lived) P: 746; *picture on* P: 743
Pyromania P: 920
San Francisco (Earthquake and fire) S: 98 *with picture*
Vulcan V: 453
Wisconsin (History) W: 365-366
- Fire, Ring of** [region, Pacific Ocean] See Ring of Fire *in this index*
- Fire Administration, United States**
Fire department (Recent developments) F: 128-129
- Fire alarm**
Fire department (Communication systems) F: 125 *with picture*
- Fire ant** F: 122
Ant (Protection against enemies) A: 525; (The importance of ants) A: 528
Conservation (Biodiversity conservation) Ci: 976-977
- Fire blight** [plant disease]
Apple (Pests and diseases) A: 571-572
Bacteria (Harmful bacterial) B: 19-20
Blight B: 400
Pear (Diseases) P: 216
Plant *pictures on* P: 543
- Fire brigade**
Fire department (History) F: 128
- Fire chief**
Fire Department (Paid departments) F: 128
- Fire clay**
Clay Ci: 658
- Fire control** [warfare]
Radar (In the military) R: 65-67
- Fire curing**
Tobacco (Kinds of tobacco) T: 305-306; (Curing tobacco) T: 306
- Fire department** F: 123 *with pictures*
Franklin, Benjamin (Civic leader) F: 487-488
- Fire drill** F: 129
- Fire extinguisher** F: 130 *with picture*
Fire department (Fire prevention and fire safety) F: 124-125
- Fire Fighters, International Association of**
Labor movement (table) L: 8
- Fire fighting** See Firefighting *in this index*
- Fire Island National Seashore** [New York]
National Park System (table: National seashores) N: 57
New York (Places to visit) N: 302
- Fire laws**
Fire prevention (Fire prevention laws) F: 132
- Fire marshal** [title]
Marshal M: 228
- Fire Next Time, The** [book by Baldwin]
Baldwin, James B: 39
- Fire opal** [gem]
Opal O: 789
- Fire-over**
Glass (Glass terms) G: 222
- Fire poppy**
Flower (Flowers of summer-dry regions) F: 288 *with picture*
- Fire prevention** F: 130 *with pictures*
Building construction (Classification of buildings) B: 683
Fire department (Fire prevention and fire safety) F: 124; (Fire protection in North America) F: 128
Fireproofing F: 134
Forestry (Fire and forests) F: 407
Safety (Safety from fire) S: 11
- Fire Prevention and Control Administration, National** [U.S.]
Fire department (Recent developments) F: 128
- Fire-refining furnace**
Copper (Smelting) Ci: 1043
- Fire retardant**
Fireproofing F: 134
- Fire safety** See Fire prevention *in this index*
- Fire safety code**
Fire department (Fire prevention and fire safety) F: 124
- Fire ship**
Spanish Armada (The battle) So: 756
- Fire-stick elder** [African leader]
Maasai M: 2
- Fire stop** [building construction]
House *diagram on* H: 383
- Fire test**
Building construction (Classification of buildings) B: 683
Fire prevention *picture on* F: 132
- Fire truck**
Fire department (Firefighting) F: 123; (Fire trucks) F: 125 *with pictures*
- Fire-tube boiler**
Boiler B: 439
- Fire wheel** [flower]
Gaillardia G: 6 *with picture*
- Fire worship** [religion] F: 132
- Firearm** [weapon] F: 132 *with pictures*
Browning, John Moses B: 646
Flintlock F: 236 *with picture*
Infantry (Formations) I: 265
Whitney, Eli (Arms manufacturer) W: 295
War (Technological advancements) W: 26
- Fireball** [astronomy] F: 133
Meteor M: 431
- Fireball** [nuclear energy]
Fallout (How fallout is produced) F: 18
Nuclear weapon (Blast wave) N: 597
- Firebird** [bird] See Baltimore oriole; Scarlet tanager *in this index*
- Firebird, The** [ballet]
Classical music (Igor Stravinsky) Ci: 649; *picture on* Ci: 651
Stravinsky, Igor (Early works) So: 922
Tallchief, Maria T: 20 *with picture*
- "Firebombing, The"** [poem by Dickey]
Dickey, James D: 189
- Firebox**
Locomotive (Steam locomotives) L: 417
- Firebrick**
Refractory R: 200
- Firebugs, The** [play by Frisch]
Frisch, Max F: 535
- Firecracker**
Fireworks F: 135
- Firecracker flower** [plant] F: 134 *with picture*
- Firedamp** [gas]
Damp D: 23
Safety lamp S: 16
- Firefighter** [occupation]
Fire department F: 123; (Careers) F: 129
Forestry (Fire and forests) F: 407 *with picture*
Radio (In public safety) R: 84
- Firefly** [insect] F: 134 *with picture*
Beetle (Fireflies) B: 217
Insect (Courtship) I: 294 *with picture; picture on* I: 283
- Firefly, The** [operetta by Friml]
Friml, Rudolf F: 534
- Fireline**
Forestry (Fire and forests) F: 407

Fireman, Locomotive

Railroad (Railroad systems) R: 112-113

Firenze See Florence *in this index*

Fireplace

Heating (Fireplaces) H: 160

Colonial life in America (Furnishings) Ci: 797

Pioneer life in America (A pioneer settlement)
P: 479-480

Fireproofing F: 134

Fire (Fireproof materials) F: 121

Fireside chat (U.S. history)

President of the United States *picture on*
P: 765

Radio (The Golden Age of Broadcasting) R: 92-93 *with picture*

Roosevelt, Franklin Delano (The "Hundred Days") R: 457 *with picture*

Fireside Poets

American literature (Poetry) A: 418

Firestone, Harvey Samuel (American businessman) F: 135**Firestone Tire & Rubber Company**

Firestone, Harvey Samuel F: 135

Firewall [computing]

Computer (Intranets) Ci: 923

Internet (Glossary of Internet terms) I: 350a;
(Security) I: 350e

Fireweed [plant] F: 135

Flower (Flowers of the Arctic tundra) F: 283
with picture

Firewood

Camping (Building a campfire) C: 94-96

Cord Ci: 1050

Fireworks F: 135

Signaling (Visual and sound signals) S: 454

Firing [industrial process]

Brick (Firing bricks) B: 598 *with picture*

Ceramics (Making ceramics) C: 360

Glass (Fired decorations) G: 217

Pottery (Firing) P: 718

Firing chamber

Rifle (How a rifle works) R: 338

Firing mechanism

Firearm (Mechanism) F: 132-133 *with picture*

Firing pin

Firearm (Mechanism) F: 132-133 *with diagrams*

Ammunition (The primer) A: 435

Handgun (Single-action revolvers) H: 43; *picture on* H: 44

Rifle (How a rifle works) R: 338

Firing post [defense]

Pioneer life in America (Defending a settlement) P: 485

Firing squad [execution]

Capital punishment (table) C: 193

Firm, The [book by Grisham]

Grisham, John G: 396

Firmin, Geoffrey [literary figure]

Lowry, Malcolm L: 511

Firn [geology]

Glacier (How glaciers form) G: 203

First African Baptist Church

Georgia (Places to visit) G: 122

First aid F: 136 *with pictures*

Bandage B: 75

Barbiturate (Dangers of barbiturates) B: 107

Bleeding (First aid for bleeding) B: 399

Blisters B: 403

Bruise B: 650

Burn (First-aid care) B: 708

Cardiopulmonary resuscitation C: 212 *with pictures*

Drowning (Giving first aid) D: 349

Emetic E: 259

Fainting F: 6 *with picture*

Frostbite F: 543

Hyperthermia H: 476

Nosebleed N: 549 *with pictures*

Poison ivy (Control and treatment) P: 602

Rabies (Treatment) R: 49

Red Cross (Health and safety training) R: 185

Shock S: 429

Snakebite (First aid) S: 536

Sunburn So: 989

Tourniquet T: 348

See also the list of Related articles in the First aid article

First Amendment [U.S. Constitution]

Constitution of the United States Ci: 1011

Civil rights (The First Amendment) Ci: 608

Commonstock Law Ci: 926

Democracy D: 121

Freedom of assembly (In the United States)
F: 504

Freedom of religion (In the United States)
F: 505

Freedom of speech (In the United States)
F: 506

Libel L: 226

Obscenity and pornography (In the United States) O: 643-644

Religious education (Public schools) R: 225

School prayer S: 186

United States (Religion) U: 114

First American Bankshares, Inc.

Clifford, Clark McAdams Ci: 674

First Balkan War See Balkan Wars *in this index***First Bank of the United States** See Bank of the United States *in this index***First Baptist Meeting House**

Providence (Description) P: 839 *with picture*

First baseman

Baseball (Player positions) B: 127

First baseman's glove

Baseball (Equipment) B: 125 *with picture*

First Boer War [1880-1881]

Boer War B: 435

First Book of Architecture, The [book by Serlio]

Drama *picture on* D: 331

First cause [philosophy]

Philosophy (Ancient philosophy) P: 386-387

First Circle, The [book by Solzhenitsyn]

Russian literature (Modern Soviet literature)
R: 564

Solzhenitsyn, Alexander So: 587

First-class lever

Lever (Classes of levers) L: 217; *picture on*
L: 218

First-Class Mail

Postal services (Technological advancements)
P: 707

Postal Service, United States (Classes of mail)
P: 699

First Class Scout

Boy Scouts (Boy Scouting) B: 537-539

First Continental Congress See Continental Congress *in this index***First cousin**

Family (Family relationships) F: 21

First cousin once removed

Family (Family relationships) F: 21

First Day at Gettysburg, The [painting by Walker]

United States, History of the *picture on* U: 172

First day cover [mail]

Stamp collecting (Cancellations) So: 830

First-degree burn

Burn (Classification of burns) B: 708

First aid (Burns) F: 139

Skin (Burns) S: 490

First edition

Book collecting (Author collections) B: 469

First estate [French history]

Estates-General E: 360

First folio

Shakespeare, William (Folios) S: 368 *with picture; picture on* S: 345

First gear

Transmission (How a manual transmission works) T: 378 *with diagram*

"First in war, first in peace, and first in the hearts of his countrymen" [quotation]

Washington, George W: 90

First Indochina War

Indochina (The Geneva Accords) I: 225

First International, The [organization]

Socialism (The First International) So: 560

First ladies [U.S. history] F: 142 *with pictures*

White House hostesses W: 291

First Ladies National Historic Site [Ohio]

National Park System (table: National historic sites) N: 52

First Love [book by Turgenev]

Russian literature (Early realism) R: 562

First National Bank Building [Mobile]

Mobile *picture on* M: 682

First National Center [Omaha]

Omaha (The city) O: 756

First Navigation Act [1651]

Navigation Acts N: 75

First overtone

Harmonics H: 62 *with diagram*

First Parish Church [Portland]

Maine (Places to visit) M: 78

First person [literature]

Literature (Style) L: 353

First Punic War [264-241 B.C.] See Punic Wars *in this index*

First quarter

Moon (Phases) M: 783-784

First Quorum of the Seventy

Mormons (Church organization) M: 807

First Riel Rebellion See Red River Rebellion *in this index***First-run syndication**

Television (Commercial stations) T: 114-115

First Seminole War See Seminole Wars *in this index***First sergeant** [rank]

Rank, Military (table) R: 140

First State

Delaware D: 96

First Temple See Temple in Jerusalem *in this index***First Triumvirate** See Triumvirate *in this index***First United States Volunteer Cavalry** See Rough Riders *in this index***First Vatican Council** See Vatican Council I *in this index***First violin** [music]

Orchestra (The musicians) O: 820

First Virginia Convention [1774]

Jefferson, Thomas (Revolutionary leader)
J: 78-79

Virginia (The course toward independence)
V: 420

First World

Third World T: 258

First Zionist Congress [1897]

Zionism (Movement to Palestine) Z: 599

Firth [geography]

Fiord F: 119

Scotland (Rivers and lakes) S: 217 *with map*

Firth of Clyde [Scotland]

Clyde, River Ci: 715

Scotland (Rivers and lakes) S: 217 *with map*

Firth of Forth [Scotland] F: 143

Scotland (Rivers and lakes) S: 217

FIS [organization]

Skiing (Skiing as a sport) S: 486

FIS [political party] See Front Islamique du Salut *in this index***Fiscal policy**

Depression (Causes and prevention) D: 150-151

Inflation (Weapons against inflation) I: 268

Keynes, John Maynard K: 308

Money (Money and the economy) M: 714

Recession (Fighting recession) R: 175

Fischer, Bobby [American chess player] F: 143

Chess (World chess champions) C: 414;
(United States chess champions) C: 414;
(History) C: 415

Fischer, Edmond Henri [American physiologist]

Nobel Prizes (Physiology or medicine: 1992)
N: 445

Fischer, Emil [German chemist]

Nobel Prizes (Chemistry: 1902) N: 442

Fischer, Ernst Otto [German chemist]

Nobel Prizes (Chemistry: 1973) N: 443

Fischer, Hans [German biochemist]

Nobel Prizes (Chemistry: 1930) N: 442

Fischer, Helmut H. [German pilot]

Glider (table) G: 230

Fischer-Dieskau, Dietrich [German singer]

F: 143

Fischer quintuplets

Quintuplets Q: 43

Fischer von Erlach, Johann Bernhard [Austrian architect]

Architecture (Baroque architecture) A: 622

Austria (The arts) A: 932-933

Vienna (The city) V: 362

Fischinger, Oskar [German filmmaker]

Animation (Animation in Europe) A: 514

Fischl, Eric [American artist]

Painting (Post-modernism) P: 88

Fisgard Lighthouse [British Columbia]

Canada (table: National historic sites) C: 114

Fish F: 144 *with pictures*

Animal (table: Length of life of animals)
A: 473; (A table of animal intelligence)
A: 493

Aquaculture A: 578

Aquarium, Home A: 578

Aquarium, Public A: 578b

Balance of nature (Upsetting the balance)
B: 35

Brain (In vertebrates) B: 559 *with diagram*

Cell *picture on* C: 330

Coral reef (Life on coral reefs) **Ci**: 1048b
 Deep sea (Fish) **D**: 82b *with pictures*
 Ear (The ears of animals) **E**: 12-13
 Egg (Other kinds of eggs) **E**: 116
 Food (Interesting facts about food) **F**: 329
 Food supply (Livestock and fish) **F**: 347
 Heart (Fish) **H**: 146 *with diagram*
 Ichthyology **I**: 24
 Nutrition (Kinds of nutrients) **N**: 625
 Ocean (The importance of the ocean) **O**: 654;
 (Life in the ocean) **O**: 655 *with pictures*
 Pet (Pets for the home) **P**: 319-320 *with picture*
Pfiesteria **P**: 353
 Prehistoric animal (The first animals with backbones) **P**: 737; (Fish) **P**: 738 *with picture*
 Seafood **S**: 264
 Sound (Animal sounds) **So**: 598
 Tropical fish **T**: 450
See also the list of Related articles in the Fish article
Fish, Hamilton [American political leader] **F**: 175
 New York (table) **N**: 313
Fish and chips [food]
 England (Food and drink) **E**: 295-296
 Shark (How people use sharks) **S**: 377
Fish and Wildlife Service [U.S.] **F**: 175
 Bird (Bird study and protection) **B**: 367;
 (Birdbanding) **B**: 368
Fish community
 Fish (Fish in the balance of nature) **F**: 147
Fish farm
 Fish (Food and game fish) **F**: 146
 Fishing industry (Fish farms) **F**: 182 *with picture*
Fish glue
 Glue **G**: 236
Fish hawk [bird]
 Osprey **O**: 866 *with picture*
Fish ladder [conservation]
 Bonneville Dam **B**: 462
 Salmon (The life of a salmon) **S**: 69-70
 Washington (Recent developments) **W**: 68-69
Fish market
 Asia *picture on* **A**: 789
Fish meal
 Fishing industry (Methods of processing)
F: 186-187
Fish net
 Net **N**: 137 *with picture*
Fish oil
 Fishing industry (Methods of processing)
F: 186-187
 Sharks (How people use sharks) **S**: 377
Fish trap
 Fishing industry (Traps) **F**: 185 *with diagram*
Fishback, William Meade [American political leader]
 Arkansas (table) **A**: 712
Fisher [animal]
 Fur (table) **F**: 561
 Marten **M**: 233
Fisher, Andrew [Australian statesman]
 Australia (table) **A**: 925
Fisher, Anna L. [American astronaut]
 Astronaut (A look at the astronauts) **A**: 831
Fisher, Carl Graham [American businessman]
 Dixie Highway **D**: 255
 Lincoln Highway **L**: 327
Fisher, Charles [Canadian political leader]
 Confederation of Canada (Fathers of Confederation) **Ci**: 935
Fisher, John Stuchell [American political leader]
 Pennsylvania (table) **P**: 263
Fisher, Leonard Everett [American author]
 Regina Medal (table: 1991) **R**: 206
Fisher, Ronald A. [English statistician]
 Evolution (The synthetic theory) **E**: 432
 Statistics (History) **So**: 869-870
Fisher, Saint John [English religious leader]
F: 175
Fisher, Vardis [American author] **F**: 175
Fisher, Walter L. [American government official]
 Interior, Department of the (table) **I**: 325
 Taft, William Howard (table) **T**: 11
Fisher spider
 Spider (Fisher spiders) **So**: 787 *with picture*;
 (table) **So**: 790
Fisheries and oceans, Minister of [office]
 Canada, Government of (The Cabinet) **C**: 132;
diagram on **C**: 137
Fisherman *See* Fishing; Fishing industry *in this index*
Fisherman's ring [ornament]

Pope (Titles, clothing, and symbols) **P**: 661
Fisherman's Wharf
 San Francisco (Downtown San Francisco)
S: 92-93 *with map*
Fishermen's Memorial [statue]
 Gloucester **G**: 234
Fishery [conservation]
 Fish *pictures on* **F**: 146
 Fishing industry (Where fish are caught)
F: 181 *with pictures*
Fishery conservation zone
 Fishing industry **F**: 181; (Government regulation) **F**: 187
Fishes, Age of *See* Devonian Period *in this index*
Fishhook
 Fishing (Hooks) **F**: 177; *pictures on* **F**: 178
 Fishing industry (Hooks) **F**: 185
 Indian, American *picture on* **I**: 139
 Money *picture on* **M**: 705
Fishing **F**: 175 *with pictures*
 Fish (Food and game fish) **F**: 146
 Indian, American (Hunting, gathering, and fishing) **I**: 141
 Inuit (Hunting and fishing) **I**: 354d *with picture*
 Maine *picture on* **M**: 72
 Nunavut *picture on* **N**: 611
 Salmon (Salmon fishing) **S**: 70
Fishing admiral
 Newfoundland and Labrador (Colonization)
N: 375
Fishing banks
 Grand Banks **G**: 305
Fishing industry **F**: 180 *with pictures and maps*
Text
 Alabama (Fishing industry) **A**: 273
 Canada (Fishing industry) **C**: 124 *with picture*
 Careers (Farming, fishing, and forestry)
C: 222
 Cod (Cod fishing and marketing) **Ci**: 748
 Conservation (Ocean conservation) **Ci**: 978
 Colonial life in America (Fishing and whaling) **Ci**: 810
 Coral reef (Coral reefs and people) **Ci**: 1049
 Dolphin (Dolphins and people) **D**: 299
 England (Agriculture and fishing) **E**: 302 *with picture*
 Fish (Food and game fish) **F**: 146 *with pictures*
 Herring **H**: 215 *with picture*
 Iceland (Fishing industry) **I**: 23 *with picture*;
 (Independence) **I**: 23-24
 Japan (Fishing industry) **J**: 50
 Norway (Fishing) **N**: 543
 Nova Scotia (Fishing) **N**: 566
 Ocean (The importance of the ocean)
O: 654; (Fisheries) **O**: 665
 Peru (Fishing) **P**: 313 *with picture*
 Portugal (Way of life) **P**: 687 *with picture*
 Russia (Fishing industry) **R**: 546
 Seafood **S**: 265
 Ship (Specialized types of vessels) **S**: 422
 Thailand (Economy) **T**: 225-226 *with picture*
Pictures
 Coast Guard, United States *picture on*
Ci: 736
 Japan *picture on* **J**: 52
 Net *picture on* **N**: 137
 Oyster *picture on* **O**: 892
 United Kingdom *picture on* **U**: 65
See also the list of Related articles in the Fishing industry article
Fishing laws
 Fishing (Fishing tips) **F**: 179
 Fishing industry (Fishery conservation) **F**: 187
Fishplate
 Railroad (Tracks) **R**: 108-109
Fishworm *See* Earthworm *in this index*
Fisk, Carlton [American baseball player]
 Baseball (table: Baseball Hall of Fame) **B**: 134
Fisk, James [American financier] **F**: 188
 Black Friday **B**: 387
 Gould, Jay **G**: 280
Fiske, John [American philosopher] **F**: 189
Fiske, Minnie Maddern [American actress]
F: 189
Fiske, Robert B. [American attorney]
 Clinton, Bill (National affairs) **Ci**: 682d-682e
Fission [biology]
 Ameba **A**: 406
 Reproduction (Through asexual reproduction)
R: 242-243 *with picture*
Fission [physics] **F**: 189

Atom (Studying the nucleus) **A**: 876
 Bomb (Atomic bombs) **B**: 451
 Electric power (Nuclear power plants) **E**: 184
 Energy supply (Nuclear energy) **E**: 278
 Fermi, Enrico **F**: 74
 Hahn, Otto **H**: 7
 Isotope (Artificial radioisotopes) **I**: 477
 Neutron **N**: 155
 Nuclear energy (Nuclear fission) **N**: 582 *with diagram*; (Artificial fission) **N**: 590
 Nuclear physics **N**: 595
 Nuclear weapon (Fission weapons) **N**: 596
 Physics (Nuclear physics) **P**: 437; (Uncovering the secrets of the atom) **P**: 442
 Radiation (In industry) **R**: 75; (Artificial radioactive substances) **R**: 77 *with picture*
 Transmutation of elements **T**: 379
 Uranium (Fissionability) **U**: 215
Fission fragment [physics]
 Nuclear energy (Nuclear fission) **N**: 582 *with diagram*
Fission weapon *See* Nuclear weapon *in this index*
Fist puppet
 Puppet (Hand puppets) **P**: 904
Fitch [fur]
 Fur (table) **F**: 561
 Polecat **P**: 619
Fitch, Clyde [American dramatist] **F**: 189
Fitch, John [American inventor] **F**: 189 *with picture*
 Propeller **P**: 826
 Ship (The first steamboats) **S**: 411
Fitch, Val Logsdon [American physicist]
 Nobel Prizes (Physics: 1980) **N**: 441
Fitness [biology]
 Evolution (Main ideas of evolutionary theory)
E: 426-427; (Natural selection) **E**: 428
Fitter's model
 Modeling (Kinds of models) **M**: 684-685
Fittipaldi, Emerson [Brazilian race driver]
 Automobile racing (table: Grand Prix world champions) **A**: 980; (table: Indianapolis 500 winners) **A**: 980
Fitzgerald, Barry [Irish actor]
 Motion picture (Best performance by an actor in a supporting role: 1944) **M**: 863
FitzGerald, Edward [British author] **F**: 190
Rubaiyat **R**: 499
Fitzgerald, Ella [American singer] **F**: 190 *with portrait*
 Jazz (The swing era) **J**: 71
Fitzgerald, F. Scott [American author] **F**: 190
with portrait
 American literature (The Lost Generation)
A: 421
 Lost Generation **L**: 472
 Novel (New directions in the novel) **N**: 573-574
Fitzgerald, Frank D. [American political leader]
 Michigan (table) **M**: 507
FitzGerald, Garret [Irish government official]
 Ireland (table) **I**: 428
 United Kingdom (Thatcher) **U**: 73
Fitzgerald, George [Irish physicist]
 Relativity (Lorentz-Fitzgerald contraction)
R: 211
Fitzgerald, John F. [American political leader]
 Boston (Rise of Irish politicians) **B**: 504
 Kennedy, John Fitzgerald (Family background)
K: 260
FitzGerald, L. L. [Canadian painter]
 Group of Seven **G**: 403
Fitzgerald, Rose [mother of] *See* Kennedy, Rose Fitzgerald *in this index*
Fitzgerald, Zelda [wife of]
 Fitzgerald, F. Scott **F**: 190
Fitzgerald contraction [physics] *See* Lorentz-Fitzgerald contraction *in this index*
Fitzgerald v. Nixon [U.S. history]
 Supreme Court of the United States (table)
So: 1002
Fitzooth, Robert
 Robin Hood **R**: 367
Fitzpatrick, Benjamin [American political leader]
 Alabama (table) **A**: 274
Fitzpatrick, Thomas [American frontiersman]
F: 190
 Westward movement in America (Exploration)
W: 248-249
Fitzsimmons, Bob [British boxer] **F**: 191
 Boxing **B**: 533 *with picture*
 Solar plexus **So**: 579
Fitzsimmons, Frank Edward [American labor

- leader] F: 191
- FitzSimons, Thomas** [American political leader] F: 191
- Fitzwilliam Virginal Book** [music]
Byrd, William B: 747
Virginal V: 397
- FIV** [virus] See Feline immunodeficiency virus in this index
- Five, The** [music]
Rimsky-Korsakov, Nikolai R: 342
- Five Books of Moses** See Pentateuch; Torah in this index
- Five Civilized Tribes** [U.S. history] F: 191
Choctaw Indians C: 519
Indian, American (After European contact) I: 158
Indian Territory I: 189 with map
Oklahoma (The Indian nations) O: 731,
(Progress toward statehood) O: 732
Seminole Indians S: 293
- Five Classics** [religious book]
Confucianism (Early Confucianism) Ci: 936-937
- Five-finger** [plant]
Cinquefoil Ci: 557
- Five Finger Exercise** [play by Shaffer]
Shaffer, Peter S: 342
- 500 Index, Standard & Poor's** [stock market]
Standard & Poor's indexes So: 833
- Five-leaved ivy** [plant]
Virginia creeper V: 424 with picture
- Five Letters** [book by Cortés]
Latin-American literature (Colonial literature) L: 111
- Five Nations** [U.S. history] See Iroquois League in this index
- Five Pillars of Islam**
Islam (Teachings and practices) I: 463
- 5-point must system**
Boxing (Scoring a fight) B: 528-529
- "Five Points"** [essay by Le Corbusier]
Le Corbusier L: 175
- Five-Power Naval Limitation Treaty**
Washington Conference W: 109
- Five-spot**
Flower picture on F: 288
- Five-step delivery**
Bowling (Delivering the ball) B: 522
- Five Weeks in a Balloon** [book by Verne]
Verne, Jules V: 338
- Five-year plan** [economics] F: 191
China (The beginning of Communist rule) C: 505
Communism (Under Stalin) Ci: 892
India (India in the 1950's and early 1960's) I: 133
Russian literature (The period of industrial literature) R: 564
Stalin, Joseph (The five-year plan) So: 826
Union of Soviet Socialist Republics (History) U: 35-36
- Fifefold symmetry** [mathematics]
Quasicrystal Q: 9
- Fivepins** [sport]
Bowling (Canadian fivepins) B: 524
- Fix**
Navigation (Dead reckoning) N: 70
- Fixation**
Reading (How we read) R: 156-157
Speed reading So: 774
- Fixative**
Painting (Pastel) P: 39
Perfume (Animal substances) P: 286
- Fixed ammunition**
Ammunition (Artillery ammunition) A: 435-436
- Fixed Base Operator**
Airport (Small aircraft services) A: 246
- Fixed Calendar, The**
Calendar (Calendar reform) C: 32
- Fixed capital** [economics]
National income (Changes in national income) N: 38
- Fixed-focus camera**
Camera (Fixed-focus cameras) C: 82
Photography (Cameras) P: 417
- Fixed income** [economics]
Inflation (Effects on income) I: 268
- Fixed joint** [anatomy]
Human body (The skeletal system) H: 418
Joint J: 155 with diagram
- Fixed landing gear**
Airplane (The landing gear) A: 216-217
- Fixed nitrogen**
Nitrogen cycle N: 426
- Fixed oil**
Oil (Fixed oils) O: 707
- Fixed-pitch propeller**
Airplane (Propellers) A: 217
Propeller (The airplane propeller) P: 826
- Fixed platform**
Petroleum (Offshore drilling) P: 340-341
- Fixed sentence** [law]
Sentence S: 304
Parole P: 178
- Fixed signal**
Lighthouse (Identifying lighthouses) L: 294
- Fixer** [chemical]
Photography (Developing black-and-white film) P: 420-421 with picture
- Fixer, The** [book by Malamud]
Malamud, Bernard M: 95
- Fixture** [law] F: 191
- Fizeau, Armand H. L.** [French physicist]
Optics (History) O: 813
- Fjord** See Fiord in this index
- Flaccid paralysis** [disease]
Paralysis (Paralysis of central nervous system origin) P: 152
- Flaccus, Quintus Horatius** See Horace in this index
- Flaccus, Valerius** [Roman political leader]
Cato, Marcus Porcius, the Elder C: 304
Latin literature (The Imperial Period) L: 116
- Flag F: 192 with pictures**
Heraldry (Beginnings) H: 194
Navy Jack N: 91
Pirate (How pirates lived) P: 494 with pictures
Semaphore S: 290
Union Jack U: 27
- Flag** [music]
Music (Indicating time values) M: 953
- Flag, Canadian**
Canada, History of (The return of the Liberals) C: 152 with picture
Flag (Displaying the flag) F: 218;
(Manufacturing flags) F: 222-223
- Flag, United States**
Flag (Flags of the United States) F: 208 with pictures; (Honoring a national flag) F: 218 with pictures; (Manufacturing flags) F: 222 with pictures
Astronaut picture on A: 828
Freedom of speech (In the United States) F: 506-507
Hopkinson, Francis H: 334
Jones, John Paul (Navy commission) J: 158
Key, Francis Scott K: 307
Pledge of Allegiance P: 572
Ross, Betsy R: 483
"Star-Spangled Banner" picture on So: 854
- Flag burning**
Flag (Interesting facts about flags) F: 193
Supreme Court of the United States (table) So: 1002
- Flag code**
Flag (Honoring a national flag) F: 218;
(Permitted and prohibited uses) F: 222
- Flag Code, International**
Flag (Flags that talk) F: 208, picture on F: 196
- Flag Day** [custom] F: 224
Sweden (Holidays) So: 1026
- Flag football** [sport]
Football F: 354
- Flag hoist**
Signaling (Visual and sound signals) S: 454
- Flag of convenience**
Ship (Merchant fleets of the world) S: 425;
(Merchant fleets of other countries) S: 426
- Flag of truce** F: 224
Truce T: 456
- Flag officer** [rank] F: 224
- Flagellate** [zoology]
Protozoan (Flagellates) P: 837 with picture
Algae (Other kinds of algae) A: 349
- Flagellum** [biology]
Bacteria (How bacteria move) B: 21 with picture
Reproduction, Human (The human reproductive system) R: 244-246
Sponge (Special cells) So: 799
- Flageolet** [musical instrument] F: 224 with picture
- Flagg, James Montgomery** [American artist]
Uncle Sam picture on U: 20
- Flagler, Henry Morrison** [American businessman] F: 224
Florida (Progress as a state) F: 262
- Miami (History) M: 480
- Flagrant foul**
Basketball (Fouls) B: 147-148
- Flagstad, Kirsten** [Norwegian singer] F: 224
- Flagstaff** [Arizona] F: 224 with picture
Radar picture on R: 69
- Flagstaff** [hydrofoil]
Hydrofoil (Modern hydrofoil development) H: 468-469
- Flaherty, Pat** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Flaherty, Robert Joseph** [American director] F: 225
- Flahiff, George Bernard Cardinal** [Canadian religious leader] F: 225
- Flail** [tool] F: 225
Wheat (The mechanization of wheat farming) W: 276
- Flail** [weapon]
Flail F: 225
- Flaking grits**
Corn (The dry-milling industry) Ci: 1061-1062
- Flamboyant tracery** [architecture]
Tracery T: 353
- Flame** See Fire in this index
- Flame of Life, The** [book by D'Annunzio]
D'Annunzio, Gabriele D: 34
- Flame scallop** [animal]
Mollusk picture on M: 685
- Flame test** [chemistry] F: 225
Mineral (Other identification tests) M: 567
- Flame thrower** [weapon] F: 225 with picture
- Flamefish**
Fish picture on F: 155
- Flamenco** [dance] F: 226 with picture
Spain (Music) So: 739 with picture
- Flames, Calgary**
Hockey (table: National Hockey League) H: 281
- Flaming Gorge Dam** [Green River, Utah]
Utah picture on U: 247
Wyoming (Rivers and lakes) W: 528-529
- Flaming Gorge National Recreation Area** [Utah]
Utah picture on U: 240
- Flaming Pie** [recording]
McCartney, Paul M: 332
- Flaming Youth** [U.S. history]
United States, History of the (The Flaming Youth) U: 185
- Flamingo** F: 226 with pictures
Bird picture on B: 351
Zoo (Interesting facts about zoo animals) Z: 605 with picture
- Flamingo lily** [plant]
Anthurium A: 550
- Flammable Fabrics Act** [1953]
Clothing (Protecting the public) Ci: 705
- "Flammonde"** [poem by Robinson]
Robinson, Edwin Arlington R: 368
- Flanagan, Edward Joseph** [American social reformer] F: 227 with portrait
Girls and Boys Town G: 201
- Flanagin, Harris** [American political leader]
Arkansas (table) A: 712
- Flanders** [region, Europe] F: 227 with maps
Belgium (Regions and language communities) B: 227
City picture on Ci: 583
Classical music (Franco-Flemish music) Ci: 646
Flemings F: 233
Painting (The northern Renaissance) P: 57 with pictures
Renaissance (The Renaissance outside Italy) R: 236-237
Walloons W: 18
- Flanders, Benjamin** [American political leader]
Louisiana (table) L: 496
- Flanders Field** [Belgium] F: 227
- Flanker**
Football (The offensive team) F: 356-357 with diagrams
- Flannel** [fabric] F: 228
- Flapper** [plumbing]
Plumbing (How toilets work) P: 579 with diagrams
- Flapper** [U.S. history]
Held, John, Jr. H: 168 with picture
United States, History of the (The Flaming Youth) U: 185, picture on U: 186
- Flaps** [airplane]
Aerodynamics (Creating extra lift) A: 86

- Airplane (The wing) **A**: 213-214 *with picture*
 Glider (The wings) **G**: 228
Flare [signal]
 Fireworks (Other uses of fireworks) **F**: 135
Flare, Solar See Solar flare *in this index*
Flash camera
 Camera (Point-and-shoot cameras) **C**: 82 *with pictures*
Flash distillation
 Distillation (Simple distillation) **D**: 238-239
 Water (Distillation) **W**: 127; *diagram on W*: 128
Flash fill-in
 Photography (Direction) **P**: 413-414 *with picture*
Flash flood
 Flood (River floods) **F**: 236
Flash lamp
 Laser (Parts of a laser) **L**: 83
Flash synchronizer
 Photography (Artificial lighting devices) **P**: 419
Flashback [drugs]
 Hallucinogenic drug **H**: 26
 LSD **L**: 512
Flashback [psychology]
 Post-traumatic stress disorder **P**: 709
Flashing [building material]
 House (The roof) **H**: 382 *with diagram*
Flashing signal
 Lighthouse (Identifying lighthouses) **L**: 294
Flashlight **F**: 228 *with diagram*
Flashover
 Fire (How fires behave) **F**: 121
Flask [manufacturing]
 Cast and casting (How castings are made) **C**: 278 *with diagram*
Flat [gardening]
 Transplanting **T**: 381 *with picture*
Flat [music]
 Music (Tone) **M**: 950; (Indicating pitch) **M**: 953
Flat [printing]
 Photoengraving and photolithography (Transferring the image) **P**: 406
Flat [scenery]
 Theater (Kinds of scenery) **T**: 239
Flat-bed press
 Printing (Letterpress printing) **P**: 799-800
Flat-bed scanner [machine]
 Photoengraving and photolithography (Capturing the image) **P**: 405
Flat bread
 Bread (Kinds of bread) **B**: 588 *with pictures*
Flat-coated retriever [dog] **F**: 228 *with picture*
Flat color printing
 Printing (Flat color printing) **P**: 802
Flat-file database [software]
 Database **D**: 41
Flat glass
 Glass (Flat glass) **G**: 212; (Drawing) **G**: 215 *with picture*
Flat kite
 Kite (Types of kites) **K**: 339 *with picture*
Flat paint
 Paint (Selecting the paint) **P**: 25
Flat panel screen [electronics]
 Computer (Monitors) **Ci**: 916
 Television (Digital television) **T**: 126-128 *with picture*
Flat-plate collector [instrument]
 Energy supply (Solar energy) **E**: 278
 Solar energy (Solar heating) **So**: 579 *with picture*
Flat stitch
 Embroidery (Embroidery stitches) **E**: 257 *with picture*
Flat tax **F**: 228
 Income tax (Defining taxable income) **I**: 102-103
Flat Tax, The [book by Hall and Rabushka]
 Flat tax **F**: 228
Flat water racing
 Canoeing (Flat water racing) **C**: 181 *with picture*
Flat yard [railroad]
 Railroad (Freight operations) **R**: 109-110
Flatbed editing machine
 Motion picture *picture on M*: 855
Flatbed scanner [electronic device]
 Computer (A scanner) **Ci**: 915
Flatbed truck
 Truck (On-highway trucks) **T**: 457; *picture on T*: 459
Flatboat [boat] **F**: 228 *with picture*
 Pioneer life in America (How the pioneers traveled) **P**: 478-479
 Raft **R**: 102
Flatbottom [motorboat]
 Motorboat racing (Hull designs) **M**: 876 *with picture*
Flatbush [district]
 New York City (Brooklyn) **N**: 326-328
Flatfish **F**: 228
Flatfoot [disorder] **F**: 229
Flathead Indians [American Indians]
 De Smet, Pierre Jean **D**: 159
 Salish Indians (The Interior Salish) **S**: 67
Flathead Lake
 Montana (Places to visit) **M**: 750; (Rivers and lakes) **M**: 752
Flathead Mountains
 Montana (Land regions) **M**: 752
Flatiron Building
 New York City (Architecture) **N**: 336
Flats [region, Alaska]
 Yukon River (Upper Yukon) **Y**: 582
Flatt, Lester [American musician]
 Country music (Bluegrass music) **Ci**: 1098a *with picture*
Flatt and Scruggs [American musicians]
 Country music (Bluegrass music) **Ci**: 1098a *with picture*
Flattop [ship] See Aircraft carrier *in this index*
Flatworm [animal] **F**: 229 *with diagram*
 Animal (A classification of the animal kingdom) **A**: 506 *with picture*; *picture on A*: 486
 Disease (Other infectious diseases) **D**: 227-228
 Eye *picture on E*: 468
 Invertebrate **I**: 366
 Parasite (Parasites that feed on people and animals) **P**: 154
 Worm (Flatworms) **W**: 500 *with pictures*
Flaubert, Gustave [French author] **F**: 230 *with portrait*
 De Maupassant, Guy **D**: 119
 French literature (Realism) **F**: 521
 Novel (France) **N**: 573
Flaugergues, Comet [astronomy]
 Comet (table) **Ci**: 868
Flavedo [botany]
 Orange (The fruit and the tree) **O**: 814
Flavian Amphitheater See Colosseum *in this index*
Flavian emperors
 Rome, Ancient (The height of the empire) **R**: 446-447
Flavonoid [chemical] **F**: 230
 Citrin **Ci**: 573
Flavor
 Taste **T**: 50
 Spice **So**: 781
Flavoring agent
 Food additive (Kinds of additives) **F**: 339
Flawless diamond
 Diamond (How diamonds can be judged) **D**: 182
Flax [plant] **F**: 230 *with pictures*
 Clothing (Clothing materials) **Ci**: 704
 Fiber (Plant fibers) **F**: 87
 Linen **L**: 334
 Linseed oil **L**: 339
 Materials (Biological materials) **M**: 300d
Flaxman, John [British sculptor]
 Sculpture (European sculpture) **S**: 253-254
Flaxseed
 Flax **F**: 230; (Growing and processing seed flax) **F**: 231
Flea [insect] **F**: 232 *with picture*
 Cat (Veterinary care) **C**: 295
 Disease (Spread of infectious diseases) **D**: 228
 Dog (Grooming) **D**: 278
 Insect *picture on I*: 282
Flea beetle
 Potato (Diseases and insect pests) **P**: 713
Flea circus
 Flea **F**: 232
Fleabane [plant] **F**: 232 *with picture*
 Flower *picture on F*: 286
Fleance [literary figure]
 Shakespeare, William (*Macbeth*) **S**: 363
Fledermaus, Die [operetta by Strauss]
 Operetta **O**: 809
Fleece
 Hair **H**: 9
 Karakul **K**: 245
 Wool **W**: 399 *with picture*
Fleece flower [plant]
 Knotweed **K**: 357
Fleet [ships]
 Navy (The organization of navies) **N**: 77
Fleet, Thomas [American printer]
 Mother Goose (Who was Mother Goose?) **M**: 842
Fleet admiral
 Admiral **A**: 58
Fleet Marine Forces, United States
 Marine Corps, United States (The purpose of the Marine Corps) **M**: 206; (Operating forces) **M**: 208
 Camp Lejeune **C**: 90
 Navy, United States (The Operating Forces) **N**: 85
Fleet marriage
 Fleet Prison **F**: 232
Fleet Prison [London] **F**: 232
Fleet system [Spanish history]
 Cuba (Early years) **Ci**: 1175
Fleischer, Dave [American cartoonist]
 Animation (Pioneers of American animation) **A**: 514
Fleischer, Max [American cartoonist]
 Animation (Pioneers of American animation) **A**: 514
Fleischman, Paul [American author]
 Newbery Medal (table) **N**: 359
Fleischman, Sid [author]
 Newbery Medal (table) **N**: 359
Fleischmann Planetarium [Reno]
 Nevada (Places to visit) **N**: 164
Fleming, Sir Alexander [British bacteriologist]
 F: 232 *with portrait*
 Antibiotic (History) **A**: 552
 Chain, Ernst Boris **C**: 369
 Penicillin **P**: 240
Fleming, Aretas B. [American political leader]
 West Virginia (table) **W**: 225
Fleming, Denise [American author/illustrator]
 Literature for children *picture on L*: 366
Fleming, Francis P. [American political leader]
 Florida (table) **F**: 260
Fleming, Ian Lancaster [British author] **F**: 233
Fleming, John Ambrose [British engineer]
 Vacuum tube (Development of the vacuum tube) **V**: 259
Fleming, Sir Sandford [Canadian engineer]
 F: 233
Fleming, Victor [American director]
 Motion picture (Best achievement in directing: 1939) **M**: 862
Fleming, Walter M. [American doctor]
 Shrine, The **S**: 442
Fleming, William [American political leader]
 Virginia (table) **V**: 417
Fleming valve
 Vacuum tube (Development of the vacuum tube) **V**: 259
Flemings [people] **F**: 233
 Belgium **B**: 226; (Population and ancestry) **B**: 229; (Independence) **B**: 233-234; (After World War II) **B**: 235
 Walloons **W**: 18
Flemish bond
 Brick (Bonds) **B**: 599 *with picture*
Flemish language and literature
 Belgium (Languages) **B**: 229; (The arts) **B**: 230
Flemming, Arthur Sherwood [American government official]
 Eisenhower, Dwight David (table) **E**: 152
 Health and Human Services, Department of (table) **H**: 128
Flemming, Hugh John [Canadian political leader]
 New Brunswick (table) **N**: 196
Flemming, James K. [Canadian political leader]
 New Brunswick (table) **N**: 196
Flenser [job]
 Whale (Processing whale products) **W**: 263
Flesh **F**: 233
Flesh-eating animal See Carnivore *in this index*
Flesh-eating plant See Carnivorous plant *in this index*
Fleshing [industrial process]
 Leather (Preparing the hides) **L**: 167
Fleshy-finned fish
 Fish (Bony fish) **F**: 147-148 *with pictures*
Fleshy fruit
 Fruit (Simple fruits) **F**: 548; *pictures on F*: 547
 Seed (Kinds of seeds) **S**: 281
Fletcher, Allen M. [American political leader]
 Vermont (table) **V**: 333
Fletcher, John [English dramatist] **F**: 234
 Beaumont, Francis **B**: 191
Fletcher, Louise [American actress]

- Motion picture (Best performance by an actress: 1975) M: 862
- Fletcher, Ryland** [American political leader]
Vermont (table) V: 333
- Fletcher, Thomas C.** [American political leader]
Missouri (table) M: 668
- Fletcher v. Peck** [U.S. history] F: 234
Marshall, John (Chief justice) M: 230
Supreme Court of the United States (table)
So: 1002
- Fletching**
Archery (Arrows) A: 602 *with diagram*
- Fleur-de-lis** [symbol] F: 234 *with picture*
Heraldry picture on H: 195
Iris I: 430
- Flours du mal, Les** [poems by Baudelaire] See
Flowers of Evil, The *in this index*
- Floury, André Hercule Cardinal de** [French statesman]
Louis XV L: 475
- Flexibility**
Physical fitness (Performance-related fitness)
P: 433-434; (Health-related fitness) P: 434
- Flexible divisor** [investment]
Dow Jones averages D: 316
- Flexible exchange rate** [economics]
Money (International finance) M: 716
- Flexible kite**
Kite (The flexible kite) K: 340 *with picture*
- Flexible manufacturing system**
Machine tool M: 17
- Flexible response** [warfare]
Nuclear weapon (Nuclear weapons in military planning) N: 599-600
- Flexible theater**
Theater (The stage) T: 233-235
- Flexitime** See *Flexitime in this index*
- Flexner, Abraham** [American educator] F: 234
Medicine (Professional organizations and medical reform) M: 376
- Flexographic printing**
Photoengraving and photolithography (Plates for relief printing) P: 407 *with picture*
Printing (Relief printing) P: 799; *diagram on*
P: 800
- Flexography** See *Flexographic printing in this index*
- Flexor**
Hand diagrams on H: 40
Muscle (Skeletal muscles) M: 933
- Flextime**
Wages and hours (Hours) W: 3
- Flextrack**
Railroad, Model (Track) R: 120
- Flick, Elmer** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Flicker** [bird] F: 234 *with picture*
Bird (Birds of forests and woodlands) B: 334
with picture
Woodpecker (Kinds) W: 394-395
Yellowhammer Y: 557
- Flickertail State**
North Dakota N: 496
- Flight** See *Aviation; Flying in this index*
- Flight** [military unit]
Air force (The organization of air forces) A: 183
- Flight archery** [contest]
Archery (Flight archery) A: 603
- Flight deck** [airplane]
Airplane picture on A: 219
- Flight deck** [ship]
Aircraft carrier A: 206 *with pictures*
- Flight engineer**
Astronaut A: 829
Aviation (Jobs with airlines and airports)
A: 992
- Flight envelope**
Test pilot (Experimental test pilots) T: 181
- Flight instruments**
Airplane picture on A: 222
- Flight into Egypt** [sculpture]
Sculpture picture on S: 250
- Flight of Daedalus and Fall of Icarus** [woodcut]
Airplane picture on A: 229
- Flight of the Bumblebee, The** [music by
Rimsky-Korsakov]
Rimsky-Korsakov, Nikolai R: 342
- Flight of the Moth, The** [book by Post]
Post, Emily Price P: 698
- Flight simulator** [aviation]
Audio-visual materials (Multisensory materials)
A: 883
Wind shear W: 332
- Flight surgeon**
Aerospace medicine (Aviation medicine) A: 89
- Flight Test Center**
Edwards Air Force Base E: 114
- Flightless bird**
Bird (Birds of Australia and the Pacific Islands)
B: 349 *with picture*; (How birds move)
B: 350-352 *with picture*
- Flin Flon** [town, Manitoba-Saskatchewan] F: 235
- Flinders, Matthew** [British explorer]
Australia (Exploring the new land) A: 922 *with map*
Franklin, Sir John F: 492
South Australia (History) So: 639
- Flinders Island** [Australia]
Tasmania (Location, size, and description)
T: 49; (The people) T: 49
- Flinders Range** [mountains, Australia]
South Australia So: 639
- Flint** [city, Michigan] F: 235 *with picture*
- Flint** [mineral] F: 236 *with picture*
Fire (Methods of starting fires) F: 121
Quartz (Types) Q: 8
Rock (table) R: 373 *with picture*; (Chemical sediments) R: 372
- Flint corn**
Corn (Kinds of corn) Ci: 1058
- Flint Hills**
Kansas (Land regions) K: 228
- Flintknapping** [technique]
Archaeology (Evaluation) A: 598
- Flintlock** [gun] F: 236 *with picture*
Handgun (Early handguns) H: 45 *with picture*
Revolutionary War in America (Weapons and tactics) R: 279 *with pictures*
Rifle picture on R: 339
- Flip-book**
Animation A: 511
- Flip chart**
Audio-visual materials (Flip charts) A: 882
- Flip turn**
Swimming (Starts and turns) So: 1046
- Flipper** [zoology]
Animal (Fins, tails, and flippers) A: 490
Dolphin (The bodies of dolphins) D: 297
Seal (Flippers) S: 266
Whale (Body shape) W: 259 *with picture*
- FLIR** [electronic device] See *Forward-Looking Infrared system in this index*
- Flitch**
Plywood (Making plywood) P: 586
- FLN** [political group, Algeria] See *Front de Libération Nationale in this index*
- Float** [boat]
Ship (History) S: 403
- Float** [fishing]
Fishing (Floats) F: 177; *picture on* F: 178
- Float** [parade]
Flower picture on F: 274
- Float** [plumbing]
Plumbing (How toilets work) P: 579 *with diagrams*
- Float** [tool]
Plaster (Plastering) P: 552-553 *with picture*
- Float bath** [furnace]
Glass (Drawing) G: 215
- Floating**
Drowning D: 349
Swimming (Water safety) So: 1042-1043
- Floating dock** [shipping]
Dry dock D: 369
- Floating exchange rate** [economics]
Balance of payments (Balance of payments and exchange rates) B: 36
Economics (World finance) E: 64
Exchange rate E: 435
Money (International finance) M: 716
- Floating Gardens of Xochimilco** [Mexico]
Lake Xochimilco L: 48
- Floating market**
Myanmar picture on M: 970c
- Floating Opera, The** [book by Barth]
Barth, John B: 120
- Floating rib** [anatomy]
Rib R: 320 *with diagrams*
- Floating soap**
Detergent and soap (Bar soaps) D: 164
- Floating sorrel** [plant]
Endangered species (table) E: 270
- Floatplane**
Airplane (Seaplanes) A: 212
- Flock**
Bird picture on B: 360
Duck (Habits) D: 376
- Flock, Tim** [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1952, 1955) A: 981
- Flodden Field, Battle of** [1513]
Scotland (The House of Stuart) S: 219
- Flog** [paper]
Stereotyping So: 893
- Flood F: 236 with pictures**
Conservation (Water conservation) Ci: 977
Dam (What does a dam do?) D: 17
Disaster (table) D: 223
Hurricane (Hurricane damage) H: 455
Johnstown J: 155
Levee L: 216
Mississippi River (Floods and flood control)
M: 647
Missouri (Recent developments) M: 672
Missouri River (Dams and reservoirs) M: 675;
(History) M: 675-676
Netherlands (Climate) N: 145
Ohio (The early 1900's) O: 702 *with picture*
Rapid City R: 144
Safety (During a flood) S: 15
South Dakota (The mid-1900's) So: 684 *with picture*
Tennessee Valley Authority (Flood control)
T: 160
Water picture on W: 116
- Flood, Great** See *Deluge in this index*
- Flood Control Act** [1936]
Flood (Flood control) F: 237
- Flood irrigation**
Irrigation (Surface irrigation) I: 457 *with picture*
- Flood plain** [geography]
Flood (Reducing flood losses) F: 238 *with diagram*
Plain P: 506 *with picture*
River (Flood plains) R: 353 *with diagram*
Valley V: 265
- Flood-proofing**
Flood (Reducing flood losses) F: 238
- Floodlight**
Lighting (For outdoor events) L: 297 *with picture*
- Floodwater mosquito** [insect]
Mosquito (Egg) M: 833
- Floodway**
Flood (Reducing flood losses) F: 238
Mississippi River (Floods and flood control)
M: 647-648
- Floor** [geography]
Rain forest (Structure and growth) R: 126a
Valley V: 265
- Floor broker** [economics]
Commodity exchange Ci: 873
- Floor covering** See *Rugs and carpets in this index*
- Floor exercise** [gymnastics]
Gymnastics (Men's events) G: 448 *with picture*; (Women's events) G: 449
- Floor joist** [construction] See *Joist in this index*
- Floor leader** [office]
Political party (Organizing the government)
P: 632
United States, Government of the (Party leadership) U: 138-140
- Floor loom**
Weaving (Kinds of looms) W: 174
- Floor plan**
Interior design (Planning on paper) I: 330
- Flooring** [building material] F: 239
House (The frame) H: 382 *with diagram*
Interior design (Choosing patterns and textures) I: 332-333
Linoleum L: 338
Lumber (table) L: 518
Mosaic M: 822
- Floppy disk** [electronic device]
Computer (Floppy drives) Ci: 916
- Floppy drive** [electronic device]
Computer (Floppy drives) Ci: 916; *picture on*
Ci: 913
- Flora** [biology] F: 239
Fauna F: 56
- Floral bract** [botany]
Pineapple (The pineapple plant) P: 472
- Floral organ** [botany]
Grass (The grass plant) G: 324
- Floralia** [custom]
May Day M: 322
- Flora et Zéphire** [painting by Chalon and Lane]
Ballet picture on B: 53
- Floreana Island**
Galapagos Islands G: 7 *with map*
- Florence** [Italy] F: 239 *with pictures*

- Florin** F: 266
Leonardo da Vinci (Early career) L: 199
Medici M: 362
Michelangelo (Early life) M: 483; (The Last Judgment) M: 486
Painting (The 1300's) P: 51-52
Renaissance (The Italian Renaissance) R: 233 *with map*
- Florence, Cathedral of** [Italy]
 Architecture (Early Renaissance architecture) A: 620 *with picture*
 Brunelleschi, Filippo B: 651
 Campanile C: 90a
- Florence, Council of** [1438]
 Roman Catholic Church (The close of the Middle Ages) R: 408
- Florence, William J.** [American actor]
 Shrine, The S: 442
- Florentine Pietà** [sculpture by Michelangelo]
 Michelangelo (Later years) M: 487; *picture on* M: 484
- Flores de Mayo** [festival]
 May M: 320
- Flores Island** [island, Azores] F: 241
- Flores Perez, Francisco** [Salvadoran political leader]
 El Salvador (Recent developments) E: 252
- Forewood River Plantation**
 Mississippi (Places to visit) M: 632
- Flore, Lord** [British bacteriologist] F: 241
 Chain, Ernst Boris C: 369
 Penicillin (Early history) P: 240
- Floria Tosca** [opera character]
 Opera (Tosca) O: 807
- Florian** [Roman emperor]
 Rome, Ancient (table) R: 447
- Florian, Douglas** [American poet]
 Literature for children (Children's literature today) L: 365; *picture on* L: 369
- Floribunda** [plant]
 Rose R: 477; *picture on* R: 478
- Floriculture** [botany] F: 241
 Flower (In landscaping) F: 274
 Horticulture H: 370
- Florida** F: 242 *with pictures and maps*
See also the list of Related Articles in the Florida article
Bush v. Gore B: 723
 Election of 2000 (On Election Day) E: 161
 Gálvez, Bernardo de G: 18
 Hispanic Americans (In the Southeast) H: 250;
 (Cuban immigration) H: 253
 Menéndez de Avilés, Pedro M: 400
 Ponce de León, Juan P: 655
- Florida, University of** F: 266
- Florida East Coast Railway**
 Flagler, Henry Morrison F: 224
- Florida gallinule** [bird]
 Gallinule G: 16
- Florida Keys** [islands, Florida] F: 266 *with picture*
 Florida (Land regions) F: 254 *with picture*
- Florida Marlins** [baseball team]
 Baseball (table) B: 130
- Florida panther** [wild cat] F: 266 *with picture*
- Florida Panthers** [team]
 Hockey (table: National Hockey League) H: 281
- Florida parishes** [region, Louisiana]
 Louisiana (Land regions) L: 490
- Florida pompano** [fish]
 Pompano P: 653 *with picture*
 Fish *picture on* F: 153
- Florida Purchase** [U.S. history]
 Monroe, James (War with the Seminole) M: 737
- Florida Southern College**
 Florida *picture on* F: 246
- Florida State University** F: 266
- Florida Supreme Court**
 Election of 2000 (Court challenges) E: 161
- Florida Theatre**
 Jacksonville (Cultural life and recreation) J: 18
- Florida Times-Union** [newspaper]
 Florida (Communication) F: 260
- Florin** [money] F: 266
 Guilder G: 429
- Florio, James J.** [American political leader]
 New Jersey (table) N: 249
- Florissant Fossil Beds National Monument**
 [Colorado] F: 266 *with picture*
 National Park System (table: National monuments) N: 51
- Florist** [occupation]
- Flower** (As decoration) F: 273-274
- Florizel** [literary figure]
 Shakespeare, William (*The Winter's Tale*) S: 365
- Flory, Paul John** [American chemist]
 Nobel Prizes (Chemistry: 1974) N: 443
- Flotation cell**
 Copper (Milling) Ci: 1042-1043
- Flotation process** [chemistry] F: 267
 Copper (Milling) Ci: 1042
 Lead (Production) L: 149
- Flotsam, jetsam, and lagan** [wreckage] F: 267
- Flounder** [fish] F: 267 *with picture*
 Fish *pictures on* F: 149, F: 153, F: 166
- Flounder, The** [book by Grass]
 German literature (German literature after 1945) G: 142
- Flour** [food] F: 267 *with pictures*
 Bran B: 562
 Bread B: 588
 Sago S: 19
 Wheat (Food for people) W: 266
- Flour beetle** [insect] F: 269 *with picture*
- Flour City** [nickname]
 Rochester (Government and history) R: 370-371
- Flour corn**
 Corn (Kinds of corn) Ci: 1058-1059
- Flow chart**
 Computer (Preparing a program) Ci: 923
- "Flow my tears"** [song by Dowland]
 Dowland, John D: 316
- Flower** F: 270 *with pictures*
 Angiosperm A: 462 *with picture*
 Bud B: 666
 Cotton *picture on* Ci: 1088
 Floriculture F: 241
 Gardening (Ornamental gardens) G: 31 *with pictures*; (table) G: 33 *with diagram*
 Perfume (Plant substances) P: 286
 Plant (Angiosperms) P: 519; (Flowers) P: 531 *with pictures*; (Sexual reproduction) P: 532 *with picture*
 Seed (Seed development in angiosperms) S: 281
 Tree (Seeds) T: 417
 Vegetable (Flower buds) V: 292 *with picture*
For a list of articles on specific flowering plants, see the table in the Flower article
- Flower** [fireworks]
 Fireworks (How fireworks work) F: 135
- Flower** [tile]
 Mah-jongg M: 64 *with picture*
- Flower, Roswell Pettibone** [American political leader]
 New York (table) N: 313
- Flower arranging** [art]
 Flower (Flower arranging) F: 298 *with pictures*
- Flower child**
 Hippies H: 239
- Flower Fables** [book by Alcott]
 Alcott, Louisa May A: 338
- "Flower Song"** [aria]
 Opera (*Carmen*) O: 802-803
- Flowering dogwood** [plant]
 Dogwood D: 284 *with picture*
 Tree *pictures on* T: 421
- Flowering maple** [shrub] F: 303 *with picture*
- Flowering of New England, The** [book by Brooks]
 Brooks, Van Wyck B: 641
- Flowering plant** *See* Angiosperm *in this index*
- Flowering quince** [plant]
 Quince Q: 42
- Flowering tobacco** [plant] F: 303 *with picture*
- Flowerpecker** [bird] F: 303
- Flowerpot Rocks** [Hopewell Cape]
 New Brunswick (Places to visit) N: 188
- Flowers of Evil, The** [poems by Baudelaire]
 French literature (Symbolism) F: 522
 Baudelaire, Charles B: 173
- Flowers of sulfur** [chemistry]
 Sulfur (Forms) So: 966-967
- Flowfield** [physics]
 Aerodynamics (Applying aerodynamic principles) A: 88
- Flowing tracery** [architecture]
 Tracery T: 353
- Flowstone**
 Cave (Speleothems) C: 319 *with diagram*
- Floyd, Charles** [American explorer]
 Iowa (Territorial days) I: 393
- Floyd, Charles M.** [American political leader]
 New Hampshire (table) N: 223
- Floyd, John** [American political leader]
 Virginia (table) V: 417
- Floyd, John Buchanan** [American government official]
 Buchanan, James (table) B: 661
 Virginia (table) V: 417
- Floyd, William** [American patriot] F: 303
- FLQ** [terrorists] *See* Front de Libération du Québec *in this index*
- Flu** *See* Influenza *in this index*
- Fluconazole** [drug]
 Antibiotic (table) A: 551
- Flue curing**
 Tobacco (Kinds of tobacco) T: 305-306; (Curing tobacco) T: 306
- Flue pipe** [musical instrument]
 Organ (Pipe organs) O: 851-852
- Fluency** [speech]
 Speech therapy (Types and causes of speech defects) So: 773
- Flügelhorn** [musical instrument] F: 304
 Music *picture on* M: 949
- Fluid** [physics] F: 304
 Friction (Kinds of friction) F: 532
 Liquid L: 346
 Physics (Fluid and plasma physics) P: 438
 Viscosity V: 428 *with picture*
- Fluid dynamics**
 Mechanics M: 354
- Fluid film bearing** [machine]
 Bearing (Plain bearings) B: 188 *with diagram*
- Fluid mechanics** [physics] F: 304
- Fluid ounce** [measure]
 Ounce O: 879
- Fluid statics** [physics]
 Fluid mechanics (Fluid statics) F: 304
- Fluidic engine**
 Hydraulic engine H: 462
- Fluidized-bed combustion**
 Coal (Coal research) Ci: 730-731
- Fluke** [animal] F: 304
 Animal *picture on* A: 468
 Flatworm F: 229 *with diagram*
 Worm (Flatworms) W: 500 *with picture*
- Fluke** [fin]
 Dolphin (The bodies of dolphins) D: 297
 Whale (Body shape) W: 259 *with picture*
- Fluke** [fish]
 Flounder F: 267
- Flume** [New Hampshire]
 New Hampshire (Places to visit) N: 216 *with picture*
- Flunitrazepam** [drug] *See* Rohypnol *in this index*
- Fluor** *See* Fluorite *in this index*
- Fluorescence** [physics] F: 304
- Fluorescent lamp** [lighting] F: 305 *with diagram*
 Electric light (Gaseous-discharge lamps) E: 174 *with picture*
 Interior design (Selecting accessories) I: 333
 Invention *picture on* I: 356
 Lighting (Lighting devices) L: 298
- Fluorescent light**
 Fluorescent lamp F: 305 *with diagram*
- Fluoridation** [water treatment] F: 305
- Dentistry** (Modern dentistry) D: 145
 Teeth (A good diet) T: 81
- Fluoride** [chemistry]
 Dentistry (Modern dentistry) D: 145
 Fluoridation F: 305
 Fluorine F: 306
 Hydrofluoric acid H: 465
- Fluorine** [element] F: 306
 Atom *diagram on* A: 872
 Halogen H: 27
- Fluorite** [mineral] F: 306
 Fluorine F: 306
 Mineral *picture on* M: 569
- Fluoroquinolone** [drug]
 Quinolone Q: 43
- Fluoroscope**
 Fluoroscopy F: 307 *with picture*
- Fluoroscopy** [medicine] F: 306 *with picture*
 Radiology R: 98
- Fluorsper** *See* Fluorite *in this index*
- Fluothane** [drug]
 Halothane H: 27
- Fluoxetine** [drug]
 Antidepressant A: 553
 Depression D: 151
- Fluphenazine** [drug]
 Tranquilizer T: 370
- Flush** [botany]
 Tea (Growing tea) T: 62 *with picture*

Flush [poker]

Poker P: 603

Flushing Institute [school]

Muhlenberg, Henry Melchior M: 912

Flushing Meadow-Corona Park [district]

New York City (Queens) N: 329

Flute [musical instrument] F: 307 *with pictures*Music (Wind instruments) M: 949 *with picture*Piccolo P: 450 *with pictures***Fluted armor**

Armor (During the Middle Ages) A: 720

Fluted point [archery]

Indian, American (The first Americans) I: 151

Flutie, Doug [American football player]

Football (table) F: 363

Flutter kick

Swimming (The basic kicks) So: 1043

Flux [chemistry] F: 307

Gold (Smelting) G: 253

Iron and steel (Raw materials) I: 440-441

Welding (Fusion welding) W: 189

Flux lines [physics]Magnetic equator *diagram on* M: 55

Magnetism (Magnetic fields) M: 59

Sun (Magnetic field) So: 977

Weber W: 176

See also Field lines *in this index***Fluxing** [industrial process]

Aluminum (Fabricating ingots) A: 394

Fly [flag]Flag *diagram on* F: 194**Fly** [insect] F: 308 *with pictures*Biology *picture on* B: 319

Bot fly B: 507

Insect (Wings) I: 288; (Touch) I: 291; *pictures on* I: 282

Lovebug L: 508

Midge M: 535 *with picture*

Typhoid fever (Cause and spread) T: 539

*See also the list of Related Articles in the Fly article***Fly, Artificial**Fishing (Bait) F: 177-178; *pictures on* F: 177**Fly agaric** [fungus]Mushroom (Poisonous mushrooms) M: 945 *with picture***Fly ash**

Coal (Coal as a fuel) Ci: 719

Fly-by mission

Satellite (Spacecraft missions) S: 150c

Fly-by-wire system [aviation]

Automatic flight control system (How an AFCS works) A: 944

Fly endFlag *diagram on* F: 194**Fly orchid**Flower *picture on* F: 271**Fly out**

Baseball (Outs by batters) B: 128-129; (Rule changes) B: 133

Fly reelFishing (Reels) F: 176-177 *with picture***Fly shuttle** [machine]

Cotton (England) Ci: 1092

Hargreaves, James H: 60

Industrial Revolution (Weaving machines) I: 249

Invention (Economic needs) I: 355

Fly-up [ceremony]

Girl Scouts (Junior Girl Scouts) G: 197

Flyball governor [machine]

Automation (History of automation) A: 945

Flyblown

Blow fly B: 419

Flycatcher [bird] F: 311 *with picture*Bird (Birds of grasslands) B: 336 *with picture*Pewee P: 352 *with picture***Flyer** [airplane]Airplane (The Wright brothers) A: 231 *with picture***Flyer** [circus]Circus (At the circus) Ci: 562 *with picture***Flyers, Philadelphia**

Hockey (table: National Hockey League)

H: 281

Flying*See also* Aviation *in this index*Airplane (Principles of flight) A: 220 *with diagrams*

Animal (Wings) A: 488

Bird (In the air) B: 352 *with pictures*

Insect (Wings) I: 288

Flying [scenery]

Theater (Changing scenery) T: 240

Flying boat [airplane]Airplane (Seaplanes) A: 212; (Engineering improvements) A: 237; *picture on* A: 233Aviation (The industry comes of age) A: 989 *with picture***Flying buttress**Architecture (Gothic architecture) A: 618-619 *with pictures*; (Architectural terms) A: 608 *with picture*

Gothic art (Early Gothic architecture) G: 278

Notre Dame, Cathedral of N: 550

Flying Cloud [ship]

McKay, Donald M: 337

Ship *picture on* S: 410**Flying crane** [aircraft]

Helicopter (For transportation and construction work) H: 170

Flying Doctor ServiceAustralia (Transportation) A: 921 *with picture*

Aviation (General aviation activities) A: 984

Outback O: 879

Flying dragon [reptile] F: 311 *with picture*Animal *picture on* A: 469

Lizard (How lizards move) L: 399

Flying Dutchman [legendary ship] F: 311**Flying Dutchman, The** [opera by Wagner]

Flying Dutchman F: 311

Opera (Richard Wagner) O: 798-799

Flying fortress [airplane]

Air Force, United States (Between world wars) A: 195

Aircraft, Military *picture on* A: 205Airplane *picture on* A: 234

Bomber (History) B: 453

World War II (The air war) W: 481 *with picture***Flying fox** [animal] F: 311Bat (The body of a bat) B: 159 *with picture*; (Some kinds of bats) B: 161**Flying gurnard** [fish]

Gurnard G: 443

Flying hatchetfishFish *picture on* F: 145**Flying lemur** [animal] F: 312 *with picture*Mammal (table) M: 128 *with picture*; *picture on* M: 116**Flying lizard** [animal]Flying dragon F: 311 *with picture***Flying saucer** *See* Unidentified flying object *in this index***Flying squirrel** [animal] F: 312 *with picture*Animal *picture on* A: 479

Squirrel (Types of squirrels) So: 815

"Flying stovepipe" [nickname]

Jet propulsion (Ramjet) J: 114

Flying Tigers [World War III] F: 312

Chennault, Claire Lee C: 408

Flying top [toy]

Helicopter (Early designs and experiments) H: 173

Flyingfish [fish] F: 312Animal *picture on* A: 487Fish *pictures on* F: 145, F: 152**Flynn, Edmund J.** [Canadian political leader]

Quebec (table) Q: 29

Flynn, Elizabeth Gurley [American labor leader]

F: 313

Flynn, William S. [American political leader]

Rhode Island (table) R: 311

Flytrap *See* Venus's-flytrap *in this index***Flyway** [route]

Bird (Where birds migrate) B: 360-361

Flyweight [mechanics]Governor G: 293 *with diagram***Flyweight class**

Boxing (table) B: 530

Flywheel [engine] F: 313 *with picture*Automobile (The power train) A: 952; *diagrams on* A: 951

Gasoline engine (Flywheel) G: 64

Machine *diagram on* M: 13Starter (Automobile starters) So: 857 *with diagram*

Transmission (What a transmission does)

T: 375; (The clutch) T: 378

FM [radio] *See* Frequency modulation *in this index***Fm** [symbol]

Fermium F: 74

FM radar

Radar (Continuous-wave radar) R: 69

FM screening

Printing (Preparing illustrations for reproduction) P: 797

FMCS *See* Federal Mediation and Conciliation*Service in this index***FMLN** [political organization]

El Salvador (Recent developments) E: 252

FMS [manufacturing]

Machine tool M: 17

FNLA [political group] *See* Front for theLiberation of Angola *in this index***FNM** [political party] *See* Free NationalMovement *in this index***Fo, Dario** [Italian dramatist]

Drama (Drama in other countries) D: 341

Nobel Prizes (Literature: 1997) N: 446

Foal [animal]

Horse (Life history) H: 351; (Training horses)

H: 359 *with picture*

Horse racing (Thoroughbred horses) H: 363-

364

Zebra Z: 591 *with picture***Foam extinguisher**

Fire extinguisher (Foam extinguishers) F: 130

Foam glass

Glass (Specialty glasses) G: 212

Foam rubber

Rubber (Sponge rubber) R: 505

Foaming [industrial process]Plastics (Making plastic products) P: 557-558 *with picture***Focal length** [optics]Lens (The focal length) L: 196a *with diagrams*

Magnifying glass M: 62

Telescope (Optical telescopes) T: 103

Focal plane [optics]

Lens (The focal plane) L: 196a

Telescope (Optical telescopes) T: 103

Foch, Ferdinand [French military leader] F: 313*with portrait*

World War I (The last campaigns) W: 463

Foci [astronomy] *See* Focus *in this index***Focke, Henrich** [German inventor]

Helicopter (The first practical helicopters)

H: 173 *with picture***Focus** [astronomy]

Planet (How planets move) P: 508-509

Focus [geology]

Earthquake (How an earthquake begins) E: 33-

34 *with diagram***Focus** [geometry]Ellipse E: 243 *with diagram*Parabola P: 141 *with diagram***Focus** [optics]

Aberration A: 10

Camera (How a camera works) C: 80

Eye (Focusing) E: 462 *with diagrams*Lens (Convergence) L: 196a *with diagrams*

Mirror (Convex mirrors) M: 616-617; (Concave

mirrors) M: 617 *with diagram*Photography (Focusing the image) P: 410 *with**picture*; (Focusing) P: 414

Telescope (Optical telescopes) T: 103

Focus group

Public opinion poll (Designing the questionnaire) P: 863

Fodder [agriculture]

Invention (The Industrial Revolution) I: 361-362

Foehn [weather] F: 313

Alps (Climate) A: 385

Chinook C: 512

Switzerland (Climate) So: 1056

Wind (Local winds) W: 329-330

Foetus *See* Fetus *in this index***FOG** [navigation] *See* Fiber-optic gyro *in this index***Fog** [weather] F: 314 *with pictures*

United Kingdom (Climate) U: 61-62

Weather (Humidity) W: 158

Fogel, Robert William [American economist]

Nobel Prizes (Economics: 1993) N: 449

Fogg, Phileas [literary figure]

Verne, Jules V: 338

Foggy Bottom [area]

State, Department of So: 859

Washington, D.C. (Executive branch buildings)

W: 75

Fogo [island]Cape Verde C: 189 *with map***FOIA** *See* Freedom of Information Act *in this index***Foil** [boat]Hydrofoil H: 466 *with pictures*Missile boat M: 618 *with diagram***Foil** [weapon]Fencing (The foil) F: 70 *with picture***Foil-electret condenser microphone**Telephone (The transmitter) T: 95 *with picture*

- Foix, Count of** [French nobleman]
Andorra (History) A: 455
- Fokine, Michel** [Russian choreographer] F: 314
with picture
Ballet (Ballet in Russia) B: 52
- Fokine, Vera** [wife of]
Fokine, Michel *picture on* F: 315
- Fokker, Anthony Herman Gerard** [Dutch engineer] F: 315
Air Force, United States (World War I) A: 194
- Fokker D VII** [airplane]
Airplane *picture on* A: 233
- Fokker DR-1 triplane**
Aircraft, Military *picture on* A: 204
- Folacin** [vitamin] *See* Folic acid in *this index*
- Folate** [vitamin] *See* Folic acid in *this index*
- Fold** [cooking]
Cooking (table) Ci: 1029
- Fold** [geology]
Hot springs H: 374b
Mountain (Fold mountains) M: 892 with *diagram*
- Fold of the axis** [geometry]
Symmetry So: 1066
- Folded dipole**
Antenna (Receiving antennas) A: 543-544 with *picture*
- Folding camping trailer** [vehicle]
Recreational vehicle (Folding camping trailers) R: 184
Trailer (Recreational trailers) T: 368
- Folding fan**
Fan F: 27 with *picture*
- Folding machine**
Bookbinding (Forming a book) B: 470
- Foley, Thomas Stephen** [American political leader] F: 315 with *portrait*
- Folger, Charles J.** [American government official]
Arthur, Chester Alan (table) A: 756; (Election of 1884) A: 757
Treasury, Department of the (table) T: 407
- Folger, Henry C.** [American bibliophile]
Folger Shakespeare Library F: 315
- Folger Shakespeare Library** [Washington, D.C.] F: 315
Washington, D.C. (Folger Shakespeare Library) W: 71; *map on* W: 76; *picture on* W: 83
- Folia** [anatomy]
Brain (The cerebellum) B: 550b-551 with *diagram*
- Folic acid** [vitamin] F: 315
Anemia (Insufficient production of red blood cells) A: 458
Diet (Normal diet) D: 200
Nutrition (Vitamins) N: 626
Spina bifida So: 792
Vitamin (Vitamin B complex) V: 430-431
- Folio** [publishing] F: 315
Shakespeare, William (Publishing history) S: 368 with *picture*
- Foliose lichen** [plant]
Lichen L: 269 with *picture*
- Folk** [sociology]
Folklore (Origins of folklore) F: 322-323
- Folk, Joseph W.** [American political leader]
Missouri (table) M: 668; (Progress as a state) M: 671
- Folk art** F: 316 with *pictures*
See also Folk dancing; Folk music; Folklore; Handicraft in *this index*
Sculpture (American sculpture) S: 255 with *pictures*
- Folk costume**
Clothing *pictures on* Ci: 695
- Folk dancing** F: 320 with *picture*
Dance (Folk dancing) D: 27 with *picture*
Latin America *picture on* L: 101
Square dancing So: 811 with *picture*
- Folk doll**
Doll (Traditional dolls) D: 287 with *picture*
- Folk high school**
Denmark (Education) D: 135-136
- Folk literature** *See* Folklore in *this index*
- Folk Meter** [poetry]
Poetry (Rhythm and meter) P: 591-592
- Folk music** F: 321
Country music (The roots of country music) Ci: 1098a
Folklore (Folk songs) F: 325
Jazz (The roots of jazz) J: 70
Music (Western music) M: 955
Opera (Nationalism) O: 799
- Popular music P: 669; (The folk music revival) P: 671
Western frontier life in America (Music) W: 240
- Folk narrative** [story]
Legend L: 183
- Folk rock**
Rock music (Expanding styles and sounds) R: 378-379
- Folk song**
Folk music F: 321
Folklore (Folk songs) F: 325
- Folk tale**
Folklore (Folk tales) F: 324
Literature for children (Folk literature) L: 357
Storytelling (History) So: 913-914
- Folkestone** [United Kingdom]
Channel Tunnel C: 375
- Folketing**
Denmark (Government) D: 132-133
- Folklore** [literature] F: 322 with *pictures*
Fairy F: 9
Lang, Andrew L: 60
Literature for children (Folk literature) L: 357
Storytelling So: 912
See also the list of Related Articles in the Folklore article
- Folkmoor**
Vikings (Ancestry and population) V: 378-379
- Folkway** [anthropology]
Mores M: 802
Sumner, William Graham So: 973
- Folkways** [book by Sumner]
Sumner, William Graham So: 973
- Follicle** [anatomy]
Acne A: 27 with *diagram*
Hair (The structure and growth of hair) H: 9 with *diagram*
- Follicle** [zoology]
Egg (Development of the bird's egg) E: 117
- Follicle stimulating hormone**
Hormone (Growth and sex hormones) H: 336
Menstruation (Follicular phase) *diagram on* M: 403
- Follow-on**
Cricket (The game) Ci: 1132
- Follow-up letter**
Letter writing (Letters of application) L: 211-212 with *picture*
- Following the Equator** [book by Twain]
Twain, Mark (Later works) T: 529-530
- Folsom, Frances** [wife of Grover Cleveland] *See* Cleveland, Frances Folsom in *this index*
- Folsom, James E.** [American political leader]
Alabama (table) A: 274
- Folsom, Jim, Jr.** [American political leader]
Alabama (table) A: 274
- Folsom, Marion B.** [American government official]
Eisenhower, Dwight David (table) E: 152
Health and Human Services, Department of (table) H: 128
- Folsom point** [archaeology] F: 326 with *picture*
Indian, American (Early days) I: 151 with *picture*
New Mexico (Indian days) N: 272
- Fomento** [organization]
Puerto Rico (Puerto Rico today) P: 884
- Fon** [people]
Benin (People) B: 249
- Fonck, René** [French aviator]
Ace A: 24
World War I (The war in the air) W: 460-461
- Fond du Lac** [Minnesota]
Duluth D: 381
- Fonda, Henry** [American actor] F: 326 with *portrait*
Motion picture (Best performance by an actor: 1931) M: 862-863
- Fonda, Jane** [American actress] F: 326 with *portrait*
Motion picture (Best performance by an actress: 1971, 1978) M: 862
- Fong, Hiram Leong** [American political leader] F: 326
Asian Americans (Individual achievements) A: 812c
- Fonio** [plant]
Burkina Faso (Economy) B: 706
- Fono** [parliament]
Samoa (Government) S: 80
- Fonseca, Gulf of** [gulf, Honduras]
Honduras (The Southern Coast) H: 310 with *map*
- Fonseca, Manoel Deodoro da** [Brazilian political leader]
Brazil (Birth of the republic) B: 585
- Font** [printing]
Photocomposition P: 405
Printing (Electronic imagesetting) P: 797
Proofreading (Proofreaders' marks) P: 822
Type T: 536
- Fontaine, Joan** [British actress]
Motion picture (Best performance by an actress: 1941) M: 862
Olivier, Laurence *picture on* O: 744
- Fontainebleau** [France] F: 326 with *picture*
Architecture (Later Renaissance architecture) A: 621 with *picture*
- Fontana Dam** [Little Tennessee River, North Carolina]
Tennessee Valley Authority (The dams) T: 158-159 with *map*
- Fontanarossa, Susanna** [mother of]
Columbus, Christopher (Early years) Ci: 857
- Fontane, Theodor** [German author] F: 327
- Fontange**
Clothing (The 1600's) Ci: 701 with *picture*
- Fontanne, Lynn** [British actress] F: 327
Lunt, Alfred L: 526
- Fonteyn, Margot** [British dancer] F: 327 with *picture*
Nureyev, Rudolf N: 613
- Fonvizin, Denis** [Russian dramatist]
Russian literature (The classical movement) R: 559-560
- Fonyo, Steve** [Canadian public figure]
Fox, Terry F: 442
- Foochow** [China]
Fuzhou F: 590
- Food** F: 328 with *pictures*
See also Cooking; Diet; Food, Frozen; Food preservation; Food supply; Nutrition in *this index*
Adolescent (Eating disorders) A: 63
Agriculture (Chief agricultural products) A: 147
Allergy (Diagnosis and treatment) A: 374
Animal (Animals and people) A: 471; (Adaptations for eating) A: 490; (Providing food) A: 498
Balance of nature (Ecosystems) B: 34; (Competition) B: 34
Bird (As a source of food and raw materials) B: 330
Cancer (Genes damaged by substances in the environment) C: 170
Colonial life in America (Food and drink) Ci: 802
Disease (Spread of infectious diseases) D: 228
Grain G: 301
Health food H: 129
Home economics (Nutrition, dietetics, and food science) H: 300
Indian, American (Food) I: 136d with *picture*
Inuit (Food) I: 354b
Ocean (The importance of the ocean) O: 654
Pioneer life in America (Food) P: 481 with *picture*
Plant (The importance of plants) P: 518
Potato P: 711
Pure food and drug laws (Foods) P: 907
Restaurant R: 262
Rice (Food) R: 323
Seed (How people use seeds) S: 283
Soybean So: 689
Space exploration (Meeting basic needs in space) So: 703
Starvation So: 858
Territoriality T: 176
See also the list of Related Articles in the Food article and the Way of Life or People sections of various country articles, such as England (People)
- Food, Frozen** F: 338 with *picture*
Birdseye, Clarence B: 375
Food preservation (Freezing) F: 342; (Freeze-drying) F: 343
Nitrogen (Uses of nitrogen) N: 425-426
Refrigeration R: 200
- Food additive** F: 339
Bread (How yeast bread is made) B: 588
Cancer (Genes damaged by substances in the environment) C: 170
Cattle (Feeding) C: 312
Food (Processing) F: 334
Food preservation (Additives) F: 343
Health food (Types of health foods) H: 129
Pure food and drug laws (Food additives) P: 907

324 Food Administration

Food Administration [U.S. history]

Hoover, Herbert Clark (Food administrator)
H: 328

World War I (The United States enters the war) W: 462

Food Aid Convention

Food supply (Food aid programs) F: 351

Food and Agriculture Organization (UN)

F: 340

Food supply (Food supply programs) F: 350
Globalization (Features of globalization) G: 233
United Nations (Fighting hunger) U: 89

Food and Commercial Workers International Union, United

See United Food and Commercial Workers International Union in this index

Food and Drug Administration [U.S.] F: 340

Antibiotic (Testing) A: 551
Artificial sweetener A: 761
Consumerism (The right to safety) Ci: 1018
Cosmetics (Cosmetics regulations) Ci: 1075
Dietary supplement D: 200
Drug (Drug regulation) D: 357
Food additive (Government regulations) F: 340
Genetic engineering (History) G: 84b
Health and Human Services, Department of (The Public Health Service) H: 128
Herbal medicine H: 196
Nutrition (Nutrition guidelines) N: 626
Packaging (Packaging regulations) P: 19
Public Health Service P: 857
Pure food and drug laws P: 907
Thalidomide T: 229

Food and drug laws See Pure food and drug laws in this index

Food and Drugs Act, Federal [1906]

Adams, Samuel Hopkins A: 44
Consumerism (Beginnings of consumerism) Ci: 1019
Drug abuse (History) D: 365
Pure food and drug laws (History) P: 909
Roosevelt, Theodore (Domestic problems) R: 470

Food chain

Animal (Adaptations for eating) A: 490
Botany (The importance of botany) B: 508-509
Deep sea (The deep-sea environment) D: 82
Ecology (Energy flow) E: 54
Environmental pollution (Water pollution) E: 334
Fish (Fish in the balance of nature) F: 147 with diagram
Forest (The flow of energy) F: 396
Ocean (The food cycle) O: 655; (Discoveries) O: 664
Pest control (Effects of pesticide use) P: 318

Food coloring

Food additive (Kinds of additives) F: 339

Food crop [agriculture]

Crop Ci: 1153

Food for Peace [federal program] F: 340

Food supply (Food aid programs) F: 351
Foreign aid (Economic development and mutual security) F: 383-384
Humphrey, Hubert Horatio (Senator and Vice President) H: 437

Food Guide Pyramid

Nutrition (Nutrition guidelines) N: 626 with picture

Food inspection

Pure food and drug laws (Enforcement) P: 908-909
Sanitation (Food processing and distribution) S: 111 with picture

Food laws See Pure food and drug laws in this index

Food pellet

Zoo (Diet) Z: 606

Food poisoning F: 340

Botulism B: 514
Camping (Safety) C: 96
Campylobacter C: 97
E. coli E: 2
Listeria L: 349
Mycotoxin M: 970f
Poison (Kinds of poisons) P: 601
Salmonellosis S: 71

Food preservation F: 341 with picture

See also Preservative in this index

Cold storage Ci: 761
Dehydrated food D: 93
Food, Frozen F: 338
Fruit (Marketing fruit) F: 546
Irradiation I: 455

Meat packing (Curing and smoking) M: 351
Pasteurization P: 193
Refrigeration R: 200

Food processing

See also Food preservation in this index
Air conditioning (In business and industry) A: 176-177

Cooking Ci: 1027

Food (Processing) F: 334

Health food (Types of health foods) H: 129
Meat packing (Packing processes) M: 350
Omaha O: 756

Food science

Home economics (Nutrition, dietetics, and food science) H: 300

Food service industry

Careers (Tourism and hospitality) C: 233-234 with picture
Hospital (Professional services departments) H: 371; picture on H: 372
Restaurant R: 262

Food Stamp Act [1964]

Food Stamp Program F: 344

Food Stamp Program [federal program]

F: 344
Wellfare (The Food Stamp Program) W: 190

Food storage tissue [botany]

Plant (Seeds) P: 531-532

Food supply F: 345 with pictures

Agriculture (Recent developments) A: 160
Balance of nature (Ecosystems) B: 34; (Competition) B: 34
Famine (Fighting famine) F: 26-27
Hunger H: 449
Malthus, Thomas Robert M: 115
Ocean (The importance of the ocean) O: 654
Population (Effects) P: 674
United Nations (Fighting hunger) U: 89
Women's movements (In developing nations) W: 387

Food vacuole [biology]

Ameba A: 406

Food value See Nutrition in this index

Food web [ecology]

Animal (Adaptations for eating) A: 490
Ecology (Energy flow) E: 54
Fish (Fish in the balance of nature) F: 147

Foot [food] See Ful in this index

Foot hen [bird]

Grouse (Habits) G: 404

Foot of the World and the Flying Ship, The

[book by Shulevitz]
Shulevitz, Uri S: 443 with picture

Foolish fire

Will-o'-the-wisp W: 307

Foot's gold See Pyrite in this index

Foot [anatomy] F: 352 with diagram

Bunion B: 699

Flatfoot F: 229

Shoe S: 430

Foot [animal]

Animal (Legs and feet) A: 488 with pictures
Bird (Legs and feet) B: 364, pictures on B: 363
Clam (The body of a clam) Ci: 637
Conch Ci: 928
Mollusk (Gastropods) M: 695; (Bivalves) M: 695

Oyster (Young) O: 891

Snail S: 522 with pictures

Spider pictures on So: 785

Foot [poetry]

Poetry (Rhythm and meter) P: 591-594

Foot [unit of measure] F: 352

Weights and measures (Measurement systems) W: 184

Foot, Michael [British political leader] F: 353

with portrait

Foot, Samuel A. [American political leader]

Connecticut (table) Ci: 967

Foot-and-mouth disease F: 353

Cattle (Diseases) C: 312-314

Foot-candle [unit of measure] F: 353

Light (The brightness of light) L: 291 with diagram

Lighting (Quantity of light) L: 297

Foot cavalry

Civil War (The peninsular campaign) Ci: 626-627

Foot fault

Tennis (The serve) T: 163

Foot-pound [unit of measure] F: 353

Energy (Units of work and energy) E: 274
Power P: 727
Work W: 405

Foot survey [archaeology]

Archaeology (Locating sites) A: 595-596

Footage

Motion picture (The rushes) M: 855

Football [sport] F: 354 with pictures

See also Rugby football; Soccer in this index
Disabled picture on D: 218
Heisman Memorial Trophy H: 167
See also the list of Related Articles in the Football article

Football, Australian rules [sport]

Australia (Recreation) A: 904 with picture

Football, Canadian [sport]

Grey Cup G: 391

Football Hall of Fame [Ohio] See Pro Football

Hall of Fame in this index

Football helmet

Helmet picture on H: 178

Footie, Andrew Hull [Union military leader]

F: 368

Footie, Henry S. [American political leader]

Mississippi (table) M: 640

Foothill paloverde [tree]

Paloverde P: 112

Footing [construction]

Building construction (Constructing a skyscraper) B: 683-684

House (The foundation) H: 380; diagram on H: 383

Footnote [reference] F: 369

A Guide to Writing Skills Research Guide: 21

Footprinting [criminology] F: 369 with picture

Footwall

Mining (Mining terms) M: 577

For a Morality of Ambiguity [book by Beauvoir]

French literature (Existentialism) F: 523

For Colored Girls Who Have Considered

Suicide/When the Rainbow is Enuf [play by Shange]

American literature (Drama) A: 425

For-hire carrier

Truck (Industrial uses) T: 456

"For the Anniversary of My Death" [poem by

Merwin]

Merwin, W. S. M: 420

For the Little One [painting by Chase]

Chase, William Merritt picture on C: 387

For the Love of Imabelle [book by Himes]

Himes, Chester H: 234

For the Union Dead [book by Lowell]

Lowell, Robert L: 511

For Whom the Bell Tolls [book by Hemingway]

Hemingway, Ernest (Rise to fame) H: 180-181

Forage [food]

Alfalfa A: 345

Cattle (Feeding) C: 312

Conservation (Conservation of grazing lands) Ci: 981

Farm and farming (Livestock care) F: 39

Grass (Grazing and forage grasses) G: 324

Forage fish [ecology]

Minnow M: 607

Forage harvester [machine]

Corn (Harvesting) Ci: 1061

Hay H: 115

Foraker, Joseph B. [American political leader]

Ohio (table) O: 699

Foraker Act [1900]

Puerto Rico (United States rule) P: 883

Foraminifera [zoology]

Ice age (Evidence of ice ages and their climates) I: 6-7

Ooze O: 788

Protozoan (Sarcodines) P: 837

Rock (Organic sediments) R: 372

Forbes, Charles R. [American government official]

Harding, Warren Gamaliel (Government scandals) H: 58

Forbes, Edward Waldo [American artist]

Shell picture on S: 390

Forbes, Esther [American author] F: 369 with

portrait

Forbes, Kenneth [Canadian artist]

Borden, Sir Robert Laird picture on B: 483

Forbidden City, The [Tibet] See Lhasa in this

index

Forbidden City [district, Beijing]

Architecture picture on A: 612

Beijing (The city) B: 222 with picture and map

Ming dynasty M: 573

Forbidden Island [nickname]

Hawaii (Niihau) H: 102

Forbush effect [astronomy]

Magnetic storm M: 57

Force [physics] F: 369 *with diagrams*

Foot-pound F: 353; [physics] G: 2

Mass M: 268

Metric system (Mechanics) M: 437-440

Motion (The second law) M: 845

Relativity (General relativity) R: 211

Standard Model So: 833

Weight W: 180

Work W: 404

See also the list of Related Articles in the Force article

Force bill [law] F: 371

African Americans (The first years of freedom)

A: 136h-136i

Grant, Ulysses S. (Reconstruction policies)

G: 315

Ku Klux Klan (Birth of the Klan) K: 389

Nullification N: 603

United States, History of the (Jackson as

President) U: 170

Force of Circumstances [book by Beauvoir]

Beauvoir, Simone de B: 191

Force-out

Baseball (Base runners—advancing and outs)

B: 129-130

Force pump

Pump (Reciprocating pumps) P: 900

Force situation

Baseball (Base runners—advancing and outs)

B: 129

Forces Command

Army, United States (Organization of the

Army) A: 736-737

Forcible entry tool

Fire department (Fire trucks) F: 125-126 *with*

pictures

Ford [automobile]

Automobile (The birth of the automobile indus-

try) A: 963-964 *with picture; pictures on*

A: 967, A: 969

Ford, Henry (Industrial accomplishments)

F: 379 *with pictures*

Ford [geography] F: 371

Ford: The Times, the Man, the Company

[book by Nevins]

Nevins, Allan N: 178

Ford, Betty [wife of Gerald Rudolph Ford]

First ladies (table) F: 142

Ford, Gerald Rudolph (Marriage) F: 375; (Life

in the White House) F: 378; (Later years)

F: 379 *with picture*

Ford, Edsel Bryant [American businessman]

Ford Foundation (History) F: 382

Ford, Elizabeth Bloomer [wife of Gerald Ford]

See Ford, Betty in *this index*

Ford, Ford Madox [British author] F: 371

English literature (Fiction between the wars)

E: 322

Novel (New directions in the novel) N: 573-

574

Ford, Gerald R. [stepfather of]

Ford, Gerald Rudolph (Family background)

F: 372

Ford, Gerald Rudolph [U.S. President] F: 372

with pictures

Nixon, Richard Milhous (Events at home)

N: 435-437 *with picture*

Presidential succession P: 771

Vice President of the United States (Growth of

the vice presidency) V: 353

Vietnam War (The end of the war) V: 376

Warren Report W: 37

Ford, Hannibal Choate [American inventor]

F: 379

Ford, Henry [American businessman] F: 379

with pictures

Airplane (The golden age) A: 235

Automobile (The birth of the automobile indus-

try) A: 963-964 *with picture; (Henry Ford)*

A: 965 *with picture*

Aviation (Aviation progress) A: 988

Dearborn D: 60

Edison, Thomas Alva (Honors) E: 82 *with pic-*

ture

Ford Foundation (History) F: 382

Ford Motor Company F: 382

Michigan (The early 1900's) M: 509

Technology (The Industrial Revolution) T: 75

Ford, Henry, II [American businessman] F: 380

Ford, John [American director] F: 381

Motion picture (Best achievement in directing:

1935, 1940, 1941, 1952) M: 862

Ford, John [English dramatist] F: 381

Ford, Robert [American bandit]

James, Jesse J: 27

Ford, Sam C. [American political leader]

Montana (table) M: 757

Ford, Seabury [American political leader]

Ohio (table) O: 699

Ford, Thomas [American political leader]

Illinois (table) I: 71

Ford, Wendell Hampton [American political

leader] F: 381

Kentucky (table) K: 290

Ford, Whitey [American baseball player]

Baseball (table: Hall of Fame) B: 134

Ford Foundation [organization] F: 381

Ford Motor Company F: 382

Foundations (table) F: 430; (International

affairs) F: 431

Ford Instrument Company

Ford, Hannibal Choate F: 379

Ford Motor Company F: 382

Automobile (Major producing countries and

companies) A: 958-959; (Henry Ford)

A: 965; (Changes at the top) A: 966

Dearborn D: 60

Firestone, Harvey Samuel F: 135

Ford, Henry F: 379

Ford, Henry, II F: 380

Manufacturing (table) M: 170

Michigan (The early 1900's) M: 509

Sports car (History) So: 803

Ford Tri-Motor [airplane]

Airplane (The golden age) A: 235; *picture on*

A: 233

Aviation picture on A: 989

Forde, Francis [Australian political leader]

Australia (table) A: 925

Fordice, Kirk [American political leader]

Mississippi (table) M: 640

Fordney-McCumber Tariff Act [1922]

United States, History of the (Government and

business) U: 187

Ford's Theatre [Washington, D.C.]

Booth, John Wilkes B: 480

Lincoln, Abraham (Assassination) L: 326; *pic-*

ture on L: 325

Washington, D.C. (Ford's Theatre) W: 75; *map*

on W: 76; *picture on* W: 78

Ford's Theatre National Historic Site

[Washington, D.C.]

National Park System (table: National historic

sites) N: 52

Fordson

Dearborn D: 60

Fore!

Golf (The course) G: 260-261

Fore [ship]

Sailing (Hull) S: 23

Forearm [anatomy]

Arm A: 717 *with diagram*

Forebrain

Brain (In vertebrates) B: 559

Forecasting, Weather See Weather forecasting

in this index

Forecastle [ship]

Caravel C: 202

Galleon G: 15

Ship (The cog) S: 407; (Nautical terms) S: 416

with diagram; (General cargo ships)

S: 417

Foreclosure [law]

Mortgage M: 820

Receiver R: 174

Forefathers' Day [custom]

Holiday (In the United States) H: 290-291

Foregut

Insect (Digestive system) I: 289

Forehand drive

Tennis (The ball in play) T: 163; *pictures on*

T: 164

Foreign Affairs [magazine]

Council on Foreign Relations Ci: 1096

Foreign Affairs, Department of [former name]

State, Department of (Establishment) So: 860

Foreign affairs, Minister of [office]

Canada, Government of (The Cabinet) C: 132;

diagram on C: 137

Foreign aid F: 382 *with pictures*

Africa (Foreign aid) A: 129

Cold War (The Containment Policy) Ci: 763

Economics (Developing economies) E: 64

Latin America (Latin America and the United

States) L: 109

Technical assistance T: 73

Truman, Harry S. (Foreign affairs) T: 471

United Nations (Economic and technical aid)

U: 87

See also the list of Related Articles in the

Foreign Aid article

Foreign bill of exchange

Economics (World finance) E: 64

Foreign correspondent [journalism] F: 385

Foreign exchange controls

Exports and imports (Import restrictions)

E: 455

Foreign exchange market

Money (International finance) M: 716

Foreign exchange rate See Exchange rate in

this index

Foreign film

Motion picture (Postwar realism) M: 869 *with*

pictures; (The New Wave in France)

M: 870 *with picture*

Foreign Intelligence Service [agency]

Primakov, Yevgeny Maksimovich P: 776

Russia (Courts) R: 532

Foreign Investment Review Agency

Canada, History of (Foreign affairs) C: 152-153

Foreign language study

Language (Learning a foreign language) L: 62

with picture

Foreign Legion [military] F: 385

Foreign mission

Missionary M: 620

Foreign office [government]

Diplomacy (Diplomatic representatives) D: 216

Foreign policy [political science] F: 386

See also United States foreign policy in *this*

index

Foreign aid F: 382

International law I: 340

International relations I: 343

International trade (Government trade policies)

I: 348

Foreign Policy Association F: 387

Foreign relations See Foreign policy;

International relations in *this index*

Foreign Scholarships, Board of

Fulbright Scholarship F: 554

Foreign Service [diplomacy] F: 388

Ambassador A: 404

Attaché A: 878

Consul Ci: 1017

Diplomatic corps D: 217

Foreign Service Act [1946]

Foreign Service (After World War II) F: 389

Foreign Service Institute [Washington, D.C.]

Foreign Service (Service) F: 388

Foreign trade See International trade in *this*

index

Foreign trade zone F: 389

Free trade zone F: 500

Foreign-Trade Zones Board [U.S.]

Foreign trade zone F: 389

Free trade zone F: 500

Foreman [manager]

Careers *picture on* C: 227

Foreman, George [American boxer] F: 389 *with*

portrait

Foremast [ship]

Galleon G: 15

Sailing (Spars) S: 23

Ship (The full-rigged ship) S: 408

Forensic ballistics [criminology]

Ballistics (Forensic ballistics) B: 56

Forensic dentistry

Dentistry (Oral pathology) D: 144

Forensic science

Crime laboratory Ci:

326 Forest, National

Jungle J: 195
National forest N: 35
Plant (Where plants live) P: 522 *with pictures*
Forest, National See National forest in this index
Forest, Petrified
Petrified forest P: 328 *with picture*
Tree (Fossil trees) T: 415 *with picture*
Forest and Rangeland Renewable Resources Planning Act [1974]
Forestry (Laws that protect U.S. forest resources) F: 408
Forest City [Ontario]
London L: 444
Forest conservation
Conservation (Kinds of conservation) Ci: 976;
(Forest conservation) Ci: 981
Forest elephant
Elephant (Kinds of elephants) E: 227
Forest entomology [science]
Entomology (What entomologists study) E: 328
Forest fire
Forestry (Fire and forests) F: 407 *with picture*
Airplane (Special-purpose planes) A: 212
Drought D: 349
National Park System (Preserving the parklands) N: 47
Forest floor
Forest (The forest floor) F: 392 *with picture*
Forest Hills Gardens [district]
New York City (Queens) N: 329
Forest History Center [Grand Rapids]
Minnesota (Places to visit) M: 594
Forest horse
Horse (Wild horses) H: 348
"Forest Hymn, A" [poem by Bryant]
Bryant, William Cullen (His early works) B: 655-656
Forest Institute, American [organization]
Tree farming T: 433
Forest management
Forestry F: 404; (History) F: 408
Lumber (Cutting down trees) L: 518
Forest Park [park]
Portland [Oregon] (Education and cultural life) P: 683-684
Saint Louis (Parks) S: 48; (The 1900's) S: 49
Forest Pest Control Act [1947]
Forestry (Laws that protect U.S. forest resources) F: 408
Forest products F: 400 *with pictures*
See also Forest, Forestry in this index
Bark (How people use bark) B: 110-111
Lumber L: 517 *with pictures*
Tree farming T: 433
Wood W: 389 *with pictures*
Forest ranger [career]
Forest Service F: 403
National forest (Administration) N: 36
Forest reserve [U.S. history]
Forestry (History) F: 408
National forest (History) N: 36
Forest Sami [people]
Sami S: 79
Forest Service [U.S.] F: 403
Forestry (History) F: 408
National forest N: 35
National Trails System N: 61
Pinchot, Gifford P: 467
Forest supervisor [office]
National forest (Administration) N: 36
Forest tent caterpillar [insect]
Tent caterpillar T: 171
Forester [career]
Forestry F: 404 *with picture*
Lumber (Cutting down trees) L: 518
Forester, Cecil Scott [British author] F: 403
Forestry F: 404 *with pictures*
See also Forest, Forest products in this index
Botany (Uses of plants) B: 508
Careers (Farming, fishing, and forestry) C: 222 *with picture*
Conservation (Careers in conservation) Ci: 990
National forest (Uses) N: 35
Forever... [book by Blume]
Blume, Judy B: 425
Forever Free [book by Adamson]
Adamson, Joy A: 45
Forfeiture [law] F: 408
Forgeall, Dallán [Irish poet]
Irish literature (Early Irish literature) I: 430
Forge [furnace]
Forging (Hand forging) F: 409 *with picture*

Forgery [crime] F: 408
Graphology G: 323
Forget-me-not [plant] F: 408 *with picture*
Flower picture on F: 289
Forging [industrial process] F: 409 *with pictures*
Aluminum (Forging) A: 396
Automobile (Manufacturing) A: 957
Die and diemaking D: 195
Iron and steel (Rolling) I: 447
Forging hammer
Forging (Machine forging) F: 409
Forgiveness Sunday
Easter (The beginning of Lent) E: 42
Forgotten People: A Study of New Mexicans
[book by Sánchez]
Sánchez, George Isidore S: 106
Forillon National Park [Quebec]
Canada (table: National parks and national park reserves) C: 113
Fork [riding equipment]
Saddle diagram on S: 7
Fork-fern [plant]
Plant (Classification of plants) P: 547 *with picture*
Forked lightning
Lightning (Appearance) L: 300
Forks, The [historic area]
Canada (table: National historic sites) C: 114
Winnipeg (History) W: 341-342
Forlanini, Enrico [Italian inventor]
Hydrofoil (History) H: 468
Form [aesthetics]
Art and the arts (The reasons for art) A: 745
Interior design (Elements of design) I: 327 *with pictures*
Philosophy (Ancient philosophy) P: 386
Form [animal home]
Hare H: 60
Rabbit (Homes) R: 48
Form [psychology]
Gestalt psychology G: 175
Form class [grammar]
English language (Grammar) E: 312
Parts of speech P: 189
Form drag [physics]
Aerodynamics (Form drag) A: 87
Formal cause [philosophy]
Aristotle (Philosophy of nature) A: 664
Formal censorship
Censorship (Censorship methods) C: 346
Formal criticism
Criticism (Kinds of literary criticism) Ci: 1146
Formal education
Education E: 86
Formal essay [literature]
Essay E: 359
Formal garden
Gardening (Ornamental gardens) G: 31 *with picture*
Formal hands [writing]
Paleography P: 103
Formal invitation
Letter writing (Formal invitations) L: 212 *with pictures*
Formal operations [psychology]
Piaget, Jean P: 445
Formaldehyde [chemical] F: 410
Disinfectant D: 235
Methanol M: 434
Phenolic P: 356
Formalin [chemical]
Formaldehyde F: 410
Formalism [mathematics]
Mathematics (Philosophies of mathematics) M: 307
Forman, Milos [Czechoslovak director]
Motion picture (Best achievement in directing: 1975, 1984) M: 862; (Movies in the 1960's) M: 871
Formed element [physiology]
Blood (The composition of blood) B: 407
Circulatory system (The blood) Ci: 559
Former Prophets [books, Old Testament]
Bible (Books of the Hebrew Bible) B: 279-280
Former Yugoslav Republic of Macedonia See Macedonia in this index
Formic acid [chemical] F: 410
Formosa See Taiwan in this index
Formosus [pope]
Pope (table) P: 666
Forms, Theory of [philosophy]
Plato (The theory of forms) P: 568
Neoplatonism N: 124
Formula [food]

Baby (The first month) B: 6; (Feeding procedures) B: 9
Formula [mathematics]
Algebra (Writing formulas) A: 353
Calculus (Functions) C: 23
Formula Atlantic [automobile]
Automobile racing (Other kinds of racing) A: 979
Formula One car
Automobile racing (Formula One racing) A: 976 *with picture*
Foroyar Islands See Faroe Islands in this index
Forrest, Edwin [American actor] F: 410 *with portrait*
Macready, William Charles M: 26
Forrest, Nathan Bedford [Confederate general] F: 410
Civil War (Raids) Ci: 629
Ku Klux Klan (Birth of the Klan) K: 389
Mississippi (The Civil War and Reconstruction) M: 642
Forrest Gump [film]
Motion picture (Best picture: 1994) M: 861
Forrestal [ship]
Aircraft carrier (History) A: 207
Forrestal, James Vincent F: 410
Forrestal, James Vincent [American government official] F: 410
Armed Forces Day A: 718
Truman, Harry S. (table) T: 469
Fors Clavigera [book by Ruskin]
Ruskin, John R: 523
Forssmann, Werner [German physician]
Nobel Prizes (Physiology or medicine: 1956) N: 444
Forster, E. M. [British author] F: 410
Forsterite [mineral]
Olivine O: 745
Forsythe Saga, The [book by Galsworthy]
Galsworthy, John G: 16
Forsyth, Alexander [Scottish inventor]
Handgun (Early handguns) H: 45
Forsyth, John [American government official]
Georgia (table) G: 130
Jackson, Andrew (table) J: 11
State, Department of (table) So: 860
Van Buren, Martin (table) V: 273
Forsyth, William [British botanist]
Forsythia F: 411
Forsythia [shrub] F: 411 *with picture*
Flower (Garden perennials) F: 281 *with picture*
Fort [fortification] F: 411
Blockhouse B: 406
Crusades picture on Ci: 1160
Fort, George F. [American political leader]
New Jersey (table) N: 249
Fort, John Franklin [American political leader]
New Jersey (table) N: 249
Fort Amherst-Port La Joye National Historic Site [Prince Edward Island]
Canada (table: National historic sites) C: 114
Prince Edward Island (Places to visit) P: 788
Fort Amsterdam [New York]
Minuit, Peter M: 613
New York City (Settlement) N: 341
Fort Ancient [Ohio]
Mound builders (Other mound builders) M: 883
Ohio (Places to visit) O: 690
Fort Anne National Historic Site [Nova Scotia]
Canada (table: National historic sites) C: 114
Fort Atkinson [Nebraska]
Nebraska (American exploration and settlement) N: 111-112
Fort Battleford [Saskatchewan]
Canada (table: National historic sites) C: 114
Fort Beauséjour National Historic Site [New Brunswick]
Canada (table: National historic sites) C: 114
Fort Belvoir [Virginia] F: 411
Fort Benning [Georgia] F: 411 *with picture*
Fort Benton [Montana]
Montana (Exploration) M: 758
Fort Bliss [Texas] F: 411
El Paso (History) E: 247
Fort Boonesborough State Park [Lexington]
Kentucky picture on K: 283
Fort Bowie National Historic Site [Arizona]
National Park System (table: National historic sites) N: 52
Fort Bragg [North Carolina] F: 411
Fort Bridger [fort, Wyoming]
Wyoming (Exploration) W: 533; *picture on* W: 535

- Fort Brooke** [Florida]
Tampa (History) T: 23
- Fort Calgary** [Alberta]
Calgary (History) C: 34
- Fort Caroline** [Florida]
Florida (Exploration and Spanish settlement) F: 261 *with picture*
Jacksonville (Cultural life and recreation) J: 18
- Fort Caroline National Memorial** [Florida]
National Park System (table: National memorials) N: 54
- Fort Casimir** [Delaware]
Delaware (Exploration and early settlement) D: 110
- Fort Chambly National Historic Site** [Quebec]
Canada (table: National historic sites) C: 114
- Fort Chipewyan** [Alberta]
Mackenzie, Roderick M: 23
- Fort Christina** [Delaware]
Delaware (Exploration and early settlement) D: 110
Minuit, Peter M: 613
Wilmington (History) W: 315
- Fort Clatsop** [Oregon]
Astoria A: 826
Lewis and Clark expedition (Crossing the mountains) L: 223 *with map*
- Fort Clatsop National Memorial** [Oregon]
National Park System (table: National memorials) N: 54
Oregon (Places to visit) O: 836
- Fort Condé** [Alabama]
Alabama (Exploration and settlement) A: 275
- Fort Crèvecoeur** [Illinois]
La Salle, Sieur de (First explorations) L: 80 *with map*
Peoria P: 277
Tonty, Henri de T: 330
- Fort D. A. Russell** [Wyoming]
Cheyenne (History) C: 417-418
- Fort Davis National Historic Site** [Texas]
National Park System (table: National historic sites) N: 52
- Fort Dearborn** [Illinois] F: 412 *with picture*
Chicago (Birth of the city) C: 434
- Fort Dearborn Massacre** [1812]
Fort Dearborn F: 412
Chicago (Indian troubles) C: 434
Illinois (Early national period) I: 72-74
Potawatomi Indians P: 714
- Fort-de-France** [city, Martinique] F: 412
Martinique M: 235
- Fort Delaware**
Delaware (Places to visit) D: 102 *with picture; picture on* D: 112
- Fort Des Moines** [Iowa]
Des Moines (Government and history) D: 160
- Fort Dix** (New Jersey) F: 412
- Fort Donelson, Battle of** [1862]
Civil War (table) C: 624; (Battles of Fort Henry and Fort Donelson) Ci: 629
Foote, Andrew Hull F: 368
- Fort Donelson National Battlefield** [Tennessee]
National Park System (table: National battlefields) N: 55
- Fort Dummer** [Vermont]
Vermont (Exploration and settlement) V: 334; *picture on* V: 335
- Fort Duquesne** [Pennsylvania] F: 412
Braddock, Edward B: 544
French and Indian wars (The French and Indian War) F: 512-513
Washington, George (Surrender of Fort Necessity) W: 94; (Braddock's defeat) W: 94; (Frontier commander) W: 95
- Fort Edmonton** [Alberta]
Edmonton (History) E: 85
- Fort Edmonton Park** [Alberta]
Edmonton (Culture and recreation) E: 84-85
- Fort Edward National Historic Site** [Nova Scotia]
Canada (table: National historic sites) C: 114
- Fort Eustis** [Virginia] F: 413
- Fort Fincastle** [Bahamas]
Bahamas *picture on* B: 29
- Fort Francis E. Warren** [Wyoming]
Cheyenne (History) C: 417-418
- Fort Frederica National Monument** [Georgia] F: 413
National Park System (table: National monuments) N: 51
- Fort Garry** [Manitoba]
Winnipeg (History) W: 341-342
- Fort George** [Belize]
Belize City B: 238
- Fort George** [former name]
Prince George P: 794
- Fort George G. Meade** [Maryland] F: 413
- Fort George National Historic Site** [Ontario]
Canada (table: National historic sites) C: 114
- Fort Gibraltar** [Manitoba]
Winnipeg (History) W: 341
- Fort Gordon** [Georgia] F: 413
- Fort Hawkins** [Georgia]
Macon M: 25
- Fort Henry** [Ontario]
Ontario (Places to visit) O: 774 *with picture*
- Fort Henry, Battle of** [1862]
Civil War (table) Ci: 624; (Battles of Fort Henry and Fort Donelson) Ci: 629
Foote, Andrew Hull F: 368
- Fort Hood** [Texas] F: 413
- Fort Industry** [Ohio]
Toledo (Government and history) T: 321
- Fort Jefferson National Monument**
Dry Tortugas National Park D: 369
- Fort John** [Wyoming]
Wyoming (Exploration) W: 533
- Fort King George** [Georgia]
Colonial life in America (Places to visit) Ci: 800
- Fort Knox** [Kentucky] F: 413 *with picture*
Kentucky (Interesting facts about Kentucky) K: 273 *with picture; picture on* K: 292
- Fort-Lamy**
N'Djamena N: 93
- Fort Langley National Historic Site** [British Columbia]
Canada (table: National historic sites) C: 114
- Fort Laramie** [city, Wyoming]
Wyoming (Schools) W: 520
- Fort Laramie** [fort, Wyoming]
Wyoming (Exploration) W: 533; *picture on* W: 535
- Fort Laramie, Treaty of** [Wyoming]
Wyoming (Indian and settler conflicts) W: 534 *with picture*
- Fort Laramie National Historic Site** [Wyoming]
National Park System (table: National historic sites) N: 52
Wyoming (Places to visit) W: 524
- Fort La Reine** [Manitoba]
Portage la Prairie P: 681
- Fort Larned National Historic Site** [Kansas]
Kansas (Places to visit) K: 226
National Park System (table: National historic sites) N: 52-53
- Fort Lauderdale** [city, Florida] F: 413
- Fort Leavenworth** [Kansas] F: 414
Kansas (Places to visit) K: 226
- Fort La Boeuf** [Pennsylvania]
Washington, George (Messenger to the French) W: 93-94
- Fort Lee** [Virginia] F: 414
- Fort Lee** [West Virginia]
Charleston (Government and history) C: 384
- Fort Lennox National Historic Site** [Quebec]
Canada (table: National historic sites) C: 114
- Fort Leonard Wood** [Missouri] F: 414
- Fort Lernout** [Michigan]
Detroit (Early settlement) D: 170
- Fort Lisa** [Nebraska]
Nebraska (American exploration and settlement) N: 111
- Fort Little Niagara** [Ontario]
Fort Niagara F: 415
- Fort Loudoun Dam** [Tennessee River]
Tennessee Valley Authority (The dams) T: 158-159 *with map*
- Fort Louis** [Alabama]
Alabama (Exploration and settlement) A: 275
Mobile M: 681
- Fort Mackinac** [Michigan]
Mackinac Island M: 24
- Fort Macleod** [Alberta]
Alberta (Early settlement) A: 329
- Fort Madison** [Iowa]
Iowa (Territorial days) I: 393
- Fort Malden National Historic Site** [Ontario]
Canada (table: National historic sites) C: 114
- Fort Mandan** [North Dakota]
North Dakota (Exploration and early settlement) N: 513
- Fort Marion National Monument** [Florida]
Castillo de San Marcos National Monument C: 280
- Fort Massachusetts** [Mississippi]
Mississippi (Places to visit) M: 632
- Fort Matanzas National Monument** [Florida] F: 414
National Park System (table: National monuments) N: 51
- Fort McClellan** [Alabama] F: 414
- Fort McHenry National Monument and Historic Shrine** [Maryland] F: 414
Baltimore (Other interesting places to visit) B: 69 *with picture*
Key, Francis Scott K: 307
Maryland (Places to visit) M: 248 *with picture*; (The War of 1812 and industrial development) M: 258
National Park System (table: National monuments) N: 51
"Star-Spangled Banner" (How the song came to be written) So: 853-854
- Fort McPherson** [Georgia] F: 414
- Fort Meade** [Maryland]
Fort George G. Meade F: 413
- Fort Michilimackinac** [Michigan]
Michigan (Places to visit) M: 498
- Fort Mims** [Alabama]
Alabama (Territorial days) A: 275; *picture on* A: 276
Indian wars (In the South) I: 193 *with map*
- Fort Monmouth** [New Jersey] F: 414
- Fort Monroe** [Virginia] F: 415
- Fort Moultrie** [South Carolina] F: 415
South Carolina (Places to visit) So: 650
- Fort Museum** [Fort Macleod]
Alberta (Places to visit) A: 320
- Fort Nashborough** [Tennessee]
Nashville N: 22; (History) N: 23
Tennessee (Territorial years) T: 153
- Fort Navidad** [Haiti]
Haiti (History) H: 15
- Fort Necessity** [Pennsylvania] F: 415
National Park System (table: National battlefields) N: 55
Washington, George (Surrender of Fort Necessity) W: 94
- Fort Niagara** [New York] F: 415
Colonial life in America (Places to visit) Ci: 801
New York (Places to visit) N: 302
- Fort No. 1, at Pointe-Lévis** [Quebec]
Canada (table: National historic sites) C: 114
- Fort Orange** [New York]
Albany (Government and history) A: 309-310
New York (Exploration and settlement) N: 314
- Fort Peck Dam** [Missouri River, Montana] F: 415
Dam (table) D: 18 *with pictures*
Montana (Places to visit) M: 750; (Depression years) M: 760
- Fort Peck Lake**
Montana (Rivers and lakes) M: 752-754
- Fort Phil Kearny** [Wyoming]
Wyoming (Indian and settler conflicts) W: 534
- Fort Pickens** [Florida] F: 415
- Fort Pitt** [Pennsylvania]
Pittsburgh P: 500a; (Early days) P: 501
- Fort Pitt** [Saskatchewan]
Saskatchewan *picture on* S: 146
- Fort Point National Historic Site** [California]
National Park System (table: National historic sites) N: 52-53
- Fort Pontchartrain** [Michigan]
Cadillac, Antoine de Lamothe C: 11
Detroit (Early settlement) D: 170
Pontiac P: 657
- Fort Prince of Wales National Historic Park** [Manitoba]
Manitoba (Places to visit) M: 152
- Fort Pueblo** [Colorado]
Pueblo P: 870
- Fort Pulaski National Monument** [Georgia] F: 415
National Park System (table: National monuments) N: 51
- Fort Raleigh National Historic Site** [North Carolina]
National Park System (table: National historic sites) N: 52-53
- Fort Randall Dam** [Missouri River, South Dakota] F: 415
South Dakota *picture on* So: 679
- Fort Recovery** [Ohio]
Ohio (Places to visit) O: 690
- Fort Richardson** [Alaska]
Anchorage A: 450
- Fort Riley** [Kansas] F: 415
Kansas (Places to visit) K: 226
- Fort Rodd Hill National Historic Site** [British Columbia]

Canada (table: National historic sites) C: 114

Fort Rosalie [Mississippi]

Natchez N: 26

Fort Ross

California *picture on* C: 61

Fort Rouge [Manitoba]

Winnipeg (History) W: 341

Fort Rouillé [Ontario]

Toronto (Early settlement) T: 340-340a

Fort Rucker [Alabama] F: 416

Fort Sackville [Indiana]

Indiana *picture on* I: 217

Vincennes V: 386

Fort Saint Anthony

Minneapolis (Early days) M: 583

Minnesota (The Louisiana Purchase) M: 603

Fort Saint James National Historic Site

[British Columbia]

Canada (table: National historic sites) C: 114

Fort Saint Joseph [Niles]

Michigan (British control) M: 508

Fort Saint Joseph National Historic Site

[Ontario]

Canada (table: National historic sites) C: 114

Fort Saint Louis [Illinois]

La Salle, Sieur de (Expeditions to the Gulf of Mexico) L: 80 *with map*

Fort Saint Louis [Quebec]

Quebec (Early days) Q: 36

Fort Saint Louis [Texas]

Texas (French exploration) T: 204

Fort Sainte Marie [Ontario]

Ontario (Early settlement) O: 784

Fort Sam Houston [Texas] F: 416

Fort San Antonio de Bexar [Texas]

Texas (The mission period) T: 206

Fort Schuyler [New York]

Utica U: 251

Fort Scott National Historic Site [Kansas]

Kansas (Places to visit) K: 226

National Park System (table: National historic sites) N: 52-53

Fort Shafter [Hawaii] F: 416

Fort Sill [Oklahoma] F: 416

Oklahoma (Places to visit) O: 722

Fort Smith [city, Arkansas] F: 416

Arkansas (Average monthly weather) A: 708;

(Territorial years) A: 712; *picture on* A: 713

Long, Stephen Harriman L: 446

Fort Smith National Historic Site [Arkansas-

Oklahoma]

National Park System (table: National historic sites) N: 52-53

Fort Snelling [Minnesota]

Minnesota (Schools) M: 588; (Places to visit)

M: 594; (The Louisiana Purchase) M: 603-

604

Fort Snelling, Sioux Scalp Dance [painting by

Kane]

Minnesota *picture on* M: 603

Fort Stanwix [New York]

Rome R: 435

Fort Stanwix National Monument [New York]

F: 416

National Park System (table: National monu-

ments) N: 51

Fort Stevens, Battle of [1864]

Battleground National Cemetery B: 172

Fort Sullivan [South Carolina]

Fort Moultrie F: 415

Fort Sumter [South Carolina] F: 416

Buchanan, James (Prelude to war) B: 661

Civil War (Secession) Ci: 617 *with picture*;

(Fort Sumter) Ci: 625

Lincoln, Abraham (Fort Sumter and war) L: 321

South Carolina (Places to visit) So: 650 *with*

picture

Fort Sumter National Monument [South

Carolina] F: 416

National Park System (table: National monu-

ments) N: 51

South Carolina (Places to visit) So: 650

Fort Supply Dam [Wolfe Creek, Oklahoma]

F: 416

Fort Témiscamingue National Historic Site

[Quebec]

Canada (table: National historic sites) C: 114

Fort Ticonderoga [New York] F: 416 *with pic-*

ture

Allen, Ethan A: 371

New York (Places to visit) N: 302

Revolutionary War in America (The evacuation

of Boston) R: 275; (Victory at Saratoga)

R: 282

Saint Clair, Arthur S: 32

Vermont (The Revolutionary War in America)

V: 334

Fort Toronto [Ontario]

Toronto (Early settlement) T: 340-340a

Fort Union National Monument [New Mexico]

F: 416

National Park System (table: National monu-

ments) N: 51

Fort Union Trading Post National Historic

Site [North Dakota-Montana]

National Park System (table: National historic

sites) N: 52-53

Fort Vancouver National Historic Site

[Washington]

National Park System (table: National historic

sites) N: 52-53

Fort Walsh National Historic Site

[Saskatchewan]

Canada (table: National historic sites) C: 114

Fort Washington, Battle of [1776]

Revolutionary War in America (The campaign

in New York) R: 280-281

Fort Washington Park [Maryland]

National Park System (table: National park-

ways and other national parklands) N: 56

Fort Wayne [city, Indiana] F: 417

Indiana (Places to visit) I: 206 *with picture*

Fort Wellington National Historic Site

[Ontario]

Canada (table: National historic sites) C: 114

Fort Western [Maine]

Augusta A: 888

Maine (Places to visit) M: 78

Fort William [former name]

Thunder Bay T: 272

Fort William [fort, Wyoming]

Wyoming (Exploration) W: 533

Fort William Henry [New York]

French and Indian wars (The French and

Indian War) F: 512-513 *with map*

Fort Wood [New York]

Liberty Island L: 233

Statue of Liberty (Description) So: 873 *with*

picture

Fort Worth [city, Texas] F: 417 *with picture*

Fort Worth Museum of Science and History

Fort Worth (Education and cultural life) F: 418

Fort Worth Zoological Park

Fort Worth (Education and cultural life) F: 418

Fort Yuma Reservation [California and Arizona]

Quechan Indians Q: 38

Fortaleza [city, Brazil] F: 419

Fortas, Abe [American jurist] F: 419

Nixon, Richard Milhous (The national scene)

N: 434

Forte [music]

Music (table) M: 954

Forten, James [American abolitionist] F: 419

Forth Bridge [Scotland]

Bridge (table: Cantilever) B: 603

Firth of Forth F: 143

Fortier, Michael [American public figure]

Oklahoma City (History) O: 736-737

Fortier, Yves [Canadian diplomat]

United Nations (table) U: 86

Fortification See Castle; Fort; Walled city *in this*

index

Fortifications of Quebec

Canada (table: National historic sites) C: 114

Fortified cereal

Cereal C: 361

Fortified milk

Milk (Fortification) M: 548

Fortified wine

Wine (Clarifying and aging the wine) W: 338

Fortissimo [music]

Music (table) M: 954; (Indicating expression)

M: 955 *with picture*

Fortress of Louisbourg See Louisbourg,

Fortress of *in this index*

Fortress of Louisbourg National Historic Site

[Nova Scotia]

Canada (table: National Historic sites) C: 114

Fortuna [Roman mythology] F: 419

Fortune [ship]

Plymouth Colony (Expansion of the colony)

P: 583

Fortune and Men's Eyes [play by Herbert]

Canadian literature (Modern Canadian drama)

C: 161

Fortune Teller, The [painting by Caravaggio]

Caravaggio, Michelangelo Merisi da *picture on*

C: 202

Fortune-Tellers, The [book by Alexander]

Literature for children *picture on* L: 368

Fortunetelling F: 419

Divination D: 241

Halloween (Fortunetelling) H: 24b

Magic (From the 1500's to the 1700's) M: 50

with pictures

Superstition So: 995

45 Seconds from Broadway [play by Simon]

Simon, Neil S: 467

Forty Immortals [members of]

French Academy F: 511

Forty-Mile Creek

Yukon River (Upper Yukon) Y: 582

Forty-Niners [U.S. history] F: 420

California (The gold rush) C: 62

Taylor, Zachary *picture on* T: 59

Westward movement in America (California)

W: 249

49ers, San Francisco See 49ers, San Francisco

in this index

42nd Parallel, The [book by Dos Passos]

Dos Passos, John D: 311

Forty-Two Articles [religion]

Ridley, Nicholas R: 337

Forty-two-line Bible

Book (The development of printed books)

B: 466-467

Forum, Roman [ancient Rome] F: 420 *with pic-*

ture

Rome (Forums) R: 433 *with picture*

Rome, Ancient (Life of the people) R: 437 *with*

picture

Forum des Halles, Le [Paris]

Paris (Renewal and new construction) P: 166-

167

Forward [ship]

Ship (Nautical terms) S: 416

Forward [sports]

Basketball (The players) B: 144

Hockey (The starting lineup) H: 275

Soccer (The forwards) So: 545 *with diagram*

Forward, Walter [American government

official]

Treasury, Department of the (table) T: 407

Tyler, John (table) T: 534

Forward bias [electronics]

Electronics (Diodes) E: 210-211 *with diagram*

Forward contract [economics]

Commodity exchange (Forward and futures

contracts) Ci: 873

Cotton (Selling) Ci: 1091

Livestock (Direct markets) L: 398

National Farmers Organization N: 35

Forward extrusion [industrial process]

Extrusion E: 459

Forward-Looking Infrared system [electronic

device]

Night vision systems N: 419

Forward pass

Football (Changes in the game) F: 366

Forward stroke

Cricket (The batting side) Ci: 1133 *with picture*

Fosbury, Dick [American athlete]

High jump H: 227

Track and field (Jumping events) T: 355-356

Fosbury flop

High jump H: 227 *with picture*

Track and field (Jumping events) T: 355

Foscolo, Ugo [Italian author] F: 421

Italian literature (The baroque period and the

Age of Reason) I: 494-495

- Earth (Life on Earth) E: 27 *with picture*
Evolution (The fossil record) E: 430
Fish (The development of fish) F: 171 *with picture*
Gem G: 77
Geology (Experimental geology) G: 99
Insect *picture on I*: 279
Nebraska (Interesting facts) N: 95
Ocean *picture on O*: 651
Paleobotany P: 102
Paleontology P: 103
Prehistoric animal P: 736; (The study of prehistoric animals) P: 741 *with picture*
Prehistoric people P: 743; (Studying prehistoric people) P: 753, (table) P: 752
Radiocarbon R: 97
Tree (Fossil trees) T: 415
Fossil Butte National Monument [Wyoming] F: 428
National Park System (table: National monuments) N: 51
Wyoming (Places to visit) W: 524
Fossil fuel
Climate Ci: 675; (Human activity) Ci: 678
Coal (How coal was formed) Ci: 717
Conservation (Energy conservation) Ci: 983
Coral reef (Coral reefs and people) Ci: 1049
Electric power (Fossil-fueled steam electric power plants) E: 183
Energy supply E: 277; (Depletion of fuel reserves) E: 281
Fuel F: 550
Global warming (Causes of global warming) G: 232
Greenhouse effect (Increases in greenhouse gases) G: 383
Nuclear energy (The role of nuclear energy in power production) N: 580
Technology (Challenges of technology) T: 76-77
Fossiliferous limestone
Rock (Organic sediments) R: 372
Fossorial mammal
Mammal (Underground) M: 122
Foster, Alicia Christian [American actress/director] See Foster, Jodie *in this index*
Foster, Bill [American baseball player]
Baseball (table: Hall of Fame) B: 134
Foster, Charles [American government official]
Ohio (table) O: 699
Treasury, Department of the (table) T: 407
Foster, Sir George Eulas [Canadian political leader] F: 428
Foster, Jane McDowell [wife of]
Foster, Stephen Collins F: 428
Foster, Jodie [American actress/director] F: 428
Motion picture (Best performance by an actress: 1988, 1991) M: 862
Foster, John W. [American government official]
State, Department of (table) So: 860
Foster, Murphy J. [American political leader]
Louisiana (table) L: 496
Foster, Murphy J., Jr. [American political leader]
Louisiana (table) L: 496
Foster, Rube [American baseball player]
Baseball (table: Hall of Fame) B: 134
Foster, Stephen Collins [American composer]
F: 428 *with portrait*
Folk music (Characteristics of folk music) F: 321
Kentucky (Places to visit) K: 282
Popular music (1840's to the Civil War) P: 669
Foster, Walter E. [Canadian political leader]
New Brunswick (table) N: 196
Foster Botanical Gardens
Honolulu (Cultural life) H: 321-322
Foster care F: 428
Adoption (The adoption process) A: 66
Children's home C: 457
Foster Care [program]
Children's Bureau C: 457
Foster Grandparent Program
Old age (Employment and other activities) O: 739
Foster person
Foster care F: 428
Foucault, Jean Bernard Léon [French physicist] F: 429
Gyroscope (History) G: 454
Optics (History) O: 813
Pendulum (Other pendulums) P: 237-238
Foucault, Michel [French philosopher] F: 429
Foucault pendulum
Pendulum (Other pendulums) P: 237-238
Fouché, Joseph [French government official]
Secret police S: 278
Foucher, Adèle (wife of)
Hugo, Victor Marie (Early life) H: 409
Foul [sports]
Boxing (Fight rules) B: 529
Lacrosse (Men's lacrosse) L: 24
Soccer (Fouls) So: 546
Foul ball
Baseball (Outs by batters) B: 128-129
Foul territory
Baseball (The infield) B: 126 *with diagram*;
(Foul territory) B: 127 *with diagram*
Foul tip
Baseball (Outs by batters) B: 128-129
Foulbrood [disease]
Bee (Enemies) B: 205
Found object [art]
Sculpture (Assemblages) S: 257 *with picture*
Found space
Theater (The stage) T: 233-235
Foundation [construction]
Building construction (Parts of a building) B: 681-682; (Constructing a skyscraper) B: 683
House (The foundation) H: 380; *diagram on* H: 383
Pile P: 462
Skyscraper (Building skyscrapers) S: 497
Foundation Center [organization]
Foundations F: 429
Foundation Directory
Foundations F: 429
Foundation for Interior Design Research
Interior design (Training) I: 334
Foundation of the Complete Theory of Knowledge [book by Fichte]
Fichte, Johann Gottlieb F: 90
Foundation series [books by Asimov]
Asimov, Isaac A: 814
Foundations [organizations] F: 429
Endowment E: 273
Foundations of Economic Analysis [book by Samuelson]
Samuelson, Paul Anthony S: 82
Founder [disease]
Horse (Medical care) H: 356
Founder effect [genetics]
Races, Human (The founder effect) R: 59
Founding [industrial process]
Foundry F: 432
Founding Fathers (U.S. history) F: 432
United States, History of the (Forming a new nation) U: 160
Foundry [industry] F: 432
Aluminum (Casting the molten aluminum) A: 394-395
Heat *picture on* H: 148
Foundry ingot [metallurgy]
Aluminum (Casting the molten aluminum) A: 393-394
Fountain [art by Duchamp]
Duchamp, Marcel D: 373
Fountain [water] F: 432 *with picture*
Rome *picture on* R: 430
Taft, Lorado *picture on* T: 7
Fountain of Neptune [Rome]
Neptune *picture on* N: 128
Rome *picture on* R: 430
Fountain of the Four Rivers [sculpture by Bernini]
Italy *picture on* I: 505
Fountain of the Great Lakes [sculpture by Taft]
Taft, Lorado T: 7 *with picture*
Fountain of Time [sculpture by Taft]
Taft, Lorado T: 7
Fountain of Youth [legendary spring] F: 433
Ponce de León, Juan P: 655
Fountain Paint Pots
Yellowstone National Park (The Lower Loop) Y: 558
Fountain pen
Ink (Writing inks) I: 273
Pen P: 233 *with picture*
Fountainhead, The [book by Rand]
Rand, Ayn R: 136
Fountains of Rome, The [music by Respighi]
Respighi, Ottorino R: 259
Fouquet, Jean [French artist]
France *picture on* F: 463
Four Apostles [painting by Dürer]
Dürer, Albrecht D: 388
Four Books [religious books]
Religion (Confucianism) R: 220
Four Books of Sentences [book by Lombard]
Lombard, Peter L: 427
Scholasticism (The scholastic method) S: 179
Duns Scotus, John D: 386
"Four Branches of the Mabinogi" [stories]
Mythology (Celtic mythology) M: 983; (Welsh myths) M: 984
Four-color theorem [topology]
Topology T: 333
Four Corners [region, U.S.] F: 433
Anasazi A: 448a
Four Corners virus See Pulmonary syndrome hantavirus *in this index*
Four-eyed fish See Anableps *in this index*
Four Freedoms [paintings by Rockwell]
Rockwell, Norman R: 394
Four freedoms [U.S. history]
Roosevelt, Franklin Delano (The eve of war) R: 460
Four Gospels, The [books by Zola]
Zola, Émile Z: 602
4-H F: 433 *with pictures*
Agricultural education (Youth programs and organizations) A: 145
Four-H Youth Exchange, International
4-H (4-H sponsors) F: 435
Four-horned antelope [animal]
Antelope (Kinds of antelope) A: 542
Four Horsemen [football]
Football *picture on* F: 366
Four Horsemen of the Apocalypse, The [book by Blasco Ibáñez]
Blasco Ibáñez, Vicente B: 398
Four Horsemen of the Apocalypse, The [film]
Valentino, Rudolph V: 264 *with picture*
Four Horsemen of the Apocalypse [New Testament] F: 437 *with picture*
Four Hundred, Council of the [ancient Greece]
Areopagus A: 645
400 Blows, The [film]
Motion picture (The New Wave in France) M: 870
400-meter hurdles [race]
Hurdling H: 452
421 chair
Furniture (The retro style) F: 584; *picture on* F: 583
Four-in-hand
Necktie N: 117
Four Little Girls [film]
Lee, Spike L: 179
Four Masters [Chinese history]
Painting (Chinese painting) P: 44-46
Four-o'clock [plant] F: 437 *with picture*
401 (k) plan
Pension (Thrifty, or savings, plans) P: 273
Four-of-a-kind
Poker P: 603
Four-poster bed [furniture]
Colonial life in America (Furnishings) Ci: 797-799
Four-Power Treaty
Washington Conference W: 109
Four Quartets [poem by Eliot]
Eliot, T. S. (His works) E: 237-238
Four Rivers, Fountain of the [Rome]
Fountain F: 432
Four Saints in Three Acts [opera by Thomson]
Thomson, Virgil T: 265
Four Seasons, The [music by Vivaldi]
Vivaldi, Antonio V: 433
Four-spring suspension [mechanism]
Truck (Common features of trucks) T: 458
Four-step delivery
Bowling (Delivering the ball) B: 522 *with pictures*
Four-stroke cycle engine
Diesel engine (Kinds of diesel engines) D: 200
Gasoline engine (Cycle) G: 63; (Development of the gasoline engine) G: 66; *diagrams on* G: 65
Four-wheel drive
Automobile (The drive system) A: 953
Transmission (Transmissions and drives) T: 375
Fourcault, Émile [Belgian chemist]
Glass (table) G: 218
Fourdrinier papermaking machine
Paper (Sheet formation) P: 135
Four-eye butterflyfish
Butterflyfish B: 744 *with picture*
Fourier, Charles [French social reformer] F: 437
Collectivism Ci: 775
Marx, Karl (Early development) M: 237

Fourier, Jean Baptiste [French mathematician]
Mathematics (In the 1800's) M: 307
Sound (The study of waves) So: 605

Fournet, Hélène [wife of]
Rubens, Peter Paul (His life) R: 506-507 *with picture*

Fourneyron, Benoît [French engineer]
Turbine (History) T: 498-499

Fournier, Pierre-Simon [French type designer]
Book (The 1600's and 1700's) B: 467

Fourragère
Insignia I: 303

Foursquare Gospel, International Church of the [religious group]
McPherson, Aimee Semple M: 344

Fourteen Points [U.S. history] F: 437
Wilson, Woodrow (The Fourteen Points) W: 325
House, Edward Mandell H: 384
Lippmann, Walter L: 346
United States, History of the (The peace conference and treaty) U: 185
World War I (The Fourteen Points) W: 465

Fourteenth Amendment [U.S. Constitution] F: 438
Constitution of the United States Ci: 1013
Black codes B: 386
Citizenship (The Constitution) Ci: 571
Civil rights (The First Amendment) Ci: 608;
(The struggle for the rights of blacks) Ci: 609
Due process of law D: 378
Government (Interpreting the states' rights) G: 287
Holmes, Oliver Wendell, Jr. (Supreme Court justice) H: 295
Johnson, Andrew (Break with Congress) J: 140
Reconstruction (The 14th Amendment) R: 178
Supreme Court of the United States (Federalism) So: 1000-1001
Trumbull, Lyman T: 473

Fourth Amendment [U.S. Constitution]
Constitution of the United States Ci: 1012
Privacy, Right of P: 808a
Search warrant S: 269
Wiretapping W: 345

Fourth dimension [mathematics] F: 438

Fourth estate F: 438

Fourth of July See Independence Day *in this index*

Fourth Republic [French history]
France (The Fourth Republic) F: 475

Fous de Bassan, Les [book by Hébert]
Canadian literature (Modern literature: 1945 to the present) C: 160

Fouta Djallon [region]
Guinea (Land and climate) G: 431 *with map*; (History) G: 432

Fouta Djallon mountains
Senegal (Land and climate) S: 299

Fovea centralis [anatomy]
Eye (Focusing) E: 462 *with picture*; *picture on* E: 461

Fowl
Chicken C: 440; (Producing meat) C: 445
Poultry P: 720

Fowle, D. G. [American political leader]
North Carolina (table) N: 490

Fowler, Henry Hamill [American government official]
Treasury, Department of the (table) T: 407

Fowler, Robert [Canadian diplomat]
United Nations (table) U: 86

Fowler, William Alfred [American physicist]
Astronomy (Advances in astrophysics) A: 848-849
Nobel Prizes (Physics: 1983) N: 441

Fowler's toad [animal]
Toad *picture on* T: 303

Fowling in the Marshes [painting]
Painting (Egyptian painting) P: 40-41 *with picture*

Fox [animal] F: 438 *with pictures*
Animal *picture on* A: 483
Fur (table) F: 561; *picture on* F: 562
Mammal *diagram on* M: 121

Fox [company]
Motion picture (Movies become big business) M: 866

Fox, Charles James [British statesman] F: 441
Hastings, Warren H: 83
North, Lord N: 457
Radicalism (In Europe) R: 82

Fox, George [English religious leader] F: 441
Peace (From the 1400's to the 1700's) P: 206
Quakers (History) Q: 4

Fox, George L. [American pantomimist]
Pantomime P: 132

Fox, Harry [American entertainer]
Ballroom dancing B: 63
Fox trot F: 442

Fox, Katherine [American religious leader]
Spiritualism So: 796

Fox, Margaret [American religious leader]
Spiritualism So: 796

Fox, Nelson [American baseball player]
Baseball (table: Hall of Fame) B: 134

Fox, Paula [American author] F: 441
Literature for children (Fiction) L: 358-359

Fox, Terry [Canadian athlete] F: 441 *with picture*

Fox, Vicente [Mexican political leader] See Fox Quesada, Vicente *in this index*

"Fox and the Grapes, The" [table]
Allegory A: 371
Fable F: 2 *with picture*

Fox Broadcasting Company [television network]
Television (The national networks) T: 114;
(Important dates in television) T: 126

Fox grape
Grape (North American grapes) G: 320

Fox hunting [sport] F: 442
Virginia *picture on* V: 402

Fox Indians
Sauk Indians S: 163
Iowa (Indian days) I: 393
Wisconsin (Struggle for control) W: 366

FOX network [television] See Fox Broadcasting Company *in this index*

Fox Quesada, Vicente [Mexican political leader] F: 442
Mexico (Recent developments) M: 474-475
President of the United States P: 767

Fox River [Wisconsin]
Lake Winnebago L: 48

Fox squirrel [animal]
Squirrel (Types of squirrels) So: 815

Fox Talbot, William Henry [British scientist]
Talbotype T: 19
Communication (The 1800's) Ci: 881-882
Photography (Early developments) P: 425
Printing (Developments in platemaking) P: 83-804

Fox terrier [dog]
Dog *pictures on* D: 272, D: 273
Smooth fox terrier S: 521
Wire fox terrier W: 344

Fox trot [dance] F: 442
Ballroom dancing B: 63

Foxberry [fruit]
Lingonberry L: 335 *with picture*

Foxe, John [English teacher]
Biography (The Renaissance) B: 313

Foxe, Luke [English seaman]
Manitoba (Exploration) M: 160

Foxfire [light]
Will-o'-the-wisp W: 307

Foxglove [plant] F: 442 *with picture*
Digitalis D: 203
Flower *picture on* F: 277
Plant (Medicines) P: 518

Foxhound [dog]
American foxhound A: 411 *with picture*
Dog *picture on* D: 270
English foxhound E: 312 *with picture*

Foxtail [weed]
Lawn *picture on* L: 143

Foxtail barley [plant] F: 442

Foxtail millet [hay]
Millet M: 555

Foxx, Jimmie [American baseball player] F: 442

Foyn, Svend [Norwegian whaler]
Whale (Hunting techniques) W: 263

Foyt, A. J. [American race car driver] F: 443
Automobile racing (table: Indianapolis 500 winners) A: 980

FPA [organization]
Foreign Policy Association F: 387

Fr [symbol]
Francium F: 482

FRA [U.S.]
Railroad (Railroad systems) R: 112-113

Fra Angelico See Angelico, Fra *in this index*

Fra Filippo Lippi [Italian painter]
Lippi, Filippo L: 345 *with picture*

Fra Giovanni da Fiesole See Angelico, Fra *in this index*

"Fra Lippo Lippi" [poem by Browning]
Browning, Robert (Browning's poems) B: 646

Fractal [geometry] F: 443 *with diagram*

Fractal geometry [geometry]
Mathematics (Philosophies of mathematics) M: 307

Fraction [industry]
Petroleum (table) P: 331

Fraction [mathematics] F: 444 *with pictures*
Arithmetic (Arithmetic of small fractions) A: 668
Decimal system (Decimals and fractions) D: 72 *with diagrams*
Percentage P: 280
Ratio R: 147

Fractional distillation [chemistry]
Distillation (Simple distillation) D: 238
Paraffin P: 143
Petroleum (Refining petroleum) P: 343-344 *with diagram*

Fractionating column
Distillation (Rectification) D: 239

Fractionating tower
Petroleum (Refining petroleum) P: 343-344

Fractionation [medicine]
Plasma (Uses in medicine) P: 551

Fracture [injury] F: 451 *with diagrams*
Bone (Broken bones) B: 457 *with diagram*
First aid (Fractures and dislocations) F: 140
Osteoporosis O: 867
Rib R: 321

Fracture [mineralogy]
Gem (Cleavage) G: 77

Fragile river mussel
Shell *picture on* S: 387

Fragile-X syndrome [genetics]
Mental retardation (Causes) M: 410
Brain (Genetic disorders) B: 557-558

Fragment, Sentence [grammar]
Sentence (Sentence fragments) S: 304

Fragmenta Aurea [poems by Suckling]
Suckling, Sir John So: 951

Fragmentation [munitions] F: 451
Bomb (Fragmentation bombs) B: 450

Fragmentation bomb [weapon]
Bomb (Fragmentation bombs) B: 450 *with diagram*
Fragmentation F: 451

Fragmentation grenade [weapon]
Grenade G: 390 *with diagram*

Fragmentation shell [weapon]
Fragmentation F: 451

Fragonard, Jean Honoré [French painter] F: 451
Painting (Rococo painting) P: 65-66 *with picture*

Frahm, Herbert Ernst Karl See Brandt, Willy *in this index*

Frail, Dale A. [American astronomer]
Planet (The first discoveries) P: 512

Fram [ship]
Amundsen, Roald (The race to the South Pole) A: 445
Nansen, Fridtjof N: 12
Oslo O: 864

Frambesia [disease] See Yaws *in this index*

Frame [bowling]
Bowling (table) B: 521

Frame [film]
Motion picture (How motion pictures work) M: 857

Frame [television]
Television (The television camera) T: 121-122

Frame, Frederick [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980

Frame construction [architecture]
Building construction (Frame construction) B: 683
Colonial life in America (Houses) Ci: 796
House (Building materials) H: 380; (The frame) H: 382 *with diagram*
Skyscraper (Building skyscrapers) S: 497

Frame of Government
Pennsylvania (Colonial days) P: 264

Frame sled
Inuit (Transportation) I: 354c; *picture on* I: 354d

Framework silicate
Silicate S: 458

Freming lumber
Lumber (Softwood lumber) L: 517

Framingham Heart Study
Heart (Progress in treatment and prevention) H: 145-146

Framley Parsonage [book by Trollope]

Trollope, Anthony T: 449

Franc [money] F: 451 *with pictures*

Money pictures on M: 704

Franca, Celia [British dancer]

Ballet (Ballet in Canada) B: 54

France F: 452 *with pictures and maps*

Christmas (In France) C: 530 *with picture*

Doll (Porcelain dolls) D: 290

English Channel E: 311

Euro E: 378

Flag pictures on F: 206, F: 209, F: 216

Fleur-de-lis F: 234

Furniture (France) F: 572 *with picture*

"Marseillaise" M: 227

Police (In other countries) P: 623 *with picture*

Art and architecture

France (Arts) F: 461 *with pictures*

Ballet (History) B: 50-51

Classical music (History) Ci: 645-646

Motion picture (The New Wave in France) M: 870 *with picture*

Painting (The 1600's and 1700's) P: 58-61; (The 1800's) P: 67; (The 1900's in Europe) P: 77

Porcelain (French porcelain) P: 677

Sculpture (European sculpture) S: 253-254 *with picture*

Statue of Liberty (History) So: 876 *with pictures*

Theater (France) T: 248

Communications and mass media

France (Communication) F: 470

Newspaper (In Europe) N: 386

Defense

Air force (The French Air Force) A: 184

Army (The French Army) A: 726

Foreign Legion F: 385

Maginot Line M: 53

Navy (Major navies of the world) N: 78-79

North Atlantic Treaty Organization (History) N: 471

Zouaves Z: 612

Education

France (Education) F: 460

Government

France (Government) F: 455

Bill of rights (French bill of rights) B: 302

Communism (In non-Communist countries) Ci: 897

Estates-General E: 360

Foreign aid (Other countries' aid programs) F: 384

Law (The first modern law codes) L: 135-136

Local government (Unitary systems) L: 408

President (Dual presidency) P: 756b

Right wing R: 340

Health and welfare

Standard of living (table) So: 834

History

France (History) F: 471

Air force (History) A: 184 *with picture*

Algeria (French rule) A: 364

Alsace-Lorraine A: 387

Arabs (Ottoman and European rule) A: 588

Belgium (The Brabant Revolution) B: 233

Berlin Airlift B: 266

Bourbon (In France) B: 516

Cold War Ci: 762; (The great blocs split) Ci: 768

Colonialism (Later colonialism) Ci: 814

Comoros (History) Ci: 901

Continental System Ci: 1022

Côte d'Ivoire (History) Ci: 1085

Dauphin D: 44

Dien Bien Phu, Battle of D: 198

Exploration (The French and English in North America) E: 446

Franco-Prussian War F: 483

Franks F: 494

French and Indian wars F: 511

French Revolution F: 524

Fronde F: 541

Fur trade (The early fur trade) F: 564

Geneva Accords G: 87

Golden Age G: 255

Holy Roman Empire H: 298 *with map*

Huguenots H: 410

Hundred Years' War H: 437

Indian, American (In Canada) I: 178

Italy (The French Revolution and Napoleon) I: 514-515

Jackson, Andrew (Foreign affairs) J: 13-14

July Revolution J: 190

League of Nations (Disagreement among members) L: 160; (Why the League failed) L: 160

Louisiana Purchase L: 502

Madagascar (History) M: 28-29

Mali (History) M: 109

Mexico (The French invasion) M: 472

Mississippi Schema M: 649

Monroe Doctrine (Origins) M: 739

Netherlands (Wars with England and France) N: 149

New France N: 204 *with picture*

New Zealand (International tensions) N: 356

Revolutionary War in America R: 270; (Diplomatic triumphs) R: 280; (France's entry into the Revolutionary War) R: 283

Revolution of 1848 R: 269

Roman Catholic Church (Growth of the church in Europe) R: 407-409

Seigneurial system S: 287

Senegal (History) S: 299

Seychelles (History) S: 340

Slavery (The decline of slavery) S: 504

Spanish Civil War (Foreign assistance) So: 756a

Suez crisis So: 958

Syndicalism So: 1067

Toronto (History) T: 340

United Kingdom (The growing empire) U: 67

United States, History of the (The English and French) U: 151; (Foreign affairs) U: 162; (The Louisiana Purchase) U: 163

Vietnam V: 364; (History) V: 369-370

War of 1812 W: 28

Waterloo, Battle of (Napoleon returns to France) W: 145

World War I (A system of military alliances) W: 454-455; (The Western Front) W: 455-456; (Destruction and casualties) W: 464

World War II (table: The Allies) W: 471; (The fall of France) W: 474; (table: Military casualties) W: 497

Language and literature

See French language; French literature in this index

People

France (People) F: 455

Food picture on F: 328

Technology and science

AIDS (Cause) A: 163

Industrial Revolution (France) I: 253

Metric system (Creation of the metric system) M: 441

Transportation

See also the list of Related Articles in the France article

France, Anatole [French author] F: 480

France, Institute of [organization]

Institute of France I: 305

France, La [airship]

Airship (The first airships) A: 251

France, Marie de [French poet]

Knights and knighthood (Knighthood in literature) K: 351

Launfal, Sir L: 121

Franca and England in the New World [book by Parkman]

Parkman, Francis P: 171

France-Soir (newspaper)

Paris (Economy) P: 165

Francesca, Piero della See Piero della Francesca in this index

Franche-Comté [former province]

Burgundy B: 705

Franchise [law] F: 480

Chain store C: 369

Hotel (History) H: 377

Motel M: 836

Restaurant (Chains and franchises) R: 262

Soft drink (How soft drinks are made) So: 571

Franchise tax

Taxation (Taxes on transactions) T: 53

Francía, José Gaspar Rodríguez de

[Paraguayan political leader]

Paraguay (Independence) P: 149

Francis I [emperor of Austria] See Francis II [Holy Roman emperor] in this index

Francis I [Holy Roman emperor]

Habsburg, House of H: 3

Maria Theresa M: 199

Francis I [king of France] F: 480

Cartier, Jacques (Exploration of Canada) C: 262

Exploration (The search for a northern passage) E: 446

France (A period of wars) F: 473

Leonardo da Vinci (Last years) L: 200

Louvre L: 507

Renaissance (Political background) R: 237

Francis II [Holy Roman emperor] F: 480

Austria (Wars in the 1700's and 1800's) A: 938

Holy Roman Empire (The House of Habsburg) H: 299

Francis II [king of France]

Catherine de Médicis C: 303

Francis, David R. [American government official]

Cleveland, Grover (table) Ci: 672

Missouri (table) M: 668

Francis, Dick [British author] F: 481

Francis, James B. [English inventor]

Turbine (History) T: 498-499

Francis, John Brown [American political leader]

Rhode Island (table) R: 311

Francis, Thomas, Jr. [American doctor]

Salk, Jonas Edward (His life) S: 68

Francis Case, Lake

South Dakota (Rivers and lakes) So: 676

Francis de Sales, Saint [French religious leader] F: 481

Religious life (Religious life in the 1500's and 1600's) R: 227

Francis Ferdinand [archduke of Austria] See Franz Ferdinand in this index

Francis Joseph [emperor of Austria] F: 481

Austria (Austria-Hungary) A: 939

Beard B: 187

Franz Josef Land F: 494

Maximilian M: 319

Rampolla, Mariano Cardinal R: 133

Francis Marion National Forest

South Carolina (Places to visit) So: 650

Francis of Assisi, Saint [Italian religious leader] F: 481 *with picture*

Christianity picture on C: 525

Franciscans F: 482

Italian literature (The Middle Ages) I: 494

Religious life (Religious life in the Middle Ages) R: 226

Francis turbine

Turbine (Water turbines) T: 496

Francis Xavier See Xavier, Saint Francis in this index

Franciscana [animal] See La Plata dolphin in this index

Franciscans [religious group] F: 482

California (The California missions) C: 60

Capuchins C: 200

Christianity picture on C: 525

Francis of Assisi, Saint F: 481

Friar F: 532

Hispanic Americans (In the Southwest) H: 250-251

Mission life in America (Eastern missions) M: 618

Religious life (Religious life in the Middle Ages) R: 226

Francium [element] F: 482

Alkali A: 369

Franck, César [French composer] F: 482

Franck, James [German physicist]

Nobel Prizes (Physics: 1925) N: 440

Franco, Francisco [Spanish political leader] F: 482 *with portrait*

Falange Española F: 12

Fascism (Fascism in other countries) F: 50

Juan Carlos I J: 177

Madrid (History) M: 40

Spain (Civil war) So: 750 *with picture*

Spanish Civil War (Rebellion leads to civil war) So: 756a; (Progress of the war) So: 756a; (Results of the war) So: 756b

Franco, Itamar [Brazilian political leader]

Brazil (Return to civilian government) B: 586

Franco, Jean [French mountain climber]

Mount Makalu M: 886

Franco-Dutch War [1673-1679]

Grand Alliance G: 305

Franco-Flemish school [art]

Sculpture (European sculpture) S: 253 *with picture*

Franco-Ontarian Festival [Ottawa]

Ottawa (Annual events) O: 873

Franco-Prussian War [1870-1871] F: 483

- Balloon (Balloons in war) B: 61
 France (The Franco-Prussian War) F: 474
 Germany (The unification of Germany) G: 165
 Homing pigeon (History) H: 306
 Paris (Paris in wartime) P: 166
Franconia [former state, Germany]
 Germany (The breakup of Charlemagne's empire) G: 162
Franconia Notch
 New Hampshire (Places to visit) N: 216
Franconia Range
 New Hampshire (Mountains) N: 220
Frank, Anne [German public figure] F: 484 *with portrait*
 Diary D: 184
Frank, Clint [American football player]
 Football (table) F: 363
Frank, Ilya M. [Russian physicist]
 Nobel Prizes (Physics: 1958) N: 441
Frank, Michael [American educator]
 Wisconsin (Schools) W: 351
Frank Slide Interpretive Centre [Alberta]
 Alberta (Places to visit) A: 320 *with picture*
Frankenstein [book by Shelley] F: 484
 Science fiction (The first science fiction) S: 205
 Shelley, Mary Wollstonecraft S: 391
Frankenstein [film]
 Karloff, Boris K: 247
Frankenthaler, Helen [American painter] F: 484
 Painting (Abstract painting) P: 34 *with picture*;
 (Color-field painting) P: 86
Frankfort [Kentucky] F: 484
Frankfurt [city, western Germany] F: 485
Frankfurt, Treaty of [1871]
 Franco-Prussian War (The end of the war) F: 483-484
Frankfurt Airport
 Airport (table) A: 245
Frankfurt Assembly [German history]
 Germany (The Revolution of 1848) G: 165
Frankfurter [food]
 Sausage S: 163
 Food (Interesting facts about food) F: 329
 Iowa *picture on* I: 395
 Meat packing (Sausage making) M: 351 *with picture*
Frankfurter, Felix [American jurist] F: 485
Frankie and Johnny in the Clair de Lune [play by McNally]
 McNally, Terrence M: 344
Frankincense [tree product] F: 485
Ranking and penalty privileges [law] F: 485
Frankish kingdom [European history]
 Charlemagne (Military conquests) C: 378-379 *with map*
 France (History) F: 471 *with map*
 Franks F: 494
Frankland, Sir Edward [British chemist]
 Helium H: 176
Franklin [Idaho]
 Idaho (Exploration and early settlement) I: 42
Franklin, Aratha [American singer] F: 485
Franklin, Barbara H. [American government official]
 Commerce, Department of (table) Ci: 871
Franklin, Battle of [1864]
 Civil War (table) Ci: 624, (North to Nashville) Ci: 632-633
Franklin, Benjamin [American statesman] F: 486 *with pictures*
 Adams, John (Diplomat) A: 36
 Adult education (The colonial period) A: 69
 Albany Congress A: 310
 American literature (Philadelphia) A: 415
 Autobiography A: 942
 Bath (History) B: 164-165
 Cent C: 350
 Colonial life in America (Furnishings) Ci: 797-798, (Literature) Ci: 806-807, (Science) Ci: 808-809
 Declaration of Independence (The Continental Congress) D: 74, *picture on* D: 77
 Electricity (Experiments with electric charge) E: 196
 Fire department (Fire protection in North America) F: 128
 Foundations (History) F: 431
 Glasses G: 224
 Gulf Stream G: 437
 Harmonica H: 62
 Insurance (The growth of insurance) I: 316
 Jefferson, Thomas (The Declaration of Independence) J: 79 *with picture*;
 (Minister to France) J: 80
 Kite (History) K: 340
 Library (Libraries in the United States) L: 261
 Lightning L: 299
 Paine, Thomas (Early life) P: 22
 Philadelphia (Libraries and museums) P: 364;
 (Early colonial days) P: 365-366
Poor Richard's Almanac P: 658
 Postal Service, United States (Colonial times) P: 700 *with picture*
 Postal services (Postal service in the United States) P: 706
 Proverb P: 839
 Range (History) R: 138 *with picture*
 Quebec (Communication) Q: 28
 Rebus *picture on* R: 174
 Revolutionary War in America (The Treaty of Paris) R: 285; *picture on* R: 276
 State, Department of (Establishment) So: 860
 Westward movement in America (Regional conflict) W: 245
Franklin, Frederic [American dancer]
 De Mille, Agnes *picture on* D: 119
Franklin, James [brother of]
 Franklin, Benjamin (Student and apprentice) F: 487
 Rhode Island (Communication) R: 310
Franklin, Jesse [American political leader]
 North Carolina (table) N: 490
Franklin, Sir John [British explorer] F: 492
 Arctic (Arctic exploration) A: 639-640
 Exploration (Arctic exploration) E: 449-450 *with map*
 Northwest Passage N: 528
Franklin, John Hope [American historian] F: 492 *with portrait*
Franklin, Rosalind Elsie [British chemist] F: 492
Franklin, Shirley [American political leader]
 Atlanta (Recent developments) A: 861
Franklin, State of [U.S. history] F: 493 *with map*
 Sevier, John S: 328
 Tennessee T: 135; (Territorial years) T: 153
 Watauga Association W: 113
Franklin, William [son of]
 Franklin, Benjamin (Printer) F: 487
Franklin D. Roosevelt Lake [Washington]
 Grand Coulee Dam G: 308
 Irrigation (Surface water) I: 456
 Washington W: 60
Franklin D. Roosevelt National Historic Site [New York]
 National Park System (table: National historic site) N: 52-53
 New York (Places to visit) N: 302 *with picture*
Franklin Delano Roosevelt Memorial [Washington, D.C.] F: 493 *with picture*
 National Park System (table: National memorials) N: 54
 Washington, D.C. (The Tidal Basin) W: 73-74 *with picture*; *map on* W: 76
Franklin Institute [Philadelphia] F: 493
 Franklin, Benjamin (The twilight years) F: 491
 Pennsylvania (Museums) P: 249
 Philadelphia (Libraries and museums) P: 364
Franklin Lake
 Nevada (Rivers and lakes) N: 166-168
Franklin Mountains [Canada]
 Northwest Territories (The land) N: 530-531 *with map*
Franklin Park
 Boston (Recreation) B: 502
Franklin stove
 Franklin, Benjamin (Other studies) F: 489; *picture on* F: 490
 Heating (Wood-burning stoves) H: 160
 Range (History) R: 138 *with picture*
Franklin Technical Institute [Boston]
 Franklin, Benjamin (The twilight years) F: 491
Franklinite [mineral]
 Zinc Z: 598
Franklin's gull [bird]
 Gull (Their homes) G: 439
Franklinton
 Columbus (History) Ci: 856
Franks [people] F: 494 *with map*
 Belgium (The Middle Ages) B: 232
 Charlemagne (Military conquests) C: 378
 Europe (The Middle Ages) E: 409-410
 Frankfurt F: 485
 Germany (History) G: 162
 Lombards L: 427
 Merovingian dynasty M: 418
 Netherlands (Early days) N: 148
 Switzerland (Early days) So: 1058-1059
Franks, Bobby [American public figure]
 Darrow, Clarence Seward D: 38
Franny and Zooey [book by Salinger]
 Salinger, J. D. S: 66
Franz Ferdinand [archduke of Austria]
 Austria (Austria-Hungary) A: 939
 Austria-Hungary A: 941
 Bosnia-Herzegovina (History) B: 492-493
 Francis Joseph F: 481
 Germany (World War I) G: 166
 Serbia (History) S: 314
 World War I (Beginning of the war) W: 455 *with picture*
Franz Josef [emperor of Austria] *See* Francis Joseph *in this index*
Franz Josef II, Prince [Liechtenstein ruler]
 Liechtenstein (History) L: 273
Franz Josef Land [islands, Russia] F: 494
Frash, Herman [American scientist]
 Sulfur (How sulfur is obtained) So: 967
Frash method
 Mining (Pumping methods) M: 576-577 *with diagram*
 Sulfur (How sulfur is obtained) So: 967
Fraser, Antonia [British author]
 Biography (Biography today) B: 314
Fraser, Dawn [Australian swimmer]
 Swimming (History) So: 1048
Fraser, Douglas Andrew [American labor leader] F: 494
Fraser, Gretchen [American skier]
 Skiing (The middle and late 1900's) S: 487
Fraser, James Earle [American sculptor] F: 494
 Oklahoma *picture on* O: 723
Fraser, John J. [Canadian political leader]
 New Brunswick (table) N: 196
Fraser, Malcolm [Australian political leader] F: 494
 Australia (table) A: 925; (Political crisis) A: 925
Fraser, Simon [Canadian explorer] F: 495
 British Columbia (The overland fur traders) B: 628
 Fraser River F: 495
 Prince George F: 794
Fraser fir [tree]
 Fir F: 119
Fraser River [British Columbia] F: 495
 British Columbia (The colonial period) B: 630
 Canada (Rivers, waterfalls, and lakes) C: 118-120
Fraser Valley
 British Columbia (Land regions) B: 622;
 (Agriculture) B: 626
Fraser's Lodge [painting by Thomson]
 Group of Seven *picture on* G: 402
Frashëri, Midhat [Albanian political leader]
 Albania (World War II) A: 307-308
Fraternal Order of Eagles [organization] *See* Eagles, Fraternal Order of *in this index*
Fraternal organization F: 495
Fraternal twins
 Multiple birth (Kinds of multiple birth) M: 919
 Reproduction, Human (Multiple birth) R: 246
Fraternity [organization] F: 495
 Universities and colleges (Fraternities and sororities) U: 210
Fraud [crime] F: 496
 Bush, George Walker (National affairs) B: 723
 Business (Recent developments) B: 726
 Crime (table) Ci: 1137
 United States, History of the (Recent events) U: 195-196
Frauds, Statute of [1677]
 Fraud F: 496
Fraunces, Samuel [West Indian businessman]
 Fraunces Tavern F: 496
Fraunces Tavern [New York City] F: 496
Fraunhofer, Joseph von [German physicist]
 Astronomy (Optical astronomy) A: 838-840
 Sun (Analyzing electromagnetic radiation) So: 983
 Telescope (Refracting telescopes) T: 103-104
Fraunhofer lines [light]
 Sun (Analyzing electromagnetic radiation) So: 983
Frazer, Sir James George [Scottish anthropologist] F: 496
 Magic (Kinds of magic) M: 49
 Mythology (Frazer's theory) M: 986
Frazier, Edward Franklin [American sociologist] F: 497
Frazier, James B. [American political leader]
 Tennessee (table) T: 152
Frazier, Lynn J. [American political leader]

- North Dakota (table) N: 513; (The early 1900's) N: 514-516
- Fr chet te, Louis-Honor ** [Canadian poet]
Canadian literature (Poetry: 1850-1918)
C: 157-158
- Laurier, Sir Wilfrid (Early public career) L: 124
- Fr chet te, Louise** [Canadian diplomat]
United Nations (table) U: 86
- Freckled darter** [fish]
Darter D: 38
- Freckles**
Skin (Skin color) S: 490
- Freddie Mac** See Federal Home Loan Mortgage Corporation *in this index*
- Frederic, Harold** [American author] F: 497
- Frederick** [king of Bohemia]
Thirty Years' War (The Bohemian period)
T: 260
- Frederick** [Danish kings] See *Frederik in this index*
- Frederick I** [Holy Roman emperor] F: 497
Adrian IV A: 67
Alexander III A: 341
Bohemia B: 437
Crusades (The Third Crusade) Ci: 1160 *with map*
Hohenstaufen H: 289
- Frederick I** [king of Prussia]
Berlin (Prussian capital) B: 264
Germany (The rise of Prussia) G: 164
Hohenzollern H: 289
- Frederick II** [Holy Roman emperor] F: 497
Crusades (Other Crusades) Ci: 1161
Czech Republic (The rise of Bohemia) Ci: 1213
Gregory IX G: 388
Innocent III (Imperial power) I: 275
Innocent IV I: 275
- Frederick II** [king of Prussia] F: 497
Army (The rise of modern armies) A: 727-728
Espionage (History) E: 358
Frederick William I F: 498
Germany (The rise of Prussia) G: 164
Hohenzollern H: 289
Prussia (Frederick II, or Frederick the Great)
P: 842
Seven Years' War (In Europe) S: 328
Succession wars (The War of the Austrian Succession) So: 950
Voltaire (Later years) V: 446
- Frederick III** [king of Prussia] F: 497
Wilhelm II W: 305
- Frederick Barbarossa** See Frederick I [Holy Roman emperor] *in this index*
- Frederick Douglass** [paintings by Lawrence]
Lawrence, Jacob L: 146
- Frederick Douglass National Historic Site**
[Washington, D.C.]
National Park System (table: National historic sites) N: 52-53
- Frederick Law Olmsted National Historic Site**
[Massachusetts]
National Park System (table: National historic sites) N: 52-53
- Frederick of Hohenstaufen** [German nobleman]
Hohenstaufen H: 289
- Frederick the Great** See Frederick II [king of Prussia] *in this index*
- Frederick the Great** [book by Carlyle]
Carlyle, Thomas (Later career) C: 240
- Frederick Valley**
Maryland (Land regions) M: 250
- Frederick William** [ruler of Brandenburg] F: 497
Berlin (Prussian capital) B: 264
Germany (The rise of Prussia) G: 164
Hohenzollern H: 289
- Frederick William I** [king of Prussia] F: 498
Hohenzollern H: 289
- Frederick William III** [king of Prussia]
Aix-la-Chapelle, Congress of A: 253
Louise of Mecklenburg-Strelitz L: 477
Wilhelm I W: 305
- Frederick William IV** [king of Prussia]
Germany (The Revolution of 1848) G: 165
Wilhelm I W: 305
- Fredericksburg** [Virginia] F: 498
- Fredericksburg, Battle of** [1862]
Civil War (table) Ci: 624; (Battle of Fredericksburg) Ci: 627
Lee, Robert Edward (Later battles) L: 178
- Fredericksburg and Spotsylvania County Battlefields Memorial** [Virginia]
National Park System (table: National military parks) N: 55
- Fredericton** [New Brunswick] F: 498
- New Brunswick *pictures on* F: 185, F: 187
- Frederik II** [king of Denmark and Norway]
Christian IV C: 522d
- Frederik VII** [king of Denmark]
Denmark (The Schleswig wars) D: 140
- Frederik VIII** [king of Denmark] F: 498
- Frederik IX** [king of Denmark] F: 498
Denmark (Postwar years) D: 141
- Frederika** [wife of]
Paul I P: 199
- Frederiksted** [Virgin Islands]
Virgin Islands (Islands) V: 393; (The people)
V: 394
- Free African Society** [organization]
Allen, Richard A: 371
Jones, Absalom J: 157
- Free and Accepted Masons** See Masonry [organization] *in this index*
- Free association** [government]
Marshall Islands (History) M: 231
Pacific Islands (Recent developments) P: 12-13
Pacific Islands, Trust Territory of the P: 13
Palau (Government) P: 102
- Free association** [psychology]
Freud, Sigmund (On treatment) F: 531
Psychoanalysis (Psychoanalytic treatment)
P: 846
Psychology (Psychoanalysis) P: 850
Psychotherapy (Analytic psychotherapy) P: 852
- Free Association, Compact of** [government]
Marshall Islands (History) M: 231
Micronesia, Federated States of (History)
M: 515
- Free Churches**
England (Religion) E: 297-298
- Free city** [European history] F: 498
- Free dancing**
Ice skating (Ice dancing) I: 13
- Free Democratic Party** [political party]
Germany (Politics) G: 147
- Free Education Act** [1852]
Prince Edward Island (Schools) P: 786
- Free electron**
Electronics (How a circuit works) E: 208-209
Semiconductor (Semiconductor crystals)
S: 291; (Using doped crystals) S: 292
Transistor (Transistor materials) T: 372
- Free-electron laser** [physics]
Laser (Other kinds of lasers) L: 85
- Free Enquirer** [magazine]
Wright, Frances W: 506
- Free enterprise system** [economics]
See also Capitalism *in this index*
Business (Business in a free enterprise system) B: 724
Capitalism (How capitalism differs from central planning) C: 193
Chamber of Commerce of the United States
C: 371
Dartmouth College case D: 39
Economics (Capitalism) E: 59
Europe (The breakup of Communism) E: 416
Freedom (Economic freedom) F: 501
Government (Pluralism) G: 285
Laissez faire L: 31
Lenin, V. I. L: 191
Liberalism (Early liberalism) L: 228
Trade (Trade in the United States) T: 363
United States (Economy) U: 128
World (Economic systems) W: 408-413
- Free-fall**
Skydiving S: 496
- Free-flight model**
Airplane, Model (Free-flight models) A: 241
with picture
- Free-floating balloon**
Balloon B: 57
- Free-flowing agent**
Salt (How table salt is made) S: 74
- Free form** [music]
Classical music (Free form) Ci: 645
- Free French** [World War II]
De Gaulle, Charles Andr  Joseph Marie
(Leader of the Free French) D: 90
France (World War II) F: 475
- Free group**
Theater (Scandinavia) T: 248
- Free jazz**
Mingus, Charles M: 573
- Free Jazz** [recording]
Jazz (New directions) J: 73
- Free Kashmir Movement**
Kashmir (History and government) K: 248
- Free kick**
Soccer (Fouls) So: 546
- Free-lance** [employment]
Commercial art Ci: 872
Writing W: 511
- Free Libraries Act** [1882]
Ontario (Libraries) O: 769
- Free market** [economics]
Capitalism (How capitalism differs from central planning) C: 193-194
Price P: 774
- Free Methodist Church** F: 499
Methodists (Social change and division)
M: 435
- Free mount** [paleontology]
Fossil (Working with fragments) F: 426
- Free National Movement** [political party]
Bahamas (History) B: 29
- Free Officers** [political group]
Egypt (Republic) E: 132
- Free Papua Movement** [political group]
Indonesia (Indonesia under Suharto) I: 238-239
- Free-piston engine** F: 499 *with diagram*
- Free port** [trade]
Foreign trade zone F: 389
Free trade zone F: 500
Hong Kong (Economy) H: 319
- Free position** [sports]
Diving (Kinds of dives) D: 243; *picture on*
D: 244
Lacrosse (Women's lacrosse) L: 24
- Free radical** [molecule]
Aging (How aging occurs) A: 141
Antioxidant A: 557
- Free school**
Alternative school A: 388
Colonial life in America (Education) Ci: 803
Education (What should be taught?) E: 105
School (Recent developments) S: 184-185
- Free silver** [economics] F: 499
Bryan, William Jennings (Early career) B: 654
Cleveland, Grover (Saving the gold standard)
Ci: 673
Democratic Party (After the Civil War) D: 125-126
McKinley, William (Congressman) M: 339
Money (The rebirth of paper money) M: 709
Populism (Origins) P: 674
- Free skating**
Ice skating (Singles skating) I: 11-12; (Pair skating) I: 12
Roller skating (Competitive roller skating)
R: 403 *with picture*
- Free Soil Party** [U.S. history] F: 499
Adams, Charles Francis A: 33
Liberty Party L: 233
Taylor, Zachary (Nomination for President)
T: 59-60
- Free Speech Movement** [organization]
California (The mid-1900's) C: 62-63
New Left N: 255
- Free-standing insert**
Advertising (Newspapers) A: 74
- Free-standing sculpture** [art]
Sculpture (Kinds of sculpture) S: 230
- Free State** [nickname]
Maryland (The early 1900's) M: 259
- Free State** [province, South Africa]
South Africa (Provincial government) So: 609
- Free State of Panama** [Panamanian history]
Herrera, Tom s H: 214
- Free State party** [U.S. history]
Kansas ("Bleeding Kansas") K: 235
- Free Synagogue** [New York]
Wise, Stephen Samuel W: 370
- Free-tailed bat** [animal]
Bat (Some kinds of bats) B: 161
- Free Territory of Trieste**
Trieste T: 442
- Free Thai Movement** [Thai history]
Thailand (In World War II (1939-1945)) T: 227
- Free throw**
Basketball *picture on* B: 147
- Free trade** [economics] F: 499
Customs union Ci: 1201
Economics (World trade) E: 63-64
European Union E: 418
Globalization (Features of globalization) G: 233
North American Free Trade Agreement N: 470
Smith, Adam S: 515
United Kingdom (Establishment of free trade)
U: 69
- Free Trade Agreement, North American**
[1992] See North American Free Trade

- Agreement in this index
Free trade area [economics]
 Customs union Ci: 1201
 Tariff T: 43
- Free Trade Unions, International**
 Confederation of See International
 Confederation of Free Trade Unions in this index
- Free trade zone** F: 500
 Foreign trade zone F: 389
- Free Traders** [Australian history]
 Australia (The birth of a new nation) A: 924
- Free University of Brussels**
 Belgium (Education) B: 229-230
- Free verse** [poetry] F: 500
 American literature (Walt Whitman and Emily Dickinson) A: 419
 Meter M: 433
 Poetry (table) P: 594; (Forms) P: 595
- Free will** [philosophy] F: 500
 Metaphysics (Causality) M: 430
- Freebase** [drug]
 Cocaine Ci: 742
- Freeboard** [shipping]
 Plimsoll mark P: 573
 Ship (Nautical terms) S: 416
- Freebooter**
 Pirate P: 494
- Freed, Alan** [American disc jockey]
 Rock music (Growing popularity) R: 377
- Freedman**
 African Americans (Free blacks) A: 136e-136f;
 (The first years of freedom) A: 136h
- Freedman, Russell** [American author]
 Laura Ingalls Wilder Award (table) L: 121
 Newbery Medal (table) N: 359
 Regina Medal (table: 1996) R: 206
- Freedmen's Bureau** [U.S. history] F: 500
 African Americans (The first years of freedom)
 A: 136h with picture
 Reconstruction (Early congressional reaction)
 R: 177
- Freedom** F: 501
 Bill of rights B: 301
 Civil rights Ci: 608
 Communism (Restrictions on personal freedom) Ci: 891
 Democracy D: 120
 Existentialism (What is existentialism?) E: 436-437
 Fascism (Personal liberty) F: 49
 Sartre, Jean-Paul S: 127
 Union of Soviet Socialist Republics (Personal freedom) U: 31
- Freedom** [proposed space station]
 International Space Station (History) I: 346b
- Freedom, Academic**
 Academic freedom A: 20
 Freedom (Social freedom) F: 501
- Freedom, Statue of**
 Capitol, United States C: 196
 Columbia Ci: 851
- Freedom Council**
 Denmark (World War II) D: 140-141
- Freedom Day, National** [custom] F: 503
- Freedom dues** [U.S. history]
 Colonial life in America (The lower class)
 Ci: 793
- Freedom fighter** [Hungarian history]
 Cold War (Unrest in Eastern Europe) Ci: 765
- Freedom march** [U.S. history]
 United States, History of the (The civil rights movement) U: 192 with picture
- Freedom of a Christian, The** [book by Luther]
 Luther, Martin (The break with the Roman Catholic Church) L: 528
- Freedom of Access to Clinic Entrances Act** [1994]
 Abortion (Abortion in the United States) A: 15-16
- Freedom of assembly** F: 504
 Constitution of the United States (Amendment 1) Ci: 1011
 Freedom (Kinds of freedom) F: 501
- Freedom of contract**
 Law (Beginnings of U.S. law) L: 136; (Law since 1900) L: 136
- Freedom of Information Act** [1966] F: 505
- Freedom of religion** F: 505
 Calvert, Cecilius C: 70
 Church and state (The Reformation) C: 542
 Colonial life in America (Religious and political reasons) Ci: 788; (Religion) Ci: 804
 Communism (Restrictions on personal freedom) Ci: 891-892
 Constitution of the United States (Amendment 1) Ci: 1011
 Indian, American (Political gains) I: 182
 Maryland (Colonial days) M: 256
 Nantes, Edict of N: 12
 Pennsylvania (Colonial days) P: 264
 Pennsylvania Dutch P: 270
 Philadelphia (Early colonial days) P: 365-366
 Providence (Government and history) P: 840
 Religious education (Public schools) R: 225
 School prayer S: 186
 Toleration Act T: 321
 Union of Soviet Socialist Republics (Personal freedom) U: 31
 United States, History of the (Virginia and Maryland) U: 152-153
- Freedom of speech** F: 506
 Civil rights (Limits of civil rights) Ci: 608
 Communism (Restrictions on personal freedom) Ci: 891-892
 Constitution of the United States (Amendment 1) Ci: 1011
 Democracy D: 121
 Freedom (Social freedom) F: 501
 Obscenity and pornography (In the United States) O: 643-644
 Riot R: 348
 Supreme Court of the United States (Freedom of speech) So: 1001; (table) So: 1002
- Freedom of the City** [play by Friel]
 Friel, Brian F: 533
- Freedom of the press** F: 507
 Constitution of the United States (Amendment 1) Ci: 1011
 Journalism (The role of U.S. journalism)
 J: 172; (Restrictions on freedom of the press) J: 173; (Journalism in free societies) J: 173
 New York (Under English rule) N: 314-315
 Newspaper (Newspapers in other countries)
 N: 385-386
 Obscenity and pornography (In the United States) O: 643-644
 Supreme Court of the United States (table)
 So: 1002
- Freedom of thought and expression**
 Academic freedom A: 20
- Freedom of Will** [book by Edwards]
 Edwards, Jonathan E: 114
 American literature (New England) A: 414
- Freedom Party** [political party]
 Austria (Recent developments) A: 940
- Freedom rider** [U.S. history]
 Kennedy, John Fitzgerald (Civil rights) K: 264
 Rustin, Bayard R: 568
- Freedom school** [education]
 Alternative school (History) A: 389
- Freedom 7** [spacecraft]
 Shepard, Alan Bartlett, Jr. S: 395
- Freedom to farm law** [1996]
 Farm and farming (Federal farm programs)
 F: 44
- Freedom Trail**
 Boston (Downtown Boston) B: 496; map on B: 499
- Freedom Union** [political party]
 Poland (Politics) P: 605
- Freedom's Journal** [newspaper]
 Russwurm, John Brown R: 567
 Walker, David W: 14
- Freeh, Louis J.** [American government official]
 Federal Bureau of Investigation (History) F: 62-63
- Freehold** [law]
 Estate E: 360
- Freeholder** [U.S. history]
 Colonial life in America (Economic reasons)
 Ci: 787
 New Jersey (Local government) N: 249
- Freeman, Bud** [American saxophonist]
 Jazz (The 1920's) J: 70
- Freeman, Cathy** [Australian athlete]
 Olympic Games picture on O: 755
- Freeman, Daniel** [American settler]
 Nebraska (Statehood) N: 112
- Freeman, Douglas Southall** [American author]
 F: 508
- Freeman, Mary Eleanor Wilkins** [American author] F: 509
- Freeman, Orville Lothrop** [American political leader] F: 509
 Kennedy, John Fitzgerald (table) K: 266
 Minnesota (table) M: 602
- Mondale, Walter Frederick (Political career)
 M: 702
- Freeman, R. Austin** [English author]
 Detective story (History) D: 163
- Freeman-Thomas, Freeman** [British colonial official]
 Willingdon, Marquess of W: 314
- Freeman's Farm, Battles of** [1777]
 Arnold, Benedict (A disappointed officer)
 A: 742
 New York picture on N: 315
 Revolutionary War in America (table) R: 276;
 (Victory at Saratoga) R: 282-283
- Freemasonry** See Masonry [organization] in this index
- Freeport Doctrine** [U.S. history]
 Davis, Jefferson (Secretary of war) D: 48
 Lincoln, Abraham (The debates with Douglas)
 L: 317
- Freer, Charles Lang** [American businessman]
 Freer Gallery of Art F: 509
- Freer Gallery of Art** (Washington, D.C.) F: 509
 Smithsonian Institution (Museums) S: 519
 Washington, D.C. (Smithsonian museums)
 W: 71-72; map on W: 76
- Freesia** [plant] F: 509 with picture
- Freeskiing** [competition]
 Skiing (Alpine competitions) S: 486-487
- Freestall** [barn]
 Barn B: 113
- Freestone** [rock]
 Limestone L: 308
- Freestone peach** [fruit]
 Peach (Cultivars) P: 210
- Freestyle competition**
 Olympic Games (Winter Olympic Games)
 O: 746d
 Skiing (Freestyle skiing) S: 483
 Swimming (Kinds of races) So: 1044
- Freestyle wrestling**
 Wrestling (Chief forms of wrestling) W: 505
- Freethinker** [philosophy] F: 509
- Freetown** [Sierra Leone] F: 509
 Sierra Leone S: 450 with picture
- Freeway** [road]
 See also Expressway in this index
 Los Angeles (Transportation) L: 465
 Road (Primary highways) R: 358
 Traffic (Traffic problems) T: 366-367
- Freeze-drying** [industrial process] F: 510
 Coffee (Instant coffee) Ci: 754
 Dehydrated food D: 93
 Food preservation (Freeze-drying) F: 343
 Space exploration (Eating and drinking)
 So: 703
 Taxidermy (Process of mounting) T: 56
- Freezer**
 Food, Frozen F: 338
 Ice cream (How ice cream is made) I: 8
- Freezer burn**
 Food, Frozen (Packaging) F: 339
- Freezing**
 Cryobiology Ci: 1165
 Fishing industry (Methods of processing)
 F: 186
 Food, Frozen F: 338
 Food preservation (Freezing) F: 342
 Frost F: 542
 Ice I: 4
 Water (Other desalting processes) W: 128
- Freezing nucleus**
 Cloud (How clouds form) Ci: 711
 Rain (The ice-crystal process) R: 124
- Freezing point** F: 510
 Heat (Changes in state) H: 153 with diagram
- Freezing tip** [medicine]
 Cryobiology Ci: 1165
- Frei Montalva, Eduardo** [Chilean political leader]
 Chile (Years of progress) C: 469-470
- Freie Bühne** [theater group]
 Drama (Early realism) D: 338
- Freight** [shipping] F: 510
 Containerization Ci: 1021
 Railroad (Freight service) R: 106; (Rolling stock) R: 107-108 with pictures; (Freight operations) R: 109-110
 Transportation (Air transportation) T: 385;
 (Freight transportation) T: 394
- Freight elevator**
 Elevator E: 234
- Freight forwarder**
 Aviation (Aviation support industries) A: 985
- Freight train**

Locomotive (Kinds of locomotives) **L: 414**
Railroad (Freight service) **R: 106** *with picture*;
(Rolling stock) **R: 107-108** *with pictures*
Freighter [ship]
Ship (Classification of cargo ships) **S: 417**;
(General cargo ships) **S: 417-418**; (Dry
bulk carriers) **S: 420-421**
Trade *picture on T: 362*
Freischütz, Der [opera by Weber]
Opera (Romanticism) **O: 798**
Weber, Carl Maria von **W: 176**
Fréjus Peak [mountain, France Italy]
Fréjus Tunnels **F: 510**
Fréjus Tunnels [France-Italy] **F: 510**
France (Transportation) **F: 470**
Tunnel (table) **T: 491**
Fréling, Friz [American animator]
Animation (Animation in the mid-1900's)
A: 514a
Frelimo [political organization]
Mozambique (Government) **M: 904**; (History)
M: 905-906
Frelinghuysen, Frederick T. [American govern-
ment official]
Arthur, Chester Alan (table) **A: 756**
State, Department of (table) **So: 860**
Frelinghuysen, Theodore [American political
leader]
Polk, James Knox (Election of 1844) **P: 642**
Frelinghuysen, Theodore J. [German-American
religious leader]
Great Awakening **G: 335**
Fremantle, Sir Charles Howe [British explorer]
Australia (Exploring the new land) **A: 922-923**
Frémont, Jessie Benton [wife of]
Frémont, John Charles **F: 511**
Frémont, John Charles [American explorer]
F: 510 *with portrait*
California (The Mexican War) **C: 60**
Carson, Kit (Rise to prominence) **C: 250**
Civil War (Developments in the political party
system) **Ci: 616**
Lake Tahoe **L: 46**
Nevada (Exploration) **N: 173-174**
Republican Party (The election of 1856) **R: 254**
Westward movement in America (Exploration)
W: 248
Wyoming (Exploration) **W: 533**
Fremont Bridge [Oregon]
Bridge (table: Steel arch) **B: 603**
French, Augustus C. [American political leader]
Illinois (table) **I: 71**
French, Daniel Chester [American sculptor]
F: 511
Lincoln Memorial **L: 328** *with picture*
Sculpture (American sculpture) **S: 255-256**
French, John Denton Pinkstone [British gener-
al] **F: 511**
Edward VIII **E: 113**
French Academy [organization] **F: 511**
Institute of France **I: 305**
Metric system (Creation of the metric system)
M: 441
Weights and measures (The metric system)
W: 187
French Alliance [1778]
Franklin, Benjamin (Serving in France) **F: 490-491**
French and Indian War [1754-1763]
See also *Seven Years' War in this index*
French and Indian wars (The French and
Indian War) **F: 512** *with picture and map*
Acadia **A: 21**
Braddock, Edward **B: 544** *with picture*
Canada, History of (The colonial wars) **C: 143**
Fort Duquesne **F: 412**
Franklin, Benjamin (The Plan of Union) **F: 489**
Indiana (Exploration and settlement) **I: 215**
New France (The British conquest) **N: 205**
Ohio (Exploration and settlement) **O: 700**
Pontiac **P: 657**
Quebec, Battle of **Q: 37**
Revolutionary War in America (Background
and causes of the war) **R: 271**
Rogers's Rangers **R: 401**
Tennessee (Exploration) **T: 153**
United Kingdom (The growing empire) **U: 67**
United States, History of the (The French and
Indian War) **U: 156**
Washington, George (Messenger to the
French) **W: 93-94** *with picture*
French and Indian wars [1689-1763] **F: 511**
with picture and map
Canada, History of (British conquest and rule

(1689-1815)) **C: 143**
Colonial life in America (The struggle for land)
Ci: 791-792
Indian, American (In Canada) **I: 178**
Indian wars (The French and Indian wars)
I: 192
Massachusetts (The French and Indian wars)
M: 291
Michigan (British control) **M: 508**
New York (Under English rule) **N: 314-315**
Smallpox **S: 513**
French bulldog [dog] **F: 514**
Dog *picture on D: 275*
French Cameroons [former colony]
British Cameroons **B: 611**
Cameroon (History) **C: 86**
French Canada
Quebec **Q: 10**
French Canadian cattle
Cattle (Other dairy cattle) **C: 311**
French-Canadian nationalism
Quebec (The mid-1900's) **Q: 32**
French Canadians [people]
Canada (Ancestry) **C: 104-105**
Civil rights (Civil rights in Canada) **Ci: 610**
Laurier, Sir Wilfrid **L: 123**
Montreal (Ethnic groups) **M: 772**
Quebec (Population) **Q: 14**
French chalk
Soapstone **So: 543**
French chef's knife
Knife (Types of knives) **K: 345**
French coach horse
Horse (table: Some types and breeds of hors-
es) **H: 343**
French combing length
Wool (Sorting and grading) **W: 400**
French Communist Party
France (Politics) **F: 455**
French Community
French West Africa (History) **F: 528**
French Connection, The [film]
Motion picture (Best picture: 1971) **M: 861**
French Dickens
Daudet, Alphonse **D: 43**
French East India Company [French history]
East India Company **E: 40**
French Equatorial Africa [former colony] **F: 514**
with map
Central African Republic **C: 352**
Chad (History) **C: 367**
Gabon (History) **G: 3**
French Foreign Legion
Foreign Legion **F: 385**
French Guiana [territory, South America] **F: 514**
with pictures and map
Indian, American (Indians of the Tropical
Forest) **I: 175**
French Guinea [former colony]
French West Africa **F: 527**
Guinea (History) **G: 432**
French horn [musical instrument] **F: 516** *with
pictures*
Horn **H: 339**
Jazz (New directions) **J: 73**
Music (Wind instruments) **M: 949-950**; *picture
on M: 949*
French impressionism
Impressionism (French impressionism) **I: 94**
with picture
French Indochina [former colony]
Indochina **I: 224**
Vientiane **V: 363**
French language **F: 516**
Canada (Languages) **C: 106**
Civil rights (Civil rights in Canada) **Ci: 610**
Congo (Kinshasa) (Languages) **Ci: 940**
Dialect **D: 180**
English language (Middle English) **E: 313**
French Academy **F: 511**
Manitoba (Recent developments) **M: 163**
Montreal (Social problems) **M: 773**
Phonetics (Phonetics and spelling) **P: 400**
Quebec (The people) **Q: 35**
French Language, Charter of the
Quebec (Recent developments) **Q: 32**
French literature **F: 518** *with pictures*
Classicism (France) **Ci: 653**
Drama (French neoclassical drama) **D: 333**;
(France) **D: 335**; (Romanticism) **D: 337**;
(French drama) **D: 339**
Novel (France) **N: 573**; (The modern novel)
N: 573-574
See also *the list of Related Articles in the*

French Literature *article*
French National Committee [World War II]
De Gaulle, Charles André Joseph Marie
(Leader of the Free French) **D: 90**
French overture [music]
Lully, Jean-Baptiste **L: 516**
Overture **O: 881**
French pastry [food]
Pastry **P: 194**
French Polynesia [territory, South Pacific
Ocean] **F: 524**
Marquesas Islands **M: 217**
Society Islands **So: 563**
Tuamotu Islands **T: 476**
French provincial style
Furniture *picture on F: 576*
French Quarter [district]
New Orleans (Downtown New Orleans)
N: 279 *with picture*; *maps on N: 280*
Louisiana (Visitor's guide) **L: 488**; (Population)
picture on L: 482
French Revolution [1789-1799] **F: 524** *with pic-
tures*
Adams, John (Difficulties with France) **A: 37**
Bastille **B: 158**
Charles X [of France] **C: 382**
Clothing (Protection) **Ci: 688**; (The 1700's)
Ci: 701-702
Danton, Georges-Jacques **D: 35**
Democracy (French contributions to democra-
cy) **D: 123**
Divine right of kings **D: 242**
Émigrés **E: 260**
Estates-General **E: 360**
Europe (Democracy and nationalism) **E: 413**
Freedom (During the Age of Reason) **F: 503**
France (The French Revolution) **F: 474** *with
picture*
Girondists **G: 201**
Guillotine **G: 429**
Italy (The French Revolution and Napoleon)
I: 514
Jacobins **J: 20**
Jefferson, Thomas (Minister to France) **J: 80**
Lafayette, Marquis de (The revolution at
home) **L: 28**
Louis XV **L: 475**
Louis XVI **L: 476**
Marie Antoinette (The revolution) **M: 200**
"Marseillaise" **M: 227**
Mirabeau, Comte de **M: 614**
Paine, Thomas (French revolutionary) **P: 22**
Paris (The Renaissance) **P: 166**
Pitt, William, the Younger **P: 500**
Radicalism (In Europe) **R: 82**
Rights of Man, Declaration of the **R: 340**
Robespierre **R: 366**
Roland de la Platière, Marie Jeanne **R: 401**
Roman Catholic Church (The decline of church
influence) **R: 410**
Terrorism (History of terrorism) **T: 179**
Tuileries **T: 481**
United Kingdom (The Napoleonic Wars) **U: 68**
Versailles, Palace of **V: 339**
Washington, George (Neutrality proclamation)
W: 105
Women's movements (Forces of change)
W: 384
World, History of the (The rise of democracy
and nationalism) **W: 443-444** *with picture*
French Revolution, The [book by Carlyle]
Carlyle, Thomas (Early career) **C: 239-240**
French Revolutionary calendar
Month **M: 767**
French Royal Banner [Flag]
Flag *picture on F: 216*
French Shore [region]
Newfoundland and Labrador (War with France)
N: 375
French Somaliland
Djibouti **D: 256**
French Sudan
French West Africa **F: 528**; (History) **F: 528**
Mali (History) **M: 109**
French Territory of the Afars and Issas
Djibouti **D: 256**
French Togoland
Togo (History) **T: 310-311**
French West Africa [African history] **F: 527** *with
map*
French West Indies [territory, Caribbean] **F: 528**
Frenchman Butte National Historic Site
[Sakatchewan]
Canada (table: National historic sites) **C: 114**

Frenchtown

War of 1812 (Raisin River) W: 33
Freneau, Philip [American author] F: 528
 Columbia Ci: 851
Frenette, Ray [Canadian political leader]
 New Brunswick (table) N: 196
Frenulum [zoology]
 Moth M: 837
Freon [compound]
 Chlorofluorocarbon C: 517
Frequency [marketing]
 Advertising (Media selection) A: 76b
Frequency [physics]
 Antenna A: 543
 Astronomy (Electromagnetic radiation) A: 838
 Ear (The sense of hearing) E: 9; (How sounds reach the brain) E: 10
 Electric current (Direct and alternating current) E: 168
 Electric generator (A simple generator) E: 170-171
 Electronics (Transistors) E: 212
 Hertz H: 217
 Kilohertz K: 316
 Light (The nature of light) L: 284
 Metric system (Space and time) M: 437
 Pitch P: 498
 Radiation (Electromagnetic radiation) R: 75
 Radio (From sound waves to electric waves) R: 86
 Radio, Amateur R: 95
 Sound (table) So: 599; (Frequency and pitch) So: 599 *with diagrams*; (Beats) So: 604
 Television (Broadcasting) T: 122
 Ultrasound U: 16
 Vibration V: 347
 Waves (Measuring waves) W: 152
 Weather (Weather radar) W: 162-163
Frequency analysis
 Codes and ciphers (Communications intelligence) Ci: 750
Frequency band [radio]
 Communications satellite (How communications satellites work) Ci: 888b
Frequency-modulated radar
 Radar (Continuous-wave radar) R: 69
Frequency modulation [radio] F: 528
 Antenna A: 543-544
 Radio (Transmitting radio waves) R: 87 *with diagram*
 Static So: 867
 Television (Broadcasting) T: 122-123
 Wireless communication (How wireless communication works) W: 345
Frère Jean [literary figure]
 Rabelais, François R: 49
Fresco [art] F: 529 *with picture*
 Architecture (Medieval architecture) A: 617
 Byzantine art (Frescoes and mosaics) B: 750 *with picture*
 Catacombs C: 297
 Greece, Ancient *picture on* G: 373
 Jesus Christ *picture on* J: 105
 Leonardo da Vinci (Paintings) L: 200b-201
 Michelangelo (The Sistine Chapel) M: 484
 Mural M: 929 *with picture*
 Painting (Fresco painting) P: 38
Fresco secco
 Painting (Fresco painting) P: 38
Fresh I [hydrofoil]
 Hydrofoil (History) H: 468
Fresh air
 Ventilation V: 309
Fresh cow
 Cattle (Breeding) C: 312
Fresh Meadows [New York City]
 Housing (Private housing projects) H: 390
Fresh water
 Hydrosphere H: 472
 Water W: 116
Freshman [education]
 Universities and colleges (The student body) U: 208-209
Freshness labeling
 Consumerism (The right to information) Ci: 1018-1019
Freshwater eelgrass [plant]
 Eelgrass E: 115
Freshwater fish
 Fish (Freshwater environments) F: 150; (How fish adjust to change) F: 168
Freshwater marsh
 Marsh M: 227
Fresnel, Augustin J. [French physicist]

Lighthouse (History) L: 295
 Optics (History) O: 813
 Physics (Developments in the 1800's) P: 440
 Radiation (History) R: 80
Fresnel lens
 Lighthouse (How lighthouses work) L: 294
Fresno [city, California] F: 529
Fret [musical instrument]
 Guitar G: 435 *with diagrams*
 Sitar S: 477
FRETILIN [organization]
 East Timor E: 41
Freud, Anna [Austrian psychiatrist] F: 530
Freud, Sigmund [Austrian psychiatrist] F: 530 *with portrait*
See also Freudian theory *in this index*
 Abnormal psychology (History) A: 12
 Age of Reason (Criticism of the Age of Reason) A: 139-140
 Autograph A: 943
 Biography (Modern biography) B: 314
 Doolittle, Hilda D: 309
 Dream (The meanings of dreams) D: 345
 Erikson, Erik Homburger E: 352
 Horney, Karen H: 340
 Hypnotism (Scientific studies) H: 479
 Jones, Ernest J: 158
 Jung, Carl Gustav J: 194
 Memory (Motivated forgetting) M: 393
 Mental illness (Medical approaches) M: 409
 Neurosis N: 153
 Oedipus complex O: 676
 Painting (Surrealism) P: 81
 Phobia P: 392
 Psychoanalysis P: 846
 Psychology (Psychoanalysis) P: 850
 Psychotherapy (Analytic psychotherapy) P: 852
 Surrealism So: 1010
 Unconscious U: 20
Freudian theory [psychology]
See also Psychoanalysis *in this index*
 Anxiety A: 562
 Developmental psychology (Psychoanalytic theory) D: 174
 Personality (Freud's psychoanalytic theory) P: 302
 Psychoanalysis (Psychoanalytic theory) P: 846
Frey [Norse mythology] F: 531
 Vikings (Religion) V: 379-380
Freyja [Norse mythology] F: 531
 Vikings (Religion) V: 379-380
Freyr [Norse mythology]
 Frey F: 531
Freyssinet, Eugene [French engineer]
 Cement and concrete (History) C: 345
Friar [religion] F: 531
 Capuchins C: 200
 Christianity (The Middle Ages) C: 526
 Dominicans D: 305
 Franciscans F: 482
Friar Bacon and Friar Bungay [play by Greene]
 Drama (Elizabethan playwrights) D: 331-332
 Greene, Robert G: 382
Friars Minor [religious group]
 Franciscans F: 482
 Friar F: 532
Frick, Ford [American baseball commissioner]
 Baseball (table: Hall of Fame) B: 134
Frick, Henry Clay [American businessman]
 Carnegie, Andrew (Rise to wealth) C: 241-242; (The homestead strike) C: 242
 Frick Collection F: 532
 Goldman, Emma G: 258
Frick Art Reference Library
 Frick Collection F: 532
Frick Collection [New York City] F: 532
 New York City (Museums) N: 338
Fricka [opera character]
 Opera (*Ring of the Nibelung, The*) O: 806-807
Fricker, Brenda [Irish actress]
 Motion picture (Best performance by an actress in a supporting role: 1989) M: 863
Friction [physics] F: 532
 Aerodynamics (Friction drag) A: 87
 Brake B: 560
 Fire (Methods of starting fires) F: 121
 Heat (Sources of heat) H: 149
 Machine (Efficiency) M: 14
 Motion (How friction affects motion) M: 844
Friction drag
 Aerodynamics (Friction drag) A: 87
Friction welding
 Welding (Solid-state bonding) W: 189

Friday [day] F: 532
 Islam (The Five Pillars of Islam) I: 463-464
Friday [literary figure]
Robinson Crusoe R: 369
Friday Harbor Laboratory [California]
 Marine biology (What marine biologists do) M: 204-205
Friday Island
 Torres Strait Islands T: 341
Friday mosque [building]
 Mosque M: 830
Fried, Alfred Hermann [Austrian author]
 Nobel Prizes (Peace: 1911) N: 447
Friedan, Betty [American social reformer] F: 532 *with portrait*
 National Organization for Women N: 42
 Women's movements (Decline after 1920) W: 385-386
Friedkin, William [American director]
 Motion picture (Best achievement in directing: 1971) M: 862
Friedland, Battle of [1807]
 Napoleon I (Dominates Europe) N: 16 *with map*
Friedland, Duke of [Bohemian military leader]
See Wallenstein, Albrecht Wenzel Eusebius von *in this index*
Friedman, Jerome Isaac [American physicist]
 Kendall, Henry Way K: 258
 Nobel Prizes (Physics: 1990) N: 442
Friedman, Milton [American economist] F: 533
 Chicago, University of (Research program) C: 438
 Laissez faire L: 31
Friedrich, Casper David [German artist]
 Painting (Romanticism) P: 68 *with picture*
Friedrichstrasse, Berlin [painting by Kirchner]
 Expressionism *picture on* E: 456
 Painting (Expressionism) P: 78-79
Friel, Brian [Irish dramatist] F: 533
Friendly Island
 Hawaii (Molokai) H: 100
Friendly Islands
 Tonga T: 327
Friendly Persuasion [film]
 Cooper, Gary C: 1034
Friendly Persuasion, The [book by West]
 West, Jessamyn W: 198
Friendly society [English history]
 Fraternal organization (History) F: 495
Friendly takeover [business]
 Business (Recent developments) B: 726
 Merger M: 418
Friends, Religious Society of [religious group]
See Quakers *in this index*
Friends of the Library
 Library (Supporting the public library) L: 243
Friends Service Council [organization]
 Nobel Prizes (Peace: 1947) N: 447
Friends World Committee for Consultation [organization]
 Quakers (Worship) Q: 4-5
Friendship Bridge [Brazil-Paraguay]
 Paraguay (Transportation and communication) P: 148
Friendship Hill National Historic Site [Pennsylvania]
 National Park System (table: National historic sites) N: 52-53
Friendship Pipeline
 Pipeline (In other countries) P: 491-492
Friendship 7 [spacecraft]
 Glenn, John Herschel, Jr. G: 226; (Glenn's historic flight) G: 226 *with picture*
Friesland [province]
 Netherlands (Language) N: 139
Frietchie, Barbara [literary figure] F: 533
Frieze
 Architecture (table) A: 608-609 *with picture*; (Minoan architecture) A: 615
 Parthenon P: 183
Frieze rug
 Rugs and carpets (Kinds of rugs and carpets) R: 514-515 *with picture*
Frigate [ship] F: 533 *with diagram*
 Destroyer D: 162
 Navy (Frigates) N: 78
 Navy, United States (Combat ships) N: 84
 Warship (Frigates) W: 40
Frigatebird F: 534 *with picture*
 Bird (Birds of the ocean and the Antarctic) B: 344 *with picture*
Frigg [Norse mythology]
 Balder B: 38

- Friday F: 532
- Frijoles** [food]
Mexico (Food and drink) M: 455-456
- Frill** [anatomy]
Triceratops T: 441
- Frilled lizard**
Lizard (Defenses) L: 400 *with picture*
- Friml, Rudolf** [Czechoslovakian composer]
F: 534
Musical comedy (The first musicals) M: 959
- Fringe** [light] *See* Interference fringe *in this index*
- Fringe benefit** [compensation]
Careers (Probable earnings) C: 216
Employee Stock Ownership Plan E: 263
Labor movement (Arranging contracts) L: 5
Medicine (The United States) M: 367
Pension P: 272
Profit sharing P: 811
Wages and hours (Wages) W: 3
- Fringe-toed lizard**
Desert *picture on* D: 155
- Fringed gentian** [plant]
Flower *picture on* F: 285
- Fringed lizard**
Lizard (How lizards move) L: 399-400
- Fringetail** [fish]
Goldfish *picture on* G: 258
- Fringing reef**
Coral reef (Kinds of coral reefs) Ci: 1048a
- Frisbee** F: 534
- Frisch, Frankie** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Frisch, Karl von** [Austrian zoologist] F: 534
- Frisch, Max** [Swiss author] F: 535
- Frisch, Otto R.** [Austrian physicist]
Fermi, Enrico F: 74
Hahn, Otto H: 7
Meitner, Lise M: 387
Nuclear energy (Artificial fission) N: 590
Strassmann, Fritz So: 919
- Frisch, Ragnar** [Norwegian economist] F: 535
Econometrics E: 57
Tinbergen, Jan T: 295
- Frisian** [language]
Netherlands (Language) N: 139
- Fritchie, Barbara** [American public figure]
Fritchie, Barbara F: 533
- Frith, William Powell** [British artist]
Painting (Painting outside France) P: 72
- Fritillary** [insect]
Butterfly (Brush-footed butterflies) B: 734
- Fritillary** [plant] F: 535 *with picture*
Flower (Garden perennials) F: 280 *with picture*
- Fritz, Jean** [American author]
Laura Ingalls Wilder Award (table) L: 121
Literature for children (Biography) L: 359; *pictures on* L: 378, L: 379
Regina Medal (table: 1985) R: 206
- Fröbel, Friedrich Wilhelm August** [German educator] F: 535
Kindergarten K: 317; (Early kindergartens) K: 318
- Frobisher, Sir Martin** [English explorer] F: 535
Exploration *map on* E: 443; (The search for a northern passage) E: 446
Inuit (The arrival of Europeans) I: 354g
Inuit I: 397
Northwest Passage N: 528
Nunavut (Arrival of the Europeans) N: 611-612
Spanish Armada (The two fleets) So: 755-756
- Frobisher Bay** [former name]
Inuit I: 397
Northwest Passage N: 528
- Frock coat**
Clothing (The 1800's) Ci: 702 *with picture*
- Freebel, Friedrich** *See* Fröbel, Friedrich Wilhelm August *in this index*
- Frog** [anatomy]
Horse (table: Horse terms) H: 343; (Legs and hoofs) H: 349
- Frog** [animal] F: 536 *with pictures*
Amphibian (Kinds of amphibians) A: 440 *with pictures*
Animal *pictures on* A: 478, A: 490, A: 507
Bullfrog B: 696
Ear (The ears of animals) E: 12-13 *with picture*
Egg (How embryos develop) E: 117
Heart *diagram on* H: 146
Larva L: 78 *with picture*
Metamorphosis (Other examples) M: 429 *with pictures*
Sound *picture on* So: 598
Tadpole T: 6
- Tree frog T: 434 *with picture*
- Frogner Park** [park, Oslo]
Norway (Arts) N: 541 *with picture*
- Frogs** [play by Aristophanes]
Aristophanes A: 663
- Froissart, Jean** [French historian] F: 541
French literature (Early prose) F: 519
- Frolic** [party]
Colonial life in America (Recreation) Ci: 802
- Frolinat** [Chad]
Chad (History) C: 367
- "From Greenland's Icy Mountains"** [hymn]
Mason, Lowell M: 266
- From Here to Eternity** [film]
Motion picture (Best picture: 1953) M: 861
Zinnemann, Fred Z: 598
- From Immigrant to Inventor** [book by Pupin]
Pupin, Michael Idvorsky P: 904
- From Madrigal to Modern Music** [book by Moore]
Moore, Douglas Stuart M: 796
- From Morn to Midnight** [play by Kaiser]
Drama (Expressionism) D: 339
Kaiser, Georg K: 210
- From Slavery to Freedom** [book by Franklin]
Franklin, John Hope F: 492
- From the Dictatorship of Porfirio Díaz to the Revolution** [painting by Siqueiros]
Painting *picture on* P: 40
- From the Fifteenth District** [book by Gallant]
Gallant, Mavis G: 14
- From the Founding of the City** [book by Livy]
History (The ancient Greeks and Romans) H: 261-262
- From the Greeks to Darwin** [book by Osborn]
Osborn, Henry Fairfield O: 861
- From the Mixed-Up Files of Mrs. Basil E. Frankweiler** [book by Konigsburg]
Konigsburg, Elaine K: 365
- From the New World** [music by Dvořák]
Dvořák, Antonín D: 394
- Fromm, Erich** [German-American psychoanalyst] F: 541
- Fromme, Lynette Alice** [American public figure]
Ford, Gerald Rudolph (The national scene) F: 376-378
- Fron** [botany]
Fern (Parts of a fern) F: 74-75 *with pictures*
Plant (Ferns) P: 520 *with pictures*
Seaweed (Kinds) S: 276
- Fronde** [French history] F: 541
Louis XIV L: 475
- Fronzini, Arturo** [Argentine political leader]
Argentina (New political problems) A: 658
- Front** [weather]
Air turbulence A: 200
Bjerknes, Vilhelm B: 385
Climate (Atmospheric circulation) Ci: 676a
Cloud (How clouds form) Ci: 711
Tornado (The story of a tornado) T: 333-334
Weather (table: Weather terms) W: 157;
(Planetary-scale systems) W: 158-159;
(Synoptic-scale systems) W: 159-160 *with diagrams*
- Front bench** [politics]
Parliament (How the House of Commons works) P: 173
- Front crawl**
Swimming (The basic strokes) So: 1043; *pictures on* So: 1044
- Front de Libération du Québec** [political group]
Canada, History of (The Quebec separatist movement) C: 152; (The separatist threat) C: 153
Montreal (The separatist movement) M: 779
Quebec (Recent developments) Q: 32
Trudeau, Pierre Elliott (The national scene) T: 464
- Front de Libération Nationale** [political group, Algeria]
Algeria (Government) A: 360-361; (History) A: 364-365
- Front for Liberation of Mozambique** *See* Frelimo *in this index*
- Front for the Liberation of Angola** [political group] *See* National Front for the Liberation of Angola *in this index*
- Front for the Liberation of Occupied South Yemen**
Yemen (Formation of Yemen [Aden]) Y: 563-564
- Front fork**
Motorcycle (The parts of a motorcycle) M: 878 *with picture*
- Front Islamique du Salut** [political party]
Algeria (Recent developments) A: 365
- Front line** [music]
Jazz (The sound of jazz) J: 68 *with picture*
- Front Page, The** [play by Hecht and MacArthur]
Hecht, Ben H: 164
- "Front Page Challenge"** [television program]
Berton, Pierre B: 272
- Front porch campaign** [U.S. history]
McKinley, William (The front-porch campaign) M: 340
- Front Range** [mountains]
Colorado (Land regions) Ci: 838 *with map*
- Front Street** [Dodge City]
Kansas (Places to visit) K: 226 *with picture*
- Front-wheel drive**
Automobile (The drive system) A: 953
Transmission (Transmissions and drives) T: 375
- Frontal activity** [weather]
Cloud (How clouds form) Ci: 711 *with pictures*
- Frontal bone** [anatomy]
Face F: 3
Head *diagram on* H: 123
Human body *diagram on* H: 422
Skull S: 495
- Frontal fog** [weather]
Fog F: 314 *with diagram*
- Frontal lobe** [anatomy]
Brain (The cerebrum) B: 550b *with diagram*;
(In thinking and remembering) B: 555
- Frontal muscle** [anatomy]
Human body *diagram on* H: 422
- Frontal sinus** [anatomy]
Sinus S: 474 *with diagram*
- Frontenac** [racing car]
Chevrolet, Louis C: 416
- Frontenac, Comte de** [Canadian political leader]
F: 541 *with picture*
Canada, History of (The royal province) C: 142-143
Jolliet, Louis (Discovery and exploration) J: 156
Marquette, Jacques (Exploration and discovery) M: 218
- Frontier** [U.S. history]
Boom town B: 474
Pioneer life in America P: 476
Turner, Frederick Jackson T: 515
West, The W: 199
Western frontier life in America W: 232
Westward movement in America W: 244;
(Closing of the frontier) W: 252; (The frontier influence) W: 252
- Frontier Days Celebration**
Cheyenne (Description) C: 417; *picture on* C: 418
Wyoming *picture on* W: 517; (Visitor's guide) *picture on* W: 524
- Frontier Scout** [newspaper]
North Dakota (Communication) N: 512
- Frontier town** [U.S. history]
Western frontier life in America (Frontier towns) W: 236
- Frontispiece**
Book (Inside a book) B: 464-465
- Fronto** [Roman scholar]
Latin literature (The Imperial Period) L: 116
- Frosch, Paul** [German bacteriologist]
Löffler, Friedrich August Johannes L: 420
- Frost** [weather] F: 542 *with pictures*
Jack Frost J: 2
- Frost, Jack** [legendary figure]
Jack Frost J: 2
- Frost, Leslie M.** [Canadian political leader]
Ontario (table) O: 783
- Frost, Robert Lee** [American poet] F: 542 *with portrait*
American literature (Realist poetry) A: 421 *with portrait*
Autograph *picture on* A: 943
- Frostbite** [disorder] F: 543
Dry ice D: 369
First aid (Frostbite) F: 141
Weather (Reporting the weather) W: 169-170
- Frosti** [Norse mythology]
Jack Frost J: 2
- Frosting** [hairstressing]
Hairstressing (The 1900's) H: 12
- Frostline** [geology]
House (The foundation) H: 380
- Froude, James Anthony** [British historian]
Biography (Modern biography) B: 314
- Frozen food** *See* Food, Frozen *in this index*

FRS See Federal Reserve System in this index

Fructose [sugar] F: 543

Carbohydrate (Kinds of carbohydrates) C: 203;
(How the body uses carbohydrates) C: 204

Corn syrup Ci: 1065

Hydrolysis H: 471

Jerusalem artichoke J: 102

Nutrition (Carbohydrates) N: 625

Sugar (Kinds of sugar) So: 959

Fruit F: 544 with pictures

Angiosperm A: 462 with picture

Antioxidant A: 557

Farm and farming (Specialized crop farms)

F: 30-31 with picture

Flavonoid F: 230

Food (Food from plants) F: 329

Food, Frozen (Preparing foods for freezing)

F: 338-339 with picture

Horticulture H: 369

Lake (Climate) L: 33

Nutrition (Carbohydrates) N: 625; (Nutrition guidelines) N: 626

Plant (Seeds) P: 531-532

Tree (Food products) T: 412; (Seeds) T: 417 with pictures

Vegetable V: 292; (Fruits) V: 292 with picture

Wine W: 336

See also the list of Related Articles in the Fruit article

Fruit bat [animal]

Flying fox F: 312

Fruit fly [insect] F: 549 with picture

Apple maggot A: 573

Compound eye picture on Ci: 906

Genetic engineering (History) G: 84b

Heredit (The birth of genetics) H: 208;

(Chromosomes and genes) H: 201

Insect (Wings) I: 288; picture on I: 291

Mediterranean fruit fly M: 380 with picture

Fruit juice [drink]

Wine W: 336

Fruit of Islam [organization]

Nation of Islam N: 27

Fruit pigeon See Asian fruit pigeon in this index

Fruit rot [plant disease]

Tomato (Growing, harvesting, and processing)

T: 326

Fruit sugar See Fructose in this index

Fruiting body

Fungi (Parts of a fungus) F: 558-559 with pictures

Mushroom M: 941

Fruitlands [social reform]

Alcott, Bronson A: 338

Frunza [former name]

Bishkek [Bishkek] B: 381

Frustration tolerance [psychology]

Baby (From 1 to 6 months) B: 7

Child (Aggressive and antisocial behavior)

C: 452

Frustule

Diatom D: 185 with picture

Frustum [geometry]

Cone Ci: 931 with diagram

Fruticose lichen

Lichen L: 269

Fry [zoology]

Fish (How fish live) F: 165 with picture

Fry, Christopher [British dramatist] F: 549

Fry, Elizabeth Gurney [British social reformer]

F: 549

Fry, Joseph [American sea captain]

Virginus Affair V: 424

Fry, Joshua [English surveyor]

Map (Mapping the Americas) M: 184-185

Fry, Roger [English art critic]

Postimpressionism P: 709

Frye, Northrop [Canadian critic] F: 549

Fryer [food]

Poultry (Raising poultry) P: 720

Frying

Cooking (Frying) Ci: 1028

Frying Pan-Arkansas Project [water system]

Colorado (The mid-1900's) Ci: 847

FSA [U.S. history]

Health and Human Services, Department of (History) H: 128

New Deal (table) N: 201

FSH [hormone] See Follicle stimulating hormone in this index

FSI [Washington, D.C.]

Foreign Service (Service) F: 388

FSLIC [agency] See Federal Savings and Loan

Insurance Corporation in this index

FSM [country] See Micronesia, Federated States of in this index

FT [train]

Locomotive picture on L: 416

FTC See Federal Trade Commission in this index

Ft.-lb [measurement] See Foot-pound in this index

FTP program [software]

Computer (Internet software) Ci: 922

Fu-chou [China]

Fuzhou F: 590

Fu Mingxia [Chinese athlete]

Olympic Games picture on O: 749

Fuad I [king of Egypt]

Faruk I F: 48

Fuchs, Leonhard [German botanist]

Fuchsia F: 550

Fuchs, Sir Vivian Ernest [British geologist]

F: 549

Antarctica (Recent activities) A: 538

Exploration (The exploration of Antarctica)

E: 450 with map

Fuchsia [plant] F: 549 with picture

Fudge-A-Mani book by Blume

Blume, Judy B: 425

Fuegiens [people]

Tierra del Fuego T: 283

Fuel F: 550

Automobile (How an automobile works)

A: 949 with diagrams

Environmental pollution (Air pollution) E: 331;

picture on E: 333

Fire (How fire is produced) F: 121

Global warming (Limiting global warming)

G: 232a

Jet propulsion J: 110

Light L: 282

Methanol M: 434

Natural gas liquids N: 64

Petroleum P: 330

Plant (Raw materials) P: 518

Rocket (Kinds of rocket engines) R: 388 with diagrams

Technology (Challenges of technology) T: 76-

77

Uranium U: 214

See also the list of related articles in the Fuel article

Fuel-air bomb

Bomb (Incendiary bombs) B: 450

Fuel assembly

Nuclear energy (Power reactors) N: 584-585

with diagram; (Fuel preparation) N: 586

with picture; (Wastes and waste disposal)

N: 588

Fuel cell [automobile]

Automobile (The automobile today) A: 972

Automobile racing (Safety measures) A: 975-

976

Fuel cell [electricity] F: 551 with diagram

Cooper, Leroy Gordon, Jr. Ci: 1035

Electric car (History) E: 165-166 with picture

Electrochemistry E: 200

Energy supply (Fuel cells) E: 279

Gas [fuel] (The worldwide gas industry) G: 59

Space exploration (Meeting basic needs in

space) So: 703

Fuel fabrication plant

Nuclear energy (Fuel preparation) N: 586

Uranium (Refining and processing uranium

ore) U: 215

Fuel injection [mechanics] F: 552 with diagram

Automobile (The fuel system) A: 950 with diagrams

Free-piston engine F: 499

Fuel line

Carburetor C: 208

Fuel nozzle

Carburetor C: 208

Fuel oil

Heating (Oil) H: 160

Fuel pump

Fuel injection F: 552 with diagram

Fuel reservoir

Carburetor C: 208

Fuel rod

Nuclear energy (Power reactors) N: 584-585

with diagram

Fuel shortage

Automobile (The rise of international automak-

ing) A: 972

Energy supply E: 277

Petroleum (The energy shortage) P: 349

Transportation (Problems of modern transportation) T: 397

Fuel system

Gasoline engine (Fuel system) G: 65

Fuenteovejuna [play by Lope de Vega]

Spanish literature (The 1600's) So: 759

Fuentes, Carlos [Mexican author] F: 552

Latin-American literature (Recent developments) L: 113

Fugard, Athol [South African author] F: 553

Drama (Drama in other countries) D: 341

Fugio cent

Cent C: 350

Fugitive slave laws [U.S. history] F: 553

Cary, Mary Ann Shadd C: 270

Civil War (The Compromise of 1850) Ci: 616

Compromise of 1850 Ci: 907

Mississippi (The Civil War and Reconstruction) M: 642

Underground railroad U: 21

Fugitives [literary group]

American literature (Modernist poetry) A: 421

Fugu [fish]

Puffer P: 886

Fugue [music] F: 553

Classical music (Fugue) Ci: 645

Counterpoint C: 1097

Fugue [psychology] See Psychogenic fugue in this index

Fuhrrott, Johann K. [German anthropologist]

Prehistoric people (table) P: 752

Führer

Hitler, Adolf (The New Order) H: 267

Fuji, Mount See Mount Fuji in this index

Fuji-Hakone-Izu National Park [Japan]

National park (Japan) N: 42c with picture;

table N: 42f

Fuji-san See Mount Fuji in this index

Fuji-yama See Mount Fuji in this index

Fujimori, Alberto [Peruvian political leader]

Peru (Government) P: 306-307; (Return to

civilian government) P: 316; (Recent

developments) P: 316 with picture

Fujita, T. Theodore [Japanese-American meteorologist]

Tornado (Damage by tornadoes) T: 334

Fujita scale [instrument]

Tornado (Damage by tornadoes) T: 334; (table)

T: 335

Fujitsu Company

Computer (Manufacturing) Ci: 924

Manufacturing (table) M: 170

Fujiwara [Japanese history]

World, History of the (The rise of Japanese

civilization) W: 435-436

Fukui, Kenichi [Japanese chemist]

Nobel Prizes (Chemistry: 1981) N: 443

Ful [food]

Egypt (Food and drink) E: 124

Sudan (Food and drink) So: 953

Fula [people] See Fulani in this index

Fulani [people] F: 553 with picture

Cameroon (People) C: 85

Gambia (People) G: 18

Guinea (People) G: 430; (History) G: 432

Hausa H: 86

Mali (People) M: 106

Niger (People) N: 407-408

Senegal (People) S: 297

Sierra Leone (History) S: 452

Fulbright, J. William [American political leader]

F: 554

Fulbright Act (1946)

Fulbright Scholarship F: 554

Fulbright Scholarship [education] F: 554

Scholarship (International scholarships) S: 178

Fulcrum [mechanics]

Lever L: 217

Machine (Six simple machines) M: 14 with

pictures; (Mechanical advantage) M: 14

with picture

Fulgurite [rock]

Glass (Early times) G: 217-218

Fulks, Joe [American basketball player]

Basketball (Changes in the game) B: 151-152

Full bridle [riding equipment]

Horse (The bridle) H: 352

Poker P: 603
Full moon
 Blue moon B: 420
 Moon (Phases) M: 783-784 *with picture*
Fullback [sports]
 Football (The offensive team) F: 356 *with diagrams*
 Soccer (The defenders) So: 545
Fuller, Alvin T. [American political leader]
 Massachusetts (table) M: 288
Fuller, Buckminster [American designer] F: 554 *with picture*
 Architecture *picture on A*: 610
Fuller, Calvin S. [American chemist]
 Solar energy (The development of photovoltaic cells) So: 577
Fuller, Levi K. [American political leader]
 Vermont (table) V: 333
Fuller, Margaret [American author] F: 554
 American literature (Nonfiction prose) A: 418
 Magazine (History) M: 43-45
Fuller, Melville Weston [American jurist] F: 555
Fuller, Sarah [American educator]
 Bell, Alexander Graham (The Boston teacher) B: 240
Fuller, Sarah Margaret *See Fuller, Margaret in this index*
Fullerene [molecule]
 Carbon (Fullerenes) C: 206 *with diagram*
Fuller's earth [earth] F: 555
Fuller's teasel [plant]
 Teasel T: 73
Fulling [industrial process]
 Broadcloth B: 634
 Fuller's earth F: 555
 Wool (Making fabric) W: 401
Fullmoon maple [tree]
 Maple (Other maples) M: 187
Fully encapsulating suit
 Fire Department (Protective clothing) F: 127 *with picture*
Fully submerged hydrofoil
 Hydrofoil H: 467 *with diagram*
Fulmar [bird] F: 555
Fulton II [ship]
 Perry, Matthew Calbraith P: 294
Fulton, Robert [American inventor] F: 555 *with pictures*
 Clermont Ci: 662b
 Pennsylvania (Industrial growth) P: 267
 Ship (The *Clermont*) S: 411
 Submarine (Early submarines) So: 942
 Torpedo (History) T: 340c
Fulton, Robert D. [American political leader]
 Iowa (table) I: 391
Fulton the First [ship]
 Fulton, Robert (Builds the *Clermont*) F: 556
Fumarole [geology] F: 556
Fumigant insecticide
 Fumigation F: 556
 Insecticide I: 302 *with picture*
Fumigation F: 556
 Food preservation (Other methods) F: 343-344
Fuming sulfuric acid [chemical]
 Sulfuric acid (Uses and properties) So: 968
Funafuti [city, Tuvalu] F: 556
 Tuvalu T: 527
Funan [ancient kingdom]
 Cambodia (History) C: 72-73
Funchal [city, Madeira] F: 556
 Madeira Islands (The island of Madeira) M: 29 *with picture*
Function [mathematics]
 Algebra (Functions) A: 356
 Calculus (Functions) C: 23; (The fundamental theorem of calculus) C: 25
Function key
 Computer (A keyboard) Ci: 912
 Keyboard K: 308 *with picture*
Function word
 Adjective (Comparison of adjectives) A: 57
 English language (Grammar) E: 312
 Grammar (Principles of English grammar) G: 303
 Parts of speech P: 189
Functional constituency
 Hong Kong (Government) H: 319
Functional disorder
 Abnormal psychology (Theories of abnormal psychology) A: 12
Functional food
 Health food (Types of health foods) H: 129
Functional hypoglycemia [disorder]
 Hypoglycemia H: 481

Functional illiteracy
 Education (How can performance be improved?) E: 105-106
 Literacy L: 351
Functional jurisdiction [law]
 Government (Jurisdiction) G: 282
Functional learning [education]
 Handwriting (Learning manuscript writing) H: 47
Functional literacy
 Reading (The importance of reading) R: 155; (Reading and society) R: 162-163
Functional magnetic resonance imaging [medicine]
 Brain (The work of the brain) B: 552-553
Functional murmur [physiology]
 Heart murmur H: 147
Functional proteins
 Metabolism (Anabolism) M: 424
Functional type [classification]
 Archaeology (Classification) A: 597-598
Functionalism
 Anthropology (The early 1900's) A: 548
 Sociology (Development of social research) So: 566
Fund [economics]
 Endowment E: 273
Fund-raising event
 Election campaign (Campaign funds) E: 160
Fundamental boson [physics]
 Boson B: 494
 Subatomic particle (Elementary particles) So: 937
Fundamental force
 Force (Kinds of force) F: 370
 Subatomic particle (Fundamental forces) So: 936; (Theories of forces) So: 937-938
Fundamental frequency [sound]
 Harmonics H: 62 *with diagram*
 Pitch P: 498
 Sound (Sound quality) So: 601
Fundamental Orders [U.S. history]
 Connecticut Ci: 952; (Constitution) Ci: 967; (English settlement) Ci: 968
 Hartford (Government and history) H: 79
 Hooker, Thomas H: 324
Fundamental theorem of arithmetic
 Number theory N: 605
Fundamental theorem of calculus
 Calculus (The fundamental theorem of calculus) C: 25; (History) C: 25
Fundamentalism [religion] F: 557
 Islam (Divisions of Islam) I: 466
 Religion (Religion today) R: 223
 Scopes trial S: 209
Fundamentals, The [religious history]
 Fundamentalism F: 557
Fundo [farm]
 Chile (Rural life) C: 460-462
Fundy, Bay of *See Bay of Fundy in this index*
Fundy National Park [New Brunswick]
 Canada (table: National parks and national park reserves) C: 113
 National park (table) N: 42g
Funeral at Omans, The [painting by Courbet]
See Burial at Omans, A in this index
Funeral customs F: 557
See also Burial in this index
 Bell (Uses of bells) B: 239
 Cremation Ci: 1126
 Embalming E: 255
 Flag (Permitted and prohibited uses) F: 222
 Louisiana *picture on L*: 483
 Maya (Religion) M: 322-323
 Mummy M: 925
 Necropolis N: 117
 Painting (Egyptian painting) P: 40-41
 Pyramids (Egyptian pyramids) P: 916
 Sutte So: 1013
 Wake W: 6
Funeral march
 March M: 193
Fungal disease F: 558
 Disease (Other infectious diseases) D: 227
 Lawn *pictures on L*: 143
See also the list of Related Articles in the Fungal disease article
Fungi [botany] F: 558 *with pictures*
 Animal A: 468
 Antibiotic (Other kinds of antibiotics) A: 550
 Classification, Scientific (Groups in classification) Ci: 654-655
 Disease (Other infectious diseases) D: 227
 Forestry (Diseases and pests) F: 407

Fungal disease F: 558
 Fungicide F: 560
 Hay fever (Causes and prevention) H: 116
 Kingdom K: 329
 Lichen L: 269 *with pictures*
 Mushroom M: 941 *with pictures*
 Mycotoxin M: 970f
 Parasite (Parasites that feed on plants) P: 155
 Plant (Roots) P: 529; (Photosynthesis) P: 538 *with picture*; (Plant enemies) P: 543 *with pictures*
 Rust R: 567
 Saprophyte S: 122
 Spore (Algal and fungal spores) So: 802 *with diagram*
See also the list of Related Articles in the Fungi article
Fungicide [chemical] F: 560
 Agriculture (Agricultural chemicals) A: 159-160
 Mildew M: 541
 Pest control (Pesticides) P: 318
Fungus-growing ant
 Ant (Fungus growers) A: 527 *with picture; picture on A*: 520
Funj Sultanate [former empire] F: 560
 Sudan (History) So: 955
Funk, Casimir [Polish biochemist]
 Vitamin (History) V: 432
Funky jazz
 Jazz (Hard bop) J: 72
Funnel [smokestack]
 Ship (Nautical terms) S: 416
Funnel [weather]
 Tornado (The story of a tornado) T: 333-334 *with pictures*
Funnel gauge [meteorology]
 Rain (Measuring rainfall) R: 125
Funnel-web spider
 House spider H: 388
 Spider (Funnel-web spiders) So: 789; (table) So: 790
Funnies *See Comics in this index*
Funny bone [anatomy] F: 560
Funny Car
 Automobile racing (Drag racing) A: 978
Funston, Frederick [American general] F: 560
Fuqua, Henry L. [American political leader]
 Louisiana (table) L: 496
Fur F: 561 *with pictures*
See also Coat [zoology] in this index
 Camel (People and camels) C: 77; (The body of a camel) C: 77
 Clothing (Clothing materials) Ci: 704; (Protecting the public) Ci: 705
 Fur trade F: 564
 Hair H: 9
Fur [people]
 Sudan (People) So: 952
Fur Products Labeling Act [1952]
 Clothing (Protecting the public) Ci: 705
 Fur (Cutting and sewing) F: 563
Fur ranch
 Fur F: 561; (Fur ranching) F: 562
Fur seal [sea animal]
 Alaska (Plant and animal life) A: 295-296 *with picture*
 Animal *picture on A*: 500
 Mammal *picture on M*: 116
 Pribilof Islands P: 774
 Seal (Eared seals) S: 265 *with picture*; (Seals in captivity) S: 267
Fur trade [American history] F: 563 *with picture and map*
 Alaska (Fur industry) A: 298
 Alberta (The fur trade) A: 328
 Astor, John Jacob A: 826
 Canada, History of (Start of the fur trade) C: 142 *with pictures*; (Exploration of the West) C: 145
 Hudson's Bay Company H: 407
 Indian, American (After European contact) I: 154
 Indiana (Exploration and settlement) I: 215
 Montagnais Indians M: 741
 New France (Colonial life) N: 204
 North West Company N: 519
Fur Trade, Museum of the [Chadron]
 Nebraska (Places to visit) N: 102
Furchgott, Robert Francis [American pharmacologist]
 Nobel Prizes (Physiology or medicine: 1998) N: 445
Furcolo, Foster [American political leader]
 Massachusetts (table) M: 288

340 Furfural

Furfural [chemical] F: 566
 Grain (Other uses) G: 301
 Rice (Other uses) R: 323

Furfuraldehyde
 Furfural F: 566

Furfuryl alcohol [chemical]
 Furfural F: 566

Furies [mythology] F: 566 *with pictures*
 Hades H: 4

Furies, The [play by Aeschylus]
 Aeschylus A: 90

Furious [ship]
 Aircraft carrier (History) A: 207

Furious Seasons [book by Carver]
 Carver, Raymond C: 269

Furka Base Tunnel [Switzerland]
 Tunnel T: 491

Furka Pass [Switzerland]
 River R: 351 *with picture*

Furlong [unit of measure] F: 566
 Horse racing (At the races) H: 365
 Weights and measures (Miscellaneous weights and measures) W: 184; (Inch-pound units) W: 187

Furlough
 Criminal justice system (Problems in the correctional system) Ci: 1144

Furman v. Georgia [U.S. history]
 Supreme Court of the United States (Criminal law) So: 1001; (table) So: 1002

Furnace F: 567 *with diagram*
 Heating (Warm-air heating) H: 159
 Iron and steel I: 436 *with picture*; (How steel is made) I: 442 *with diagrams*
 Steam engine (How steam engines work) So: 880

Furnas, Robert W. [American political leader]
 Nebraska (table) N: 110

Furness, H. H. [American author]
 Shakespeare, William (Editions of the 1700's and 1800's) S: 368

"Furnished Room, The" [story by O. Henry]
 Henry, O. (His works) H: 189

Furniture F: 568 *with pictures*
 Antique (Furniture) A: 558 *with picture*
 Bauhaus picture on B: 174
 Biedermeier B: 295
 Colonial life in America (Furnishings) Ci: 797; (Decorative arts) Ci: 807 *with picture*
 Folk art (Household objects) F: 318 *with pictures*
 Interior design I: 326 *with pictures*
 Ironwork, Decorative picture on I: 454
 Lacquer L: 23
 Mahogany M: 66
 Paint (Industrial paints) P: 24
 Pioneer life in America (Furniture and household utensils) P: 481 *with picture*
 Sweden (Industrial design) So: 1027
 White House pictures on W: 288
 Wicker W: 299
See also the list of Related Articles in the Furniture article

Furniture City
 Grand Rapids G: 309

Furrow irrigation
 Irrigation (Surface irrigation) I: 457-458 *with picture*

Furrow mining
 Mining (Surface mining methods) M: 574-575

Further Observations on the Variolae Vaccinae or Cowpox [book by Jenner]
 Jenner, Edward (Recognition) J: 91

Furtwängler, Wilhelm [German conductor]
 F: 588

Furze [shrub] F: 588

Fuserium wilt [fungus]
 Pea (Diseases and pests) P: 205
 Watermelon W: 146

Fuse [electricity] F: 589 *with diagrams*
 Electric circuit E: 166
 Electricity (Controlling electric current) E: 195
 House (Electrical wiring) H: 382

Fusa [explosives] F: 589
 Ammunition (How shells explode) A: 436
 Bomb B: 450 *with diagrams*
 Depth charge D: 152
 Fireworks (How fireworks work) F: 135
 Mine warfare (Land mines) M: 564

Fused silica glass
 Glass (Fused silica glass) G: 213

Fusee [flare]
 Fireworks (Other uses of fireworks) F: 135

Fuselage

Airplane (The fuselage) A: 214 *with picture*
 Glider (The body) G: 228

Fusible metal
 Bismuth B: 383

Fusil
 Heraldry picture on H: 195

Fusion [optics]
 Eye (Depth perception) E: 463-464

Fusion [physics] F: 589
 Alpha particle A: 381
 Bomb (Hydrogen bombs) B: 451-452
 Energy supply (Nuclear energy) E: 278; *picture on E: 282*
 Glass (Specialty glasses) G: 212-213
 Laser (Heating) L: 83
 Nuclear physics N: 595
 Nova N: 553
 Nuclear energy (Nuclear fusion) N: 583 *with diagram*; (Experimental fusion devices) N: 592 *with pictures*
 Nuclear weapon (Thermonuclear weapons) N: 597
 Physics (Nuclear physics) P: 437
 Plasma P: 552
 Radiation (In industry) R: 75; (The sun and other stars) R: 77 *with diagram*
 Star (Fusion in stars) So: 846; (Evolution of stars) So: 848
 Sun (Sun terms) So: 976; (Nuclear fusion) So: 978
 Transmutation of elements T: 379
 White dwarf W: 285

Fusion jazz
 Jazz (Fusion) J: 73 *with picture*
 Davis, Miles D: 49

Fusion Party [political party]
 Australia (The birth of a new nation) A: 924

Fusion reactor
 Magnetohydrodynamics M: 62
 Nuclear energy (Experimental fusion devices) N: 592 *with pictures*

Fusion weapon *See Nuclear weapon in this index*

Fusion welding
 Welding (Fusion welding) W: 189 *with picture*

Fussall, Jacob [American businessman]
 Ice cream (History) I: 8-9

Fust, Johannes [German printer]
 Gutenberg, Johannes G: 444

Futa [clothing]
 Yemen (Food and clothing) Y: 562

Futabatei Shimei [Japanese author]
 Japanese literature (The modern period) J: 62

Futebol [sport]
 Brazil (Recreation) B: 575

Futon [quilt]
 Japan (Way of life) J: 38
 Tokyo (Visitor's guide) T: 316

Futrell, Junius Marion [American political leader]
 Arkansas (table) A: 712

Futrelle, Jacques [American author]
 Detective story (History) D: 163

Future Eve, The [book by Villiers de l'Isle Adam]
 Villiers de l'Isle-Adam, Comte de V: 385

Future Farmers of America *See FFA in this index*

Future Farmers of Virginia
 FFA (History) F: 86

Future Homemakers of America *See Family, Career and Community Leaders of America in this index*

Future Nurses
 Nursing (Career information) N: 620

Future perfect tense [grammar]
 Tense T: 170

Future Shock [recording]
 Hancock, Herbie H: 38

Future tense [grammar]
 Tense T: 170

Futures contract [economics]
 Commodity exchange (Forward and futures contracts) Ci: 873; (Financial futures) Ci: 874
 Cotton (Selling) Ci: 1091
 Wheat (Buying and selling wheat) W: 274

Futurism [art] F: 589 *with pictures*
 Boccioni, Umberto B: 434
 Italian literature (The 1900's) I: 495
 Italy (Arts) I: 504-505 *with picture*
 Russian literature (Post-symbolism) R: 563
 Sculpture (Cubism and futurism) S: 257

Fuze [munitions] *See Fuse in this index*

Fuzhou [China] F: 590

Treaty port T: 409

Fuzing system
 Guided missile (The warhead) G: 423-424

G

G [letter] G: 1 *with pictures*

G [physics] G: 2
 Space exploration (Getting into space and back) So: 698

G [rating]
 Motion picture (Censorship and self-regulation) M: 861

G clef [music]
 Music (Indicating pitch) M: 953 *with picture*
 Treble T: 409

G-Men [FBI agents]
 Federal Bureau of Investigation (History) F: 62-63

G scale
 Railroad, Model (Scale and size) R: 120

GA [hormone]
 Gibberellin G: 185

G.A. [organization] *See Gamblers Anonymous in this index*

Ga [people]
 Accra A: 24

Ga [symbol]
 Gallium G: 16

Gabardine [fabric] G: 2

Gabbro
 Rock (table) R: 373 *with picture*

Gaberones
 Gaborone G: 4

Gabirol, Solomon Ibn [Hebrew poet]
 Hebrew literature (Medieval works) H: 162

Gable, Clark [American actor] G: 2 *with portrait*
 Autograph picture on A: 943
 Motion picture (Best performance by an actor: 1934) M: 862

Gable roof
 Roof R: 451 *with picture*

Gabo, Naum [Russian-born sculptor] G: 2
 Pevsner, Antoine P: 351

Gabon G: 2 *with map*
 Flag picture on F: 198
 French Equatorial Africa F: 514
 Rain forest picture on R: 126d
 Sculpture picture on S: 240

Gaboon viper
 Snake picture on S: 525
 Viper V: 391

Gabor, Dennis [British engineer] G: 4
 Holography H: 297
 Optics (History) O: 813

Gaborone [Botswana] G: 4

Gabriel [American slave revolt leader] G: 8

Gabriel [Biblical figure]
 Annunciation A: 518
 Islam I: 463
 Jesus Christ (The Nativity) J: 104-105
 Kaaba K: 208
 Quran Q: 44

Gabriel, Peter [British musician]
 Rock music (Rock and society) R: 380

Gabrieli, Andrea [Italian composer]
 Classical music (The Baroque period) Ci: 647

Gabrieli, Giovanni [Italian composer]
 Classical music (The Baroque period) Ci: 647

Gaceta de Texas [newspaper]
 Texas (Communication) T: 203

Gades [ancient city]
 Phoenicia (Language) P: 393

Gadhafi, Muammer Muhammad al- [Libyan political leader] *See Qadhafi, Muammer Muhammad al- in this index*

Gadolin, Johan [Finnish chemist]
 Gadolinium G: 4

Gadolinite [mineral]
 Gadolinium G: 4
 Rhenium R: 290
 Ytterbium Y: 574

Gadolinium [element] G: 4

Gadsby's Tavern
 Alexandria A: 345

Gadsden, Christopher [American colonial leader] G: 4

Gadsden, James [American government official] G: 4
 Gadsden Purchase G: 5

- Gadsden Purchase** [1853] **G**: 4 *with map*
 Arizona (Spanish exploration) **A**: 688-690
 Gadsden, James **G**: 4
 Mexico (War with Texas and the United States) **M**: 471
 New Mexico (Territorial days) **N**: 275
 United States, History of the (Manifest destiny) **U**: 167 *with map*
 Westward movement in America (The Southwest) **W**: 249
- Gadwall** [duck] **G**: 5 *with picture*
- Gaea** [Greek mythology]
 Cronus **Ci**: 1152
 Hesperides **H**: 218
 Mythology (The Creation myth) **M**: 978
 Titans **T**: 300
 Uranus **U**: 217
- Gaekkebreve** [custom]
 Valentine's Day (In Europe) **V**: 261
- Gaelic football**
 Ireland (Recreation) **I**: 420
- Gaelic language** **G**: 5
 Alphabet *picture on* **A**: 383
 Ireland (Language) **I**: 418
 Irish literature **I**: 430; (Modern works in Gaelic) **I**: 431
 Northern Ireland (Language) **N**: 522
 Scotland (Language) **S**: 213
 United Kingdom (Language) **U**: 55
- Gaelic League** [Irish history]
 Irish literature (Modern works in Gaelic) **I**: 431
- Gaelic literature**
 Irish literature **I**: 430; (Modern works in Gaelic) **I**: 431
- Gaels** [Celtic-speaking people] **G**: 5
- Gaetani, Benedetto** *See* Boniface VIII *in this index*
- Gaff** [fishing equipment]
 Fishing (Bait) **F**: 177-178
- Gaff** [sailing]
 Sailing (Spars) **S**: 23-24
- Gaffer** [job]
 Glass (Glass terms) **G**: 222
- Gaffer** [photography]
 Motion picture (Preparing to shoot) **M**: 852
- Gag cartoon**
 Cartoon (Single panel cartoons) **C**: 265-266
with picture; (Developing the idea) **C**: 266-267
- Gag order** [law]
 Freedom of the press (In the United States) **F**: 507-508
- Gag Rules** [U.S. history]
 Adams, John Quincy (The Gag Rules) **A**: 43
- Gagaku** [music]
 Music (Japanese music) **M**: 956
- Gagarin, Yuri Alekseyevich** [Russian cosmonaut] **G**: 5 *with portrait*
 Astronaut (Achievements in space) **A**: 829
with picture; (table) **A**: 830
 Exploration (Space exploration) **E**: 452
 Space exploration (Vostok and Mercury: The first human beings in space) **So**: 711-712
with picture
 Union of Soviet Socialist Republics *picture on* **U**: 33
- Gage** [instrument]
 Gauge **G**: 69
- Gage, Henry T.** [American political leader]
 California (table) **C**: 59
- Gage, Jack R.** [American political leader]
 Wyoming (table) **W**: 532
- Gage, Lyman J.** [American government official]
 McKinley, William (table) **M**: 342
 Roosevelt, Theodore (table) **R**: 470
 Treasury, Department of the (table) **T**: 407
- Gage, Thomas** [British general] **G**: 5
 Concord, Battle of **Ci**: 929
 Revere, Paul (Paul Revere's ride) **R**: 267
 Revolutionary War in America (The Intolerable Acts) **R**: 273; (Lexington and Concord) **R**: 274
- Gagil-Tamil** [island, Pacific]
 Yap Islands **Y**: 553
- Gagnan, Émile** [French diver]
 Diving, Underwater (History) **D**: 247
 Exploration (Deep-sea exploration) **E**: 451
 Skin diving (History) **S**: 494
- Gagnon, Madeleine** [Canadian poet]
 Canadian literature (Modern Canadian poets) **C**: 160-161
- Gahagan, Helen** [American political leader]
- Nixon, Richard Milhous (U.S. senator) **N**: 430
- Gahn, Johan Gottlieb** [Swedish chemist]
 Manganese **M**: 139
- Gaia** [biology] **G**: 6
- Gaillard, David DuBose** [American engineer]
 Panama Canal (The Gaillard Cut) **P**: 123
- Gaillard Cut**
 Panama Canal (The Gaillard Cut) *map on* **P**: 123; (Cutting through the isthmus) **P**: 126; (The canal since 1920) **P**: 126
- Gaillardia** [plant] **G**: 6 *with picture*
 Flower *picture on* **F**: 287
- Gainsborough, Thomas** [British painter] **G**: 6
with picture
 Painting (People) **P**: 31 *with picture*;
 (Landscapes and seascapes) **P**: 32-33
 Rococo **R**: 396
 Siddons, Sarah Kemble *picture on* **S**: 449
- Gainsborough hat**
 Hat **H**: 83; *picture on* **H**: 84
- Gairy, Eric M.** [Grenada political leader]
 Grenada (History and government) **G**: 389
- Gaiseric** [Vandal king]
 Vandals **V**: 279
- Gait**
 Horse (Gaits) **H**: 353 *with pictures*
- Gaitán, Jorge Eliécer** [Colombian political leader]
 Colombia (The 1900's) **Ci**: 783
- Gaîté Parisienne** [ballet]
 Massine, Léonide **M**: 296
- Gaius Caesar Augustus Germanicus** [Roman emperor] *See* Caligula *in this index*
- Gaius Marius** [Roman general]
 Sulla, Lucius Cornelius **So**: 968
- Gaius Plinius Caecilius Secundus** *See* Pliny the Younger *in this index*
- Gaius Plinius Secundus** *See* Pliny the Elder *in this index*
- Gaius Verres** [Roman political leader]
 Cicero, Marcus Tullius (His life) **Ci**: 552
- Gaiwii** [message]
 Handsome Lake **H**: 46
- Gajdusek, Daniel Carleton** [American physiologist]
 Nobel Prizes (Physiology or medicine: 1976) **N**: 445
- Gal** [measurement]
 Metric system (Non-SI metric units) **M**: 440
- Gala** [apple]
 Apple (table) **A**: 571 *with picture*
- Galabiyah** [clothing]
 Egypt (Clothing) **E**: 124
- Galactic cluster** [astronomy]
 Milky Way (Shape of the galaxy) **M**: 550-551
- Galactic cosmic rays**
 Astronomy (Cosmic-ray astronomy) **A**: 845
 Cosmic rays (Galactic cosmic rays) **Ci**: 1076
- Galactic halo**
 Halo **H**: 27
- Galactose**
 Carbohydrate (Kinds of carbohydrates) **C**: 203;
 (How the body uses carbohydrates) **C**: 204
 Cell (Metabolic diseases) **C**: 336
- Galactosemia** [disorder]
 Cell (Metabolic diseases) **C**: 336
- Galago** [animal] **G**: 7 *with picture*
 Primate (Galagos and lorises) **P**: 778
- Galah** [bird]
 Parrot (Kinds of parrots) **P**: 179
- Galahad, Sir** [legendary figure] **G**: 7
 Holy Grail (The search for the Grail) **H**: 298
 Lancelot, Sir **L**: 56
 Round Table (Origin) **R**: 490-491 *with picture*
- Galant style** [music]
 Classical music (The Classical period) **Ci**: 647
- Galapagos Islands** [islands, Pacific] **G**: 7 *with picture and map*
 Ecuador **E**: 67; (The Galapagos Islands) **E**: 70
 Evolution (Geographic distribution of species) **E**: 430-431 *with picture*; (Darwin's theory) **E**: 432
 Island (How life develops on islands) **I**: 473
 Science *picture on* **S**: 201
- Galapagos Marine Reserve**
 Galapagos Islands **G**: 8
- Galapagos National Park** [Ecuador]
 Galapagos Islands **G**: 8
 National park (Other interesting national parks) **N**: 42e; (table) **N**: 42g
- Galapagos penguin**
 Penguin (The life of penguins) **P**: 238
- Galapagos tortoise**
 Tortoise **T**: 342
 Turtle (Tortoises) **T**: 523
- Galarza, Ernesto** [Mexican-American historian] **G**: 8
- Galatea, La** [book by Cervantes]
 Cervantes, Miguel de (His literary career) **C**: 363
- Galatia** [former region, Turkey] **G**: 8
- Galatians** [people]
 Galatia **G**: 8
 Gaul **G**: 70
- Galatians, Epistle to the** [New Testament] **G**: 8
- Galaxy** [astronomy] **G**: 8 *with pictures*
 Andromeda Galaxy **A**: 457 *with picture*
 Astronomy (Modern astronomy) **A**: 836;
 (Discovering other galaxies) **A**: 848
 Cosmology **Ci**: 1078
 Dark matter **D**: 37
 Hubble, Edwin Powell **H**: 403
 Interstellar medium **I**: 352
 Magellanic Clouds **M**: 48
 Milky Way **M**: 550 *with picture*
 Nebula **N**: 116
 Star **So**: 840
 Universe **U**: 205
- Galaydh, Ali Khalif** [Somali political leader]
 Somalia (History) **So**: 589-590
- Galba** [Roman emperor]
 Rome, Ancient (table) **R**: 447
- Galba, Martí Joan de** [Spanish author]
 Spanish literature (The 1400's) **So**: 758
- Galbraith, John Kenneth** [American economist] **G**: 9
- Galdhøpiggen** [mountain, Norway]
 Norway (Land regions) **N**: 541 *with map*
- Galdós, Benito Pérez** [Spanish author]
 Spanish literature (The 1800's) **So**: 761-762
- Gale** [weather]
 Wind (table) **W**: 330
- Gale, Leonard D.** [American inventor]
 Morse, Samuel Finley Breese (Morse as inventor) **M**: 818
 Telegraph (The Morse telegraph) **T**: 90
- Gale, Zona** [American author] **G**: 9
- Gale warning** [weather]
 Boating (Warning signals) *picture on* **B**: 430
 Flag *picture on* **F**: 197
- Galego** [language]
 Portuguese language **P**: 695
- Galen** [Greek doctor] **G**: 9
 Anatomy **A**: 448b
 Biology (Beginnings) **B**: 317-318 *with picture*
 Color (Early theories of color vision) **Ci**: 825-826
 Heart (Early beliefs about the heart) **H**: 143
 Medicine (Greece and Rome) **M**: 372-373
 Occupational therapy (History) **O**: 649
 Science (Ancient Rome) **S**: 197
 Vesalius, Andreas **V**: 341
 Zoology (History) **Z**: 610
- Galena** [Illinois]
 Illinois (Places to visit) **I**: 62 *with picture*
- Galena** [mineral] **G**: 10
 Lead (Production) **L**: 149; (Properties) **L**: 149
 Mineral *picture on* **M**: 568
- Galerius** [Roman emperor]
 Rome, Ancient (table) **R**: 447
- Gali Gali** [Egyptian magician]
 Magician (Sleight of hand) **M**: 51
- Galicia** [province]
 Spain (Language) **So**: 733; (The Northern Mountains) **So**: 740 *with map*
- Galicia** [region, Europe] **G**: 10
 Ukraine (History) **U**: 12
- Galician** [language]
 Portuguese language **P**: 695
 Spain (Language) **So**: 733
 Spanish language (Castilian Spanish) **So**: 757
- Galigai, Leonora** [Italian public figure]
 Marie de Médicis **M**: 200
- Galilean relativity** [physics]
 Relativity (Galilean relativity) **R**: 209
- Galilean satellite** [astronomy]
 Jupiter (Satellites) **J**: 200
 Satellite (History of satellite study) **S**: 150c
 Solar system (Moons) **So**: 580
- Galilean transformation** [physics]
 Relativity (Galilean transformations) **R**: 210
- Galilee** [region, Israel] **G**: 10
 Israel (The Judeo-Galilean Highlands) **I**: 482

342 Galilee, Miracle at Sea of

Jesus Christ (Ministry) J: 106 *with map*
Galilee, Miracle at Sea of
 Jesus Christ (The miracles) J: 106
Galilee, Sea of [lake, Israel-Syria] G: 10 *with map*
Galilei, Galileo [Italian astronomer] *See* Galileo *in this index*
Galileo [Italian astronomer] G: 11 *with pictures*
 Academic freedom (Beginnings) A: 20
 Astronomy (Developing the modern view) A: 847
 Callisto C: 69
 Copernicus, Nicolaus Ci: 1039
 Europa E: 379
 Falling bodies, Law of F: 16
 Ganymede G: 27
 Gravitation G: 331
 Io I: 370
 Italian literature (The baroque period and the Age of Reason) I: 494
 Leaning Tower of Pisa L: 162
 Light (The speed of light) L: 291-292
 Mathematics (Mathematics and the scientific revolution) M: 306-307
 Meteorology (History) M: 433
 Moon (Early observations with telescopes) M: 792
 Pendulum P: 237
 Physics (The Renaissance) P: 438-439
 Relativity (Galilean relativity) R: 209
 Satellite (History of satellite study) S: 150c
 Saturn (Rings) S: 152-153
 Science (Conducting experiments) S: 195;
 (The scientific revolution) S: 198 *with picture*
 Sound (The study of waves) So: 605
 Telescope T: 102; (Refracting telescopes) T: 103-104
 World, History of the picture on W: 442
Galileo [space probe] G: 12 *with picture*
 Asteroid (Measuring asteroids) A: 824
 Europa E: 379
 Jupiter (Flights to Jupiter) J: 201
 Satellite (History of satellite study) S: 150c-150d
 Space exploration (Probes to Jupiter and beyond) So: 710-711
Gall [American Indian leader] G: 13 *with portrait*
Gall [botany] G: 13 *with picture*
 Eelworm E: 115
 Plant (Diseases) P: 543
Gall, Franz Joseph [German anatomist]
 Phrenology P: 430
Gall bladder [anatomy] *See* Gallbladder *in this index*
Gall mite [animal]
 Mite M: 678
Galla Placidia, Mausoleum of [Italy]
 Ravenna R: 151
Galland, Isaac [American doctor]
 Iowa (Schools) I: 378
Galland, Jean Antoine [French scholar]
Arabian Nights A: 582b
Gallant, Mavis [Canadian author] G: 13
Gallant Fox [horse]
 Kentucky Derby (table) K: 296
Gallatin, Albert [American statesman] G: 14
 Jefferson, Thomas (New policies) J: 83
 Madison, James (The growth of nationalism) M: 36
Gallatin Mountains
 Montana (Land regions) M: 752
Gallaudet, Edward Miner [American educator]
 G: 14
Gallaudet, Thomas [American educator] G: 14
Gallaudet, Thomas Hopkins [American educator] G: 14
 Connecticut (Schools) Ci: 956
Gallaudet University G: 14
 Deafness (Education) D: 59; (Deaf community and culture) D: 59-60
Gallbladder [anatomy] G: 14 *with diagram*
 Bile B: 300
 Human body diagram on H: 422
 Liver L: 393
Gallé, Emile [French artist]
 Art nouveau A: 750
Galle, Johann G. [German astronomer]
 Astronomy (Finding new planets) A: 848
 Neptune (Discovery) N: 129-130
Gallé glass
 Glass (Types of art glass) G: 220 *with picture*

Gallego, Juan Nicasio [Spanish poet]
 Spanish literature (The 1800's) So: 761
Gallegos, Rómulo [Venezuelan political leader]
 Latin-American literature (The early 1900's) L: 113
 Venezuela (The arts) V: 301; (The road to democracy) V: 305
Gallen, Hugh J. [American political leader]
 New Hampshire (table) N: 223
Gallen-Kallela, Akseli [Finnish painter]
 Finland (The arts) F: 112
Galleon [ship] G: 15 *with picture*
 Navy (The beginning of modern navies) N: 79
 Ship (The galleon) S: 408 *with picture*
 Warship (The age of sailing ships) W: 41; picture on W: 42
Galleria [Houston]
 Houston (The city) H: 394; picture on H: 397
Galleria Vittorio Emanuele II
 Milan (People) M: 540 *with picture*
Gallery [theater]
 Shakespeare, William (Theater buildings) S: 352 *with picture*; (The stage) S: 352 *with picture*
Galley [kitchen]
 Sailing picture on S: 25
Galley [printing]
 Linotype (How the linotype works) L: 338-339
Galley [ship] G: 15 *with picture*
 Ship (Phoenician and Greek ships) S: 405 *with picture*; (Lateen-rigged ships) S: 407
 Navy (Ancient navies) N: 79
 Warship (Early warships) W: 41; picture on W: 42
Galic Wars [European history]
 Gaul G: 70
Gallicanism [religion]
 Pope (The 1700's and 1800's) P: 665
 Roman Catholic Church (Gallicanism) R: 409
Gallienus [Roman emperor] G: 15
Gallinule [bird] G: 16
 Rail R: 103
Gallio [Roman governor]
 New Testament (The life of Paul) N: 288
Gallipoli, Battle of [1915]
 Atatürk, Kemal A: 852
 World War I (The Dardanelles) W: 459
Gallipolis [city, Ohio]
 Ohio picture on O: 694
Gallium [element] G: 16
Gallon [unit of measure] G: 16 *with picture*
Gallop
 Horse (Gaits) H: 353 *with picture*
 Mammal (On land) M: 121-122
Galloping cavalry charge
 Cavalry C: 318 *with picture*
Galloping Ghost
 Grange, Red G: 310
Galloway [breed]
 Cattle (The bodies of cattle) C: 306-307
Galloway, Joseph [American political leader]
 G: 16
Gallstone [disorder]
 Gallbladder G: 14
 Jaundice J: 66
Gallup [city, New Mexico] G: 16
Gallup, George Horace [American statistician]
 G: 16
 Public opinion poll (History) P: 863
Gallup Poll
 Gallup, George Horace G: 16
Gallus [Roman emperor]
 Rome, Ancient (table) R: 447
Galsworthy, John [British author] G: 16
 Democracy (Famous quotations about democracy) D: 120
Galt, Sir Alexander Tilloch [Canadian government official] G: 17
 Confederation of Canada (Fathers of Confederation) Ci: 935 *with picture*
Galt, Edith Bolling [wife of Woodrow Wilson]
See Wilson, Edith Bolling *in this index*
Galtier, Lucian [American settler]
 Saint Paul (History) S: 52
Galton, Sir Francis [British scientist] G: 17
 Crime laboratory (History) Ci: 1141-1142
 Fingerprinting (History) F: 107
 Heredity (Early ideas about heredity) H: 208
 Intelligence (Theories of intelligence) I: 318
Galusha, Jonas [American political leader]
 Vermont (table) V: 333
Galvani, Luigi [Italian anatomist] G: 17

Electricity (Experiments with electric charge) E: 196-197
 Telegraph (Development of the telegraph) T: 90
Galvanism [physics]
 Galvani, Luigi G: 17
 Telegraph (Early discoveries) T: 90
Galvanized iron and steel
 Zinc Z: 598
Galvanizing [industrial process] G: 17
 Cadmium C: 12
 Iron and steel (Finishing) I: 447 *with diagram*
Galvanometer [instrument]
 Ampère, André Marie A: 439
 Electric meter (History) E: 177 *with picture*
 Kelvin, Lord K: 258
 Motion picture (The sound track) M: 858 *with diagram*
Galvanoplasty [industrial process]
 Electroplating E: 218
Galveston [city, Texas] G: 17
 Flood (Seacoast floods) F: 237
Galveston Island [Gulf of Mexico]
 Galveston G: 17
 Laffite, Jean L: 28
Gálvez, Bernardo de [Spanish colonial official]
 G: 18
 Galveston G: 18
Galvin, Pud [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Galway [city, Ireland] G: 18
 Ireland (Surface features) I: 422
Gama, José Basílio da [Brazilian poet]
 Latin-American literature (Colonial literature) L: 111-112
Gama, Vasco de *See* Da Gama, Vasco *in this index*
Gamellet [Biblical figure] G: 18
Gembang [musical instrument]
 Orchestra picture on O: 823
Gambel's quail [bird]
 Bird (Birds of the desert) B: 339 *with picture*
 Quail Q: 4
Gambia [country, Africa] G: 18 *with picture and map*
 Flag picture on F: 198
Gambia River [Africa]
 Gambia (Land) G: 19
 Senegal (Land and climate) S: 299
Gamble, Hamilton R. [American political leader]
 Missouri (table) M: 668
Gamble, John [American military leader]
 Marine Corps, United States (The early Marine Corps) M: 208-209
Gamblers Anonymous G: 20
Gambling G: 20
 Atlantic City A: 862
 Card game C: 208
 Gamblers Anonymous G: 20
 Horse racing (Betting) H: 365
 Indian, American (Social and economic progress) I: 180-181
 Las Vegas L: 87; (History) L: 89 *with picture*
 Lottery L: 473
 Nevada (Service industries) N: 170; (Legal gambling and easy divorce) N: 176
Gamboa, Federico [Mexican author]
 Latin-American literature (Realism) L: 112
Gambrel roof
 Roof R: 451 *with picture*
Game [animals] G: 21
 Meat M: 346
 Poaching P: 588 *with picture*
Game [game theory]
 Game theory G: 22
Game [recreation] G: 21 *with picture*
 Colonial life in America (Recreation) Ci: 802 *with picture*
 Computer (Games software) Ci: 919 *with picture*
 Hobby (Games and sports) H: 272
 Indian, American (Recreation) I: 142 *with picture*
 Toy (Toys for late childhood) T: 352
See also the list of Related Articles in the Game [recreation] article
Game, Computer *See* Computer game *in this index*
Game fish
 Fish (Food and game fish) F: 146
Game fishing *See* Fishing *in this index*
Game laws

- Hunting (Game laws) H: 450
Wildlife conservation (History) W: 304
- Game Management** [book by Leopold]
Leopold, Aldo L: 203
- Game of chance**
Card game C: 208
Dice D: 186
Roulette R: 490
- Game plan**
Football (The coaches) F: 358
- Game point**
Tennis (table) T: 162; (Scoring) T: 162-163
- Game preserve**
Buffalo picture on B: 674
Lion L: 340
- Game song**
Folk music (Kinds of folk music) F: 321
- Game theory G: 22**
Nash, John Forbes, Jr. N: 22
- Gamecock**
Cockfighting Ci: 744
South Carolina (The Revolutionary War) So: 659-660
- Gamelan** [orchestra]
Indonesia (The arts) I: 232-233
Malaysia (The arts) M: 99
Music (Indonesian music) M: 956 *with picture*
- Game master**
Game (Board games) G: 21-22
- Gamete** [reproduction]
See also Egg [reproduction]; Egg cell; Sperm *in this index*
Alternation of generations A: 388
Hereditry (Sex cells and reproduction) H: 201; (Sources of genetic variation) H: 203
Moss (How mosses live) M: 834-835
Plant (Sexual reproduction) P: 532
Reproduction R: 242
Reproduction, Human R: 244
Spore (Plant spores) So: 801
- Gamete intrafallopian transfer** [reproduction]
Infertility (Treatment) I: 265
- Gametophyte** [botany]
Alternation of generations A: 388
Bryophyte B: 656
Fern (Life cycle of a fern) F: 75 *with picture*
Hornwort H: 341
Liverwort L: 396
Moss (How mosses live) M: 834-835
Plant (Sexual reproduction) P: 532 *with diagrams*
Seed (How seeds develop) S: 281
Spore (Plant spores) So: 801
- Gametes** [people]
Colombia (Way of life) Ci: 779-781
- Gamio, Manuel** [Mexican anthropologist] G: 23
- Gamla Stan** [district, Stockholm]
Stockholm (The city) So: 904-905
- Gamma globulin** [physiology] G: 23
Hepatitis (Hepatitis A) H: 192
Immune system (Passive immunity) I: 88c
Kawasaki disease K: 250
Measles (Prevention) M: 346
Plasma (Functions of plasma) P: 551
Serum S: 319
- Gamma hydroxybutyrate** [drug] *See* GHB *in this index*
- Gamma interferon** [drug]
Interferon I: 324
- Gamma Phi Beta**
Sorority So: 597
- Gamma-ray astronomy**
Astronomy (Gamma-ray astronomy) A: 845
- Gamma Ray Observatory** [satellite] *See* Compton Gamma Ray Observatory *in this index*
- Gamma rays** [radiation] G: 23
Astronomy (The electromagnetic spectrum) A: 839; (Gamma-ray astronomy) A: 845
Atom (Radioactivity) A: 873
Cancer (Radiation therapy) C: 172
Electromagnetic waves (The electromagnetic spectrum) E: 202; *diagram* on E: 202
Light (Electromagnetic waves) L: 285
Nuclear energy (Radioactive decay) N: 582
Nuclear weapon (Initial nuclear radiation) N: 599; (Residual nuclear radiation) N: 599
Positron emission tomography P: 698
Radiation picture on R: 78; (Electromagnetic radiation) R: 75-76 *with picture*
Satellite, Artificial picture on S: 150f
Telescope (What telescopes do) T: 102-103; (Other telescopes) T: 108; (Gamma-ray telescopes) T: 109 *with picture*
- Gammell, Stephen** [American artist]
Caldecott Medal (table: 1989) C: 26
- Gammone, Warren** [American farmer]
Cattle (Hereford) C: 309
- Gamow, George** [Russian-born physicist]
Big bang B: 296
- Gamp, Sairy** [literary figure]
Dickens, Charles (The first phase) D: 188
- Gamsakhurdia, Zviad K.** [Georgian political leader]
Georgia (History) G: 111
Shevardnadze, Eduard Amvrosiyevich S: 399
- Gan Island**
Maldives (History) M: 104-105
- Gance, Abel** [French director]
Motion picture (The movies talk) M: 867
- Gand** [city, Belgium]
Ghent G: 181
- Ganda** [people] G: 24
Uganda (People) U: 3
- Gander** *See* Goose *in this index*
- Gander International Airport**
Newfoundland and Labrador (Libraries and museums) N: 364
- Gandharan school** [art]
Kanishka K: 215
Sculpture (India) S: 236-237
- Gandhi** [film]
Motion picture (Best picture: 1982) M: 861
- Gandhi, Indira** [Indian political leader] G: 24 *with portrait*
Gandhi, Rajiv G: 25
India (India under Indira Gandhi) I: 133-134 *with picture*
Rao, P. V. Narasimha R: 141
Vajpayee, Atal Bihari V: 260
- Gandhi, Mohandas Karamchand** [Indian political leader] G: 24 *with portrait*
Asia (The end of colonialism) A: 807 *with picture*
Civil disobedience (History of civil disobedience) Ci: 607
Fast F: 52
India (Rise of Indian nationalism) I: 131; (Independence and partition) I: 133 *with picture*
Pacifism P: 18
South Africa (The Union of South Africa) So: 618-619
- Gandhi, Rajiv** [Indian political leader] G: 25 *with portrait*
Gandhi, Indira G: 24
Gandhi, Sonia G: 26
India (India under Indira Gandhi) I: 133-134, (Religious and ethnic unrest) I: 134
Rao, P. V. Narasimha R: 141
- Gandhi, Sanjay** [Indian political leader]
Gandhi, Indira G: 24
- Gandhi, Sonia** [Indian political leader] G: 26
Gandhi, Rajiv G: 26
- Gandy Bridge** [Saint Petersburg-Tampa]
Saint Petersburg [Florida] (Government and history) S: 56
- Ganesh** [Hindu god]
India (Hinduism) I: 116
Mahabharata M: 64
- Gang** [sociology] G: 26
- Gang of Four** [Chinese history]
China (Deng Xiaoping) C: 506
Jiang Qing J: 126
- Gang Plank** [region]
Wyoming (Land regions) W: 526
- Gang plow**
Plow (The gang plow) P: 575 *with picture*
- Gang saw** [machine]
Lumber (Sawing logs) L: 519
- Ganges dolphin**
River dolphin R: 354
- Ganges River** [India] G: 26 *with picture*
Asia picture on A: 782
Brahmaputra River B: 548
India (The Northern Plains) I: 121-122
January J: 30
Religion picture on R: 217
River (table) R: 352
Varanasi V: 285
Yamuna River Y: 550
- Ganges river dolphin**
Mammal picture on M: 117
- Ganglion** [anatomy]
- Brain (The brain in animals) B: 558
Insect (Nervous system) I: 289 *with diagram*
Nervous system (The cell body) N: 133
- Ganglioside** [physiology]
Tay-Sachs disease T: 56
- Gangrene** [disease] G: 27
- Gangsta rap** [music] *See* Gangster rap *in this index*
- Gangster**
Gang G: 26
- Gangster film**
Motion picture (Movies in the 1930's) M: 868
- Gangster Funeral** [painting by Levinel]
Levine, Jack picture on L: 219
- Gangster rap** [music]
Rap music R: 141
Rock music (Rock and society) R: 380-381
- Gangue** [mineral]
Metallurgy (Mineral dressing) M: 426
Mining (Underground mining methods) M: 576; (Mining terms) M: 577
Ore O: 825
- Gannet** [bird] G: 27
Newfoundland and Labrador (Places to visit) N: 368
- Gannett Company**
Newspaper (Recent trends) N: 387
- Gannett Peak**
Rocky Mountains (Chief ranges of the Rockies) R: 395
Wyoming (Land regions) W: 526
- Ganoid scale** [zoology]
Fish (Scales) F: 160 *with picture*
- Gantry** [machine]
Computed tomography Ci: 907
- Gantt, Harvey** [American political leader]
Charlotte (Government and history) C: 385
- Ganwa** [people]
Burundi (History) B: 713
- Ganymede** [Greek mythology] G: 27
- Ganymede** [satellite] G: 27 *with picture*
Galileo G: 13
Jupiter (Satellites) J: 200
Satellite S: 150; (Recently active satellites) S: 150a
Solar system (Moons) So: 580-581
- GAO** *See* General Accounting Office *in this index*
- Gao** [African history]
Africa (Kingdoms in western Africa) A: 132
Mali (History) M: 109 *with map*
Niger (History) N: 409
- Gao Xingjian** [Chinese author]
Chinese literature (Modern Chinese literature) C: 512
Nobel Prizes (Literature: 2000) N: 446
- Gaol** [institution] *See* Jail *in this index*
- Gaoliang** [plant]
Gobi G: 242
- Gap** [geography] G: 27
- Gaposchkin, Celia Payne** [British astronomer]
See Payne-Gaposchkin, Celia Helena *in this index*
- Gaposchkin, Sergei** [Russian astronomer]
Payne-Gaposchkin, Cecilia Helena P: 204
- G.A.R.** [abbreviation]
Grand Army of the Republic G: 305 *with picture*
- Gar** [fish] G: 28 *with picture*
Fish (Bony fish) F: 147-148
Pike P: 461
- Gar** [Tibet]
Tibet T: 276
- Gar pike** [fish]
Pike P: 461
- Garamba National Park** [Congo (Kinshasa)]
National park (table) N: 42f
- Garand, John C.** [American engineer]
Garand rifle G: 28
- Garand rifle** G: 28
- Garay, Juan de** [Spanish soldier]
Buenos Aires (History) B: 673
- Garbage**
Culture (How people study culture) Ci: 1189-1190 *with picture*
Environmental pollution (Types of pollution) E: 331
Fly (Head) F: 309; (Larva) F: 310
Middle Ages (Medieval towns) M: 527
Ocean (Marine pollution) O: 664
Waste disposal W: 112
- Garbage disposal** *See* Waste disposal *in this index*

344 Garbage disposer

Garbage disposer [machine] G: 28
Garbage truck
 Truck *picture on* T: 459
Garbanzo See Chickpea *in this index*
Garber, Silas [American political leader]
 Nebraska (table) N: 110
Garbo, Greta [Swedish-American actress] G: 28
with portrait
 Steichen, Edward *picture on* So: 884
Garcelon, Alonzo [American political leader]
 Maine (table) M: 87
Garcés, Francisco [Spanish missionary]
 Nevada (Exploration) N: 173
García, Hector P. [American diplomat]
 American GI Forum of the United States
 A: 411
 Hispanic Americans (Political developments)
 H: 255
García, Jerry [American singer]
 Greteful Dead G: 330; *picture on* G: 329
García Gutiérrez, Antonio [Spanish author]
 Opera (*Travatore, Il*) O: 808
García Iniguez, Calixto [Cuban general] G: 29
García Lorca, Federico [Spanish author] G: 29
 Spanish literature (Drama) So: 763
García Márquez, Gabriel José [Colombian
 author] G: 29
 Colombia (The arts) Ci: 781
 Latin-American literature (Recent develop-
 ments) L: 113
 Novel (The novel today) N: 575
García Moreno, Gabriel [Ecuadorian political
 leader]
 Ecuador (Independence) E: 73
García Pérez, Alan [Peruvian political leader]
 Peru (Return to civilian government) P: 316
García Robles, Alfonso [Mexican diplomat]
 Nobel Prizes (Peace: 1982) N: 449
García Sarmiento, Félix Rubén [Nicaraguan
 poet] See Darío, Rubén *in this index*
Garcilaso [Spanish poet] See Vega, Garcilaso de
 la *in this index*
Garcilaso [El Inca] [Latin-American author] See
 Vega, Garcilaso de la [El Inca] *in this index*
Garden See Gardening *in this index*
Garden, Mary [American singer] G: 29
Garden cress [plant]
 Cress Ci: 1127
Garden district
 New Orleans (Residential districts) N: 279; *pic-
 ture on* N: 281
Garden egg [plant]
 Eggplant E: 118
Garden Island [nickname]
 Hawaii (Kauai) H: 102
Garden loosestrife [plant]
 Loosestrife L: 453
Garden morning-glory [plant]
 Morning-glory *picture on* M: 809
Garden of Earthly Delights, A [book by Oates]
 Oates, Joyce Carol O: 639
Garden of Earthly Delights, The [painting by
 Bosch]
 Bosch, Hieronymus B: 491
Garden of Eden [Old Testament]
 Adam and Eve A: 32
 Eden E: 76
 Paradise P: 143
Garden of Gethsemane [Jerusalem]
 Gethsemane G: 175
 Jesus Christ (The trial) J: 108 *with picture*
Garden of Intelligence
 Zoo (History) Z: 608
Garden of the Gods [Colorado] G: 29
 Colorado (Places to visit) Ci: 836
 Rock (table) R: 374
Garden of the Gulf
 Prince Edward Island P: 783
Garden sage [plant]
 Sage S: 18
 Salvia S: 78
Garden spider
 Spider (table) So: 790; *pictures on* So: 785,
 So: 786, So: 789
Garden State [nickname]
 New Jersey N: 231
Garden State Parkway [road]
 New Jersey (The mid-1900's) N: 253
Garden thyme [plant]
 Thyme T: 274
Gardenia [plant] G: 29
 Flower *picture on* F: 292

Gardening G: 30 *with pictures*
 Bonsai B: 463
 Cold frame Ci: 761
 Fertilizer F: 78
 Greenhouse G: 382
 Hotbed H: 376
 Peat moss P: 225
 Pruning P: 841 *with picture*
 Rose (How to grow roses) R: 478
 Safety (In the yard) S: 11
 Terrarium T: 175
 Transplanting T: 381 *with pictures*
 United Kingdom *picture on* U: 56
 See also the list of Related Articles in the
 Gardening article
Gardening, Landscape See Landscape architec-
 ture *in this index*
Gardiner, David [American political leader]
 Tyler, John (Life in the White House) T: 534
Gardiner, James G. [Canadian political leader]
 Saskatchewan (table) S: 144
Gardiner, Julia [wife of John Tyler] See Tyler,
 Julia Gardiner *in this index*
Gardiner, William Tudor [American political
 leader]
 Maine (table) M: 87
Gardner, Alexander [American photographer]
 Civil War (The home front) Ci: 622
Gardner, Booth [American political leader]
 Washington (table) W: 65
Gardner, Erle Stanley [American author] G: 39
with portrait
Gardner, Frederick D. [American political leader]
 Missouri (table) M: 668
Gardner, Gerald B. [British religious leader]
 Witchcraft (Witchcraft as a religion) W: 371;
 (Witchcraft in modern times) W: 373
Gardner, Henry J. [American political leader]
 Massachusetts (table) M: 288
Gardner, Howard E. [American psychologist]
 Intelligence (Theories of intelligence) I: 318
 Teaching (Guiding and assisting student learn-
 ing) T: 66
Gardner, John William [American government
 official] G: 39
 Common Cause Ci: 874
Gardner, Newport [American musician]
 African Americans (Free blacks) A: 136e-
 136f
Gardner, O. Max [American political leader]
 North Carolina (table) N: 490
Gardner, Rulon [American wrestler]
 Olympic Games *picture on* O: 749
Gardnerella vaginalis [bacterium]
 Vaginitis V: 260
Garefowl [extinct bird] See Great auk *in this
 index*
Garfield, Abram [father of]
 Garfield, James Abram (Childhood) G: 40
Garfield, Eliza Ballou [mother of]
 Garfield, James Abram (Childhood) G: 40
Garfield, Harry Augustus [son of]
 Garfield, James Abram (Garfield's family)
 G: 40-41
Garfield, James Abram [U.S. President] G: 40
with pictures
 Arthur, Chester Alan (Election of 1880) A: 756
 Bell, Alexander Graham (His later life) B: 241
 Blaine, James Gillespie B: 396
 Civil service (History) Ci: 613
 Republican Party (Political inactivity) R: 255
Garfield, James R. [American government offi-
 cial]
 Garfield, James Abram (Garfield's family)
 G: 40-41
 Interior, Department of the (table) I: 325
 Roosevelt, Theodore R: 470
Garfield, Lucretia Rudolph [wife of James A.
 Garfield]
 First ladies (table) F: 142
 Garfield, James Abram (Garfield's family)
 G: 40; *picture on* G: 41
Garfunkel, Art [American singer]
 Simon, Paul S: 467
Gargantua and Pantagruel [book by Rabelais]
 French literature (François Rabelais) F: 519
 Humanism (The spread of humanism) H: 431
 Rabelais, François R: 49
 Satire S: 150h
Gargas Cave [France]
 Prehistoric people *picture on* P: 751
Gargle [liquid] G: 43

Gargoyle [architecture] G: 43 *with picture*
 Sculpture (As part of architecture) S: 229-230
Garibaldi, Giuseppe [Italian military leader]
 G: 43
 Italy (Italy united) I: 515-516 *with picture*
 Sicilies, Kingdom of the Two S: 447
Garies and Their Friends, The [book by Webb]
 African American literature (The 1800's)
 A: 136a
Garifuna [people]
 Honduras (Ancestry) H: 309
Garland, Augustus Hill [American political
 leader]
 Arkansas (table) A: 712
 Cleveland, Grover (table) Ci: 671
 Justice, Department of (table) J: 203
Garland, Hamlin [American author] G: 43
 American literature (Naturalists) A: 419
 Western frontier life in America
 (Homesteading on the Great Plains)
 W: 234
Garland, Judy [American entertainer] G: 43
with picture
 Motion picture *picture on* M: 846
Garlic [plant] G: 44 *with picture*
Garment See Clothing *in this index*
Garment District
 New York City (Manhattan) N: 323-324;
 (Industry) N: 333 *with picture*
Garment industry
 Clothing (The 1800's) Ci: 702; (The 1900's)
 Ci: 703-704
 Textile T: 212
**Garment Workers' Union, International
 Ladies'**
 Union of Needletrades, Industrial and Textile
 Employees U: 27
Garn, Edwin J. [American political leader]
 Astronaut (A look at the astronauts) A: 831
 Bank (A boom in money market funds) B: 94
Garn-St. Germain Depository Institutions Act
 [1982]
 Bank (A boom in money market funds) B: 94
Garneau, Alfred [Canadian poet]
 Canadian literature (Poetry: 1850-1918) C: 157
Garneau, François Xavier [Canadian historian]
 Canadian literature (Early Québécois literature)
 C: 157
Garneau, Marc [Canadian astronaut] G: 44 *with
 portrait*
 Astronaut (table) A: 830; (A look at the astro-
 nauts) A: 831
Garner, John Nance [American political leader]
 G: 44 *with portrait*
 Hoover, Herbert Clark (Election of 1932)
 H: 330
 Roosevelt, Franklin Delano (Election of 1932)
 R: 456
 Vice President of the United States (table)
 V: 351; (Social duties) V: 352
Garnerin, André [French balloonist]
 Balloon (The growth of ballooning) B: 61
Garnet [gem] G: 45 *with picture*
 Gem *picture on* G: 78
 Ruby R: 508
Garnier, Charles [French architect]
 Architecture (Combined styles) A: 626 *with
 picture*
Garnishment [law] G: 45
Garrahy, J. Joseph [American political leader]
 Rhode Island (table) R: 311
Garrard, James [American political leader]
 Kentucky (table) K: 290
Garrett, Mike [American football player]
 Football (table) F: 363
Garrett, Pat [American frontiersman] G: 45
Garrick, David [British actor] G: 45
 Drama (England) D: 334 *with picture*
Garrick Gaieties, The [musical]
 Hart, Lorenz H: 77
Garrick Year, The [book by Drabble]
 Drabble, Margaret D: 317
Garrison [military]
 Flag (table) F: 193
Garrison, Lindley M. [American government
 official]
 Wilson, Woodrow (table) W: 323
Garrison, Lucy McKim [American publisher]
 Spiritual So: 796
Garrison, Nicholas [British artist]
 Colonial life in America *picture on* Ci: 792
Garrison, William Lloyd [American social

- reformer) **G**: 45 *with portrait*
 Abolition movement (In the United States) **A**: 12
 Massachusetts (Progress as a state) **M**: 292
 United States, History of the (The abolition movement) **U**: 171
- Garrison Dam** [Missouri River, North Dakota] **G**: 46
 North Dakota (The mid-1900's) **N**: 516
- Garrison Diversion Project**
 Canada, History of (Foreign affairs) **C**: 152-153
 North Dakota (The mid-1900's) **N**: 516; (Late 1900's) **N**: 516
- Garrison flag**
 Flag (table) **F**: 193
- Garrote** [execution] **G**: 46
- Garson, Greer** [British actress]
 Motion picture (Best performance by an actress: 1942) **M**: 862
- Garson, Stuart S.** [Canadian political leader]
 Manitoba (table) **M**: 159
- Garst, Warren** [American political leader]
 Iowa (table) **I**: 391
- Garter, Order of the** [award] **G**: 46 *with picture*
 Medals, decorations, and orders (table) **M**: 359
 George, Saint **G**: 109
 Knighthood, Orders of (Honorary orders) **K**: 347
- Garter snake** [reptile] **G**: 46 *with picture*
 Snake *picture on* **S**: 532
- Garter stitch**
 Knitting *picture on* **K**: 354
- Garth Brooks** [recording]
 Brooks, Garth **B**: 641
- Garvey, Dan E.** [American political leader]
 Arizona (table) **A**: 687
- Garvey, Marcus** [American social reformer]
G: 47 *with portrait*
 African Americans (The Garvey movement) **A**: 136k *with picture*
 Jamaica (People) **J**: 23-24
 Malcolm X **M**: 103
- Garvin, Lucius F. C.** [American political leader]
 Rhode Island (table) **R**: 311
- Gary** [Indiana] **G**: 47
- Gary, Elbart Henry** [American businessman]
G: 47
 Gary **G**: 47
- Gary, James** [American government official]
 McKinley, William (table) **M**: 342
- Gary, Raymond D.** [American political leader]
 Oklahoma (table) **O**: 730; (The mid-1900's) **O**: 734
- Gary School Plan** [education]
 Indiana (Schools) **I**: 200-201
- Garza, Eligio de la** [American political leader]
 Hispanic Americans (Political developments) **H**: 255
- Gas** [fuel] **G**: 50 *with pictures*
 Fuel (Gas fuels) **F**: 551
 Heating (Gas) **H**: 160
See also Manufactured gas and Natural gas in *this index* and *the list of Related Articles* in the Gas [fuel] article
- Gas** [physics] **G**: 48 *with pictures*
 Air (Gases of the air) **A**: 167 *with diagram*
 Avogadro, Amedeo **A**: 994
 Chemistry (The phlogiston theory) **C**: 401
 Cohesion **Ci**: 756
 Density **D**: 142
 Electricity (Conductors) **E**: 193
 Expansion **E**: 438
 Interstellar medium **I**: 352
 Matter (States of matter) **M**: 311
 Molecule (Molecules and matter) **M**: 693
 Solution (Gaseous solutions) **So**: 587
 Sun (Evolution of the sun) **So**: 982
See also the list of Related articles in the Gas [physics] article
- Gas** [weapon] *See* Gas warfare in *this index*
- Gas, Manufactured** *See* Manufactured gas in *this index*
- Gas, Natural** *See* Natural gas in *this index*
- Gas, Poison** *See* Poison gas in *this index*
- Gas, Tear**
 Mace **M**: 11
- Gas balloon**
 Balloon (Gas balloons) **B**: 58 *with pictures*;
 (Recreational uses) **B**: 59
- Gas burner** *See* Burner in *this index*
- Gas-cap drive** [drilling]
 Petroleum (Primary recovery) **P**: 342 *with picture*
- Gas chamber** **G**: 60
 Capital punishment (table) **C**: 193
 Holocaust (The camps) **H**: 296a
 Treblinka **T**: 409
- Gas chromatograph** [chemistry]
 Mass spectroscopy **M**: 269
- Gas chromatography** [chemistry]
 Chromatography (Gas chromatography) **C**: 538
 Crime laboratory (Analyzing the evidence) **Ci**: 1141
- Gas chromatography/mass spectrometry** [test]
 Drug testing **D**: 366
- Gas-discharge tube** [electronic component]
 Electronics (Early experiments) **E**: 215
- Gas engine** *See* Gasoline engine in *this index*
- Gas-filled tube**
 Vacuum tube (Kinds of vacuum tubes) **V**: 258-259
- Gas furnace**
 Gas [fuel] (Gas in industry) **G**: 51-52; *picture on* **G**: 50
- Gas gangrene** [disease]
 Gangrene **G**: 27
 Hyperbaric oxygen therapy **H**: 475
- Gas generator**
 Turbine (Gas turbine systems) **T**: 497
- Gas giant** [astronomy] *See* Jovian planet in *this index*
- Gas hydrate**
 Gas [fuel] (From well to user) **G**: 53
 Ice (Ice "cages") **I**: 5
- Gas infrared heater**
 Gas [fuel] (Gas in industry) **G**: 51-52
- Gas lamp**
 Invention *picture on* **I**: 356
- Gas laser** [physics]
 Laser (Gas lasers) **L**: 85
 Noble gas **N**: 451
- Gas lighting**
 Gas [fuel] (First uses of manufactured gas) **G**: 58
 Lamp (Gas lamps) **L**: 53 *with picture*
- Gas mask** **G**: 60 *with picture*
 Morgan, Garrett Augustus **M**: 803
- Gas meter** **G**: 60 *with picture*
- Gas oil** [petroleum] **G**: 60
- Gas permeable contact lens**
 Contact lens (Hard contact lenses) **Ci**: 1020
- Gas poisoning**
 Chemical-biological-radiological warfare (Chemical) **C**: 396
- Gas range**
 Range (Gas ranges) **R**: 138 *with pictures*
- Gas refrigerator**
 Refrigeration (The gas refrigerator) **R**: 202 *with diagram*
- Gas system** [mechanics]
 Machine gun (Operation) **M**: 15-16
- Gas tail**
 Comet (Direction of the tails) **Ci**: 868
- Gas total energy system**
 Gas [fuel] (Gas in industry) **G**: 51-52 *with diagram*
- Gas turbine** [machine]
 Electric power (Other sources of electric power) **E**: 184
 Ship (The chief parts of a ship) **S**: 424
 Turbine (Gas turbine systems) **T**: 497
- Gas turbine engine**
 Warship (Warships in the nuclear age) **W**: 42-43
- Gas warfare** *See* Chemical-biological-radiological warfare in *this index*
- Gas welding**
 Welding (Gas welding) **W**: 189
- Gas well**
 Gas [fuel] (Producing gas) **G**: 53; (Transmitting and distributing gas) **G**: 53; *picture on* **G**: 54
 Well (Oil and natural gas wells) **W**: 193
- Gascoigne, George** [English author] **G**: 60
- Gascons** [people]
 Gascony **G**: 60
- Gascony** [France] **G**: 60
- Gascony, Gulf of** *See* Gulf of Gascony in *this index*
- Gascoyne-Cecil, Robert Arthur Talbot** *See* Salisbury, Marquess of in *this index*
- Gaseous diffusion** [chemistry]
 Isotope (Separating isotopes) **I**: 476
 Uranium (Separating uranium isotopes) **U**: 215 *with diagram*
- Gaseous-discharge lamp**
 Electric light (Gaseous-discharge lamps) **E**: 174 *with pictures*
- Gaseous nebula** [astronomy]
 Nebula **N**: 116 *with picture*
- Gaseous waste**
 Waste disposal **W**: 112
- Gasification** [industrial process]
 Coal (Coal as a raw material) **Ci**: 720; (Coal research) **Ci**: 730-731
 Gas [fuel] *picture on* **G**: 55
 Synthetic fuel **So**: 1068
- Gasifier** [engine]
 Free-piston engine **F**: 499
- Gaskell, Elizabeth** [British author] **G**: 60
- Gaslight**
 Gas [fuel] (First uses of manufactured gas) **G**: 58
 Lamp (Gas lamps) **L**: 53 *with picture*
- Gasoline** [fuel] **G**: 61 *with picture*
 Automobile (How an automobile works) **A**: 949; (The birth of the automobile industry) **A**: 963
 Bromine **B**: 636
 Fuel (Petroleum) **F**: 550
- Gasoline engine** **G**: 63 *with pictures*
 Automobile (How an automobile works) **A**: 949 *with diagrams*
 Catalytic converter **C**: 298
 Engine **E**: 283
 Filter **F**: 103
 Fuel injection **F**: 552
 Gasoline **G**: 61
 Heat (Changing heat into motion) **H**: 153-154
 Rotary engine **R**: 486 *with diagrams*
See also the list of Related Articles in the Gasoline engine article
- Gasoline filter**
 Gasoline engine (Fuel system) **G**: 65
- Gasoline shortage** *See* Energy crisis in *this index*
- Gasoline tax** **G**: 66
 Road (How roads and highways are paid for) **R**: 360
- Gaspar** [Biblical figure]
 Magi **M**: 49
- Gaspé Peninsula** [Quebec] **G**: 66
 Quebec (Visitor's guide) **Q**: 20; (Land regions) **Q**: 22; (Natural resources) **Q**: 26; *picture on* **Q**: 10
- Gaspra** [asteroid]
 Asteroid (Measuring asteroids) **A**: 824
- Gassan, Ogata** [Japanese artist]
 Japan *picture on* **J**: 55
- Gassendi, Pierre** [French philosopher]
 Materialism **M**: 300b
- Gasser, Herbert Spencer** [American physiologist]
 Nobel Prizes (Physiology or medicine: 1944) **N**: 444
- Gassion, Edith Giovanna** [French singer] *See* Piaf, Edith in *this index*
- "Gassy Jack"** [city history]
 Vancouver (History) **V**: 277
- Gaster** [entomology]
 Ant (The metasoma) **A**: 522 *with picture*
- Gaston, William** [American political leader]
 Massachusetts (table) **M**: 288
- Gastown** [district]
 British Columbia (Places to visit) **B**: 620 *with picture*
- Gastrectomy**
 Surgery (Some common surgical operations) **So**: 1006
- Gastric juice** [physiology]
 Digestive system (From mouth to stomach) **D**: 202-203
 Stomach (The stomach's work) **So**: 907
- Gastric stapling** [surgery]
 Weight control (Surgery) **W**: 183
- Gastric ulcer**
 Stomach (Peptic ulcers) **So**: 908
 Ulcer **U**: 15 *with picture*
- Gastrin** [hormone]
 Gland (Exocrine glands) **G**: 208
- Gastritis** [disorder] **G**: 67
- Gastrocnemius** [anatomy]
 Leg (The leg) **L**: 182 *with diagram*
- Gastrointestinal anthrax**
 Anthrax **A**: 545

346 Gastrointestinal effect

- Gastrointestinal effect** [radiology]
Radiation (Dose) R: 79-80
- Gastrointestinal tract** *See* Alimentary canal *in this index*
- Gastroplasty** [surgery]
Weight control (Surgery) W: 183
- Gastropod** [zoology]
Mollusk (Gastropods) M: 695
Shell (Kinds of mollusk shells) S: 385 *with diagram*
- Gastroscope** [instrument] G: 67
Endoscope E: 273 *with pictures*
- Gate**
Airport (The passenger terminal) A: 244
- Gate** [electronics]
Transistor (Metal oxide semiconductor field effect transistors) T: 373-374 *with diagram*
- Gate** [sports]
Boxing (Financing) B: 530-532
- Gate of Heavenly Peace**
Beijing (The city) B: 222 *with map*
- Gate region** [electronics]
Transistor (Metal oxide semiconductor field effect transistors) T: 373-374 *with diagram*
- Gate valve**
Valve V: 268 *with diagram*
- Gatehouse**
Castle (Structure) C: 280 *with picture*
- Gatekeeper** [medicine]
Medicine (The United States) M: 367-368
- Gates, Bill** [American businessman] G: 67
Computer (The personal computer) Ci: 924c-924d
Gates Foundation G: 67
- Gates, Charles W.** [American political leader]
Vermont (table) V: 333
- Gates, Horatio** [American general] G: 67
Arnold, Benedict (A disappointed officer) A: 742
Burgoyne, John *picture on* B: 704
Revolutionary War in America (Victory at Saratoga) R: 282 *with picture*; (Camden) R: 284
South Carolina (The Revolutionary War) So: 659
Washington, George (The army) W: 99
- Gates, Melinda** [wife of Bill Gates]
Gates Foundation G: 67
- Gates, Ralph F.** [American political leader]
Indiana (table) I: 214
- Gates, Thomas S., Jr.** [American government official]
Defense, Department of (table) D: 87
Eisenhower, Dwight David (table) E: 152
- Gates Foundation** G: 67
Foundations (table) F: 430
- Gates of Ivory, The** [book by Drabble]
Drabble, Margaret C: 317
- Gates of Paradise** [sculptures by Ghiberti]
Ghiberti, Lorenzo G: 182
- Gates of the Arctic National Park** [Alaska] G: 68
National Park System (table: National parks) N: 48; (table: National preserves) N: 58
- Gateway Arch** [Saint Louis]
Missouri (Places to visit) M: 660
Saint Louis (The city) S: 46 *with picture*; (Museums) S: 48
United States *picture on* U: 110
- Gateway Center**
Minneapolis (Downtown redevelopment) M: 583
- Gateway National Recreation Area** [New Jersey-New York]
National Park System (table: National recreation areas) N: 49
New York City (Parks) N: 338
- Gateway State** [former nickname]
Ohio O: 680
- Gateway to China**
Lanzhou L: 69
- Gateway to the North** [nickname]
Edmonton E: 83
- Gathas** [hymns]
Persia, Ancient (Religion) P: 297
Zoroastrianism (Beliefs) Z: 611
- Gather**
Glass (Glass terms) G: 222
- "Gather ye rosebuds while ye may"**
Herrick, Robert H: 215
- Gathering in a Park** [painting by Watteau]
Clothing *picture on* Ci: 702
- Gathering line** [pipeline]
Gas [fuel] (Transmitting and distributing gas) G: 53
- Gathering machine**
Bookbinding (Forming a book) B: 470
- Gathering Place** [nickname]
Hawaii (Oahu) H: 102
- Gatineau** [city, Quebec] G: 68
- Gatineau River** [Quebec]
Quebec *picture on* Q: 11
- Gatling, Richard Jordan** [American inventor] G: 68
Indiana (Early statehood) I: 216
- Gatling gun**
Gatling, Richard Jordan G: 68
Machine gun (History) M: 16 *with picture*
- Gator Bowl** [sports]
Jacksonville (Cultural life and recreation) J: 18
- Gator hole**
Alligator (Habits) A: 375
- Gator Nationals**
Automobile racing (Drag racing) A: 978-979
- GATT** *See* General Agreement on Tariffs and Trade *in this index*
- Gattamelata** [sculpture by Donatello]
Donatello D: 307
- Gatun Dam** [Chagres River]
Panama Canal (Gatun Lake) P: 123 *with map*
- Gatun Lake** [Panama Canal]
Panama Canal (Gatun Lake) P: 123 *with map*; *diagram on* P: 124
- Gatun locks** [Panama Canal]
Panama Canal (The Gatun Locks) P: 123 *with map*; *pictures on* P: 124
- Gatwick Airport**
Airport (table) A: 245
London (Transportation) L: 438
- Gaucher's disease** G: 68
- Gauche** [cowboy] G: 68
See also Cowboy *in this index*
- Gaudi, Antonio** [Spanish architect] G: 68
- Gaugamela, Battle of** [331 B.C.] *See* Arbela, Battle of *in this index*
- Gauge** [instrument] G: 69
- Gauge** [knitting]
Knitting (Knitting the fabric) K: 354
- Gauge** [size]
Railroad (Tracks) R: 108-109
Railroad, Model (Scale and size) R: 120
Shotgun S: 438
Wire (Sizes of wire) W: 343
Woodworking (Planning and design) W: 396
- Gauge boson** [physics] *See* Fundamental boson *in this index*
- Gauge theory** [physics]
Subatomic particle (The Standard Model) So: 938
- Gauguin, Paul** [French artist] G: 69 *with picture*
Derain, André D: 152
Marquesas Islands M: 217
Painting (Postimpressionism) P: 75 *with picture*
Picasso, Pablo (Early sculptures) P: 448a-448b
Postimpressionism P: 709
Tahiti T: 13
Van Gogh, Vincent V: 282
- Gaul** [former region] G: 70 *with map*
Belgium (History) B: 232
Caesar, Julius (Campaigns in Gaul) C: 13
France (Early days) F: 471
French language (Beginnings) F: 517
Rubicon R: 507
- Gauley River** [West Virginia]
Kanawha River K: 212
National Park System (table: National recreation areas) N: 49
- Gaulish** [language]
French language (Beginnings) F: 517
- Gaulle, Charles André Joseph Marie de** *See* De Gaulle, Charles André Joseph Marie *in this index*
- Gauls** [ancient people]
Gaul G: 70
France (Ancestry) F: 455
Galatia G: 8
- Gault decision** [law]
Juvenile court (In the United States) J: 205
- Gaungbaung** [garment]
Myanmar (Way of life) M: 970a
- Gauntlet** [clothing] G: 70
Armor (During the Middle Ages) A: 720 *with picture*
Glove G: 234 *with picture*
- Gaur** [animal] G: 70
- Gause, Wilhelm** [German painter]
Dance *picture on* D: 29
- Gauss** [unit of measure] G: 70
Magnetism (Magnetic fields) M: 59
- Gauss, Carl Friedrich** [German mathematician] G: 70
Ceres [asteroid] C: 362
Gauss G: 70
Geometry (Rise of non-Euclidean geometry) G: 105
Mathematics (In the 1800's) M: 307
Number theory N: 605
- Gautama** *See* Buddha *in this index*
- Gauteng** [province, South Africa]
South Africa (Provincial government) So: 609
- Gautier, Théophile** [French author] G: 71
- Gauze** [weaving]
Weaving (Fancy weaves) W: 174
- Gavarnie Falls** [falls, France]
Waterfall (table: Famous waterfalls of the world) W: 143 *with picture*
- Gavel**
Parliamentary procedure (table) P: 176
- Gavial** [reptile] G: 71 *with picture*
Crocodile Ci: 1149
Reptile (Crocodilians) R: 251
- Gaviões** [people]
Gê Indians G: 75
- Gawai Dayak** [holiday]
June J: 192
- Gawain, Sir** [legendary figure] G: 71
Round Table (The knights of the Round Table) R: 491
- Gawler Mountains**
South Australia So: 639
- Gay** [sexuality] *See* Homosexuality *in this index*
- Gay, John** [English author] G: 71
- Gay-Lussac, Joseph Louis** [French chemist] G: 71
Boron B: 490
Gas [physics] (Gas laws) G: 48-49
Iodine (Properties of iodine) I: 370-371
- Gay-Lussac's Law** [chemistry]
Gas [physics] (Gas laws) G: 48-49 *with pictures*
- Gay Nineties** [U.S. history] G: 71 *with pictures*
- Gay rights movement** G: 73
Homosexuality (Attitudes toward homosexuality) H: 307
- Gayane** [ballet]
Khachaturian, Aram Ilich K: 308a
- Gaye, Marvin** [American musician] G: 73
Rock music (Expanding styles and sounds) R: 378-379
- Gayfeather** [plant]
Blazing star B: 398
- Gayle, John** [American political leader]
Alabama (table) A: 274
- Gaylord, Frank C. II** [American sculptor]
Korean War Veterans Memorial K: 384
- Gaynor, Janet** [American actress]
Motion picture (Best performance by an actress: 1927-28) M: 862
- Gaza Strip** [region, Middle East] G: 74
Arab-Israeli conflict (The 1948 war) A: 582; (The 1967 war) A: 582a; (The first intifada) A: 582a; (Peacemaking) A: 582a; (The second intifada) A: 582b
Egypt (Republic) E: 132
Israel I: 478; (History) I: 486-488
Middle East (History) M: 532-534
Palestine (The continuing conflict and peace efforts) P: 105
Palestine Liberation Organization P: 106
Palestinians P: 107
Rabin, Yitzhak R: 50
- Gazehound** *See* Sight hound *in this index*
- Gazelle** [animal] G: 74 *with picture*
Antelope (Habits and appearance) A: 542

Gazelle hound [dog] See *Saluki in this index*
Gazette, *The* [newspaper]

Quebec (Communication) Q: 28

Gazetteer [reference]

Dictionary (Specialized dictionaries) D: 192

Gazpacho [food]

Spain (Food and drink) So: 737

Gbagbo, Laurent [Côte d'Ivoire political leader]
 Côte d'Ivoire (History) Ci: 1085

GCT See *Greenwich Mean Time in this index*

Gd [symbol]

Gadolinium G: 4

Gdańsk [Poland] G: 74

Poland (World War I and independence)

P: 612; (Rebuilding the Polish nation)

P: 612-613; (Antigovernment protests)
 P: 614

GDP See *Gross domestic product in this index*

Gdynia [Poland]

Poland *picture on* P: 615

Ge [Greek mythology] See *Gaea in this index*

Ge [symbol]

Germanium G: 143

Gé Indians [American Indians] G: 74

Indian, American (Indians of the Marginal
 Regions) I: 176-177

Gé-Péno-Carib [language group]

Indian, American (Language groups) I: 147-150

GE Realty Plot [district]

Schenectady S: 174

Gear [machine] G: 75

Automobile (The power train) A: 952 *with dia-*
grams

Transmission (What a transmission does)
 T: 375 *with diagrams*

Truck T: 456

Gear, John H. [American political leader]

Iowa (table) I: 391

Gear pump

Pump (Rotary pumps) P: 899

Gear ratio [mechanics]

Transmission (Gears) T: 376 *with diagram*

Gear shift

Bicycle (Power and speed) B: 290-291 *with*
diagram

G geared traction elevator

Elevator (How elevators work) E: 234

Gearless traction elevator

Elevator (How elevators work) E: 234 *with dia-*
gram

Gearshift

Automobile (The transmission) A: 952

Geary, John White [American political leader]

Pennsylvania (table) P: 263

Geb [Egyptian god]

Mythology (The Great Ennead) M: 976; (The
 Osiris myth) M: 976; *picture on* M: 974

Gebel-Williams, Gunther [American animal

trainer]

Circus (The middle and late 1900's) Ci: 564

Gebrselassie, Haile [Ethiopian athlete]

Olympic Games *picture on* O: 748

Gecko [reptile] G: 75 *with picture*

Lizard (How lizards move) L: 399-400

GED [testing program]

Adult education (Sources of adult education)
 A: 68

Geddes, John [American political leader]

South Carolina (table) So: 658

Gediminas [Lithuanian ruler]

Vilnius V: 385

Geer, T. T. [American political leader]

Oregon (table) O: 845

Geertz, Clifford J. [American anthropologist]

Anthropology (The middle and late 1900's)
 A: 549

Geese See *Goose in this index*

Ge'ez [language]

Ethiopia (People) E: 368

Gegenschein [astronomy]

Zodiacal light Z: 602

Gehenna [ancient region]

Hell H: 177

Gehrig, Lou [American baseball player] G: 75

Baseball (table: Hall of Fame) B: 134; (The
 Babe Ruth Era) B: 136

Gehringer, Charley [American baseball player]

Baseball (table: Hall of Fame) B: 134

Gehry, Frank [American architect] G: 75 *with*
picture

Architecture (Architecture today) A: 632-633
 Guggenheim Museum G: 422

Geiger, Hans [German physicist]

Geiger counter G: 76

Geiger counter [instrument] G: 76 *with pictures*

Prospecting P: 829

Geiger-Müller counter See *Geiger counter in*
this index

Geisel, Ernesto [Brazilian political leader]

Brazil (Under military rule) B: 586

Geisel, Theodor Seuss See *Seuss, Dr. in this*
index

Geisha

Clothing *picture on* Ci: 690

Gelasius I, Saint [pope] G: 76

Pope (table) P: 666

Gelasius II [pope]

Pope (table) P: 666

Gelatin [explosive]

Dynamite (Kinds of dynamite) D: 397

Gelatin [printing]

Printing (Gravure cylinders) P: 800; (Collotype
 printing) P: 801

Gelatin [protein] G: 76

Bone (Composition of bone) B: 456

Glue G: 236

Photography (The beginnings of modern pho-
 tography) P: 426

Gelding [horse]

Horse (Selecting a horse) H: 353

Horse racing (Thoroughbred horses) H: 363-
 364

Gell-Mann, Murray [American physicist] G: 77

Atom (Recent discoveries) A: 876

Physics (Advances in the mid-1900's) P: 442

Quark Q: 7

Gellée, Claude [French painter] See *Claude in*
this index

Gellert Baths [Budapest]

Hungary *picture on* H: 442

Gellius, Aulus [Roman author]

Latin literature (The Imperial Period) L: 116

Gelmo, Paul [German chemist]

Sulfa drug (Development of sulfa drugs)

So: 965

Gelsemium [plant]

Poisonous plant (Some poisonous plants)
 P: 602

Gem G: 77 *with pictures*

Jewelry J: 117

Lapidary L: 73

See also *the list of Related Articles in the*
Gem article

Gem, Harry [British sportsman]

Tennis (Beginnings) T: 165

Gem State [nickname]

Idaho I: 27

Gemara [religious book]

Jews (The Talmudic period) J: 122

Judaism (The Talmud) J: 180

Talmud T: 21

Gemayel, Amin [Lebanese political leader]

Lebanon (Recent developments) L: 174

Gemayel, Bashir [Lebanese political leader]

Lebanon (War and terrorism) L: 173

Gemfibrozil [drug]

Cholesterol (Treatment of high blood chole-
 sterol) C: 520

Gemini [astrology] G: 80 *with picture*

Zodiac (The zodiac in astrology) Z: 601 *with*
picture

Gemini [constellation]

Castor and Pollux C: 282

Gemini program [space exploration]

Astronaut (Achievements in space) A: 829

Grissom, Virgil Ivan G: 396

Space exploration (Voskhod and Gemini: The
 first multiperson space flights) So: 714

with picture

Gemini 3

Gemini program (Voskhod and Gemini: The
 first multiperson space flights) So: 714

Gemini 4

Gemini program (Voskhod and Gemini: The
 first multiperson space flights) So: 714

with picture

Gemini 5

Conrad, Charles, Jr. Ci: 973

Cooper, Leroy Gordon, Jr. Ci: 1035

Space exploration (Voskhod and Gemini:
 The first multiperson space flights)

So: 714

Gemini 6

Borman, Frank B: 488

Schirra, Walter Marty, Jr. S: 176

Space exploration (Voskhod and Gemini:

The first multiperson space flights)
 So: 714

Gemini 7

Lovell, James Arthur, Jr. L: 509

Schirra, Walter Marty, Jr. S: 176

Space exploration (Voskhod and Gemini:
 The first multiperson space flights)

So: 714

Gemini 8

Armstrong, Neil Alden A: 723

Space exploration (Voskhod and Gemini:
 The first multiperson space flights)

So: 714

Gemini 11

Conrad, Charles, Jr. Ci: 973

Gemini 12

Aldrin, Buzz A: 339

Gemmule [reproduction]

Sponge (Asexual reproduction) So: 800

Gempei War [1180-1185]

Minamoto Yoritomo M: 562

Gemsbok [animal] G: 80

Antelope (Kinds of antelope) A: 542-543 *with*
picture

Gemsbok National Park [Botswana]

National park (South Africa) N: 42d; (table)
 N: 42f

Gemsbuck [animal] See *Gemsbok in this index*

Gendarme [police]

Police (In other countries) P: 623 *with picture*

Gender [grammar] G: 80

German language (Nouns) G: 138

Language (Methods of study) L: 62

Noun (Gender) N: 553

Gender [sexuality]

Gay rights movement G: 73

History (Approaches to history) H: 261

Reproduction, Human (How sex is deter-
 mined) R: 246

Sexuality (Sex and gender) S: 338; (Gender
 identity) S: 338; (Gender roles) S: 338a

Gender discrimination See *Sex discrimination*
in this index

Gender role [psychology]

Aggression A: 141

Gene [genetics] G: 81

See also *Heredity in this index*

Alcoholism (Causes of alcoholism) A: 337

Antibiotic (Resistance to antibiotics) A: 551

Biodiversity (Kinds of biodiversity) B: 311

Brain (Genetic disorders) B: 557

Breast cancer B: 591

Cancer C: 167; (How damaged genes cause
 cancer) C: 169; (Genetics) C: 173

Cell (table) C: 327; (The code of life) C: 334
with diagrams; (Before 1900) C: 337

Clone Ci: 684

Colon cancer Ci: 785

Conservation (Biodiversity conservation)
 Ci: 976

Cystic fibrosis Ci: 1208

Diabetes (Causes) D: 179

Disease D: 225; (Noninfectious diseases)
 D: 228

DNA D: 258

Down syndrome D: 316

Evolution (Mutation) E: 427; (History of the
 theory of evolution) E: 432-433

Gene mapping G: 81

Genetic counseling G: 84

Genetic engineering G: 84a

Genetic testing G: 85

Genetics G: 86

Hamilton, William Donald H: 33

Heredity H: 200

Human Genome Project H: 427

Intelligence (The roles of heredity and environ-
 ment) I: 318

Life (Adaptation) L: 275

Medicine (Medical researchers) M: 369; (The
 medical revolution) M: 376-377; (The chal-
 lenge of genetics) M: 378

Mental illness (Genetic factors) M: 407

Molecular biology (The beginning of molecular
 biology) M: 691-692; (Molecular biology
 today) M: 692

Monod, Jacques Lucien M: 731

Muscular dystrophy M: 936

Mutation M: 968

Plant (How plants reproduce) P: 532; (Factors

348 Gene expression

affecting plant growth) P: 538
 Prehistoric people (The single origin theory) P: 747
 Prion P: 804
 Races, Human (How human populations develop and change) R: 57; (Susceptibility to genetic diseases) R: 58
 Reproduction (How genes are transferred) R: 242
 Reproduction, Human (How sex is determined) R: 246
 Syphilis So: 1069
 Tay-Sachs disease *diagram* on T: 56
 Tuberculosis (Prevention of tuberculosis) T: 479
 Virus (How a virus infects an organism) V: 426
 Weight control (Heredity) W: 182
 Wilson, Edward Osborne W: 316

Gene expression
 Heredity H: 200; (How proteins are made) H: 206

Gene flow [genetics]
 Heredity (Gene pools and allele frequency) H: 204
 Races, Human (Migration and gene flow) R: 59

Gene frequency [genetics]
 Races, Human (How human populations develop and change) R: 57

Gene mapping [genetics] G: 81
 Genetics (Transmission genetics) G: 87
 Heredity (Hereditary disorders) H: 204; (The Human Genome Project) H: 210
 Human Genome Project H: 427

Gene mutation [genetics]
 Heredity (Mutation) H: 203

Gene pool [genetics]
 Heredity (Gene pools and allele frequency) H: 204
 Evolution (Contributions from other scientific fields) E: 433
 Races, Human (How human populations develop and change) R: 57

Gene splicing
 Genetic engineering (How genes are reintroduced into cells) G: 84a *with diagram*

Gene therapy G: 81
 Cell (The 1900's) C: 337-338
 Cystic fibrosis Ci: 1208
 Genetic engineering (Uses of genetic engineering) G: 84a; (Concerns about genetic engineering) G: 85
 Heredity (Hereditary disorders) H: 204; (The era of genetic engineering) H: 209
 Immune system (Immunodeficiency diseases) I: 88c-88d

Genealogical and Heraldic Dictionary of the Peerage and Baronetage of the United Kingdom [book]
 Burke's Peerage B: 705

Genealogy [family] G: 82
 Heraldry H: 194 *with picture*

Genealogy of Morals, The [book by Nietzsche]
 Nietzsche, Friedrich (Nietzsche and religion) N: 406-407

General [locomotive]
 Civil War (Raids) Ci: 629
 Locomotive *picture* on L: 415

General [rank] G: 82
 Army, United States *picture* on A: 732
 Marine Corps, United States *pictures* on M: 207
 Rank, Military (table) R: 140

General, The [film]
 Keaton, Buster K: 253 *with picture*

General Accounting Office [U.S.] G: 82
 Budget (Preparation of the U.S. budget) B: 671

General adaptation syndrome [physiology]
 Stress (How stress affects the body) So: 926

General Agreement on Tariffs and Trade [1947] G: 82
 Clinton, Bill (International affairs) Ci: 682e
 Globalization (Features of globalization) G: 233
 International trade (Government trade policies) I: 348
 Reciprocal trade agreement R: 175
 Tariff (The 1900's) T: 45
 World Trade Organization W: 451

General anesthesia
 Anesthesia (General anesthesia) A: 459
 Dentistry (Modern dentistry) D: 145

Drug (Anesthetics) D: 352
 Ether E: 365
 Surgery (Anesthesia) So: 1004

General assembly
 Kibbutz K: 310

General Assembly
 United Nations (The six major UN organs) U: 78 *with picture*; (The General Assembly) U: 78; (Membership questions) U: 95-96
 International law (After World War II) I: 342
 World *picture* on W: 406

General Assembly of the Church of Scotland [religious group]
 Scotland (Religion) S: 215

General assignment editor [occupation]
 Newspaper (Gathering information) N: 382

General assistance
 Welfare (Other welfare programs) W: 191

General Association of Baptist Churches [religious group]
 American Baptist Association A: 408

General Authorities
 Mormons (Church organization) M: 807

General aviation airport
 Airport (General aviation airports) A: 243

General aviation plane
 Aviation (The aviation industry) A: 984

General Chronicle of Spain [book]
 Spanish literature (Early medieval literature) So: 757-758

General Church of the New Jerusalem [religious group]
 Swedenborgians So: 1035

General Conference
 United Nations (Amending the charter) U: 78

General contractor
 Building trade (The contracting system) B: 685

General Convention of the New Jerusalem [religious group]
 Swedenborgians So: 1035

General council [religion] See Ecumenical council *in this index*

General damages [law]
 Damages D: 22

General discharge
 Military discharge M: 543

General Dynamics Corporation
 Holland, John Philip H: 292

General education
 Education (Kinds of education) E: 88
 Teaching (Teacher-training programs) T: 67

General Educational Development Test
 Adult education (Sources of adult education) A: 68

General Electric Company G: 83
 Business (Corporations) B: 725
 Edison, Thomas Alva (The Wizard of Menlo Park) E: 78-79
 Manufacturing (table) M: 170
 Reagan, Ronald Wilson (Television star) R: 166

General Electric Research Laboratory
 Diamond (Synthetic diamonds) D: 183 *with pictures*

General Epistles [New Testament]
 James, Epistle of J: 26

General equilibrium theory [economics]
 Arrow, Kenneth Joseph A: 743

General Federation of Women's Clubs
 Women's Clubs, General Federation of W: 382

General Grant National Memorial [New York]
 National Park System (table: National memorials) N: 54

General Grant Tree [tree, California]
 Kings Canyon National Park K: 330

General History [book]
 Spanish literature (Early medieval literature) So: 757-758

General History of Connecticut, A [book by Peters]
 Blue laws B: 420

General History of Quadrupeds, A [book by Bewick]
 Bewick, Thomas B: 276

General illumination [lighting]
 Theater (Lighting methods) T: 240-241

General in His Labyrinth, The [book by García Márquez]
 García Márquez, Gabriel José G: 29

General incorporation law
 Corporation Ci: 1070

General jurisdiction [law]
 Court (Types of courts) Ci: 1101; (State courts) Ci: 1102

General Lee Tree [tree, California]
 Kings Canyon National Park K: 330

General Letters [New Testament]
 Bible (The New Testament) B: 282-284

General lien [law]
 Lien L: 273

General manager
 Opera (The general manager) O: 794

General Medical Council [agency]
 Medicine (A career as a doctor) M: 370-371

General mobile radio service
 Walkie-talkie W: 15

General Motors Corporation G: 83
 Automobile (Major producing countries and companies) A: 958-959; (William Crapo Durant) A: 965; (Changes at the top) A: 966
 Durant, William Crapo D: 387
 Flint F: 235
 Kettering, Charles Franklin K: 307
 Manufacturing (table) M: 170
 Nash, Charles William N: 22
 Plastics (Growth of the plastics industry) P: 560
 Sports car (History) So: 803

General of the Air Force [rank]
 General G: 82

General of the Armies of the United States
 Washington, George (Death) W: 107-108

General of the Army [rank]
 General G: 82

General practitioner [medicine]
 Medicine (Primary care physicians) M: 366; (The United Kingdom) M: 366-367

General-purpose bomb
 Bomb (General-purpose bombs) B: 450 *with diagram*

General Radio Service [Canada]
 Citizens band radio Ci: 568

General reference map
 Map (General reference maps) M: 177 *with picture*

General sales tax
 Sales tax S: 66

General Services Administration [U.S.] G: 83
 Washington, D.C. *map* on W: 76

General Sherman Tree [tree, California]
 Sequoia (Size) S: 310-311 *with picture*
 Sequoia National Park S: 312
 Tree (Interesting facts about trees) T: 411

General Slocum Norge [ship]
 Shipwreck (table: Major shipwrecks) S: 428

General staff [military]
 Army (The rise of modern armies) A: 727-728

General Strike [British history]
 Baldwin, Stanley B: 40

General strike [labor]
 Labor movement (Handling labor disputes) L: 6-7

General Synod of the Reformed Church in America
 Reformed Church in America R: 199

General Theory of Employment, Interest, and Money, The [book by Keynes]
 Capitalism (Changing attitudes toward capitalism) C: 195
 Economics (New solutions for old problems) E: 65
 Keynes, John Maynard K: 308

General theory of relativity [physics]
 Einstein, Albert E: 146
 Force (Einstein's theory of general relativity) F: 370
 Gravitation (Einstein's theory of gravitation) G: 332; (Predictions of general relativity) G: 332
 Relativity R: 209; (General relativity) R: 211
 String theory So: 929

General Tom Thumb See Stratton, Charles
 Sherwood *in this index*

General transport airport
 Airport (General aviation airports) A: 243

General utility airport
 Airport (General aviation airports) A: 243

Generalization [biology]
 Human being H: 413

Generalization [logic]
 Inductive method I: 240

Generalization [psychology]

- Personality (Emotional reactions) P: 303
General History of Virginia, New England and the Summer Isles, The [book by Smith]
 American literature (Virginia) A: 414
Generation [biology] G: 83
 Races, Human (Mutation) R: 58; (Genetic drift) R: 58-59
Generation of 1898 [literary group]
 Spanish literature (The Generation of 1898) So: 762
Generation of 1927 [literary group]
 Spanish literature (The Generation of 1927) So: 763
Generations, Alternation of See Alternation of generations in *this index*
Generative grammar
 Chomsky, Noam C: 520
 Grammar G: 303
Generative theory [language]
 Linguistics (The generative theory of language) L: 337
Generator [refrigeration]
 Refrigeration (The gas refrigerator) R: 202 with *diagram*
Generator [vat]
 Vinegar (Making vinegar) V: 386
Generator, Electric See Electric generator in *this index*
Generic name
 Drug (The United States Adopted Name) D: 356
 Wine (Where wine comes from) W: 336-337
Genesee River (New York)
 New York (Rivers) N: 306
 Rochester (Description) R: 370
Genesis (Old Testament) G: 83
 Deluge D: 118
 Eden E: 76
 Joseph J: 167
 Life (Religious explanations) L: 278
 Pentateuch P: 274
Genêt, Edmond Charles Édouard [French diplomat] G: 84
 Adams, John Quincy (Lawyer and writer) A: 40-41
 Washington, George (Relations with France) W: 105
Genet, Jean [French dramatist] G: 84
Genetic code
 Cell (The genetic code) C: 336
 Heredity (How proteins are made) H: 206
 Molecular biology (The beginning of molecular biology) M: 691-692
 RNA R: 357
Genetic counseling G: 84
 Birth defect (Prevention and treatment) B: 380
 Heredity (Hereditary disorders) H: 204-205
Genetic diversity
 Biodiversity (Kinds of biodiversity) B: 311
Genetic drift
 Evolution (Genetic drift) E: 429; (The synthetic theory) E: 432-433
 Heredity (Gene pools and allele frequency) H: 204
 Races, Human (Genetic drift) R: 58
Genetic engineering G: 84a with *diagrams*
 Biology (Current research and issues) B: 320-321 with *picture*
 Biotechnology B: 326
 Clone Ci: 684
 Corn (Controlling pests and diseases) Ci: 1061
 Gene mapping G: 81
 Genetics (Molecular genetics) G: 86-87
 Heredity (The era of genetic engineering) H: 209
 Science (Recent developments) S: 203; *picture on* S: 204
 Technology (Emerging technologies) T: 75
Genetic medicine
 Medicine (The challenge of genetics) M: 378
Genetic testing [medicine] G: 85
Genetic variation
 Heredity (Sources of genetic variation) H: 203
Geneticist
 Genetics G: 86
 Heredity H: 200
Genetics G: 86
 See also Heredity in *this index*
 Biology (table) B: 317; (The growth of modern biology) B: 319-320
 Botany (How plants function) B: 508; (Later developments) B: 509
 Cell (The code of life) C: 334
 Clone Ci: 684
 Evolution (History of the theory of evolution) E: 432
 Genetic counseling G: 84
 Genetic engineering G: 84a
 Heredity H: 200; (The birth of genetics) H: 208
 Medicine (table) M: 369
 Mendel, Gregor Johann M: 398
 Molecular biology M: 691
 Plant (How people have changed plants) P: 542; (Control of diseases and pests) P: 545
 Races, Human (How human populations develop and change) R: 57; (Genetic drift) R: 58
 Science (Science in the early 1900's) S: 201-202
 Sociobiology So: 563
 Zoology (What zoologists study) Z: 610
Geneva (Switzerland) G: 87
 Calvin, John (His life) C: 70
 Presbyterians (History) P: 757-756a
Geneva, Lake [France-Switzerland] See Lake Geneva in *this index*
Geneva Accords [international relations] G: 87
 Indochina (The Geneva Accords) I: 225
 Vietnam V: 364; (The First Indochina War) V: 371
 Vietnam War (The Indochina War) V: 373
Geneva Agreements [1954] See Geneva Accords in *this index*
Geneva Arbitration [1871-1872]
 Alabama A: 255
 Washington, Treaty of W: 109
Geneva Catechism [religion]
 Catechism C: 299
Geneva conference [1954]
 Cold War (The death of Stalin) Ci: 764
Geneva conference [1955]
 Cold War (The spirit of Geneva) Ci: 765; *picture on* Ci: 768
Geneva Conventions [international law] G: 88
 International law (In the 1800's) I: 342
 Prisoner of war P: 808
 Red Cross (The Red Cross in other lands) R: 187; (In the United States) R: 187
Geneva Phonogram Convention [1974]
 Copyright (International copyright) Ci: 1048
Genève See Geneva in *this index*
Geneviève, Sainte [French religious leader]
 Paris (Famous buildings) P: 163-164
Genf See Geneva in *this index*
Genfer See [lake, Switzerland]
 Lake Geneva L: 38 with *map*
Genghis Khan [Mongol conqueror] G: 88 with *picture and map*
 Asia (The people) A: 791; (Nomadic invasions) A: 805-806
 India (The Mughal Empire) I: 129
 Kublai Khan K: 391
 Mongol Empire (Early empire) M: 720
 Siberia (History) S: 446
Genie [Arab mythology] G: 89
 Aladdin A: 280
Genin, John Nicholas [American businessman]
 Hat (History) H: 84-85
Genital herpes [disease] See Herpes, Genital in *this index*
Genital organs [anatomy]
 Menstruation M: 404 with *pictures*
 Reproduction, Human (The human reproductive system) R: 244-245 with *diagrams*
 Sexuality (Biological factors) S: 337
 Sterility So: 893
Genital phase [psychology]
 Libido L: 233
Genitive case [grammar]
 Case (Cases in Latin) C: 272
Genius [Roman mythology] G: 89
Genius of Universal Emancipation, The [magazine]
 Lundy, Benjamin L: 523
 United States, History of the (The abolition movement) U: 171
Genji, Prince [literary figure]
 Murasaki Shikibu M: 929
Genn, James [American surveyor]
 Washington, George (First expedition) W: 93
Gennes, Pierre-Gilles de [French physicist]
 Nobel Prizes (Physics: 1991) N: 442
Gennesaret [lake, Israel-Syria]
 Galilee, Sea of G: 10 with *maps*
Genoa [city, Italy] G: 89
 Columbus, Christopher (Early years) Ci: 857
 Venice (History) V: 308
Genoa [city, Nevada]
 Nevada (Early settlement) N: 174 with *picture*
Genoa, Gulf of
 Genoa G: 89
Genoa jib
 Sailing (Sails) S: 24
Genocide [crime] G: 90
 Holocaust ("The Final Solution") H: 296a
 Minority group (How a group becomes a minority) M: 609
 Racism (History) R: 62
 War (Changes in the rules of war) W: 24
Genocide Convention [1948]
 Genocide G: 90
 Holocaust (The Nuremberg Trials) H: 296b
Genome [genetics]
 Biology (Current research and issues) B: 320-321
 Gene mapping G: 81
 Heredity (Chromosomes and genes) H: 201; (The Human Genome Project) H: 210
 Human Genome Project H: 427
 Typhus (Treatment) T: 541
Genotype [genetics]
 Heredity (Heredity and environment) H: 205
 Races, Human (How human populations develop and change) R: 57
Genre film
 Motion picture (Movies become big business) M: 866
Genre painting [art]
 Painting (People) P: 31 with *picture*
 Teniers, David, the Younger *picture on* T: 133
Genro [Japanese government]
 Statesman So: 867
Genseric [Vandal king]
 Vandals V: 279
Gent [Belgium]
 Ghent G: 181
Gentamicin [medication]
 Antibiotic (table) A: 551
Gentian [botany] G: 90
 Flower F: 300 with *picture*
Gentile [people] G: 90
Gentileschi, Artemisia [Italian painter] G: 90
 Painting (Baroque) P: 58
Gentle Art of Making Enemies, The [book by Whistler]
 Whistler, James Abbott McNeill W: 283
Gentleman Boss
 Arthur, Chester Alan A: 754
"Gentleman from San Francisco, The" [story by Bunin]
 Russian literature (Symbolism) R: 563
Gentleman Jim [nickname]
 Corbett, James John Ci: 1050
Gentleman's Agreement [book by Hobson]
 Hobson, Laura Zamestin H: 273
Gentleman's Agreement [film by Hart]
 Hart, Moss H: 77
 Kazan, Elia K: 252
 Motion picture (Best picture: 1947) M: 861
Gentleman's Magazine
 Magazine (History) M: 43
Gentlemen's agreement [1908] G: 90
 Asian Americans (The second wave) A: 812d-812e
 Roosevelt, Theodore (Friction with Japan) R: 471
Gentoo penguin
 Antarctica (Animal life) A: 534-535 with *picture*
Gentry [social class]
 Colonial life in America (The structure of colonial society) Ci: 793
Genuine Remains in Verse and Prose, The [book by Butler]
 Butler, Samuel B: 729
Genuine Risk [horse]
 Kentucky Derby K: 297
Genus [biology]
 Animal (The scientific classification of animals) A: 472-473
 Classification, Scientific (Groups in classification) Ci: 654-656
Geocentric theory
 Astronomy (Earth-centered theories) A: 835; (History) A: 846-847 with *diagram*

- Science (Ancient Greece) S: 196-197
- Geocentric zenith** [astronomy]
Zenith Z: 593
- Geochemical Ocean Section Studies**
Atlantic Ocean (New techniques) A: 867
- Geochemical prospecting**
Geochemistry G: 90
- Geochemistry G: 90**
- Geochronology**
Science (The physical sciences) S: 193
- Geode** [geology] G: 91
Fluorite F: 306
- Geodesic dome**
Architecture *picture on* A: 610
Fuller, Buckminster F: 554 *with picture*
- Geodesy** [surveying] G: 91
- Geodetic center of North America** G: 91
Kansas K: 216
- Geodetic control point**
Survey (Types of surveys) So: 1010
- Geodetic survey**
Geodesy G: 91
Surveying (Types of surveys) So: 1010
- Geoduck** [clam] G: 91 *with picture*
- Geoffrey, Count of Anjou** [French nobleman]
Henry II [king of England] H: 185
Plantagenet P: 550
- Geoffrey of Monmouth** [Welsh historian] G: 91
Gawain, Sir G: 71
Knights and knighthood (Knighthood in literature) K: 351
- Geographic center of North America** G: 91
North Dakota (Interesting facts) N: 497
- Geographic center of the United States** G: 91
United States *map on* U: 120
- Geographic grid**
Map (Reading a map) M: 178; *diagram on* M: 180
- Geographic information system**
Map M: 176; (Production and reproduction) M: 180 *with picture*
- Geographic Names, United States Board on** G: 91
- Geographical information system** [database]
Surveying (Careers in surveying) So: 1012
- Geographical Magazine**
Royal Geographical Society R: 498
- Geographical-race theory**
Races, Human (The geographical-race theory) R: 54-55 *with map*
- Geographical Society, Royal**
Royal Geographical Society R: 498
- Geography** G: 92 *with pictures and map*
Botany (Plant habitats) B: 508
Evolution (Evolution of new species) E: 429-430; (Geographic distribution of species) E: 430
Geomorphology G: 106
Mythology (What myths are about) M: 974
Races, Human (The geographical-race theory) R: 54-55 *with map*
World (Physical features of the world) W: 415
See also the list of Related Articles in the Geography article
- Geography** [book by Ptolemy]
Map (Ancient maps) M: 181-182; *picture on* M: 184
Ptolemy P: 855
- Geography** [book by Strabo]
Geology (The ancient Greeks) G: 97
Strabo So: 917
- Geography III** [poetry by Bishop]
American literature (Poetry) A: 423
- Geological catastrophe** [zoology]
Cuvier, Baron C: 1202
- Geological engineering**
Mining (The mining industry) M: 577
- Geological Survey** [Canada]
Geological Survey, United States G: 96
- Geological Survey, United States** G: 96
Flood (Reducing flood losses) F: 238
Map (Database development) M: 180,
(Mapping the Americas) M: 184-185
Moon (Describing lunar evolution) M: 794
- Geological time scale**
Earth (Age of Earth) E: 26, (table) E: 30
Time (Geological time) T: 292
- Geology** G: 97 *with pictures*
Careers (Life, physical, and social sciences) C: 225-226
Earth E: 16
Geomorphology G: 106
- Hutton, James H: 458
Lyell, Sir Charles L: 533
Petroleum (Exploring for petroleum) P: 336
Prospecting P: 829
Radiogeology R: 98
Science (The physical sciences) S: 193
Werner, Abraham Gottlob W: 197
See also the list of Related Articles in the Geology article
- Geomagnetic field**
Magnetism (The magnetism of the earth) M: 60c
- Geomagnetic north pole**
North Pole N: 517
- Geomagnetic south pole**
South Pole So: 686
- Geometric fractal**
Fractal F: 443 *with diagrams*
- Geometric progression** [mathematics]
Progression (Geometric progressions) P: 812
Series (Working with infinite series) S: 317
- Geometric series** [mathematics]
Series S: 316; (Working with infinite series) S: 317
- Geometric style** [art] G: 101
Painting (Greek painting) P: 42
- Geometric tracery** [architecture]
Tracery T: 353
- Geometrical optics** [physics]
Optics O: 813
Physics (Light) P: 437
- Geometry** G: 101 *with pictures*
Axiom A: 994
Euclid E: 376
Fourth dimension F: 438
Mathematics (Branches of mathematics) M: 303
Philosophy (Modern philosophy) P: 387-388
Symmetry So: 1066
Topology T: 333
See also the list of Related Articles in the Geometry article
- Geomorphology** [geology] G: 106
Geography (Physical geography) G: 93; *picture on* G: 94
Geology (Areas of specialization) G: 100-101
- Geophysics** G: 106
Careers (Life, physical, and social sciences) C: 225-226
Geology (Areas of specialization) G: 100-101
Petroleum (Geophysical studies) P: 336
Seismology S: 288
- Geopolitics** G: 106
War (Conflicts over resources) W: 24
- Georg II** [duke of Saxe-Meiningen]
Drama (Early realism) D: 338
- George** [city, Washington]
Washington (Interesting facts about Washington) W: 47
- George I** [British king] G: 107
South Carolina (Colonial days) So: 659
United Kingdom (The beginning of cabinet government) U: 67
Walpole, Sir Robert W: 19
- George I** [king of Greece] G: 107
Greece (George I) G: 362
- George II** [British king] G: 107 *with portrait*
United Kingdom (The beginning of cabinet government) U: 67
- George II** [king of Greece] G: 107
Greece (World War I) G: 363; (Between world wars) G: 363
- George III** [British king] G: 107 *with portrait*
Buckingham Palace B: 664
North, Lord N: 457
Pitt, William, the Younger P: 500
Pound P: 721
Revolutionary War in America (British policy changes) R: 271-272; (The Declaration of Independence) R: 276
United Kingdom (The beginning of cabinet government) U: 67; (The Revolutionary War in America) U: 67
United States, History of the (British policy changes) U: 156
- George IV** [British king] G: 108
- George V** [British king] G: 108 *with portrait*
- George VI** [British king] G: 108 *with portrait*
- George, David Lloyd** *See* Lloyd George, David *in this index*
- George, Eddie** [American football player]
Football (table) F: 363
- George, Francis Cardinal** [American religious leader] G: 108
- George, Henry** [American social reformer]
G: 108
Ricardo, David R: 321
Single tax S: 473
- George, James Zachariah** [American political leader] G: 108
- George, Jean Craighead** [American author]
Newbery Medal (table) N: 359
- George, Saint** [legendary figure] G: 109
Dragon D: 319 *with picture*
- George, Stefan** [German poet] G: 109
- George-Barden Act** [1946]
Agricultural education (History) A: 145
- George Bush Presidential Library**
Bush, George Herbert Walker (Later years) B: 722a
- George C. Marshall Space Flight Center**
Alabama A: 256; (Population) A: 260; (The mid-1900's) A: 278
Huntsville H: 451
Kennedy Space Center K: 271
Redstone Arsenal R: 192
- George Cross**
Medals, decorations, and orders (table) M: 359
- George Land** [island, Arctic]
Franz Josef Land F: 494
- George Rogers Clark National Historical Park** [Indiana]
National Park System (table: National historical parks) N: 56-57
- George Street**
Sydney (The city) So: 1063
- George Town** [city, Cayman Islands]
Cayman Islands C: 323
- George Town** [city, Malaysia] G: 109
- George Tupou I** [king of Tonga]
Fiji (History) F: 98
Tonga (History) T: 329
- George Tupou II** [king of Tonga]
Tonga (History) T: 329
- George Washington** [book by Freeman]
Freeman, Douglas Southall F: 509
- George Washington** [sculpture by Greenough]
Sculpture (American sculpture) S: 255 *with picture*
- George Washington** [ship]
Aircraft carrier (The United States carrier fleet) A: 206
- George Washington Birthplace National Monument** [Virginia] G: 109
National Park System (table: National monuments) N: 51
- George Washington Bridge** [New York City]
G: 109
Bridge (table: Suspension) B: 603
New Jersey (Transportation) N: 247-248 *with picture*
- George Washington Carver Museum**
Alabama (Museums) A: 261 *with picture*
- George Washington Carver National Monument** [Missouri] G: 109
Carver, George Washington (Awards and honors) C: 269
National Park System (table: National monuments) N: 51
- George Washington Carver Research Foundation** [Alabama]
Carver, George Washington (Tuskegee instructor and researcher) C: 269
- George Washington Memorial Parkway** [Maryland-Virginia]
National Park System (table: National parkways and other national parklands) N: 56
- George Washington of South America** [nickname]
Bolivar, Simón B: 441
- Georges, Hurricane** *See* Hurricane Georges *in this index*
- Georges Pompidou National Center of Art and Culture** [Paris]
Paris (Museums and art galleries) P: 164 *with picture*
France (Museums and libraries) F: 461
- Georgetown** [city, Cayman Islands]
Cayman Islands C: 323
- Georgetown** [city, Guyana] G: 109
Guyana G: 445; *picture on* G: 447
- Georgetown** [Washington, D.C.]
Washington, D.C. (Architectural styles) W: 78; (Northwest) W: 79; (History) W: 85; *pic-*

- ture on W: 81
Georgetown University G: 109
 Carroll, John C: 248
Georgia [country, Caucasus] **G:** 110 *with picture and map*
 Caucasus C: 317
 Flag *picture on F:* 203
 Shevardnadze, Eduard Amvrosiyevich S: 399
 Union of Soviet Socialist Republics (History) U: 35
Georgia [state, U.S.] **G:** 112 *with pictures and maps*
 Colonial life in America (Development of the Thirteen Colonies) Ci: 789 *with map*
 Exploration (The French and English in North America) E: 446-447
 South Carolina (Colonial days) So: 659
 Trail of Tears T: 368
 United States, History of the (The Southern Colonies) U: 154
See also the list of Related Articles in the Georgia article
Georgia, Strait of [Washington]
 Puget Sound P: 886
Georgia, University of G: 135
 Georgia (Schools) G: 116-117 *with picture*
Georgia Institute of Technology G: 135
"Georgia On My Mind" [song]
 Carmichael, Hoagy C: 240
"Georgia Peach, The" [nickname]
 Cobb, Ty Ci: 741
Georgia Tech *See Georgia Institute of Technology in this index*
Georgia Warm Springs Foundation
 Roosevelt, Franklin Delano (The Warm Springs Foundation) R: 455
Georgian architecture G: 135
 Colonial life in America (Houses) Ci: 796-797
 England (The arts) E: 298-299
 House *picture on H:* 381
 White House (The original building) W: 290 *with picture*
Georgian Bay [bay, Ontario] **G:** 136
 Lake Huron L: 39 *with map*
 Ontario *picture on O:* 764
Georgian Bay Islands National Park [Ontario]
 Canada (table: National parks and national park reserves) C: 113
Georgian language
 Georgia (People) G: 110
Georgian poets [English literature]
 English literature (Literature before World War I) E: 322
Georgians [people]
 Georgia (People) G: 110
Georgics [poems by Virgil]
 Virgil (His works) V: 391-392
 Latin literature (The Augustan Age) L: 116
GEOSAT [satellite] *See Geostationary orbit satellite in this index*
Geoscientist
 Careers (Life, physical, and social sciences) C: 225-226
Geostationary orbit satellite
 Communications satellite (Types of satellites) Ci: 888a
 Satellite, Artificial *picture on S:* 150f
 Weather (Weather satellites) W: 163-164
 Weather satellite W: 172 *with picture*
Geosynchronous orbit
 Satellite, Artificial (Satellite orbits) S: 150d-150e *with picture*
 Space exploration (Kinds of earth orbits) *diagram on So:* 697
Geotextile [fabric]
 Textile (Nonwovens) T: 215
Geothermal energy
 Hot springs H: 374b
 Volcano (Benefits of volcanoes) V: 443
Geothermal power
 Electric power (Other sources of electric power) E: 184
 Energy supply (Geothermal power) E: 279
 Global warming (Limiting global warming) G: 232a
Geotropism [botany]
 Plant (Factors affecting plant growth) P: 538-539 *with picture*
 Tropism T: 452
Gephardt, Richard Andrew [American political leader] **G:** 136
Ger [tent]
- Mongolia (The people) M: 722-723 *with picture*
Gerald R. Ford Museum
 Grand Rapids G: 309
Geraniol [chemical]
 Citronella Ci: 573
Geranium [plant] **G:** 136 *with picture*
 Flower F: 300 *with picture; picture on F:* 292
Gerard, Forrest [American government official]
 Indian, American (Political gains) I: 182
Gerbil [animal] **G:** 136 *with picture*
Gerhardt, Charles [French chemist]
 Aspirin A: 816
Geriatrics [medicine] **G:** 137
See also Old age in this index
 Diet (Special diets) D: 200
 Senility S: 300
Géricault, Théodore [French painter] **G:** 137
 Painting (Romanticism) P: 68-69 *with picture*
Geringer, Jim [American political leader]
 Wyoming (table) W: 532
Gerlachovský Štít [mountain]
 Slovakia (Land and climate) S: 508d
Germ [biology]
 Bran B: 563
 Egg (The yolk) E: 117
 Flour (How white flour is milled) F: 268-269
 Wheat (Food for people) W: 266-267 *with diagram; (Structure) W:* 267-268 *with diagram*
Germ [medicine]
 Antiseptic A: 559
 Gnotobiotics G: 238
Germ cell [biology]
 Cell (Meiosis) C: 331
Germ plasm [genetics]
 Weismann, August W: 188
Germ theory [medicine]
 Biology (Materialistic physiology and the cell theory) B: 319
 Drug (The drug revolution) D: 359
 Medicine (Scientific study of the effects of disease) M: 375
Germ warfare
 Biological Weapons Convention B: 315
 Chemical-biological-radiological warfare (Biological) C: 396
 Terrorism (Biological attacks) T: 178
German cockroach
 Cockroach Ci: 745
 Insect *picture on I:* 285
German Confederation [German history]
 Austria (Metternich and revolution) A: 938
 Germany (The German Confederation) G: 165;
 (The unification of Germany) G: 165
 Liechtenstein (History) L: 273
German Democratic Republic
 Germany (East Germany) G: 170
German Dictionary [book by Grimm]
 Grimm G: 394
German East Africa [former colony]
 Rwanda (History) R: 571-572
German Empire [German history]
 Germany (The unification of Germany) G: 165 *with map; (The German Empire) G:* 166
 Berlin (Prussian capital) B: 264
 Prussia (German empire) P: 843 *with map*
German expressionism [art]
 Painting (Expressionism) P: 78
German Grammar [book by Grimm]
 Grimm G: 394
German language G: 137
 Belgium (Regions and language communities) B: 227
 English language (The development of English) E: 313
 German literature (The Renaissance) G: 139-140
 Phonetics (Phonetics and spelling) P: 400
 Yiddish language Y: 566
German literature G: 138 *with pictures*
 Drama (Germany) D: 336; (Romanticism) D: 337
 Mythology (Teutonic mythology) M: 984
See also the list of Related Articles in the German literature article
German measles *See Rubella in this index*
German Museum
 Munich (Important buildings) M: 927
German Pavilion [Barcelona, Spain]
 Mies van der Rohe, Ludwig M: 536
German pinscher [dog]
- Dog (Types of dogs) D: 265-266
German police dog
 German shepherd dog G: 143
German Requiem, A [music by Brahms]
 Brahms, Johannes (His music) B: 549
German shepherd dog G: 143 *with picture*
 Dog *picture on D:* 262
 Police dog P: 626
German shorthaired pointer [dog] **G:** 143
 Dog *picture on D:* 269
German silver [metal]
 Nickel silver N: 405
 Alloy (Costly and ornamental alloys) A: 378
German Society [organization]
 Legal aid L: 182
German State Library [Berlin]
 Berlin (The downtown areas) B: 260; (Libraries and museums) B: 262
German Toy Museum [Nuremberg]
 Doll (Dolls in museums) D: 294
German Village [district]
 Columbus (History) Ci: 856
German wirehaired pointer [dog] **G:** 143 *with picture*
German Workers' Party [German history]
 Hitler, Adolf (Birth of the Nazi Party) H: 266
 Nazism (The birth of Nazism) N: 92
Germani [ancient people]
 Germany (Ancient times) G: 162
Germania [book by Tacitus]
 Tacitus, Cornelius T: 5
Germanic languages
 Language (Indo-European) L: 64
Germanicus [Roman general]
 Tiberius T: 276
Germanicus, Gaius Caesar Augustus [Roman emperor]
 Caligula C: 66
Germanium [element] **G:** 143
 Indium I: 224
 Zone melting Z: 602
Germanium oxide
 Germanium G: 143
Germans [people]
 Germany G: 144
 Middle Ages (The Germanic invasions) M: 523; (The Germanic kingdoms) M: 523
Germans, Buffalo
 Basketball (The history of professional basketball) B: 153
Germantown [district, Philadelphia]
 Pastorius, Francis Daniel P: 193
 Philadelphia (Residential districts) P: 360-362 *with picture; picture on P:* 362
Germantown, Battle of [1777]
 Pennsylvania *picture on P:* 267
 Revolutionary War in America (table) R: 276;
 (Brandywine and Germantown) R: 282
Germanus, Saint [French religious leader]
 Patrick, Saint (His life) P: 197
Germany G: 144 *with pictures and maps*
Art and architecture
 Germany (Arts) G: 153
 Architecture *pictures on A:* 619
 Classical music (History) Ci: 645-646
 Doll (The 1800's) D: 289
 Motion picture (Filmmaking in Europe) M: 866-867 *with picture*
 Painting (The northern Renaissance) P: 57;
 (The 1800's) P: 67-68; (The 1900's in Europe) P: 77-78
 Porcelain (German porcelain) P: 677
 Theater (Germany) T: 248
Communications and mass media
 Germany (Transportation) G: 162
 German language G: 137
 Newspaper (In Europe) N: 386
Defense
 Germany (Armed forces) G: 147
 Air force (The German Air Force) A: 184
Education
 Germany (Education) G: 151
 Academic freedom (Beginnings) A: 20
Finance and banking
 Euro E: 378
Government
 Germany (Government) G: 147
 Green party G: 381
 Parliament (Parliaments in other countries) P: 174
Health and welfare
 Police (In other countries) P: 623

- Social security (Early social insurance programs) **So**: 556
- History**
- Germany (History) **G**: 162 *with pictures and maps*
- Air force (History) **A**: 184-185
- Alsace-Lorraine **A**: 387
- Armor (During the Middle Ages) **A**: 720 *with picture*
- Aviation (World War II [1939-1945]) **A**: 990
- Belgium (The world wars) **B**: 234
- Berlin Airlift **B**: 266
- Berlin Wall **B**: 267
- Cameroon (History) **C**: 86
- City-state **Ci**: 603
- Cold War **Ci**: 762; (Germany) **Ci**: 766; (The Cold War in the 1970's) **Ci**: 769; (The Cold War after 1980) **Ci**: 770
- Colonialism (Later colonialism) **Ci**: 814
- Communism (In Eastern Europe) **Ci**: 896-897
- Czech Republic (The Munich Agreement) **Ci**: 1213
- Depression (Effects on society) **D**: 150
- Fascism (Fascism in Germany) **F**: 49
- Feudalism **F**: 81
- Flag pictures on **F**: 217
- Franco-Prussian War **F**: 483
- Free city **F**: 498
- Greece (World War II) **G**: 363
- Holy Roman Empire **H**: 298 *with map*
- India (Rise of Indian nationalism) **I**: 131; (World War II [1939-1945]) **I**: 132
- Industrial Revolution (Germany) **I**: 254
- Inflation (Hyperinflation) **I**: 267 *with picture*
- Jews (Beginnings of Nazi persecution) **J**: 124
- Latvia (History) **L**: 119
- League of Nations (Disagreement among members) **L**: 160
- Lenin, V. I. (Outcast) **L**: 193
- Leningrad, Siege of **L**: 195
- Lithuania (History) **L**: 389-390
- Money (How money developed) **M**: 705; (The value of money) **M**: 714
- Napoleon III (His defeat) **N**: 20
- Nazism **N**: 92
- Netherlands (World War II) **N**: 149
- Norway (World War II) **N**: 546
- Nuremberg Trials **N**: 612
- Potsdam Conference **P**: 715
- Prussia **P**: 842 *with map*
- Revolution of 1848 **R**: 269
- Russia (World War II) **R**: 554
- Rwanda (History) **R**: 571-572
- Samoa (History) **S**: 80a-80b
- Spanish Civil War (Foreign assistance) **So**: 756a
- Stalin, Joseph (World War II) **So**: 827; (The Cold War) **So**: 827
- Union of Soviet Socialist Republics (History) **U**: 35
- United Kingdom ("Peace in our Time") **U**: 70
- Warsaw (History) **W**: 38
- Warsaw Pact **W**: 39
- World War I (A system of military alliances) **W**: 454-455; (Destruction and casualties) **W**: 464; (The postwar world) **W**: 466
- World War II (The rise of dictatorships) **W**: 469-470; (Allies) **W**: 470-471; (table: The Axis) **W**: 471; (In the United States and Canada) **W**: 494-495; (Peace with Germany) **W**: 497; (table: Military casualties) **W**: 497
- Language and literature**
- See German language; German literature *in this index*
- People**
- Germany (People) **G**: 147
- Standard of living (table) **So**: 834
- Social and cultural life**
- Germany (Way of life) **G**: 150 *with pictures*
- Christmas (In Germany) **C**: 530
- Technology and science**
- Space exploration (European nations) **So**: 727
- See also the list of Related Articles in the Germany article
- Germany, A Winter Tale** [poem by Heine]
- German literature (The Young Germans) **G**: 141
- Heine, Heinrich **H**: 167
- Germany, Treaty on the Final Settlement With Respect to** [1990]
- Germany (The unification of East and West Germany) **G**: 171
- Germany Over All** [song]
- Deutschland über Alles* **D**: 172
- Germicidal lamp**
- Sun lamp **So**: 988
- Ultraviolet rays (Uses of ultraviolet rays) **U**: 17
- Germicide**
- Antiseptic **A**: 559
- Disinfectant **D**: 235
- Germinal mutation**
- Heredity (Mutation) **H**: 203
- Mutation **M**: 969
- Germination** [botany] **G**: 173
- Plant (Germination) **P**: 536 *with picture*
- Seed (How seeds sprout) **S**: 283 *with pictures*
- Tree (How seeds sprout into trees) **T**: 418
- Germinie Lacerteux** [book by Goncourt brothers]
- Goncourt **G**: 267
- Germine gene therapy**
- Gene therapy **G**: 81
- Germont, Alfredo** [opera character]
- Opera (*Traviata, La*) **O**: 807-808 *with picture*
- Gernsback, Hugo** [American journalist]
- Science fiction (The early 1900's) **S**: 205
- Geronimo** [American Indian chief] **G**: 173 *with portrait*
- Apache Indians **A**: 562
- Arizona (Indian fighting) **A**: 690 *with picture*
- Autograph picture on **A**: 943
- Fort Sill **F**: 416
- Indian wars (Apache warfare) **I**: 195
- New Mexico (Territorial days) **N**: 275
- Gerontology**
- Geriatrics **G**: 137
- Old age **O**: 738
- Gerosia** [council]
- Greece, Ancient (Government) **G**: 372
- Gerry, Elbridge** [American political leader]
- G**: 174
- Constitution of the United States (The Constitutional Convention) **Ci**: 999-1000
- Gerrymander **G**: 174
- Massachusetts (table) **M**: 288
- Vice President of the United States (table)
- V**: 351; **V**: 348 *with portrait*
- XYZ Affair **X**: 546
- Gerrymander** [politics] **G**: 174 *with picture*
- Gerry, Elbridge **G**: 174
- House of Representatives (Size) **H**: 385
- Gershwin, George** [American composer] **G**: 174
- Classical music (Third-stream music) **Ci**: 650
- Gershwin, Ira **G**: 175
- Musical comedy (Musical comedy matures) **M**: 960
- Opera (American opera) **O**: 800; (*Porgy and Bess*) **O**: 806
- Roaring Twenties (Cultural trends) **R**: 364
- Gershwin, Ira** [American lyricist] **G**: 175
- Gershwin, George **G**: 174
- Opera (*Porgy and Bess*) **O**: 806
- Gertie** [film]
- Animation (Pioneers of American animation) **A**: 514 *with picture*
- Gerund** [Grammar]
- Participle **P**: 184
- Geryon** [Greek mythology]
- Hercules (The twelve labors) **H**: 198-199
- Geschichte der Kunst des Altertums** [book by Winckelmann]
- Winckelmann, Johann Joachim **W**: 329
- Gesell, Arnold Lucius** [American psychologist]
- Developmental psychology (Maturational theory) **D**: 174
- Gesner, Abraham** [Canadian geologist]
- Kerosene (History) **K**: 306
- Museum (Early Canadian museums) **M**: 940
- Petroleum (History of the use of petroleum) **P**: 347
- Gessler** [legendary figure]
- Tell, William **T**: 129
- Gesso** [art material]
- Painting (Grounds) **P**: 36
- Gestalt psychology** **G**: 175
- Köhler, Wolfgang **K**: 361
- Psychology (Gestalt psychology) **P**: 850
- Gestalt therapy**
- Psychotherapy (Other forms of psychotherapy) **P**: 852
- Gestapo** [German history] **G**: 175
- Himmler, Heinrich **H**: 234
- Hitler, Adolf (The New Order) **H**: 267
- Nazism (The rise to power) **N**: 92
- World War II (In the United States and Canada) **W**: 494-495
- Gestation** [biology]
- See also Pregnancy *in this index*
- Mammal (Reproduction) **M**: 123-124
- Gesture**
- Dance (Asian theatrical dance) **D**: 30
- Get** [religion]
- Judaism (Special occasions) **J**: 181-182
- Gethsemane** [New Testament] **G**: 175
- Jesus Christ (The trial) **J**: 108 *with picture*
- Getty, Donald R.** [Canadian political leader]
- Alberta (table) **A**: 328
- Getty, J. Paul** [American businessman] **G**: 175
- Getty Center** [California] **G**: 175
- Meier, Richard **M**: 384 *with picture*
- Getty Museum, J. Paul** [California] **G**: 176
- Getty Trust, J. Paul **G**: 176
- Getty Research Institute for the History of Art and the Humanities**
- Getty Center **G**: 175
- Getty Trust, J. Paul** [foundation] **G**: 176
- Foundations (table) **F**: 430
- Gettys, James** [American businessman]
- Gettysburg **G**: 176
- Gettysburg** [Pennsylvania] **G**: 176
- Gettysburg, Battle of** [1863] **G**: 176
- Civil War (table) **Ci**: 624; (Battle of Gettysburg) **Ci**: 628 *with map*; *picture on* **Ci**: 614
- Ewell, Richard Stoddert **E**: 434
- Gettysburg **G**: 176
- Gettysburg Address **G**: 176
- Lee, Robert Edward (Later battles) **L**: 178
- Longstreet, James **L**: 452
- Meade, George Gordon **M**: 344
- Pennsylvania *picture on* **P**: 266
- Pickett, George Edward **P**: 451
- United States, History of the *picture on* **U**: 172
- Gettysburg Address** [U.S. history] **G**: 176
- Everett, Edward **E**: 423
- Lincoln, Abraham (The Gettysburg Address) **L**: 323
- Gettysburg National Cemetery** [Pennsylvania]
- National cemetery **N**: 31
- Gettysburg National Military Park** [Pennsylvania]
- Gettysburg **G**: 176
- National Park System (table: National military parks) **N**: 55
- Pennsylvania (Places to visit) **P**: 254 *with picture*
- Getz, Stan** [American musician] **G**: 177
- Jazz *picture on* **J**: 71; (Cool jazz) **J**: 72
- GeV** [unit of measure]
- Particle accelerator (How accelerators work) **P**: 184
- Geyser** [geology] **G**: 177 *with pictures*
- Iceland (The inland plateau) **I**: 22
- Yellowstone National Park (Touring Yellowstone) **Y**: 558 *with map*
- Geysers Power Plant**
- California (Electric power) **C**: 57
- Geysir** [hot spring, Iceland]
- Iceland (The inland plateau) **I**: 22
- Géza** [Magyar leader]
- Hungary (The Kingdom of Hungary) **H**: 445
- Gezelligheid** [trait]
- Netherlands (Way of life) **N**: 139
- Gezira, El** [region, Sudan]
- Sudan (Central Sudan) **So**: 954
- GH** [hormone] See Growth hormone *in this index*
- Ghall, Boutros Boutros-** [Egyptian diplomat]
- See Boutros-Ghall, Boutros *in this index*
- Ghana** **G**: 178 *with pictures and map*
- Ashanti **A**: 767
- Flag *picture on* **F**: 198
- Mythology (African mythology) **M**: 982-983
- Police *picture on* **P**: 623
- Ghana Empire** [African history] **G**: 180 *with map*
- Africa (Kingdoms in western Africa) **A**: 132
- French West Africa (History) **F**: 528
- Mauritania (History) **M**: 315
- World, History of the (African civilizations) **W**: 437

- Ghats** [stairs]
Ganges River **G**: 26
- Ghazi** [king of Iraq]
Iraq (Independence) **I**: 413
- GHB** [drug]
Drug abuse (table: Some commonly abused drugs) **D**: 363; (Club drugs) **D**: 363
- Ghee** [food]
India (Food and drink) **I**: 118
- Ghegs** [people]
Albania (People) **A**: 306
- Ghent** [Belgium] **G**: 181
- Ghent, Battle of** [1411]
Cannon *picture on* **C**: 179
- Ghent, Treaty of** [1814] **G**: 181
United States, History of the (The War of 1812) **U**: 164-165
War of 1812 (Treaty of Ghent) **W**: 31
- Ghent, University of**
Belgium (Education) **B**: 229-230
- Ghent Altarpiece** [painting by Van Eyck]
Van Eyck, Jan **V**: 282
- Gheorghiu-Dej, Gheorghe** [Romanian political leader]
Romania (Opposition to the Soviet Union) **R**: 425
- Gherarducci, Silvestro dei** [Italian artist]
Illuminated manuscript *picture on* **I**: 78
- Gherkin** [food]
Cucumber **Ci**: 1183
- Ghetto** [sociology] **G**: 181
African Americans (The black migration to the North) **A**: 136k; (Unrest in the cities) **A**: 136o
Anti-Semitism **A**: 559
Holocaust (Before the Holocaust) **H**: 296
Housing **H**: 389
Jews (Jews in Christian Europe) **J**: 122-123
Segregation (Other segregation in the United States) **S**: 286
- Ghibellines** See Guelphs and Ghibellines *in this index*
- Ghiberti, Lorenzo** [Italian sculptor] **G**: 181
Donatello **D**: 307
Relief *picture on* **R**: 213
Sculpture (Kinds of sculpture) **S**: 230
- Ghirdes knot**
Rugs and carpets (Oriental rugs) **R**: 516 *with diagram*
- Ghiorso, Albert** [American physicist]
Americium **A**: 431
Californium **C**: 66
Curium **Ci**: 1195
Fermium **F**: 74
- Ghirardelli Square**
San Francisco (Downtown San Francisco) **S**: 92-93 *with map*
- Ghirlandajo, Domenico** [Italian painter] **G**: 182
Michelangelo (Early life) **M**: 483
- Ghislanzoni, Antonio** [Italian librettist]
Opera (*Aida*) **O**: 801
- Ghislieri, Michele** [Pius V]
Pius V, Saint **P**: 502
- Ghiz, Joseph** [Canadian political leader]
Prince Edward Island (table) **P**: 791
- Ghor** [Israel-Jordan]
Dead Sea **D**: 56
- Ghost** **G**: 182
Ghost story **G**: 182
Halloween (Halloween symbols) **H**: 24b
- Ghost crab** [sea animal]
Crab *picture on* **Ci**: 1115
- Ghost Dance** [religious movement] **G**: 182
Indian, American (After European contact) **I**: 159-160
Indian wars (The Sioux wars) **I**: 194
Sioux Indians **S**: 474
South Dakota (Territorial days) **So**: 681-683
Wounded Knee (The 1890 massacre) **W**: 502
Wovoka **W**: 502
- Ghost flower**
Flower *picture on* **F**: 291
- Ghost shirt** [ceremonial garment]
Ghost Dance **G**: 182
- Ghost Sonata, The** [play by Strindberg]
Strindberg, August **S**: 929
- Ghost story** [literature] **G**: 182
- Ghost town** **G**: 182
Boom town **B**: 474
- Ghost Writer, The** [book by Roth]
Roth, Philip **R**: 487
- Ghosts** [play by Ibsen]
Ibsen, Henrik (His plays) **I**: 4
- Ghosts of the Barrio** [mural by Healy]
Hispanic Americans *picture on* **H**: 255
- Ghutra** [clothing]
Saudi Arabia (Clothing) **S**: 157-158
- GI** [military] **G**: 182
- Gi** [uniform]
Karate **K**: 246
- Gi Bill** [U.S.]
Adult education (In the 1900's) **A**: 69
Scholarship (Grants to veterans) **S**: 178
Veterans Affairs, Department of (Benefits and other services) **V**: 343
Vocational education (The 1900's) **V**: 435
- GI Forum, American** [organization] See American GI Forum of the United States *in this index*
- G.I. Joe doll**
Doll (Modern dolls) **D**: 292-293
- Gia Long** [emperor of Vietnam]
Vietnam (Independence) **V**: 368-370
- Giacometti, Alberto** [Swiss sculptor] **G**: 183 *with picture*
Sculpture (Assemblages) **S**: 257-258 *with picture*
- Giacosa, Giuseppe** [Italian librettist]
Opera (*Bohème, La*) **O**: 801; (*Madama Butterfly*) **O**: 804; (*Tosca*) **O**: 807
- Giaever, Ivar** [American physicist]
Nobel Prizes (Physics) 1973) **N**: 441
- Giambologna** [Italian sculptor]
Mercury *picture on* **M**: 417
- Giannini, Amadeo Peter** [American businessman]
Bank of America **B**: 96
- Giant** [biology] **G**: 183 *with picture*
- Giant** [mythology] **G**: 183
- Giant African snail**
Invasive species (Managing invasive species) **I**: 354k
Snail (Useful and harmful snails) **S**: 523 *with picture*
- Giant anteater**
Anteater **A**: 540 *with picture*
- Giant cactus** See Saguaro *in this index*
- Giant City State Park** [Illinois]
Illinois *picture on* **I**: 64
- Giant clam** [sea animal]
Clam (Types of clams) **Ci**: 637 *with picture*
Shell **S**: 384 *with picture*
- Giant corporation**
Business (Corporations) **B**: 725
- Giant desert centipede**
Centipede **C**: 351
- Giant four-o'clock**
Flower (Flowers of the desert) *picture on* **F**: 291
- Giant Hercules moth**
Moth **M**: 837 *with picture*; (Giant silkworm moths and royal moths) **M**: 841-842
- Giant hornet**
Hornet **H**: 340 *with picture*
- Giant house spider**
House spider **H**: 388
- Giant hummingbird** [bird]
Hummingbird (Size) **H**: 433-435 *with picture*
- Giant Impact** [theory]
Moon (Origin and evolution of the moon) **M**: 788 *with picture*
- Giant Jaguar, Temple of the** [Guatemala]
Latin America *picture on* **L**: 104
- Giant kelp** [plant]
Kelp **K**: 257 *with picture*
Ocean *picture on* **O**: 651
Seaweed (Kinds) **S**: 276
- Giant octopus** [sea animal]
Octopus **O**: 672 *with picture*
- Giant owl moth**
Moth **M**: 837
- Giant panda**
Animal *picture on* **A**: 475
Asia (Wild animals) **A**: 797
Endangered species (table) **E**: 270
Evolution (Contributions from other scientific fields) **E**: 433
National park *picture on* **N**: 42g
Panda (The giant panda) **P**: 129 *with picture*
- Giant protea** [tree]
Protea **P**: 831 *with picture*
- Giant ragweed** [plant]
Ragweed **R**: 103
- Giant sable antelope**
Antelope (Habits and appearance) **A**: 542
- Giant salamander**
Salamander **S**: 59
- Giant scavenger beetle**
Beetle *picture on* **B**: 218
- Giant schnauzer** [dog] **G**: 184
- Giant sequoia** [tree]
Sequoia (The giant sequoia) **S**: 310b *with picture*
Tree *picture on* **T**: 410
- Giant silkworm moth**
Moth (Giant silkworm moths and royal moths) **M**: 841-842 *with pictures*
- Giant slalom** [race]
Skiing (Alpine competitions) **S**: 486-487 *with picture*
Snowboarding **S**: 541
- Giant sloth** [extinct animal]
Biology *picture on* **B**: 320
- Giant spider crab**
Crab **Ci**: 1115
Crustacean **C**: 1162 *with picture*
- Giant Springs**
Montana (Interesting facts) **M**: 743
- Giant squid** [sea animal] **G**: 184 *with picture*
- Giant stag beetle** [insect]
Stag beetle **So**: 821
- Giant swallowtail** [insect]
Butterfly (Swallowtails) **B**: 736 *with picture*
- Giant toad** See Cane toad *in this index*
- Giant tortoise**
Animal *picture on* **A**: 469
- Giant water bug**
Water bug **W**: 133
- Giantess Geyser**
Geyser (How geysers form) **G**: 177-178
- Giants, New York**
New York Giants (National Football League) **F**: 364
- Giants, San Francisco** See San Francisco
Giants *in this index*
- Giant's Causeway** [Ireland] **G**: 184 *with picture*
- Giants in the Earth** [book by Rölvaag]
American literature (Realist fiction) **A**: 422
- Giants in the Earth** [opera by Moore]
Moore, Douglas Stuart **M**: 796
- Giardia lamblia** [parasite]
Giardiasis **G**: 184
- Giardiasis** [disorder] **G**: 184
- Giauque, William Francis** [American chemist]
Nobel Prizes (Chemistry) 1949) **N**: 443
- Gibberellic acid** [hormone]
Gibberellin **G**: 185
- Gibberellin** [hormone] **G**: 185
Hormone (Plant hormones) **H**: 337
Plant (Factors affecting plant growth) **P**: 538
- Gibbon** [animal] **G**: 185 *with picture*
Animal *picture on* **A**: 468
Ape (Way of life) **A**: 563 *with picture*
Mammal *diagram on* **M**: 122
Primate (Lesser apes) **P**: 778a *with picture*
- Gibbon, Edward** [British historian] **G**: 185
History (Antiquarian research and the philosophes) **H**: 262
- Gibbon, John H.** [American doctor]
Heart (Development of heart surgery) **H**: 144
- Gibbons, Grinling** [Dutch sculptor]
Woodcarving **W**: 391
- Gibbons, James Cardinal** [American religious leader]
Cardinal (table: American cardinals) **C**: 211
- Gibbons, Orlando** [English composer] **G**: 185
- Gibbons, Thomas** [American businessman]
Gibbons v. Ogden **G**: 186
- Gibbons v. Ogden** [U.S. history] **G**: 185
Interstate commerce (The commerce clause) **I**: 350f-351
Supreme Court of the United States (table) **So**: 1002
- Gibbous moon**
Moon (Phases) **M**: 783-784
- Gibbs, A. C.** [American political leader]
Oregon (table) **O**: 845
- Gibbs, Josiah Willard** [American physicist]
G: 186
Chemistry (Development of physical chemistry) **C**: 404
- Gibbs, William C.** [American political leader]
Rhode Island (table) **R**: 311
- Gibb's Hill Lighthouse**
Bermuda (History) **B**: 268
- Gibbsite** [mineral]

354 Gibraltar

- Bauxite (How bauxite forms) B: 174
Gibraltar [British territory] G: 186 *with picture and map*
 Barbary ape B: 105
 Treaty T: 408
Gibraltar, Rock of
 Gibraltar G: 186 *with picture*
 Rock (table) R: 374
Gibraltar, Strait of [Africa-Spain] G: 187
Gibraltar of America [nickname]
 Quebec Q: 34
Gibran, Kahlil [Lebanese author] G: 187
Gibson, Althea [American tennis player] G: 187
 Tennis (The mid-1900's) T: 166-168
Gibson, Bob [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Gibson, Charles Dana [American artist] G: 187
with picture
 Hairdressing (The 1800's) H: 12
Gibson, Ernest W. [American political leader]
 Vermont (table) V: 333
Gibson, Josh [American baseball player] G: 187
 Baseball (table: Hall of Fame) B: 134; (Postwar baseball) B: 137
Gibson, Kenneth A. [American political leader]
 Newark (History) N: 358
Gibson, Mel [American actor/director]
 Motion picture (Best achievement in directing: 1995) M: 862
Gibson, Paris [American settler]
 Great Falls G: 343
Gibson, William [American-born author]
 Science fiction (Recent developments) S: 206
Gibson, William F. [American civil rights leader]
 Evers-Williams, Myrlie E: 425
Gibson Desert [Australia]
 Australia (Deserts) A: 910 *with map*
 Australian Desert A: 927
Gibson girl
 Gibson, Charles Dana G: 187 *with picture*
 Hairdressing (The 1800's) H: 12 *with picture*
Gide, André [French author] G: 187
 French literature (The four masters) F: 522
 Nobel Prizes (Literature: 1947) N: 446
Gideon [Biblical figure] G: 188
Gideon, Clarence [American public figure]
 Gideon v. Wainwright G: 188
Gideon, George [literary figure]
 Creasey, John C: 1123
 Detective story (The pattern) D: 162-163
Gideon v. Wainwright [U.S. history] G: 188
 Supreme Court of the United States (Criminal law) So: 1001; (table) So: 1002
Gideons International [organization] G: 188
 Montana (Interesting facts) M: 743
Gidzenko, Yuri P. [Russian cosmonaut]
 International Space Station (History) I: 346b
with picture
Gielgud, John [British actor] G: 188 *with portrait*
 Motion picture (Best performance by an actor in a supporting role: 1981) M: 863
Gierek, Edward [Polish political leader]
 Poland (Antigovernment protests) P: 614
Giessbach Falls [Switzerland]
 Switzerland (The Swiss Alps) So: 1055-1056
Giffard, Henri [French engineer]
 Airship (The first airships) A: 251
GIFT [reproduction] See Gamete intrafallopian transfer in this index
Gift from the Sea [book by Lindbergh]
 Lindbergh, Anne Morrow L: 330
"Gift of the Magi, The" [story by O. Henry]
 Henry, O. H: 189
"Gift Outright, The" [poem by Frost]
 Frost, Robert Lee F: 542
Gift tax
 Inheritance tax I: 271
 Taxation (Other taxes) T: 53
Gifted children G: 188
 Special education (Gifted children) So: 771
Giga [prefix]
 Metric system (Metric prefixes) M: 439
Gigabyte [unit of measure]
 Computer (Computer code) Ci: 911
Gigantism [disorder]
 Giant G: 183
Gigi [book by Colette]
 Colette C: 772
Gigi [film]
 Motion picture (Best picture: 1958) M: 861
Gihon River [Bible]
 Eden E: 76
Gikuyu [people] See Kikuyu in this index
Gil, Gilberto [Brazilian musician]
 Brazil (The arts) B: 576-577
Gil Blas [book by Lesage]
 Lesage, Alain René L: 205
 French literature (The Age of Reason) F: 520
Gila Cliff Dwellings National Monument [New Mexico] G: 189
 National Park System (table: National monuments) N: 51
Gila monster [lizard] G: 189
 Animal picture on A: 483
 Lizard (Defenses) L: 400
 Reptile R: 250 *with picture*
Gila River [Arizona-New Mexico] G: 189
 Phoenix (The city) P: 395 *with map*
Gila Wilderness
 New Mexico (Places to visit) N: 264
Gila woodpecker [bird]
 Bird (Birds of the desert) B: 339 *with picture*
Gilbert, Grove Karl [American geologist]
 Moon (Determining the origin of craters) diagram on M: 793-794
Gilbert, Sir Humphrey [English explorer] G: 189
 Newfoundland and Labrador (Colonization) N: 375
Gilbert, Rufus [American inventor]
 Elevated railroad E: 233
Gilbert, Thomas [British explorer]
 Tarawa T: 42
Gilbert, Walter [American chemist]
 Nobel Prizes (Chemistry: 1980) N: 443
 Sanger, Frederick S: 110
Gilbert, William [English doctor] G: 189
 Electricity (Early discoveries) E: 196
 Electroscope E: 219
Gilbert, Sir William Schwenck [British author]
 G: 189
 Gilbert and Sullivan G: 189
 Sullivan, Sir Arthur Seymour So: 969
Gilbert and Ellice Islands [islands, Pacific]
 Gilbert Islands G: 190
 Kiribati (History) K: 335-336
 Tuvalu (History) T: 527
Gilbert and Sullivan G: 189
 D'Oyly Carte, Richard D: 317
 Gilbert, Sir William Schwenck G: 189
 Operetta O: 809
 Sullivan, Sir Arthur Seymour So: 969
Gilbert Islands G: 190
 Kiribati K: 335
Gilbreth, Frank and Lillian [American engineers] G: 190
Gilchrist, Albert W. [American political leader]
 Florida (table) F: 260
Gilcrease Institute of American History and Art [Tulsa]
 Oklahoma (Places to visit) O: 722
Gilda [opera character]
 Opera (*Rigoletto*) O: 806
Gilded Age [U.S. history]
 Twain, Mark (Productive years in Hartford) T: 529
 United States, History of the (The Gilded Age) U: 180
Gilded Age, The [book by Twain and Warner]
 Twain, Mark (Productive years in Hartford) T: 529
Gilder's tip [tool]
 Gold leaf G: 254
Gilding [art]
 Gold leaf G: 253
Gilding metal
 Ammunition (The bullet) A: 435
Giles, Ernest [Australian explorer]
 Australian Desert A: 927
Giles, Herbert A. [British scholar]
 Chinese language (Development) C: 511
Giles, Warren [American baseball executive]
 Baseball (table: Hall of Fame) B: 134
Giles, William Branch [American political leader]
 Virginia (table) V: 417
Giles Goat-Boy [book by Barth]
 Barth, John B: 120
Gilgamesh [literary figure]
 Gilgamesh, Epic of G: 190
Gilgamesh, Epic of [poem] G: 190
 Babylonia (Language and literature) B: 13
 Deluge D: 118
 Mythology (Mythical symbols) M: 974-975
Gill [botany]
 Mushroom (Parts of a mushroom) M: 941, *picture on M: 942*
Gill [zoology]
 Amphibian (Breathing) A: 440
 Animal (Adaptations for breathing) A: 491-492 *with picture*
 Fish F: 145; (Respiratory system) F: 161 *with picture; diagrams on F: 162*
 Oyster (Body organs) O: 890 *with diagram*
 Respiration (Breathing in animals without lungs) R: 261
Gill net
 Fishing industry (Nets) F: 183-184 *with diagram*
Gill-over-the-ground [plant]
 Ivy (Ground ivy) I: 522
Gillars, Mildred [American public figure]
 World War II (Propaganda) W: 493
Gillespie, Dizzy [American musician] G: 190
 Hines, Earl H: 238
 Jazz (Sbebop) J: 72
Gillett, James N. [American political leader]
 California (table) C: 59
Gillette, William [American dramatist] G: 190
Gilliam, Terry [American animator]
 Cleese, John C: 661
Gilligan, John J. [American political leader]
 Ohio (table) O: 699
Gillyflower [plant] See Wallflower in this index
Gilman, Alfred Goodman [American physiologist]
 Nobel Prizes (Physiology or medicine: 1994) N: 445
Gilman, Charlotte Perkins [American social reformer] G: 190
Gilman, George F. [American businessman]
 Hartford, George Huntington H: 79
Gilman, John T. [American political leader]
 New Hampshire (table) N: 223
Gilman, Nicholas [American political leader]
 G: 191
Gilmer, George R. [American political leader]
 Georgia (table) G: 130
Gilmer, Thomas Walker [American political leader]
 Tyler, John (table) T: 534
 Virginia (table) V: 417
Gilmore, James S., III [American political leader]
 Virginia (table) V: 417
Gilmore, Joseph A. [American political leader]
 New Hampshire (table) N: 223
Gilmore, Patrick Sarsfield [American band leader] G: 191
Gilpatric, Guy [American diver]
 Diving, Underwater (History) D: 247
Gilpin, Charles S. [American dramatist]
 Spingarn Medal (table: 1921) So: 793
Gilpin, Henry D. [American government official]
 Justice, Department of (table) J: 203
 Van Buren, Martin (table) V: 273
Gilpin, William [American government official]
 Colorado (The gold rush) C: 845
Gilsemans, Isaac [Dutch artist]
 New Zealand *picture on N: 356*
Gilsonite [mineral]
 Asphalt (Asphalt production) A: 815
Gift [hog]
 Hog (table) H: 284
Gimbal [navigation]
 Compass (Deviation) Ci: 903
 Gyroscope (Mechanical gyroscopes) G: 454
with diagram
Gin [drink]
 Alcoholic beverage (Gin) A: 336
Gin, Cotton See Cotton gin in this index
Ginaca machine
 Pineapple (Cultivation and production) P: 472-473
Ginastera, Alberto [Argentine composer]
 G: 191
 Latin America (Music) L: 102-103
 Opera (Opera today) O: 800 *with picture*
Ginevra de' Benci [painting by Leonardo]
 Leonardo da Vinci L: 200 *with picture*
Ginger [spice] G: 191
Gingerbread hornbook
 Hornbook H: 339
Gingerbread Lady, The [play by Simon]
 Simon, Neil S: 466
Gingerbread tree

Doum palm D: 314
Gingham [fabric] G: 191
Gingivitis [disease]
 Periodontitis P: 288
 Teeth (Periodontal diseases) T: 85 *with picture*
 Trench mouth T: 435
Gingrich, Newt [American political leader]
 G: 191
 Congress of the United States (Congressional ethics) Ci: 948
Ginkgo [tree] G: 191 *with picture*
 Dietary supplement D: 201
 Herbal medicine H: 196
 Plant (Gymnosperms) P: 519-520 *with picture*;
 (Early plants) P: 540-541; (Classification of plants) P: 546-547 *with picture*
 Tree (Ginkgo trees) T: 415; *pictures on* T: 413
Ginnie Mae *See* Government National Mortgage Association *in this index*
Ginning [industrial process]
 Cotton (Ginning and baling) Ci: 1090
Ginnungagap [Norse mythology]
 Mythology (The creation of life) M: 984
Ginsberg, Allen [American poet] G: 192
 American literature (Literature since 1945) A: 423
 Beat movement B: 189
Ginsburg, Ruth Bader [American jurist] G: 192
 Supreme Court of the United States *picture on* So: 999
Ginseng [plant] G: 192 *with pictures*
 Herbal medicine H: 196
Gintl, Wilhelm Julius [Austrian inventor]
 Telegraph (Service expansion and improvement) T: 91-92
Ginza district
 Advertising *picture on* A: 72
 Tokyo (Other places of interest) T: 317; *picture on* T: 312
Ginzberg, Asher [Hebrew poet]
 Hebrew literature (Modern Hebrew literature) H: 162-163
Gio [people]
 Liberia (Recent developments) L: 232
Gioconda, La [opera by Ponchielli]
 8oito, Arrigo B: 440
Gioconda, La [painting by Leonardo da Vinci]
See Mona Lisa *in this index*
Giorgi, Bruno [Brazilian sculptor]
 Latin America *picture on* L: 102
Giorgione [Italian painter] G: 193
 Painting (The Renaissance in Venice) P: 55-56 *with picture*
Giorno di Regno, Un [opera by Verdi]
 Verdi, Giuseppe V: 316
Giotto [Italian artist] G: 193 *with picture*
 Christianity *picture on* C: 525
 Italy (Painting and sculpture) I: 506
 Jesus Christ *picture on* J: 105
 Mural M: 928-929 *with picture*
 Painting (The 1300's) P: 51 *with picture*
 Renaissance (The fine arts) R: 235-236
Giotto [space probe]
 European Space Agency E: 418
 Space exploration (Probes to comets) So: 711 *with picture*
Giovanni, Nikki [American poet] G: 193
Giovanni, Yolande Cornelia, Jr. [American poet] *See* Giovanni, Nikki *in this index*
Giovanni da Fiesola, Fra *See* Angelico, Fra *in this index*
Giovanni's Room [book by Baldwin]
 Baldwin, James B: 39
Gipsies *See* Gypsies *in this index*
Gipsy Moth IV [ship]
 Chichester, Sir Francis C: 439
Gir Forest [region, India]
 Lion L: 340; (Hunting lions) L: 342-343
Giraffe [animal] G: 194 *with pictures and map*
 Animal *pictures on* A: 469, A: 476
 Evolution *picture on* E: 427
 Kenya *picture on* K: 303
 Mammal *picture on* M: 119
 Zoo (Interesting facts about zoo animals) Z: 605 *with picture*
Giralda [Seville Cathedral]
 Seville S: 329
Girard, Marc A. [Canadian political leader]
 Manitoba (table) M: 159
Girard, Rodolphe [Canadian author]
 Canadian literature (Fiction: 1850-1918) C: 158
Giraudoux, Jean [French dramatist] G: 195

French literature (French drama of the mid-1900's) F: 523
Girder [construction]
 Bridge (Girder bridges) B: 600 *with diagram*
 Building construction (Beams, girders, and columns) B: 682-683
Girder bridge
 Bridge (Girder bridges) B: 600 *with diagram*
Girdle [zoology]
 Reptile (Skeleton) R: 251
Girl
See also Female *in this index*
 Adolescent (Physical development) A: 60-61
 Baby B: 4
 Child C: 448
 Sexuality (Biological factors) S: 337
Girl Guides [organization] G: 195
See also Girl Scouts *in this index*
 Baden-Powell, Lord B: 23
 Girl Scouts G: 196
Girl Guides and Girl Scouts, World Association of *See* World Association of Girl Guides and Girl Scouts *in this index*
Girl Guides of Canada
 Girl Scouts (Girl Guides of Canada-Guides du Canada) G: 198; *picture on* G: 200
Girl Holding a Cat [sculpture by Segal]
 Segal, George *picture on* S: 284
Girl Named Disaster, A [book by Farmer]
 Literature for children (Fiction) L: 358
Girl of the Golden West, The [opera by Puccini]
 Puccini, Giacomo P: 869
Girl Reserves
 Y-Teens Y: 548
Girl Scout National Council
 Girl Scouts (Troops, groups, and councils) G: 198
Girl Scout Week
 Girl Scouts (Annual events) G: 198
Girl Scouts [organization] G: 196 *with pictures*
See also Girl Guides *in this index*
 Low, Juliette Gordon L: 509
Girl with Lantern on a Balcony at Night [print by Harunobu]
 Japanese print *picture on* J: 63
Girls and Boys Town [Nebraska] G: 200
 Flanagan, Edward Joseph F: 227
 Nebraska (Places to visit) N: 102
Girls Clubs of America, Inc. [former name]
 Girls Incorporated G: 201
Girls' Festival [Japan]
 Doll (Doll festivals and customs) D: 287 *with picture*
Girls Incorporated G: 201
Girls Nation [meeting]
 Girls State G: 201
Girls State [meeting] G: 201
 American Legion Auxiliary A: 413
Gironde [French history]
 Girondists G: 201
Girondists [French history] G: 201
 French Revolution (The National Convention) F: 526
 Marat, Jean-Paul M: 191
 Robespierre (Revolutionary leader) R: 371-366
 Roland de la Platière, Marie Jeanne R: 401
Girth [riding equipment]
 Harness *diagram on* H: 63
 Horse (table: Riding equipment) H: 351; (The saddle) H: 351-352 *with picture*
 Saddle S: 7 *with pictures*
Girty, Simon [American frontiersman] G: 201
GIS [cartography] *See* Geographic information system *in this index*
Giscard d'Estaing, Valéry [French political leader] G: 201
 France (France after de Gaulle) F: 477-478
Giselle [ballet]
 Ballet (Romantic ballet) B: 51
 Moscow *picture on* M: 825
Gish, Dorothy [American actress] G: 202 *with picture*
Gish, Lillian [American actress] G: 202 *with picture*
Gissing, George Robert [British author] G: 202
Gist, Christopher [American frontiersman]
 G: 202
 Frankfort F: 485
 Ohio (Exploration and settlement) O: 700
 Washington, George (Messenger to the French) W: 93-94
Gist, William H. [American political leader]

Glacier National Park 355

South Carolina (table) So: 658
Gist's Plantation [U.S. history]
 Ohio Company (The first Ohio Company) O: 705
Gitanjali [book by Tagore]
 Tagore, Rabindranath T: 13
Giuliani, Rudolph William [American political leader]
 New York City (A time of change) N: 343
 September 11 terrorist attacks (Moving forward) S: 310a
Giunta
 Italy (Local government) I: 499
Givat Ram [area]
 Jerusalem (West Jerusalem) J: 95 *with map*
"Give me liberty or give me death"
 Henry, Patrick H: 189
 Revolutionary War in America (Fighting in the Southern Colonies) R: 275
 Richmond (Other interesting places to visit) R: 332
Given name
 Name N: 5
Giver, The [book by Lowry]
 Lowry, Lois L: 511
Giving Tree, The [book by Silverstein]
 Silverstein, Shel S: 466
Giza [Egypt] G: 202
 Egypt, Ancient (Arts and sciences) E: 139
 Pyramids (The Pyramids of Giza) P: 917 *with pictures*
 Sphinx (Egyptian sphinxes) So: 780 *with picture*
Gizikis, Phaidon [Greek political leader]
 Greece (The restoration of democracy) G: 365
Gizzard [zoology] G: 203 *with diagram*
 Bird (The digestive system) B: 365
 Chicken (The body of a chicken) C: 440-441
 Insect (Digestive system) I: 289
Gjellerup, Karl [Danish author]
 Nobel Prizes (Literature: 1917) N: 446
Gjøa [ship]
 Amundsen, Roald *picture on* A: 445
 Northwest Passage N: 529 *with picture*
Glacial acetic acid [chemical]
 Acetic acid A: 25
Glacial epoch [geology]
 Ice age I: 6
Glacial lake
 Lake (How lakes are formed) L: 32 *with picture*
Glaciated valley [geography]
 Glacier G: 203 *with picture*
 Valley (How valleys are formed) V: 266
Glaciation [geology]
 Glacier G: 203 *with pictures*
 Ice age I: 6
Glacier [geography] G: 203 *with pictures*
 Alaska (Glaciers) A: 295 *with picture*
 Alps (How the Alps were formed) A: 384
 Arctic Ocean (Ice) A: 643
 Canyon C: 185
 Climate (Glaciers) Ci: 679 *with picture*
 Earth (Earth's changing climate) E: 24; *picture on* E: 23
 Erosion (How erosion occurs) E: 355
 Glacier National Park G: 205
 Ice age I: 6 *with picture and map*
 Iceberg I: 17 *with diagram*
 Island (Kinds of islands) I: 471
 Lake (How lakes are formed) L: 32
 Moraine M: 799
 Plate tectonics (History of tectonic theory) P: 564-565
 River (Sources of river water) R: 351 *with picture*
 Water (How water shapes the earth) W: 121
Glacier Bay National Park [Alaska] G: 205
 National Park System (table: National parks) N: 48
Glacier Bay National Preserve [Alaska]
 National Park System (table: National preserves) N: 58
Glacier bear
 Bear (American black bears) B: 184
Glacier National Park [British Columbia]
 Canada (table: National parks and national park reserves) C: 113
Glacier National Park [Montana] G: 205 *with maps*
 Divide D: 241
 Montana (Places to visit) M: 750; *picture on* M: 742

356 Glacier Point

- National park (table) N: 42g
National Park System (table: National parks) N: 48
Rocky Mountains (Chief ranges of the Rockies) R: 395
- Glacier Point**
Yosemite National Park (Rock masses) Y: 570
- Glackens, William James** [American artist] G: 206
Ashcan School A: 768
- Glade Creek** [West Virginia]
United States *picture on* U: 120
- Gladesville Bridge** [Sydney, Australia]
Bridge (table: Concrete arch) B: 603
- Gladiator** [film]
Motion picture (Best picture: 2000) M: 861
- Gladiator** [Roman Empire] G: 206
Colosseum Ci: 850
Helmet *picture on* H: 178
Rome, Ancient (Recreation) R: 439 *with picture*
- Gladiolus** [plant] G: 206
Flower (Garden perennials) F: 280 *with picture*
- Gladstone, James** [Canadian political leader]
Alberta (The mid-1900's) A: 329
- Gladstone, William Ewart** [British political leader] G: 206 *with portrait*
Liberal Democrats (A major party) L: 227
United Kingdom (Gladstone and Disraeli) U: 69
- Gladstonian Liberals** [British history]
United Kingdom (Gladstone and Disraeli) U: 69
- Glamour** [magazine]
Magazine (table) M: 45
- Gland** [anatomy] G: 207 *with diagram*
Bird (Why birds migrate) B: 360
Blood (Carrying hormones) B: 410
Disease (Metabolic diseases) D: 229
Frog *pictures on* F: 537
Hormone (Metabolic hormones) H: 335-336
Human body *diagram on* H: 422
Mammal (Skin and hair) M: 118
See also the list of Related Articles in the Gland article
- Glanders** [disease] G: 210
- Glans** [anatomy]
Circumcision Ci: 561
- Glanville, Bartholomew de** [French scholar]
Encyclopedia (From the 1200's to the 1600's) E: 268a
- Glare**
Lighting (Lighting problems) L: 297-298
- Glaser, Donald Arthur** [American physicist]
Nobel Prizes (Physics: 1960) N: 441
- Glasgow** [Scotland] G: 210
- Glasgow, Ellen** [American author] G: 210
- Glasgow, University of** [Scotland] G: 210
Glasgow G: 210
- Glashow, Sheldon Lee** [American physicist]
Nobel Prizes (Physics: 1979) N: 441
- Glasnost** [Soviet history]
Communism (The Soviet Union under Gorbachev) Ci: 895-896
Gorbachev, Mikhail Sergeyevich (Domestic policies) G: 272
Russian literature (Modern Soviet literature) R: 564-565
Union of Soviet Socialist Republics (Gorbachev's reforms) U: 40
- Glaspell, Susan** [American dramatist] G: 210
- Glass** G: 211 *with pictures*
Annealing A: 517
Antique (Glass) A: 558 *with picture*
Bottle B: 513
Ceramics (Kinds of ceramic products) C: 359
Composite materials Ci: 904
Gem (Imitation and synthetic gems) G: 79
Plastics (To replace glass and ceramics) P: 555
Quartz (Properties and uses) Q: 8
Sound (table) So: 601
Tempering T: 130
Textile (Manufactured fibers) T: 213-214
- Glass, Carter** [American political leader] G: 223
Bank (The crisis of 1933) B: 93-94
Wilson, Woodrow (Legislative program) W: 322-323
- Glass, Philip** [American composer] G: 224
Classical music (Minimalism) Ci: 651
- Glass-beaded screen**
Projection screen P: 816
- Glass blowing**
Glass (Blowing) G: 215 *with picture; pictures on* G: 216
- Glass building block**
Glass (Specialty glasses) G: 212
- Glass Capital of the World** [nickname]
Toledo T: 321
- Glass catfish**
Catfish C: 301 *with picture*
- Glass-ceramics**
Glass (Specialty glasses) G: 212-213; *picture on* G: 211
- Glass family** [literary figures]
Salinger, J. D. S: 66
- Glass harmonica** [musical instrument]
Harmonica H: 62
- Glass House** [Connecticut]
Johnson, Philip Cortelyou J: 153
- Glass industry**
Glass (Modern glassmaking) G: 222
- Glass laser**
Laser (Solid-state lasers) L: 85
- Glass lizard** G: 224 *with picture*
Lizard (How lizards move) L: 399-400; (Defenses) L: 400
- Glass marbles**
West Virginia (Interesting facts) W: 207 *with picture*
- Glass Menagerie, The** [play by Williams]
Williams, Tennessee W: 311
Drama (Later United States drama) D: 340
- Glass of Water, A** [play by Scribe]
Scribe, Augustin Eugène S: 226
- Glass snake** *See* Glass lizard *in this index*
- Glass solder**
Glass (table) G: 218
- Glass sponge** [sea animal]
Deep sea (Invertebrates) D: 82a *with picture*
Sponge (Kinds of sponges) So: 800
- Glass-Steagall Banking Act** [1933]
Bank (The crisis of 1933) B: 93-94
Glass, Carter G: 224
New Deal (Helping savers and investors) N: 200
- Glass tubing**
Glass (Specialty glasses) G: 212-213; (Drawing) G: 215-216 *with diagram*
- Glassboro Conference** [1967]
Cold War (Soviet-American relations) Ci: 768
- Glasscock, William E.** [American political leader]
West Virginia (table) W: 225; (Labor developments) W: 229
- Glasses** [vision] G: 224 *with pictures*
See also Eye; Vision *in this index*
Eye (Defects of the eye) E: 464
- Glasshouse** [gardening] *See* Greenhouse *in this index*
- Glassmaking**
Glass (Composition of glass) G: 213; (How glass is made) G: 214 *with diagrams*; (How glass is shaped and finished) G: 215 *with pictures*; (How glass is decorated) G: 217
West Virginia (Manufacturing) W: 222-223 *with picture*
- Glassware**
Colonial life in America (Decorative arts) Ci: 807-808 *with picture*
Islamic art (Glassware) I: 470
- Glasswort** [plant] G: 225
- Glassy**
Marbles M: 193
- Glassy carbon** *See* Amorphous carbon *in this index*
- Glastonbury** [England] G: 225
- Glaswegians** [people]
Glasgow G: 210
- Glatiramer acetate** [drug]
Multiple sclerosis M: 921
- Glauber's salt** [chemical]
Salt, Chemical S: 75
- Glaucoma** [disease] G: 226
Beta-blocker B: 274
Blindness (Diseases) B: 401
Eye (Glaucoma) E: 466
- Glaucinite** [mineral] G: 226
- Glaucus** [Greek mythology]
Scylla S: 261
- Glaze**
Ceramics (Making ceramics) C: 360
Enamel E: 264
Pottery (Decorating and glazing) P: 718
Tile T: 286
- Glaze** [cooking]
Cooking (table) Ci: 1029
- Gleanings in Bee Culture** [magazine]
Wright brothers W: 508
- Gleason, Henry A.** [American ecologist]
Botany (Later developments) B: 509
- Gleevec** [drug]
Leukemia (Cause) L: 215
- Gleizes, Albert** [French painter]
Cubism Ci: 1181
- Glen** [geography]
Scotland (Land regions) S: 217
- Glen Canyon Dam** [Colorado River, Arizona] G: 226
Arizona *picture on* A: 686
Lake Powell L: 45 *with map*
Seven Natural Wonders of the World (The Grand Canyon) S: 324
- Glen Canyon National Recreation Area** [Arizona-Utah]
National Park System (table: National recreation areas) N: 49
- Glen More** [region, Scotland]
Scotland (The land) S: 217 *with map*
- Glenbow Museum**
Alberta (Libraries and museums) A: 317
- Glendenin, Lawrence E.** [American chemist]
Promethium P: 818
- Glendening, Parris N.** [American political leader]
Maryland (table) M: 255
- Glendower, Owen** [Welsh prince]
Wales (Revolts against England) W: 12-13
- Glegarry Glen Ross** [play by Mamet]
Mamet, David M: 115
- Glenn, John Herschel, Jr.** [American astronaut] G: 226 *with pictures*
Astronaut (Achievements in space) A: 829 *with picture*; (table) A: 830; (A look at the astronauts) A: 831
Exploration (Space exploration) E: 452
Space exploration (Vostok and Mercury: The first human beings in space) So: 711-712 *with picture*
- Glenn, R. B.** [American political leader]
North Carolina (table) N: 490
- Glennon, John J. Cardinal** [American religious leader]
Cardinal (table: American cardinals) C: 211
- Glen Sheen** [Duluth]
Minnesota (Places to visit) *picture on* M: 594
- Glenview Naval Air Station** [Illinois] G: 227
- Glenville** [district]
Cleveland (Social problems) Ci: 665; (Downturn and racial tensions) Ci: 667
- Glessner House** [Chicago]
Architecture (Early modern architecture in America) A: 629
Richardson, Henry Hobson R: 330 *with picture*
- Glia** [anatomy]
Brain (Brain cells) B: 551-552
- Gladiin** [protein]
Gluten G: 237
- Glick, George Washington** [American political leader] G: 227
Kansas (table) K: 234
- Glickman, Dan** [American government official]
Agriculture, Department of (table) A: 161
Clinton, Bill (table) Ci: 682d
- Glidden, Carlos** [American inventor] G: 227
Sholes, Christopher Latham S: 433
Typewriter (History) T: 539
- Glidden, Joseph F.** [American inventor]
Barbed wire B: 106
- Glide bomb**
Guided missile G: 423
- Glide ratio** [physics]
Glider (Parts of a glider) G: 228
- Glider** [aircraft] G: 228 *with pictures*
Airplane A: 209; (First human flights) A: 230 *with pictures*
Wright brothers (Flying experiments) W: 509
- Glider** [animal] G: 231 *with picture*
Possum P: 698
- Gliding** [sport] *See* Glider [aircraft]; Hang gliding *in this index*
- Gliding possum** [animal] *See* Glider [animal] *in this index*
- Glima** [sport]
Iceland (Recreation) I: 22
- Glinka, Mikhail Ivanovich** [Russian composer] G: 231

- Russia (Music) R: 536-537
- Glioma** [disorder]
Tumor T: 484
- Glitter rock**
Rock music (Rock goes pop) R: 379
- Global heat conveyor** [geology]
Earth (Cycles in and on Earth) E: 22
- Global ocean** See *World ocean in this index*
- Global Oscillation Network Group Project**
National Optical Astronomy Observatories N: 42
Sun (Earth-based studies) So: 987
- Global Positioning System** [navigation] G: 231
with *diagram*
Airport (Air traffic control) A: 246-247
Altimeter A: 390
Archaeology (Surveying sites) A: 596; (The 1900's) A: 599
Automatic flight control system (How an AFCS works) A: 944
Automobile (The automobile today) A: 972-973
Map (Navigation maps) M: 177; (Observation and measurement) M: 180
Mountain (Measuring mountains) M: 896
Navigation (Satellite navigation) N: 74 with *diagram*
Railroad (Other train controls) R: 112
Seismograph S: 288
Surveying (Surveying tools) So: 1011
- Global Television Network**
Television (In Canada) T: 117
- Global warming** [weather] G: 232 with *picture*
Air (Changes in the atmosphere) A: 173-174
Climate Ci: 675; (Causes of climate change) Ci: 676d
Greenhouse effect (Increases in greenhouse gases) G: 383
National park (Changes in the environment) N: 42h
Ocean (Climate change) O: 665
Pacific Ocean (Scientific research) P: 15-17
Petroleum (Global warming) P: 349
Southern Ocean (Scientific research) So: 688b
- Globalism**
World (Cooperation among nations) W: 413
- Globalization G: 232b**
Democracy (Democracy today) D: 124
Human rights H: 428
International relations (Globalization) I: 346
New Democratic Party N: 203
Trade T: 361
- Globe** [map] G: 233
Great-circle route G: 338 with *diagram*
Hemisphere H: 181
Map M: 176; (Map projections) M: 179-180; (Advances in European cartography) M: 183-184
- Globe artichoke** [plant]
Artichoke A: 758 with *picture*
- Globe candytuft** [plant]
Candytuft C: 177
- Globe mallow** [plant]
Flower (Flowers of prairies and dry plains) F: 286 with *picture*
- Globe Shakespeare, The** [book]
Shakespeare, William (Editions of the 1700's and 1800's) S: 368
- Globe Theatre** [English history] G: 233
London (Expansion beyond the walls) L: 440 with *picture*
Shakespeare, William (The Globe Theatre) S: 348; (The King's Men) S: 348; (Theater buildings) S: 352 with *pictures*
- Globe tulip** [plant]
Mariposa lily M: 212 with *picture*
- Globe valve**
Valve *diagram* on V: 268
- Globular cluster** [astronomy]
Cosmology (Star ages) Ci: 1078
Galaxy (Shapes of galaxies) G: 8a
Milky Way (Shape of the galaxy) M: 550-551
Pulsar P: 898
Shapley, Harlow S: 373
Universe (Changing views of the universe) U: 205-206
- Globulin** [protein] G: 234
Blood (Protecting against disease) B: 410
Drug (Antiserums and globulins) D: 351
Gamma globulin G: 23
Liver (Other functions) L: 394
Plasma (Functions of plasma) P: 551
- Glochidia** [zoology]
Larva L: 78
- Glockenspiel** [musical instrument] G: 234 with *picture*
Music (Percussion instruments) M: 950
- Glögg**
Christmas (Christmas feasting) C: 534-535
- Glomar Challenger** [ship]
Mediterranean Sea (Formation) M: 382
Ocean Drilling Program O: 667
Plate tectonics (History of tectonic theory) P: 564-565
- Glomerulonephritis** [disease]
Kidney (Kidney diseases) K: 312
Nephritis N: 127
Strep throat So: 925
- Glomerulus** [anatomy]
Kidney (How the kidneys produce urine) K: 311-312 with *diagram*
- GLONASS** [navigation system]
Navigation (Satellite navigation) N: 74
- Glooscap** [legendary figure]
Micmac Indians M: 513
New Brunswick (Interesting facts) N: 181
Prince Edward Island P: 783
- Glooscap Trail**
Nova Scotia (Places to visit) N: 560
- Gloriosa lily**
Flower *picture* on F: 271
- Glorious beetle** [insect]
Beetle *picture* on B: 218
- Glorious Flight: Across the Channel with Louis Blériot, The** [book by Provensen]
Literature for children (Bibliography) *picture* on L: 382
- Glorious Revolution** [1688] G: 234
England (The Restoration) E: 309
James II J: 25
Restoration R: 263
William III W: 308
- Glory** [film]
Washington, Denzel W: 89
- Glory hole**
Glass (Glass terms) G: 222
- Gloss paint**
Paint (Selecting the paint) P: 25
- Glossa** [entomology]
Insect *diagram* on I: 287
- Glossary** [reference]
Dictionary (History) D: 194
- Glossopharyngeal nerve** [anatomy]
Neuralgia N: 152
- Glossopharyngeal neuralgia** [disorder]
Neuralgia N: 152
- Gloster E. 28/39** [aircraft]
Jet propulsion (Development of jet propulsion) J: 114
- Glottis** [anatomy]
Larynx L: 79
- Gloucester** [Massachusetts] G: 234
- Gloucester, Battle of** [1777]
Lafayette, Marquis de (Service to the United States) L: 27
- Gloucester, Duke of** [former name] See Richard III in *this index*
- Gloucester, Earl of** [literary figure]
Shakespeare, William (*King Lear*) S: 363
- Glove** [clothing] G: 234 with *pictures*
Baseball (Equipment) B: 125 with *pictures*
Computer (Virtual reality [VR] software) Ci: 919
Space exploration (Leaving the spacecraft) So: 704-705
Virtual reality V: 425
- Glove puppet**
Puppet (Hand puppets) P: 904
- Glover, Jose** [British religious leader]
Daye, Stephen D: 54
- Glowworm** [insect]
Beetle (Fireflies) B: 217-219
Firefly F: 134
- Gloxinia** [plant] G: 235 with *picture*
Flower *picture* on F: 292
- Glucagon** [hormone]
Hormone (Metabolic hormones) H: 335
Metabolism (Control of metabolism) M: 424
Pancreas P: 128
- Gluck, Christoph Willibald** [German composer] G: 235
Opera (Gluck and opera reform) O: 798
Overture O: 881
- Glückauf** [ship]
Ship (Tankers) S: 420
- Glucocerebrosidase** [enzyme]
Gaucher's disease G: 68
- Glucocerebroside** [chemical]
Gaucher's disease G: 68
- Glucocorticoid** [hormone]
ACTH A: 30
Adrenal gland A: 67
Hormone (Metabolic hormones) H: 335-336
Stress (How stress affects the body) So: 926-927
- Glucose** [sugar] G: 236
Carbohydrate (Kinds of carbohydrates) C: 203 with *diagram*; (How the body uses carbohydrates) C: 204
Cellulose (Biological importance) C: 341
Dextrose D: 178
Diabetes D: 178
Glycogen G: 237
Hunger H: 449
Hydrolysis H: 471
Hypoglycemia H: 480
Liver (Digestion and use of food) L: 394
Maltose M: 115
Physical fitness (Glucose tolerance) P: 435
Starch So: 855
Sugar (Kinds of sugar) So: 959
- Glucose catabolism**
Metabolism (Catabolism) M: 424
- Glucose tolerance** [physiology]
Physical fitness (Glucose tolerance) P: 435
- Glue G: 236**
Woodworking (Gluing) W: 398
- Glue gesso**
Painting (Grounds) P: 36
- Gluon** [physics] G: 236
Boson B: 494
Matter (Quark-gluon plasmas) M: 311
Physics (Physics today) P: 442
Subatomic particle (Elementary particles) So: 937
- Glutamic acid** [chemical]
Monosodium glutamate M: 733
Wheat (Other uses) W: 267
- Glutaraldehyde** [chemical]
Disinfectant D: 235
- Gluten** [protein] G: 237
Corn (The wet-milling industry) Ci: 1061
Flour (Types of flour) F: 268
Grass (Cereals) G: 326
Wheat (Food for people) W: 266
Yeast (How yeast is used) Y: 554-555
- Glutenin** [protein]
Gluten G: 237
- Glutton** [animal]
Wolverine W: 380 with *picture*
- Glycerin** See *Glycerol in this index*
- Glycerius** [Roman emperor]
Rome, Ancient (table) R: 447
- Glycerol** [chemical] G: 237
Detergent and soap (The kettle method) D: 164
Fat (Structure) F: 52
Fat substitute F: 54
Food (Producing energy) F: 330
Lard L: 76
Lipid (Kinds of lipids) L: 345
Nitroglycerin N: 426
Nutrition (Fats) N: 625
Triglyceride T: 442
- Glycogen** [physiology] G: 237
Bernard, Claude B: 270
Carbohydrate (Kinds of carbohydrates) C: 203-204
Glucose G: 236
Liver (Digestion and use of food) L: 394
Metabolism (Anabolism) M: 424
- Glycol** [chemistry] G: 237
Butterfly (Hibernation) B: 742
Food, Frozen (Indirect-contact freezing) F: 338
- Glycolipid** [chemical]
Lipid (Kinds of lipids) L: 345
- Glycolysis** [biochemistry]
Metabolism (Catabolism) M: 424
Respiration (Cellular respiration) R: 261
- Glycoprotein**
Brain (In thinking and remembering) B: 555
- Glycoside** [compound]
Digitalis D: 203
- Glycyrrhizin** [chemical]
Licorice L: 270
- Glynn, Martin Henry** [American political leader]

- New York (table) N: 313
- Glyph**
Indian, American (Writing) I: 150 *with picture*
- GMO corn**
Corn (Controlling pests and diseases)
Ci: 1061; (Development of hybrids)
Ci: 1063
- GMT** See *Greenwich Mean Time in this index*
- Gnat** [insect] G: 237 *with picture*
- Gnatcatcher** [bird] G: 238 *with picture*
- Gnathostomata**
Fish (A classification of fish) F: 172
- Gnedich, Pyotr** [Russian playwright]
Theater picture on T: 248
- Gneiss** [rock] G: 238 *with picture*
Earth picture on E: 21
Rock (table) R: 373 *with picture*; (Metamorphic rock) R: 372-373
- Gnetalean** [plant]
Plant (Gymnosperms) P: 519-520;
(Classification of plants) P: 546-547 *with picture*
- Gnetum** [plant]
Plant (Angiosperms) P: 519-520
- GNMA** See *Government National Mortgage Association in this index*
- Gnome** G: 238
- Gnomon** [instrument]
Sundial So: 990 *with picture*
- Gnomonic projection**
Great-circle route G: 338 *with diagram*
- Gnosis** [religion]
Gnosticism G: 238
- Gnosticism** [religion] G: 238
Irenaeus, Saint I: 429
Roman Catholic Church (The first 300 years)
R: 406
- Gnotobiotics** [biology] G: 238
- GNP** [economics] See *Gross national product in this index*
- Gnu** [animal] G: 239 *with picture*
Africa picture on A: 123
Animal picture on A: 476
Tanzania picture on T: 33
- Go** [game]
Game (Board games) G: 21
- Go-away bird**
Touraco T: 346
- Go Down, Moses** [stories by Faulkner]
Faulkner, William F: 55
- Go-kart** [automobile]
Kart racing K: 248
- Go-motion** [photography]
Animation (Puppet animation) A: 513
- Go Tell It On the Mountain** [book by Baldwin]
Baldwin, James B: 39
Novel (After World War II) N: 574
- "Go West, young man"** [quotation]
Greeley, Horace (His publications) G: 379
- Goa** [state, India]
India (India in the 1950's and early 1960's)
I: 133
Xavier, Saint Francis X: 543
- Goal** [sports]
Lacrosse L: 23
Rugby football (Rugby Union) R: 510; (Rugby League) R: 511
Soccer (The field) So: 544
- Goal area**
Soccer (The field) So: 544
- Goal kick**
Soccer (Restarts) So: 546
- Goal line** [sports]
Football (The field) F: 354-355 *with diagram*
Rugby football (Rugby Union) R: 510; (Rugby League) R: 511
Soccer (The field) So: 544
- Goal post**
Football (The field) F: 354-355 *with picture*
Rugby football (Rugby Union) R: 510
- Goalie** [hockey] See *Goalkeeper in this index*
- Goalkeeper** [sports]
Hockey (The starting lineup) H: 275;
(Equipment) H: 276-277 *with picture*
Lacrosse L: 23
Soccer (The goalkeeper) So: 545 *with diagram*
- Goaltending**
Basketball (Basketball terms) B: 145
- Goanna** [lizard]
Monitor M: 724
- Goat** [animal] G: 239 *with pictures*
Animal picture on A: 474
Prion P: 804
- Goat, The** [astrology]
Capricorn C: 198 *with picture*
- Goat antelope** [animal]
Chamois C: 372
Goat (Wild goats) G: 239
Mountain goat M: 898
- Goat of the fan** [animal]
Springbok So: 807 *with picture*
- Goat tying**
Rodeo (All-girl rodeos) R: 398
- Goatee**
Beard B: 187
- Goatsucker** [bird] G: 242 *with picture*
- Gobat, Charles Albert** [Swiss statesman]
Nobel Prizes (Peace) 1902) N: 447
- Gobelin** [French history]
Tapestry (History) T: 40
- Gober, Hershel W.** [American government official]
Clinton, Bill (table) Ci: 682d
Veterans Affairs, Department of (History)
V: 343-344
- Gobi** [region, Asia] G: 242 *with picture and map*
Andrews, Roy Chapman A: 456
Camel picture on C: 77
Mongolia (Land) M: 723
Plant (Deserts) P: 525
- Gobind Singh** [Indian religious leader]
Sikhism S: 455
- Goble, Paul** [British author]
Caldecott Medal (table: 1979) C: 26
- Goblin**
Fairy F: 10
- "Goblin Market"** [poem by Rossetti]
Rossetti, Christina Georgina R: 484
- Goby** [fish] G: 243 *with picture*
Fish F: 144
- God** G: 243
Age of Reason (Deism) A: 139
Agnosticism A: 143
Anselm, Saint A: 519
Aquinas, Saint Thomas (His thought) A: 581
Aristotle (Metaphysics) A: 664
Atheism A: 853
Augustine, Saint (His beliefs) A: 888
Bible B: 279
Creationism Ci: 1123
Deism D: 93
Islam I: 463
Judaism (The teachings of Judaism) J: 179
Kant, Immanuel (Kant's ideas) K: 244
Mysticism M: 972
Mythology M: 973; (Mythical beings) M: 974
Philosophy (Modern philosophy) P: 387-388
Polytheism P: 651
Religion R: 214
Theism T: 251
Theology T: 252
Theosophy T: 253
Trinity T: 447
Witchcraft (Witchcraft as a religion) W: 371-372
See also the list of related articles in the God article and the articles on specific religions, such as Hinduism
- God, Kingdom of** [religion]
Christianity (The origin of Christianity) C: 524-525
Jesus Christ (The early Christians) J: 109
- God, Son of** [religion]
Jesus Christ (The early Christians) J: 109
- God and Man at Yale** [book by Buckley]
Buckley, William F., Jr. B: 664
- "God Bless America"** [song] G: 244
Berlin, Irving B: 266
- "God helps them that help themselves"** [quotation]
Poor Richard's Almanac P: 659
- "God is dead"** [philosophy]
God (Ideas about God) G: 244
Nietzsche, Friedrich (Nietzsche and religion)
N: 406
- God Knows** [book by Heller]
Heller, Joseph H: 177
- God of Small Things, The** [book by Roy]
Novel (The novel today) N: 575
- God of Vengeance** [play by Asch]
Asch, Sholem A: 767
- "God Save the King"** [song]
"God Save the Queen" G: 244
National anthem N: 28
- "God Save the Queen"** [song] G: 244
National anthem N: 28
- God Sends Sunday** [book by Bontemps]
Bontemps, Arna Wendell B: 463
- God That Failed, The** [anthology]
Wright, Richard W: 508
- God the Father**
Mormons (Church doctrines) M: 806
- Godard, Jean-Luc** [French director] G: 244
Motion picture (The New Wave in France)
M: 870-871 *with picture*
- Godbody** [book by Sturgeon]
Sturgeon, Theodore So: 934
- Godbout, Adélard** [Canadian political leader]
Quebec (table) Q: 29
- Goddard, Mary Katherine** [American publisher]
G: 244
- Goddard, Robert Hutchings** [American physician] G: 244
Lindbergh, Charles Augustus (His historic flight) L: 330
Rocket (Rockets of the early 1900's) R: 390 *with picture*
Space exploration (Early dreams of space flight) So: 706 *with picture*
- Goddard, Samuel P., Jr.** [American political leader]
Arizona (table) A: 687
- Goddard, William** [American publisher] G: 245
- Goddess**
Mythology (Mythical beings) M: 974
Witchcraft (Witchcraft as a religion) W: 371-372
- Goddess of Democracy** [statue]
China picture on C: 506
- Godefroy, Alexandre F.** [French hairdresser]
Hairdressing (The 1800's) H: 12
- Godefroy, Maximilian** [French artist]
Baltimore (Other interesting places to visit)
B: 69
- Gödel, Kurt** [Austrian-born American mathematician]
Mathematics (Philosophies of mathematics)
M: 307
- Goderich, Viscount** [British political leader]
United Kingdom (table: British prime ministers) U: 72
- Godetia** [plant] G: 245 *with picture*
- Godey, Louis Antoine** [American publisher]
G: 245
Magazine (History) M: 43
- Godey's Lady's Book** [magazine]
Godey, Louis Antoine G: 245
Magazine (History) M: 43
- Godfather, Part II, The** [film]
Coppola, Francis Ford Ci: 1045
De Niro, Robert D: 131
Motion picture (Best picture: 1974) M: 861
Pacino, Al P: 18
Puzo, Mario P: 913
- Godfather, Part III, The** [film]
Pacino, Al P: 18
Puzo, Mario P: 913
- Godfather, The** [film]
Brando, Marlon B: 563
Coppola, Francis Ford Ci: 1045
Motion picture (Best picture: 1972) M: 861
Pacino, Al P: 18
Puzo, Mario P: 913; P: 913
- Godfather of Soul** [nickname]
Brown, James B: 643
- Godfrey, Thomas** [American inventor]
Sextant S: 337
- Godfrey of Bouillon** [French crusader]
Crusades (The First Crusade) Ci: 1160 *with map*
- Godiva, Lady** [English public figure] G: 245
- Godkin, Edward Lawrence** [American editor]
G: 245
- Gododdin** [poem by Aneirin]
Wales (The arts) W: 11
- Godolphin Arabian** [horse]
Horse racing (Thoroughbred horses) H: 363
- Godparent** [religion]
Baptism B: 101
Family (Family relationships) F: 21
- Gods** See *God in this index*
- Gods Are A-thirst, The** [book by France]
France, Anatole F: 480
- God's Determination** [book by Taylor]
Taylor, Edward T: 56
- God's Gift to Poland** [weather]

- Indian summer I: 189
God's Man [engravings by Ward]
 Ward, Lynd Kendall W: 36
God's Trombones [book by Johnson]
 Johnson, James Weldon J: 143
Godse, Nathuram [Indian public figure]
 Gandhi, Mohandas Karamchand (Freedom and death) G: 25
Godspeed [ship]
 Jamestown J: 28
Godthåb [city, Greenland] G: 245
 Greenland (People) G: 384-385
Godunov, Boris [czar of Russia]
 Russia (table: Czars and empresses) R: 549;
 (The Time of Troubles) R: 549
Godwin, Earl of Wessex [English nobleman]
 Edward the Confessor E: 114
 Harold II H: 64
Godwin, Edward [British architect]
 Terry, Ellen T: 180
Godwin, Mary [British author] See Shelley,
 Mary Wollstonecraft *in this index*
Godwin, Mary Wollstonecraft [British author]
 See Wollstonecraft, Mary *in this index*
Godwin, Mills E., Jr. [American political leader]
 Virginia (table) V: 417
Godwin, William [British author] G: 246
Godwin Austen, Henry Haversham [British
 surveyor]
 K2 K: 208
Godwit [bird] G: 246
Goebbels, Joseph [Nazi government official]
 G: 246
 Kristallnacht K: 388
 World War II (Propaganda) W: 493
Goebel, William [American political leader]
 Kentucky K: 272; (table) K: 290; (The early
 1900's) K: 293
Goeppert-Mayer, Maria See Mayer, Maria
 Goeppert *in this index*
Goering, Hermann Wilhelm [Nazi general]
 G: 246 *with portrait*
 Hitler, Adolf *picture on* H: 268
 Luftwaffe L: 515
 Nuremberg Trials (The trials) N: 612-613
 World War II (The air war) W: 481
Goes, Hugo van der See Van der Goes, Hugo *in
 this index*
Gnethals, George Washington [American engi-
 neer] G: 246
 Panama Canal (Cutting through the isthmus)
 P: 126
Goethals Bridge [New Jersey-New York]
 Elizabeth E: 238
 New York City (Transportation) N: 334
Goethe, Johann Wolfgang von [German
 author] G: 247 *with portrait*
 Classicism (Germany) Ci: 653
 Color (Newton and Goethe) Ci: 826
 Drama (Romanticism) D: 337
 German literature (The Storm and Stress
 movement) G: 140-141
 Herder, Johann Gottfried von H: 199
 Mephistopheles M: 411
Goff, Nathen, Jr. [American government official]
 Hayes, Rutherford Birchard (table) H: 121
Goggles
 Inuit (Clothing) I: 354b
 Night vision systems *picture on* N: 419
 Skin diving (History) S: 494
Gogh, Vincent Van See Van Gogh, Vincent *in
 this index*
Gogol, Nikolai [Russian author] G: 248
 Russian literature (Late romanticism) R: 561
 Drama (Russian drama and Chekhov) D: 338
 Satire S: 150h
Goh Chok Tong [Singapore political leader]
 Singapore (History) S: 471-472
Goidelic Celts [language]
 Gaels G: 5
Going My Way [film]
 Crosby, Bing Ci: 1154
 Motion picture (Best picture: 1944) M: 861
Going public [investment]
 Initial public offering I: 271
Going to Meet the Man [stories by Baldwin]
 Baldwin, James B: 39
Goiter [disorder] G: 248
 Iodine (Uses of iodine) I: 370
 Nutrition (Deficiency diseases) N: 630-631
 Physiology P: 445
Gokarne Aunsi [holiday]
- August A: 886
Golan [ancient city]
 Cities of refuge Ci: 568
Golan Heights [region, Middle East] G: 248
 Israel (The Yom Kippur War) I: 488
 Middle East (Continuing conflict) M: 533
 Syria (The continuing Arab-Israeli conflict)
 So: 1075-1076
 United Nations (Peacekeeping operations)
 U: 90-91
Golconda [painting by Magritte]
 Magritte, René M: 64
Gold [element] G: 249 *with pictures*
 Alchemy A: 333
 Alloy (Costly and ornamental alloys) A: 378
 Carat C: 202
 Colonial life in America (Decorative arts)
 Ci: 807
 El Dorado E: 158
 Gold leaf G: 253
 Gold rush G: 254
 Gresham's law G: 391
 Hong Kong (Service industries) H: 319
 Malleability M: 110
 Mercantilism M: 412
 Metallurgy (Leaching) M: 427
 Mineral *picture on* M: 568
 Money (The rebirth of paper money) M: 709
with picture; (How the money supply is
 determined) M: 714
 Montana (Interesting facts) M: 743
 South Africa (Mining) So: 616 *with picture*;
 (Discovery of diamonds and gold) So: 618
 South Dakota *picture on* So: 682
 Teeth (Dental decay) T: 82-83
"Gold-Bug, The" [story by Poe]
 Poe, Edgar Allan (Poe's life) P: 589
Gold certificate [money]
 Money *picture on* M: 709
Gold Coast [Africa]
 Ashanti A: 768
 Ghana G: 178
Gold Coast [district]
 Chicago (The North Side) C: 423 *with picture*
Gold crew
 Submarine (Life aboard a submarine) So: 941
Gold Cup race
 Motorboat racing (Types of racing) M: 877
Gold depository
 Fort Knox F: 413 *with picture*
Gold Diggers of 1933 [film]
 Motion picture (Movies in the 1930's) M: 868
with picture
Gold eagle [money]
 Money *picture on* M: 708
Gold filling
 Gold (Jewelry) G: 251
Gold film
 Gold (Other uses) G: 251 *with picture*
Gold leaf G: 253
 Gold (Other uses) G: 251
Gold-leaf electroscope
 Electroscope E: 218
Gold mine
 Gold (Mining) G: 252
 Nevada (Mining) N: 170 *with picture*
Gold piece
 Money *picture on* M: 708
Gold plating
 Gold (Jewelry) G: 251
Gold record
 Recording industry (Recording industry
 awards) R: 182
Gold Room at Bear Creek [Quebec]
 Canada (table: National historic sites) C: 114
Gold rush [Australian history]
 Australia (The Australian gold rush) A: 924
Gold rush [Canadian history]
 Yukon Territory (History) Y: 585
 Royal Canadian Mounted Police (History)
 R: 497
Gold rush [U.S. history] G: 254 *with picture*
 Alaska (The gold rush) A: 301; *picture on*
 A: 302
 Asian Americans (The first wave of Asian
 immigration) A: 812d
 California (The gold rush) C: 62 *with picture*;
picture on C: 61
 Colorado (The gold rush) Ci: 845
 Forty-Niners F: 420
 Gold (History of gold) G: 253
 Goldfield G: 256
- Jefferson Territory J: 88
 Juneau J: 194
 Klondike K: 344 *with picture*
 Marshall, James Wilson M: 229
 Montana (The gold rush) M: 758 *with picture*
 Murieta, Joaquin M: 930
 Pioneer life in America (Crossing the Plains)
 P: 485-486
 San Francisco (The gold rush) S: 97
 South Dakota (Territorial days) So: 681
 Taylor, Zachary *picture on* T: 59
 Western frontier life in America (The search
 for gold and silver) W: 233 *with picture*
 Westward movement in America (California)
 W: 249 *with picture*
Gold standard [economics] G: 254
 Cleveland, Grover (The currency and the tariff)
 Ci: 671; (Saving the gold standard) Ci: 673
 Exchange rate E: 435
 Gold (History of gold) G: 253
 McKinley, William (The front-porch campaign)
 M: 340
 Money (The rebirth of paper money) M: 709;
 (How the money supply is determined)
 M: 714-715
 Republican Party (The money issue) R: 255
Gold Standard Act [1900]
 McKinley, William (McKinley's first
 Administration [1897-1901]) M: 340
 Money (The rebirth of paper money) M: 709
Goldberg, Arthur Joseph [American states-
 man] G: 254
 Kennedy, John Fitzgerald (Other develop-
 ments) K: 265; (table) K: 266
 United Nations (table) U: 86
Goldberg, Ephraim Owen [American architect]
 See Gehry, Frank *in this index*
Goldberg, Rube [American cartoonist]
 Cartoon *picture on* C: 263
Goldberg, Whoopi [American actress]
 Motion picture (Best performance by an
 actress in a supporting role: 1990) M: 863
Goldberg Variations [music by Bach]
 Canon C: 183
Goldberger, Joseph [American doctor] G: 255
 Pellagra P: 232
 Vitamin (History) V: 432
Golden Age [world history] G: 255
 Elizabeth I E: 238
 England (The reign of Elizabeth I) E: 307
 Greece, Ancient (The rivalry between Athens
 and Sparta) G: 373-374; *pictures on*
 G: 370
 Greek literature (The Golden Age) G: 377
 Gupta dynasty G: 442
 India (The golden age) I: 129
 Jews (The Jews under Islam) J: 122
 Latin literature (The Golden Age) L: 115
 Netherlands N: 139; (Prosperity and power)
 N: 148 *with picture*
 Russian literature (Early romanticism) R: 560
 Spanish literature (The Golden Age) So: 758
 World, History of the (The Greeks) W: 428
with picture
Golden Age, The [book by Grahame]
 Grahame, Kenneth G: 301
Golden Age, The [film]
 Buñuel, Luis B: 700
Golden Age of Athens [ancient Greece]
 Athens (The Golden Age) A: 857
 Golden Age G: 255
 Greece, Ancient (The rivalry between Athens
 and Sparta) G: 373-374; *pictures on*
 G: 370
 Greek literature (The Golden Age) G: 377
 Pericles P: 287
Golden Age of Broadcasting
 Radio R: 83; (Putting a show on the air) R: 86;
 (The Golden Age of Broadcasting) R: 92
with pictures
Golden Age of Jazz, The
 Jazz (The 1920's) J: 70
Golden apples [Greek mythology]
 Hercules (The twelve labors) H: 198-199
 Hesperides H: 218
Golden Ass, The [book by Apuleius] See
Metamorphoses in this index
Golden bell [plant]
 Forsythia F: 411 *with picture*
Golden Bough, The [book by Frazer]
 Frazer, Sir James George F: 496
 Magic (Kinds of magic) M: 49

Mythology (Frazer's theory) M: 986-987

Golden Bowl, The [book by James]

James, Henry (His works) J: 26

Golden-brown algae [organisms] *See* *Diatom in this index*

Golden carp [fish] *See* *Goldfish in this index*

Golden chain [tree]

Laburnum L: 19

Golden chanterelle [fungus]

Mushroom (Mushroomlike fungi) M: 945

Golden Cockerel, The [opera by Rimsky-Korsakov]

Rimsky-Korsakov, Nikolai R: 341

Golden-crowned kinglet

Kinglet K: 330 *with picture*

Golden Delicious

Apple (table) A: 571 *with picture*

Golden eagle

Bird (Birds of the desert) B: 339 *with picture*

Eagle E: 3; (Food) E: 5 *with picture*; (The golden eagle) E: 5

Golden Eagle Passport

National Park System (Visitors' costs) N: 46

Golden Fleece [Greek mythology] G: 255

Argonauts A: 660

Jason J: 64

Medea M: 360

Golden Fleece, Order of the

Knighthood, Orders of (Honorary orders) K: 347

Golden-fronted leafbird

Bird (Birds of Europe and Asia) B: 346-347 *with picture*

Golden Gate [bay]

San Francisco (History) S: 97

Golden Gate Bridge [San Francisco] G: 255

Bridge (table: Suspension) B: 603; *picture on* B: 600

California (Transportation) C: 57; *picture on* C: 37

United States *picture on* U: 98

Golden Gate International Exposition [1939-1940]

California (Progress as a state) C: 62; *picture on* C: 61

Golden Gate National Recreation Area

[California]

National Park System (table: National recreation areas) N: 49

Golden Gate of Yaroslav the Wise [landmark]

Kiev K: 314

Golden Gate Park

San Francisco (Residential districts) S: 93-94 *with map*

Golden Gateway Center

San Francisco (Downtown San Francisco) S: 92-93

Golden Gloves Tournament

Boxing (Amateur boxing) B: 530

Golden hamster

Hamster H: 37 *with picture*

Golden Heart City [nickname] *See* *Fairbanks in this index*

Golden Hind [ship]

Drake, Sir Francis (Voyage around the world) D: 321 *with picture*

Golden Horde [Russian history]

Mongol Empire (Breakup) M: 721

Russia (Mongol rule) R: 548

Golden Horn [inlet, Istanbul]

Istanbul (The city) I: 490

Golden Horseshoe [region, Ontario]

Ontario O: 764

Golden Notebook, The [book by Lessing]

Lessing, Doris L: 208

Golden Pavilion [Kyoto, Japan]

Kyoto K: 398

Golden pheasant

Pheasant (Kinds of pheasants) P: 355-356 *with picture*

Golden plover [bird]

Animal *picture on* A: 485

Bird (Birds of the Arctic) B: 343 *with picture*

Golden-rain tree

New Harmony N: 229

Golden rectangle [geometry]

Golden section G: 256 *with diagram*

Golden retriever [dog] G: 255

Dog *picture on* D: 268

Golden Road [trade route]

Turkestan T: 501

Golden robin [bird] *See* *Baltimore oriole in this index*

Golden Rose of Montreux [award]

Television (International television awards) T: 117

Golden rule [religion] G: 256

Confucianism (Early Confucianism) Ci: 936

Religion (A code of conduct) R: 216

Golden Sebright bantam rooster

Chicken *picture on* C: 442

Golden section [geometry] G: 256 *with diagram*

Golden shiner [fish]

Minnow M: 608

Roach R: 357

Golden Spike National Historic Site [Utah]

National Park System (table: National historic sites) N: 52-53

Golden State

California C: 36

Golden State Warriors

Basketball (table) B: 150

Golden Temple [India]

Amritsar A: 444

India (India under Indira Gandhi) I: 133-134

Golden Triangle [district, Pittsburgh]

Pittsburgh (The city) P: 500a *with picture*

Golden trout [fish]

Trout *picture on* T: 453

Golden-winged woodpecker *See* *Yellow-shafted flicker in this index*

Golden-eyed lacewing [insect]

Insect *picture on* I: 281

Goldenrod [plant] G: 256

Flower (Flowers of woodlands and forests) F: 284-285 *with picture*

Insect picture on I: 284

Goldfield [Nevada] G: 256

Goldfield [plant]

Flower *picture on* F: 288

Goldfinch [bird] G: 256 *with pictures*

Goldfish [fish] G: 257 *with pictures*

Gordin, Horace [American magician]

Magician (Illusions) M: 51-52

Golding, William [British author] G: 258

Goldman, Edwin Franko [American bandleader] G: 258

Goldman, Emma [Russian-American social reformer] G: 258 *with portrait*

Goldman, Ronald [American public figure]

Simpson, O. J. S: 468

Goldman Band

Goldman, Edwin Franko G: 258

Goldmann, Max [Austrian director]

Reinhardt, Max R: 209

Goldmark, Peter [American engineer]

Phonograph (History) P: 401-402

Goldoni, Carlo [Italian dramatist] G: 258

Canada *picture on* C: 111

Drama (Italy) D: 335

Italian literature (The baroque period and the Age of Reason) I: 494-495

Goldrick, O. J. [American educator]

Colorado (Schools) C: 832

Goldsborough, Charles [American political leader]

Maryland (table) M: 255

Goldsborough, Phillips Lee [American political leader]

Maryland (table) M: 255

Goldschmidt, Neil E. [American government official]

Carter, Jimmy (table) C: 257

Oregon (table) O: 845

Transportation, Department of (table) T: 400

Goldsmith, Deborah [American painter]

Folk art *picture on* F: 317

Goldsmith, Oliver [Irish author] G: 259

English literature (The Johnson circle) E: 319 *with picture*

Irish literature (Drama) I: 431

Newbery, John N: 358

Goldsmith, Oliver [Canadian poet]

Canadian literature (Early English-Canadian literature) C: 157

Goldstein, Joseph Leonard [American physiologist]

Nobel Prizes (Physiology or medicine: 1985) N: 445

Goldwater, Barry Morris [American political leader] G: 259 *with portrait*

Arizona (Politics) A: 687-688

Johnson, Lyndon Baines (Full-term President) J: 149-150

Nixon, Richard Milhous (New York City lawyer) N: 432

Goldwyn, Samuel [American producer] G: 259

Goles [English jester]

Jester J: 103

Golestan [book by Saadi]

Saadi S: 2

Golf [sport] G: 260 *with pictures*

Japan *picture on* J: 41

Ryder Cup R: 572

Saint Andrews S: 30

Scotland (Recreation) S: 214 *with picture*

United Kingdom *picture on* U: 57

Zaharias, Babe Didrikson Z: 588

Golf ball

Golf (Golf balls) G: 261 *with picture*

Golf club

Golf (Golf clubs) G: 262 *with pictures*

Golf course

Golf G: 260 *with pictures*

Golfers' Association, Professional

Golf (PGA Championship) G: 265

Golgi, Camillo [Italian physiologist] G: 267

Golgi apparatus [biology]

Cell (The cytoplasm) C: 329 *with diagrams*

Golgi cell [biology]

Golgi, Camillo G: 267

Golgi complex [biology]

Cell (The cytoplasm) C: 329 *with diagrams*

Golgotha

Calvary C: 70

Jesus Christ (The Crucifixion) J: 108

Goliad [Texas]

Texas (The Texas revolution) T: 206

Goliath [Biblical figure] G: 267

David (Early life) D: 45 *with picture*

Giant G: 183

Sling S: 508

Goliath beetle

Beetle B: 215

Insect (The variety of insects) I: 280-281; *picture on* I: 278

Goliath frog

Frog (The body of a frog) F: 536

Goliath grouper [fish] G: 267

Bass (True bass) B: 157 *with picture*

Fish *picture on* F: 153

Golkar [political organization]

Indonesia (Politics) I: 227

Goma [city, Congo]

Congo (Kinshasa) *picture on* Ci: 940c

Gomateswara [Jain god]

Religion *picture on* R: 215

Gombu, Nawang [Nepalese mountain climber]

Mount Everest M: 884

Gomera [Canary Islands]

Columbus, Christopher (Sailing west) Ci: 860

Gomez, Estevan [Portuguese explorer]

Nova Scotia (Exploration and settlement) N: 568

Gómez, General [Mexican military leader]

Maximilian M: 319

Gómez, Juan Vicente [Venezuelan political leader]

Venezuela (Rule by dictatorships) V: 305

Gomez, Lefty [American baseball player]

Baseball (table: Hall of Fame) B: 134

Gómez de Espinosa, Gonzalo [Spanish sailor]

Magellan, Ferdinand (The end of the voyage) M: 47

Gomorrhah [ancient city]

Sodom and Gomorrhah So: 570

Gompers, Samuel [American labor leader]

G: 267

Coolidge, Calvin (As governor) Ci: 1031

Labor movement (The first nationwide labor organizations) L: 9-10

United States, History of the (Early reform efforts) U: 181

Gomułka, Władysław [Polish political leader]

Cold War (Unrest in Eastern Europe) Ci: 765

Poland (History) P: 611-613

Gonad [anatomy]

Hormone (Growth and sex hormones) H: 336

Gonadotropin [hormone]

Steroid (The adrenal steroids) So: 895

Gonçalves, Antão [Portuguese explorer]

Henry the Navigator H: 191

Gonçalves, Nuno [Portuguese painter]

Portugal (The arts) P: 689

Gonçalves Dias, Antônio [Brazilian poet]

Latin-American literature (Romanticism) L: 112

- Goncharov, Ivan** [Russian author]
Russian literature (Early realism) R: 562
- Goncharova, Natalya** [Russian artist]
Painting (Nonobjective painting in Russia)
P: 79
Pushkin, Alexander (His life) P: 912
- Goncourt** [French literary family] G: 267
- Goncourt, Edmond de** [French author]
Goncourt G: 267
French literature (Naturalism) F: 522
Impressionism (Music, literature, and sculpture) I: 95
- Goncourt, Jules de** [French author]
Goncourt G: 267
French literature (Naturalism) F: 522
Impressionism (Music, literature, and sculpture) I: 95
- Göncz, Árpád** [Hungarian political leader]
Hungary (Multiparty elections) H: 448
- Gondola** [boat] G: 268 *with picture*
Europe *picture on E*: 381
Italy *picture on I*: 510
- Gondola** [compartment]
Airship (Thrust) A: 250-251 *with diagram*
- Gondola car** [railroad]
Railroad *picture on R*: 108
- Gondolier** [career]
Gondola G: 268
- Gondwanaland** [geology]
Earth (The shaping of the continents) E: 24;
map on E: 31
Plate tectonics (Plate movement) P: 563; (The drifting continents) *map on P*: 564
- Gone with the Wind** [book by Mitchell]
Mitchell, Margaret M: 678
- Gone with the Wind** [film]
Gable, Clark G: 2
Mitchell, Margaret M: 678
Motion picture (Best picture: 1939) M: 861;
(Movies in the 1930's) M: 868-869
United States *picture on U*: 118
- Goneril** [literary figure]
Shakespeare, William (*King Lear*) S: 363
- GONG**
National Optical Astronomy Observatories
N: 42
- Gong** [musical instrument] G: 268
- Gongfu** See Kung fu *in this index*
- Góngora, Luis de** [Spanish poet] G: 268
Spanish literature (The 1600's) So: 759-760
- Gongorismo** [literature]
Góngora, Luis de G: 268
See also Culteranismo *in this index*
- Gonne, Maude** [Irish public figure]
Yeats, William Butler Y: 555
- Gonorrhea** [disease] G: 268
Chlamydia C: 516
Penicillin (Resistance) P: 241
Sexually transmitted disease S: 338b
- Gonthier, Charles** [Canadian jurist]
Supreme Court of Canada (table) So: 997 *with portrait*
- Gonzaga, Tomás Antônio** [Brazilian poet]
Latin-American literature (Colonial literature)
L: 111-112
- Gonzales, Corky** See Gonzales, Rodolfo *in this index*
- Gonzales, Josá** [American Indian leader]
New Mexico (Mexican rule) N: 273-275
- Gonzales, Pancho** [American tennis player] See
Gonzalez, Pancho *in this index*
- Gonzales, Rodolfo** [American social reformer]
G: 268
Hispanic Americans (Political developments)
H: 255-256
- González, Elián** [Cuban public figure]
Hispanic Americans (Cuban immigration)
H: 253-254
Miami (History) M: 480-481
Reno, Janet R: 240
- González, Felipe** [Spanish political leader]
Spain (Political changes) So: 751-752
- Gonzalez, Henry B.** [American political leader]
Hispanic Americans (Political developments)
H: 255
- González, Josá Victoriano** [Spanish painter]
Gris, Juan G: 395
- González, Juan Miguel** [Cuban public figure]
Hispanic Americans (Cuban immigration)
H: 253-254
- González, Lázaro** [Cuban public figure]
Hispanic Americans (Cuban immigration)
H: 253-254
- Gonzalez, Pancho** [American tennis player]
G: 268
- González Macchi, Luis** [Paraguayan political leader]
Paraguay (Stroessner's rule and overthrow)
P: 150
- González Videla, Gabriel** [Chilean political leader]
Chile (Years of progress) C: 469
- Gonzalo, Don** [literary figure]
Don Juan D: 306
- Gonzalo de Berceo** [Spanish poet]
Spanish literature (Early mediæval literature)
So: 757-758
- Goober**
Peanut P: 213 *with pictures*
- Goobar State** [nickname]
Georgia G: 112
- Good, James W.** [American government official]
Hoover, Herbert Clark (table) H: 330
- Good as Gold** [book by Heller]
Heller, Joseph H: 177
- Good-bye, Mr. Chips** [book by Hilton]
Hilton, James H: 233
- Good Companions, The** [book by Priestley]
Priestley, John Boynton P: 776
- Good Earth, The** [book by Buck]
Buck, Pearl S. B: 663
- Good Friday** [religion] G: 269
Easter (Good Friday) E: 43 *with picture*
Holy Week H: 299
Jesus Christ (The Crucifixion) J: 108; (The trial)
J: 108
Philippines *picture on P*: 373
- "Good Friday, 1613. Riding Westward"** [poem by Donne]
Donne, John (His poetry) D: 308
- Good Hope, Cape of** See Cape of Good Hope
in this index
- Good Housekeeping** [magazine]
Hearst, William Randolph H: 131
Magazine (table) M: 45
- Good luck charm**
Fetish F: 80
- Good luck sign**
Superstition (Kinds of superstitions) So: 995
- Good Man Is Hard to Find, A** [stories by O'Connor]
O'Connor, Flannery O: 668
- Good Morning Blues** [book by Basie]
Basie, Count B: 140
- Good-Natur'd Man, The** [play by Goldsmith]
Goldsmith, Oliver G: 259
- Good Neighbor Policy** [American history]
Latin America (Latin America and the United States) L: 109
Monroe Doctrine (The Good Neighbor Policy)
M: 740
Pan-American conferences (Good Neighbor Policy) P: 113
Roosevelt, Franklin Delano (Good Neighbor Policy) R: 458
- Good News Bible**
Bible (Modern English translations) B: 286-287
- Good Samaritan** [Bible]
Samaritans S: 78
- Good Shepherd, The** [mosaic]
Mosaic pictures on M: 822
- Good Soldier, The** [book by Ford]
Ford, Ford Madox F: 371
Novel (New directions in the novel) N: 573-574
- Good Templars, International Organization of**
G: 269
- Goodall, Jane** [British zoologist] G: 269 *with picture*
Chimpanzee (Chimpanzees and people) C: 473
Primate (The study of nonhuman primates)
P: 778c
- Goodbye, Columbus** [book by Roth]
Roth, Philip R: 487
- Goodbye to All That** [book by Graves]
Graves, Robert G: 331
- Goodbye to Berlin** [book by Isherwood]
Isherwood, Christopher I: 462
- Goode, W. Wilson** [American political leader]
Philadelphia (Continued growth) P: 367
- Goodell, David H.** [American political leader]
New Hampshire (table) N: 223
- Goodfellas** [film by Scorsese]
Scorsese, Martin S: 210
- Goodfellow, Robin**
Puck P: 870 *with picture*
- Goodhue, Grace Anna** [wife of Calvin Coolidge]
See Coolidge, Grace Goodhue *in this index*
- Goodhue, James Madison** [American publisher]
Minnesota (Communication) M: 601
- Gooding, Cuba, Jr.** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1996) M: 863
- Gooding, Frank R.** [American political leader]
Idaho (table) I: 42
- Goodland, Walter S.** [American political leader]
Wisconsin (table) W: 365
- Goodman, Benny** [American clarinet player]
G: 269
Jazz (The swing era) J: 71 *with picture*
- Goodman Theater**
Theater *pictures on T*: 236, T: 237, T: 239, T: 240, T: 241
- Goodnight, Charles** [American pioneer]
Western frontier life in America W: 232
- Goodrich, Benjamin Franklin** [American businessman] G: 269
- Goodrich, James P.** [American political leader]
Indiana (table) I: 214
- Goodrich Company, B. F.**
Goodrich, Benjamin Franklin G: 269
Ohio *picture on O*: 701
Zipper Z: 600
- Goods and services**
Consumer Price Index Ci: 1017
Economics E: 57; (Economic problems) E: 58
Gross domestic product (Real GDP) G: 399
Income (Types of income) I: 100
- Goods and services tax** [Canada]
Mulroney, Brian (Other economic developments) M: 917-918
- Goodspeed, Edgar Johnson** [American scholar]
Bible (Modern English translations) B: 286
- Goodwill Industries** [organization] G: 269
Disabled (table) D: 222
- Goodwin, Archie** [literary figure]
Stout, Rex Todhunter So: 916
- Goodwin, Ichabod** [American political leader]
New Hampshire (table) N: 223
- Goodwin, John N.** [American political leader]
Arizona (Territorial days) A: 690
- Goodwin, W. A. R.** [American historian]
Williamsburg (Restoration) W: 313
- Goodyear, Charles** [American inventor] G: 270
Connecticut (The 1800's) Ci: 970
Invention (The inventive process) I: 355-357
Rubber (Discovery of vulcanization) R: 501
- Goodyear, Miles** [American frontiersman]
G: 270
- Goodyear blimp**
Airship *picture on A*: 250
- Goofballs**
Drug (Antianxiety and hypnotic drugs) D: 352
- Googol** [number] G: 270
- Googolplex** [number]
Googol G: 270
- Goora** [nut]
Kola nut K: 362 *with picture*
- Goose** [bird] G: 270 *with pictures*
Bird (As a source of food and raw materials)
B: 330 *with picture*
Brant B: 564 *with picture*
Canada goose C: 156
Poultry P: 720
- Goose, Elizabeth** [American author]
Mother Goose (Who was Mother Goose?)
M: 842
- Goosa barnacle** [sea animal]
Barnacle B: 113 *with pictures*
Crustacean *picture on Ci*: 1163
- Goose bumps**
Hair (Glands and muscles) H: 9-10
- Gooseberry** [fruit] G: 271
- "Goosebumps" novels** [books by Stine]
Stine, R. L. So: 901
- Goosefoot** [plant]
Lamb's-quarters L: 51
- Goosen, Retief** [South African golfer]
Golf (U.S. Open) G: 265
- G.O.P.**
Republican Party R: 253
- Gopher** [animal] G: 271 *with picture*
- Gopher State** [nickname]
Minnesota M: 584

Gopher tortoise

- Tortoise T: 342
Turtle (Tortoises) T: 523
- Gorbachev, Mikhail Sergeyevich** [Soviet political leader] G: 272 *with portrait*
Armenia (History) A: 718b-719
Bush, George Herbert Walker (U.S.-Soviet relations) B: 721
Cold War (The Cold War after 1980) Ci: 770
Communism (The Soviet Union under Gorbachev) Ci: 895
Estonia (History) E: 362-363
Europe (The breakup of Communism) E: 416
International relations (The Cold War ends) I: 346
Latvia (History) L: 119-120
Lithuania (History) L: 389-390
Moscow (Early 1900's) M: 827
Politburo P: 627
Russia (The rise of Gorbachev) R: 554
Russian literature (Modern Soviet literature) R: 564-565
Union of Soviet Socialist Republics (History) U: 35-40 *with picture*
United States, History of the (Improved U.S.-Soviet relations) U: 195
World, History of the (The easing of Cold War tensions) W: 448
Yeltsin, Boris Nikolayevich Y: 560
- Gordian I** [Roman emperor]
Rome, Ancient (table) R: 447
- Gordian II** [Roman emperor]
Rome, Ancient (table) R: 447
- Gordian III** [Roman emperor]
Rome, Ancient (table) R: 447
- Gordian knot** [Greek mythology] G: 273
Alexander the Great (Invasion of Asia) A: 342
Knots, hitches, and splices (History) K: 357
- Gordillo, Francisco** [Spanish explorer]
Ayllón, Lucas Vázquez de A: 995
South Carolina (Exploration and settlement) So: 659
- Gordimer, Nadine** [South African author] G: 273
- Gordium** [ancient city, Asia Minor]
Alexander the Great (Invasion of Asia) A: 342
- Gordius** [legendary figure]
Gordian knot G: 273
- Gordon, Alexander** [Scottish nobleman]
Gordon setter G: 273
- Gordon, Charles George** [British general]
G: 273
- Gordon, James W.** [American political leader]
Michigan (table) M: 507
- Gordon, Jeff** [American race car driver] G: 273
Automobile racing (table: NASCAR Winston Cup champions, 1995, 1997, 1998, 2001) A: 981
- Gordon, John Brown** [Confederate general]
Georgia (table) G: 130
- Gordon, John Campbell Hamilton-** [British statesman]
Aberdeen and Temair, Marquess of A: 10
- Gordon, Ruth** [American actress]
Motion picture (Best performance by an actress in a supporting role: 1968) M: 863
- Gordon, Yehudah Leib** [Hebrew poet]
Hebrew literature (Modern Hebrew literature) H: 162
- Gordon Pasha**
Gordon, Charles George G: 273
- Gordon setter** [dog] G: 273
Dog picture on D: 269
Setter S: 323
- Gordy, Berry, Jr.** [American businessman]
G: 273
Gaye, Marvin G: 73
- Gore, Al** [American political leader] G: 274 *with portrait*
Bush, George Walker B: 722b; (Election as president) B: 722e-722f
Bush v. Gore B: 723
Clinton, Bill (The Democratic nomination) Ci: 682c-682d; (table) Ci: 682d *with picture*
Democratic Party (Mixed results) D: 128
Election of 2000 E: 161
Lieberman, Joseph Isadore L: 271
Vice President of the United States (table) V: 351; (Growth of the vice presidency) V: 353-354, V: 349 *with portrait*
- Gore, Albert, Sr.** [American political leader]
Gore, Al (Early life) G: 274

- Gore, Albert Arnold, Jr.** [American political leader] See Gore, Al *in this index*
- Gore, Charles** [British religious leader]
Oxford Movement O: 887
- Gore, Christopher** [American political leader]
Massachusetts (table) M: 288
- Gore, Howard M.** [American government official]
Agriculture, Department of (table) A: 161
Coolidge, Calvin (table) Ci: 1032
West Virginia (table) W: 225
- Gore, Mary Elizabeth Aitcheson** [wife of Al Gore]
Gore, Al (Early life) G: 274
- Gore, Tipper** [wife of Al Gore] See Gore, Mary Elizabeth Aitcheson *in this index*
- Gorée** [Senegal] G: 274
- Gorgas, William Crawford** [American doctor]
G: 274
Panama Canal (Victory over disease) P: 126
Yellow fever (Prevention) Y: 556
- Gorge** [geology]
Canyon C: 185
Dalles D: 16
- Gorgeana** [former name, York]
Maine (Ownership disputes) M: 89
- Gorges, Sir Ferdinando** [English colonial official]
Maine (Exploration and settlements) M: 89
- Gorgias** [Greek orator]
Oratory (Beginnings) O: 818
Sophists So: 595
- Gorgias** [book by Plato]
Plato (The dialogues) P: 567
- Gorgonian** [coral]
Coral (Other kinds of corals) Ci: 1048a
- Gorgons** [Greek mythology] G: 275
Medusa M: 383
- Gorham, Nathaniel** [American political leader]
G: 275
- Gorilla** [animal] G: 275 *with pictures and map*
Africa picture on A: 123
Animal picture on A: 481
Ape (Way of life) A: 563 *with picture*
Fossey, Dian F: 421
Primate (Great apes) P: 778a
Skeleton diagram on S: 481
Zoo (Interesting facts about zoo animals) Z: 605
- Gorillas in the Mist** [book by Fossey]
Fossey, Dian F: 421
- Gorkha** [former kingdom]
Kathmandu K: 249
- Gorki** [Russia] See Nizhny Novgorod *in this index*
- Gorki, Maxim** [Russian author] G: 277
Russian literature (Late realism) R: 562-563
- Gorki Park**
Moscow (Entertainment and recreation) M: 825 *with picture*
- Gorki Theater** [Russia]
Theater (Russia) T: 248-249
- Gorky, Arshile** [American painter] G: 277 *with picture*
- Gorrie, John** [American inventor]
Air conditioning (History) A: 180
Food preservation (Modern food preservation) F: 344
- Gorse** [shrub]
Furze F: 588
- Gorsky, Alexander** [Russian choreographer]
Bolshoi Ballet B: 449
- Gorton, John Grey** [Australian political leader]
Australia (table) A: 925
- Gorton, Samuel** [American colonial leader]
Rhode Island (Settlement) R: 312
- Goshawk** [bird]
Hawk H: 111; picture on H: 112
- Goshenite** [mineral]
Gem picture on G: 78
- Goshman, Albert** [American magician]
Magician (Close-up magic) M: 51
- Goslin, Goose** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Gosling** [bird]
Goose (The life of a wild goose) G: 271
- Gosling Memorial Library** [Saint John's]
Newfoundland and Labrador (Libraries and museums) N: 364
- Gosnold, Bartholomew** [English explorer]
G: 277
Cape Cod C: 188

- Martha's Vineyard M: 233
Massachusetts (Early exploration) M: 289
- Gospel music**
Jackson, Mahalia J: 15
- Gospels** [New Testament] G: 277
Bible (Books of the New Testament) B: 282
Jesus Christ (Early life) J: 104
New Testament (Books) N: 287
- Gossaert, Jan** [Flemish painter]
Clothing picture on Ci: 699
- Gossett, Charles C.** [American political leader]
Idaho (table) I: 42
- Gossett, Louis, Jr.** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1982) M: 863
- Gossip column**
Winchell, Walter W: 328
- Gösta Berling's Saga** [book by Lagerlöf]
Lagerlöf, Selma L: 30
- Göta Canal** [waterway, Sweden]
Sweden (Recreation) So: 1025-1026
- Götaland Plateau**
Sweden (The South Swedish Highland) So: 1029 *with map*
- Göteborg** [Sweden] G: 277
- Götha** [airplane]
Bomber (History) B: 453
- Gothart-Nithart, Mathis** [German artist] See Grünwald *in this index*
- Gothenburg** [Sweden]
Göteborg G: 277
- Gothic architecture**
Architecture (Gothic architecture) A: 618 *with pictures*
Gargoyles G: 43 *with picture*
Gothic art G: 278 *with picture*
Notre Dame, Cathedral of picture on N: 551
Reims R: 208; picture on R: 207
- Gothic armor**
Armor (During the Middle Ages) A: 720
- Gothic art** G: 278 *with picture*
Furniture (The Middle Ages) F: 571; (Historical revivals) F: 581
Painting (Gothic painting) P: 50 *with picture*
Tracery T: 353
- Gothic lettering**
Handwriting (Later writing styles) H: 50
Paleography P: 103
- Gothic novel** G: 278
American literature (The romance) A: 418
English literature (Romantic prose) E: 320
Novel (Gothic novels) N: 572
Romance R: 415
Romanticism (Romanticism in literature) R: 427
- Gothic revival** [architecture]
Architecture (The Gothic Revival) A: 626 *with picture*
New York City (Architecture) N: 336; (Saint Patrick's Cathedral) N: 339 *with picture*
- Goths** [ancient people] G: 279
Russia (Early days) R: 547
- Gotland** [island, Baltic Sea]
Lombards L: 427
Sweden (The land) So: 1028 *with map*
- Goto Optical Manufacturing Company**
Planetarium (Modern planetariums) P: 514a-514b
- Götterdämmerung, Die** [opera by Wagner]
Opera (*Ring of the Nibelung, The*) O: 806-807
Wagner, Richard (Later career) W: 4
- Gottes Zeit** [music by Bach]
Bach, Johann Sebastian (His works) B: 16
- Gottfried von Strassburg** [German poet]
G: 279
- Gottlieb, Adolph** [American painter] G: 279 *with picture*
- Gottmann, Jean** [French geographer]
Megalopolis M: 384
- Gottorp Globe** [device]
Planetarium (Early planetariums) P: 514; picture on P: 514b
- Gottschalk, Louis Moreau** [American composer] G: 280
- Gottsched, Johann** [German dramatist]
Drama (Germany) D: 336
- Gottwald, Klement** [Czechoslovak political leader]
Czechoslovakia (Communist rule) Ci: 1215-1216
- Götz von Berlichingen** [play by Goethe]
Goethe, Johann Wolfgang von (Early years) G: 247

Gou-Gu theorem

Mathematics (Chinese mathematics) **M: 306**

Gouache [art]

Painting (Water-color painting) **P: 39-40**

Gouda [city, Netherlands]

Netherlands *picture on N: 141*

Goudy, Frederic William [American printer]

G: 280

Book (The 1800's) **B: 467-468**

Gouge [tool]

Woodcarving **W: 391 with diagram**

Gouin, Lomer [Canadian political leader]

Quebec (table) **Q: 29**

Goujon, Jean [French sculptor]

Louvre **L: 507**

Goukouni Oueddei [Chadian political leader]

Chad (History) **C: 367-368**

Goulart, João [Brazilian political leader]

Brazil (Return to constitutional government)
B: 585-586

Goulash [food]

Hungary (Food and drink) **H: 441**

Gould, Sir Francis Carruthers [British artist]

John Bull **J: 133**

Gould, Glenn [Canadian pianist] **G: 280****Gould, Gordon** [American inventor]

Laser (History) **L: 86**

Gould, Jay [American businessman] **G: 280**

Black Friday **B: 387**

Fisk, James **F: 189**

Grant, Ulysses S. (Political corruption) **G: 315-316**

Knights of Labor **K: 352**

Labor movement (The first nationwide labor organizations) **L: 9-10**

Gould, Morton [American composer] **G: 280****Gould, Stephen Jay** [American naturalist]

G: 281

Essay (Formal essays) **E: 359**

Gounod, Charles [French composer] **G: 281**

Opera (*Faust*) **O: 804**

Gourd [botany] **G: 281 with pictures****Gourmet restaurant**

Restaurant (Kinds of restaurants) **R: 262**

Gout [disease] **G: 281**

Arthritis (Other forms of arthritis) **A: 752**

Gouty arthritis [disease]

Gout **G: 281**

Goux, Jules [American race driver]

Automobile racing (table: Indianapolis 500 winners) **A: 980**

Goverla, Mount [Ukraine] *See Mount Goverla in this index***Government G: 282 with pictures**

Capitalism (Protecting the public interest)
C: 194-195

Church and state **C: 542**

City (Government) **Ci: 590; (Political culture)**
Ci: 593

Colonial life in America (Government and law enforcement) **Ci: 794**

Flag (Kinds of flags) **F: 195; (Flags of the United States government)** *pictures on*
F: 211

Freedom of the press **F: 507**

Journalism (Restrictions on freedom of the press) **J: 173**

Metropolitan area (Problems of metropolitan areas) **M: 442**

Nationalization **N: 63**

Political science **P: 638**

Privatization **P: 808b**

State government **So: 862 with pictures**

Truck (Governmental uses) **T: 457**

World (Forms of government) **W: 408**

Diplomacy and foreign relations

Diplomacy **D: 216**

Foreign policy **F: 386**

International relations **I: 343**

Forms of government

Absolutism **A: 17**

Aristocracy **A: 662**

Authoritarianism **A: 941**

Autocracy **A: 942**

Communism **Ci: 889**

Democracy **D: 120 with picture**

Despotism **D: 161**

Fascism **F: 49**

Federalism **F: 66**

Monarchy **M: 700**

Nazism **N: 92**

Oligarchy **O: 742**

Police state **P: 626**

Provisional government **P: 840**

Republic **R: 253**

Theocracy **T: 251**

Totalitarianism **T: 343**

Organization

Citizenship **Ci: 568**

City planning **Ci: 598**

Country **Ci: 1097**

Government ownership **G: 293**

Government regulation **G: 293**

Law **L: 130**

Taxation **T: 52**

Voting **V: 449**

Theories and philosophies

Age of Reason (The orderliness of nature)

A: 139

Anarchism **A: 448**

Civil disobedience **Ci: 607**

Conservatism (Political conservatism)

Ci: 991

Liberalism (Early liberalism) **L: 228**

United States, History of the (The colonists and government) **U: 155; (Government and the people)** **U: 180**

See also the list of Related Articles in the Government article

Government, Commission of [1934]

Newfoundland and Labrador (Ruin and recovery) **N: 377**

Government bond

Savings bond **S: 166**

Government Center

Boston (Downtown Boston) **B: 496**

Government corporation

United States, Government of the (Executive departments and agencies) **U: 140**

Government Employees, American

Federation of *See American Federation of Government Employees in this index*

Government Employees, National**Association of**

Labor movement (table) **L: 8**

Government hospital

Hospital (Type of ownership) **H: 371**

Government House [Ottawa]

Ottawa (Rideau Hall) **O: 872**

Government in the Sunshine Act [1976]

Sunshine laws **So: 992**

Government library

Library (Government libraries) **L: 248 with picture**

Government National Mortgage Association

[U.S.] **G: 293**

Housing and Urban Development, Department of (Functions) **H: 393**

Government of India Act [1935]

India (New Constitution) **I: 132**

Government of Ireland Act [1920]

Ireland (The Irish Free State) **I: 427**

Irish Republican Army (Beginnings) **I: 433**

Northern Ireland (The division of Ireland)

N: 524

Government ownership **G: 293**

See also Nationalization in this index

Communism **Ci: 889**

Corporation (Other corporations) **Ci: 1070**

Public utility **P: 867**

Socialism **So: 560**

Government Printing Office [U.S.] **G: 293**

Washington, D.C. *map on W: 76*

Government regulation **G: 293**

Automobile (The growth of government regulation) **A: 971**

Business (Government regulation of business)
B: 726

City (Solving city problems) **Ci: 592**

Environmental pollution (Government action)

E: 335; (Weighing benefits and risks)

E: 339

Industry (Government regulation) **I: 260**

Nuclear energy (Government regulation)

N: 589

President of the United States (The independent agencies) **P: 764**

Public utility (Government regulation) **P: 867**

Railroad (Railroad systems) **R: 112-113**

Sales (Regulation of selling) **S: 64**

Television (Regulating U.S. television)

T: 118

Transportation (Government and transportation) **T: 396-397**

Truck (Regulation of trucks) **T: 458**

United States (Economy) **U: 128**

Government securities

Federal Reserve System (Organization) **F: 65**

Investment (Indirect investments) **I: 367**

Money (The role of the Federal Reserve System) **M: 716**

Government service *See Civil service in this index*

Governments, Census of

Census (United States censuses) **C: 346-347**

Governor [machine] **G: 293 with diagram**

Corliss, George Henry **Ci: 1055**

Gasoline engine (Fuel system) **G: 65**

Governor [office] **G: 294**

Address, Forms of (Officials of the United States) **A: 53**

Lieutenant governor **L: 273**

State government (Executive branch) **So: 862**

Veto (Governors' veto power) **V: 347**

See also the tables of governors in the state articles

Governor [penology]

Prison (The prison staff) **P: 806**

Governor general [office] **G: 294**

Address, Forms of (Officials of the Commonwealth of Nations) **A: 53**

Australia (The federal government) **A: 895**

Canada, Government of (The governor general) **C: 131; (How a bill becomes law in Canada)** **C: 134 with diagram; C: 130**

Flag *picture on F: 214*

Prime minister of Canada **P: 778c**

Supreme Court of Canada (Organization)

So: 996

Governor General's Literary Awards **G: 295****Governorate** [political unit]

Egypt (Local government) **E: 121**

Governors, Palace of the [Santa Fe]

New Mexico (Interesting facts) **N: 257 with picture**

Governors Island [New York]

New York City (Small islands) **N: 330**

Governors Island National Monument [New York]

National Park System (table: National monuments) **N: 51**

Gowda, Kempe [Indian ruler]

Bangalore **B: 76**

Gower, John [English poet]

English literature (The age of Chaucer) **E: 316**

Gowon, Yakubu [Nigerian political leader]

Nigeria (Civil war) **N: 418**

Goya, Francisco [Spanish painter] **G: 295 with picture**

Painting (Social expression) **P: 34;**

(Romanticism) **P: 68-69 with picture**

Realism (In painting) **R: 172**

Goyaele [American Indian chief] *See Geronimo in this index***Gozo** [island, Mediterranean]

Malta **M: 113 with map**

Gozzi, Carlo [Italian dramatist]

Drama (Italy) **D: 335**

Gozzoli, Benozzo [Italian painter]

Italy *picture on I: 514*

GP [medicine] *See General practitioner in this index***GPO** [organization] *See Government Printing Office in this index***GPS** [navigation] *See Global Positioning System in this index***Gracchi** [ancient Rome]

Gracchus, Tiberius Sempronius **G: 296**

Gracchus, Gaius Sempronius [Roman political leader] **G: 296**

Rome, Ancient (Breakdown of the republic)
R: 446

Gracchus, Tiberius Sempronius [163-133 B.C., Roman political leader] **G: 296**

Rome, Ancient (Breakdown of the republic)
R: 446

Grace [princess of Monaco] *See Kelly, Grace in this index***Grace** [religion] **G: 296**

Augustine, Saint (His beliefs) **A: 888**

Luther, Martin (Justification by faith) **L: 527-528**

Grace, Eugene Gifford [American businessman]

Bethlehem Steel Corporation **B: 275**

Graceland [estate, Memphis] **G: 296**

Memphis (The city) **M: 394**

Presley, Elvis P: 772
 Tennessee (Places to visit) T: 144 *with picture*
Graceland [recording]
 Simon, Paul S: 467
Graces [Greek mythology] G: 296 *with picture*
Gracioso [literature]
 Spanish literature (The 1600's) So: 759
Grackle [bird] G: 296 *with picture*
Grade [education]
 Grading G: 297
 Teaching (Checking student progress) T: 67
Grade [employment]
 Civil service (Federal civil service) Ci: 612
Grade [engineering]
 Road (Grading) R: 359
Grade [horse]
 Horse (table: Horse terms) H: 343
Grade [rank]
 Rank, Military R: 139
Grade A
 Dairying (Dairy farming regulations) D: 7-8
 Milk (At a dairy farm) M: 546-547
Grade school See *Elementary school in this index*
Grade separation
 Road (Primary highways) R: 358
Grading [education] G: 297
Grading [engineering]
 Road (Grading) R: 359 *with picture*
Grading [industry]
 Beef (Grades of beef) B: 209
 Cotton (Classing) Ci: 1091
 Lumber (Grading lumber) L: 519
 Meat (How to select meat) M: 347
 Rice (Grading) R: 327
 Wool (Processing of wool) W: 400
Gradualism [biology]
 Evolution (Main ideas of evolutionary theory) E: 426
Graduate [student]
 Universities and colleges (The student body) U: 208
Graduate, The [film]
 Nichols, Mike N: 403
Graduate school [education]
 Careers (Professional and graduate schools) C: 217
 Universities and colleges (Graduate study) U: 209
Graduated-payment mortgage [economics]
 Mortgage M: 821
Graduation [education] G: 297
 Caps and gowns C: 198 *with pictures*
 Rite of passage R: 350
Graduation Week [custom]
 United States Military Academy (The student body) U: 202
Gradus ad Parnassum [music by Clementi]
 Clementi, Muzio Ci: 662a
Grady, Henry Woodfin [American editor] G: 297
Graf, Steffi [German tennis player] G: 298
 Tennis (table: Wimbledon) T: 166; (Tennis today) T: 168-169 *with picture*
Graf Spee [ship] G: 298
Graf Zeppelin [airship]
 Airship (Between world wars) A: 252
 Ellsworth, Lincoln E: 244
Graffenried, Cristoph von [Swiss colonial leader]
 New Bern N: 179
Graffiti [drawings]
 Dubuffet, Jean D: 372
 Painting (Recent painting) P: 87-88
Graft [politics] G: 298
Graft-versus-host disease
 Bone marrow transplant B: 458
Grafting [botany] G: 298 *with pictures*
 Forestry (Tree improvement) F: 405
 Fruit (Growing fruit) F: 545
 Pear (How pears are grown) P: 215
 Plant (Grafting) P: 535 *with picture*
Grafting [medicine]
 See also *Skin grafting in this index*
 Plastic surgery (Methods of plastic surgery) P: 553
 Transplant (Tissue transplants) T: 379
Grafton, Duke of [British statesman]
 United Kingdom (table: British prime ministers) U: 72
Grafton, Sue [American author] G: 299 *with portrait*
Grafton Street [Dublin]

Ireland *picture on I*: 420
Graham, A. B. [American educator]
 4-H (History) F: 436
Graham, Billy [American religious leader]
 G: 300 *with picture*
 Evangelicalism E: 422
 Revivalism R: 269
Graham, Donald E. [American publisher]
 Graham, Katharine G: 300
Graham, Evarts [American doctor]
 Surgery (History) So: 1007
Graham, Horace F. [American political leader]
 Vermont (table) V: 333
Graham, Katharine [American businesswoman]
 G: 300 *with portrait*
Graham, Martha [American dancer] G: 300 *with picture*
 Dance (European and American theatrical dance) D: 31
 United States *picture on U*: 119
Graham, Robert D. [American political leader]
 Florida (table) F: 260
Graham, Sylvester [American minister]
 Health food (History) H: 129
Graham, William A. [American political leader]
 Fillmore, Millard (table) F: 102
 North Carolina (table) N: 490
 Pierce, Franklin (Election of 1852) P: 456
Graham Bell Island
 Franz Josef Land F: 494
Graham Island
 Queen Charlotte Islands Q: 39
Graham Land [peninsula]
 Antarctica (Early exploration) A: 535-536
Graham plaid
 Tartan *picture on T*: 47
Grahame, Gloria [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1952) M: 863
Grahame, Kenneth [British author] G: 301
 Shepard, Ernest Howard S: 396
Grail, Holy See *Holy Grail in this index*
Grain [book by Stead]
 Canadian literature (Literature between the world wars) C: 159-160
Grain [food] G: 301
 Demeter D: 119
 Farm and farming (Specialized crop farms) F: 30
 Food (Food from plants) F: 329
 Food supply (Cereal grains) F: 347; (Making farmland more productive) F: 349-350; (Reducing the demand for feed grain) F: 350
 Grass (Cereals) G: 326
 Livestock (Feed) L: 397
 Nutrition (Nutrition guidelines) N: 626
 Reaper R: 173
 Threshing machine T: 270
 Triticale T: 448
 Vegetarianism V: 295
Grain [fuel]
 Guided missile (The engine) G: 424
 Rocket (Solid-propellant rockets) R: 388 *with diagram*
Grain [metallurgy]
 Alloy (Characteristics of alloys) A: 377
Grain [photography]
 Photography (Graininess) P: 418
Grain [unit of measure]
 Apothecaries' weight A: 567
 Avoirdupois A: 994
Grain Coast
 Liberia (History) L: 231
Grain drill [machine]
 Oats (Growing oats) O: 641 *with picture*
Grain elevator [building] G: 301
 Buffalo (Economy) B: 677
 Wheat (Transporting and storing wheat) W: 273, *picture on W*: 275
Grain exchange [economics]
 Wheat (Buying and selling wheat) W: 274 *with picture*
Grain sorghum [plant] G: 302
 Sorghum (Grain sorghums) So: 596 *with picture*
 Sudan grass So: 956
Grain weevil [insect] G: 302 *with picture*
Grainger, Percy Aldridge [Australian-American composer] G: 302
Grainne [legendary figure]
 Mythology (The Irish cycles) M: 983-984

Gram [unit of measure] G: 302
 Metric system (Mechanics) M: 437; (The metric system at a glance) M: 438-439 *with picture*; (Creation of the metric system) M: 441
Gram, Hans C. J. [Danish bacteriologist]
 Antibiotic (Antibacterial antibiotics) A: 550
Gram-negative bacteria
 Antibiotic (Antibacterial antibiotics) A: 550
Gram-positive bacteria
 Antibiotic (Antibacterial antibiotics) A: 550
Grass [plant]
 Grass *picture on G*: 325
 Lawn (Planting the grass) L: 142-144
Gramm, Phil [American political leader] G: 302 *with portrait*
Gramm-Rudman-Hollings Act [1985]
 Gramm, Phil G: 303
Grammar [language] G: 303
 English language (Grammar) E: 312
 Language (Methods of study) L: 62
 Latin language (Grammar) L: 114
 Liberal arts L: 226
 Linguistics (Constructing a grammar) L: 335
 Parts of speech P: 189
 See also *specific language articles, such as French language, and the lists of Related articles in the Grammar and English language articles*
Grammar of Assent, The [book by Newman]
 Newman, John Henry N: 379
Grammar of Science [book by Pearson]
 Pearson, Karl P: 219
Grammar school [education]
 See also *Elementary school in this index*
 Education (The Renaissance) E: 100
 England (Education) E: 297
 United Kingdom (Education) U: 56
Grammatical structure
 Language (The makeup of language) L: 62
Grammatical transformation
 Linguistics (The generative theory of language) L: 337
Grammaticus [teacher]
 Education (Ancient Roman education) E: 98
Gramme, Zénobe Théophile [Belgian engineer]
 Electric motor (History) E: 181
Grammy Awards
 Recording industry (Recording industry awards) R: 182
Gramophone G: 304
 Phonograph (History) P: 401-402
Grampian Mountains [Scotland]
 Scotland (Land regions) S: 217 *with map*
Gran Chaco [region, South America] G: 304
 Argentina (Northern Argentina) A: 652 *with picture and map*
 Bolivia (Territorial losses) B: 447
 Latin America (Border disputes) L: 108
 Paraguay (The land and climate) P: 147
 South America So: 626
Gran Colombia [Latin American history]
 Bolívar, Simón (His victories) B: 441
 Colombia (Independence) Ci: 783
 Ecuador (Spanish rule) E: 73
Gran Paradiso National Park [Italy]
 National park (table) N: 42f
Gran Sabana, La [region, Venezuela]
 Angel Falls A: 460
Gran Sasso Tunnel [Italy]
 Tunnel (table) T: 491
Gran Via [street]
 Madrid (The city) M: 38 *with picture*
Grenade [city, Nicaragua] G: 304
Grenada [city, Spain] G: 304 *with picture and map*
 Alhambra A: 366
Grenada [Spanish history] G: 304 *with map*
 Isabella I: 461
Grenade, Luis de [Spanish author]
 Spanish literature (The 1500's) So: 758-759
Granadilla [plant] See *Passion-flower in this index*
Granary [agriculture]
 See also *Grain elevator in this index*
Granary of the Confederacy
 Virginia (The Civil War and Reconstruction) V: 421
Granary weevil [insect]
 Weevil W: 180
Grand [airplane]
 Airplane (Other pioneer planes and fliers)

- A:** 233-234, *picture on* **A:** 232
Grand Alliance [European history] **G:** 305
 Succession wars (The War of the Spanish Succession) **So:** 950
Grand Army of the Republic [organization] **G:** 305 *with picture*
 Memorial Day (History) **M:** 392
 Veterans' organizations (In the United States) **V:** 344
 Woman's Relief Corps, National **W:** 382
Grand Atlas Mountains [Africa]
 Atlas Mountains **A:** 869
Grand Avenue Mall [Milwaukee]
 Wisconsin *picture on* **W:** 347
Grand Bahama Island
 Bahamas **B:** 28 *with map*
Grand Banks [Newfoundland] **G:** 305 *with map*
 Cabot, John **C:** 8
 Newfoundland and Labrador (Plant and animal life) **N:** 372
Grand Canal [waterway, China]
 Canal (Major canals in other countries) **C:** 164, (History) **C:** 164; *picture on* **C:** 162
 China (Transportation) **C:** 498-499
 Sui dynasty **So:** 964
Grand Canal [waterway, Venice]
 Venice (The city) **V:** 306 *with map*
Grand Canyon [Arizona] **G:** 306 *with picture*
 See also Grand Canyon National Park in this index
 Arizona (Visitor's guide) **A:** 678; (Places to visit) **A:** 678 *with picture*
 Colorado River **Ci:** 849 *with map*
 Fossil (Tracing the development of life) **F:** 423 *with picture*
 Grand Canyon National Park **G:** 307 *with map*
 Seven Natural Wonders of the World (The Grand Canyon) **S:** 324 *with picture*
Grand Canyon National Park [Arizona] **G:** 307 *with map*
 National park (Changes in the environment) **N:** 42h
 National Park System (table: National parks) **N:** 48
Grand Canyon of the Yellowstone [region, Wyoming]
 National park *picture on* **N:** 42i
 Yellowstone National Park (The Lower Loop) **Y:** 558-559 *with map*
Grand Canyon State [name for]
 Arizona **A:** 670
Grand Canyon Suite, The [music by Grofé]
 Grofé, Ferde **G:** 397
Grand Cayman Island [Caribbean]
 Cayman Islands **C:** 323
Grand Central Station
 New York City (Transportation) **N:** 334-335
Grand Concourse [street]
 New York City (The Bronx) **N:** 328-329
Grand Coulee Dam [Columbia River, Washington] **G:** 308
 Columbia River (Hydroelectric power and irrigation) **Ci:** 852 *with map*
 Irrigation (Surface water) **I:** 456
 Washington (Places to visit) **W:** 56; *picture on* **W:** 64
Grand Design [European history]
 Peace (From the 1400's to the 1700's) **P:** 206
Grand Dictionnaire Universel du XIX^e siècle, Le [book by Larousse]
 Encyclopedia (Today's encyclopedias) **E:** 268b
Grand Dixence Dam [Dixence River, Switzerland]
 Dam (table) **D:** 18
Grand Falls [former name, Churchill Falls]
 Churchill River **C:** 550
Grand Falls [waterfall, New Brunswick]
 New Brunswick (Rivers and lakes) **N:** 192-193 *with picture*
 Saint John River **S:** 36
Grand fir [tree]
 Fir **F:** 120
Grand Forks [city, North Dakota]
 North Dakota (Late 1900's) **N:** 516
Grand Gallery
 Pyramids (The pyramids of Giza) **P:** 917
Grand Hotel [film]
 Motion picture (Best picture: 1931-32) **M:** 861
Grand Illusion [film]
 Motion picture (Movies in the 1930's) **M:** 868-869 *with picture*
 Renoir, Jean **R:** 240
Grand Island [island, New York]
 Niagara River (Description) **N:** 394
Grand Isle
 Louisiana (Places to visit) **L:** 488
Grand jeté [movement]
 Ballet (table) **B:** 45 *with picture*
Grand jury **G:** 308
 Court (How courts work) **Ci:** 1101
 Criminal justice system (Pretrial procedures) **Ci:** 1143
 Indictment **I:** 223
 Jury (Grand juries) **J:** 202
 Law enforcement (Trial) **L:** 141
Grand Kremlin Palace
 Moscow (Famous landmarks) **M:** 823-824 *with map*
Grand Lake [Colorado]
 Colorado (Rivers and lakes) **Ci:** 840
Grand Lake [New Brunswick]
 New Brunswick (Rivers and lakes) **N:** 192-193
Grand Lake [Newfoundland and Labrador]
 Newfoundland and Labrador (Rivers and lakes) **N:** 370-372 *with map*
Grand Lake [Nova Scotia]
 Nova Scotia (Rivers and lakes) **N:** 562-564
Grand larceny [crime]
 Larceny **L:** 75
Grand Lodge
 Masonry (Organization) **M:** 267
Grand Lodge of England
 Masonry (History) **M:** 267
Grand Loop [road]
 Yellowstone National Park (Touring Yellowstone) **Y:** 558
Grand mal seizure [disease]
 Epilepsy **E:** 343
Grand Master
 Masonry (Organization) **M:** 267
Grand Monarch, The See Louis XIV in this index
Grand Nain
 Banana **B:** 72
Grand National [race] **G:** 308
 Steeplechasing **So:** 883
Grand National Champion
 Motorcycle (Motorcycling as a sport) **M:** 879
Grand National Consolidated Trades Union [labor history]
 Owen, Robert (Cooperatives) **O:** 882-883
Grand National Party
 Korea (Politics) **K:** 367
Grand Old Party
 Republican Party **R:** 253
"Grand Ole Opry" [radio program] **G:** 308
 Country music (History) **Ci:** 1098a-1098b
 Nashville (Cultural life and recreation) **N:** 23
 Tennessee (Places to visit) **T:** 144 *with picture*
Grand opera [music]
 Opera (table) **O:** 791, (Grand opera) **O:** 798
Grand Palace [Bangkok]
 Bangkok (The city) **B:** 77
 Thailand *picture on* **T:** 221
Grand piano
 Piano (Grand pianos) **P:** 447 *with picture*
Grand' Place
 Belgium *picture on* **B:** 229
Grand Portage National Monument [Minnesota] **G:** 309
 Minnesota (Places to visit) **M:** 594
 National Park System (table: National monuments) **N:** 51
Grand Pré [Nova Scotia] **G:** 309
 Canada (table: National historic sites) **C:** 114
Grand Prismatic Spring
 Yellowstone National Park (The Lower Loop) **Y:** 558
Grand Prix [horse show]
 Horse (Jumping) **H:** 357
Grand Prix [race]
 Automobile racing (Formula One racing) **A:** 976, (Growth of organized automobile racing) **A:** 979-980
Grand Rapids [Michigan] **G:** 309
 Furniture (The furniture industry) **F:** 586
Grand River
 Lake O' The Cherokees **L:** 42 *with map*
 Michigan (Rivers, waterfalls, and lakes) **M:** 500
 South Dakota (Rivers and lakes) **So:** 676
Grand slam [bowling]
 Carter, Don **C:** 251
Grand slam [cards]
 Bridge (Bidding) **B:** 604
Grand slam [golf]
 Golf (Tournaments) **G:** 264
Grand slam [tennis]
 Laver, Rod **L:** 129
 Tennis (Tennis tournaments) **T:** 165
 Williams, Serena **W:** 311
Grand Slam [warfare]
 Bomb (History) **B:** 452
Grand Strand [northern coastline]
 South Carolina (Coastline) **So:** 652
Grand Terre [island, Pacific]
 New Caledonia **N:** 200
Grand Testament [poem by Villon]
 French literature (Lyric poetry) **F:** 518
Grand Teton [mountain, Wyoming]
 Grand Teton National Park **G:** 309
Grand Teton National Park [Wyoming] **G:** 309 *with picture*
 National Park System (table: National parks) **N:** 48
 Teton Range **T:** 183
 Wyoming **W:** 516, (Places to visit) **W:** 524
Grand Theatre [Quebec]
 Quebec (The arts) **Q:** 36
Grand Traverse Bay
 Lake Michigan (Surface features) **L:** 41
Grand Trianon [palace, Versailles]
 Trianon, Treaty of **T:** 439
 Versailles, Palace of **V:** 339
Grand Trunk Canal [England]
 Industrial Revolution (Waterways) **I:** 250
Grand Trunk Railway [Canada-U.S.]
 Canada, History of (Progress under Laurier) **C:** 148
Grand Turk [island, West Indies]
 Turks and Caicos Islands **T:** 514b
Grand unified theories [physics]
 Physics (Physics today) **P:** 443
 Proton **P:** 836
 Subatomic particle (Theoretical research) **So:** 938
Grand Union Flag
 Flag (First United States flags) **F:** 208-210 *with picture*
Grand Vizier [title]
 Vizier **V:** 433
Grand Wizard [office]
 Ku Klux Klan (Birth of the Klan) **K:** 389
Grande batterie
 Army (The rise of modern armies) **A:** 727-728
Grande Chartreuse, La [monastery, France]
 Carthusians **C:** 261
Grande Comore [island, Comoros]
 Comoros **Ci:** 899
Grande-Grève National Historic Site [Nova Scotia]
 Canada (table: National historic sites) **C:** 114
Grande Jatte, La [painting by Seurat] See Sunday Afternoon on the Island of La Grande Jatte in this index
Grande-Terre Island [West Indies]
 Guadeloupe **G:** 408
Grandes écoles
 France (Education) **F:** 460-461
Grandeur [psychology]
 Delusion **D:** 118
Grandfather clause [U.S. history] **G:** 310
 Fifteenth Amendment **F:** 95
Grandfather clock
 Colonial life in America (Furnishings) **Ci:** 797-798
Grandfather Mountain
 North Carolina (Places to visit) **N:** 482 *with picture*
Grandiflora [plant]
 Rose **R:** 477
Grandissimes, The [book by Cable]
 Cable, George Washington **C:** 7
Grandma Moses See Moses, Grandma in this index
Grandparent
 Family (Family relationships) **F:** 21
GrandPré, Mary [American artist]
 Literature for children *picture on* **L:** 377
Grands Ballets Canadiens, Les
 Ballet (Ballet in Canada) **B:** 54
 Canada (Ballet and opera) **C:** 111
Grange, Harold See Grange, Red in this index
Grange, National [organization] **G:** 310
 Cooperative (History) **Ci:** 1038
 Rural delivery **R:** 521
 United States, History of the (Early reform

- efforts) U: 181
- Grange, Red** [American football player] G: 310
Football (The rise of professional football)
F: 366-367 *with picture*
- Granger, Francis** [American government official]
Harrison, William Henry (table) H: 76
Tyler, John (table) T: 534
- Granger cases** [U.S.] G: 311
Waite, Morrison Remick W: 6
- Granit, Ragnar** [Swedish physiologist]
Nobel Prizes (Physiology or medicine: 1967)
N: 445
- Granite** [rock] G: 311
Building stone B: 685
Earth *picture on* E: 21
Igneous rock I: 48
Mineral *picture on* M: 566
Ocean (How the sea floor was formed) O: 662
Rhode Island (Natural resources) R: 309
Rock (table) R: 373 *with picture*; (Metamorphic rock) R: 372-373
Vermont (Places to visit) V: 326; (Mining)
V: 332 *with picture*
- Granite moss**
Moss M: 834 *with picture*
- Granite Mountains**
Wyoming (Land regions) W: 526
- Granite Peak** [mountain]
Montana (Land regions) M: 752
Rocky Mountains (Chief ranges of the Rockies) R: 395
- Granite Plateau** [region, Austria]
Austria (Land regions) A: 934
- Granite State** [nickname]
New Hampshire N: 208
- Granma** [newspaper]
Cuba (Transportation and communication)
Ci: 1175
- Granny knot**
Knots, hitches, and splices (Useful knots)
K: 356 *with diagram*
- Granny Smith**
Apple (table) A: 571 *with picture*
- Granovitaya Palace**
Kremlin K: 387
- Grant**
Fellowship F: 69
Ford Foundation (Programs) F: 382
Foundations (Arts and humanities) F: 431
Revenue sharing R: 266
Scholarship S: 178
- Grant, Cary** [American actor] G: 311 *with portrait*
Motion picture (Movies in the 1930's) M: 868
with picture
- Grant, George Monro** [Canadian educator]
G: 311
- Grant, Hiram Ulysses** [given name]
Grant, Ulysses S. (Boyhood) G: 312;
(Education) G: 313
- Grant, James B.** [American political leader]
Colorado (table) Ci: 844
- Grant, Julia Dent** [wife of Ulysses S. Grant]
First ladies (table) F: 142
Grant, Ulysses S. *picture on* G: 314
- Grant, Kathryn** [American actress]
Crosby, Bing Ci: 1155
- Grant, Lee** [American actress]
Motion picture (Best performance by an actress in a supporting role: 1975) M: 863
- Grant, Richard** [American settler]
Montana (The cattle industry) M: 758
- Grant, Ulysses S.** [U.S. President] G: 312 *with pictures*
Army, United States (The Civil War [1861-1865]) A: 738
Black Friday B: 387
Civil War (Battles of Fort Henry and Fort Donelson) Ci: 629; (Siege of Vicksburg) Ci: 630; (The final year—1864-1865) Ci: 631 *with picture*
Illinois (Places to visit) I: 62
Kentucky (The Civil War) K: 293
Lee, Robert Edward (Final engagements) L: 178
Liberal Republican Party L: 227
Lincoln, Abraham (Building the army) L: 321-322
Republican Party (The Radical Republicans and Reconstruction) R: 254
Saint Louis (Places to visit) S: 49
Sheridan, Philip Henry S: 396
Sherman, William Tecumseh S: 397
United States, History of the (Government and the people) U: 180-181
Whiskey Ring W: 282
- Grant, Ulysses Simpson, Jr.** [son of]
Grant, Ulysses S. (Later years) G: 317
- Grent & Ward** [bank]
Grant, Ulysses S. (Later years) G: 317
- Grant Grove**
Kings Canyon National Park K: 330
- Grant-in-aid**
City government (City finances) Ci: 597
Government (Relationships among public governments) G: 288
State government (State finances) So: 865
- Grant-Kohrs Ranch National Historic Site** [Montana]
National Park System (table: National historic sites) N: 52-53
- Grant-maintained school**
Charter school C: 386
- Grant Park**
Chicago (Downtown Chicago) C: 420-421;
(Cultural life and places to visit) C: 428
- Grant's gazelle**
Gazelle G: 74
- Grant's tomb** [New York City]
Grant, Ulysses S. *picture on* G: 318
- Granulation** [chemistry]
Honey (Kinds of honey) H: 314
- Granule** [sun]
Sun (Zones of the sun) So: 979-980
- Granulomatous colitis** See Crohn's disease in this index
- Granville-Barker, Harley** [British author] G: 319
Shakespeare, William (Modern critics) S: 369
- Granville Island** [Vancouver]
British Columbia (Places to visit) B: 620
- Grape** [fruit] G: 319 *with pictures*
France (Agriculture) F: 469
Italy (Agriculture) I: 511 *with picture*
Phylloxera P: 431 *with picture*
Portugal *picture on* P: 692
Raisin R: 130
Wine W: 336 *with picture*
- Grape phylloxera** [insect]
Grape (Diseases and pests) G: 320
- Grape sugar**
Glucose G: 236
- Grapefruit** G: 320 *with pictures*
Tangelo T: 26
- Grapes of Wrath, The** [book by Steinbeck]
American literature (Realist fiction) A: 422; *picture on* A: 416
Dust Bowl D: 391
Steinbeck, John So: 885
- Grapes of Wrath, The** [film]
Ford, John F: 381
- Grapevine**
Raisin (Growing grapes) R: 130
- Graph** [mathematics] G: 321 *with pictures*
Computer graphics (In science) Ci: 924f
Geometry (Analytic geometry) G: 104-105
with diagram
- Grapheme** [linguistics]
Reading (Phonics instruction) R: 159
- Graphic arts** G: 322
Industrial arts (Industrial arts courses) I: 242-243
See also the list of Related Articles in the Graphic arts article
- Graphic Communications International Union**
Labor movement (table) L: 8
- Graphic design**
Careers *picture on* C: 220
Desktop publishing D: 158 *with picture*
Map (Planning and graphic design) M: 180
Publishing (Designing and printing) P: 869
- Graphical user interface** [computing]
Computer (A mouse) Ci: 912-914
Computerized instruction (The personal computer) Ci: 925
World Wide Web W: 500
- Graphics, Computer** See Computer graphics in this index
- Graphics co-processor** [electronics]
Computer (Personal computers) Ci: 909
- Graphics file** [computing]
Computer (Storage devices) Ci: 915
Newspaper (Making up the pages) N: 383
- Graphite** [mineral] G: 323
Carbon (Forms of carbon) C: 205 *with diagram*
- Charcoal C: 377
Interstellar medium I: 352
Mineral *picture on* M: 568
Pencil P: 236
Powder metallurgy P: 725
- Graphology** [writing] G: 323
- Grapnel**
Anchor A: 449 *with picture*
- Grason, William** [American political leader]
Maryland (table) M: 255
- Grass** [nickname]
Marijuana M: 201
- Grass** [plant] G: 324 *with pictures*
Artificial turf A: 761
Bluegrass B: 423
Dog (Why dogs do the things they do) D: 263
with picture
Lawn L: 142 *with pictures*
Plant (Grasslands) P: 525; (Roots) P: 529 *with picture*; *pictures on* P: 519, P: 527
See also the list of Related articles in the Grass article
- Grass, Günter** [German author] G: 326
German literature (German literature after 1945) G: 142
Nobel Prizes (Literature: 1999) N: 446
Novel (The novel today) N: 575
- Grass carp** [fish]
Carp C: 245 *with picture*
- Grass frog**
Frog *picture on* F: 537
- Grass Is Blue, The** [recording]
Parton, Dolly P: 188
- Grass Is Singing, The** [book by Lessing]
Lessing, Doris L: 208
- Grass Lake**
Illinois (Rivers and lakes) I: 64-66
- Grass line**
Baseball (The outfield) B: 126
- Grass pickerel** [fish]
Fish *picture on* F: 159
Pickerel P: 450
Pike P: 461
- Grass skirt**
Hawaii (Growth of constitutional government) H: 106-108
- Grass spider**
Spider (table) So: 790
- Grass tree** [plant]
Australia *picture on* A: 916
- Grasse, Comte de** [French admiral] See De Grasse, François Joseph Paul in this index
- Grasshopper** [insect] G: 327 *with pictures*
Insect (Muscular system) I: 289 *with diagram*; (Hearing) I: 290-291; *pictures on* I: 280, I: 286
Katydid K: 249
Metamorphosis (Other examples) M: 429
- Grasshopper Glacier** [Montana]
Montana (Interesting facts) M: 743
- Grasshopper mouse**
Mouse (Grasshopper mice) M: 902; *picture on* M: 901
- Grassland** [geography] G: 329 *with picture*
Africa (Deserts, grasslands, and forests) A: 120
Animal (Animals of the grasslands) A: 476
with pictures and map
Biome (table) B: 323 *with map*
Colorado *picture on* Ci: 841
Forestry (Grazing land) F: 406
Llanos L: 402
Pampa P: 113
Plant (Grasslands) P: 525; *picture on* P: 527
Prairie P: 730 *with picture and map*
Savanna S: 164 *with picture*
Steppe So: 891
- Grasslands National Park** [Saskatchewan]
Canada (table: National parks and national park reserves) C: 113
- Grasso, Ella Tambussi** [American political leader] G: 329 *with portrait*
Connecticut (table) Ci: 967
- Grassy buttercup** [plant]
Buttercup B: 731
- Grate** [cooking]
Cooking (table) Ci: 1029
- Gateau, Marcel** [French hairdresser]
Hairdressing (The 1800's) H: 12
- Grateful Dead** [musical group] G: 329 *with picture*
Rock music (Growing social significance)

- R: 379; (New directions and old) R: 380
- Gratian** [Roman emperor]
Rome, Ancient (table) R: 447
Theodosius I T: 252
- Graticule** [map]
Map (Geographic grids) M: 178; *diagram on* M: 180
- Grating**
Diffraction (Uses of diffraction) D: 201
Spectrometer So: 772
- Grating cheese**
Cheese (Kinds of cheese) C: 392 *with pictures*
- Grattan, Henry** [Irish political leader] G: 330
Ireland (Union with Britain) I: 426
- Grau, Raul Cubes** [Paraguayan political leader]
Paraguay (Stroessner's rule and overthrow) P: 150
- Grau San Martin, Ramón** [Cuban government official]
Cuba (History) Ci: 1175-1177
- Graupel** [weather]
Rain (The ice-crystal process) R: 124
Snow (How snow forms) S: 539
- Grave Creek Mound** [Ohio]
Mound builders (The Adena culture) M: 881
- Grave goods** [sculpture]
Indian, American (Indians of the Southeast) I: 157-158
Sculpture (Later Indian sculpture) S: 243
- Gravel** [rock] G: 330
- Gravenhage, 's** See Hague, The *in this index*
- Graves, Abner** [friend of Doubleday]
Baseball (The Abner Doubleday Theory) B: 132
- Graves, Bibb** [American political leader]
Alabama (table) A: 274
- Graves, Bill** [American political leader]
Kansas (table) K: 234
- Graves, Earl G.** [American publisher]
Spingarn Medal (table: 1999) So: 793
- Graves, Michael** [American architect] G: 330 *with picture*
Architecture *picture on* A: 633
- Graves, Morris** [American painter] G: 330 *with picture*
- Graves, Richard** [American colonial businessman]
Pewter (History) P: 352-353
- Graves, Robert** [British author] G: 331
- Graves' disease** G: 331
Immune system (Organ-specific autoimmune diseases) I: 88c
Thyroid gland (Overactive thyroid) T: 275
- Gravestone** [sculpture by Collins]
Sculpture (American sculpture) S: 255 *with picture*
- Graveyard of the Atlantic**
Cape Hatteras C: 188
North Carolina N: 472
Nova Scotia N: 554
Sable Island S: 3
- Gravimeter** [instrument]
Petroleum (Geophysical studies) P: 336
Prospecting P: 829
- Graving dock** [shipping]
Dry dock D: 369
- Gravitation** [physics] G: 331 *with diagrams*
Airplane (Gravity and lift) A: 220 *with diagram*
Antigravity A: 555
Black hole B: 388
Boson B: 494
Ear (The response to gravity) E: 11
Earth (Earth's size and shape) E: 18
Falling bodies, Law of F: 17 *with diagrams*
Force (Kinds of force) F: 370; [physics] G: 2
Gravity, Center of G: 333
Hawking, Stephen William H: 113
Kepler, Johannes K: 305
Mars (Gravitational force) M: 225
Mass (Mass and weight) M: 268
Moon M: 782
Newton, Sir Isaac (The theories of motion and gravitation) N: 388
Physics (Newton) P: 439; (Einstein and relativity) P: 441-442
Relativity (General relativity) R: 211
Satellite (Formation of satellites) S: 150
Satellite, Artificial (Satellite orbits) S: 150d
Space exploration (Getting into space and back) So: 698; (Microgravity) So: 701
Star (Fusion in stars) So: 846
String theory So: 929
Subatomic particle (Fundamental forces)
- So: 936; (Theories of forces) So: 937-938
Tide T: 280 *with diagrams*
Weight W: 180
See also the list of Related Articles in the Gravitation article
- Gravitational constant** [physics]
Force (Gravitation) F: 370; [physics] G: 2
- Gravitational force** [physics]
Quantum field theory Q: 5
- Gravitational lensing** [physics]
Astronomy (Radio astronomy) A: 843-844; *diagram on* A: 841
- Gravitational mass** [physics]
Relativity (General relativity) R: 211-212
- Gravitational observatory**
Observatory (Gravitational observatories) O: 645
- Gravitational wave** [physics]
Astronomy (Gravitational-wave astronomy) A: 845
Gravitation (Predictions of general relativity) G: 332
Observatory (Gravitational observatories) O: 645
Physics (Einstein and relativity) P: 441-442
Relativity (Gravitational waves) R: 212
- Gravitational-wave astronomy**
Astronomy (Gravitational-wave astronomy) A: 845
- Gravitometer**
Pipeline (How pipelines work) P: 491
- Graviton** [physics]
Boson B: 494
Subatomic particle (Elementary particles) So: 937
- Gravitropism** See Geotropism *in this index*
- Gravity** See Gravitation *in this index*
- Gravity, Center of** [physics] G: 333 *with diagram*
Archimedes (His discoveries) A: 605
- Gravity, Specific** [physics]
Density D: 143
Galileo (Early scientific interests) G: 11
Gem (Specific gravity) G: 77
Water (The properties of water) W: 129-130
- Gravity dam**
Dam (Masonry dams) D: 17
- Gravity meter** See Gravimeter *in this index*
- Gravity weapon**
Bomb B: 450
- Gravity's Rainbow** [book by Pynchon]
American literature (Experimental styles) A: 424
Pynchon, Thomas P: 915
- Gravure** [printing]
Magazine (Editing and assembling an issue) M: 43
Photoengraving and photolithography P: 405; (Plates and cylinders for gravure printing) P: 407
Printing (Recess printing) P: 800 *with diagram*
- Gravure cylinder** [printing]
Photoengraving and photolithography (Plates and cylinders for gravure printing) P: 407
Printing (Recess printing) P: 800 *with diagram*
- Gravure plate** [printing]
Photoengraving and photolithography (Plates and cylinders for gravure printing) P: 407
- Gravure screen**
Printing (Gravure cylinders) P: 800
- Gray**
Color *diagram on* Ci: 822
- Gray** [unit of measurement]
Radiation (Dose) R: 79
- Gray, Asa** [American botanist] G: 333
- Gray, Cordelia** [fictional character]
James, P. D. J: 27
- Gray, Elisha** [American inventor] G: 334
Telephone (The Bell System) T: 100
- Gray, Elizabeth Janet** [American author]
Newbery Medal (table) N: 359
- Gray, Horace** [American jurist]
Supreme Court of the United States (table) So: 1000
- Gray, Isaac P.** [American political leader]
Indiana (table) I: 214
- Gray, Colonel John Hamilton** [1812-1887, Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935 *with picture*
- Gray, John Hamilton** [1814-1889, Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935 *with picture*
- Gray, Louis H.** [British biologist]
Radiation (Dose) R: 79
- Gray, Robert** [American explorer] G: 334
Washington (Discovery and exploration) W: 66
- Gray, Simon** [British dramatist] G: 334
- Gray, Thomas** [British poet] G: 334 *with pictures*
- Gray, Thomas R.** [American lawyer]
Turner, Nat T: 518
- Gray, William H.** [American religious leader]
Whitman, Marcus W: 293
- Gray birch** [tree]
Birch (Gray birch) B: 327
- Gray catbird** [bird]
Catbird C: 299
- Gray Eagle**
Speaker, Tris So: 768
- Gray fox**
Fox F: 438 *with picture*; (Dens) F: 440; (Kinds of foxes) F: 440
- Gray friars** [religious group]
Friar F: 532
- Gray ghost** [dog]
Weimaraner W: 188
- Gray goods** [fabric] See Gray-state cloth *in this index*
- Gray jay** [bird]
Jay J: 66
- Gray kangaroo**
Kangaroo K: 213
- Gray limestone** [rock]
Limestone L: 307 *with picture*
- Gray market** [economics]
Black market B: 389
- Gray matter** [anatomy]
Brain (Brain cells) B: 551-552
Nervous system (The axon) N: 133-134
- Gray Panthers** [organization] G: 335
Old age (Employment and other activities) O: 739
- Gray parrot** [bird]
Parrot (Kinds of parrots) P: 179
- Gray squirrel**
Animal *picture on* A: 478
Invasive species (How invasive species affect habitats) I: 354j
Squirrel (Types of squirrels) So: 815 *with picture*
- Gray-state cloth**
Cotton (Spinning) Ci: 1091
- Gray whale** G: 335
Animal *picture on* A: 491
Whale (Gray whales) W: 255; *picture on* W: 256
- Gray wolf**
Wildlife conservation (Vulnerable species) W: 304
Wolf W: 375
- Graybeard** [plant] See Spanish moss *in this index*
- Graylag goose**
Goose G: 270; (Kinds of geese) G: 270
- Grayling** [fish] G: 335 *with picture*
- Gray's Inn** [London]
Inns of Court I: 276
- Graz** [Austria] G: 335
- Graziano, Rocky** [American boxer]
Boxing (The golden age of U.S. boxing) B: 533-534
- Grazing**
Farm and farming (Livestock grazing) F: 40 *with picture*
Ranching (Life on a cattle ranch) R: 134
- Grazing incidence**
Telescope (Ultraviolet telescopes) T: 108 *with picture*
- Grazing incidence angle** [physics]
X rays (Penetrating power) X: 541
- Grazing land**
Conservation (Conservation of grazing lands) Ci: 981 *with picture*
Soil (Soil conservation) So: 576
- Grease** [cooking]
Cooking (table) Ci: 1029
- Grease** [musical]
Musical comedy (During the late 1900's) M: 960
Travolta, John T: 406
- Greasewood** [shrub] G: 335
Creosote bush Ci: 1127 *with picture*

Greasy spot [plant disease]

Orange (Pests and diseases) O: 815

Great Abaco IslandBahamas (Land and climate) B: 29 *with map***Great age of European exploration**

Exploration (The great age of European exploration) E: 442

Great American Desert [nickname, Great Plains]

Westward movement in America (Exploration) W: 248

Great American Fraud, The [book by Adams]

Adams, Samuel Hopkins A: 44

Great American Tea Company

Chain store C: 369

Hartford, George Huntington H: 79

Great ape [animal]

Primate (Anthropoids) P: 778; (Conservation) P: 778c

Great Apes, The [book by Yerkes]

Yerkes, Robert Mearns Y: 565

Great Artesian Basin

Australia (Underground water) A: 911

Great Atlantic and Pacific Tea Company

Chain store C: 369

Hartford, George Huntington H: 79

Great auk [extinct bird]Auk A: 890 *with picture*Bird (Extinct birds) B: 369-370 *with picture***Great Awakening** [U.S. history] G: 335Colonial life in America (Religion) Ci: 804-805 *with picture*

Edwards, Jonathan E: 114

Revivalism R: 268

Tennent, Gilbert T: 133

Great Baltimore Fire [1904]

Baltimore (The 1900's) B: 70

Great barracuda [fish]

Barracuda B: 117

Fish F: 153

Great Barrier Reef [Australia] G: 336 *with picture*Australia (The Great Barrier Reef) A: 911 *with picture*Coral reef (Kinds of coral reefs) Ci: 1048a *with picture*

Queensland Q: 39

Seven Natural Wonders of the World (The Great Barrier Reef) S: 324b *with picture***Great Barrier Reef Marine Park** [Australia]National park (Australia) N: 42b *with picture*; (table) N: 42f**Great Barrier Reef Marine Park Authority** [Australia]

Great Barrier Reef G: 336

Great Basin [region, U.S.] G: 336 *with map*Indian, American (Indians of the Great Basin) I: 164 *with picture and map*United States (The Western Plateaus, Basins, and Ranges) U: 125 *with picture***Great Basin bristlecone pine** [tree]Bristlecone pine B: 610 *with pictures***Great Basin National Park** [Nevada] G: 336 *with picture*

National Park System (table: National parks) N: 48

Great Bear [constellation]

Big and Little Dippers (The Big Dipper) B: 296

Great Bear Lake [Northwest Territories] G: 336 *with map*

Lake (table) L: 34

Great black-backed gull [bird]Gull (Their homes) G: 439 *with picture***Great blue heron**Heron (American herons) H: 214; *picture on* H: 213Bird (Birds of inland waters and marshes) B: 340 *with picture***Great blue touraco** [bird]

Touraco T: 346

Great Bridge, Battle of [1775]

Revolutionary War in America (Fighting in the Southern Colonies) R: 275

Great Britain [island] G: 337*See also* United Kingdom *in this index*United Kingdom U: 48; (The land) U: 58 *with map***Great Britain** [ship]

Brunel, Isambard Kingdom B: 651

Ship (Development of the ship propeller) S: 412-413 *with picture***Great Britain and Northern Ireland, United**Kingdom of *See* United Kingdom *in this index***Great Buddha** [sculpture]Japan (Sculpture) J: 43 *with picture***Great Buddha, Hall of the** [temple]*Temple picture on* T: 131**Great Charter** *See* Magna Carta *in this index***Great circle** [geometry]

Geometry (Non-Euclidean geometry) G: 104

Sphere So: 780 *with diagram*Trigonometry (Spherical trigonometry) T: 444 *with diagram***Great-circle route** [geography] G: 338 *with maps*

Globe G: 233

Great City of Tenochtitlan [painting by Rivera]Indian, American *picture on* I: 136**Great Code: The Bible and Literature, The** [book by Frye]

Frye, Northrop F: 549

Great Comet [astronomy]

Comet (table) Ci: 868

Great Compromise [U.S. history]

Congress of the United States (The founding of Congress) Ci: 947

Connecticut (Statehood) Ci: 970

Constitution of the United States (The compromises) Ci: 1000-1001

Franklin, Benjamin (The twilight years) F: 491

New Jersey (The Revolutionary War) N: 250-251

Sherman, Roger S: 397

Great Council [English history]

Parliament (History) P: 174

Great crested flycatcher [bird]

Yellowhammer Y: 557

Great Dane [dog] G: 338 *with picture***Great Dark Spot** [astronomy]

Planet (Neptune) P: 511

Great Decisions [seminar]

Foreign Policy Association F: 387

Great Depression [1929-1942] G: 338 *with pictures*

African Americans (The Great Depression) A: 136l

Automobile (The hard times of the 1930's) A: 968

Baby boom generation (Causes of the baby boom) B: 11

Bank (The crisis of 1933) B: 93

Birmingham (History) B: 376

Canada, History of (The Great Depression) C: 150 *with picture*

Capitalism (Changing attitudes toward capitalism) C: 195

Chicago (Ending a century of progress) C: 436

Conservation (The rise of the conservation movement) Ci: 985-986

Deflation D: 88

Democratic Party (The New Deal) D: 127

Depression (Effects on society) D: 150 *with picture*

Family (Changes) F: 23

Hispanic Americans (Immigration restrictions and growing discrimination) H: 252

Homelessness (History) H: 302

Hoover, Herbert Clark (The Great Depression) H: 329

Hopkins, Harry Lloyd H: 333

Kansas (The Great Depression) K: 238

Kentucky (The early 1900's) K: 293-294

Lange, Dorothea L: 60 *with picture*

Michigan (Depression and recovery) M: 509

Minnesota (The early 1900's) M: 604-606

Motion picture (Movies in the 1930's) M: 868

New Deal N: 200

New Zealand (The Great Depression) N: 355

Railroad (The 1920's and the Great Depression) R: 118

Roaring Twenties (The end of an era) R: 364

Roosevelt, Franklin Delano (Roosevelt's first administration) R: 456

Saskatchewan (The Great Depression) S: 147

United States, Government of the (The rise of big government) U: 146

United States, History of the (The Great Depression) U: 188 *with pictures*

Washington, D.C. (Continued growth) W: 87

Welfare (The Great Depression) W: 191

Welfare state W: 192

Works Progress Administration W: 405

World War II (Economic problems) W: 469

Great Dictator, The [film]

Chaplin, Charlie C: 377

Great Dismal Swamp National Wildlife Refuge

Dismal Swamp D: 235

Great Dissenter [name for]

Holmes, Oliver Wendell, Jr. (Supreme Court justice) H: 295

Great Divide [geography] G: 343

Colorado (Land regions) Ci: 838

Continental divide Ci: 1022

North America (Rivers) N: 464

Rocky Mountains R: 394

Wyoming (Land regions) W: 526

Great Divide, The [play by Moody]

Moody, William Vaughn M: 781

Great Dividing Range [region, Australia]Australia (Land regions) A: 908 *with picture and map*

Queensland (Location, size, and surface features) Q: 39

Great Eastern [ship]

Brunel, Isambard Kingdom B: 651

Ship (Ships of iron) S: 412 *with picture***Great Egg Harbor Scenic and Recreational River** [New Jersey]

National Park System (table: National parkways and other national parklands) N: 56

Great egret [bird]Egret (Kinds) E: 119 *with picture***Great Elector**

Frederick William F: 497

"Great Elegy for John Donne" [poem by Brodsky]

Brodsky, Joseph B: 635

Great Ennead [Egyptian mythology]

Mythology (The Great Ennead) M: 976

Great Escarpment [region]South Africa (The Plateau) So: 614 *with map***Great Exhibition of 1851** [London]Architecture (The Industrial Revolution) A: 625 *with picture*

Shelter (The Industrial Revolution) S: 394

Victoria and Albert Museum V: 358

World's fair W: 500

Great Expectations [book by Dickens]

Dickens, Charles (The second phase) D: 188

Great Exuma IslandBahamas (Land and climate) B: 29 *with map***Great Fall** [waterfall, Guyana]Guyana (Land) G: 446 *with map***Great Falls** [city, Montana] G: 343

Montana (Interesting facts) M: 743; (table: Average monthly weather) M: 754

Great Falls [falls, Guyana]

Guyana (Land) G: 446

Great Falls Historic District

Paterson P: 195

Great Fire of London *See* London Fire *in this index***Great Flood** [Biblical history] *See* Deluge *in this index***Great Fountain Geyser**

Yellowstone National Park (The Lower Loop) Y: 558

Great Gatsby, The [book by Fitzgerald]

American literature (The Lost Generation) A: 421

Fitzgerald, F. Scott F: 190

Novel (New directions in the novel) N: 573-574

Great Go-Between, The [play by Echegaray]

Spanish literature (The 1800's) So: 761

Great God Brown, The [play by O'Neill]

O'Neill, Eugene Gladstone (His plays) O: 762

Great-grandparent

Family (Family relationships) F: 21

Great grey owl

Owl O: 883

Great hall [castle]Castle (Life in a castle) C: 281 *with picture***Great Hall** [temple]

Egypt, Ancient (Religion) E: 137

Great Highway, The [play by Strindberg]

Strindberg, August So: 929

Great horned owlOwl (Important owls) O: 884 *with picture***Great Hunger, The** [poem by Kavanagh]

Irish literature (Fiction and poetry) I: 432-433

Great Inagua IslandBahamas (Land and climate) B: 29 *with map***Great Irish Famine** [1845-1848] G: 343 *with picture*

Ireland (The potato famine) I: 426 *with picture*
 Mildew M: 542
 Potato (History) P: 713
Great Lakes [Canada-U.S.] G: 344 *with map*
 Canada (Rivers, waterfalls, and lakes) C: 118;
 (Waterways and ports) C: 126
 Environmental pollution (Progress in control-
 ling pollution) E: 338
 Inland waterway (Great Lakes-St. Lawrence
 Seaway System) I: 274
 Lake (Travel and trade routes) L: 34
 Lake Erie L: 37 *with map*
 Lake Huron L: 38 *with map*
 Lake Michigan L: 40 *with map*
 Lake Ontario L: 43 *with map*
 Lake Superior L: 45 *with map*
 Lamprey (Destructiveness) L: 55
 North America (Lakes) N: 464
 Ruffe R: 509
 Saint Lawrence River S: 41
 Saint Lawrence Seaway S: 42 *with picture and*
map
 Zebra mussel Z: 591 *with picture*
See also the list of Related Articles in the
Great Lakes article
Great Lakes Aquarium [Duluth]
 Minnesota (Places to visit) M: 594
Great Lakes Lowland
 Ontario (Land regions) O: 776
Great Lakes Naval Training Center [Illinois]
 G: 346
Great Lakes of South Dakota
 South Dakota (Places to visit) So: 672; (The
 mid-1900's) So: 684
Great Lakes-Saint Lawrence Basin
Agreement [1941]
 Saint Lawrence Seaway (Agreements of 1941
 and 1954) S: 45
Great Lakes-Saint Lawrence Seaway *See*
Saint Lawrence Seaway in this index
Great Lakes Science Center [Cleveland]
 Cleveland (Museums and libraries) Ci: 666
Great Lakes Water Quality Agreement [1972]
 Environmental pollution (Progress in control-
 ling pollution) E: 338
 Great Lakes (Water quality) G: 346
Great laurel [shrub]
 Rhododendron R: 318 *with picture*
Great Leap Forward [Chinese history]
 China (The Great Leap Forward) C: 505
 Mao Zedong (His leadership) M: 175
Great Mahele [Hawaiian history]
 Hawaii (Growth of constitutional government)
 H: 106
Great McGinty, The [film]
 Sturges, Preston So: 934
Great Meadows, Battle of the [1754]
 Fort Duquesne F: 412
Great Migration, The [book by Lawrence]
 Literature for children *picture on* L: 359
Great Moravian Empire [European history]
 Czechoslovakia (Early history) Ci: 1215
 Slavs S: 505
 Slovakia (Early days) S: 508d
Great Mosque [Saudi Arabia]
 Islam (The Five Pillars of Islam) I: 463-464
with picture
 Kaaba K: 208
 Mecca (The city) M: 352 *with picture*
 Saudi Arabia *picture on* S: 154
Great Mughals, Kingdom of the
 Mongol Empire M: 721
Great National Pike
 National Road N: 60
Great Nebula in Andromeda [galaxy] *See*
Andromeda Galaxy in this index
Great Nebula of Orion
 Nebula *picture on* N: 116
 Orion O: 856
Great northern diver [bird]
 Loon L: 452
Great Northern Peninsula
 Newfoundland and Labrador (Land regions)
 N: 370 *with map*
Great Northern Railway
 Hill, James Jerome H: 231
Great Northern War [1700-1721]
 Charles XII C: 382
 Denmark (Wars with Sweden) D: 140
 Finland (Swedish rule) F: 116
Great Palace [Petrodvorets]
 Russia (Architecture) R: 536

Great Peace [U.S. history] *See* Iroquois League
in this index
Great Persecution [Roman history]
 Diocletian D: 214
Great Plains [region, North America] G: 346
with map
 Colorado (Land regions) Ci: 838 *with map*
 Dust Bowl D: 391 *with picture*
 Indian, American (Indians of the Plains) I: 158
with pictures
 Indian Territory I: 189
 North America (Agriculture) N: 468 *with pic-
 ture*
 Pioneer life in America (Crossing the Plains)
 P: 485
 United States (The Interior Plains) U: 124
 United States, History of the (America moves
 west) U: 166
 Western frontier life in America (Building the
 frontier) W: 232-233
 Westward movement in America (Settling the
 Great Plains) W: 250
Great Purge [Soviet history]
 Communism (Under Stalin) Ci: 892-893
 Russia (Stalin) R: 553
 Saint Petersburg [Russia] (History) S: 55
 Stalin, Joseph (Rule by terror) So: 826-827
 Union of Soviet Socialist Republics (Stalin's
 policies) U: 36-37
Great Purification Ceremony [religion]
 Shinto S: 401
Great purple hairstreak [insect]
 Butterfly (Blues, coppers, and hairstreaks)
 B: 734 *with picture*
Great Pyramid [Egypt]
 Egypt, Ancient (Arts and sciences) E: 139
 Pyramids (The pyramids of Giza) P: 917 *with*
picture; diagram on P: 919
Great Pyrenees [dog] G: 347
 Dog *picture on* D: 267
Great Railway Bazaar, The [book by Theroux]
 Theroux, Paul T: 257
Great Red Spot [astronomy]
 Jupiter (The atmosphere) J: 198 *with picture*
 Planet *picture on* P: 510
Great Republic [ship]
 Clipper ship Ci: 682i *with picture*
 McKay, Donald M: 337
 Ship (Clipper ships) S: 410-411
Great rhododendron [shrub]
 Rhododendron R: 318 *with picture*
Great Rift Valley [Africa-Asia] G: 347
 Ethiopia (The Ethiopian Plateau) E: 370
 Israel I: 482 *with picture*
 Kenya (The highland) K: 301
 Malawi (Land) M: 97
 Red Sea R: 189
 Rwanda (Land) R: 571
 Tanzania (Land and climate) T: 32
 Uganda (Land) U: 3
Great Rotunda
 Washington, D.C. *picture on* W: 72
Great Saint Bernard Hospice [shelter]
 Saint Bernard Passes (Great St. Bernard) S: 32
with picture
Great Saint Bernard Pass [Switzerland]
 Alps (Chief ranges of the Alps) A: 385
 Saint Bernard Passes (Great St. Bernard) S: 32
Great Saint Bernard Tunnel [Switzerland]
 Alps (Alpine travel) A: 386
 Switzerland (Transportation) So: 1058
Great Salt Lake [Utah] G: 347 *with maps*
 Salt Lake City S: 76
 United States (The Western Plateaus, Basins,
 and Ranges) U: 125
 Utah (Interesting facts) U: 231; (Places to visit)
 U: 238 *with picture*; (Land regions)
 U: 240; (Rivers and lakes) U: 242
Great Salt Lake City
 Salt Lake City (History) S: 76a
Great Salt Lake Desert [region, Utah] G: 348
 Utah (Land regions) U: 240; (Deserts) U: 242
Great Salt Water
 Chesapeake Bay C: 411
Great Sand Dunes National Monument
 [Colorado] G: 348
 Colorado (Interesting facts) Ci: 829 *with pic-
 ture*
 National Park System (table: National monu-
 ments) N: 51
Great Sand Dunes National Preserve
 [Colorado]

National Park System (table: National pre-
 serves) N: 58
Great Sandy Desert [Australia]
 Australia (Deserts) A: 910 *with map*
 Australian Desert A: 927
Great Schism [1378-1417]
See also Schism *in this index*
 Church and state (The Middle Ages) C: 542
 John XIII [antipope] J: 132
 Pope (The troubles of the papacy) P: 664
 Roman Catholic Church (The Great Schism)
 R: 408
 Sigismund S: 453
 Urban VI U: 219
Great Seal of the United States [emblem]
 G: 348
 E Pluribus Unum E: 3
 Flag (The colors) F: 210
 United States, Government of the *picture on*
 U: 137
Great September Comet [astronomy]
 Comet (table) Ci: 868
Great Serpent Mound [Ohio]
 Mound builders (Other mound builders)
 M: 883 *with picture*
 Ohio (Places to visit) O: 690 *with picture*
Great shearwater [bird]
 Shearwater S: 379
Great Siberian Railroad
 Trans-Siberian Railroad T: 401
Great Silk Road [trade route] *See* Silk Road *in*
this index
Great Silla dynasty
 Martial arts (Korean martial arts) M: 234
Great Sioux Reservation
 South Dakota (Territorial days) So: 681
Great Slave Lake [Northwest Territories] G: 348
with map
 Hearne, Samuel H: 131
Great Smoky Mountains [North Carolina-
 Tennessee] G: 348 *with picture*
 Clingmans Dome Ci: 681
 Tennessee *picture on* T: 134
Great Smoky Mountains National Park [North
 Carolina-Tennessee] G: 349
 National Park System (table: National parks)
 N: 48 *with picture*
 Tennessee (Places to visit) T: 144 *with picture*
Great Socialist People's Libyan Arab
Jamahiriya [official name]
 Libya L: 264
Great Society [U.S. history] G: 349
 Johnson, Lyndon Baines (The Great Society)
 J: 150
 Democratic Party (The Great Society) D: 128
Great Sphinx [Giza, Egypt]
 Egypt, Ancient (Painting and sculpture) E: 139
 Sphinx (Egyptian sphinxes) So: 780 *with pic-
 ture*
Great spirit [religion]
 Indian, American (Beliefs) I: 147
Great Star Cloud in Sagittarius [astronomy]
 Milky Way (The center of the galaxy) M: 551
Great Star Flag [U.S. history]
 Flag (Changes in the United States flag)
 F: 214; *picture on* F: 209
Great Stone Face [White Mountains]
 New Hampshire (Places to visit) N: 216
 White Mountains W: 291
"Great Stone Face, The" [character]
 Keaton, Buster K: 253
"Great Stone Face, The" [story by Hawthorne]
 White Mountains W: 291
Great Sun [ruler]
 Indian, American (Indians of the Southeast)
 I: 157
Great Swamp Fight [1675]
 Rhode Island (King Philip's War) R: 312-313
Great-tailed grackle [bird]
 Grackle G: 297
Great Theater of the World, The [play by
 Calderón de la Barca]
 Spanish literature (The 1600's) So: 759-760
Great tit [bird]
 Titmouse T: 302
Great Train Robbery, The [film]
 Motion picture (Early motion pictures) M: 864
with picture
 Westerns W: 242
Great Trek [South African history]
 Afrikaners A: 137
 South Africa (British rule) So: 618

Great Valley [region, California]
California (Land regions) C: 48

Great Valley [region, U.S.]
Appalachian Mountains (Physical features) A: 567
Pennsylvania (The Appalachian Ridge and Valley Region) P: 256
United States (The Appalachian Highlands) U: 120-121
Virginia (Land regions) V: 410

Great vehicle [religion]
Buddhism (The Mahayana) B: 669

Great vessels [anatomy]
Heart (Blood vessels) H: 135

Great Victoria Desert [region, Australia] G: 349
Australia (Deserts) A: 910 *with map*

Great Wall [astronomy]
Galaxy (Groups of galaxies) G: 8a

Great Wall of China G: 349
Asia (The Huang He and Yangtze valleys) A: 805
China (The early empire) C: 501 *with picture*
Shi Huangdi S: 399
World, History of the *picture on W*: 431

Great Western [ship]
Brunel, Isambard Kingdom B: 651
Ship (Ships of iron) S: 412

Great Western Railroad [Canada]
Hamilton (History) H: 31-32

Great wheel [machine]
Spinning (Early spinning wheels) So: 794

Great White Fleet [U.S. history]
Navy, United States ("The Great White Fleet") N: 88
Roosevelt, Theodore (Friction with Japan) R: 471

Great white heron [bird]
Heron (American herons) H: 214

Great white shark *See* White shark *in this index*

Great World and Timothy Colt, The [book by Auchincloss]
Auchincloss, Louis A: 880

Great Wrath [Finnish history]
Finland (Swedish rule) F: 116

Great Ziegfeld, The [film]
Motion picture (Best picture: 1936) M: 861

Great Zimbabwe [ancient city]
Zimbabwe (History) Z: 597

Greater Antilles [islands, West Indies]
West Indies W: 200

Greater bird-of-paradise
Bird-of-paradise B: 374 *with picture*

Greater Columbus Arts Festival
Columbus (Cultural life and recreation) Ci: 855

Greater East Asia Co-Prosperity Sphere [Japanese history]
World War II (Propaganda) W: 493

Greater glider [animal]
Glider [animal] G: 231

Greater kudu [animal]
Antelope *picture on A*: 543

Greater London
London (Greater London) L: 428; *map on L*: 429

Greater London Authority [government]
London (The Greater London Authority) L: 439;
(Recent developments) L: 443

Greater Los Angeles [area]
Los Angeles (Metropolitan area) L: 462 *with map*

Greater New Orleans Bridge [Louisiana]
Bridge (table: Cantilever) B: 603

Greater prairie-chicken
Prairie-chicken P: 731

Greater scaup [bird]
Duck *picture on D*: 375

Greater Sudbury [city, Ontario] G: 350

Greater Sunda Islands
Indonesia (The Greater Sunda Islands) I: 233 *with map*

Greater Swiss mountain dog G: 350 *with picture*

Greater Syria
Syria (History) So: 1074

Greater Texas and Pan American Exposition [1937]
Texas (The early 1900's) T: 207-208

Greatest common factor [mathematics]
Factor (Common factors) F: 4

Greatest Show on Earth [circus]
Barnum, P. T. B: 115

Circus (History) Ci: 562-563

Greatest Show on Earth, The [film]
De Mille, Cecil Blount D: 119
Motion picture (Best picture: 1952) M: 861

Greave [armor]
Armor (In early times) A: 720; *picture on A*: 720

Greb, Harry [American boxer]
Boxing (The golden age of U.S. boxing) B: 533-534
Tunney, Gene T: 492

Grebe [bird] G: 351
Bird (Birds of inland waters and marshes) B: 340 *with picture*; (How birds move) B: 350-352; (In the water) B: 354; *picture on B*: 357

Grebel, Conrad [Swiss religious leader]
Reformation (Zwingli and the Anabaptists) R: 197-198

Gréber, Jacques [French architect]
Ottawa (The 1900's) O: 875

Gréboun, Mount [mountain, Niger]
Niger (Land and climate) N: 408-409

Grecian Archipelago
Aegean Sea A: 84 *with map*

Grecian stock [plant]
Stock So: 902

Greco, El [Spanish painter] G: 351 *with picture*
Art and the arts (The aesthetic experience) A: 745-746 *with picture*
Greece (Arts) G: 356
Philosophy *picture on P*: 388
Resurrection *picture on R*: 263

Greco-Roman Age
Greek literature (The Greco-Roman Age) G: 378

Greco-Roman wrestling
Wrestling (Chief forms of wrestling) W: 505

Greece G: 352 *with pictures and maps*
Balkans (The First Balkan War) B: 42; (The Second Balkan War) B: 42
Cold War (The Containment Policy) Ci: 763
Cyprus Ci: 1205
Euro E: 378
Macedonia [country] (History) M: 12a
Otto I O: 876
Philip, Prince P: 371
Standard of living (table) So: 834
World War II (table: The Allies) W: 471
See also the list of Related Articles in the Greece article

Greece, Ancient G: 366 *with pictures and maps*
Armor (In early times) A: 720; *picture on A*: 720
Bell (History) B: 239
Book (Early books) B: 465
Boxing (Ancient times) B: 532
Classicism (Greece) Ci: 653
Communication (During ancient times) Ci: 879 *with picture*
Doll (Ancient times) D: 288; *picture on D*: 289
Europe (Ancient Greece) E: 408
Family (Ancient families) F: 21-22
Golden Age G: 255
Hellenistic Age H: 177
Mental illness (Early attitudes) M: 408
Money *picture on M*: 706
Olympiad O: 746
Textile (Prehistoric and ancient times) T: 218

Art and architecture
Greece, Ancient (The arts) G: 369-372 *with pictures*
Acropolis A: 29
Architecture (Classical Greek architecture) A: 615 *with pictures*
Column (The Greek orders) Ci: 865 *with pictures*
Geometric style G: 101
Jewelry (Early jewelry) J: 117
Lyre L: 537
Painting (Greek painting) P: 42 *with picture*; (Roman painting) P: 42
Pottery *picture on P*: 717
Ring *picture on R*: 342
Sculpture (The importance of sculpture) S: 228 *with picture*; (As part of architecture) S: 229; (Greek sculpture) S: 245 *with pictures*
Sphinx (The Greek sphinx) So: 781 *with picture*

Education
Greece, Ancient (Education) G: 367

Atomism A: 877
Education (Ancient Greek education) E: 97-98
Physical education (Early history) P: 433
Zoo (History) Z: 608

Government
Greece, Ancient (Government) G: 372
Democracy (Origins of democracy) D: 122
Freedom (In ancient Greece and Rome) F: 502
Government (Ancient times) G: 290
Law (The influence of ancient Greece) L: 133
Peace (Ancient Greece and Rome) P: 206

Health and welfare
Public health (History) P: 857

History
Greece, Ancient (History) G: 372-374 *with pictures and maps*
Army (Ancient armies) A: 726
Barbarian B: 104
Citizenship (History) Ci: 572
Exploration (The Greeks) E: 441
History (The ancient Greeks and Romans) H: 261
Library (Ancient libraries of papyrus) L: 258
Marathon M: 191
Navy (Ancient navies) N: 79
Philosophy (Ancient philosophy) P: 386-387
Rome, Ancient (Expansion overseas) R: 445-446
Slavery S: 501
Women's movements (In ancient societies) W: 384
World, History of the (The Greeks) W: 428 *with picture*

Language and literature
See Greek language; Greek literature *in this index*

Parks and monuments
Park (History) P: 168-169

Recreation and sports
Olympic Games O: 746; (The ancient games) O: 750 *with picture*

Religion
Greece, Ancient (Religion) G: 367
Butterfly B: 732
Helen of Troy H: 168
Mythology (Greek mythology) M: 978 *with pictures*
Poetry (Ancient poetry) P: 595-596

Social and cultural life
Greece, Ancient (Life of the people) G: 367 *with picture*
Bed (History) B: 197-198
Classical music (Early music) Ci: 645
Clothing (Ancient times) Ci: 696-697 *with pictures*
Cremation Ci: 1126
Food (Ancient times) F: 336
Furniture (Ancient Greece) F: 570 *with picture*
Gymnasium G: 447
Hairdressing (Ancient times) H: 11 *with picture*
Homosexuality (Attitudes toward homosexuality) H: 307
Shelter (Ancient times) S: 393

Technology and science
Greece, Ancient (Science) G: 369
Anatomy A: 448b
Aqueduct (Ancient aqueducts) A: 581
Astronomy (History) A: 846-847
Drug (Drugs in ancient times) D: 358
Electricity (Early discoveries) E: 196
Fraction (History) F: 450
Geology (The ancient Greeks) G: 97
Heart (Early beliefs about the heart) H: 143
Invention (Ancient Greece) I: 358
Map (Ancient maps) M: 181
Mathematics (The Greeks) M: 306
Medicine (Greece and Rome) M: 372 *with picture*
Moon (Ancient ideas) M: 791-792
Numeration systems (The Greek numeral system) N: 607
Physics (The Greeks) P: 438
Science (Ancient Greece) S: 196 *with picture*
Screw (History) S: 226
Ship (Phoenician and Greek ships) S: 405 *with pictures*

- Transportation (Ancient Greece) T: 387
Transportation
 See also the list of Related Articles in the
 Greece, Ancient article
- Greece Expiring on the Ruins of Missolonghi**
 [painting by Delacroix]
 Greece picture on G: 362
- Greek alphabet**
 Greek language (Alphabet) G: 376
 Alphabet pictures on A: 383
- Greek Anthology, The** [poems]
 Masters, Edgar Lee M: 297
- Greek architecture** See Greece, Ancient in this
 index
- Greek art** See Greece, Ancient in this index
- Greek cross**
 Architecture (Later Renaissance architecture)
 A: 621
 Cross Ci: 1155 with picture
 Saint Peter's Basilica (History) S: 53-54
- Greek Cypriots** [people]
 Makarios III M: 95
- Greek drama**
 Drama (Greek drama) D: 326 with pictures
- Greek fire** [chemistry] G: 376
- Greek games** [sports]
 Isthmian Games I: 492
- Greek gods** See Greek mythology in this index
- Greek language** G: 376
 Alphabet (The Greeks) A: 383 with pictures
 Language (Indo-European) L: 64
 Linguistics (Comparative reconstruction)
 L: 336; (Comparative and historical
 research) L: 337
 New Testament (Writing the New Testament)
 N: 287
 Old Testament (Translations) O: 741
- Greek-letter society** [organization] See
 Fraternity; Sorority in this index
- Greek literature** G: 377
 Biography (Early biographies) B: 312
 Drama (Greek drama) D: 326 with pictures
 Fable F: 3
 Mask (Theatrical masks) M: 265
 Novel (Ancient Greek and Roman narratives)
 N: 572
 Romance R: 414
 See also the list of Related Articles in the
 Greek literature article
- Greek Macedonia** [department, Greece]
 Macedonia [historic region] M: 11 with map
- Greek mythology**
 Mythology M: 973; (Greek mythology) M: 978
 with pictures; (Roman mythology) M: 981
 See also the list of Related Articles in the
 Mythology article
- Greek numerals**
 Numeration systems (The Greek numeral sys-
 tem) N: 607
- Greek Orthodox Archdiocese of North and
 South America** [religious group] G: 379
- Greek Orthodox Church** [religious group]
 Bible (Books of the Hebrew Bible) B: 279-280
 Eastern Orthodox Churches E: 45
 Greece (Religion) G: 356 with picture
 Greek Orthodox Archdiocese of North and
 South America G: 379
- Greek Orthodox Church of the Annunciation**
 Milwaukee (Annual events and places of inter-
 est) M: 561
- Greek Passion, The** [book by Kazantzakis]
 Kazantzakis, Nikos K: 252
- Greek philosophy**
 Philosophy (Ancient philosophy) P: 386-387
- Greek process**
 Olive (Harvesting and preparation for market)
 O: 743-744
- Greek Revival style** [architecture]
 Architecture (The Greek Revival) A: 625
 House picture on H: 381
 Latrobe, Benjamin Henry L: 117
- Greek Slave** [sculpture by Powers]
 Powers, Hiram P: 728
- Greek tragedy**
 Drama (Tragedy) D: 326
 Europe picture on E: 393
 Greek literature (Drama) G: 377
 Tragedy T: 368
- Greek War of Independence** [1821-1829]
 Greece (Independence) G: 362
- Greeks** [people]
 Greece (Population) G: 353
- Greece, Ancient (The people) G: 367
- Greeley, Horace** [American publisher] G: 379
 with portrait
- Colorado (Territorial days) Ci: 845
- Davis, Jefferson (Leader of the Confederacy)
 D: 48
- Grant, Ulysses S. (Election of 1872) G: 316-
 317
- Journalism (The growth of U.S. newspapers)
 J: 174
- Liberal Republican Party L: 227
- Lincoln, Abraham (Second inauguration)
 L: 324-325
- Nast, Thomas N: 25
- Green**
 Color (Mixing colorants) Ci: 819-820 with dia-
 grams
- Green** [sports]
 Golf (The green) G: 261 with diagram
 Lawn bowling L: 144
- Green, Bartholomew** [Canadian printer]
 Printing (Early printing in North America)
 P: 803
- Green, Dwight H.** [American political leader]
 Illinois (table) I: 71
- Green, Ernest** [American social reformer]
 Spingarn Medal (table: 1958) So: 793
- Green, Fred W.** [American political leader]
 Michigan (table) M: 507
- Green, Nehemiah** [American political leader]
 Kansas (table) K: 234
- Green, Paul Eliot** [American dramatist] G: 379
- Green, Robert S.** [American political leader]
 New Jersey (table) N: 249
- Green, Samuel** [American doctor]
 Ku Klux Klan (Mid-1900's) K: 390
- Green, Samuel** [American printer]
 Almanac picture on A: 379
- Green, Theodore Francis** [American political
 leader] G: 379
 Rhode Island (table) R: 311
- Green, Warren** [American political leader]
 South Dakota (table) So: 680
- Green, William** [American labor leader] G: 380
 Congress of Industrial Organizations Ci: 941
 Labor movement (Reunification of the AFL
 and the CIO) L: 13
- Green algae**
 Algae (Green algae) A: 349 with picture
 Seaweed (Kinds) S: 276 with picture
- Green almond** [nut]
 Pistachio nut P: 497
- Green aracari** [bird]
 Toucan picture on T: 345
- Green-backed heron**
 Bird (Birds of inland waters and marshes)
 B: 340 with picture
 Heron (American herons) H: 214 with picture
- Green Benk Telescope** [West Virginia] G: 380
 with picture
 National Radio Astronomy Observatory N: 59
 Observatory (Ground-based observatories)
 O: 644-645
 Telescope (Types of radio telescopes) T: 106-
 107
 West Virginia picture on W: 227
- Green Bay** [city, Wisconsin] G: 380
- Green-Bay Intelligencer** [newspaper]
 Wisconsin (Communication) W: 364
- Green Bay Packers**
 Football (National Football League) F: 364
 Lombardi, Vince L: 427
 Wisconsin picture on W: 350
- Green Belt**
 London (Outlying areas) L: 430; (Rebuilding)
 L: 442
- Green Belt**
 Moscow (Layout of Moscow) M: 823, map on
 M: 824
- Green Berets** [army unit] See Special Forces in
 this index
- Green chain** [machine]
 Lumber (Grading lumber) L: 519
- Green corn dance**
 Indian, American (Ceremonies) I: 148; (Before
 European contact) I: 157-158
- Green Gables House**
 Prince Edward Island (Places to visit) P: 788
 with picture
- Green Henry** [book by Keller]
 Keller, Gottfried K: 255
- Green Hills of Africa** [book by Hemingway]
- Hemingway, Ernest (Rise to fame) H: 180
- Green House, The** [book by Vargas Llosa]
 Vargas Llosa, Mario V: 285
- Green iguana**
 Iguana I: 50 with picture
- Green jay** [bird]
 Jay J: 67 with picture
- Green Knight** [legend]
 Round Table (The knights of the Round Table)
 R: 491
- Green lumber** [wood]
 Lumber (Sawing logs) L: 519
- Green manure**
 Fertilizer (Organic fertilizers) F: 79
 Legume L: 185
 Manure M: 172
- Green moray eel**
 Fish picture on F: 155
- Green Mountain Boys** [U.S. history] G: 380
 Allen, Ethan A: 371
 Vermont (Land disputes) V: 334; (The
 Revolutionary War in America) V: 334, pic-
 ture on V: 335
 Warner, Seth W: 36
- Green Mountain National Forest**
 Vermont (Places to visit) V: 326
- Green Mountains** [Vermont] G: 380
 Vermont (Land regions) V: 328; picture on
 V: 318
- Green olive** [fruit]
 Olive (Harvesting and preparation for market)
 O: 743-744
- Green onion**
 Onion (Cultivation) O: 763 with picture
- Green party** [political party] G: 381
 Environmental pollution (Environmental organi-
 zations) E: 338
- Green Party** [Germany]
 Germany (Politics) G: 147; (West Germany)
 G: 170
 Green party G: 381
- Green Party** [United States]
 Green party G: 381
 Nader, Ralph N: 2
- Green pasta** [food]
 Pasta P: 192
- Green Pastures, The** [play by Connelly]
 Bradford, Roark B: 545
 Connelly, Marc Ci: 972
- Green pepper** [plant]
 Pepper P: 278 with picture
- Green Revolution** [agriculture]
 Agriculture (Plant and livestock breeding)
 A: 159
 Borlaug, Norman Ernest B: 488
 Food supply (Making farmland more produc-
 tive) F: 349 with picture
 India (Agriculture) I: 125
 Population (Effects) P: 674
 Wheat (Breeding new varieties of wheat)
 W: 277
- Green River** [Utah-Wyoming]
 Utah (Rivers and lakes) U: 242, picture on
 U: 240
 Wyoming (Rivers and lakes) W: 528; (The mid-
 1900's) W: 536
- Green Room**
 White House (Public rooms) W: 286-290 with
 pictures
- Green sand** [manufacturing]
 Cast and casting (Types of molds) C: 278
- Green shell bean** [plant]
 Bean (Kinds of beans) B: 181
- Green snake**
 Snake picture on S: 532
- Green-tailed towhee** [bird]
 Towhee T: 349
- Green tea**
 Tea (Processing tea) T: 62
- Green tree python** [snake]
 Snake picture on S: 525
- Green turtle**
 Turtle T: 520 with picture; (Young) T: 521,
 (Turtles and human beings) T: 523-524
- Green Water, Green Sky** [book by Gallant]
 Gallant, Mavis G: 13
- Green-winged teal** [bird]
 Teal T: 71
- Green woodpecker**
 Woodpecker picture on W: 394
- Greenaway, Kate** [British artist] G: 381
 Literature for children picture on L: 361

- Valentine's Day (Commercial valentines)
V: 264 *with picture*; *picture on* V: 262
- Greenback** [money] G: 381
Hayes, Rutherford Birchard (Money problems)
H: 121
Money (The rebirth of paper money) M: 709
with picture
- Greenback Party** [U.S. history] G: 381
Cooper, Peter C.: 1035
Political party (Third parties) P: 636
- Greenbelt** [area]
Conservation (Urban conservation) Ci: 984
- Greenbelt** [Maryland]
Washington, D.C. (Metropolitan area) W: 80-81
- Greenbelt Park** [Maryland]
National Park System (table: National park-ways and other national parklands) N: 56
- Greenberg, Hank** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Greenbottle** [insect]
Blow fly B: 419
Fly (The body of a fly) F: 309 *with picture*
- Greenbrier** [plant] G: 381
Smilax S: 515
- Greene, Catherine Littlefield** [American social reformer]
Whitney, Eli (Early life) W: 295
- Greene, Freddie** [American musician]
Basie, Count B: 140
- Greene, Graham** [British author] G: 381
English literature (Fiction between the wars)
E: 322
Novel (After World War II) N: 574
- Greene, John** [American colonial leader]
Rhode Island (Settlement) R: 312
- Greene, Nathanael** [American general] G: 382
Greensboro G: 386
Revolutionary War in America (Cowpens and Guilford Courthouse) R: 285
Rhode Island (Places to visit) R: 304
South Carolina (The Revolutionary War)
So: 659
- Greene, Robert** [English author] G: 382
Drama (Elizabethan playwrights) D: 331-332
Shakespeare, William (First recognition) S: 347
- Greene, William** [American political leader]
Rhode Island (table) R: 311
- Greene's Groatworth of Wit Bought with a Million of Repentance** [pamphlet by Greene]
Greene, Robert G: 382
Shakespeare, William (First recognition) S: 347
- Greenfield, Herbert** [Canadian political leader]
Alberta (table) A: 328
- Greenfield Village** [Dearborn, Michigan]
Dearborn D: 60
Detroit (Other interesting places to visit)
D: 170
Edison, Thomas Alva (Honors) E: 82; *picture on* E: 81
Ford, Henry (Political and charitable activities)
F: 380
Michigan (Museums) M: 493; (Places to visit)
M: 498 *with picture*
- Greengard, Paul** [American neurobiologist]
Nobel Prizes (Physiology or medicine: 2000)
N: 445
- Greenglass, David** [American public figure]
Rosenberg, Julius and Ethel R: 481
- Greenhalge, Frederic T.** [American political leader]
Massachusetts (table) M: 288
- Greenhand** [rank]
FFA (Degrees) F: 85
- Greenhouse** [gardening] G: 382
Floriculture F: 241
Industry *picture on* I: 256
- Greenhouse effect** [physics] G: 382
Air pollution (Atmosphere) A: 199
Animal (Pollution) A: 504
Biodiversity (Protecting biodiversity) B: 311
Conservation (International problems) Ci: 990
Earth (The atmosphere) E: 18-19
Energy supply (Environmental effects) E: 281
Environmental pollution (Air pollution) E: 331
Forest (Deforestation) F: 398-399
Global warming (Causes of global warming)
G: 232
Greenhouse G: 382
Marine biology (Biological oceanographers)
M: 205
- National park (Changes in the environment)
N: 42h
Ocean (Climate change) O: 665
Pacific Ocean (Scientific research) P: 15-17
Paleobotany P: 102
Planet (Venus) P: 511
Remote sensing R: 231
Venus (Temperature) V: 312
Weather (Air temperature) W: 157
- Greenhouse gas**
Global warming (Causes of global warming)
G: 232
Greenhouse effect G: 382
- Greenhouse range** [agriculture]
Greenhouse G: 382
- Greenhouse whitefly** [insect]
Whitefly W: 293
- Greenland** [province, Denmark] G: 383 *with pictures and map*
Climate (Glaciers) Ci: 679 *with picture*
Denmark D: 132; (Postwar years) D: 141
Eric the Red E: 350
Ice age (Evidence of ice ages and their climates) I: 6-7
Iceberg (North Atlantic icebergs) I: 17
Inuit I: 354 *with map*; (History) I: 354g; (The Inuit today) I: 354h-354i
Peary, Robert Edwin (Arctic expeditions)
P: 224
See also the list of Related Articles in the Greenland article
- Greenland National Park** [Greenland]
National park (table) N: 42g
- Greenland right whale** [mammal] *See*
Bowhead whale *in this index*
- Greenland shark** [fish]
Dogfish D: 284
- Greenland Standard Time**
Time *map on* T: 289
- Greenlandic** [language]
Greenland (People) G: 384
- Greenly, William L.** [American political leader]
Michigan (table) M: 507
- Greenough, Horatio** [American sculptor] G: 386
Sculpture (American sculpture) S: 255 *with picture*
- Greenpeace** [organization] G: 386
New Zealand (International tensions) N: 356
- Greensand** [mineral]
Glaucinite G: 226
- Greensboro** [North Carolina] G: 386
- Greenspan, Alan** [American government official] G: 386
- Greenstick fracture**
Fracture F: 451 *with diagram*
- Greenup, Christopher** [American political leader]
Kentucky (table) K: 290
- Greenup Locks** [Ohio River]
West Virginia *picture on* W: 222
- Greenville** [South Carolina]
South Carolina (Population) So: 644
- Greenville, Treaty of** [1795]
Indian wars *picture on* I: 192
Northwest Territory (Settlement) N: 535
Westward movement in America (Indian conflicts) W: 247 *with picture*
- Greenway, John Campbell** [American engineer] G: 386
- Greenway, Thomas** [Canadian political leader]
Manitoba (table) M: 159
- Greenwich** [London]
London (Other places of interest) L: 437
- Greenwich Civil Time** *See* Greenwich Mean Time *in this index*
- Greenwich Hospital** [England]
Wren, Sir Christopher W: 504 *with picture*
- Greenwich Mean Time**
Time (Worldwide time zones) T: 292
- Greenwich Meridian** [geography] G: 386
International Date Line I: 339
London (Other places of interest) L: 437
Longitude (Longitude and location) L: 451
Map (Geographic grids) M: 178-179
Time (Worldwide time zones) T: 292; *map on* T: 291
- Greenwich Observatory, Royal** [England]
G: 387
Greenwich Meridian G: 386
- Greenwich Tea Burning** [U.S. history]
New Jersey (The Revolutionary War) N: 250
- Greenwich Village** [district]
New York City (Manhattan) N: 323-324; (A visitor's guide) N: 338
- Greenwood, Chester**
Maine M: 69 *with picture*
- Greenwood field** [region, Colorado-Kansas]
Helium (Production) H: 176
- Greer, Germaine** [Australian author] G: 387
- Greeting**
Address, Forms of A: 53
Salute S: 76b
- Greeting cards** G: 387
Valentine's Day V: 261 *with pictures*
- Grefe, John** [American chess player]
Chess (United States chess champions)
C: 414
- Gregg, Hugh** [American political leader]
New Hampshire (table) N: 223
- Gregg, John Robert** [Irish-American educator]
G: 387
Shorthand (Gregg shorthand) S: 435
- Gregg, Judd Alan** [American political leader]
New Hampshire (table) N: 223
- Gregg system**
Gregg, John Robert G: 387
Shorthand (Gregg shorthand) S: 435 *with diagrams*
- Gregg v. Georgia** [U.S. history]
Supreme Court of the United States (Criminal law) So: 1001; (table) So: 1002
- Gregoire, Paul Cardinal** [Canadian religious leader] G: 387
- Gregor, William** [English scientist]
Titanium (Discovery and manufacture) T: 300
- Gregori, Johann** [German author]
Russian literature (Western influences)
R: 559
- Gregorian calendar** G: 387
Calendar (Some calendars today) C: 29; (The Gregorian calendar) C: 31
Julian calendar J: 187
Month M: 767
- Gregorian chant** [music]
Classical music (The Middle Ages) Ci: 645
Song So: 592
- Gregorius** [poem by Hartmann von Aue]
Hartmann von Aue H: 79
- Gregory** [antipope]
Pope (table) P: 666
- Gregory I, Saint** [pope] G: 387
Christianity (The Middle Ages) C: 526
Classical music (The Middle Ages) Ci: 645
Pope (The early Middle Ages) P: 663 *with picture*
- Gregory III, Saint** [pope]
All Saints' Day A: 370
- Gregory VII, Saint** [pope] G: 387
Christianity (The Middle Ages) C: 526
Germany (The Holy Roman Empire) G: 162
Henry IV [of Germany] H: 187
Pope (The peak of papal power) P: 663
- Gregory IX** [pope] G: 388
Inquisition I: 277
- Gregory X** [pope] G: 388
Pope (Early days) P: 662
- Gregory XIII** [pope] G: 388
Calendar (The Gregorian calendar) C: 31
Julian calendar J: 187
- Gregory XVI** [pope]
Pope (table) P: 666
- Gregory, Dick** [American entertainer] G: 388
- Gregory, Hanson** [American sea captain]
Doughnut D: 312
- Gregory, James** [Scottish mathematician]
Series (Working with infinite series) S: 317
- Gregory, John Munford** [American political leader]
Virginia (table) V: 417
- Gregory, Lady** [Irish dramatist] G: 388
Irish literature (The Irish literary revival) I: 431-432
Yeats, William Butler Y: 555
- Gregory, Thomas W.** [American government official]
Justice, Department of (table) J: 203
- Gregory, William** [American political leader]
Rhode Island (table) R: 311
- Graige** [fabric]
Textile (Finishing the fabric) T: 217
See also Gray-state cloth *in this index*
- Grein, Jacob T.** [British producer]
Drama (Early realism) D: 338
- Greiner, Ludwig** [German dollmaker]

- Doll (The 1800's) D: 289-290
Gremlin [superstition] G: 388
Grenada [country, West Indies] G: 388 *with picture and map*
 Flag *picture on* F: 201
 Grenadines G: 390
 Reagan, Ronald Wilson (Foreign affairs) R: 168
 War correspondent W: 27
Grenada [Mississippi]
 Mississippi M: 623
Grenade [weapon] G: 390 *with diagram*
Grenadier [fish]
 Deep sea (Fish) D: 82b-82c
Grenadier [soldier]
 Grenade G: 390
Grenadines [islands, West Indies] G: 390
 Grenada G: 388
 Saint Vincent and the Grenadines S: 56
Grendel [literary figure]
Beowulf B: 256
Grenfell, Sir Wilfred Thomason [British doctor] G: 390
 Labrador (History) L: 18
Grenoble [France] G: 390
Grenville, George [British political leader]
 Revolutionary War in America (The Sugar Act) R: 272
 United Kingdom (table: British prime ministers) U: 72
Grenville, Lord [British political leader]
 United Kingdom (table: British prime ministers) U: 72
Grenville, Sir Richard [English military leader] G: 390
Grès [pottery]
 Stoneware So: 911
Gresham, Sir Thomas [English economist]
 Gresham's law G: 391
Gresham, Walter Q. [American government official]
 Arthur, Chester Alan (table) A: 756
 Cleveland, Grover (table) Ci: 672
 State, Department of (table) So: 860
 Treasury, Department of the (table) T: 407
Gresham's law [economics] G: 391
"Gretchen at the Spinning Wheel" [song]
 Schubert, Franz Peter (His life) S: 187
Gretzky, Wayne [Canadian hockey player]
 G: 391 *with portrait*
Greve, Felix Paul [Canadian author]
 Grove, Frederick Philip G: 404
Grevy's zebra [animal]
 Mammal *picture on* M: 116
 Zebra Z: 591
Grew, Nehemiah [English botanist]
 Botany (The development of modern botany) B: 509
Grey, Albert Henry George [British statesman]
 See Grey, Earl [1851-1917] *in this index*
Grey, Earl [1764-1845, British prime minister]
 United Kingdom (table: British prime ministers) U: 72
Grey, Earl [1851-1917, British statesman]
 G: 391
 Grey Cup G: 391
Grey, Sir George [British colonial official]
 New Zealand (The New Zealand Wars) N: 355
Grey, Henry [English nobleman]
 Grey, Lady Jane G: 391
Grey, Ledy Jane [queen of England] G: 391
 Edward VI E: 113
 Mary I M: 239
 Ridley, Nicholas R: 337
 Tower of London T: 349
Grey, Joel [American actor]
 Motion picture (Best performance by an actor in a supporting role: 1972) M: 863
Grey, Zane [American author] G: 391
Grey Cup [trophy] G: 391
 Football (Canadian football) F: 364-365
Grey King, The [book by Cooper]
 Cooper, Susan Ci: 1035
Grey Nuns [religious order]
 Youville, Saint Marguerite d' Y: 574
Grey Owl [Canadian naturalist] G: 392
Greyhound [dog] G: 392
 Dog *picture on* D: 270
 Dog racing D: 283 *with picture*
 Italian greyhound I: 492 *with picture*
Greyhound Bus Lines
 Hibbing H: 221
 Minnesota (Transportation) M: 601
Greystoke, Lord [literary figure]
 Burroughs, Edgar Rice B: 711
Griboyedov, Alexander [Russian dramatist]
 Russian literature (Early romanticism) R: 560-561
Grid
 Vacuum tube (How a vacuum tube works) V: 258
Grid, Geographic [cartography] See Geographic grid *in this index*
Gridiron
 Football (The field) F: 354-355
Gridiron pattern
 City (Description) Ci: 585-586
Gridiron pendulum
 Pendulum (Clock pendulums) P: 237 *with diagram*
Gridley, Reuel C. [American businessman]
 Nevada (Interesting facts about Nevada) N: 157 *with picture*
Grieg, Edvard [Norwegian composer] G: 392
 Grainger, Percy Aldridge G: 302
Grier, Robert C. [American jurist]
 Supreme Court of the United States (table) So: 1000
Grievance procedure
 Industrial relations (The settlement of disputes) I: 245
 Labor movement (Arranging contracts) L: 4-6 *with pictures*
Griffey, Ken, Sr. [American baseball player]
 Griffey, Ken, Jr. G: 393
Griffey, Ken, Jr. [American baseball player]
 G: 392
Griffin [Greek mythology] G: 393
Griffin, Archie [American football player]
 Football (table) F: 363
Griffin, Charles [American educator]
 North Carolina (Schools) N: 476-477
Griffin, Marvin [American political leader]
 Georgia (table) G: 130
Griffin, Walter Burley [American architect]
 Canberra (History) C: 166
Griffith, Arthur [Irish political leader] G: 393
 Ireland (The Easter Rising) I: 427
 Sinn Féin (History) S: 473
Griffith, Clark C. [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Griffith, D. W. [American director] G: 393
 Motion picture (D. W. Griffith) M: 865 *with picture*
Griffith, Hugh [British actor]
 Motion picture (Best performance by an actor in a supporting role: 1959) M: 863
Griffith Foundation [organization]
 McConnell Family Foundation M: 334
Griffith Park
 Los Angeles (Recreation) L: 467 *with picture*
Griffith Water Project [conservation]
 Nevada (The mid-1900's) N: 176
Griffon [dog]
 Dog *picture on* D: 274
 Wirehaired pointing griffon W: 344
Griffon [ship]
 Hennepin, Louis H: 185
Griggs, David [American geologist]
 Plate tectonics (History of tectonic theory) P: 564-565
Griggs, John W. [American government official]
 Justice, Department of (table) J: 203
 McKinley, William (table) M: 342
 New Jersey (table) N: 249
Grignard, François Auguste Victor [French chemist]
 Nobel Prizes (Chemistry: 1912) N: 442
Grigny, Nicolas de [French composer]
 Classical music (The Baroque period) Ci: 647
Grijalva, Juan de [Spanish explorer]
 Mexico (The Spanish conquest) M: 469
Grilling
 Cooking (Broiling and grilling) Ci: 1028
Grillparzer, Franz [Austrian dramatist]
 Austria (The arts) A: 932-933
 German literature (Romanticism) G: 141
Grimaldi, Francesco M. [Italian mathematician]
 Moon (Early observations with telescopes) M: 792
Grimaldi, Joseph [British actor]
 Clown Ci: 714
Grimeldi, Rainier Louis Henri Maxence Bertrand de [prince of Monaco] See Rainier III *in this index*
Grimaldi family [European history]
 Monaco (History) M: 700
Grimes, Burleigh [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Grimes, George [American prospector]
 Idaho (Exploration and early settlement) I: 42
Grimes, James W. [American political leader]
 Iowa (table) I: 391
 Johnson, Andrew (The trial) J: 141
Grimes, Martha [American author] G: 393
Grimké, Angelina Emily [American social reformer] G: 393 *with portrait*
Grimké, Archibald H. [American political leader]
 Spingarn Medal (table: 1919) So: 793
Grimké, John F. [American jurist]
 Grimké, Sarah Moore G: 393
Grimké, Sarah Moore [American social reformer] G: 393 *with portrait*
 Feminism F: 69
Grimm [German linguists] G: 394 *with portrait*
 Folklore (Origins of folklore) F: 322
 Grimm's Fairy Tales G: 394
Grimm, Jakob Ludwig [German linguist]
 See also Grimm *in this index*
 Grimm G: 394
 Language (The science of language) L: 66
 Linguistics (Comparative and historical research) L: 337
Grimm, Wilhelm Karl [German linguist]
 See also Grimm *in this index*
 Grimm G: 394
Grimmelshausen, Hans Jakob Christoffel von [German author] G: 394
 German literature (Baroque literature) G: 140
Grimm's Fairy Tales G: 394
 Fairy (Fairies in literature) F: 11 *with picture*
 Folklore (Origins of folklore) F: 322
 Grimm G: 394
 Romanticism (Romanticism in literature) R: 427
 Storytelling (The 1800's) So: 914
Grinding and polishing [industrial process]
 G: 394 *with pictures*
 Machine tool (Metal removal) M: 18
Grinding belt
 Grinding and polishing (Grinding tools) G: 395
Grinding stone
 Indian, American *pictures on* I: 140
Grinding wheel
 Grinding and polishing (Grinding tools) G: 395
Grinnell Glacier
 Glacier National Park (Glaciers) G: 205
Grinnell Point
 Montana M: 742
Griot
 Guinea G: 431
Grippe [disease] See Influenza *in this index*
Gripper [printing]
 Offset O: 678
Gripping beast [art]
 Vikings (Cultural life and recreation) V: 381
Gripsholm Castle
 Sweden *picture on* So: 1021
Gris, Juan [Spanish painter] G: 395
 Collage Ci: 773
 Cubism Ci: 1181 *with picture*
 Modigliani, Amedeo *picture on* M: 686
 Painting (Still-life paintings) P: 33; (Cubism) P: 77-78
Griscorn, Samuel [father of]
 Ross, Betsy R: 483
Griseofulvin [medication]
 Athlete's foot A: 858
Grisham, John [American author] G: 396
Grisson [animal] G: 396 *with picture*
Grisini [food]
 Bread *picture on* B: 588
Grisson, Virgil Ivan [American astronaut]
 G: 396
 Astronaut (Accidents in space) A: 830
 Space exploration (Vostok and Mercury: The first human beings in space) So: 711-712 *with picture*; (Voskhod and Gemini: The first multiperson space flights) So: 714; (Making ready) So: 715
Gristle See Cartilage *in this index*
Griswold, Dwight [American political leader]
 Nebraska (table) N: 110
Griswold, Matthew [American political leader]
 Connecticut (table) Ci: 967
Griswold, Morley [American political leader]
 Nevada (table) N: 173

Griswold, Roger [American political leader]
Connecticut (table) Ci: 967

Griswold, Rufus [Poe's literary executor]
Poe, Edgar Allan P: 589

Grit chamber
Sewage (Primary treatment) S: 329

Grito de Dolores [Mexican history]
Hidalgo y Costilla, Miguel H: 224
Mexico (Revolt against the Spaniards) M: 470

Grits [food]
Hominy H: 306
Indian, American (Indians of the Southeast)
I: 157

Grits [nickname]
Liberal Party L: 227

Grizzlies, Memphis

Basketball (table) B: 150

Grizzly bear [animal] G: 396 *with picture*
Bear (Brown bears) B: 184 *with pictures*

Grizzly Giant [tree]
Sequoia (Size) S: 311
Yosemite National Park Y: 569

Groat [botany]
Buckwheat B: 665
Oatmeal O: 640

Groce, Jared [American farmer]
Texas (Agriculture) T: 202

Grocery
Food (Marketing) F: 335

Groenendael [dog]
Belgian sheepdog B: 225 *with picture*

Groesbeck, Alexander J. [American political leader]
Michigan (table) M: 507

Grofé, Ferde [American composer] G: 397

Grog Shop, The [book by Zola]
Zola, Émile Z: 602

Groin [engineering]
Jetty J: 116

Groined vault [architecture]
Vault V: 291

Grolier Multimedia Encyclopedia, The
Encyclopedia (Today's encyclopedias) E: 268b-269

Gromyko, Andrei Andreyevich [Soviet political leader] G: 397

Gronland [official name]

Greenland G: 383

Gronouski, John Austin, Jr. [American government official]
Johnson, Lyndon Baines (table) J: 151
Kennedy, John Fitzgerald (table) K: 266

Groom
Marriage (Wedding ceremonies and customs) M: 221

Groome, James Black [American political leader]
Maryland (table) M: 255

Grooming
Chimpanzee (The life of a chimpanzee) C: 471-472 *with picture*

Dog (Grooming) D: 278 *with picture*
Horse (Grooming) H: 355 *with picture*

Grooming, Personal

Hairdressing H: 11

Groot, Huig de [Dutch lawyer] *See* Grotius, Hugo *in this index*

Grooved terrain [geology]
Satellite (Recently active satellites) S: 150a

Gropius, Walter [German architect] G: 397 *with picture*

Architecture (Early modern architecture in Europe) A: 627-629, (Walter Gropius) A: 630 *with picture*
Bauhaus B: 173

Gros, Antoine-Jean [French artist]
Army *picture on* A: 727

Gros Bourdon, Le [bell]
Montreal (Churches) M: 773

Gros Morne National Park [Newfoundland]
Canada (table: National parks and national park reserves) C: 113
National park (table) N: 42g
Newfoundland and Labrador (Places to visit) N: 368

Gros point [handicraft]
Needlepoint N: 118

Gros Ventre Indians [American Indians] G: 398

Grosbeak [bird] G: 398 *with picture*

Bird (Bills) B: 362 *with picture*

Groseilliers, Sieur des [French explorer] G: 398

Hudson's Bay Company (Beginnings) H: 407

Minnesota (Exploration) M: 603

Radisson, Pierre Esprit R: 99

Wisconsin (Exploration and settlement) W: 365

Gross, David J. [American physicist]
Gluon G: 236

Gross, Hans [Austrian jurist]
Crime laboratory (History) Ci: 1141-1142

Gross, Robert E. [American doctor]
Heart (Development of heart surgery) H: 144

Gross anatomy
Anatomy A: 448b

Gross combination weight rating [measure]
Truck (Kinds of trucks) T: 457

Gross domestic product [economics] G: 399 *with diagrams*

See also individual country articles, such as
United States

Developing country D: 173

Economics (Measuring economic growth) E: 59

National debt (Debt policy) N: 33 *with diagrams*

World, History of the *map on* W: 447

Gross Domestic Product Deflator
Inflation (Measuring inflation) I: 267

Gross income [economics]

Income (Types of income) I: 100

Income tax (Figuring the individual income tax) I: 104

Gross national product [economics]

Gross domestic product (Interpreting the GDP) G: 399-400

Income (Types of income) I: 100

National income (Determining national income) N: 37-38

Gross tonnage [shipping]

Ship (Nautical measurements) S: 416

Merchant marine M: 412

Gross vehicle weight rating

Truck (Kinds of trucks) T: 457

Grosse, A. V. [American physicist]

Dunning, John Ray D: 386

Grosse, Hans Werner [German aviator]
Glider (table) G: 230

Grosse, Karin [German pilot]

Glider (table) G: 230

Grosseteste, Robert [English scholar]

Physics (The Middle Ages) P: 438

Radiation (History) R: 80

Grossglockner [mountain, Austria]

Austria (The land and climate) A: 934

Grossmünster Church [Zurich]

Zurich *picture on* Z: 613

Grossularite [gem]

Garnet G: 45

Grosvenor, Gilbert Hovey [American editor]
G: 400

Grosz, George [German painter] G: 400 *with picture*

Beckmann, Max B: 197

Grósz, Károly [Hungarian political leader]

Hungary (Beginnings of change) H: 448

Grotesque [literature]

Anderson, Sherwood A: 452

Grotius, Hugo [Dutch lawyer] G: 400

International law (In early days) I: 342

Peace (From the 1400's to the 1700's) P: 206

Political science (Secularism) P: 639

Grotowski, Jerzy [Polish director]

Drama (Experimental theater) D: 340

Grotto of the Agony

Gethsemane G: 175

Grouch, The [play by Menander]

Drama (New Comedy) D: 327

Ground [art]

Painting (Grounds) P: 36

Ground [construction]

Plaster (Plastering) P: 552

Ground [electricity] G: 400

Ground [flag]

Flag *diagram on* F: 194

Ground beef

Meat packing (Tenderizing) M: 351

Ground beetle [insect]

Beetle (Ground beetles) B: 217, *picture on*
B: 218

Ground dove [bird]

Pigeon (The life of a pigeon) P: 459

Ground effect machine *See* Air cushion vehicle *in this index*

Ground-effects panel

Automobile racing (Indy car racing) A: 977-978

Ground Forces of the Russian Federation

Army (The Russian army) A: 726

Ground hemlock [tree]

Yew Y: 565 *with picture*

Ground hog [animal] *See* Woodchuck *in this index*

Ground-Hog Day [custom] G: 401

February F: 60

Woodchuck W: 392

Ground iguana

Iguana I: 50

Ground ivy [plant]

Ivy I: 522

Lawn *picture on* L: 143

Ground-launched missile

Air force (Missiles) A: 183

Ground pearl [shell]

Scale insect S: 170

Ground-penetrating radar

Archaeology (Locating sites) A: 595-596

Ground pine *See* Club moss *in this index*

Ground sloth [extinct animal] G: 401 *with picture*

Prehistoric animal *picture on* P: 736

Ground speed

Airplane (Measuring flying speed) A: 225

Ground squirrel [animal] G: 401 *with picture*

Animal (Animals of the polar regions) A: 484

Squirrel (Types of squirrels) So: 815

Woodchuck W: 392

Ground state [physics]

Atom (Electron energy levels) A: 873 *with diagram*

Laser (Producing laser light) L: 83-84

Ground station [astronomy]

Satellite, Artificial (Communications satellites) S: 150f

Telephone *diagram on* T: 96

Ground stroke

Tennis (The ball in play) T: 163

Ground substance [physiology]

Tissue (Animal tissues) T: 299

Ground tissue [botany]

Stem (Herbaceous stems) So: 887

Ground-to-cloud lightning

Lightning (The charges) L: 300

Ground water [geology] G: 402

Environmental pollution (Water pollution) E: 334

Forest (Environmental value) F: 391

Hazardous wastes (Effects of hazardous wastes) H: 122

Hydrology H: 470

Irrigation (Ground water) I: 456

River (Sources of river water) R: 351

Spring So: 806

Water (Precipitation) W: 120-121 *with diagram*; (Sources of supply) W: 124

Well (Water wells) W: 193

Ground wave [radio]

Radio (Transmitting radio waves) R: 87 *with diagram*

Ground zero

Nuclear weapon (Blast wave) N: 597-598

Ground zero [U.S. history]

September 11 terrorist attacks (Moving forward) S: 310a

Groundling [English history]

Shakespeare, William (Theater buildings) S: 352

Groundnut

Peanut P: 213 *with pictures*

Groundout

Baseball (Outs by batters) B: 128-129

Group [mathematics]

Mathematics (Philosophies of mathematics) M: 307

Group [military unit]

Air force (The organization of air forces) A: 183

Navy (The organization of navies) N: 77

Group [sociology]

Collective behavior Ci: 774

Community Ci: 898

Game theory G: 23

Group dynamics G: 402

Mammal (Group life) M: 125

Primate P: 777

Sociology So: 564

Group, The [book by McCarthy]

McCarthy, Mary M: 331

Group A beta-hemolytic streptococcus [bacteria]

- Erysipelas **E**: 355
 Scarlet fever (Causes) **S**: 173
 Strep throat **So**: 925
 Streptococcus **So**: 926
- Group annuity plan**
 Pension (Private pension plans) **P**: 273
- Group dynamics** [psychology] **G**: 402
 Clothing (Protection) **Ci**: 688
 Human relations **H**: 427
 Morale **M**: 800
- Group flashing signal**
 Lighthouse (Identifying lighthouses) **L**: 294
- Group home**
 Children's home **C**: 457
 Foster care **F**: 428
- Group life insurance**
 Insurance (Main kinds of life insurance) **I**: 309-310
- Group occulting signal**
 Lighthouse (Identifying lighthouses) **L**: 294
- Group of Seven** (Canadian artists) **G**: 402 *with pictures*
 Canada (Painting and sculpture) **C**: 109 *with picture*
 Canadian literature (Literature between the world wars) **C**: 159
 Jackson, Alexander Young **J**: 5
 Thomson, Tom **T**: 265
- Group Portrait with Lady** [book by Böll]
 Böll, Heinrich **B**: 448
 German literature (German literature after 1945) **G**: 142
- Group Theatre**
 Method acting **M**: 434
 Odets, Clifford **O**: 674
- Group therapy**
 Drug abuse *picture on D*: 364
 Mental illness (Psychotherapy) **M**: 407-408
 Psychology *picture on P*: 847
 Psychiatry (Psychotherapy) **P**: 845
 Psychotherapy (Group therapy) **P**: 852
 Speech therapy (Treatment) **So**: 773
- Group work**
 Social work (Methods of social work) **So**: 558
- Groupe Bull** [company]
 Computer (Manufacturing) **Ci**: 924
- Grouper** [fish] **G**: 403 *with picture*
 Goliath grouper **G**: 267
- Grouse** [bird] **G**: 403 *with picture*
 Ruffed grouse **R**: 509 *with picture*
- Grout** [engineering]
 Dam (Embankment dams) **D**: 18
- Grout, Josiah** [American political leader]
 Vermont (table) **V**: 333
- Grove, Frederick Philip** [Canadian author]
G: 404
 Canadian literature (Literature between the world wars) **C**: 159-160
- Grove, Lefty** [American baseball player]
 Baseball (table: Hall of Fame) **B**: 134
- Grover, La Fayette** [American political leader]
 Oregon (table) **O**: 845
- Grover Cleveland** [book by Nevins]
 Nevins, Allan **N**: 178
- Groves, Leslie R.** [American military leader]
 Manhattan Project **M**: 141
- Growler** [oceanography]
 Iceberg (North Atlantic icebergs) **I**: 17
- Growth** [biology] **G**: 404
 Adolescent (Physical development) **A**: 60-61
 Baby **B**: 4 *with pictures; diagram on B*: 8
 Hormone (Plant hormones) **H**: 337
 Kwashiorkor **K**: 398
 Life (Growth) **L**: 274
 Life cycle **L**: 280
 Plant (How plants grow) **P**: 536 *with diagrams*
 Regeneration **R**: 203
 Tropism **T**: 452
- Growth by accretion** [geology]
 Growth (In nonliving things) **G**: 404
- Growth fund** [economics]
 Mutual fund **M**: 969
- Growth hormone**
 DES **D**: 153
 Dwarf (Hormonal dwarfism) **D**: 395
 Genetic engineering (Uses of genetic engineering) **G**: 84a-84b
 Giant **G**: 183
 Heredity (The era of genetic engineering) **H**: 209
 Hormone (Metabolic hormones) **H**: 335-336;
 (Growth and sex hormones) **H**: 336
- Pituitary gland **P**: 502
- Growth of the Soil, The** [book by Hamsun]
 Hamsun, Knut **H**: 37
- Growth rate**
 Child (Physical differences) **C**: 451
- Growth regulator herbicide**
 Herbicide (How herbicides work) **H**: 198
- Growth ring** See Annual ring *in this index*
- Growth Theory: An Exposition** [book by Solow]
 Solow, Robert Merton **So**: 586
- Groznyy** [city, Chechnya]
 Chechnya **C**: 390 *with map*
- Grub** [entomology] **G**: 406
 Beetle (The life cycle of beetles) **B**: 216
 Insect (Complete metamorphosis) **I**: 293
 Lawn *picture on L*: 143
 Potato (Diseases and insect pests) **P**: 713
- Gruber, Eberhard** [German religious leader]
 Amanites **A**: 399
- Gruelle, Johnny** [American cartoonist]
 Doll (The early 1900's) **D**: 291-292
 Indiana (Interesting facts) **I**: 197 *with picture*
- Gruen, Victor** [Austrian architect]
 Gehry, Frank **G**: 76
- Gruening, Ernest** [American political leader]
G: 406
- Gruentzig, Andreas** [Swiss physician]
 Heart (Progress in treatment and prevention) **H**: 145
- Grumman Aircraft Corporation**
 Aviation (Aviation progress) **A**: 988-989
- Grundl, Lake** [Austria]
 Austria *picture on A*: 934
- Grundtvig, Nicolai Frederik Severin** [Danish poet]
 Scandinavian literature (The Golden Age) **S**: 171
- Grundy, Felix** [American government official]
 Justice, Department of (table) **J**: 203
 Madison, James (Events leading to war) **M**: 34-35
 Polk, James Knox (Education) **P**: 641
 Van Buren, Martin (table) **V**: 273
- Grunewald** [district, Berlin]
 Berlin (Recreation) **B**: 262
- Grünwald, Matthias** [German painter] **G**: 406 *with picture*
- Grunge rock** [music]
 Rock music (Rock and society) **R**: 380
 Seattle (The arts) **S**: 274
- Grunion** [fish] **G**: 407 *with picture*
 Biological clock (Other rhythms) **B**: 315
- Grunitzky, Nicolas** [Togolese political leader]
 Togo (History) **T**: 310-311
- Grunt** [fish] **G**: 407
 Fish *pictures on F*: 155
- Grunting ox** [animal]
 Yak **Y**: 548
- Gruppen** [music by Stockhausen]
 Stockhausen, Karlheinz **So**: 904
- Gruyère** [cheese]
 Cheese (Hard cheese) **C**: 392 *with picture*
- Gryphius, Andreas** [German author]
 German literature (Baroque literature) **G**: 140
- GSA** [organization] See General Services Administration *in this index*
- GST** [tax] See Goods and services tax *in this index*
- Gu Kaizhi** [Chinese painter] **G**: 407
 Painting (Chinese painting) **P**: 44 *with picture*
- Guacamole** [food]
 Avocado **A**: 993
- Guácharo** [bird]
 Oilbird **O**: 708 *with picture*
- Guácharo, Cave of the**
 Venezuela (The Andean Highlands) **V**: 302
- Guadalejara** [city, Mexico] **G**: 407
- Guadalcanal, Battle of** [1942]
 World War II (The South Pacific) **W**: 487-488
- Guadalcanal Island** [island, Coral Sea] **G**: 407
- Guadalquivir River** [Spain]
 Spain (The Guadalquivir Basin) **So**: 740 *with map*
- Guadalupe bass** [fish]
 Bass (Black bass) **B**: 156-157
- Guadalupe Day** [custom] **G**: 407
 Mexico (Holidays) **M**: 457
- Guadalupe Hidalgo, Treaty of** [1848] **G**: 408
 Arizona (Spanish exploration) **A**: 688
 California (The Mexican War) **C**: 60-62
 Hispanic Americans (Conflict) **H**: 251
- Mexican War (The peace treaty) **M**: 447
 State, Department of (Changing responsibilities) **So**: 860
 Texas (Statehood and early progress) **T**: 207
 United States, History of the (Manifest destiny) **U**: 167
 Westward movement in America (The Southwest) **W**: 249
- Guadalupe Mountains**
 Texas (Mountains) **T**: 198
- Guadalupe Mountains National Park** [Texas]
G: 408
 National Park System (table: National parks) **N**: 48
- Guadalupe Peak** [mountain]
 Texas (Mountains) **T**: 198
- Guadeloupe** [islands, West Indies] **G**: 408 *with maps*
- Guadiana River** [Portugal-Spain]
 Portugal (Rivers) **P**: 690
- Guejardo, Jesús** [Mexican assassin]
 Zapata, Emiliano **Z**: 590
- Guajira Peninsula** [Colombia]
 Colombia (The Coastal Lowlands) **Ci**: 782
- Guam** [territory, Pacific] **G**: 408 *with pictures and map*
 Exploration (Magellan's globe-circling expedition) **E**: 445
 Flag *picture on F*: 213
 Mariana Islands **M**: 199
 Territory (American territorial government) **T**: 176; (American territorial government) **T**: 177
 World War II (Island hopping in the Central Pacific) **W**: 488-489
- Guan** [bird] **G**: 409
- Guan** [public official]
 Mandarin **M**: 135
- Guan Di** [Chinese general]
 Taoism (Taoism as a religion) **T**: 36
- Guan Hanqing** [Chinese dramatist]
 Chinese literature (Drama and fiction) **C**: 512
- Guanabara Bay**
 Rio de Janeiro **R**: 344 *with picture*
 South America *picture on So*: 622
- Guenaco** [animal] **G**: 409 *with picture*
 Alpaca **A**: 381
- Guanahani** [island]
 Columbus, Christopher (The first landing) **C**: 860
- Guenahatabey Indians**
 Cuba (Early years) **Ci**: 1175
- Guanajuato** [state, Mexico]
 Fox Quesada, Vicente **F**: 442
- Guangzhou** [city, China] **G**: 410 *with picture*
 City *picture on Ci*: 583
 Treaty port **T**: 409
- Guenine** [biochemistry]
 Cell (DNA—the wondrous molecule) **C**: 334-335 *with diagram*
 DNA **D**: 258
 Heredity (The structure of DNA) **H**: 205-206
 RNA **R**: 357
- Guano** [fertilizer] **G**: 411 *with picture*
 Bat **B**: 159
 Bird (As a source of food and raw materials) **B**: 330-331
 Peru (Mining) **P**: 313
- Guantánamo** [Cuba] **G**: 411
- Guantánamo Naval Base**
 Cuba (History) **Ci**: 1175-1177
 Guantánamo **G**: 411
- Guer** [plant] **G**: 411
- Guarani** [language]
 Paraguay (Languages) **P**: 145; (The arts) **P**: 147
 Tupi-Guarani Indians **T**: 492
- Guerani Indians**
 Brazil (History) **B**: 583
 Paraguay (Population and ancestry) **P**: 145;
 (The arts) **P**: 147; (Early days) **P**: 149
 Tupi-Guarani Indians **T**: 492
- Guarantee**
 Consumerism (The right to quality) **Ci**: 1018
- Guaranty** **G**: 411
- Gueranty Building** [Buffalo]
 Architecture (Early modern architecture in America) **A**: 629
 Sullivan, Louis Henri **So**: 970 *with picture*
- Guard** [sports]
 Basketball (The players) **B**: 144
 Football (The offensive team) **F**: 356 *with diagrams*

- Guard, Changing of the** [ceremony]
United Kingdom *picture* on U: 63
- Guard cell** [botany]
Leaf (Obtaining the raw materials) L: 155 *with diagram*
- Guard hairs** [zoology]
Fur F: 561 *with picture*
Mammal (Skin and hair) M: 118
- Guard of Honor** [book by Cozzens]
Cozzens, James Gould Ci: 1114
- Guardhouse, The** [painting by Teniers]
Teniers, David, the Younger *picture* on T: 133
- Guardia, Tomás** [Costa Rican military leader]
Costa Rica (Revolutions and reforms)
Ci: 1084
- Guardian** [law] G: 411
- Guardian ad litem** [law]
Guardian G: 411
- Guardian spirit** [religion]
Indian, American (The guardian spirit) I: 147
- Guarini, Guarino** [Italian architect]
Architecture (Baroque architecture) A: 622
- Guarneri, Andrea** [Italian violinmaker] G: 411
- Guarneri, Giuseppe** [Italian violinmaker] G: 411
- Guarneri, Giuseppe Antonio** [Italian violinmaker] G: 411
Violin (History) V: 390
- Guarneri, Pietro** [Italian violinmaker] G: 411
- Guatemala** G: 412 *with pictures and maps*
See also Central America in this index
Alvarado, Pedro de A: 398
Belize (History) B: 238
Indian, American (Indians of Middle America) I: 169, (Current issues) I: 182-183
Latin America *picture* on L: 104
Valle, José Cecilio Del V: 265
World War II (table: The Allies) W: 471
See also the list of Related Articles in the Guatemala article
- Guatemala City** [Guatemala] G: 418
Guatemala G: 412 *with picture*; (Population) G: 414; (Colonial period) G: 416-417
- Guava** [fruit] G: 418 *with picture*
- Guayacan** [tree] *See Lignum-vitae in this index*
- Guayaquil** [Ecuador] G: 418
Ecuador E: 67
- Guayas River**
Ecuador (The Coastal Lowland) E: 69-70
- Guaymí Indians** [American Indians]
Indian, American *picture* on I: 140
- Guayule** [shrub] G: 418
Rubber (The rubber tree) R: 502
- Gubbrud, Archie** [American political leader]
South Dakota (table) So: 680
- Guden River**
Denmark (Lakes and rivers) D: 138
- Gudrun** [legendary figure]
Brunhild B: 652
- Gudrun** [poem]
German literature (Epic poetry) G: 139
- Guei, Robert** [Côte d'Ivoire political leader]
Côte d'Ivoire (History) Ci: 1085
- Guelder rose** [plant]
Snowball S: 540 *with picture*
- Guelphs and Ghibellines** [Italian history] G: 418
Italy (Rise of the city-states) I: 513-514
- Guenevere** [legendary figure]
Arthur, King A: 757
Lancelot, Sir L: 56
Round Table (Origin) R: 490-491; (The decline of the Round Table) R: 491
- Guenon** [animal] G: 419 *with picture*
Monkey *diagram* on M: 727, *picture* on M: 728
- Guerard, Benjamin** [American political leader]
South Carolina (table) So: 658
- Guerin, Jules** [American artist]
Lincoln Memorial L: 328
- Guermantes Way, The** [book by Proust]
Proust, Marcel P: 838
- Guernica** [painting by Picasso]
Picasso, Pablo (The 1920's and 1930's) P: 448b-449 *with picture*
Spanish Civil War (Progress of the war) So: 756a
- Guernica** [Spain]
Spanish Civil War (Progress of the war) So: 756a
- Guernsey** [cattle]
Cattle (Guernsey) C: 310 *with picture*; (table) C: 313
Dairying (Dairy cattle) D: 6
- Guernsey** [island, English Channel] G: 419
Channel Islands C: 375 *with map*
- Guerrero, Vicente** [Mexican patriot]
Mexico (Independence) M: 471
- Guerrière** [ship]
Constitution Ci: 995
Hull, Isaac H: 412
- Guerrilla warfare** G: 419
Commando Ci: 871
Marion, Francis M: 211
McKinley, William (America becomes a world power) M: 341
Palestine Liberation Organization P: 106
World War II (Resistance groups) W: 493
- Guerrillas** [play by Hochhuth]
Hochhuth, Rolf H: 273
- Guess Who's Coming to Dinner** [film]
Poitier, Sidney P: 603
- Guest, Edgar Albert** [American poet] G: 421
- Guest worker**
Berlin (People) B: 262
Germany (Ancestry) G: 150
Immigration (Europe) I: 85
- Guevara, Angel Aníbal** [Guatemalan political leader]
Guatemala (Political developments) G: 417
- Guevara, Ché** [Cuban military leader] G: 421
with portrait
Guerrilla warfare (History) G: 420
- Guevara, Ernesto "Ché"** *See Guevara, Ché in this index*
- Guggenheim, Daniel** [American businessman]
Guggenheim, Meyer G: 421
- Guggenheim, Meyer** [American businessman] G: 421
- Guggenheim, Murry** [American businessman]
Guggenheim, Meyer G: 421
- Guggenheim, Simon** [American philanthropist]
Guggenheim, Meyer G: 422
- Guggenheim, Solomon R.** [American philanthropist]
Guggenheim, Meyer G: 422
Guggenheim Museum G: 422
- Guggenheim foundations**
Guggenheim, Meyer G: 421
Guggenheim Museum G: 422
- Guggenheim Laboratories**
Princeton University (Campus buildings) P: 795
- Guggenheim Memorial Foundation, John Simon**
Guggenheim, Meyer G: 422
- Guggenheim Museum** [New York City] G: 422
New York *picture* on N: 297
New York City (Museums) N: 338
Wright, Frank Lloyd (Later career) W: 507
- Guggenheim Museum** [Spain]
Gehry, Frank G: 76 *with picture*
- GUI** [computing] *See Graphical user interface in this index*
- Guiana** [region, South America] G: 422
- Guiana Highlands** [region]
South America So: 628 *with picture*
- Guibert, Hervé** [French author]
French literature (Recent French literature) F: 523
- Guicciardini, Francesco** [Italian historian]
History (The Humanist movement) H: 262
- Guiccioli, Teresa** [mistress of]
Byron, Lord (Byron's life) B: 748
- Guidance** [education] G: 422 *with picture*
- Guidance eruption** [dentistry]
Orthodontics O: 859
- Guidance system**
Guided missile (Guidance and control systems) G: 424 *with diagrams*; (Kinds of guidance systems) G: 426 *with diagrams*
- Guide dog**
Dog guide D: 282 *with pictures*
- Guide for the Perplexed** [book by Maimonides]
Maimonides, Moses M: 67
Hebrew literature (Medieval works) H: 162
- Guided ammunition**
Ammunition (Guided ammunition) A: 436
- Guided bomb**
Bomb (Guided bombs) B: 450 *with diagram*
- Guided democracy** [Indonesian history]
Indonesia (Indonesia under Sukarno) I: 238
- Guided missile** [weapon] G: 423 *with pictures*
Air force (Aircraft and missiles) A: 183, (History) A: 184-186
Air Force, United States (Missiles) A: 191-192
- Army, United States (Missiles) A: 735
- Ballistics B: 56
- Cuban missile crisis Ci: 1179
- Jet propulsion *picture* on J: 113
- Laser (Guiding) L: 83
- Missile boat M: 618
- Navy, United States (Missiles) N: 84
- Nuclear weapon (Strategic nuclear weapons) N: 599
- Radar (In the military) R: 65
- Rocket (Military use) R: 386
See also the list of Related Articles in the Guided missile article
- Guided missile cruiser** [ship]
Cruiser Ci: 1159
Navy, United States (Combat ships) N: 84
Warship (Cruisers) W: 40; *picture* on W: 43
- Guides** [scouts]
Girl Scouts (Guides) G: 199
- Guideway** [train track]
Magnetic levitation train M: 55
- Guido d'Arezzo** [Italian musician]
Classical music (The Middle Ages) Ci: 645-646 *with picture*
- Guidon**
Flag (Military flags) F: 195-196 *with picture*
- Guild** [European history] G: 428
City (Economy) Ci: 584-585
Clothing (The Middle Ages) Ci: 698-699
Education (Christian education in the Middle Ages) E: 99
Industrial Revolution I: 246
Insurance (Earliest insurance) I: 316
Labor movement (Origins of the labor movement) L: 9
Middle Ages (Medieval towns) M: 527
Mystery play M: 972
Textile (During the Middle Ages) T: 218-219
- Guild, Curtis, Jr.** [American political leader]
Massachusetts (table) M: 288
- Guild Chapel** [Stratford]
Shakespeare, William *picture* on S: 348
- Guilder** [money] G: 429
- Guilford, Earl of** [British statesman]
North, Lord N: 457
- Guilford Courthouse, Battle of** [1781]
North Carolina (Revolution and independence) N: 492
Revolutionary War in America (table) R: 276; (Cowpens and Guilford Courthouse) R: 285
- Guilford Courthouse National Military Park** [North Carolina]
National Park System (table: National military parks) N: 55
- Guilin** [city, China]
China *pictures* on C: 485, C: 494
- Guillaume, Charles Édouard** [French physicist]
Nobel Prizes (Physics: 1920) N: 440
- Guillaume de Lorris** [French poet]
French literature (Narrative poetry) F: 518-519
- Guillemin, Roger Charles Louis** [American physiologist]
Nobel Prizes (Physiology or medicine: 1977) N: 445
- Guillemot** [bird] G: 429 *with picture*
Auk A: 890
- Guillotin, Joseph Ignace** [French doctor]
Guillotine G: 429
- Guillotine** [machine] G: 429 *with picture*
French Revolution (Terror and equality) F: 526-527
Paris (Gardens, squares, and parks) P: 162-163
- Guinand, Pierre-Louis** [French chemist]
Glass (table) G: 218
- Guinea** [region, Africa] G: 429
- Guinea** [country] G: 430 *with pictures and map*
Flag *picture* on F: 199
French West Africa F: 528 *with map*
- Guinea** [money] G: 432
- Guinea-Bissau** [country, Africa] G: 432 *with pictures and map*
Flag *picture* on F: 199
Guinea G: 429
Portugal (Empire and wealth) P: 693-694 *with map*
- Guinea fowl** [bird]
Poultry P: 720
- Guinea pig** [animal] G: 434 *with picture*
Cavy C: 322
- Guineafowl** [bird] G: 435 *with picture*
- Guinée, République de**

- Guinea **G**: 430
- Guinevere** See *Guenevere in this index*
- Guinizelli, Guido** [Italian poet]
Italian literature (The Middle Ages) **I**: 494
- Guinn, Kenny** [American political leader]
Nevada (table) **N**: 173
- Guinness, Alec** [British actor] **G**: 435 *with portrait*
Motion picture (Best performance by an actor: 1957) **M**: 862
- Guion, John I.** [American political leader]
Mississippi (table) **M**: 640
- Güiraldes, Ricardo** [Argentine author]
Latin-American literature (The early 1900's) **L**: 113
- Guiscard, Robert** [Norman conqueror]
Normans **N**: 456
- Guiscard, Roger** [Norman conqueror]
Normans **N**: 456
- Guise, Henry of** [French nobleman] See *Henry of Guise in this index*
- Guise, Mary of** See *Mary of Guise in this index*
- Guise family** [French history]
Huguenots **H**: 410
- Guitar** [musical instrument] **G**: 435 *with pictures*
Christian, Charlie **C**: 522d
Country music (The instruments) **Ci**: 1098
Jazz (The guitar) **J**: 69
Segovia, Andrés **S**: 284
- Guitar** [sculpture by Picasso]
Picasso, Pablo (Cubism) **P**: 448b
Sculpture (Cubism and futurism) **S**: 257 *with picture*
- Guiteau, Charles J.** [American assassin]
Arthur, Chester Alan (Assassination of Garfield) **A**: 756
Garfield, James Abram (Assassination) **G**: 42
- Guizot, François Pierre Guillaume** [French historian]
History (History in the universities) **H**: 262-263
- Gujarat** [state, India]
India (Recent developments) **I**: 134-135
Mumbai (History) **M**: 925
- Gujarati** [language]
India (Languages) **I**: 114
- Gulag** [prison]
Concentration camp (Other concentration camps) **Ci**: 927
- Gulag Archipelago, 1918-1956, The** [book by Solzhenitsyn]
Solzhenitsyn, Alexander **So**: 587
- Gulden** [money]
Guilder **G**: 429
- Gules** [color]
Heraldry (Expansion) **H**: 194 *with picture*
- Gulf** [geography] **G**: 436
Ocean (The world ocean) **O**: 651
- Gulf Between, The** [film]
Technicolor **T**: 73
- Gulf Coast** [Alabama]
Alabama (Coastline) **A**: 268
- Gulf Coastal Plain** [region, North America]
United States (The Gulf Coastal Plain) **U**: 124
- Gulf Cooperation Council** **G**: 436
Oman (History) **O**: 759
United Arab Emirates (History) **U**: 45
- Gulf Intracoastal Waterway** [North America]
G: 436 *with map*
Inland waterway (Intracoastal Waterway System) **I**: 274
Louisiana (Transportation) **L**: 495
Texas (Transportation) **T**: 202-203
- Gulf Islands National Seashore** [Florida-Mississippi]
National Park System (table: National seashores) **N**: 57
- Gulf of Alaska**
Alaska (Coastline) **A**: 294
- Gulf of Aqaba**
Arab-Israeli conflict (The 1967 war) **A**: 582a
Red Sea **R**: 189
- Gulf of Bothnia**
Baltic Sea **B**: 65 *with map*
- Gulf of California** **G**: 436 *with map*
- Gulf of California harbor porpoise** [sea animal]
Porpoise **P**: 680
- Gulf of Carpentaria** [Australia]
Exploration (Exploring Australia's interior) **E**: 448
- Gulf of Finland**
Baltic Sea **B**: 65 *with map*
- Gulf of Fonseca**
Honduras (The Southern Coast) **H**: 310 *with map*
- Gulf of Gascony**
Bay of Biscay **B**: 176
- Gulf of Genoa**
Genoa **G**: 89
- Gulf of Mexico** **G**: 437 *with map*
Florida *picture on* **F**: 243
- Gulf of Oman**
Persian Gulf **P**: 300 *with map*
- Gulf of Riga**
Estonia (Land and climate) **E**: 362 *with map*
- Gulf of Saint Lawrence** **G**: 437
- Gulf of Saint-Malo** [France]
Tide (Tidal patterns) **T**: 282
- Gulf of Suez**
Red Sea **R**: 189
- Gulf of Taganrog**
Azov, Sea of **A**: 998
- Gulf of Thailand**
China Sea **C**: 508 *with map*
- Gulf of Tonkin**
China Sea **C**: 508 *with map*
- Gulf of Tonkin Resolution** [U.S. history]
Johnson, Lyndon Baines (Foreign affairs) **J**: 149
Vietnam War (The Gulf of Tonkin incident) **V**: 375
- Gulf porpoise** [sea animal]
Porpoise **P**: 680
- Gulf States** [U.S.] **G**: 437
- Gulf Stream** [Atlantic] **G**: 437 *with picture and map*
Arctic Ocean (Ice) **A**: 643
Atlantic Ocean (Currents) **A**: 866
Europe (Climate) **E**: 398
Franklin, Benjamin (Other studies) **F**: 489
Gulf of Mexico **G**: 437
Ocean (Circulation) **O**: 658
- Gulf War** [1991] See *Persian Gulf War in this index*
- Gulf War syndrome** [disorder] **G**: 438
Persian Gulf War (Consequences of the war) **P**: 300d-301
- Gulfweed** [plant]
Seaweed (Kinds) **S**: 276 *with picture*
- Gulick, Charlotte Vatter** [American educator]
Camp Fire Boys and Girls (History) **C**: 90
Gulick, Luther Halsey **G**: 439
- Gulick, Luther Halsey** [American educator]
G: 439
Camp Fire Boys and Girls (History) **C**: 90
- Gulistan** [book by Saadi]
Islamic art *picture on* **I**: 469
- Gulko, Boris** [American chess player]
Chess (United States chess champions) **C**: 414
- Gull** [bird] **G**: 439 *with pictures*
Bird (Birds of inland waters and marshes) **B**: 340 *with picture*; (In the air) **B**: 352-353 *with picture*
- Gullet** [anatomy]
Esophagus **E**: 358
Peramecium **P**: 152
- Gulliver, Lemuel** [literary figure]
Swift, Jonathan (*Gulliver's Travels*) **So**: 1040 *with picture*
- Gulliver's Travels** [book by Swift] **G**: 439
English literature (Swift and Pope) **E**: 318
Irish literature (Early works in English) **I**: 431
Literature for children (The 1700's) **L**: 361
Satire **S**: 150h
Science fiction (Forerunners of science fiction) **S**: 205
Swift, Jonathan **So**: 1039 *with picture*
- Gull's Hornbook, The** [book by Dekker]
Dekker, Thomas **D**: 93
- Gullstrand, Allvar** [Swedish physiologist]
Nobel Prizes (Physiology or medicine: 1911) **N**: 444
- Gully** [natural feature]
Mars (Channels, valleys, and gullies) **M**: 226 *with picture*
- Gulper eel** [fish]
Deep sea (Fish) **D**: 82b-82c *with picture*
Fish *picture on* **F**: 156
- Gum** **G**: 440
- GUM** [department store]
Moscow (Famous landmarks) **M**: 823-824 *with map*
- Gum, Bubble**
Bubble gum **B**: 657
- Gum, Chewing**
Chewing gum **C**: 416 *with diagrams*
- Gum acacia**
Gum arabic **G**: 440
- Gum arabic** [tree product] **G**: 440
Acacia **A**: 20
Gum **G**: 440
Lithography (How lithography works) **L**: 387
- Gum elastic**
Invention (The inventive process) **I**: 355-357
- Gum eraser** [compound]
Eraser **E**: 349
- Gum resin**
Resin **R**: 259
- Gum rosin** [by-product]
Rosin **R**: 482
- Gum tissue**
Dentistry (Periodontics) **D**: 144
- Gum tree** **G**: 440
- Gum turpentine** [tree product]
Turpentine **T**: 519
- Gumbo** [plant]
Okra **O**: 738 *with picture*
- Gumm, Frances** [American actress] See *Garland, Judy in this index*
- Gums** [anatomy]
Teeth (Periodontal diseases) **T**: 85
- Gun** **G**: 440
Ballistics (Interior ballistics) **B**: 56
Flintlock **F**: 236 *with picture*
Navy (The history of navies) **N**: 79
Whitney, Eli (Arms manufacturer) **W**: 295
- Gun control** [law] **G**: 440
Handgun (Gun control) **H**: 45
National Rifle Association of America **N**: 60
Second Amendment **S**: 278
- Gun director**
Warship (Warships in the two world wars) **W**: 41-42
- Gun-type fission bomb**
Nuclear weapon *diagram on* **N**: 598
- Gun-type fission method**
Nuclear weapon (Fission weapons) **N**: 596-597
- Guncotton** [explosive] **G**: 441
Gunpowder (History) **G**: 441
- Gunderson, Carl** [American political leader]
South Dakota (table) **So**: 680
- Gundog** See *Sporting dog in this index*
- Gunnbjörn, Mount**
Greenland (The land) **G**: 385 *with map*
- Gunnison River** [Colorado]
Black Canyon of the Gunnison National Park **B**: 386
- Gunpowder** [explosive] **G**: 441
Army (Ancient armies) **A**: 726-727; (Armies in the Middle Ages) **A**: 727
Fireworks **F**: 135
Invention (The Renaissance) **I**: 360
Technology (Technological advances) **T**: 75
- Gunpowder** [tea]
Tea (Grades of tea) **T**: 63
- Gunpowder Plot** [English history] **G**: 442
Fawkes, Guy **F**: 57
- Guns of August, The** [book by Tuchman]
Tuchman, Barbara Wertheim **T**: 480
- Gunship**
Air force (Aircraft and missiles) **A**: 183
Aircraft, Military (Helicopters) **A**: 203-204
Helicopter (Further improvements) **H**: 171-174
- Gunston Hall** [estate]
Virginia (Places to visit) **V**: 408
- Gunter, Edmund** [English mathematician]
Surveying (Early tools) **So**: 1011
- Gunter, Julius C.** [American political leader]
Colorado (table) **Ci**: 844
- Gunter's chain** [measuring device]
Surveying (Early tools) **So**: 1011
- Guntersville Dam** [Alabama]
Alabama (Rivers and lakes) **A**: 270
- Guntersville Lake** [Alabama]
Alabama (Rivers and lakes) **A**: 270
- Gunther** [legendary figure]
Nibelungenlied **N**: 395
- Gunther, Fritz** [German chemist]
Detergent and soap (The development of detergents) **D**: 165
- Gunther, Ignaz** [German sculptor]
Sculpture (European sculpture) **S**: 253-254
- Gunung Lauser National Park** [Indonesia]
National park (table) **N**: 42f
- Gunwale**

Canoeing (Entering and leaving a canoe) C: 180

Günz ice age [geology]
Ice age (Evidence of ice ages and their climates) I: 6-7

Guppy [fish] G: 442 *with picture*
Animal picture on A: 490
Fish picture on F: 157
Tropical fish T: 451

Guppy, R. J. L. [British scientist]
Guppy G: 442

Gupta dynasty [history of India] G: 442 *with picture*
India (The golden age) I: 129 *with map*
World, History of the (The Mauryan Empire in India) W: 430-431 *with picture*

Guri Dam [Venezuela]
Dam (table) D: 18

Gurik, Robert [Canadian dramatist]
Canadian literature (Modern Canadian drama) C: 161

Gurkhali [language]
Sikkim (People) S: 456

Gurkhas [people]
Nepal (People) N: 125

Gurnard [fish] G: 443

Guru [nut]
Kola nut K: 362 *with picture*

Guru [religion]
Buddhism (The Mantrayana) B: 669
Hinduism (Worship of saints) H: 237
Yoga Y: 567

Gurunsi [people]
Burkina Faso (People) B: 706

Gusmão, José Alexandre [Timorese political leader]
East Timor (History) E: 41-42

Gustafsson, Greta Lovisa [Swedish-American actress] See Garbo, Greta *in this index*

Gustav I Vasa [king of Sweden] G: 443
Helsinki H: 179
Sweden (The beginnings of modern Sweden) So: 1033

Gustavus II [king of Sweden] See Gustavus Adolphus *in this index*

Gustavus Adolphus [king of Sweden] G: 443
Army (The rise of modern armies) A: 727
Oxenstierna, Axel Gustafsson O: 887
Sweden (The age of expansion) So: 1033; *picture on So: 1033*
Thirty Years' War (The Swedish period) T: 260

Guston, Philip [American painter] G: 443

Gutenberg, Johannes [German printer] G: 443
Bible picture on B: 279
Book (The development of printed books) B: 466
Communication (The invention of movable type) Ci: 880
Invention (The Renaissance) I: 360
Library (Paper, printing, and libraries) L: 260
Printing P: 796; (The invention of movable type) P: 803 *with picture*
Type (History) T: 537

Gutenberg Bible
Bible picture on B: 279
Book (The development of printed books) B: 466
Gutenberg, Johannes G: 444
Library of Congress L: 263

Guthrie [Oklahoma]
Oklahoma (Interesting facts) O: 713

Guthrie, A. B., Jr. [American author] G: 444

Guthrie, Arlo [American singer]
Guthrie, Woody G: 445

Guthrie, James [American government official]
Pierce, Franklin (table) P: 456
Treasury, Department of the (table) T: 407

Guthrie, Janet [American race driver]
Automobile racing (Automobile racing today) A: 981

Guthrie, Samuel [American chemist]
Chloroform C: 517

Guthrie, Tyrone [British director] G: 444

Guthrie, Woody [American singer] G: 444 *with portrait*
Popular music (The folk music revival) P: 671

Guthrie Theater [Minneapolis]
Guthrie, Tyrone G: 444
Minneapolis (The arts) M: 582
Minnesota (Places to visit) M: 594 *with picture*

Guthrum [Danish military leader]
Alfred the Great A: 348

Gutiérrez, Antonio García [Spanish dramatist]
Spanish literature (The 1800's) So: 761

Gutiérrez, Gustavo [Peruvian clergyman]
Liberation theology L: 228

Gutiérrez, José Angel [American social reformer] G: 445 *with portrait*
Hispanic Americans (Political developments) H: 255-256

GUT's [physics] See Grand unified theories *in this index*

Gutta-percha [tree product] G: 445

Gutter [bowling]
Bowling (The lane) B: 523

Gutty
Golf (Beginnings) G: 264

Guy, John [English settler]
Newfoundland and Labrador (Colonization) N: 375

Guy, William L. [American political leader]
North Dakota (table) N: 513

Guy Fawkes Day [custom]
Fawkes, Guy F: 57

Guy line
Crane Ci: 1120 *with pictures*

Guy Mannerling [book by Scott]
Dandie Dinmont terrier D: 33

Guy of Warwick [legendary figure] G: 445

Guyana G: 445 *with picture and map*
Flag picture on F: 201
Indian, American (Indians of the Tropical forest) I: 175

Guyana, University of
Guyana (People) G: 445-446

Guyenne [province, France]
Hundred Years' War H: 437

Guyot [oceanography]
Seamount S: 268

Guyot, Mount [North Carolina-Tennessee]
Great Smoky Mountains G: 349

Guys and Dolls [musical]
Loesser, Frank L: 420
Runyon, Damon R: 521

Guy's Hospital [London]
Addison, Thomas A: 48

Guzmán, Antonio [Dominican Republic political leader]
Dominican Republic (History) D: 304-305

Guzmán Blanco, Antonio [Venezuelan political leader]
Venezuela (Rule by dictatorships) V: 305

Guzmán de Alfarache [book by Alemán]
Spanish literature (The 1600's) So: 759

Guzmán Reynoso, Abimael [Peruvian political leader]
Peru (Recent developments) P: 316

Gwaii Haanas Archipelago [British Columbia]
Canada (table: National marine parks and conservation areas) C: 113

Gwaii Haanas National Park [British Columbia]
Canada (table: National parks and national park reserves) C: 113

Gwenn, Edmund [British actor]
Motion picture (Best performance by an actor in a supporting role: 1947) M: 863

Gwin, William M. [American political leader]
Pony express P: 657

Gwinnett, Button [American patriot] G: 447

Gwoyeu Romatzyh [Chinese language]
Lin Yutang L: 309

Gwyn, Nell [English actress] G: 447

Gyanendra [king of Nepal]
Nepal (History) N: 126-127

Gymnasium [secondary school]
Education (Ancient Greek education) E: 97-98
Germany (Education) G: 151-152
Hungary (Education) H: 441

Gymnasium [sports] G: 447
Physical education (Early history) P: 433
Safety (Safety at school) S: 11-12
School (Improvements in school design) S: 184

Gymnastics [sport] G: 447 *with pictures*
Comaneci, Nadia Ci: 866
Olympic Games (Summer Olympic Games) O: 746e-746f *with picture*

Gymnopédies [music by Satie]
Satie, Erik S: 150h

Gymnosperm [botany] G: 450 *with picture*
Angiosperm A: 462
Earth (The Mesozoic Era) E: 27-28
Plant (Seed plants) P: 519 *with pictures*; (Early plants) P: 540-541; (Classification of

plants) P: 546-547
Seed S: 281 *with diagram*
Tree (Needleleaf trees) T: 414; *pictures on T: 417*

Gynecology
Obstetrics and gynecology O: 646
Medicine (table) M: 369
Surgery (Obstetrics and gynecology) So: 1007

Győr [city, Hungary] G: 450

Gypsies [people] G: 451 *with picture*
Flamenco F: 226
Holocaust H: 296
Romania R: 416

Gypsum [mineral] G: 451
Alabaster A: 280
Cement and concrete (Raw materials) C: 344
Crystal (Classifying crystals) Ci: 1166-1167 *with picture*
Mineral picture on M: 569
Plaster of Paris P: 553
Rock (Chemical sediments) R: 372
Wallboard W: 17

Gypsum flower [geology]
Cave (Speleothems) C: 319

Gypsum Hills [Oklahoma]
Oklahoma (Land regions) O: 724-726

Gypsy moth [insect] G: 452 *with pictures*
Insect picture on I: 285
Moth (Tussock moths) M: 841 *with picture*; *picture on M: 839*
Tussock moth T: 525

Gyre [oceanography]
Atlantic Ocean (Moving ocean waters) A: 866
Ocean (Circulation) O: 658
Pacific Ocean (Currents) P: 15

Gyrfalcon [bird]
Falcon (The gyrfalcon) F: 14 *with picture*

Gyro [tool]
Gyroscope G: 453 *with pictures*

Gyrocompass [instrument] G: 452
Compass (Deviation) Ci: 903
Inertial guidance (History) I: 263
Sperry, Elmer Ambrose So: 779

Gyronny
Heraldry picture on H: 195

Gyroscope [tool] G: 453 *with pictures*
Automatic flight control (How an AFCS works) A: 944
Foucault, Jean Bernard Léon F: 429
Gyrocompass G: 452
Inertial guidance I: 263; (Gyroscopic systems) I: 263; (History) I: 263
Laser (Guiding) L: 83
Sperry, Elmer Ambrose So: 779
Top (Kinds of tops) T: 331

Gyroscopic compass See Gyrocompass *in this index*

Gyroscopic inertia [physics]
Gyroscope (Gyroscopic properties) G: 453

Gyroscopic precession [physics]
Ballistics (Exterior ballistics) B: 56
Gyroscope (Gyroscopic properties) G: 453-454 *with diagram*

H

H [letter] H: 1 *with pictures*

H [slang]
Heroin H: 213

H [symbol]
Henry H: 185
Hydrogen H: 469

H-2 [rocket]
Space exploration (Japan) So: 727
International Space Station I: 346b
Space exploration picture on So: 699

H. M. Pulham, Esq. [book by Marquand]
Marquand, John Phillips M: 217

H-substance [physiology]
Allergy (How an allergy develops) A: 373

H₂O
Water (The chemistry of water) W: 129 *with diagram*
Compound Ci: 906

Ha Ha Bay [Quebec]
Saguenay River S: 20

Haakon IV [king of Norway]
Norway (The Viking period) N: 545

- Haakon VI** [king of Norway]
Denmark (A great power) D: 139
- Haakon VII** [king of Norway]
Norway (Independence) N: 546; (World War II) N: 546
- Ha-am, Ahad** [Hebrew poet]
Hebrew literature (Modern Hebrew literature) H: 162-163
- Ha'apai** [islands]
Tonga (Land) T: 328
- Haavelmo, Trygve** [Norwegian economist]
Nobel Prizes (Economics: 1989) N: 449
- Habakkuk** [Biblical figure]
Habakkuk, Book of H: 2
- Habakkuk, Book of** [Old Testament] H: 2
- Habana, La** [Cuba] See *Havana in this index*
- "Habañera"** [aria]
Opera (*Carmen*) O: 802-803
- Habañera** [dance]
Tango T: 27
- Habeas corpus** [law] H: 2 *with pictures*
Civil rights (Due process) Ci: 608
Civil War (Government and politics) Ci: 622
Freedom (Social freedom) F: 501
Law (The Middle Ages) L: 134-135
- Habeas Corpus Amendment Act** [1679]
Habeas corpus H: 2
- Haber, Fritz** [German chemist]
Chemistry (Growth of industrial chemistry) C: 405
Haber process H: 2
Nobel Prizes (Chemistry: 1918) N: 442
- Haber-Bosch process** See *Haber process in this index*
- Haber process** [chemistry] H: 2
Hydrogen (Hydrogen compounds) H: 469
Nitrogen (Production of nitrogen compounds) N: 426
- Habibie, Bacharuddin Jusuf** [Indonesian political leader]
Indonesia (The fall of Suharto) I: 239
- Habibullah Khan** [emir of Afghanistan]
Afghanistan (The Anglo-Afghan wars) A: 95-96
- Habichtsbürg** [Aargau, Switzerland]
Habsburg, House of H: 3
- Habimah** [theater]
Israel (The arts) I: 482
- Habit** [clothing]
Friar F: 532
- Habit** [geology]
Mineral (Other identification tests) M: 567
- Habit** [psychology] H: 2
Learning (Theories of learning) L: 163-164
- Habitable zone** [astronomy]
Planet (The first discoveries) P: 512-513
- Habitant** [Canadian history]
Drummond, William Henry D: 368
- Habitant, The** [poems by Drummond]
Drummond, William Henry D: 368
- Habitant Farm, The** [painting by Krieghoff]
Canada *picture on* C: 110
- Habitat** [biology] H: 3
Animal (Where animals live) A: 473; (How human beings endanger animals) A: 504
Aquarium, Public (Displaying exhibits) A: 579
Endangered species (Loss of habitat) E: 269
Global warming (Changes of habitat) G: 232
Invasive species (How invasive species affect habitats) I: 354j
Lake (The lake habitat) L: 33
Ocean (Habitat modification) O: 665
Raccoon (The life of a raccoon) R: 50
- Habitat** [laboratory]
Diving, Underwater (History) D: 247
- Habitat** [housing development, Montreal]
Montreal (Housing) M: 772
Saldie, Moshe S: 8
- Habitat for Humanity** [organization]
Atlanta (Housing) A: 860
Carter, Jimmy (Later years) C: 259
- Habitat management**
Wildlife conservation (Methods of wildlife conservation) W: 304
- Habits of adjustment** [psychology]
Habit (Kinds of habits) H: 3
- Habré, Hissene** [Chadian political leader]
Chad (History) C: 367-368
- Habsburg, House of** H: 3
Austria (The Habsburgs) A: 937 *with map*
Belgium (Habsburg rule) B: 233
Bohemia B: 437
Croatia (History) Ci: 1148a-1148b
Czech Republic (Habsburg rule) Ci: 1213
Germany (The Holy Roman Empire) G: 162-163
Holy Roman Empire (The House of Habsburg) H: 299
Hungary (History) H: 445
Italy (Spanish and Austrian rule) I: 514
Magyars M: 64
Maximilian I M: 319
Prague (History) P: 730
Richelieu, Cardinal (Thirty Years' War) R: 331
Switzerland (The struggle for freedom) So: 1059
Thirty Years' War (The Swedish-French period) T: 260
Vienna (History) V: 363
- Habyarimana, Juvenal** [African military leader]
Burundi (History) B: 713-714
Rwanda (History) R: 571-572
- Hacienda** [estate]
Bolivia (Colonial rule) B: 446
Mexico (Agriculture) M: 465-466; (Spanish rule) M: 470
- Hacienda Buena Vista** [Puerto Rico]
Puerto Rico (Places to visit) P: 877
- Hack**
Curling (The game) Ci: 1195; *diagram on* Ci: 1196
- Hackamore** [riding equipment]
Horse (table: Riding equipment) H: 351
- Hackberry** [tree] H: 3
Tree *pictures on* T: 421
- Hacker**
Crime (Computer crime) Ci: 1357
- Hacker, Jörg** [German pilot]
Glider (table) G: 230
- Hackled band**
Spider (How spiders make silk) So: 786
- Hackled-band orb weaver**
Spider (table) So: 790; *picture on* So: 788
- Hackley, Robert J.** [American settler]
Tampa (History) T: 23
- Hackman, Gene** [American actor]
Motion picture (Best performance by an actor: 1971) M: 862-863; (Best performance by an actor in a supporting role: 1992) M: 863
- Hackmatack** [tree]
Larch L: 75
- Hackney** [breed]
Horse (table: Some types and breeds of horses) H: 343
- Hackney pony**
Horse (table: Some types and breeds of horses) H: 343; (Ponies) H: 347 *with picture*
- Hacksaw** [tool]
Saw (Handsaws) S: 166-167 *with picture*
Tool (Metalworking tools) T: 331
- Had bush** [plant]
Desert *picture on* D: 155
- Hadassah** [organization] H: 3
Szold, Henrietta So: 1078
- Hadassah International** [organization]
Hadassah H: 3
- Hadassah Medical Center**
Jerusalem (West Jerusalem) J: 95 *with map*
- Hadden, Briton** [American publisher]
Journalism (The age of sensationalism) J: 174-175
- Hadding** [legendary figure]
Mythology (Teutonic heroes) M: 985
- Haddock** [fish] H: 4 *with picture*
Fish *picture on* F: 153
- Hader, Berta Hoerner** [American artist]
Caldecott Medal (table: 1949) C: 26
- Hader, Elmer** [American artist]
Caldecott Medal (table: 1949) C: 26
- Hades** [Greek mythology] H: 4
See also Pluto [god] in *this index*
Asclepius A: 767
Cerberus C: 360
Eurydice E: 421
Mythology (Greek divinities) M: 979; (table) M: 980
Orpheus O: 858
Persephone P: 295
Tartarus T: 48
- Hadhramaut** [region, Yemen]
Yemen *picture on* Y: 563
- Hadith** [religion]
Islam (The Sunna of Muhammad) I: 463
Shari'a S: 374
- Hadj** See *Hajj in this index*
- Hadji Murad** [book by Tolstoy]
Tolstoy, Leo (Later works) T: 323
- Hadley, Herbert S.** [American political leader]
Missouri (table) M: 668
- Hadley, John** [British inventor]
Sextant S: 337
- Hadley, Ozra A.** [American political leader]
Arkansas (table) A: 712
- Hadrian** [popes] See *Adrian in this index*
- Hadrian** [Roman emperor] H: 4
Jerusalem (Roman rule) J: 101
Library (Ancient libraries of papyrus) L: 258-259
- Hadrianopolis** [ancient city]
Edirne E: 77
- Hadrian's Library** [Athens]
Library (Ancient libraries of papyrus) L: 258-259
- Hadrian's Wall** [England]
England (The Roman conquest) E: 303-304 *with picture*
Roman walls R: 414 *with picture*
Scotland (The Roman invasion) S: 219
- Hadron** [physics] H: 4
Gluon G: 236
Quark Q: 7
Subatomic particle (Composite particles) So: 937
- Hadrosaur** [dinosaur] H: 5
Dinosaur (True dinosaurs) D: 206b-206c; (Reproduction and growth) D: 211; *picture on* D: 209
- Haeckel, Ernst Heinrich** [German zoologist] H: 5
Protist P: 836
- Haema...**
Words beginning Haema or Haemo appear under Hema or Hemo, as in Hemoglobin
- Haley, Chick** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Hafiz** [Persian poet] H: 5
Iran (The arts) I: 402-403
- Hafnium** [element] H: 5
- Hafsa** [wife of Muhammad]
Muslims (The early caliphs) M: 964a
- Hagaman, Frank L.** [American political leader]
Kansas (table) K: 234
- Haganah** [organization]
Dayan, Moshe D: 53
Eshkol, Levi E: 358
- Hagar** [Biblical figure]
Abraham A: 16
Ishmael I: 462
Islam (The Five Pillars of Islam) I: 463-464
Muslims (Before Muhammad) M: 964
- Hagåtña** [Guam] H: 5
Guam G: 408 *with picture*
- Hagelin, Boris C. W.** [Swedish engineer]
Codes and ciphers (Cipher machines) Ci: 750
- Hagen** [legendary figure]
Nibelungenlied N: 395
Siegfried S: 450
- Hagen, Uta** [American actress]
Shakespeare, William *picture on* S: 355
- Hagen, Walter** [American golfer] H: 5
- Hagenbeck, Carl** [German animal trainer] H: 5
Zoo (The evolution of zoos) Z: 609
- Hagerman Fossil Beds National Monument** [Idaho]
Idaho (Places to visit) I: 34
National Park System (table: National monuments) N: 51
- Hagerstown Valley**
Maryland (Land regions) M: 250
- Hägerstrand, Torsten** [Swedish geographer]
Geography (The growth of geography) G: 95-96
- Hagfish** [sea animal] H: 6
Animal *picture on* A: 507
Fish (Lampreys and hagfish) F: 148 *with picture*
- Haggadah** [religion]
Passover P: 192
- Haggai, Book of** [Old Testament] H: 6
- Haggard, H. Rider** [British author] H: 6
- Haggis** [food]
Scotland (Food and drink) S: 214
- Hägglund, Joel** See *Hill, Joe in this index*
- Hagia Sophia** [museum, Istanbul] H: 6
Architecture (Byzantine architecture) A: 617, *picture on* A: 618
Byzantine art (Architecture) B: 749-750
Byzantine Empire (The empire under Justinian I) B: 754, *picture on* B: 753
Istanbul (The city) I: 490-491 *with picture*
- Hagiography** [literature]
Biography (The Middle Ages) B: 313
- Hagley Museum** [Wilmington]

- Delaware (Places to visit) D: 102
Hagood, Johnson [American political leader]
 South Carolina (table) So: 658
Hague, Frank [American political leader] H: 6
 Jersey City (Government and history) J: 94
Hague, The [The Netherlands] H: 6 *with picture*
 Netherlands (National government) N: 139
Hague, William [British political leader]
 Conservative Party Ci: 992
Hague Convention [1970]
 Hijacking H: 230
Hague Peace Conference [1899]
 Hague, The (History) H: 6-7
 International law (In the 1800's) I: 342
 Prisoner of war P: 808
Hague Peace Conference [1907]
 Hague, The (History) H: 6-7
 International law (In the 1800's) I: 342
 Neutrality N: 153
 Prisoner of war P: 808
 Right of search R: 340
Hahajima [island, Japan]
 Bonin Islands B: 460
Hahn, Kurt [German educator]
 Outward Bound O: 880
Hahn, Michael [American political leader]
 Louisiana (table) L: 496
Hahn, Otto [German chemist] H: 7
 Meitner, Lise M: 387
 Nuclear energy (Artificial fission) N: 590
 Physics (Uncovering the secrets of the atom)
 P: 442
 Protactinium P: 831
 Strassmann, Fritz So: 918
 Uranium (History of the use of uranium)
 U: 216
Hahnemann, Samuel [German doctor] H: 7
 Homeopathy H: 302
Haida Indians [American Indians] H: 7
 Alaska (Population) A: 286, *picture on* A: 300
 Canada (Painting and sculpture) C: 109-110
with picture
 Indian, American (Shelter) I: 136d; *picture on*
 I: 162
Haider, Jörg [Austrian political leader]
 Austria (Recent developments) A: 940
Haider, Sign of [Pakistan]
 Medals, decorations, and orders (table) M: 359
Haifa [Israel] H: 7
Haig, Alexander Meigs, Jr. [American govern-
 ment official] H: 7
Haig, Douglas [British military leader] H: 8
 World War I (The Battle of the Somme)
 W: 458-459; (Allied failures) W: 461
Haig, Earl *See* Haig, Douglas *in this index*
Haight, Henry H. [American political leader]
 California (table) C: 59
Haik [garment]
 Algeria (Clothing) A: 361
Haiku [poetry]
 Japanese literature (The Tokugawa period)
 J: 62
 Poetry (Lyric poetry) P: 591
Hail [weather] H: 8 *with pictures*
 Rain (The ice-crystal process) R: 124
 Tornado (The story of a tornado) T: 333-334
 Weather (Synoptic-scale systems) W: 159-161
Hail and Farewell [book by Moore]
 Moore, George Augustus M: 797
Hail insurance
 Crop insurance Ci: 1153
Hail Mary [prayer]
 Annunciation A: 518
 Rosary R: 477
Hail the Conquering Hero [film]
 Sturges, Preston So: 934
"Hail to the Chief" [song] H: 8
Haile, William [American political leader]
 New Hampshire (table) N: 223
Haile-Mariam, Mengistu [Ethiopian political
 leader] *See* Mengistu Haile-Mariam *in this*
index
Haile Selassie I [emperor of Ethiopia] H: 8
 Eritrea (History) E: 353-354
 Ethiopia (Haile Selassie) E: 371 *with picture*
 Italo-Ethiopian War I: 495
 Jamaica (People) J: 23-24
 Rastafarians R: 145
Hailstone
 Hail H: 8 *with picture*
Haines, Daniel [American political leader]
 New Jersey (table) N: 249
Haines, Jackson [American skater]
 Ice skating (History) I: 16
Haines, Jesse [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Haines, John M. [American political leader]
 Idaho (table) I: 42
Haines, William T. [American political leader]
 Maine (table) M: 87
Hainuwele [Polynesian goddess]
 Mythology (Jensen's theory) M: 988
Haiphong [Vietnam] H: 8
 Vietnam War (Invasion of the south) V: 376
Hair H: 9 *with pictures*
See also Fur *in this index*
 Baldness B: 38
 Cosmetics (Kinds of cosmetics) Ci: 1075
 Depilatory D: 149
 Fur F: 561 *with pictures*
 Hairdressing H: 11 *with pictures*
 Head lice H: 123
 Mammal M: 117; (Skin and hair) M: 118 *with*
picture
 Races, Human R: 52 *with picture*; (The three-
 race theory) *pictures on* R: 54
 Skin (Hair, nails, and glands) S: 489
Hair [musical]
 Musical comedy (During the late 1900's)
 M: 960
 Rock music (Expanding styles and sounds)
 R: 378-379
Hair Buyer [North American history]
 Indian wars (Other Midwestern conflicts)
 I: 192
Hair cell [anatomy]
 Ear (The inner ear) E: 8; (How sounds reach
 the brain) E: 10 *with diagram*; (The
 response to gravity) E: 11 *with diagram*
Hair dye
 Hairdressing (Ancient times) H: 11
Hair hygrometer [instrument]
 Hygrometer (The hair hygrometer) H: 474
Hair setting
 Hairdressing H: 11 *with pictures*
Hair snake [animal]
 Horsehair worm H: 367
Hair transplanting
 Baldness B: 39
Hair weaving
 Baldness B: 39
Hairball [disorder]
 Cat (Grooming) C: 294
Hairbell [plant]
 Bluebell B: 421
Haircap moss [plant]
 Moss M: 834 *with picture*
Hairdresser
 Hairdressing H: 11; (Careers in hairdressing)
 H: 13 *with picture*
Hairdressing H: 11 *with pictures*
See also Barber *in this index*
 Barber B: 106
 Clothing (The 1700's) Ci: 701-702 *with picture*
 Colonial life in America (Clothing) Ci: 799
Hairdryer
 Hairdressing (Caring for the hair) H: 13
Hairspring
 Watch (Mechanical watches) W: 114
Hairstreak [entomology]
 Butterfly (Blues, coppers, and hairstreaks)
 B: 734 *with picture*
Hairstyle
 Egypt, Ancient *picture on* E: 138
 Hairdressing H: 11 *with pictures*
Hairworm
 Horsehair worm H: 367
Hairy Ape, The [play by O'Neill]
 O'Neill, Eugene Gladstone (His plays) O: 762
Hairy mammoth [extinct animal]
 Mammoth M: 130
Hairy-nosed wombat [animal]
 Wombat W: 382
Hairy woodpecker
 Woodpecker *picture on* W: 394
Haise, Fred Wallace, Jr. [American astronaut]
 H: 13 *with portrait*
 Lovell, James Arthur Jr. L: 509
 Space exploration (The flight of Apollo 13)
 So: 718
Haiti [country] H: 14 *with pictures and map*
 Aristide, Jean-Bertrand A: 662
 Christophe, Henri C: 537
 Clinton, Bill (International affairs) Ci: 682e
 Dominican Republic (People) D: 303
 Duvalier, François D: 393
 Flag *picture on* F: 201
 Hispaniola H: 259
 Latin America (The wars of independence)
 L: 107-108
 Toussaint L'Ouverture T: 348
 Voodoo V: 448 *with picture*
 World War II (table: The Allies) W: 471
Hajj [religion] H: 17
 'Id al-Adha I: 25
 Islam (The Five Pillars of Islam) I: 463-464
 Mecca (Economy) M: 358-353
Hajji [religion]
 Hajj H: 17
Hake (fish) H: 17 *with picture*
Hakkinen, Mika [Finnish race driver]
 Automobile racing (table: Grand Prix world
 champions) A: 980
Hal, Prince [literary figure]
 Henry V [of England] H: 187
 Shakespeare, William (*Henry IV*) S: 359
Halas, George Stanley [American football
 coach] H: 17
Halberstam, David [American journalist]
 War correspondent W: 27
Halcion [drug]
 Benzodiazepine B: 256
Hald, Jens [Danish physician]
 Disulfiram D: 240
Haldane, J. B. S. [British biologist]
 Evolution (The synthetic theory) E: 432
 Life (Modern theories) L: 278
Haldane, William [American cabinetmaker]
 Furniture (The furniture industry) F: 586
Haldeman, H. R. [American government official]
 Watergate W: 144
Hale, Edward Everett [American author] H: 18
Hale, George Ellery [American astronomer] H: 18
 Mount Wilson Observatory M: 890
 Palomar Observatory P: 112
 Sun (History of modern solar study) So: 986
 Yerkes Observatory Y: 565
Hale, John Parker [American political leader]
 H: 18
 Free Soil Party F: 499
Hale, Nathan [American patriot] H: 18 *with pic-
 ture*
 Connecticut (The Revolutionary War) Ci: 970
 Revolutionary War in America (The campaign
 in New York) R: 280
Hale, Nathan [American editor]
 Hale, Edward Everett H: 18
Hale, Samuel W. [American political leader]
 New Hampshire (table) N: 223
Hale, Sarah Josepha [American editor] H: 19
 Magazine (History) M: 43-45
 Thanksgiving Day (Later Thanksgiving Days in
 the United States) T: 230
Hale, William [British engineer]
 Rocket (Early rockets) R: 390
Hale-Bopp, Comet
 Comet Ci: 868; (table) Ci: 868
Hale rocket [weapon]
 Rocket (Early rockets) R: 390
Hale Telescope [California]
 Palomar Observatory P: 112
 Telescope (Reflecting telescopes) T: 104-105
Haleakala [volcano]
 Hawaii (Maui) H: 100
Haleakala National Park [Hawaii] H: 19 *with*
picture
 Hawaii (Places to visit) H: 98 *with picture*
 National Park System (table: National parks)
 N: 48
Halemaumau [crater, Hawaii]
 Kilauea K: 315
Hales, Stephen [British scientist]
 Heart (Discovery of circulation) H: 144
Hales Bar Dam [Tennessee River, Alabama]
 Tennessee River T: 158
Halevi, Judah [Hebrew poet] H: 19
 Hebrew literature (Medieval works) H: 162
Halévy, Ludovic [French librettist]
 Opera (*Carmen*) O: 802
Haley, Alex [American author] H: 19 *with por-
 trait*
 American literature (Works by minority writ-
 ers) A: 425
Haley, Gail E. [American artist]
 Caldecott Medal (table: 1971) C: 26
Haley, Jack [American actor]
 Garland, Judy *picture on* G: 44
Half-and-half [dairy product]
 Milk (table) M: 547
Half-Breeds [U.S. history]
 Garfield, James Abram (Congressman) G: 41-
 42

- Hayes, Rutherford Birchard (Campaign of 1876) **H**: 120
- Republican Party (The Radical Republicans and Reconstruction) **R**: 254-255
- Half brother**
Family (Family relationships) **F**: 21
- Half-camp** [dwelling]
Lincoln, Abraham (Boyhood) **L**: 312
- Half dollar** [money] **H**: 20 *with pictures*
Money (United States currency today) **M**: 709-711 *with pictures*
- Half Dome**
Yosemite National Park (Rock masses) **Y**: 570
- Half-hour glass** [measuring device]
Hourglass **H**: 379
- Half-life** [radioactivity]
Isotope (Radioactive isotopes) **I**: 476
Nuclear energy (Radioactive decay) **N**: 582
Radiation (Radiation and radioactivity) **R**: 75
Radiocarbon (Radiocarbon dating) **R**: 97
Radiogeology **R**: 98
Uranium (Radioactivity) **U**: 214-215
- Half-mast** [custom]
Flag (Raising and lowering the flag) **F**: 219
- Half Mile Down** [book by Beebe]
Beebe, William **B**: 208
- Half moon** [astronomy]
Moon (Phases) **M**: 783-784
- Half Moon** [ship]
Hudson, Henry (North American voyages) **H**: 404
- Half-pipe** [competition]
Snowboarding **S**: 541
- Half shaft**
Automobile (The drive system) **A**: 953
- Half sister**
Family (Family relationships) **F**: 21
- Half stitch** [embroidery]
Petit point **P**: 326
- Half-timbered house**
Shelter (The Middle Ages) **S**: 393-394
- Half-title page**
Book (Inside a book) **B**: 464
- Half tone** [music]
Tone **T**: 327
- Halfback** [sports]
Football (The offensive team) **F**: 356 *with diagrams*
Soccer (The midfielders) **So**: 545
- Halfpenny** [money]
Penny **P**: 271
- Halftone image** [printing]
Photoengraving and photolithography
(Capturing the image) **P**: 405 *with picture*
Printing (Preparing illustrations for reproduction) **P**: 797; (Process color printing) **P**: 802
- Halftone screen** [printing]
Printing (Preparing illustrations for reproduction) **P**: 797
- Halfway house**
Criminal justice system (Problems in the correctional system) **Ci**: 1144
Prison (Reforms in the 1900's) **P**: 808
- Halfway line** [sports]
Rugby football (Rugby Union) **R**: 510
- Haliburton, Thomas Chandler** [Canadian author]
Canadian literature (Early English-Canadian literature) **C**: 157
- Halibut** [fish] **H**: 20 *with picture*
Fish **F**: 153
- Halicarnassus, Mausoleum at** [Persia]
Seven Wonders of the Ancient World (The Mausoleum at Halicarnassus) **S**: 325; *picture on S*: 327
- Halide** [chemistry]
Halogen **H**: 27
- Halifax** [Nova Scotia] **H**: 20 *with picture*
Nova Scotia (Population) **N**: 558; (table: Average monthly weather) **N**: 564; (The struggle in Acadia) **N**: 568; *pictures on N*: 555, **N**: 561, **N**: 567
- Halifax, Earl of** [British nobleman]
Halifax **H**: 20
- Halifax Citadel National Historic Site** [Nova Scotia]
Canada (table: National historic sites) **C**: 114
- Halifax Gazette** [newspaper]
Nova Scotia (Communication) **N**: 566
- Halite** [mineral]
Mineral (Mineral crystals) **M**: 567-570 *with pictures*
Salt **S**: 72
- Hall, Asaph** [American astronomer]
Mars (Satellites) **M**: 226b
- Hall, Sir Benjamin** [British government official]
Big Ben **B**: 297
- Hall, Charles Martin** [American chemist]
Aluminum (Smelting the alumina) **A**: 393; (The growth of the aluminum industry) **A**: 397
Alcoa Inc. **A**: 398
- Hall, David** [American political leader]
Delaware (table) **D**: 109
- Hall, David** [American political leader]
Oklahoma (table) **O**: 730
- Hall, Edward T.** [American anthropologist]
Communication (The study of communication) **Ci**: 887
- Hall, Edwin H.** [American physicist]
Hall effect **H**: 22
- Hall, Fred** [American political leader]
Kansas (table) **K**: 234
- Hall, G. Stanley** [American educator] **H**: 22
Progressive education (Progressive educators) **P**: 812
- Hall, Hiland** [American political leader]
Vermont (table) **V**: 333
- Hall, Sir James** [Scottish geologist]
Geology (Experimental geology) **G**: 99
- Hall, James Norman** [American author]
Nordhoff and Hall **N**: 453
- Hall, John H.** [American political leader]
Oregon (table) **O**: 845
- Hall, John W.** [American political leader]
Delaware (table) **D**: 109
- Hall, Joshua** [American political leader]
Maine (table) **M**: 87
- Hall, Luther E.** [American political leader]
Louisiana (table) **L**: 496
- Hall, Lyman** [American patriot] **H**: 22
Georgia (table) **G**: 130
- Hall, Nathan K.** [American government official]
Fillmore, Millard (table) **F**: 102
- Hall, Prince** [American social leader] **H**: 22
Masonry (History) **M**: 267-268
- Hall, Robert E.** [American economist]
Flat tax **F**: 228
- Hall, Samuel Read** [American educator]
Vermont (Schools) **V**: 322
- Hall, Stuart** [British cultural critic]
Communication (Communication and culture) **Ci**: 888
- Hall, Willard P.** [American political leader]
Missouri (table) **M**: 668
- Hall, William** [American political leader]
Tennessee (table) **T**: 152
- Hall effect** [electricity] **H**: 22
- Hall-Héroult process** [industrial process]
Aluminum (Smelting the alumina) **A**: 393; (The growth of the aluminum industry) **A**: 397
- Hall of Fame**
Hall of fame **H**: 22 *with pictures*
- Hall of Fame, Baseball** See Baseball Hall of Fame *in this index*
- Hall of Fame, Basketball** See Basketball Hall of Fame *in this index*
- Hall of Fame, Hockey** [Toronto] See Hockey Hall of Fame *in this index*
- Hall of Fame for Great Americans** [New York City]
Hall of fame (The Hall of Fame for Great Americans) **H**: 22 *with picture*
- Hall of Mirrors**
Versailles, Palace of **V**: 339
- Hall of Music**
Purdue University **P**: 907
- Hall of One Hundred Columns** [Persepolis]
Architecture (Mesopotamian architecture) **A**: 611-612
- Hall of the Great Buddha** [temple]
Temple **T**: 131
- Hall of the Slain** [Norse mythology]
Valhalla **V**: 265
- Hall voltage** [electricity]
Hall effect **H**: 22
- Halla-san** [mountain, Korea]
Korea (Islands) **K**: 374
- Hallaca** [food]
Christmas (In Latin America) **C**: 532
Venezuela (Food) **V**: 301
- Hallam, Arthur Henry** [friend of]
Tennyson, Lord (His life) **T**: 169
- Halleck, Henry Wager** [Union general] **H**: 24
Civil War (The war in the West—1862-1864) **Ci**: 629
Grant, Ulysses S. ("Unconditional Surrender" Grant) **G**: 314
- "Hallelujah Chorus"** [music by Handell]
Handell, George Frideric (His work) **H**: 42
- Halles, Les** [district]
Paris (Renewal and new construction) **P**: 166-167
- Halley, Edmond** [English astronomer] **H**: 24
Greenwich Observatory, Royal **G**: 387
Halley's Comet **H**: 24
Insurance (The growth of insurance) **I**: 316
Map (Advances in European cartography) **M**: 183-184
Newton, Sir Isaac (The Principia) **N**: 389
- Halley's Comet** [astronomy] **H**: 24 *with diagram*
Comet (Composition) **Ci**: 868 *with picture*; (table) **Ci**: 868
Halley, Edmond **H**: 24
Space exploration (Probes to comets) **So**: 711
- Halliburton, Richard** [American author] **H**: 24a *with picture*
- Halliday, Michael** [pen name]
Creasey, John **Ci**: 1123
- Hallidie, Andrew S.** [American engineer]
Cable car **C**: 7
San Francisco (Continued prosperity) **S**: 97-98
- Halliwell, James** [British author]
Nursery rhyme (History) **N**: 614-615
- Halloween** **H**: 24a *with picture*
October **O**: 670
Pumpkin **P**: 901
- Hallstatt** [Austria]
Celts **C**: 342
Necropolis **N**: 117
- Hallucinated City** [book by Andrade]
Latin-American literature (The early 1900's) **L**: 113
- Hallucination** [psychology] **H**: 26
Abnormal psychology (Theories of abnormal psychology) **A**: 12
Alcoholism (Effects of alcoholism) **A**: 337-338
Amphetamine (Amphetamine abuse) **A**: 439
Hallucinogenic drug **H**: 26
Mental illness (Schizophrenia) **M**: 405
Narcolepsy **N**: 20
Sleep (What happens without sleep) **S**: 507
- Hallucinogenic drug** **H**: 26
Brain (How drugs affect brain chemistry) **B**: 556
Drug (Hallucinogens) **D**: 352
Drug abuse (Abuse of illegal drugs) **D**: 362; (table: Some commonly abused drugs) **D**: 363
LSD **L**: 512
- Halmahera** [island, Indonesia]
Indonesia (The Molucca Islands) **I**: 234
- Halo** [astronomy]
Milky Way (Shape of the galaxy) **M**: 550-551
- Halo** [light] **H**: 26 *with picture*
Madonna and Child (Types of Madonna paintings) **M**: 38
- Halogen** [chemistry] **H**: 27
- Halogen lamp** See Tungsten-halogen lamp *in this index*
- Haloid Company** [former name]
Xerox Corporation **X**: 544
- Halon extinguisher**
Fire extinguisher (Liquefied gas extinguishers) **F**: 130
- Halonen, Tarja** [Finnish political leader]
Finland (Recent developments) **F**: 118
- Halothane** [drug] **H**: 27
- Hals, Frans** [Dutch painter] **H**: 27 *with picture*
Painting (The Dutch masters) **P**: 62 *with picture*
- Halsall, William F.** [American painter]
Pilgrims **P**: 463
- Halsey, William Frederick, Jr.** [American admiral] **H**: 28
- Halsted, William** [American doctor]
Dentistry (Modern dentistry) **D**: 145
Mastectomy **M**: 297
Surgery (History) **So**: 1007
- Halteres** [entomology]
Fly (Thorax) **F**: 309 *with diagram*
Insect (Wings) **I**: 288
Mosquito (Thorax) **M**: 832-833 *with diagram*
- Halva** [food]
Pakistan (Food and drink) **P**: 96
- Halyard** [rope]
Flag (table) **F**: 193; (Raising and lowering the flag) **F**: 219
Sailing (Rigging) **S**: 24
- Ham** [Biblical figure]
Noah **N**: 439

- Ham** [chimpanzee]
Space exploration (Vostok and Mercury: The first human beings in space) **So: 711-712**
- Ham** [food] **H: 28 with pictures**
Meat pictures on **M: 349**
- Ham** [radio]
Radio, Amateur **R: 95**
- Hamad bin Isa Al-Khalifa** [king of Bahrain]
Bahrain (History) **B: 30-31**
- Hamadryad** [mythology]
Nymph **N: 633**
- Hamadryas** [animal]
Baboon **B: 3**
- Hamakua Coast** [region]
Hawaii (Places to visit) **H: 98**
- Hamamelin** [medication]
Witch hazel **W: 371**
- Haman** [Biblical figure]
Esther, Book of **E: 361**
Purim **P: 909**
- Hamate bone**
Hand (Parts of the hand) **H: 40**
Wrist *diagram on W: 510*
- "Hamatreya"** [poem by Emerson]
Emerson, Ralph Waldo (His poetry) **E: 259**
- Hambletonian** [horse]
Harness racing (Harness horses) **H: 63**
- Hamburg** [Germany] **H: 28 with picture**
- Hamburg American Line**
Ship (Passenger vessels) **S: 414-415**
- Hamburg Dramaturgy, The** [essays by Lessing]
Drama (Germany) **D: 336**
Lessing, Gotthold Ephraim **L: 208**
- Hamburg parsley** [plant]
Parsley **P: 182**
- Hamburger** [food]
Food (Interesting facts about food) **F: 329**
- Hame tug**
Harness *diagram on H: 63*
- Hamelin** [Germany]
Pied Piper of Hamelin **P: 452**
- Hamer, Fannie Lou** [American civil rights leader]
H: 29
- Hames**
Harness **H: 63 with diagram**
- Hamilcar Barca** [Carthaginian general] **H: 29**
Barcelona **B: 108**
Hannibal (His early life) **H: 51**
- Hamilton** [city, Bermuda] **H: 29**
- Hamilton** [city, Ontario] **H: 30 with picture and map**
Canada *picture on C: 122*
- Hamilton, Alexander** [American statesman]
H: 32 with portrait
Adams, John (Vice President) **A: 37**, (The Federalist split) **A: 37**, (Difficulties with France) **A: 37-38**
Bank (History of U.S. banking) **B: 92**
Bank of the United States **B: 96**
Burr, Aaron (Gains recognition) **B: 711**
Clinton, George **Ci: 682g**
Constitution of the United States **Ci: 998**
Democratic-Republican Party **D: 128**
Federalist, The **F: 67**
Federalist Party **F: 67**
Jefferson, Thomas (Secretary of state) **J: 81 with picture**; (Election of 1804) **J: 85**
Paterson **P: 195**
United States, Government of the (Early years) **U: 145**
United States, History of the (Solving financial problems) **U: 162**; (Foreign affairs) **U: 162 with picture**
Washington, D.C. (Choosing the capital) **W: 85**
Washington, George (Cabinet) **W: 102 with picture**; (Finances) **W: 103**; (Constitutional debate) **W: 103**
- Hamilton, Alice** [American doctor] **H: 33 with portrait**
Hull House **H: 412**
- Hamilton, Andrew** [American lawyer]
Postal Service, United States (Colonial times) **P: 700**
Zenger, John Peter **Z: 593**
- Hamilton, Andrew J.** [American political leader]
Texas (table) **T: 203**
- Hamilton, Billy** [American baseball player]
Baseball (table: Hall of Fame) **B: 134**
- Hamilton, Charles** [American author]
Carmichael, Stokely **C: 241**
- Hamilton, Emma Lady** [British public figure]
Nelson, Horatio (Battle of the Nile) **N: 122**
- Hamilton, George** [Canadian pioneer]
Hamilton **H: 30**, (History) **H: 31**
- Hamilton, Gordon** [American social worker]
Social work (History) **So: 559**
- Hamilton, Henry** [British colonial leader]
Indian wars (Other Midwestern conflicts) **I: 192**
- Hamilton, James, Jr.** [American political leader]
South Carolina (table) **So: 658**
- Hamilton, Jimmy** [American clarinetist]
Ellington, Duke *picture on E: 242*
- Hamilton, John M.** [American political leader]
Illinois (table) **I: 71**
- Hamilton, Mount** [California]
Lick Observatory **L: 270**
- Hamilton, Paul** [American political leader]
Madison, James (table) **M: 35**
South Carolina (table) **So: 658**
- Hamilton, Virginia** [American author] **H: 33**
Regina Medal (table: 1990) **R: 206**
- Hamilton, William Donald** [British biologist]
H: 33
- Hamilton, William T.** [American political leader]
Maryland (table) **M: 255**
- Hamilton Fish** [book by Nevins]
Nevins, Allan **N: 178**
- Hamilton Grange National Memorial** [New York]
National Park System (table: National memorials) **N: 54**
- Hamilton Harbour** [Canada]
Hamilton (The city) **H: 30 with map**
- Hamilton River** [former name]
Churchill River **C: 550**
- Hamilton Tiger-Cats**
Football (Canadian Football League) **F: 364**
- Hamites** [people] **H: 33**
- Hamlet** [film]
Motion picture (Best picture: 1948) **M: 861**
Olivier, Laurence **O: 744**
- Hamlet** [literary figure]
Shakespeare, William (*Hamlet*) **S: 361 with picture**
- Hamlet** [play by Shakespeare]
Shakespeare, William (*Hamlet*) **S: 361 with picture**
- Hamlet, The** [book by Faulkner]
Faulkner, William **F: 55**
- Hamlet council**
Nunavut (Government) **N: 611**
- Hamlin, Hannibal** [American political leader]
H: 34
Lincoln, Abraham (Election of 1860) **L: 318 with picture**
Maine (table) **M: 87**; (Statehood) **M: 89-91**
Vice President of the United States (table) **V: 351**; **V: 348 with portrait**
- Hamlich, Marvin** [American composer]
Musical comedy (The modern musical emerges) **M: 960**
- Hamm, John F.** [Canadian political leader]
Nova Scotia (table) **N: 567**
- Hammann** [ship]
Midway Island **M: 536**
- Hammerskjöld, Dag** [Swedish statesman] **H: 34**
Pearson, Lester Bowles *picture on P: 223*
United Nations (The secretary-general) **U: 83 with portrait**
- Hammer** [anatomy]
Ear (The middle ear) **E: 7-8 with diagram**
- Hammer** [gun]
Rifle (How a rifle works) **R: 338**
- Hammer** [tool] **H: 34 with pictures**
Woodworking (Steps in woodworking) **W: 396 with picture**
- Hammer throw** [sport] **H: 34 with pictures**
Track and field (Throwing events) **T: 356**; (World track and field records) **T: 358-359**
- Hammered dulcimer**
Dulcimer **D: 380 with picture**
- Hammerhead shark** [fish] **H: 34 with picture**
Shark (Kinds of sharks) **S: 375**
- Hammerstein, Oscar, II** [American dramatist]
H: 35 with portrait
Musical comedy (Musical comedy matures) **M: 960**
Rodgers, Richard **R: 398**
- Hammett, Dashiell** [American author] **H: 35**
American literature (Realist fiction) **A: 422**
- Hammill, John** [American political leader]
Iowa (table) **I: 391**
- Hammock** [bed]
Indian, American *picture on I: 140*
Ship (The full-rigged ship) **S: 408**
- Hammon, Jupiter** [American poet]
African Americans (Free blacks) **A: 136e-136f**
- Hammond** [Indiana]
Gary **G: 47**
- Hammond, Abram A.** [American political leader]
Indiana (table) **I: 214**
- Hammond, James H.** [American political leader]
South Carolina (table) **So: 658**
- Hammond, Jay S.** [American political leader]
Alaska (table) **A: 300**
- Hammond, John** [American businessman]
Basie, Count **B: 140**
- Hammond, John Hays, Jr.** [American inventor]
H: 35
- Hammond, Winfield S.** [American political leader]
Minnesota (table) **M: 602**
- Hammond Island**
Torres Strait Islands **T: 341**
- Hammurabi** [king of Babylonia] **H: 35 with picture**
Babylon (The Old Babylonian Empire) **B: 11**
World, History of the (The Tigris-Euphrates Valley) **W: 422-424**
- Hammurabi, Code of** [law]
Adoption (History) **A: 67**
Hammurabi **H: 35**
Insurance (Earliest insurance) **I: 316**
Law (Early developments in the East) **L: 133**
Theocracy **T: 252**
World, History of the (The Tigris-Euphrates Valley) **W: 422-424**
- Hammurapi** See *Hammurabi in this index*
- Hampshire** [hog]
Hog (Kinds of hogs) **H: 285 with picture**; (table) **H: 286**
- Hampshire sheep**
Sheep (Medium-wooled sheep) **S: 382**
- Hampton** [Virginia] **H: 36**
- Hampton, Lionel** [American musician] **H: 36**
Jazz (The swing era) **J: 71 with picture**
- Hampton, Wade** [American general]
War of 1812 (Campaigns of 1813) **W: 31**
- Hampton, Wade** [Confederate general] **H: 36**
South Carolina (table) **So: 658**; (Reconstruction) **So: 660**
- Hampton Beach**
New Hampshire (Places to visit) **N: 216**
- Hampton Court Conference** [1604] **H: 36**
Puritans (History) **P: 910**
- Hampton National Historic Site** [Maryland]
National Park System (table: National historic sites) **N: 52-53**
- Hampton Normal and Agricultural Institute** [former name]
Hampton University **H: 37**
- Hampton Roads** [harbor, Virginia] **H: 36**
- Hampton Roads, Battle of** [1862]
Civil War (First battle between ironclads) **Ci: 626 with picture**
- Hampton Roads Conference** [1865] **H: 37**
Stephens, Alexander Hamilton **So: 890**
- Hampton University** **H: 37**
- Hamster** [animal] **H: 37 with picture**
- Hamstring** [anatomy]
Leg (The thigh) **L: 181-182**
- Hamsun, Knut** [Norwegian author] **H: 37**
- Han** [Japanese history]
Japan (Tokugawa period) **J: 55**
- Han** [people]
China (Nationalities) **C: 481 with picture**
- Han dynasty** [Chinese history] **H: 37 with map**
Asia (The Huang He and Yangtze valleys) **A: 805 with map**
China (The arts) **C: 488 with picture**; (The early empire) **C: 501 with map**
Great Wall of China (History) **G: 350**
Liu Bang **L: 393**
Painting (Chinese painting) **P: 44**
Sculpture (China) **S: 238**
World, History of the (The unification of China) **W: 431 with picture**
- Han Gaozu** [Chinese emperor] See *Liu Bang in this index*
- Han Kao-tsu** [emperor of China] See *Liu Bang in this index*
- Han River** [Korea]
Seoul **S: 304**
- Hancock, George W.** [American sportsman]
Softball (History) **So: 572**
- Hancock, Herbie** [American musician] **H: 38**
Jazz (Fusion) **J: 73**
- Hancock, John** [American patriot] **H: 38 with pictures**
Declaration of Independence (Adoption of the Declaration) **D: 74**; *picture on D: 77*

- Massachusetts (table) M: 288
 Revere, Paul (Paul Revere's ride) R: 267
 Shays's Rebellion S: 379
- Hancock, Thomas** [British inventor]
 Rubber (The rubber industry begins) R: 501
- Hancock, Thomas** [luncheon]
 Hancock, John H: 38
- Hancock, Walker Kirtland** [American sculptor]
 Stone Mountain So: 909
- Hancock, Winfield Scott** [Union general] H: 39
 Arthur, Chester Alan (Election of 1880) A: 756
- Hancock Center** [Chicago] *See* John Hancock
 Center in *this index*
- Hancock Park** [Los Angeles]
 La Brea tar pits L: 19
- Hancock Tower** [Boston] *See* John Hancock
 Tower in *this index*
- Hand** [anatomy] H: 39 *with diagrams*
 Brain (In controlling movement) B: 553-554
 Carpal tunnel syndrome C: 245
 Skeleton *diagrams on* S: 480
 Wrist W: 510 *with diagram*
- Hand** [botany]
 Banana (How bananas grow) B: 72
- Hand** [unit of measure]
 Horse (Size) H: 348
 Weights and measures (table: Miscellaneous
 weights and measures) W: 184
- Hand, Learned** [American jurist] H: 40
- Hand axe** [tool]
 Prehistoric people *picture on* P: 750
- Hand brake**
 Brake (Mechanical brakes) B: 560
- Hand cannon** [gun]
 Harquebus H: 67
- Hand drill** [tool]
 Woodworking (Drilling) W: 398 *with picture*
- Hand game**
 Indian, American (Recreation) I: 142-143
- Hand loom** [weaving]
 Textile *picture on* T: 218
- Hand organ** [musical instrument] H: 40
- Hand prop**
 Theater (Properties and set dressing) T: 240
- Hand puppet**
 Puppet (Hand puppets) P: 904; *picture on*
 P: 906
- Hand scanner** [electronic device]
 Computer (A scanner) Ci: 915
- Hand shower**
 Bath (History) B: 164-165
- Hand tool**
 Woodworking (Steps in woodworking) W: 396
with pictures
- Handball** [sport] H: 41 *with pictures*
 Team handball T: 71
- Handball court**
 Handball H: 41 *with diagrams*
- Handbook of a Christian Soldier** [book by
 Erasmus]
 Erasmus, Desiderius E: 349
- Handcuffs** H: 42 *with picture*
- Handel, George Frideric** [German composer]
 H: 42
 Classical music (Oratorios) Ci: 644; (The
 Baroque period) Ci: 647
 Oratorio O: 818
- Handforth, Thomas** [American artist]
 Caldecott Medal (table: 1939) C: 26
- Handgun** [weapon] H: 43 *with pictures*
 Firearm *picture on* F: 133
 Gun control (Approaches to gun control)
 G: 440
- Handheld computer**
 Computer (Personal computers) Ci: 909-910
with picture
 Smart card S: 513
- Handicap** [sports] H: 45
 Golf (table) G: 261
 Polo (The game) P: 647
 Sailing (Handicap races) S: 27
 Trapshooting T: 404
- Handicapped** [people] *See* Disabled in *this
 index*
- Handicraft** H: 45 *with pictures*
 Embossing E: 256
 Hobby (Handicrafts) H: 272
 Indian, American (Arts and crafts) I: 145 *with
 pictures; pictures on* I: 138
 Mexico (Manufacturing) M: 464-465 *with pic-
 ture*
- Handke, Peter** [German author]
 Drama (Later German-language drama) D: 340
 German literature (German literature after
 1945) G: 142
- Handkerchief** H: 46
- Handlebars**
 Bicycle (Steering and stopping) B: 291 *with
 diagrams*
- Handley, George** [American political leader]
 Georgia (table) G: 130
- Handley, Harold W.** [American political leader]
 Indiana (table) I: 214
- Hands** *See* Hand in *this index*
- Hands-on practice** [education] *See* Learning by
 doing in *this index*
- Handsaw** [tool]
 Saw (Handsaws) S: 166 *with pictures*
- Handset**
 Telephone (How a telephone works) T: 94 *with
 picture*
- Handsome Lake** [American Indian leader] H: 6
 Indian, American (Prophets) I: 148
 Iroquois Indians I: 455
 Red Jacket R: 188
- Handwriting** H: 46 *with pictures*
*See also the list of Related Articles in the
 Handwriting article*
 Charlemagne (Administration and influence)
 C: 379
 Graphology G: 323
- Handwriting analysis**
 Graphology G: 323
- Handwriting on the wall** H: 50
- Handwriting-recognition software** [computing]
 Computer (A touch screen) Ci: 914-915
- Handy, W. C.** [American composer] H: 50 *with
 portrait*
 Blues B: 424
 Memphis (The city) M: 394
- Haneda Airport** [Tokyo] *See* Tokyo International
 Airport in *this index*
- Hanes, H. A.** [American aviator]
 Airplane (table) A: 232
- Hanford Graduate Center** [Richland,
 Washington]
 Idaho, University of I: 46
- Hanford Project** [Washington]
 DuPont Company D: 387
 Washington (The mid-1900's) W: 68; *picture
 on* W: 67
- Hang gliding** [sport]
 Glider (Gliding today) G: 231
- Hangar**
 Airport (Hangars) A: 245
- Hangar deck**
 Aircraft carrier A: 206 *with diagram*
- Hangbird** *See* Baltimore oriole in *this index*
- Hang-chou** *See* Hangzhou in *this index*
- Hanging** [execution] H: 51
 Capital punishment (table) C: 193
 Lynching L: 535
- Hanging Gardens of Babylon**
 Seven Wonders of the Ancient World (The
 Hanging Gardens of Babylon) S: 325; *pic-
 ture on* S: 327
 Babylon (The New Babylonian Empire) B: 12
 World, History of the (Civilizations of south-
 west Asia) W: 426
- Hanging parrot**
 Parakeet P: 151
 Parrot (Kinds of parrots) P: 179
- Hanging valley** [geology]
 Alps (How the Alps were formed) A: 384
 Valley (How valleys are formed) V: 266
- Hanging wall**
 Mining (Mining terms) M: 577
- Hangul** [alphabet]
 Korea (Language) K: 370
- Hangzhou** [China] H: 51
- Hanington, Daniel L.** [Canadian political leader]
 New Brunswick (table) N: 196
- Haniwa** [sculpture]
 Japan (Sculpture) J: 43; (Early days) J: 52-53
 Sculpture (Japan) S: 239
- Hankou** [China]
 Wuhan W: 514
- Hanks, Horatio** [American inventor]
 Connecticut (The 1800's) Ci: 970
- Hanks, Lucy** [grandmother of]
 Lincoln, Abraham (Family background) L: 311-
 312
- Hanks, Nancy** [mother of]
 Lincoln, Abraham (Family background) L: 311-
 312
- Hanks, Rodney** [American inventor]
 Connecticut (The 1800's) Ci: 970
- Hanks, Sam** [American race driver]
 Automobile racing (table: Indianapolis 500 win-
 ners) A: 980
- Hanks, Tom** [American actor] H: 51 *with portrait*
 Motion picture (Best performance by an actor:
 1993, 1994) M: 863
- Hanlon, Ned** [American baseball player]
 Baseball (table: Hall of Fame) B: 134
- Hanly, J. Frank** [American political leader]
 Indiana (table) I: 214
- Hanna, L. B.** [American political leader]
 North Dakota (table) N: 513
- Hanna, Mark** [American political leader] H: 51
 McKinley, William (Governor) M: 340
 Ohio (The early 1900's) O: 702
- Hanna, William** [American animator]
 Animation (Animation in the mid-1900's)
 A: 514a
- Hannah and Her Sisters** [film]
 Allen, Woody A: 372
- Hannegan, Robert E.** [American government
 official]
 Truman, Harry S. (Vice President) T: 468;
 (table) T: 469
- Hannett, Arthur T.** [American political leader]
 New Mexico (table) N: 272
- Hannibal** [Carthaginian general] H: 51 *with pic-
 ture*
 Fabius Maximus, Quintus F: 2
 Hamilcar Barca H: 29
 Punic Wars (The Second Punic War) P: 903
 Rome, Ancient (Expansion overseas) R: 445
 Scipio Africanus, Publius Cornelius S: 208
- Hannibal** [Missouri] H: 52
 Missouri *pictures on* M: 654, M: 661
 Twain, Mark (Boyhood) T: 528
- Hanno** [Carthaginian explorer]
 Exploration (The Phoenicians) E: 441
- Hannover** *See* Hanover in *this index*
- Hannuka** *See* Hanukkah in *this index*
- Hanoi** [city, Vietnam] H: 53 *with picture*
 Vietnam V: 364
- Hanover** [city, Germany] H: 53 *with picture*
- Hanover** [region, Germany] H: 53
- Hanover, House of** [British history]
 Brunswick B: 652
 George I G: 107
 Windsor W: 334
- HANS** [device]
 Automobile racing (Safety measures) A: 975-
 976
- Hans Adam, Prince** [Liechtenstein ruler]
 Liechtenstein (History) L: 273
- Hans Brinker** [book by Dodge]
 Dodge, Mary Elizabeth Mapes D: 260
 Literature for children (Masterpieces of fiction)
 L: 362
- Hans Christian Andersen Award**
 Literature for children (Awards) L: 366
- Hansa** [German history]
 Hanseatic League H: 54
- Hansa Quarter** [district]
 Berlin (The downtown areas) B: 260-261
- Hansberry, Lorraine** [American dramatist] H: 54
 American literature (Drama) A: 425
 Drama (Later United States drama) D: 340
- Hanseatic League** [German history] H: 54
 Flag *picture on* F: 217
 Gdańsk G: 74
 Germany (The rise of cities) G: 163
 Lübeck L: 513
 Middle Ages (Economic recovery) M: 526-527
 Trade route (Medieval routes) T: 364
- Hansel and Gretel** [opera by Humperdinck]
 Humperdinck, Engelbert H: 436
- "Hansel and Gretel"** [story]
 Grimm's Fairy Tales G: 394
- Hansen, Clifford P.** [American political leader]
 Wyoming (table) W: 532
- Hansen, Gerhard H. Armauer** [Norwegian doc-
 tor]
 Leprosy (Causes) L: 203
- Hansen's bacillus** [bacterial]
 Leprosy (Causes) L: 203 *with picture*
- Hansen's disease** *See* Leprosy in *this index*
- Hanson** [musical group]
 Rock music (Rock music today) R: 381
- Hanson, Duane** [American sculptor]
 Sculpture (Since the mid-1900's) S: 259 *with
 picture*
- Hanson, Howard** [American composer] H: 54
- Hanson, John** [American political leader] H: 54
- Hantavirus** [virus] H: 54
- Hantavirus pulmonary syndrome** [disease]
 Hantavirus H: 54

- Hanukkah** [religion] H: 55
December D: 69
Judah Maccabee J: 178
Judaism (Other holidays) J: 181
- Hanukkiyah** [symbol]
Hanukkah H: 55
- Hanuman langur** [monkey]
Langur L: 68 *with picture*
- Hanyang** [China]
Wuhan W: 514
- Haora Bridge** [India]
Bridge (table: Cantilever) B: 603
- Hapgood** [play by Stoppard]
Stoppard, Tom So: 911
- Haploid cell** [biology]
Reproduction (How genes are transferred)
R: 242
- Happening** [performance art]
Performance art P: 285
- Happiness** [philosophy]
Aristotle (Ethics and politics) A: 664
Bentham, Jeremy B: 254
Buddhism (The beliefs of Buddhism) B: 667-668
Cynic philosophy Ci: 1205
Ethics (Bentham and Mill) E: 367
Nirvana N: 424
Plato (Ethics) P: 568
Utilitarianism U: 251
- "Happy Days Are Here Again"** [song]
Roosevelt, Franklin Delano (Election of 1932)
R: 455-456
- Happy Prince and Other Tales, The** [stories by Wilde]
Wilde, Oscar W: 301
- Happy Valley-Goose Bay** [Labrador]
Labrador (People and economy) L: 18
Newfoundland and Labrador (table: Average monthly weather) N: 372
- Happy Warrior** [nickname]
Smith, Alfred Emanuel S: 516
- Hapsburg, House of** See Habsburg, House of *in this index*
- "Hapworth 16, 1924"** [story by Salinger]
Salinger, J. D. S: 66
- Hara-kiri** [suicide] H: 55
- Herald** See Harold *in this index*
- Harald V** [king of Norway]
Norway (Political changes) N: 547
- Harald Bluetooth** [king of Denmark]
Denmark (Early days) D: 139
- Haram al-Sharif** [area] See Temple Mount *in this index*
- Harambee school** [education]
Kenya (Education) K: 301
- Harappa** [ancient city]
India (Earliest times) I: 128
Indus Valley civilization I: 241
Pakistan (Early civilizations) P: 98
Sculpture (Indus Valley) S: 235
World, History of the (The Indus Valley)
W: 425
- Harappan civilization** See Indus Valley civilization *in this index*
- Harare** [Zimbabwe] H: 55
Zimbabwe *picture on* Z: 597
- Haras du Pin, Le** [painting by Dufy]
Dufy, Raoul *picture on* D: 379
Painting (Color) P: 35
- Harassment, Sexual**
Thomas, Clarence T: 261 See Sexual harassment *in this index*
- Harbin** [China] H: 55
- Harbor** [geography] H: 55
Breakwater B: 589 *with picture*
- Harbor pilot**
Ship (Navigating a ship) S: 423
- Harbor porpoise** [sea animal]
Porpoise P: 680 *with picture*
- Harbor seal** [sea animal]
Seal (Birth) S: 266
- Harborplace** [district]
Baltimore (The city) B: 66 *with picture*
- Harbourfront Centre**
Toronto (Landmarks) T: 336-337
- Harbourfront Jubilee Theatre** [Summerside]
Prince Edward Island (Places to visit) P: 788
- Harcourt, Michael** [Canadian political leader]
British Columbia (table) B: 627
- Hard-boiled detective story**
Detective story (History) D: 163
- Hard bop** [American jazz music]
Jazz (Hard bop) J: 72
- Hard candy**
Candy (Hard candies) C: 176
- Hard cider** [drink]
Cider Ci: 552
- Hard Cider Campaign** [U.S. history]
Harrison, William Henry (Elections of 1836 and 1840) H: 75-76
- Hard Day's Night, A** [film]
Beatles B: 190
- Hard disk** [electronic device]
Computer (Hard drives) Ci: 915
- Hard drive** [electronic device]
Computer (Storage devices) Ci: 915
- Hard lander** [space probe]
Space exploration (Space probes) So: 708
- Hard of hearing** See Deafness *in this index*
- Hard palate** [anatomy]
Mouth M: 903 *with diagram*
Palate P: 101 *with diagram*
- Hard-paste porcelain**
Porcelain (Kinds of porcelain) P: 675
- Hard-rock mining**
Gold (Mining) G: 252
- Hard science fiction**
Science fiction (Growing popularity) S: 205-206
- Hard-shell clam**
Clam (Types of clams) Ci: 637 *with picture*
- Hard Times** [book by Dickens]
Dickens, Charles (The second phase) D: 188
- Hard Times: An Oral History of the Great Depression** [book by Terkel]
Great Depression (Economic breakdown)
G: 340
- Hard to Be a God** [book by Strugatsky brothers]
Science fiction (Growing popularity) S: 205-206
- Hard water**
Detergent and soap D: 164
Water (Purifying and treating water) W: 126
- Hard-wheat flour**
Flour (Types of flour) F: 268
- Hard x ray**
X rays (Wavelength) X: 541
- Hardanger Plateau**
Norway (Land regions) N: 541 *with map*
- Hardboard**
Forest products (Fiber products) F: 401-402
with picture
Wallboard W: 17
- Hardbound book**
Publishing (Designing and printing) P: 869
- Hardecanute** [Danish king]
England (table) E: 308
Harold III H: 64
- Hardee, Cary A.** [American political leader]
Florida (table) F: 260
- Harden, Sir Arthur** [British chemist]
Nobel Prizes (Chemistry: 1929) N: 442
- Harden, Marcia Gay** [American actress]
Motion picture (Best performance by an actress in a supporting role: 2000) M: 863
- Hardenberg, Friedrich von** [German poet]
Novalis N: 571
- Hardening of the arteries** See Arteriosclerosis *in this index*
- Hardhack** [shrub]
Spiraea So: 795
- Hardin, Charles H.** [American political leader]
Missouri (table) M: 668
- Hardin, Clifford M.** [American government official]
Agriculture, Department of (table) A: 161
Nixon, Richard Milhous (table) N: 433
- Hardin, Lil** [American pianist]
Armstrong, Louis A: 723
- Harding, Florence Kling** [wife of Warren Gamaliel Harding]
First ladies (table) F: 142
- Harding, Warren Gamaliel** (Marriage) H: 56;
(Government scandals) H: 58 *with picture*
H: 56 *with pictures*
Coolidge, Calvin (Vice President) Ci: 1032
Hoover, Herbert Clark (Secretary of commerce) H: 328-329
President of the United States *picture on*
P: 769
Teapot Dome T: 72
United States, History of the (Looking backward) U: 186
- Harding, William L.** [American political leader]
Iowa (table) I: 391
- Harding Icefield** [Alaska]
Kenai Fjords National Park K: 258
- Hardinge, Sam Wylde** [husband of] Boyd, Belle B: 541
- Hardman, Lamartine G.** [American political leader]
Georgia (table) G: 130
- Hardness** [physical property] H: 59
Diamond D: 180; (Industrial uses) D: 182
Gem (Qualities of gem minerals) G: 77
Mineral (Hardness) M: 567
Quartz Q: 8
Rock (Hardness) R: 374
- Hardouin-Mansart, Jules** [French architect]
Architecture (Baroque architecture) A: 622
- Hardscrabble** [farm]
Grant, Ulysses S. (Business failures) G: 314
- Hardtack** [food]
Civil War (The enlisted men) Ci: 620
- Hardware** [electronics]
Computer Ci: 908
Computerized instruction (How computerized instruction works) Ci: 924h
- Hardwick, Philip** [British architect]
Architecture (The Industrial Revolution) A: 625
- Hardwick, Thomas W.** [American political leader]
Georgia (table) G: 130
- Hardwood**
Forest products (Lumber) F: 400
Lignum-vitae L: 302
Lumber (Hardwood lumber) L: 517
Plywood (Kinds of plywood) P: 585
Tree (Broadleaf trees) T: 414; (Broadleaf forests) T: 428 *with picture*
Wood (Kinds of wood) W: 389 *with pictures*
Woodworking (Wood for woodworking) W: 398
- Hardwood dimension parts**
Lumber (Hardwood lumber) L: 517
- Hardy, Alexandre** [French dramatist]
Drama (The French theater) D: 333
- Hardy, Arthur S.** [Canadian political leader]
Ontario (table) O: 783
- Hardy, Harriet** See Mill, Harriet Taylor *in this index*
- Hardy, James D.** [American doctor]
Mississippi M: 623
- Hardy, Oliver** [American actor]
Laurel and Hardy L: 122 *with picture*
- Hardy, Thomas** [British author] H: 59
English literature (Later Victorian literature)
E: 321
Novel (Britain) N: 573
- Hardy Boys** [literary figures]
Stratemeyer, Edward So: 920
- Hardy-Rand-Rittler test**
Color blindness Ci: 827
- Hare** [animal] H: 60 *with picture*
Rabbit R: 46
Snowshoe hare S: 542 *with picture*
- Hare, David** [British dramatist]
English literature (Recent English drama)
E: 323
Theater *picture on* T: 247
- Hare, Thomas** [British lawyer]
Proportional representation (The Hare System)
P: 828
- "Hare and the Tortoise, The"** [story] See "Tortoise and the Hare, The" *in this index*
- Hare Krishna**
Cult (Modern cults) Ci: 1185
Yoga Y: 567
- Hare System** [political science]
Proportional representation (The Hare System)
P: 828
- Hare-wallaby** [animal]
Kangaroo (Other macropods) K: 215
- Harabell** [plant]
Bluebell B: 421
- Haredim** [people]
Jerusalem (The people of Jerusalem) J: 96-98
- Haralip** [birth defect]
Cleft palate Ci: 661
- Haram** [anthropology] H: 60
Ottoman Empire (People) O: 877
Persia, Ancient (The people) P: 297
- Harem** [zoology]
Mammal (Mating) M: 122-123
- Herem herd** [zoology]
Impala I: 90
- Hargrave, Lawrence** [Australian inventor]
Kite (The box kite) K: 339; (History) K: 340-341
- Hergreaves, James** [British inventor] H: 60 *with picture*
Industrial Revolution (Spinning machines)
I: 248-249

- Spinning (The spinning jenny) So: 794
 Spinning jenny So: 794
 Textile (The Industrial Revolution) T: 219
- Hari, Mata** [German spy]
 Mata Hari M: 298
- Harijan** [sociology] *See* Untouchable *in this index*
- Haring, Keith** [American artist]
 Painting (Recent painting) P: 87-88
- "Hark, the Herald Angels Sing"** [hymn]
 Hymn (Words and music) H: 474
- Harken Oil and Gas, Incorporated**
 Bush, George Walker (Bush's career) B: 722d-722e
- Harkins, William Draper** [American chemist]
 H: 61
- Harkness, Edward Stephen** [American philanthropist]
 Yale University (The Yale campus) Y: 549
- Harlan, James** [American political leader] H: 61
- Harlan, John Marshall** [1833-1911, American jurist] H: 61
- Harlan, John Marshall** [1899-1971, American jurist]
 Harlan, John Marshall H: 61
 Supreme Court of the United States (table) So: 1000
- Harlem** [district]
 New York City (Manhattan) N: 323-326 *with picture*
- Harlem Globetrotters** [basketball team]
 Basketball (The history of professional basketball) B: 153-155 *with picture*
- Harlem Renaissance** [literature]
 African American literature (The 1900's) A: 136a
 African Americans (The Harlem Renaissance and other achievements) A: 136k
 American literature (The Harlem Renaissance) A: 422
 Locke, Alain LeRoy L: 412
- Harlem River**
 New York City (The city) N: 323;
 (Transportation) N: 334
- Harlequin** [clown]
 Drama (Commedia dell' arte) D: 331 *with picture*
 Pantomime P: 132
- Harlequin bug** [insect]
 Cabbage *picture on* C: 2
 Insect *picture on* I: 281
 Stink bug So: 902
- Harlequin hat**
 Hat (History) H: 84-85
- Harlequin tuskfish**
 Fish *picture on* F: 155
- Harley, J. Emile** [American political leader]
 South Carolina (table) So: 658
- Harlot's Ghost** [book by Mailer]
 Mailer, Norman M: 67
- Harlow, Harry Frederick** [American psychologist] H: 61
- HARM** [missile]
 Guided missile (Air-to-surface missiles) G: 426
- Harmar, Josiah** [American general]
 Little Turtle L: 392
- Harmattan** [weather] H: 61
- Harmful plants and animals**
 Animal (Animals and people) A: 471
 Fumigation F: 556
 Insecticide I: 302
 Poisonous plant P: 602
 Weed W: 179
- Harmon, Judson** [American government official]
 Cleveland, Grover (table) Ci: 672
 Justice, Department of (table) J: 203
 Ohio (table) O: 699
- Harmon, Tom** [American football player]
 Football (table) F: 363
- Harmonic minor scale** [music]
 Music (Tone) M: 950 *with diagram*
- Harmonic progression** [mathematics]
 Progression P: 811
 Series (Working with infinite series) S: 317
- Harmonic sound**
 Noise N: 451
- Harmonic telegraph**
 Telephone (Bell's invention) T: 99
- Harmonica** [musical instrument] H: 61 *with pictures*
- Harmonics** H: 62 *with diagrams*
 Pitch P: 498
- Harmonists** [religious group]
 New Harmony N: 228
- Harmonium** [musical instrument] H: 62
- Harmony** [aesthetics]
 Art and the arts (Enjoying the arts) A: 748
 Design (Harmony) D: 157
- Harmony** [music] H: 62
 Music (Harmony) M: 951
 Rameau, Jean-Philippe R: 133
 Variation V: 286
- Harmony, Color**
 Color (Producing color harmony) Ci: 823 *with diagrams*
- Harmony Incorporated** [organization]
 Barbershop quartet singing B: 107
- Harmsworth, Alfred Charles William** [British publisher]
 Northcliffe, Viscount N: 520
- Harnack, Adolf von** [German theologian]
 Max Planck Society for the Advancement of Science M: 318
- Harness** [machine]
 Textile (Woven fabrics) T: 214
 Weaving (How a loom works) W: 174
- Harness** [parachute]
 Parachute (Parts of a parachute) P: 142-143 *with picture*
- Harness** [riding equipment] H: 63 *with diagram*
 Agriculture (The Middle Ages) A: 155-156 *with picture*
 Transportation (The Middle Ages) T: 388
- Harness, Henry D.** [British cartographer]
 Map (Development of thematic and inventory mapping) M: 185
- Harness horse**
 Horse (table: Some types and breeds of horses) H: 343; (Light harness horses) H: 345 *with picture*
- Harness racing** [sport] H: 63 *with picture*
- Harnessed antelope**
 Antelope (Kinds of antelope) A: 542
- Harnett, William Michael** [American painter]
 H: 64
- Harney Peak** [mountain]
 Black Hills B: 387
 South Dakota (Land regions) So: 674-676
- Harnick, Sheldon** [American lyricist]
 Musical comedy (The modern musical emerges) M: 960
- Harold I** [king of England]
 England (table) E: 308
- Harold I** [king of Norway] H: 64
 Norway (The Viking period) N: 545
- Harold II** [king of England] H: 64
 Bayeux Tapestry B: 177 *with picture*
 Edward the Confessor E: 114
 England (The Norman Conquest) E: 305
 Hastings, Battle of H: 83
 Norman Conquest N: 455
 William I, the Conqueror W: 308
- Harold III** [king of Norway] H: 64
- Harold V** [king of Norway] *See* Harald V *in this index*
- Harold, Earl of Wessex** *See* Harold II *in this index*
- Harold Fairhair** [king of Norway] *See* Harold I *in this index*
- Harold Finehair** [king of Norway] *See* Harold I *in this index*
- Harold Sigurdsson** *See* Harold III *in this index*
- Harold Warp's Pioneer Village** [Minden]
 Nebraska (Places to visit) N: 102
- Harold Washington Library Center**
 Chicago (New construction) C: 437
- Harp** [constellation] *See* Lyra *in this index*
- Harp** [musical instrument] H: 65 *with pictures*
- Harp seal** [sea animal]
 Seal (Birth) S: 266
- Harper, Frances Ellen Watkins** [American poet]
 H: 65 *with portrait*
- Harper, Stephen Joseph** [Canadian political leader] H: 65
- Harper, William Rainey** [American educator]
 H: 66
 Adult education (During the 1800's) A: 69
 Chicago, University of (History) C: 438
 Correspondence school Ci: 1072
 Extension programs E: 456
- Harper's Bazaar** [magazine]
 Hearst, William Randolph H: 131
- Harpers Ferry** [West Virginia] H: 66
 Brown, John (Harpers Ferry) B: 643
 Civil War (Raid at Harpers Ferry) Ci: 616;
 (Battle of Antietam) Ci: 627
 United States, History of the (Social disorder) U: 174
- West Virginia (Civil War and statehood) W: 226; *picture on* W: 227
- Harpers Ferry National Historical Park** [Maryland-West Virginia]
 National Park System (table: National historical parks) N: 56-57
 West Virginia (Places to visit) W: 216 *with picture*
- Harper's Weekly** [magazine]
 Homer, Winslow H: 304
 Magazine (History) M: 43-45
- Harpoon** [weapon] H: 66
 Fishing industry (Harpoons) F: 186
 Inuit (Hunting and fishing) I: 354d
 Whale (Hunting techniques) W: 263
- Harpisichord** [musical instrument] H: 66 *with picture*
 Classical music (The Baroque period) Ci: 647
 Landowska, Wanda L: 58
 Orchestra *picture on* O: 822
 Piano (History) P: 447
 Scarlatti, Domenico S: 173
 Spinnet So: 793
- Harpy** [mythology] H: 67
- Harpy eagle** [bird] H: 67 *with picture*
 Eagle (Other kinds of eagles) E: 5
- Harquebus** [gun] H: 67 *with picture*
- Harridge, Will** [American baseball executive]
 Baseball (table: Hall of Fame) B: 134
- Harrier** [aircraft]
 V/STOL V: 452
- Harrier** [bird] H: 67
 Northern harrier N: 520 *with picture*
- Harrier** [dog] H: 67 *with picture*
- Harriet the Spy** [book by Fitzhugh]
 Literature for children (The middle and late 1900's) L: 364
- Harriet Tubman Home**
 Tubman, Harriet T: 480
- Harriman, Averell** *See* Harriman, W. Averell *in this index*
- Harriman, Edward Henry** [American financier]
 Hill, James Jerome H: 231
- Harriman, W. Averell** [American statesman]
 H: 68
 Truman, Harry S. (table) T: 469
- Harriman, Walter** [American political leader]
 New Hampshire (table) N: 223
- Harrington, Emerson C.** [American political leader]
 Maryland (table) M: 255
- Harrington, Gordon S.** [Canadian political leader]
 Nova Scotia (table) N: 567
- Harrington, Michael** [American political scientist]
 Socialism (The New Left) So: 561
- Harris, Andrew L.** [American political leader]
 Ohio (table) O: 699
- Harris, Benjamin** [American publisher] H: 68
 Journalism (Early American journalism) J: 174
 Literature for children (The Puritans) L: 361
 Newspaper (Development of U.S. newspapers) N: 386
- Harris, Bucky** [American baseball player]
 Baseball (table: Hall of Fame) B: 134
- Harris, Chapin** [American dentist]
 Dentistry (Early dentistry) D: 144-145
- Harris, Elisha** [American political leader]
 Rhode Island (table) R: 311
- Harris, Fred Roy** [American political leader]
 H: 68
- Harris, Isham G.** [American political leader]
 Tennessee (table) T: 152
- Harris, Joe Frank** [American political leader]
 Georgia (table) G: 130
- Harris, Joel Chandler** [American author] H: 68
 American literature (Realists) A: 419
- Harris, John** [English theologian]
 Encyclopedia (An age of experiment) E: 268a
- Harris, John, Jr.** [American businessman]
 Harrisburg H: 69
- Harris, Katherine** [American government official]
 Election of 2000 (Court challenges) E: 161
- Harris, Lauren** [Canadian painter]
 Group of Seven G: 402
- Harris, Mary** *See* Jones, Mary Harris *in this index*
- Harris, Michael D.** [Canadian political leader]
 Ontario (table) O: 783; (Recent developments) O: 787
- Harris, Nathaniel E.** [American political leader]
 Georgia (table) G: 130

- Harris, Patricia Roberts** [American government official] H: 68 *with portrait*
African Americans (Achievements) A: 136p
- Harris, Paul P.** [American lawyer]
Rotary International R: 486
- Harris, Robert** [American aviator]
Glider (table) G: 230
- Harris, Robert** [Canadian painter] H: 69 *with picture*
- Harris, Roy** [American composer] H: 69
- Harris, Townsend** [American diplomat]
Japan (Renewed relations with the West) J: 56
- Harris, William J.** [American political leader]
Russell, Richard Brevard R: 524
- Harris, William Torrey** [American educator]
Education (Development of U.S. education) E: 102-104
- Harris Papyrus 1** [manuscript]
Library (Ancient libraries of papyrus) L: 258
- Harris tweed** [fabric]
Tweed T: 530
- Harrisburg** [Pennsylvania] H: 69
- Harrisburg Pennsylvanian** [newspaper]
Public opinion poll (History) P: 863
- Harrisburgh** [former name]
Juneau J: 194
- Harrison, Albert S., Jr.** [American political leader]
Virginia (table) V: 417
- Harrison, Anna Symmes** [American first lady]
First ladies (table) F: 142
Harrison, William Henry (Harrison's family) H: 74; *picture on* H: 76
- Harrison, Benjamin** [American patriot] H: 69
Harrison, William Henry (Early life) H: 74
Virginia (table) V: 417
- Harrison, Benjamin** [U.S. President] H: 70 *with pictures*
Cleveland, Grover (Election of 1888) Ci: 671
- Harrison, Caroline Scott** [wife of Benjamin Harrison]
First ladies (table) F: 142
Harrison, Benjamin (Education) H: 70; (Life in the White House) H: 73 *with picture*
- Harrison, David H.** [Canadian political leader]
Manitoba (table) M: 159
- Harrison, Donald** [American musician]
Jazz (Recent developments) J: 74 *with picture*
- Harrison, George** [British musician]
Beatles B: 189
- Harrison, Henry B.** [American political leader]
Connecticut (table) Ci: 967
- Harrison, Jane Ellen** [British classicist]
Mythology (The ritualist theory) M: 987
- Harrison, Jane Irwin** [daughter-in-law of]
Harrison, William Henry (Harrison's administration) H: 76 *with picture*
White House hostesses W: 291
- Harrison, John** [British clockmaker]
Chronometer C: 539
Map (Advances in European cartography) M: 183-184
- Harrison, Mary** [daughter of]
Harrison, Benjamin (Harrison's family) H: 70
- Harrison, Mary Dimmick** [wife of]
Harrison, Benjamin (Later years) H: 73
- Harrison, Rex** [British actor]
Motion picture (Best performance by an actor: 1964) M: 862-863
- Harrison, Richard B.** [American dramatist]
Spingarn Medal (table: 1931) So: 793
- Harrison, Russell Benjamin** [son of]
Harrison, Benjamin (Harrison's family) H: 70
- Harrison, William Henry** [U.S. President] H: 74 *with pictures*
Calendar *picture on* C: 29
Harrison, Benjamin H: 70
Indian wars (Other Midwestern conflicts) I: 192-193
Indiana (Places to visit) I: 206; (Territorial days) I: 215 *with picture*
Northwest Territory (Settlement) N: 535
Tyler, John T: 532
United States, History of the (Politics after Jackson) U: 170-171
Van Buren, Martin (Election of 1836) V: 272; (Election of 1840) V: 273
Whig Party (In the 1840's) W: 280
- Harrison Act** [1914]
Opium (History) O: 811
Drug abuse (History) D: 365
- Harrod, James** [American colonist]
Kentucky (Exploration and early settlement) K: 291
- Harrods** [department store]
England *picture on* E: 302
- Harroun, Ray** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Harrow** [tool] H: 77
Farm and farming (Preparing the soil) F: 35 *with pictures*
- Harrow School** [London] H: 77
- Harry Potter** [literary figure] *See* Potter, Harry *in this index*
- Harry Potter and the Chamber of Secrets** [book by Rowling]
Rowling, J.K. R: 494
- Harry Potter and the Goblet of Fire** [book by Rowling]
Rowling, J.K. R: 494
Literature for children (Children's literature today) L: 365; *picture on* L: 377
- Harry Potter and the Philosopher's Stone** [book by Rowling]
Literature for children (Fiction) L: 358-359
Potter, Harry P: 715
Rowling, J.K. R: 494
- Harry Potter and the Prisoner of Azkaban** [book by Rowling]
Rowling, J.K. R: 494
- Harry Potter and the Sorcerer's Stone** [book by Rowling]
Literature for children (Fiction) L: 358-359
Rowling, J.K. R: 494
- Harry S. Truman** [ship]
Aircraft carrier (The United States carrier fleet) A: 206
- Harry S. Truman National Historic Site** [Missouri]
National Park System (table: National historic sites) N: 52-53
- Harsanyi, John Charles** [American economist]
Nobel Prizes (Economics: 1994) N: 449
- Harsha** [king of India] H: 77
- Harsha-vardhana** *See* Harsha *in this index*
- Hart** [animal]
Deer D: 82d
Red deer R: 188
- Hart, Francis Brett** *See* Harte, Bret *in this index*
- Hart, Isaiah D.** [American settler]
Jacksonville J: 17
- Hart, John** [American patriot] H: 77
- Hart, John** [Canadian political leader]
British Columbia (table) B: 627
- Hart, Johnny** [American cartoonist]
Cartoon *pictures on* C: 267
- Hart, Julia Catherine Beckwith** [Canadian author]
New Brunswick (Interesting facts) N: 181
- Hart, Leon** [American football player]
Football (table) F: 363
- Hart, Lorenz** [American lyricist] H: 77
Musical comedy (Musical comedy matures) M: 960
Rodgers, Richard R: 398
- Hart, Louis F.** [American political leader]
Washington (table) W: 65
- Hart, Mickey** [American musician]
Grateful Dead G: 330
- Hart, Moss** [American dramatist] H: 77
Kaufman, George S. K: 250
- Hart, Ossian B.** [American political leader]
Florida (table) F: 260
- Hart, Steve** [Australian outlaw]
Kelly, Ned K: 257
- Hart, William Aaron** [American businessman]
Gas [fuel] (Development of the natural gas industry) G: 58
- Hart Memorial Trophy**
Hockey (Professional leagues) H: 279-280
- Hartack, Bill** [American jockey]
Kentucky Derby K: 297
- Harte, Bret** [American author] H: 77
American literature (Realists) A: 419
- Hartebeest** [animal] H: 78 *with picture*
- Hartford** [city, Connecticut] H: 78
Charter Oak C: 386
Connecticut *picture on* Ci: 953
- Hartford** [ship]
Civil War (Battle of Mobile Bay) Ci: 632
- Hartford, George Huntington** [American businessman] H: 79
- Hartford Convention** [U.S. history] H: 79
Madison, James (Progress of the war) M: 35
- Hartford Courant, The** [newspaper]
Connecticut (Interesting facts) Ci: 953; (Communication) Ci: 966
Hartford (Description) H: 78
- Hartford School for the Deaf**
Gallaudet, Thomas Hopkins G: 14
- Hartley, Fred** [American political leader]
Taft-Hartley Act T: 13
- Hartley, Marsden** [American painter] H: 79 *with picture*
- Hartley, Roland H.** [American political leader]
Washington (table) W: 65
- Hartline, Haldan Keffer** [American physiologist]
Nobel Prizes (Physiology or medicine: 1967) N: 445
- Hartmann, Erich** [German aviator]
Ace A: 24
- Hartmann von Aue** [German poet] H: 79
German literature (Epic poetry) G: 139
- Hartnell, Nathaniel** [Canadian artist]
Canada, History of *picture on* C: 146
- Hartness, James** [American political leader]
Vermont (table) V: 333
- Hartnett, Gabby** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Hartog, Dirck** [Dutch explorer]
Western Australia (History) W: 231
- Hartranft, John Fredrick** [American political leader]
Pennsylvania (table) P: 263
- Hartsfield International Airport** [Atlanta]
Airport (table) A: 245
- Hartwell, Leland Harrison** [American geneticist]
Nobel Prizes (Physiology or medicine: 2001) N: 445
- Harun al-Rashid** [Muslim ruler] H: 79
- Haruna Tunnel** [Japan]
Tunnel (table) T: 491
- Harunobu** [Japanese artist] H: 80
Japanese print (The master print artists) J: 63 *with picture*
- Harvard, John** [English philanthropist] H: 80
Harvard University (History) H: 80
Library (Libraries in the United States) L: 261
- Harvard Law School**
Law (Law education) L: 138
- Harvard-Smithsonian Center for Astrophysics**
Smithsonian Institution (Other facilities) S: 519
- Harvard University** H: 80 *with picture*
Cambridge C: 74
Colonial life in America (Education) Ci: 803-804 *with picture*
Eliot, Charles William E: 237
Football (The history of football) F: 365
Law (Law education) L: 138
Massachusetts (Libraries) M: 274 *with picture*; (Places to visit) M: 280
Radcliffe College R: 73
Rowing (History) R: 494
School (Colonial schools) S: 183
Universities and colleges (First universities in the Americas) U: 210
- Harvard University Herbarium**
Gray, Asa G: 334
- Harvard University Library**
Library (Libraries in the United States) L: 261
- Harvard Yard**
Harvard University (The Harvard campus) H: 80 *with picture*
- Harvest festival** [custom]
Thanksgiving Day T: 230
- Harvest-home celebration** [custom]
Thanksgiving Day T: 230
- Harvest mite** [insect]
Chigger C: 447 *with picture*
- Harvest moon** H: 81
- Harvest mouse**
Mouse (American harvest mice) M: 901 *with picture*
- Harvester** [machine]
Hay H: 115
Reaper R: 173
- Harvester ant** [insect]
Ant (Harvester ants) A: 526 *with picture*; *picture on* A: 524
Insect (Family life) I: 294-295
- Harvesting** [agriculture]
Combine C: 866
Cotton (Harvesting) Ci: 1090
Farm and farming (Harvesting) F: 37 *with picture*
Fruit (Harvesting) F: 545 *with picture*
Hay H: 115 *with picture*
Rice (Harvesting) R: 326 *with picture*

- Vegetable (Harvesting) V: 294
- Harvestman**
Daddy longlegs D: 3
- Harvey, Charles T.** [American inventor]
Elevated railroad E: 233
- Harvey, Gabriel** [English poet]
Nashe, Thomas N: 22
- Harvey, George B. M.** [American political leader]
Wilson, Woodrow (Governor of New Jersey) W: 321
- Harvey, James M.** [American political leader]
Kansas (table) K: 234
- Harvey, Louis P.** [American political leader]
Wisconsin (table) W: 365
- Harvey, Matthew** [American political leader]
New Hampshire (table) N: 223
- Harvey, William** [English physician] H: 81
Biology (The Renaissance) B: 318
Heart (Discovery of circulation) H: 144 *with picture*
Medicine (The beginnings of modern research) M: 374
Science (Conducting experiments) S: 195;
(The scientific revolution) S: 198
- Harvey, Wilson G.** [American political leader]
South Carolina (table) So: 658
- Harvie, John** [guardian of]
Jefferson, Thomas (Boyhood) J: 76-77
- Háry János** [opera by Kodály]
Kodály, Zoltán K: 361
- Haryana** [state, India]
Punjab P: 903
- Hasa** [region]
Saudi Arabia (The Eastern Lowlands) S: 158
with picture; (The rise of Islam) S: 160
- Hasan** [grandson of Muhammad]
Shiites S: 401
- Hash mark**
Football (The field) F: 354-355 *with diagram*
- Hashish** [drug] H: 81
Drug abuse (table: Some commonly abused drugs) D: 363
Assassination A: 817
- Hashshashins** [Middle Eastern history]
Assassination A: 817
Terrorism (History of terrorism) T: 179
- Hasidism** [religion] H: 82
Be'al Shem Tov B: 2
Jews (Eastern European religious movements) J: 123
Kabbalah K: 208
New York City *picture on* N: 332
- Hasinai Confederacy** [American Indians]
Texas (Indian days) T: 204
- Haskalah** [religious cultural movement] H: 82
Hebrew literature (Modern Hebrew literature) H: 162
Jews (Emergence into freedom) J: 123
Mendelssohn, Moses M: 400
- Haskell, John** [American inventor]
Combine C: 867
- Haskell, Charles N.** [American political leader]
Oklahoma (Early statehood) O: 732; (table) O: 730
- Haskell, Coburn** [American golfer]
Golf (Beginnings) G: 264
- Haskell, Robert** [American political leader]
Maine (table) M: 87
- Haskell Indian Nations University**
Kansas (Schools) K: 220
- Haskell Institute**
Kansas (Schools) K: 220
- Haslet, Joseph** [American political leader]
Delaware (table) D: 109
- Hasmoneans** [ancient people]
Jerusalem (Ancient times) J: 100-101
Jews (The Hellenistic period) J: 121
- Hass, Robert** [American poet]
Poet laureate (table: Poets laureate of the United States) P: 590
- Hassall, William** [American inventor]
Nail (How nails are made) N: 3
- Hassam, Childe** [American painter] H: 82
Impressionism (American impressionism) I: 95
- Hassan I** [sultan of Morocco]
Morocco (French and Spanish control) M: 814
- Hassan II** [king of Morocco] H: 82
Morocco (Constitutional monarchy) M: 815
- Hassan, Abdikassim Salad** [Somali political leader]
Somalia (History) So: 589-590
- Hassel, Odd** [Norwegian chemist]
Nobel Prizes (Chemistry: 1969) N: 443
- Hassium** [element] H: 82
Transuranium element T: 401
- Hastert, J. Dennis** [American political leader] H: 83
- Hastie, William Henry** [American jurist] H: 83
African Americans (The Great Depression) A: 1361
- Hasting, Daniel Hartman** [American political leader]
Pennsylvania (table) P: 263
- Hastings, Alcee L.** [American jurist]
Impeachment (History) I: 91-92
- Hastings, Battle of** [1066] H: 83
Norman Conquest N: 455
William I, the Conqueror W: 308
- Hastings, Jonathan** [American farmer]
Yankee Y: 552
- Hastings, Warren** [British political leader] H: 83
India (The rise of the East India Company) I: 130
- Haston, Dougal** [British mountain climber]
Mount Everest M: 884
- Haszard, Francis L.** [Canadian political leader]
Prince Edward Island (table) P: 791
- Hat H: 83** *with pictures*
Colonial life in America (Clothing) Ci: 799
Indian, American *pictures on* I: 145, I: 162
- Hat trick** [hockey]
Hockey (Hockey terms) H: 275
- Hatch**
Ship (Nautical terms) S: 416
Space exploration (Space stations) So: 721
- Hatch, Carl** [American political leader]
Hatch Political Activities Act H: 85
- Hatch, Fred L.** [American farmer]
Silo S: 463
- Hatch Act** [1887]
Agricultural education (History) A: 145
- Hatch Act** [1939-40] *See* Hatch Political Activities Act *in this index*
- Hatch Act Reform Amendments** [1993]
Hatch Political Activities Act H: 85
- Hatch cover**
Ship (Nautical terms) S: 416
- Hatch Memorial Shell**
Boston (The arts) B: 501 *with picture*
- Hatch Political Activities Act** [1939-1940] H: 85
- Hatcher, Richard Gordon** [American political leader] H: 85
Gary G: 47
- Hatchery**
Fish *pictures on* F: 146
Poultry (Raising poultry) P: 720
Salmon (Salmon conservation) S: 70
- Hatchetfish**
Fish *pictures on* F: 145, F: 156, H: 157
- Hatchett, Charles** [British chemist]
Niobium N: 424
- Hatching** [art]
Painting (Tempera) P: 38-39 *with picture*
- Hatching** [biology]
Bird (Laying and hatching eggs) B: 357-359
with pictures
Chicken (Breeding and hatching) C: 443
Incubator (Incubators for eggs) I: 106
- Hate crime H: 85**
Crime (Hate crime) Ci: 1137
- Hatfield** [American family]
Feud F: 81
- Hatfield, Henry D.** [American political leader]
West Virginia (table) W: 225; (Labor developments) W: 229
- Hatfield, Mark O.** [American political leader]
Oregon (table) O: 845
- Hatfield, Richard** [Canadian political leader]
New Brunswick (table) N: 196
- Hath Not a Jew...** [book by Klein]
Klein, A. M. K: 343
- Hatha-yoga**
Yoga Y: 567
- Hathaway, Anne** [wife of William Shakespeare]
Shakespeare, William (Marriage) S: 347
- Hathaway, Stanley K.** [American political leader]
Ford, Gerald Rudolph (table) F: 378
Interior, Department of (the table) I: 325
Wyoming (table) W: 532
- Hatheway, George L.** [Canadian political leader]
New Brunswick (table) N: 196
- Hathor** [Egyptian goddess]
Isis I: 462
Mythology (Other Egyptian divinities) M: 977
with picture
- Hathorne, John** [American jurist]
- Hawthorne, Nathaniel (His stories and sketches) H: 114
- Hatshepsut** [queen of ancient Egypt] H: 86
Architecture (Egyptian architecture) A: 612
with picture
Egypt, Ancient (The New Kingdom) E: 143
Exploration (Ancient exploration) E: 440
Thutmose III T: 273
- Hatteras, Cape** *See* Cape Hatteras *in this index*
- Hatter's Castle** [book by Cronin]
Cronin, A. J. Ci: 1152
- Hatto** [literary figure]
Mouse Tower M: 902
- Hatton, Frank** [American government official]
Arthur, Chester Alan (table) A: 756
- Hattusas** [ancient city]
Hittites (History) H: 269
- Haughey, Charles James** [Irish political leader]
Ireland (table) I: 428
- Haughton, William R.** [American harness driver]
Harness racing (History) H: 64
- Haunch** [architecture]
Arch *diagram on* A: 593
- Haun's Mill, Massacre at** [1838]
Mormons (Mormons in the Middle West) M: 808
- "Haunted Mind, The"** [story by Hawthorne]
Hawthorne, Nathaniel (His stories and sketches) H: 114-115
- Haunted Pool, The** [book by Sand]
French literature (Romantic fiction) F: 521
- Haunting of Hill House, The** [book by Jackson]
Jackson, Shirley J: 16
- Hauptman, Herbert Aaron** [American chemist]
Nobel Prizes (Chemistry: 1985) N: 443
- Hauptmann, Bruno Richard** [American public figure]
Lindbergh, Charles Augustus (The Lindbergh kidnapping) L: 331
- Hauptmann, Gerhart** [German author] H: 86
German literature (Naturalism) G: 142
Naturalism (Naturalism in drama) N: 65
- Hauptschule** [education]
Germany (Education) G: 151-152
- Hausa** [language]
Niger (People) N: 407-408
- Hausa** [people] H: 86
Niger (People) N: 407-408 *with picture*
Nigeria (People) N: 411; *picture on* N: 414
- Haushabi** [sultanate]
South Arabia, Federation of So: 639
- Haushofer, Karl** [German geopolitician]
Geopolitics G: 107
- Haussmann, Georges Eugene** [French government official]
City planning (The Renaissance) Ci: 602
- Haute cuisine** [food]
France (Food and drink) F: 459
- Havana** [Cuba] H: 86 *with picture*
Cuba Ci: 1168 *with pictures*; (History) Ci: 1175
- Havana, University of**
Havana (Education and cultural life) H: 86
- Havana brown cat**
Cat (Short-haired breeds) C: 290-291; *picture on* C: 288
- Havanese** [dog] H: 87 *with picture*
- Havasupai Indians** [American Indians]
Grand Canyon (History) G: 307
- Havel, Václav** [Czech political leader] H: 87
Czech Republic (History) Ci: 1213-1214
Czechoslovakia (The Velvet Revolution) Ci: 1216
- Havel River** [Germany]
Berlin *picture on* B: 262
- Haven, C. D.** [American chemist]
Glass (table) G: 218
- Havers, Clopton** [English biologist]
Haversian canals H: 87
- Haversian canals** [anatomy] H: 87
- Haviland, David** [American businessman]
Porcelain (French porcelain) P: 677
- Haviland, Thomas Heath** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935
- Haviland, Virginia** [American author]
Regina Medal (table: 1976) R: 206
- Havlicek, John** [American basketball player]
Basketball *picture on* B: 153
- Haw** [fruit]
Hawthorn H: 114
- Hawaii H: 88** *with pictures and maps*
Bird (Birds of Australia and the Pacific Islands) B: 349 *with picture*

- Mythology (Pacific Islands divinities) M: 892
 Pacific Islands (The high islands) P: 7 *with picture*
 Seamount S: 269
 United States (Climate) U: 126-128 *with picture*
Agriculture
 Pineapple (History) P: 473
Government
 City government Ci: 595
History
 Asian Americans (History of Asian immigration) A: 812d
 Cleveland, Grover (Foreign affairs) Ci: 673
 Cook, James (Final voyage) Ci: 1026
 Dole, Sanford Ballard D: 285
 Harrison, Benjamin (Foreign affairs) H: 73
 Public lands (Acquisition of public lands) P: 858
 Tsunami T: 476
Physical features
 Plate tectonics (Plate movement) P: 563
See also the list of Related Articles in the Hawaii article
- Hawaii, Kingdom of**
 Hawaii (The kingdom of Hawaii) H: 106
- Hawaii, Republic of**
 Hawaii (The Republic of Hawaii) H: 108
- Hawaii, University of** H: 110
 Hawaii picture on H: 95
- Hawaii-Aleutian Time Zone**
 Standard time (Time zones) So: 835
 Time (Time zones in the United States and Canada) T: 289-292 *with maps*
- Hawaii-loa** [legendary figure]
 Hawaii (Early days) H: 106
- Hawaii Volcanoes National Park** [Hawaii]
 H: 110
 Kilauea K: 315
 National Park System (table: National parks) N: 48
- Hawaiian eruption**
 Volcano (Classifying volcanic eruptions) V: 442
- Hawaiian goose** [bird] *See Nene in this index*
- Hawaiian honeycreeper** [bird] H: 110 *with pictures*
- Hawaiian Islands** *See Hawaii in this index*
- Hawaiian language**
 Hawaii (Language) H: 93
- Hawaiian sling**
 Spearfishing So: 769 *with picture*
- Hawaiians** [people]
 Hawaii (Population) H: 92-93
- Hawaiki** [Hawaiian legend]
 Hawaii (Early days) H: 106
- Hawes, Charles Boardman** [American author]
 Newbery Medal (table) N: 359
- Hawi, Khalil** [Lebanese author]
 Arabic literature (Poetry) A: 583
- Hawikuh** [ancient city]
 Gallup G: 16
- Hawk** [bird] H: 111 *with pictures*
 Bird (Kinds of food) B: 350 *with picture*; *picture on B: 330*
 Buzzard B: 746
 Falconry F: 14
- Hawk** [tool]
 Plaster picture on P: 553
- Hawk** [weapon]
 Artillery picture on A: 763
- Hawk in the Rain, The** [poems by Hughes]
 Hughes, Ted H: 409
- Hawk moth** [insect] H: 113
 Animal picture on A: 490
 Moth (Migration) M: 839; (Hawk moths) M: 841 *with pictures*
- Hewka, Robert James Lee** [Australian political leader] H: 113
 Australia (table) A: 925
- Hewkes, Graham** [American engineer]
 Earle, Sylvia Alice E: 14
- Hawkes, John** [American author]
 American literature (Experimental styles) A: 424-425
- Hawkeye State** [nickname]
 Iowa I: 374
- Hawking, Stephen William** [British physicist]
 H: 113
- Hawking glove**
 Glove picture on G: 235
- Hawkins, Alvin** [American political leader]
 Tennessee (table) T: 152
- Hawkins, Coleman** [American saxophonist]
 H: 113
- Jazz (The 1920's) J: 70
- Hawkins, Jim** [literary figure]
 Literature for children (Fiction) L: 358
 Stevenson, Robert Louis (Novels) So: 898
- Hawkins, Sir John** [English sea captain] H: 113
 Drake, Sir Francis (Early life) D: 321; (Later life) D: 323
 Galleon G: 15
 Spanish Armada (The two fleets) So: 755-756
- Hawkins, William** [American political leader]
 North Carolina (table) N: 490
- Hawks** [U.S. history]
 Johnson, Lyndon Baines (The widening Vietnam War) J: 150-151
 Vietnam War (Reactions in the United States) V: 375
- Hawks, Atlanta**
 Basketball (table) B: 150
- Hawks, Howard** [American director] H: 113
- Hawksbill** [mountain, Virginia]
 Shenandoah National Park S: 395
- Hawksbill turtle**
 Turtle (Turtles and human beings) T: 523-524
- Hawkweed** [plant]
 Devil's paintbrush D: 175
- Hawkins, Sir John** *See Hawkins, Sir John in this index*
- Hawley, James H.** [American political leader]
 Idaho (table) I: 42
- Hawley, Joseph R.** [American political leader]
 Connecticut (table) Ci: 967
- Hawn, Goldie** [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1969) M: 863
- Haworth, Sir Walter Norman** [British chemist]
 Nobel Prizes (Chemistry: 1937) N: 442
- Hawthorn** [tree] H: 114 *with picture*
 Holly H: 293
 Tree pictures on T: 421
- Hawthorn, Mike** [British race driver]
 Automobile racing (table: Grand Prix world champions) A: 980
- Hawthorne** [book by James]
 American literature (Mark Twain and Henry James) A: 420
- Hawthorne, Nathaniel** [American author]
 H: 114 *with portrait*
 American literature (The romance) A: 418 *with portrait*
 Novel (The United States) N: 573
 Pierce, Franklin (Early life) P: 454
 Poe, Edgar Allan (Fiction and theory of fiction) P: 590
 Romance R: 415
 Romanticism (Romanticism in literature) R: 427
- Hay** [feed] H: 115 *with picture*
 Alfalfa (As livestock feed) A: 346 *with picture*
 Horse (Food) H: 355
 Rake R: 130 *with picture*
 Timothy T: 293
- Hay, George D.** [American radio broadcaster]
 "Grand Ole Opry" G: 308
- Hay, John Milton** [American statesman] H: 115
 Hay-Pauncéfote Treaty H: 116
 Open-Door Policy O: 789
 Panama Canal (The United States and the canal) P: 125
- Hay, Marion E.** [American political leader]
 Washington (table) W: 65
- Hay, Marie** [American soldier]
 Iowa (The early 1900's) I: 395
- Hay-Bunau-Verilla Treaty** [1903]
 Panama Canal (The United States and the canal) P: 125-126
- Hay conditioner** [machine]
 Hay H: 115
- Hay fever** [disorder] H: 116
 Allergy A: 373
 Goldenrod G: 256
 Immune system (The humoral immune response) I: 88-88a
 Pollen P: 644
 Ragweed R: 103
 Sneezing S: 538
- Hay Fever** [play by Coward]
 Coward, Noel Ci: 1107
- Hay-Herrán Treaty** [1903]
 Panama Canal (The United States and the canal) P: 125
- Hay millet** [grain]
 Millet M: 555
- Hay-Pauncéfote Treaty** [1901] H: 116
- Clayton-Bulwer Treaty Ci: 659
 Panama Canal (The United States and the canal) P: 125
- Haye de la Torre, Víctor Raúl** [Peruvian political leader]
 Peru (The rise of APRA) P: 315
- Hayakawa, S. I.** [American educator] H: 116
- Hayden, Carl Trumbull** [American political leader] H: 117
- Hayden, Ferdinand V.** [American explorer]
 Yellowstone National Park (History) Y: 559-560
- Hayden, Horace** [American dentist]
 Dentistry (Early dentistry) D: 144-145
- Hayden, Melissa** [Canadian dancer] H: 117
- Hayden, Mike** [American political leader]
 Kansas (table) K: 234
- Hayden Planetarium** [New York City]
 Planetarium (Modern planetariums) P: 514a-514b *with pictures*
- Haydn, Franz Joseph** *See Haydn, Joseph in this index*
- Haydn, Joseph** [Austrian composer] H: 117
 Beethoven, Ludwig van (Beethoven's life) B: 213
 Classical music (The Classical period) Ci: 647-648
 Music box M: 958
 Symphony So: 1067
- Hayek, Friedrich August von** [Austrian economist]
 Nobel Prizes (Economics: 1974) N: 449
- Hayes, Denis** [American attorney]
 Earth Day E: 32
- Hayes, Helen** [American actress] H: 117 *with portrait*
 Motion picture (Best performance by an actress: 1931-32) M: 862; (Best performance by an actress in a supporting role: 1970) M: 863
- Hayes, Lord** [British admiral]
 Pekingese P: 231
- Hayes, Lucy Webb** [wife of Rutherford B. Hayes]
 First ladies F: 143; (table) F: 142
 Hayes, Rutherford Birchard (Hayes's family) H: 119; (Life in the White House) H: 121 *with portrait*
- Hayes, Patrick Joseph Cardinal** [American religious leader]
 Cardinal (table: American cardinals) C: 211
- Hayes, Roland** [American singer] H: 117
- Hayes, Rutherford Birchard** [U.S. President]
 H: 118 *with pictures*
 Electoral Commission E: 164
 Ohio (table) O: 699
 Reconstruction (The 1876 presidential election) R: 179
 Republican Party (The Radical Republicans and Reconstruction) R: 254-255
- Hayes Library** [Fremont]
 Ohio (Places to visit) O: 690
- Haymarket Riot** [1886] H: 121
 Altgeld, John Peter A: 389
 Chicago (A city reborn) C: 435
 Illinois (Industrial development) I: 74 *with picture*
 Labor movement (Opposition to unions) L: 10
 Riot (During the 1800's) R: 348-349
 United States, History of the (Early reform efforts) U: 181
- Heyne, Robert Young** [American political leader]
 H: 122
 Jackson, Andrew (The nullification crisis) J: 12
 Nullification N: 603
 South Carolina (table) So: 658
- Haynes, Elwood** [American inventor] H: 122
 Indiana (Progress as a state) I: 216 *with picture*
- Haynsworth, Clement F., Jr.** [American jurist]
 Nixon, Richard Milhous (The national scene) N: 433-434
- Hays, George Washington** [American political leader]
 Arkansas (table) A: 712
- Hays, William** [husband of] Pitcher, Molly P: 499
- Hayward, R. W.** [American physicist]
 Party [physics] P: 167
- Hayward, Susan** [American actress]
 Motion picture (Best performance by an actress: 1958) M: 862
- Haywood, William Dudley** [American labor leader]
 Idaho (Early statehood) I: 44; *picture on I: 43*

- Hazard of New Fortunes, A** [book by Howells]
Howells, William Dean H: 402
- Hazardous materials truck**
Fire Department (Special fire vehicles) F: 127
- Hazardous wastes H: 122**
Electric power (Nuclear power plants) E: 184
Engineering (Environmental engineering)
E: 286 *with picture*
Environmental pollution (Hazardous waste)
E: 334
Greenpeace G: 386
New York (The late 1900's) N: 319-320
- Haze** [weather]
Fog F: 314
- Haze droplet**
Rain (Formation of rain) R: 123
- Hazel** [tree] H: 122 *with picture*
- Hazelnut** [nut]
Filbert F: 99 *with pictures*
Hazel H: 122 *with picture*
- Hazen, John D.** [Canadian political leader]
New Brunswick (table) N: 196
- Hazer**
Rodeo (Steer wrestling) R: 397
- Hazing**
Fraternity (Membership) F: 496
- Hazlitt, William** [British author] H: 123
English literature (Romantic prose) E: 320
Essay (Formal essays) E: 359
Shakespeare, William (Romantic criticism)
S: 369
- Hazzard, David** [American political leader]
Delaware (table) D: 109
- HCE** [literary figure]
Joyce, James J: 177
- HCG** [hormone] See Human chorionic gonadotropin *in this index*
- H.D.** [pen name]
American literature (Modernist poetry) A: 421
- HD-4** [hydrofoil]
Hydrofoil (History) H: 468
- HD 168443** [star]
Planet (The first discoveries) P: 512-513
- HD 209458** [star]
Planet (The first discoveries) P: 512
- HDL** [biochemistry] See High-density lipoprotein *in this index*
- HDTV** See High-definition television *in this index*
- HDTV format**
Photography (Film) P: 417-418
- He** [symbol]
Helium (Properties) H: 176
- Head** [anatomy] H: 123 *with diagrams*
See also Skull *in this index*
Phrenology P: 430
- Head** [botany]
Inflorescence I: 268b *with picture*
- Head** [magnetic recording]
Camcorder (How a camcorder works) C: 75 *with diagram*
Magnetism (In homes) M: 60-60a
Tape recorder (How tape recorders work) T: 37 *with diagrams*
Videotape recorder (Recording) V: 361 *with diagrams*
- Head, Natt** [American political leader]
New Hampshire (table) N: 223
- Head Hunters** [recording]
Hancock, Herbie H: 38
- Head lettuce**
Lettuce (Kinds of lettuce) L: 213 *with pictures*
- Head lice** [insects] H: 123
Hair (Disorders of the hair and scalp) H: 10
Louse L: 507
- Head linesman** [sports]
Football (The officials) F: 362
- Head-mounted display** [electronics]
Virtual reality V: 425 *with picture*
- Head of household**
Income tax (Figuring the individual income tax)
I: 104
- Head of state** [government]
Prime minister P: 778c
- Head shrinking**
Headhunter H: 125
Indian, American (Why the Indians fought)
I: 144-145
Jivaro Indians J: 128
- Head-Smashed-in Buffalo Jump**
Alberta (Interesting facts) A: 313
- Head Start** (education) H: 124
Children and Families, Administration for
C: 457
Nursery school (History) N: 616
- Head tax** See Poll tax *in this index*
- Head wind** [weather]
Wind shear W: 332
- Headache H: 124**
Allergy A: 373
Migraine M: 537
Whiplash W: 280
- Headdress**
See also Hairdressing; Hat *in this index*
Egypt, Ancient (Food, clothing, and shelter)
E: 137
Indian, American *picture on I: 160*
- Header** [construction]
Brick (Bonds) B: 599
House (table) H: 380
- Headhunter** [anthropology] H: 125
- Heading** [fabric]
Flag (Manufacturing flags) F: 222-223
- Heading** [letter writing]
Letter writing (The heading) L: 210 *with picture*
- Heading** [soccer]
Soccer (Heading) So: 547
- Headland** [geography]
Cape C: 186
- Headline** [advertising]
Advertising (Attention-getting headlines)
A: 76a
- Headline Series** [publication]
Foreign Policy Association F: 387
- Headphones H: 125**
Stereophonic sound system (Parts of a stereo system) So: 892
- Headrig** [machine]
Lumber (From sawmill to lumberyard) L: 519
- Heads-up display map** [navigation]
Map (Navigation maps) M: 177-178
- Headsaw** [machine]
Lumber (Sawing logs) L: 519; *pictures on L: 521, L: 524*
- Headset** [electronics]
Computer (Virtual reality [VR] software)
Ci: 919
- Headstart** See Head Start *in this index*
- Headwaters** [geography]
Divide D: 241 *with diagram*
River (River systems) R: 351
- Heald, Nathan** [American military leader]
Fort Dearborn F: 412
- Healey-Kay, Sydney Francis** [British dancer]
Dolin, Anton D: 285
- Healing, Faith** [religion] See Faith healing *in this index*
- Health H: 125 with pictures**
See also Public health *in this index*
Careers (Health) C: 223 *with pictures*
Cigarette Ci: 553
Colonial life in America (Health and medicine)
Ci: 809
Environmental pollution E: 330
Fat (Fats and disease) F: 53
Indian reservation (Description) I: 188-189
Mythology (Mythical symbols) M: 974-975
Physical education (During the 1900's) P: 433
Physical fitness P: 433
Shoe (Shoes and health) S: 431
Smoking S: 520
Social work (Fields of social work) So: 558
Tea (Tea and health) T: 63
World, History of the (Scientific and technological achievements) W: 448
See also the list of Related articles in the Health article
- Health, Bill of** [shipping] See Bill of health *in this index*
- Health, Board of** [U.S.] H: 127
- Health, Minister of** [office]
Canada, Government of (The Cabinet) C: 132; *diagram on C: 137*
- Health, National Institutes of** See National Institutes of Health *in this index*
- Health, Public** See Public health *in this index*
- Health and Human Services, Department of** [U.S.] H: 127 *with picture*
Hoover Commission H: 332
National Institute for Occupational Safety and Health N: 39
Washington, D.C. *map on W: 76*
- Health and Human Services, Secretary of** [U.S.]
Flag *picture on F: 211*
Health and Human Services, Department of (Organization) H: 128
- Health Care Financing Administration** [U.S.]
Health and Human Services, Department of (Organization) H: 128
Medicaid M: 361
Social security (OASDHI) So: 553
- Health care plans**
Infant mortality I: 264
Old age (Health care) O: 739
- Health care reform** See Health insurance, National *in this index*
- Health Care Service Corporation**
Insurance (table) I: 315
- Health Council, National** [organization] H: 128
- Health, Education, and Welfare, Department of**
Health and Human Services, Department of H: 128
- Health food H: 129**
Food (Recent developments) F: 337
- Health foundations**
Foundations (Health) F: 431
- Health insurance**
Blue Cross and Blue Shield B: 420
Genetic testing (Promises and challenges of genetic testing) G: 86
Insurance (Private health insurance) I: 311 *with diagram*; (Greater regulation) I: 316
Managed care plans M: 131
Medicaid M: 361
Medicare M: 362
Medicine (Providing medical care) M: 366; (Financing advanced medical care) M: 377-378
Health insurance, National H: 129
Social security (Medicare) So: 555
- Health insurance, National H: 129**
Clinton, Bill (National affairs) Ci: 682d
Clinton, Hillary Rodham Ci: 682h
Medicine (Other countries) M: 368
- Health maintenance organization**
Insurance (How private health insurance is provided) I: 311-312
Managed care plans (In the United States) M: 131
Medicine (The United States) M: 367-368
- Health Organization, World** See World Health Organization *in this index*
- Health resort**
Bath (Medical bathing) B: 163
- Health Resources and Services Administration** [U.S.]
Disabled (table) D: 222
Public Health Service P: 857
- Health Statistics, National Center for**
Vital statistics (Collecting and publishing vital statistics) V: 429-430
- Healy, George Peter Alexander** [American artist]
Buchanan, James *picture on B: 658*
Calhoun, John Caldwell *picture on C: 35*
Pierce, Franklin *picture on P: 454*
Polk, James Knox *picture on P: 640*
Tyler, John *picture on T: 532*
Van Buren, Martin *picture on V: 270*
Webster, Daniel *picture on W: 177*
- Healy, James Augustine** [American religious leader] H: 129
- Healy, Wayne** [American artist]
Hispanic Americans *picture on H: 255*
- Heaney, Seamus** [Irish poet] H: 130
Irish literature (Fiction and poetry) I: 432-433
- Heap o' Living, A** [poems by Guest]
Guest, Edgar Albert G: 421
- Heard, Stephen** [American political leader]
Georgia (table) G: 130
- Heard, William W.** [American political leader]
Louisiana (table) L: 496
- Hearing** [sense]
Ear E: 7; (The sense of hearing) E: 9
Animal (Adaptations for sensing the environment) A: 492-493 *with picture*
Audiology A: 881
Bird (Hearing) B: 365
Deafness D: 56
Dog (Senses) D: 265
Fish (Hearing) F: 164
Hearing aid H: 130
Insect (Hearing) I: 290-291 *with picture*
Mammal (Senses) M: 120
Mastoid M: 298
Reading (Physical disabilities) R: 162
Reptile (Sense organs) R: 251-252
Senses S: 301
Tinnitus T: 295

390 Hearing aid

Hearing aid [instrument] H: 130 *with pictures*
Deafness (Special devices) D: 58

Hearing disorder

See also Deafness *in this index*
Closed captioning Ci: 685

Hearing ear dog

Deafness (Special devices) D: 58
Dog guide D: 282 *with picture*

Hearing fan

Hearing aid (History) H: 130

Hearing loss

See Deafness *in this index*

Hearn, Lafcadio

[American author] H: 131

Hearne, Samuel

[British explorer] H: 131
Arctic (Arctic exploration) A: 639-640
Canadian literature (Beginnings of Canadian literature) C: 157
Exploration (Crossing North America) E: 447
Great Slave Lake G: 348
Northwest Territories (History) N: 533
Saskatchewan (The coming of the fur traders) S: 146

Hearnes, Warren E.

[American political leader]
Missouri (table) M: 668

Hearsay evidence

[law]
Evidence (Rules) E: 426

Hearst, George

[father of]
Hearst, William Randolph H: 131

Hearst, Patricia

[American public figure]
Hearst, William Randolph H: 131

Hearst, Phoebe Apperson

[American educator] H: 131

Binney, Alice Josephine McLellan B: 377

Hearst, William Randolph H: 131

Hearst, Randolph A.

[American publisher]
Hearst, William Randolph H: 131

Hearst, William H.

[Canadian political leader]
Ontario (table) O: 783

Hearst, William Randolph

[American publisher] H: 131

Citizenship Day Ci: 572

Spanish-American War (American intervention) So: 753

Welles, Orson W: 194

Hearst Castle

[estate]
California (Places to visit) C: 46 *with picture*

Hearst Newspapers

Hearst, William Randolph H: 131

Hearst's International-Cosmopolitan

[magazine]
Hearst, William Randolph H: 131

Heart

[anatomy] H: 132 *with pictures*

Angina pectoris A: 461

Aorta A: 562

Arrhythmia A: 743

Artery A: 750

Artificial heart A: 759 *with picture*

Blood (What blood does in the body) B: 408

Blood pressure B: 416

Calcium channel blocker C: 21

Cardiology C: 212

Circulatory system (The heart) Ci: 559 *with picture*

Death (Defining death) D: 61

Defibrillator D: 88

Electrocardiograph E: 199

Frog picture on F: 537

Human body (The heart) H: 421, *picture on*

H: 417, *diagram on* H: 422

Insect (Circulatory system) I: 288 *with diagram*

Life (Tissues, organs, and organ systems) L: 277 *with diagram*

Mitral valve prolapse M: 679

Muscle (Cardiac muscle) M: 935

Nuclear physics N: 595

Stress test So: 927

Vein V: 295

See also the list of Related articles in the Heart article

Heart

[suit]
Card game (History) C: 209

Heart Association, American

H: 147

Heart attack

[disorder]
Disease (Diseases associated with aging) D: 230

First aid (Heart attack) F: 141

Heart H: 132, (Coronary artery disease)

H: 137, (Heart attack) H: 138 *with diagrams*

Hypertension H: 475

Heart disease

Beta-blocker B: 274

Cholesterol (Cholesterol and heart disease) C: 520

Diabetes (Research) D: 179-180

Digitalis D: 203

Drug (Drugs that affect the heart and blood vessels) D: 351

Fat (Fats and disease) F: 53

Heart H: 132; (Coronary artery disease) H: 137

Hormone replacement therapy H: 338

Lidocaine L: 270

Nutrition (Heart disease) N: 630

Rheumatic fever R: 291

Smoking (Why smoking is dangerous) S: 520

Triglyceride T: 442

United Kingdom (Food and drink) U: 55

Heart failure

Heart (Diagnosis and treatment) H: 139; (Valve disease) H: 141-142; (Heart failure) H: 143

Inhalant I: 271

Myocarditis M: 971

Heart Fund

Heart Association, American H: 147

Heart Is a Lonely Hunter, The

[book by McCullers]
McCullers, Carson M: 335

Heart-lung machine

Heart (Treatment) H: 138 *with picture*;

(Development of heart surgery) H: 144 *with picture*

Heart murmur

[disorder] H: 147

Heart (Birth defects) H: 140-141

Rheumatic fever R: 291

"Heart of Darkness"

[story by Conrad]
Conrad, Joseph Ci: 973

Heart of Dixie

[nickname]
Alabama A: 256

Heart of Midlothian, The

[book by Scott]
Scott, Sir Walter (The Waverley novels) S: 222

Heart of palm

[vegetable]
Cabbage palm C: 3

Heart of the Matter, The

[book by Greene]
Greene, Graham G: 382

Novel (After World War II) N: 574

Heart rate

Heart (Regulating the heart rate) H: 135;

(Abnormal heart rhythms) H: 142

Heart scan

[medicine]
Heart (Symptoms and diagnosis) H: 137-138

Heart transplant

[medicine]
Barnard, Christiaan Neethling B: 114

Heart (Heart failure) H: 143 *with picture*; (The first heart transplants and artificial hearts) H: 145

Shumway, Norman Edward S: 444

Surgery (History) So: 1007-1008

Transplant (Organ transplants) T: 379

Heartbeat

Heart (Regulating the heart rate) H: 135-136

Heartblock

[disorder]
Arrhythmia A: 743

Heart (Abnormal heart rhythms) H: 142

"Heartbreak Hotel"

[song]
Rock music (The emergence of rock 'n' roll) R: 377

Heartbreak House

[play by Shaw]
Shaw, George Bernard (Mature period) S: 378

Heartburn

[disorder] H: 147

Antacid A: 529

Indigestion I: 223

Heartburn

[book by Ephron]
Ephron, Nora E: 342

Hearth

Iron and steel (Running a blast furnace) I: 441

Hearth bread

Bread (Kinds of bread) B: 588

Hearth furnace

Iron and steel (The Iron Age) I: 450-451

Heartland

Geopolitics G: 107

Heartsease

[plant] See Pansy *in this index*

Heartwood

[botany]
Sap (Vascular sap) S: 121

Tree (How trunks and branches grow thicker) T: 418 *with diagram*

Heartworm

[parasite]
Dog (Medical care) D: 279

Heat

H: 148 *with pictures*

Blood (Distributing body heat) B: 410

British thermal unit B: 632

Calorie C: 70

Combustion Ci: 867

Decomposition D: 80

Energy (Conservation of energy) E: 274

Expansion E: 438

Heat pipe H: 156

Joule, James Prescott J: 169

Light L: 282, (How light is produced) L: 283

Materials (Thermal properties) M: 300c

Metric system (Heat) M: 440

Physics (Heat) P: 437; (Developments in the 1800's) P: 440

Radiator R: 82

Sun So: 974; (Energy output) So: 976

Temperature T: 130

Thermodynamics T: 253

Thermography T: 253

Vacuum bottle V: 257

Water (The properties of water) W: 129-130

See also the list of Related Articles in the Heat article

Heat

[industry]
Iron and steel (How steel is made) I: 442

Heat

[reproduction]
Cat (Reproduction) C: 293

Dog (Social and moral responsibilities) D: 279

Estrous cycle E: 364

Heat

[sports]
Harness racing (The race) H: 63

Ice skating (Pack skating) I: 14-15

Heat, Miami

Basketball (table) B: 150

Heat capacity

[physics]
Materials (Thermal properties) M: 300c

Water (The properties of water) W: 129-130

Heat cramps

[disorder]
Hyperthermia (Forms of hyperthermia) H: 476

Heat energy

Energy (Energy conversion) E: 273-274

Heat engine

Engine E: 283

Thermodynamics T: 253

Heat equator

[meteorology]
Isotherm I: 475

Heat exchanger

[engineering]
Solar energy (Central receiver systems) So: 579

Heat exhaustion

[disorder]
First aid (Heatstroke and heat exhaustion) F: 141

Hyperthermia (Forms of hyperthermia) H: 476

Heat flow

Insulation I: 306

Heat index

[weather] H: 155

Weather (Reporting the weather) W: 169-170

Heat indicator

Liquid crystal picture on L: 347

Heat lightning

Lightning (Appearance) L: 300

Heat of adsorption

Absorption and adsorption (Adsorption) A: 18

Heat of combustion

Combustion Ci: 867

Heat of fusion

[physics]
Heat (Changes in state) H: 153

Heat of vaporization

[physics]
Heat (Changes in state) H: 153

Steam So: 880

Heat pipe

H: 156

Heat prostration

[disorder]
First aid (Heatstroke and heat exhaustion) F: 141

Heat pump

H: 156
Heating (Heat pumps) H: 159, *diagram on* H: 158

Heat rash

[disorder]
Prickly heat P: 776

Heat rays

[light] See Infrared rays *in this index*

Heat-reflective suit

Fire department (Protective clothing) F: 127 *with picture*

Heat-resistant glass

Glass (Specialty glasses) G: 212; (Borosilicate glass) G: 213

Heat-seeking missile

Guided missile (Homing guidance) G: 426 *with diagram*

Heat-set fibers

Textile (Making the yarn) T: 215

Heat shield

[spacecraft]
Space exploration (Returning to the earth) So: 701

Heat transfer

[physics]
Refrigeration (Principles of refrigeration) R: 200

Heat transfer printing

Textile (Finishing the fabric) T: 217

Heat treatment

[medicine]

- Heating (Room heaters) H: 160-161
- Heath** [geography]
- Heath H: 157
- Scotland (Land regions) S: 217
- Heath** [shrub] H: 157
- Heath, Edward** [British political leader] H: 157
- United Kingdom (Economic recovery—and collapse) U: 72-73
- Heath, Sir Robert** [English political leader]
- North Carolina (Exploration and settlement) N: 490
- South Carolina (Exploration and settlement) So: 659
- Heath hen** [extinct bird]
- Prairie-chicken P: 732
- "Heathen Chinese, The"** [poem by Harte]
- Harte, Bret H: 78
- Heather** [shrub]
- Heath H: 157
- Flower *picture on* F: 283
- Heather bell** [flower]
- Heath H: 157
- Heathrow Airport**
- Airport (table) A: 245
- London (Transportation) L: 438
- Heating H: 157 with pictures**
- Automation (How automation works) A: 945 *with diagram*
- Coal (Other uses of coal as a fuel) Ci: 720
- Furnace F: 567
- Heat pipe H: 156
- House (Heating and air conditioning) H: 383
- Solar energy (Solar heating) So: 579 *with picture*
- Heating unit**
- Range (Electric ranges) R: 137
- Heating value**
- Coal (The uses of coal) Ci: 719
- Heatstroke** [disorder]
- First aid (Heatstroke and heat exhaustion) F: 141
- Hyperthermia (Forms of hyperthermia) H: 476
- Heaven** [religion] H: 161
- Mythology *picture on* M: 974
- Heaven, Temple of**
- Beijing (The city) B: 222 *with picture*
- Heaven and Earth** [film]
- Stone, Oliver So: 908
- Heavens** [theater]
- Shakespeare, William (The stage) S: 352 *with picture*
- Heaves** [disease] H: 161
- Heavy harness horse**
- Horse (Heavy harness horses) H: 347
- Heavy horse**
- Horse (Kinds of horses) H: 343; (table: Some types and breeds of horses) H: 343
- Heavy hydrogen** *See* Deuterium *in this index*
- Heavy Ion Research Center**
- Bohrium B: 438
- Element 110 E: 224
- Element 111 E: 224
- Hassium H: 83
- Meitnerium M: 387
- Transuranium element T: 401
- Heavy metal** [physics]
- Environmental pollution (Hazardous waste) E: 334-335
- Heavy metal** [rock music]
- Rock music (Rock goes pop) R: 379
- Heavy metal fluoride glass**
- Glass (Specialty glasses) G: 212-213
- Heavy rain**
- Rain (Characteristics of rain) R: 122-123
- Heavy spar** [mineral] *See* Barite *in this index*
- Heavy truck**
- Truck (Kinds of trucks) T: 457; *pictures on* T: 459
- Heavy water** [chemistry] H: 161
- Astronomy (Neutrino astronomy) A: 845
- Deuterium (Properties) D: 172
- Nuclear energy (Nuclear fission) N: 582-583; (Power reactors) N: 584-586
- Observatory (Neutrino observatories) O: 645
- Sun (Analyzing neutrinos) So: 984-985
- Water (The chemistry of water) W: 129
- Heavyweight**
- Boxing (table) B: 530
- Hebe** [Greek mythology] H: 161
- Hebern, Edward H.** [American businessman]
- Codes and ciphers (History) Ci: 751
- Hébert, Anne** [Canadian poet]
- Canadian literature (Modern literature: 1945 to the present) C: 160
- Hébert, Louis** [Canadian pioneer]
- Quebec (Early days) Q: 36
- Hebert, Paul O.** [American political leader]
- Louisiana (table) L: 496
- Hebrew Association, Young Men's and Women's** [organization]
- Jewish community centers J: 119
- Hebrew Bible**
- Bible B: 279; (The Hebrew Bible) B: 279
- Habakkuk, Book of H: 2
- Judaism J: 179; (The Bible) J: 180
- Old Testament O: 740
- Hebrew calendar**
- Calendar (The Hebrew calendar) C: 29
- Hebrew language H: 161**
- Alphabet (Arabic and Hebrew) A: 383
- Israel (Language) I: 480
- Name (Given names) N: 5
- Yiddish language Y: 566
- Hebrew literature H: 162**
- See also the list of Related articles in the Hebrew literature article*
- Hebrew University**
- Jerusalem (East Jerusalem) J: 95 *with map*; (Culture) J: 99-100
- Jewish Women, National Council of J: 119
- Hebrews** [people]
- See also* Israelites *in this index*
- Clothing (Ancient times) Ci: 696-697
- Jews J: 120; (Beginnings) J: 120-121
- Law (Early developments in the East) L: 133
- Palestine (Early history and settlement) P: 104
- Tribe T: 440
- World, History of the (Civilizations of south-west Asia) W: 426
- Hebrews, Epistle to the** [New Testament]
- H: 163
- Hebrides** [islands, Scotland] H: 163 *with maps*
- Tweed T: 530
- Hebrides, The** [music by Mendelssohn]
- Mendelssohn, Felix (His life) M: 399
- Hebron** [city, West Bank] H: 163
- Cities of refuge Ci: 568
- Hecate** [Greek mythology] H: 164
- Hecatompyles** [ancient capital]
- Parthia P: 183
- Heceta, Bruno** [Spanish explorer]
- Washington (Discovery and exploration) W: 66
- Hecht, Ben** [American author] H: 164
- Heckart, Eileen** [American actress]
- Motion picture (Best performance by an actress in a supporting role: 1972) M: 863
- Heckel, Erich** [German painter]
- Painting (Expressionism) P: 78
- Hecker, Isaac Thomas** [American religious leader]
- Paulists P: 202
- Heckler, Margaret Mary** [American government official] H: 164
- Heckman, James Joseph** [American economist]
- Nobel Prizes (Economics: 2000) N: 449
- Hecle** [ship]
- Parry, Sir William Edward P: 181
- Hecle Island** [Canada]
- Lake Winnipeg L: 48 *with map*
- Hectare** [unit of measure]
- Metric system (Non-SI metric units) M: 440; (The metric system at a glance) M: 438 *with picture*
- Hecto** [prefix]
- Metric system (Metric prefixes) M: 439; (Selection of SI prefixes) M: 440
- Hector** [legendary figure] H: 164
- Achilles A: 26
- Iliad* I: 51
- Priam P: 774
- Trojan War (The siege of Troy) T: 449
- Hecuba** [legendary figure] H: 164
- Paris P: 159
- Heda, Willem Claesz** [Dutch painter]
- Painting (Still-life paintings) P: 33; (The Dutch masters) P: 62-63 *with picture*
- Hedda Gabler** [play by Ibsen]
- Drama (Ibsen) D: 338
- Ibsen, Henrik (His plays) I: 4
- Heddles**
- Weaving (How a loom works) W: 174
- Hedge apple** *See* Osage orange *in this index*
- Hedge bindweed** [plant]
- Bindweed B: 309
- "Hedge Roses"** [song]
- Schubert, Franz Peter (His life) S: 187
- Hedgehog** [animal] H: 164 *with picture*
- Porcupine P: 678
- Hedgehog cactus** [plant]
- Leaf *picture on* L: 157
- Hedgehog tenrec** [animal]
- Tenrec T: 170 *with picture*
- Hedging** [economics]
- Commodity exchange (Forward and futures contracts) Ci: 873
- Livestock (Direct markets) L: 398
- Hedonism** [philosophy] H: 165
- Nietzsche, Friedrich (Psychological ideas) N: 407
- Philosophy (Ancient philosophy) P: 386-387
- Heeger, Alan Jay** [American physicist]
- Nobel Prizes (Chemistry: 2000) N: 444
- Heel-and-toe**
- Walking W: 15
- Heel fly**
- Bot fly B: 507
- Warble fly W: 34
- Heeling force** [physics]
- Aerodynamics (Lift and drag in a sailboat) A: 87 *with diagram*
- Heeney, Tom** [New Zealand boxer]
- Tunney, Gene T: 492
- Heflin, Van** [American actor]
- Motion picture (Best performance by an actor in a supporting role: 1942) M: 863
- Hegel, G. W. F.** [German philosopher] H: 165
- Civilization (Why civilizations rise and fall) Ci: 636
- Existentialism (What is existentialism?) E: 436-437
- Germany (Literature and philosophy) G: 153
- Idealism I: 46
- Marx, Karl (Early development) M: 237
- Materialism M: 300b
- Philosophy (Modern philosophy) P: 387-389
- Political science (Liberalism) P: 639
- Schelling, Friedrich Wilhelm Joseph von S: 174
- Hegenberger, A. F.** [American military leader]
- Hawaii (The Territory of Hawaii) H: 108
- Hei tiki** [sculpture]
- Sculpture (Pacific Islands sculpture) S: 241-242
- Heian period** [Japanese history]
- Japan (Heian era) J: 53
- Japanese literature (The Heian period) J: 61
- Painting (Japanese painting) P: 47
- Sculpture (Japan) S: 239
- Heian-kyo** [ancient city]
- Japan (Heian era) J: 53
- Kyoto K: 398
- Heidegger, Martin** [German philosopher] H: 165
- Phenomenology P: 357
- Heidelberg** [city, Germany] H: 166
- Germany *picture on* G: 152
- Heidelberg, University of** [Germany] H: 166
- Heidelberg Catechism** [religion]
- Catechism C: 299
- Presbyterians (Teaching and worship) P: 756a
- Heidelberg jaw** [anthropology] H: 166
- Swanscombe fossil So: 1017
- Heidelberg man** [anthropology] *See* Heidelberg jaw *in this index*
- Heidelberg School** [art school]
- Australia (Painting) A: 906
- Heiden, Eric** [American speedskater]
- Ice skating (History) I: 16
- Olympic Games (Boycotts) O: 753
- Heidenstam, Verner von** [Swedish author]
- Nobel Prizes (Literature: 1916) N: 446
- Heidi** [book by Spyri]
- Spyri, Johanna So: 810
- Heidi Chronicles, The** [play by Wasserstein]
- Drama (Later United States drama) D: 340-341
- Wasserstein, Wendy W: 112
- Heifer** [animal]
- Cattle C: 306; (Breeding) C: 311-312
- Heifetz, Jascha** [Lithuanian-American violinist]
- H: 166
- Height** [geometry]
- Cylinder Ci: 1204
- Height, Dorothy Irene** [American social reformer]
- Spingarn Medal (table: 1993) So: 793
- Height and weight tables**
- Baby B: 8
- Growth (Growth rate) G: 405
- Heike** [family] *See* Taira *in this index*
- Heil, Julius P.** [American political leader]
- Wisconsin (table) W: 365; (The La Follette

- Progressives) W: 368
Heilmann, Harry [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Heimaey [island, Iceland]
 Iceland (The inland plateau) I: 22
 Volcano picture on V: 442
Heimlich maneuver
 First aid (Choking) F: 139 *with pictures*
Heimskringla [book by Snorri Sturluson]
 Snorri Sturluson S: 538
Heine, Heinrich [German author] H: 166
 German literature (The Young Germans)
 G: 141
Heinemann, Barbara [American religious leader]
 Amanites A: 400
Heinicke, Samuel [German educator]
 Lip reading L: 344
Heinkel Company
 Aviation (World War II [1939-1945]) A: 990
 Turbine (History) T: 498-500
Heinkel He-178 [aircraft]
 Jet propulsion (Development of jet propulsion)
 J: 114 *with picture*
Heinlein, Robert A. [American author] H: 167
 Science fiction (The Golden Age) S: 205
Heinz Hall for the Performing Arts
 Pittsburgh (Cultural life) P: 500c *with picture*
Heinze, F. Augustus [American businessman]
 Montana (Statehood) M: 760
Heir [law] H: 167
 Inheritance tax I: 271
Heiress, The [film]
 Copland, Aaron Ci: 1040
Heisei Emperor See Akihito in this index
Heisenberg, Werner [German physicist] H: 167
 Physics (Quantum theory) P: 441
 Quantum mechanics (The uncertainty principle) Q: 6
Heisman, John W. [American football coach]
 Heisman Memorial Trophy H: 167
Heisman Memorial Trophy [sports] H: 167
 Football (table) F: 363
Hejaz [region, Saudi Arabia]
 Ibn Saud I: 3
 Saudi Arabia (The Western Highlands) S: 158
with map; (The rise of Islam) S: 160
Hekla [volcano, Iceland] H: 167
 Iceland (The inland plateau) I: 22
Hel [Norse mythology]
 Balder B: 38
 Mythology (Mythical places) M: 974, (The construction of the world) M: 984-985
Held, John, Jr. [American cartoonist] H: 167
with picture
Heldentenor
 Opera (The singers) O: 792
Heidelberg Escarpment
 New York (Mountains) N: 306
Helen [town, Georgia]
 Georgia (Places to visit) G: 122 *with picture*
Helen Keller Endowment Fund
 Keller, Helen Adams (She helps others) K: 255
Helen Keller in Her Story [film]
 Keller, Helen Adams (She helps others) K: 255
Helen of Troy [legendary figure] H: 168
 Cassandra C: 275
 Mythology (Greek heroes) M: 979-980
 Trojan War (The beginning of the war) T: 449
 Troy (The legendary Troy) T: 454
Helena [Montana] H: 168
Helena [literary figure]
 Shakespeare, William (*A Midsummer Night's Dream*) S: 357; (*All's Well That Ends Well*) S: 362
Helena, Saint [early Christian]
 Crypt Ci: 1165
Helena Public Library
 Arkansas (Libraries) A: 699
Hélène Fourment and Her Children [painting by Rubens]
 Rubens, Peter Paul picture on R: 507
Helgoland [island, North Sea] H: 168 *with map*
Heliland, Der [poem]
 German literature (Early German literature)
 G: 139
Heliarc welding
 Helium (Uses) H: 176 *with picture*
Helical gear
 Gear G: 75
Helicobacter pylori [bacteria]
 Stomach (Peptic ulcers) So: 908
 Ulcer U: 15
Helicopter [aircraft] H: 169 *with pictures*
 Air force (Aircraft and missiles) A: 183
 Aircraft, Military (Helicopters) A: 203 *with picture*; (The jet age) A: 205
 Autogiro A: 942
 Coast Guard, United States (Aircraft) Ci: 736;
picture on Ci: 738
 Connecticut (Manufacturing) Ci: 965 *with picture*
 Korean War (The air war) K: 382
 Transportation (Air transportation) T: 385
 Vietnam War (The opposing forces) V: 375
 Warship (Amphibious warfare ships) W: 40
Helicopter gunship [aircraft]
 Aircraft, Military (Helicopters) A: 203-204
Helictite [geology]
 Cave (Speleothems) C: 319-320 *with diagram*
Heliocentric theory
 Astronomy (Sun-centered theories) A: 835;
 (Developing the modern view) A: 847
with diagram
 Science (The rebirth of science) S: 197 *with diagram*
Heliograph [communications] H: 174
 Communication (The 1800's) Ci: 881
 Niépce, Joseph Nicéphore N: 406
Heliopause [astronomy]
 Heliosphere (Shock waves) H: 175
 Solar system (Heliosphere) So: 581
 Voyager V: 452
Helipolis [ancient city, Egypt]
 Cleopatra's Needles Ci: 662b
 Phoenix P: 399
 Re R: 154
 Thutmose III T: 274
Helios [Greek mythology] H: 174
 Mythology (Mythical symbols) M: 974;
 (Müller's theory) M: 986
 Phaëthon P: 353
 Rhodes R: 317
 Selene S: 289
Helios [space probes]
 Space exploration (Solar probes) So: 710;
 (European nations) So: 727
Helioseismology
 Sun (Sun terms) So: 976; (Analyzing electromagnetic radiation) So: 983-984
Heliosheath [astronomy]
 Heliosphere (Shock waves) H: 175
Heliosphere [astronomy] H: 174
 Cosmic rays (Anomalous component cosmic rays) Ci: 1076-1077
 Solar system (Heliosphere) So: 581
 Sun (Solar wind) So: 980
Heliospheric magnetic field [astronomy]
 Heliosphere (Magnetic field) H: 175
Heliostat [machine]
 Solar energy (Central receiver systems)
 So: 579
 Sun picture on So: 978
Heliotrope [plant] H: 175 *with picture*
Heliport
 Airport (General aviation airports) A: 243
 Helicopter (For transportation and construction work) H: 170
Helium [element] H: 175 *with pictures*
 See also Liquid helium in this index
 Airship (Lift) A: 250
 Balloon (Gas balloons) B: 58; (Long-distance balloon flights) B: 62
 Big bang B: 296
 Cosmology (Abundant helium) Ci: 1078
 Star (Fusion in stars) So: 846
 Sun (Composition) So: 975
Helium 3 [physics]
 Superfluid So: 994
Helium 4 [physics]
 Superfluid So: 994
Helium flash [physics]
 Star (Intermediate-mass stars) So: 848
Helix garden snail
 Snail (Useful and harmful snails) S: 523
Hell [religion] H: 176
 Divine Comedy D: 242
Hell-diver [bird]
 Grebe G: 351
Hellabrunn Zoo [Munich, Germany]
 Tarpan T: 46
Helladic civilization [ancient Greece]
 Aegean civilization (The Mycenaean culture)
 A: 83
Hellas
 Greece, Ancient G: 366
Hellas Plenitie [crater]
 Mars (Craters and impact basins) M: 226
Hellbender [animal]
 Salamander S: 59
Hellebore [plant] H: 177
Hellen [Greek mythology]
 Deucalion D: 172
Hellenes [ancient people]
 Deucalion D: 172
 Greece, Ancient G: 366
Hellenic College/Holy Cross School of Theology
 Greek Orthodox Archdiocese of North and South America G: 379
Hellenic Trough
 Mediterranean Sea (The seabed) M: 381
Hellenica [book by Xenophon]
 Xenophon X: 544
Hellenistic Age [ancient Greece] H: 177
 Alexander the Great A: 342
 Jews (The Hellenistic period) J: 121
 Greece, Ancient (The Hellenistic Age) G: 374
 Greek literature (The Hellenistic Age) G: 378
 Middle East (Early civilizations) M: 532-533
 Sculpture (Hellenistic sculpture) S: 246 *with picture*; (Roman sculpture) S: 247
 World, History of the (The Greeks) W: 428-429
Heller, Joseph [American author] H: 177
 American literature (Experimental styles)
 A: 424
 Novel (The middle and late 1900's) N: 575
Hellespont [former name, Dardanelles]
 Hero and Leander H: 212
Hellgrammite [insect] H: 177 *with pictures*
Hellman, Lillian [American dramatist] H: 178
 American literature (Drama) A: 422-423
Hellman, Martin [American engineer]
 Codes and ciphers (Later developments)
 Ci: 751
Hells Canyon [Idaho-Oregon]
 Idaho (Places to visit) I: 34 *with picture*
 Snake River S: 536
Hell's Half Acre [Casper]
 Wyoming (Places to visit) W: 524
Helm
 Ship (Nautical terms) S: 416; (The chief parts of a ship) S: 424-425
Helm, John L. [American political leader]
 Kentucky (table) K: 290
Helmand River
 Afghanistan (The Southwestern Lowlands)
 A: 94
Helmet [clothing] H: 178 *with pictures*
 Armor (During the Middle Ages) A: 720; (Later developments) A: 720 *with picture*;
 (During the Middle Ages) A: 720 *with pictures*
 Diving, Underwater (Ambient diving) D: 245
with picture
 Fire department (Protective clothing) F: 127
with picture
 Heraldry (Elements of a coat of arms) H: 194-196 *with picture*
 Space exploration (Leaving the spacecraft)
 So: 704-705 *with pictures*
Helmet flower
 Aconite A: 28 *with picture*
Helmetbird
 Bird (Birds of Africa) B: 348 *with picture*
Helmholtz, Hermann Ludwig Ferdinand von
 [German physicist] H: 179
 Color (The three-component theory) Ci: 826
 Heat (Heat and energy) H: 155
 Joule, James Prescott J: 169
 Ophthalmoscope O: 810
 Physics (Developments in the 1800's) P: 440
 Psychology (Psychology becomes a science)
 P: 849
 Sound (The study of waves) S: 605-606
Helmont, Jan Baptista van [Belgian chemist]
 Botany (The development of modern botany)
 B: 509
 Gas [physics] (History) G: 49
 Gas [fuel] (First uses of manufactured gas)
 G: 58
Helms, Jesse Alexander [American political leader] H: 179
 North Carolina (The late 1900's) N: 493-494
Helms-Burton Act [1996]
 Cuba (Foreign relations) Ci: 1179
Héloïse [French nun]
 Abelard, Peter A: 10
Héloïse and Abelard [book by Moore]
 Moore, George Augustus M: 796
Helots [ancient Greece]
 Sparta (The people) So: 766

- Help!** [film]
Beatles B: 190
- Helping verb**
Tense T: 170
- Helpmates** [film]
Laurel and Hardy *picture on* L: 122
- Helsinki** [Finland] H: 179 *with picture*
Finland F: 108 *with picture*; (Ancestry and population) F: 111 *with picture*
- Helsinki, University of**
Finland (Education) F: 112
- Helsinki Accords** H: 180
Europe (Toward European unity) E: 415-416
Human Rights Watch H: 430
Organization for Security and Cooperation in Europe O: 853
- Helsinki Final Act** [treaty]
Union of Soviet Socialist Republics (Détente) U: 39
See also Helsinki Accords in this index
- Helsinki Watch** [former name]
Human Rights Watch H: 430
- Helvetia**
Switzerland So: 1050
- Helvetians** [people] H: 180
Switzerland (Early days) So: 1058
- Helvetic Republic** [Swiss history]
Switzerland (French control) So: 1060
- Helvétius, Claude** [French philosopher]
Law (Beginnings of U.S. law) L: 136
Philosophes P: 382
- Helwan Observatory** [Egypt]
Halley's Comet H: 24
- Hem**
Sewing (Hems) S: 333
- Hemangioma** [disorder]
Birthmark B: 380
- Hematite** [mineral] H: 180
Iron and steel (Kinds of iron ore) I: 438
Taconite T: 5
- Hematocrit** [test]
Blood (Blood tests) B: 413
Blood doping B: 415
- Hematology** [medicine]
Ehrlich, Paul E: 145
See also Blood in this index
- Hematopoietic effect** [radiology]
Radiation (Dose) R: 79-80
- Hematopoietic growth factor** [physiology]
Blood (How the body maintains its blood supply) B: 410; (History of blood research) B: 414
- Hemerken, Thomas** [German author]
Thomas à Kempis T: 262
- Hemicellulose**
Wood (The composition of wood) W: 390
- Hemicyon** [animal]
Prehistoric animal *picture on* P: 740
- Heming, John** [English actor]
Shakespeare, William (Folios) S: 368
- Hemings, Eston** [American public figure]
Jefferson, Thomas (Jefferson and Sally Hemings) J: 78
- Hemings, Sally** [American public figure]
Jefferson, Thomas (Jefferson and Sally Hemings) J: 78
- Hemingway, Ernest** [American author] H: 180 *with portrait*
American literature (The Lost Generation) A: 421 *with portrait*; *picture on* A: 417
Lost Generation L: 472
Novel (New directions in the novel) N: 573-574
United States, History of the (An age of heroes) U: 186
- Hemipene** [zoology]
Snake (Reproduction) S: 530
- Hemiptera** [entomology]
Bug B: 680
Insect (table) I: 300; *pictures on* I: 281
- HemisFair '68**
San Antonio (The city) S: 84
- Hemisphere** [geography] H: 181 *with pictures*
- Hemisphere** [geometry]
Sphere So: 780
- Hemlock** [plant] H: 181 *with pictures*
Alkaloid A: 369
- Hemlock** [tree] H: 182 *with pictures*
Tree *pictures on* T: 425
- Hemlock and After** [book by Wilson]
Wilson, Angus W: 316
- Hemodialysis** [medicine]
Kidney (Kidney diseases) K: 312
- Hemoglobin** [physiology] H: 182
Anemia (Excessive destruction of red blood cells) A: 458
Blood (Red blood cells) B: 408; (What blood does in the body) B: 408
Cyanosis Ci: 1202
Genetic testing (How genes carry information) G: 85
Hemolysis H: 182
Inorganic chemistry I: 276
Iron (How bodies use iron) I: 435
Kendrew, Sir John Cowdery K: 259
Liver (Purification of the blood) L: 394
Protein (How the body uses proteins) P: 832
Respiration (Gas transport between the lungs and tissues) R: 261
Sickle cell anemia S: 448
Thalassemia T: 228
Trace elements T: 353
- Hemoglobin S** *See Sickle cell anemia in this index*
- Hemolysis** [physiology] H: 182
Streptococcus So: 926
- Hemolytic anemia**
Anemia (Excessive destruction of red blood cells) A: 458
- Hemolytic jaundice**
Jaundice J: 66
- Hémon, Louis** [French author] H: 182
Canadian literature (Literature between the world wars) C: 159
- Hemophilia** [disease] H: 182 *with diagram*
AIDS (How HIV is transmitted) A: 163-164
Blood (Bleeding disorders) B: 414
Blood transfusion B: 416
Genetic testing (Genes associated with disease) G: 85-86
Heredity (Hereditary disorders) H: 204
Plasma (Uses in medicine) P: 551
Von Willebrand's disease V: 448
- Hemorrhage** [disorder] H: 183
See also Bleeding in this index
First aid (First aid for bleeding) F: 136 *with pictures*
Stroke (Causes) So: 930
- Hemorrhage, Cerebral** *See Cerebral hemorrhage in this index*
- Hemorrhagic fever** [disorder]
Hantavirus H: 54
Ebola virus E: 48
- Hemorrhoids** [disorder] H: 183
Varicose vein V: 286
- Hemostat** [instrument]
Surgery (A typical operation) So: 1006
- Hemotoxin** [poison]
Snake (Fangs and venom glands) S: 528-529
- Hemp** [plant] H: 183
Hashish H: 81
Marijuana M: 201 *with picture*
Philippines *picture on* P: 379
Rope (Natural-fiber rope) R: 476
- Hempstead, Stephen P.** [American political leader]
Iowa (table) I: 391
- Hen** [bird]
Chicken C: 440
Poultry (Raising poultry) P: 720
Turkey T: 513
- Hen harrier** [bird] *See Northern harrier in this index*
- Henagan, B. K.** [American political leader]
South Carolina (table) So: 658
- Henbane** [plant] H: 184
- Hench, Philip Showalter** [American physician]
Nobel Prizes (Physiology or medicine: 1950) N: 444
- Henday, Anthony** [British explorer] H: 184
- Hendee, George W.** [American political leader]
Vermont (table) V: 333
- Henderson, Arthur** [British statesman]
Nobel Prizes (Peace: 1934) N: 447
- Henderson, Charles** [American political leader]
Alabama (table) A: 274
- Henderson, Fletcher** [American musician]
H: 184
Jazz (The 1920's) J: 70
- Henderson, James Pinckney** [American political leader]
Texas (table) T: 203
- Henderson, Richard** [American jurist]
Boone, Daniel (The Wilderness Road) B: 477
- Henderson, Rickey** [American baseball player]
H: 184
Baseball (table: Modern major league records) B: 137
- Henderson, Robert** [American prospector]
Klondike K: 344
- Henderson the Rain King** [book by Bellow]
Bellow, Saul B: 244
- Hendricks, Thomas Andrews** [American political leader] H: 184
Cleveland, Grover (Election of 1884) Ci: 670
Hayes, Rutherford Birchard (Campaign of 1876) H: 120
Indiana (table) I: 214
Vice President of the United States (table) V: 351; V: 348 *with portrait*
- Hendricks, William** [American political leader]
Indiana (table) I: 214
- Hendricksen, Cornelius** [Dutch explorer]
Pennsylvania (Exploration and settlement) P: 264
- Hendrix, Jimi** [American musician] H: 184 *with portrait*
Rock music (Expanding styles and sounds) R: 378-379; (Growing social significance) R: 379
- Henequen** [plant] H: 184
Mexico (The Yucatán Peninsula) M: 463
Rope (Natural-fiber rope) R: 476
- Henge** [archaeology]
Megalithic monuments M: 383
- Henie, Sonja** [Norwegian skater]
Ice skating (History) I: 16
Olympic Games (Between the wars) O: 751; *picture on* O: 752
- Henlein, Peter** [German inventor]
Watch (History) W: 115
- Henley Royal Regatta** [race]
Rowing (Competition) R: 494
- Henna** [dye] H: 185
Dye (Natural dyes) D: 396
- Hennepin, Louis** [Belgian explorer] H: 185
Iowa (Exploration and early settlement) I: 393
Minneapolis (Early days) M: 583
Minnesota (Exploration) M: 603
- Hennin** [hat]
Clothing (The Renaissance) Ci: 700 *with picture*
Hat H: 83; *picture on* H: 84
- Henotheism**
Religion (Belief in a deity) R: 215
- Henri** [grand duke of Luxembourg]
Luxembourg (History) L: 531-532
- Henri, Robert** [American artist] H: 185
Ashcan School A: 768
Davies, Arthur Bowen D: 46
Lawson, Ernest L: 147
Prendergast, Maurice Brazil P: 756
- Henriade, Le** [poem by Voltaire]
Voltaire (Imprisonment and early success) V: 446
- Henrietta Maria** [wife of Charles I]
Maryland M: 240; (Exploration and settlement) M: 256
- Henrik** [Danish prince]
Margrethe II M: 199
- Henry** [British prince]
Charles, Prince C: 382
Diana, Princess of Wales D: 183
William, Prince W: 309
- Henry** [unit of measure] H: 185
Henry, Joseph H: 189
Inductance I: 240
- Henry I** [king of England] H: 185
England (Struggles for power) E: 305
Stephen So: 890
- Henry I** [king of Germany]
Germany (The breakup of Charlemagne's empire) G: 162
Otto I, the Great O: 877
- Henry II** [king of England] H: 185
Becket, Saint Thomas B: 196
Eleanor of Aquitaine E: 158
England (Struggles for power) E: 305-306
Ireland (The Norman invaders) I: 425
Plantagenet P: 550
- Henry II** [king of France] H: 186
France (A period of wars) F: 473
Paré, Ambroise P: 156
- Henry III** [Holy Roman emperor] H: 186
- Henry III** [king of England] H: 186
England (table) E: 308
Montfort, Simon de M: 765
Plantagenet P: 550
Wales (Revolts against England) W: 12
Westminster Abbey W: 243
- Henry III** [king of France] H: 186
Ballet *picture on* B: 52

- Catherine de Médicis C: 303
Huguenots (The massacre) H: 410-411
- Henry IV** [king of England] H: 186
England (The Hundred Years' War) E: 306
Lancaster L: 55
Lollards L: 427
Richard II R: 329
- Henry IV** [king of France] H: 186 *with portrait*
Bourbon (In France) B: 516
Champlain, Samuel de (Early life) C: 373
Henry III [of France] H: 186
Marie de Médicis M: 200
Nantes, Edict of N: 12
- Henry IV** [Holy Roman emperor] H: 187
Germany (The Holy Roman Empire) G: 162
Gregory VII, Saint G: 387
Urban II U: 219
- Henry IV** [play by Pirandello]
Pirandello, Luigi P: 493
- Henry IV** [play by Shakespeare]
Shakespeare, William (*Henry IV*) S: 359 *with picture*
Drama picture on D: 324
Henry V [of England] H: 187
- Henry V** [Holy Roman emperor]
Paschal II P: 190
- Henry V** [king of England] H: 187 *with portrait*
England (The Hundred Years' War) E: 306
Hundred Years' War H: 437
Lancaster L: 55
- Henry V** [literary figure]
Shakespeare, William (*Henry IV*) S: 359;
(*Henry V*) S: 360
- Henry V** [play by Shakespeare]
Shakespeare, William (*Henry V*) S: 360;
(Rhetoric) S: 367
Olivier, Laurence O: 744
- Henry VI** [Holy Roman emperor] H: 187
- Henry VI** [king of England] H: 187
England (The Hundred Years' War) E: 306;
(The Wars of the Roses) E: 306
Lancaster L: 55
Wars of the Roses W: 38
Warwick, Earl of W: 44
York Y: 568
- Henry VI** [plays by Shakespeare]
Shakespeare, William (*Henry VI*) S: 356
- Henry VII** [king of England] H: 187 *with portrait*
Cabot, John C: 7
England (The Wars of the Roses) E: 306-307
Exploration (Exploring the New World) E: 444
Renaissance (Political background) R: 237
Richard III R: 329
Tudor, House of T: 481
Wales (Union with England) W: 13
Warbeck, Perkin W: 34
Wars of the Roses W: 38
Westminster Abbey W: 243
Wolsey, Thomas Cardinal W: 379
- Henry VIII** [king of England] H: 188 *with portrait*
Boleyn, Anne B: 440
Catherine of Aragon C: 303
Church of England (History) C: 543
Cranmer, Thomas C: 1120
Cromwell, Thomas C: 1152
England (The English Reformation) E: 307
Hairdressing (The Renaissance) H: 11-12
Holbein, Hans, the Younger H: 290
Ireland (The conquest of Ireland) I: 426
More, Saint Thomas (His life) M: 801
Postal services (The growth of public mail systems) P: 703
Protestantism (The conservative reform movements [the 1500's]) P: 834
Reformation (In England) R: 198
Scotland (The House of Stuart) S: 219
Tower of London T: 349
Tudor, House of T: 481
Wales (Union with England) W: 13
Wolsey, Thomas Cardinal W: 379
- Henry VIII** [play by Shakespeare]
Fletcher, John F: 234
Shakespeare, William (His last years) S: 349;
(The fourth period) S: 364; (*Henry VIII*) S: 365
- Henry, Alexander** [Canadian explorer] H: 188
- Henry, Sir E. R.** [British criminologist]
Fingerprinting (History) F: 107
- Henry, George S.** [Canadian political leader]
Ontario (table) O: 783
- Henry, Gregory W.** [American astronomer]
Planet (The first discoveries) P: 512
- Henry, John** [American political leader]
Maryland (table) M: 255
- Henry, John** [legendary figure] H: 188
Folklore (Legends) F: 324
- Henry, Joseph** [American physicist] H: 189
Electromagnet E: 202
Electromagnetism E: 203
Energy supply (The Industrial Revolution) E: 280
Faraday, Michael F: 28
Magnetism (Electricity and magnetism) M: 61
Physics (Developments in the 1800's) P: 440
Radio (Early development) R: 91
Telegraph (Development of the telegraph) T: 90
- Henry, Lou** [wife of Herbert Hoover] See Hoover, Lou Henry *in this index*
- Henry, Marguerite Breithaupt** [American author]
Newbery Medal (table) N: 359
- Henry, O.** [American author] H: 189
Short story S: 434
- Henry, Patrick** [American political leader] H: 189 *with picture*
Constitution of the United States (The Constitutional Convention) C: 999-1000
Jefferson, Thomas (Lawyer) J: 78
Madison, James (Virginia assemblyman) M: 33
Revolutionary War in America (Fighting in the Southern Colonies) R: 275
Richmond (Other interesting places to visit) R: 332
Virginia (table) V: 417
- Henry, William Alexander** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) C: 935 *with picture*
- Henry Dooley Zoo** [Omaha]
Zoo picture on Z: 607
- Henry E. Huntington Library and Art Gallery**
[San Marino, California]
Los Angeles (Museums) L: 466
- Henry Esmond** [book by Thackeray]
Thackeray, William Makepeace (Later career) T: 220
- Henry Ford Museum** [Dearborn, Michigan]
Detroit (Other interesting places to visit) D: 170
Ford, Henry (Political and charitable activities) F: 380
- Henry Francis Du Pont Winterthur Museum**
[Delaware] See Winterthur Museum *in this index*
- Henry Huggins** [book by Cleary]
Cleary, Beverly C: 660
- Henry James** [book by West]
West, Rebecca W: 199
- Henry Mountains**
Utah (Land regions) U: 240-242
- Henry of Bolingbroke** See Henry IV [king of England] *in this index*
- Henry of Burgundy** [French knight]
Portugal (Founding the Portuguese nation) P: 693
- Henry of Guise** [French nobleman]
Henry III [king of France] H: 186
Huguenots H: 410
Saint Bartholomew's Day, Massacre of S: 31
- Henry of Luxembourg** [German ruler]
Luxembourg (History) L: 531
- Henry of Mecklenburg-Schwerin** [husband of] Wilhelmina W: 306
- Henry of Navarre** See Henry IV [king of France] *in this index*
- Henry Street Settlement** [New York City]
Wald, Lillian D. W: 7
- Henry the Fowler** See Henry I [king of Germany] *in this index*
- Henry the Lion** [duke of Saxony]
Brunswick B: 652
Munich (History) M: 927
- Henry the Navigator** [Portuguese geographer] H: 191
Exploration (Reaching the tip of Africa) E: 443
Portugal (The age of exploration) P: 693
- Henry Whitfield State Museum** [Guilford, Connecticut]
Colonial life in America (Places to visit) C: 800
- Henshaw, David** [American government official]
Tyler, John (table) T: 534
- Hensley, Virginia Petterson** [American singer]
See Cline, Patsy *in this index*
- Henson, Jim** [American puppeteer] H: 191
Puppet (Hand puppets) P: 904-905
- Henson, Josiah** [American public figure]
Slavery (Conditions of slavery) S: 503
- Henson, Matthew Alexander** [American explorer] H: 191 *with portrait*
Exploration (Arctic exploration) E: 449-450
Peary, Robert Edwin P: 224
- Henson, William S.** [British inventor]
Airplane (Powered flight) A: 230 *with picture*
- Henze, Hans Werner** [German composer] H: 191
- HEPA filter**
Air cleaner (Types of air cleaners) A: 175-176
- Hepatic artery** [anatomy]
Liver (Structure of the liver) L: 393; *picture on* L: 394
- Hepatic duct** [anatomy]
Bile B: 300
Gallbladder G: 14 *with diagram*
Liver (Structure of the liver) L: 393
- Hepatic vein** [anatomy]
Liver (Structure of the liver) L: 393; *picture on* L: 394
- Hepatica** [plant] H: 192
Flower picture on F: 285
- Hepatitis** [disease] H: 192
Blood transfusion (How blood is collected) B: 416-417
Cirrhosis C: 567
Disease (table) D: 226
Liver (Diseases of the liver) L: 394-395
- Hepatocellular jaundice** [disorder]
Jaundice J: 66
- Hepburn, Audrey** [British actress]
Motion picture (Best performance by an actress: 1953) M: 862
- Hepburn, James** [Scottish nobleman]
Bothwell, Earl of B: 510
- Hepburn, Katharine** [American actress] H: 192 *with portrait*
Motion picture (Best performance by an actress: 1932-33, 1967, 1968, 1981) M: 862; (Movies in the 1930's) M: 868 *with picture*
- Hepburn, Mitchell F.** [Canadian political leader]
Ontario (table) O: 783
- Hepburn Railway Rate Act** [1906]
Roosevelt, Theodore (Domestic problems) R: 470
- Hepburn system**
Japanese language J: 61
- Hephaestus** [Greek mythology] H: 193
Aphrodite A: 565
Ares A: 645
Mythology (table) M: 980
Pandora P: 130
Vulcan V: 453
- Hephaestus, Temple of** [Athens]
Architecture picture on A: 615
- Hepplewhite, George** [British furniture designer] H: 193
- Heptaméron** [work by Marguerite of Navarre]
French literature (The Renaissance) F: 519
- Heptameter** [poetry]
Poetry (table) P: 594
- Heptene**
Gasoline (Gasoline octane ratings) G: 61
Natural gas liquids N: 64
- Heptarchy** [English history]
Anglo-Saxons A: 464
England (The Anglo-Saxon period) E: 304
- Heptathlon** [sports] H: 193
Joyner-Kersey, Jackie J: 177
Track and field (The decathlon, heptathlon, and pentathlon) T: 356; (World track and field records) T: 358-359
- Hepworth, Barbara** [English sculptor] H: 193 *with picture*
- Her Majesty's Opposition** [government]
United Kingdom (National government) U: 49
- HER2** [medicine]
Cancer (Monoclonal antibodies) C: 172-173
- Hera** [Greek mythology] H: 193
See also Juno *in this index*
Argus A: 661
Big and Little Dippers (The Little Dipper) B: 296
Hercules (Early life) H: 198; (The twelve labors) H: 198
Hesperides H: 218
Io I: 369 *with picture*
Mythology (table) M: 980
Zeus Z: 594
- Heracleon stone** [rock]
Lodestone L: 419
- Heracles** See Hercules [Greek mythology] *in this index*

- Heraclitus** [Greek philosopher] H: 193
Pre-Socratic philosophy (The first pre-Socratics) P: 772
- Heraclius** [Byzantine emperor]
Byzantine Empire (Invasion and conquest) B: 754
- Herald** [European history] H: 194
Heraldry (Expansion) H: 194
- Herald of Holiness** [newspaper]
Church of the Nazarene C: 543
- Heraldic achievement** See Coat of arms in this index
- Heraldry** H: 194 with pictures
Flag F: 194
Herald H: 194
- Heralds' College**
Heraldry (Heraldry today) H: 194
- Herb** [botany] H: 196
Dietary supplement D: 200
Gardening (Food gardens) G: 31
Herbal medicine H: 196
- Herb layer** [forest]
Forest (The herb layer) F: 392 with picture
- Herb Robert** [plant]
Geranium G: 136
- Herbaceous stem**
Plant (Stems) P: 330 with pictures
Stem (Kinds of stems) So: 887; diagrams on So: 888
Vegetable V: 292
- Herbal medicine** H: 196
- Herbalism** [medicine]
Alternative medicine A: 388
- Herbarium** [botany] H: 196
- Herbart, Johann Friedrich** [German psychologist] H: 197
- Herbaud, Gerard** [French pilot]
Glider (table) G: 230
- Herbaud, Jean Noel** [French pilot]
Glider (table) G: 230
- Herbert, Frank** [American author] H: 197
- Herbert, George** [English poet] H: 197
- Herbert, Hilary A.** [American government official]
Cleveland, Grover (table) Ci: 672
- Herbert, John** [Canadian dramatist]
Canadian literature (Modern Canadian drama) C: 161
- Herbert, Thomas J.** [American political leader]
Ohio (table) O: 699
- Herbert, Victor** [American composer] H: 197
American Society of Composers, Authors and Publishers A: 430
Musical comedy (The first musicals) M: 959
- Herbert Hoover Library** [Iowa]
Hoover, Herbert Clark (Elder statesman) H: 330-331
- Herbert Hoover National Historic Site** [Iowa]
National Park System (table: National historic sites) N: 52-53
- Herbicide** H: 198
Agent Orange A: 140
Agriculture (Agricultural chemicals) A: 159-160
Cotton (Weeds) Ci: 1090
Farm and farming (Pest control) F: 34
Pest control (Pesticides) P: 318
- Herbivore** [zoology] H: 198
Forest (The flow of energy) F: 396
Mammal (What mammals eat) M: 121 with diagrams
- Herblock cartoon**
Block, Herbert Lawrence B: 404 with picture
- Herbs** See Herb in this index
- Hercegovina** [region] See Bosnia-Herzegovina in this index
- Herculaneum** [ancient city] H: 198
Architecture (Neoclassical architecture) A: 623
Library (Ancient libraries of papyrus) L: 258-259
Painting (Roman painting) P: 42-43; (Neoclassicism) P: 66
- Hercules** [constellation] H: 199
- Hercules** [Greek mythology] H: 198
Alexander the Great (His youth) A: 342
Atlas A: 869
Cerberus C: 361
Cornucopia Ci: 1066
Hebe H: 161
Hydra H: 461
Mythology (Greek divinities) M: 979 with picture; picture on M: 980
Prometheus P: 817
Renaissance picture on R: 237
- Hercules, Pillars of**
Gibraltar, Strait of G: 187
- Hercules and Antaeus** [sculpture by Pollaiuolo]
Pollaiuolo, Antonio del P: 644
- Hercules beetle** [insect] H: 199
Beetle picture on B: 215
- Hercules club** [tree]
Prickly-ash P: 775
- Herd** [zoology]
Animal (Group living) A: 502
Dolphin picture on D: 299
Whale (Group life) W: 261
- Herd of Horses** [cave painting]
Painting picture on P: 41
- Herdbook** [book]
Cattle C: 306
- Herder, Johann Gottfried von** [German author] H: 199
German literature (The Storm and Stress movement) G: 140
Goethe, Johann Wolfgang von (Early years) G: 247
- Herding dog**
Dog (Herding dogs) D: 266; pictures on D: 276
- Herd's-grass** [plant]
Timothy T: 293
- Herdsman** [constellation]
Boötes B: 480
- Here and Now** [poems by Layton]
Layton, Irving L: 148
- Here Come the Clowns** [play by Barry]
Barry, Philip B: 119
- Heredia, José María** [Cuban poet]
Latin-American literature (Romanticism) L: 112
- Hereditary disease**
Allergy (Hereditary factors) A: 373
Alzheimer's disease (Diagnosis) A: 398-399
Anemia (Excessive destruction of red blood cells) A: 458
Attention deficit disorder A: 879
Cancer (Inheriting damaged genes) C: 170
Diabetes (Causes) D: 179
Disease (Inherited diseases) D: 228
Ear (Birth defects) E: 11
Eugenics E: 377
Gene mapping G: 81
Genetic counseling G: 84
Genetic testing G: 85
Genetics (Transmission genetics) G: 87
Hemophilia (How hemophilia is inherited) H: 183 with diagram
Heredity (Sex-linked genes) H: 202; (Hereditary disorders) H: 204
Inflammatory bowel disease (Causes) I: 266
Medicine (The medical revolution) M: 376-377; (The challenge of genetics) M: 378
Mental illness (Genetic factors) M: 407
Mental retardation (Causes) M: 410
Muscular dystrophy M: 936
Races, Human (Susceptibility to genetic diseases) R: 58
Sickle cell anemia S: 448
Tay-Sachs disease T: 56
Thalassemia T: 228
- Hereditary material** See DNA in this index
- Hereditary peerage**
Nobility (In the United Kingdom) N: 450
Parliament (The House of Lords) P: 173
- Heredity** H: 200 with pictures
Alcoholism (Causes of alcoholism) A: 337
Baby (Growth and development) B: 6
Baldness B: 39
Behavior (Heredity) B: 220
Brain (Genetic disorders) B: 557
Cell (The nucleus) C: 328; (Meiosis) C: 331
Dislocation D: 235
DNA D: 258
Eugenics E: 377
Evolution (Mutation) E: 427
Genetic counseling G: 84
Genetic testing G: 85
Genetics G: 86
Growth (In living things) G: 404; (Factors affecting human growth) G: 406
Intelligence (The roles of heredity and environment) I: 318
Life (Adaptation) L: 275
Mendel, Gregor Johann M: 398
Mutation M: 968
Plant (Factors affecting plant growth) P: 538
Races, Human (How human populations develop and change) R: 57
Rh factor R: 289
Science (Science in the early 1900's) S: 201-202
- Weight control (Heredity) W: 182
Zoology (What zoologists study) Z: 610
See also the list of Related Articles in the Heredity article
- Hereford cattle**
Cattle (Hereford) C: 309 with picture; (table) C: 312; picture on C: 306
Nebraska picture on N: 95
- Herenton, Willie** [American political leader]
Memphis (History) M: 396-397
- Herero** [people]
Namibia (People) N: 8 with picture
- Heresy** [religion] H: 210
Inquisition I: 277
Roman Catholic Church (The first 300 years) R: 406
Witchcraft (Middle Ages to the 1700's) W: 372
- HERF**
Machine tool (High-energy rate forming) M: 19 with picture
- Hering, Ewald** [German physiologist]
Color (The opponent color theory) Ci: 826
- Hering, Frank E.** [American public figure]
Mother's Day M: 843
- Heritage Foundation** H: 210
- Heritage park**
Pennsylvania (Recovery) P: 268
- Heritage '76**
Bicentennial Celebration, American B: 289
- Herjolfsson, Bjarni** [Norwegian explorer]
Exploration (Viking exploration) E: 442
Vikings (The Norwegian Vikings) V: 382
- Herkomer, Sir Hubert von** [British artist]
Painting (Painting outside France) P: 72
- Herland** [book by Gilman]
Gilman, Charlotte Perkins G: 190
- Herman, Alexis M.** [American government official]
Clinton, Bill (table) Ci: 682d
Labor, Department of (table) L: 2
- Herman, Billy** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Herman, Robert** [American physicist]
Big bang B: 296
- Herman, Woody** [American musician] H: 211
Jazz (The swing era) J: 71 with picture
- Herman Ottó Museum** [Hungary]
Miskolc M: 618
- Hermann and Dorothea** [book by Goethe]
Goethe, Johann Wolfgang von (Middle years) G: 247
- Hermaphrodite** [zoology] H: 211
Earthworm E: 39
Oyster (The life of an oyster) O: 891
- Hermeias** [Greek ruler]
Aristotle (Aristotle's life) A: 663
- Hermes** [Greek mythology] H: 211
Argus A: 661
Io I: 370
Mercury M: 416
Mythology (table) M: 980
Praxiteles P: 734 with picture
See also Mercury [Roman mythology] in this index
- Hermetic school** [literary group]
Quasimodo, Salvatore Q: 9
- Hermia** [literary figure]
Shakespeare, William (*A Midsummer Night's Dream*) S: 357
- Herminius** [Roman legend]
Horatius H: 334
- Hermione** [literary figure]
Shakespeare, William (*The Winter's Tale*) S: 355
- Hermit** H: 211
- Hermit crab** [sea animal] H: 211
Animal picture on A: 501
- Hermit Kingdom**
Korea (The Choson dynasty) K: 376
- Hermit thrush** [bird]
Thrush T: 271
- Hermitage** [museum]
Russia (Museums and libraries) R: 536 with picture
Saint Petersburg [Russia] (The city) S: 54; (Education and cultural life) S: 55
- Hermitage** [religion]
Hermit H: 211
- Hermitage, The** [estate]
Jackson, Andrew (Business and politics) J: 8; (Later years) J: 14 with picture
Tennessee (Places to visit) T: 144
- Hermon, Mount** [Lebanon-Syria]
Jordan River J: 167

- Hernández, José** [Argentine author]
Argentina (The arts) A: 651
Latin-American literature (Romanticism) L: 112
- Hernández, Miguel** [Spanish poet]
Spanish literature (The Generation of 1927)
So: 763
- Hernández Colón, Rafael** [Puerto Rican political leader]
Puerto Rico (Puerto Rico today) P: 884
- Hernani** [play by Hugo]
Drama (Romanticism) D: 337
Hugo, Victor Marie (Early life) H: 409-410
- Herrndon, Ellen Lewis** [wife of]
Arthur, Chester Alan (Arthur's family) A: 755;
picture on A: 756
- Herrndon, Hugh** [American aviator]
Airplane (Fliers of the golden age) A: 237
- Herrndon, William Henry** [American lawyer]
H: 212
Lincoln, Abraham (Early practice) L: 315
- Herne, James A.** [American dramatist] H: 212
- Hernia** [disorder] H: 212
- Hernie cerebri** [disorder]
Hernia H: 212
- Hernial sac** [disorder]
Hernia H: 212
- Herniated disk** See *Slipped disk in this index*
- Hero** [Greek scientist]
Invention (Ancient Greece) I: 358-359
Jet propulsion (Development of jet propulsion)
J: 114
Steam engine (History) So: 880
Turbine (History) T: 498
- Hero** [literature]
Mythology (Mythical beings) M: 974; (Greek heroes) M: 979; (American Indian mythology) M: 985; (Müller's theory) M: 986
- Hero and Leander** [Greek mythology] H: 212
- Hero and Leander** [poem by Marlowe]
Marlowe, Christopher M: 216
- Hero of Israel**
Medals, decorations, and orders (table) M: 359
- Hero of Our Times, A** [book by Lermontov]
Russian literature (Late romanticism) R: 561-562
- Hero of Two Worlds** [nickname]
Kościuszko, Tadeusz K: 384
- Herod, King** [opera character]
Opera (*Salome*) O: 807 with picture
- Herod Agrippa I** [Palestinian ruler] H: 212
Herod Antipas H: 212
James the Greater, Saint J: 28
- Herod Agrippa II** [Palestinian ruler] H: 213
- Herod Antipas** [Palestinian ruler] H: 212
Jesus Christ (The trial) J: 108
John the Baptist, Saint J: 134
Salome S: 71
- Herod Archelaus** [Palestinian ruler]
Herod the Great H: 212
- Herod Philip** [Palestinian ruler]
Herod Antipas H: 212
- Herod the Great** [Palestinian ruler] H: 212
Jerusalem (Roman rule) J: 101
Jesus Christ (The Nativity) J: 104
Masada M: 262
New Testament (The birth of Jesus) N: 287
Samaria S: 78
- Herodotus** [Greek historian] H: 213
Amazons A: 404
Geology (The ancient Greeks) G: 97
Greek literature (Historical literature) G: 377
History (The ancient Greeks and Romans)
H: 261
Lake dwelling L: 37
Phoenicia (Decline) P: 395
Postal services (Ancient times) P: 703
Pyramids (The pyramids of Giza) P: 917
- Heroes' Square** [Budapest]
Hungary picture on H: 438
- Heroic Captive, The** [sculpture by Michelangelo]
Michelangelo (The tomb of Julius II) M: 484
- Heroic couplet** [poetry]
Couplet Ci: 1100
English literature (Restoration drama) E: 318;
(Swift and Pope) E: 318
Poetry (table) P: 594, (Neoclassical poetry)
P: 597
- Heroic drama**
Drama (England) D: 334
- Heroic epic** [poetry]
Mythology (Mythical beings) M: 974
- Heroic scale** [art]
Sculpture (Kinds of sculpture) S: 230
- Heroic tragedy**
English literature (Restoration drama) E: 318
- Heroides** [book by Ovid]
Ovid O: 882
- Heroin** [drug] H: 213
Drug abuse (Abuse of illegal drugs) D: 362;
(table: Some commonly abused drugs)
D: 363; (History) D: 365
Methadone M: 433
Morphine M: 816
Opium O: 811
- Herold, David E.** [American public figure]
Lincoln, Abraham (The trial of the conspirators) L: 326
- Heron** [bird] H: 213 with pictures
Bird (Birds of inland waters and marshes)
B: 340 with pictures
Bittern B: 383 with picture
Egret E: 119
- Heron's-bill** [plant]
Geranium G: 136
- Hérault, Paul L. T.** [French chemist]
Aluminum (Smelting the alumina) A: 393; (The growth of the aluminum industry) A: 397
Iron and steel (The birth of modern steelmaking) I: 451
- Herpes, Genital** [disease] H: 214
Sexually transmitted disease S: 338b
- Herpes simplex virus**
Cold sore Ci: 761
Eye (Diseases of the cornea) E: 467
- Herpes simplex virus, type 2**
Herpes, Genital H: 214
- Herpes zoster** See *Shingles in this index*
- Herpesvirus** [virus] H: 214
Antiviral drug A: 560
Epstein-Barr virus E: 345
Herpes, Genital H: 214
Shingles S: 401
- Herpetologist**
Snake (Ways of life among snakes) S: 529
- Herpetology** [zoology] H: 214
- Herr Eugen Dühring's Revolution in Science**
[book by Engels]
Engels, Friedrich E: 283
- Herrán, Tomás** [Colombian diplomat]
Panama Canal (The United States and the canal) P: 125
- Herreid, Charles N.** [American political leader]
South Dakota (table) So: 680
- Herrenchiemsee Palace**
Ludwig II L: 515
- Herrenhausen Gardens**
Hanover H: 53
- Herrera, Juan de** [Spanish architect]
Architecture (Later Renaissance architecture)
A: 621
- Herrera, Tomás** [Panamanian political leader]
H: 214
- Herrerasaurus** [dinosaur]
Dinosaur picture on D: 206
- Herrick, James B.** [American doctor]
Heart (Development of heart surgery) H: 144
- Herrick, Myron T.** [American political leader]
Ohio (table) O: 699
- Herrick, Robert** [English poet] H: 215
- Herricks Chronicles** [books by Walpole]
Walpole, Hugh Seymour W: 19
- Herriman, George** [American cartoonist]
Cartoon picture on C: 264
- Herring** [fish] H: 215 with pictures
Animal (Providing food) A: 498
Fish picture on F: 152
Sardine S: 124 with picture
Whitefish W: 292
- Herring, Clyde L.** [American political leader]
Iowa (table) I: 391
- Herring gull** [bird]
Gull (Their homes) G: 439 with picture
- Herring Gull's World, The** [book by Tinbergen]
Tinbergen, Nikolaas T: 295
- Herring rake** [tool]
Indian, American (Hunting, gathering, and fishing) I: 141
- Herringbone** [weaving]
Basket making (Methods) B: 141
- Herringbone gear**
Gear G: 75
- Herringbone stride**
Skiing (Nordic skiing) S: 482-483
- Herringbone twill** [fabric]
Tweed T: 530
- Herrington, John S.** [American government official]
Energy, Department of (table) E: 276
Reagan, Ronald Wilson (table) R: 169
- Herriot, James** [British veterinarian] H: 216
- Herrmann, Adelaide** [British magician]
Magician (Illusions) M: 51-52
- Herrnhut** [Germany]
Moravian Church M: 801
- Herrold, David** [American businessman]
California (Communication) C: 58
- Herron, Helen** [wife of William H. Taft] See Taft, Helen Herron in *this index*
- Herschbach, Dudley Robert** [American chemist]
Nobel Prizes (Chemistry: 1986) N: 443
- Herschel, Caroline Lucretia** [British astronomer] H: 216
- Herschel, Sir John Frederick William** [British astronomer] H: 216
- Herschel, Sir William** [British astronomer]
H: 216
Astronomy (Finding new planets) A: 848
Infrared rays I: 269
- Herschel, Sir William J.** [British government official]
Crime laboratory (History) Ci: 1141-1142
- Herschler, Edgar J.** [American political leader]
Wyoming (table) W: 532
- Herself Surprised** [book by Cary]
Cary, Joyce C: 270
- Herseth, Ralph** [American political leader]
South Dakota (table) So: 680
- Hersey, John** [American author] H: 216
- Hershey** [city, Pennsylvania]
Pennsylvania (Interesting facts) P: 245
- Hershey, Alfred Day** [American biologist]
Nobel Prizes (Physiology or medicine: 1969)
N: 445
- Hershey, Milton Snavely** [American businessman] H: 216
- Hershey Chocolate Company**
Hershey, Milton Snavely H: 216
- Hershey millet** [grain]
Millet M: 555
- Hershiser, Orel** [American baseball player]
Baseball (table: Modern major league records)
B: 137
- Herstmonceux Castle** [England]
Greenwich Meridian G: 387
- Herter, Christian Archibald** [American government official]
Eisenhower, Dwight David (table) E: 152
Massachusetts (table) M: 288
State, Department of (table) So: 860
- Hertz** [unit of measure] H: 217
Ear (The sense of hearing) E: 9
Electric current (Direct and alternating current)
E: 168
Electric generator (A simple generator) E: 170-171
Kilohertz K: 316
Light (Measuring light) L: 291
Metric system (Space and time) M: 437
Radio (Broadcasting power and frequency)
R: 87-88
Sound (table) So: 599; (Frequency and pitch)
So: 599 with diagram
- Hertz, Gustav** [German physicist] H: 217
- Hertz, Heinrich Rudolph** [German physicist]
H: 217
Communication (The development of electronics) Ci: 883
Electricity (Electricity and magnetism) E: 197
Hertz H: 217
Marconi, Guglielmo (Early life) M: 196
Physics (Developments in the 1800's) P: 440
Radar (The development of radar) R: 71
Radio (Early development) R: 91
Relativity (The Michelson-Morley experiment)
R: 210
Science (Scientific advances in the 1800's)
S: 200
Wireless communication (History) W: 345
- Hertzberg Circus Collection and Museum**
[Texas]
Circus (Places to visit and annual events)
Ci: 566
- Hertzog, James Barry Munnik** [South African political leader] H: 217
South Africa (The rise of Afrikaner nationalism)
So: 619
- Hertzsprung, Ejnar** [Danish astronomer]
Star (The Hertzsprung-Russell diagram)
So: 845
- Hertzsprung-Russell diagram** [astronomy]

- Star (Characteristics of stars) **So**: 842; (The Hertzsprung-Russell diagram) **So**: 845
with diagram; *diagram on So*: 849
- Harvey, Walter L.** (American educator)
 Teachers College, Columbia University
 (History) **T**: 64
- Herzberg, Gerhard** [Canadian physicist] **H**: 217
 Nobel Prizes (Chemistry: 1971) **N**: 443
- Herzegovina** [region] See Bosnia-Herzegovina *in this index*
- Herzen, Alexander Ivenovich** [Russian publisher] **H**: 217
- Herzl, Theodor** [Austrian author] **H**: 217
 Jews (The Zionist movement) **J**: 123-124 *with picture*
 Zionism (Movement to Palestine) **Z**: 599
- Herzog** [book by Bellow]
 Bellow, Saul **B**: 244
- Herzog, Émile** [French author]
 Maurois, André **M**: 317
- Herzog, Maurice** [French mountain climber]
 Annapurna **A**: 516
- Hesburgh, Theodore Martin** [American educator] **H**: 217
- Heseltine, Michael Ray Dibdin** [British political leader] **H**: 218 *with portrait*
- Heshvan** [month]
 Calendar (The Hebrew calendar) **C**: 29
- Hesiod** [Greek poet] **H**: 218
 Greek literature (Epic poetry) **G**: 377
 Mythology (Comparing myths) **M**: 975; (Greek mythology) **M**: 978
- Hesperian Period**
 Mars (Periods of evolution) **M**: 226b-226c
- Hesperides** [Greek mythology] **H**: 218
- Hesperides** [poems by Herrick]
 Herrick, Robert **H**: 215
- Hesperidium** [botany]
 Citrus **Ci**: 573
 Fruit (Simple fruits) **F**: 548
 Lemon **L**: 188
 Orange (The fruit and the tree) **O**: 814
- Hesperis** [Greek mythology]
 Hesperides **H**: 218
- Hesperornis** [extinct animal] **H**: 218
 Bird (The first known birds) **B**: 369
- Hesperus** [Greek mythology]
 Venus **V**: 310
- Hess, Myra** [British pianist] **H**: 218
- Hess, Rudolf** [Nazi leader] **H**: 218 *with portrait*
 Hitler, Adolf (Rise of the Nazis) **H**: 266
 Nuremberg Trials (The trials) **N**: 612-613
- Hess, Victor Franz** [Austrian physicist]
 Anderson, Carl David **A**: 451
 Cosmic rays (Cosmic ray research) **Ci**: 1077
 Nobel Prizes (Physics: 1936) **N**: 440
- Hess, Walter Richard Rudolf** [Swiss physiologist]
 Nobel Prizes (Physiology or medicine: 1949) **N**: 444
- Hesse** [region, Germany]
 Hessians **H**: 219
- Hesse, Hermann** [German author] **H**: 219
 German literature (Impressionism) **G**: 142
- Hesse, Karen** [American author]
 Literature for children (Fiction) **L**: 358-359
 Newbery Medal (table) **N**: 359
- Hessian cloth** [fabric]
 Burlap **B**: 707
- Hessian fly** [insect] **H**: 219
 Gnat **G**: 237
 Insect *picture on I*: 285
 Wheat (Care during growth) **W**: 271
- Hessians** [soldiers] **H**: 219 *with picture*
 Revolutionary War in America (The fighting forces) **R**: 278
- Hestia** [Greek mythology] **H**: 219
 Mythology (table) **M**: 980
 Vesta **V**: 342
- Heston, Charlton** [American actor]
 Motion picture (Best performance by an actor: 1959) **M**: 863
- Hetch Hetchy Valley** [region, California]
 Yosemite National Park (Hetch Hetchy Valley) **Y**: 570
- Hatapheres** [mother of]
 Khufu **K**: 309
- Heterocyclic antidepressant** [drug]
 Mental illness (Somatic therapy) **M**: 407
- Heterodont teeth** [anatomy]
 Teeth (Teeth of animals) **T**: 86
- Heterodontosaurus** [extinct animal]
 Dinosaur (True dinosaurs) **D**: 206b-206c; *picture on D*: 206d
- Heteroecious rust** [fungus]
 Rust **R**: 567
- Heterogeneous catalysis** [chemistry]
 Catalysis **C**: 298
- Heterogeneous society**
 City (The people) **Ci**: 578-580
- Heterograft** [medicine]
 Skin grafting **S**: 494
- Heteronym** [language] **H**: 220
- Heterosexuality**
 Adolescent (Establishing a sexual identity) **A**: 63
 Homosexuality **H**: 307
 Sexuality (Sexual orientation) **S**: 338b
- Heterotroph** [botany]
 Plant (How plants grow) **P**: 536
- Heterotrophic bacteria**
 Bacteria (How bacteria obtain food) **B**: 21
- Heterotropia** [disorder]
 Strabismus **So**: 917
- Hetty Dorval** [book by Wilson]
 Wilson, Ethel **W**: 317
- Heureaux, Ulises** [Dominican political leader]
 Dominican Republic (History) **D**: 304-305
- Heuristics** [science]
 Artificial intelligence (Planning and problem solving) **A**: 760
- Hevea** [tree]
 Latex **L**: 90
 Rubber (The rubber tree) **R**: 502
- Hevelius, Johannes** [Polish astronomer]
 Moon (Early observations with telescopes) **M**: 792 *with picture*
- Hevesy, Georg von** [Hungarian-Danish chemist]
 Hafnium **H**: 5
 Nobel Prizes (Chemistry: 1943) **N**: 443
- HEW**
 Health and Human Services, Department of **H**: 128
- Hewes, Joseph** [American patriot] **H**: 220
- Hewish, Antony** [British physicist]
 Nobel Prizes (Physics: 1974) **N**: 441
 Pulsar **P**: 898
- Hawitt, Abram** [American businessman]
 Cooper, Peter **Ci**: 1035
- Hewlett-Packard Company**
 Computer (Manufacturing) **Ci**: 924
 Manufacturing (table) **M**: 170
- Hewson, Paul** See Bono *in this index*
- Hex sign** [art]
 Pennsylvania Dutch **P**: 270
- Hexagon** [geometry] **H**: 220 *with diagram*
- Hexagonal system** [chemistry]
 Crystal (Classifying crystals) **Ci**: 1166 *with picture*
- Hexagone Poets** [group]
 Canadian literature (Modern Canadian poets) **C**: 160
- Hexameter** [poetry]
 Greek literature (Lyric poetry) **G**: 377
 Poetry (table) **P**: 594
- Hexane** [gas]
 Natural gas liquids **N**: 64
- Haxoseminidase A** [physiology]
 Tay-Sachs disease **T**: 56
- Hexylresorcinol** [medication]
 Resorcinol **R**: 259
- Hey, Al** [book by Yorinks]
 Literature for children *picture on L*: 371
- Haydrich, Reinhard** [Nazi leader] **H**: 220
 Lidice **L**: 270
- Heyer, Gerorgette** [British author] **H**: 220
- Heyerdahl, Thor** [Norwegian adventurer] **H**: 220
with pictures
 Raft **R**: 102
- Heymans, Corneille Jean-François** [Belgian physiologist]
 Nobel Prizes (Physiology or medicine: 1938) **N**: 444
- Hayrovský, Jaroslav** [Czech chemist]
 Nobel Prizes (Chemistry: 1959) **N**: 443
- Heyse, Paul von** [German author]
 Nobel Prizes (Literature: 1910) **N**: 446
- Heyward, DuBose** [American author] **H**: 220
 Gershwin, Ira **G**: 175
 Opera (*Porgy and Bess*) **O**: 806
- Heyward, Duncan C.** [American political leader]
 South Carolina (table) **So**: 658
- Heyward, Thomas, Jr.** [American patriot] **H**: 220
- Heywood, Thomas** [English dramatist] **H**: 221
- Hezbollah** [political group]
 Israel (Recent developments) **I**: 489-490
- Hazekiah** [Biblical figure] **H**: 221
- Hf** [symbol]
 Hafnium **H**: 5
- Hg** [symbol]
 Mercury **M**: 413
- HHFA** See Housing and Home Finance Agency *in this index*
- HHS** See Health and Human Services, Department of *in this index*
- Hi-Y club**
 Hi-Y club **H**: 221
- Hiawatha** [American Indian leader] **H**: 221
 Indian, American (Federations) **I**: 143-144; (Prophets) **I**: 148
 Longfellow, Henry Wadsworth (Narrative poems) **L**: 450
- Hiawatha** [poem by Longfellow] See *Song of Hiawatha in this index*
- Hiawatha National Forest**
 Michigan (Places to visit) **M**: 498
- Hibbing** [Minnesota] **H**: 221
- Hibernaculum** [zoology]
 Snake (Regulation of body temperature) **S**: 530-531
- Hibernation** [zoology] **H**: 221 *with pictures*
 Animal (Animals of the polar regions) **A**: 484 *with picture*
 Bear (Winter sleep) **B**: 183-184
 Butterfly (Hibernation) **B**: 742
 Frog (The life of a frog) **F**: 538
 Insect (Hibernation and migration) **I**: 296 *with picture*
 Lizard (Where lizards live) **L**: 399
 Mammal (Hibernation) **M**: 125
 Raccoon (The life of a raccoon) **R**: 50-51
 Reptile (Hibernation) **R**: 252
 Temperature, Body (Warm-blooded animals) **T**: 130
- Hibernia** [former name, Ireland] **H**: 222
- Hibernia** [region]
 Grand Banks **G**: 306
- Hibiscus** [plant] **H**: 222 *with picture*
 Flower (Self-pollination) **F**: 296 *with picture*
- Hiccough** See Hiccup *in this index*
- Hiccup** [disorder] **H**: 223
- Hickam, Horace M.** [American military leader]
 Hickam Air Force Base **H**: 223
- Hickam Air Force Base** [Hawaii] **H**: 223
- Hickel, Walter J.** [American government official]
 Alaska (table) **A**: 300
 Interior, Department of the (table) **I**: 325
- Hickenlooper, Bourke B.** [American political leader]
 Iowa (table) **I**: 391
- Hickey, J. J.** [American political leader]
 Wyoming (table) **W**: 532
- Hickey, James Aloysius Cardinal** [American religious leader] **H**: 223
- Hickok, Wild Bill** [American frontiersman] **H**: 223 *with portrait*
 Abilene **A**: 11
 South Dakota (Territorial days) **So**: 681
- Hickory** [tree] **H**: 223 *with pictures*
 Wood *picture on W*: 389
- Hicks, Edward** [American painter] **H**: 224
 Folk art (Folk artists) **F**: 319; *picture on F*: 316
 Revolutionary War in America *picture on R*: 280
- Hicks, Henry D.** [Canadian political leader]
 Nova Scotia (table) **N**: 567
- Hicks, Sir John Richard** [British economist]
 Arrow, Kenneth Joseph **A**: 743
 Nobel Prizes (Economics: 1972) **N**: 449
- Hicks, Thomas Holliday** [American political leader]
 Maryland (table) **M**: 255
- Hidalgo y Costilla, Miguel** [Mexican patriot] **H**: 224
 Latin America (The wars of independence) **L**: 107
 Mexico (Revolt against the Spaniards) **M**: 470 *with picture*
- Hidatsa Indians** [American Indians]
 Gros Ventre Indians **G**: 398
 Indian, American *picture on I*: 160
 Mandan Indians **M**: 135
- Hidden curriculum**
 Curriculum **Ci**: 1197
- Hide** [leather]
 Clothing **Ci**: 686
 Leather **L**: 166
 Tannic acid **T**: 29
- Hida boat**
 Indian, American *picture on I*: 138
 Ship *pictures on S*: 407

Hide glue

Glue G: 236

Hideyoshi [Japanese political leader] H: 225Japan (Warring states period) J: 54-55;
(Tokugawa period) J: 55

Tokugawa Ieyasu T: 311

HidingAnimal (How animals protect themselves)
A: 493**Hiedler, Johann Georg** [grandfather of]

Hitler, Adolf (Boyhood) H: 265

Hierarchy [behavior]

Dominance D: 301

War (Organization and control) W: 24

Hierarchy [religion]

Religion (How the major religions are organized) R: 218

Hieratic writingHieroglyphics (Development of hieroglyphic writing) H: 225-226 *with picture*

Egypt, Ancient (The people) E: 136

Hiero [king of Syracuse]

Archimedes (His discoveries) A: 605

Hieroglyphics [writing] H: 225 *with pictures*Alphabet (The Egyptians) A: 382 *with picture*

Egypt, Ancient (The people) E: 136

Hittites (Way of life) H: 269

Maya (Communication and learning) M: 324
with picture

Mythology (The Great Ennead) M: 976

Numeration systems (The Egyptian numeral system) N: 607 *with pictures*Rosetta stone R: 481 *with picture*

Writing (Phoneticization) W: 513

Hiester, Joseph [American political leader]

Pennsylvania (table) P: 263

Higan [holiday]

September S: 308

Higginbotham, A. Leon, Jr. [American jurist]

Spingarn Medal (table: 1996) So: 793

Higgins, Andrew Jackson [American businessman] H: 227**Higgins, Daniel P.** [American architect]

Jefferson Memorial J: 88

Higgins, Frank Wayland [American political leader]

New York (table) N: 313

Higgins, James H. [American political leader]

Rhode Island (table) R: 311

Higgins, Mary [American author] See Clark, Mary Higgins *in this index***Higgs, Peter Ware** [British physicist] H: 227

Higgs boson H: 227

Higgs boson [physics] H: 227

Boson B: 494

Higgs, Peter Ware H: 227

Subatomic particle (The Standard Model)

So: 938

Higgs mechanism [physics]

Higgs, Peter Ware H: 227

High [drugs]

Cocaine Ci: 742

Marijuana (Effects) M: 201

High [meteorology]

Calms, Regions of (The horse latitudes) C: 69

Weather (Air pressure) W: 157, (table:

Weather terms) W: 157; (Synoptic-scale systems) W: 159-161

Wind (Synoptic-scale circulations) W: 329

High-altitude rocket

Rocket (High-altitude rockets) R: 390

High Arctic [region]

Northwest Territories (The land) N: 530-531

High Atlas Mountains [Africa] See Grand Atlas Mountains *in this index***High blood pressure** See Hypertension *in this index***High Bridge**

New York City (Transportation) N: 334

High Bridge [painting by Lawson]Lawson, Ernest *picture on* L: 147**High Church**

Anglicans (Episcopalians) A: 463-464

High Coast Bridge

Bridge (table: Suspension) B: 603

High-compression engine

Gasoline engine (High and low compression)

G: 63

High Court

New Zealand (Courts) N: 347

High Court of Justice [British law]

Equity E: 349

High Court of Justiciary [Scottish law]

United Kingdom (Courts) U: 54

High dam [engineering]

Tennessee Valley Authority (The dams) T: 158-159

High-definition televisionTelevision (Digital television) T: 126-127 *with picture*

Electronics (The digital age) E: 216

High-density lipoprotein

Cholesterol C: 520

Physical fitness (Cholesterol levels) P: 434

High density polyethylene

Polyethylene P: 649

High Desert [region, Oregon] H: 227**High-Energy Astronomical Observatories**

Astronomy (X-ray astronomy) A: 844-845

High-energy rate formingMachine tool (High-energy rate forming) M: 19
*with picture***High Energy Transient Explorer-2** [satellite]

Astronomy (Gamma-ray astronomy) A: 845

Telescope (Gamma-ray telescopes) T: 109

High explosive

Ammunition (Artillery ammunition) A: 435

Explosive (High explosives) E: 454

High Falls [Minnesota]

Minnesota (Lakes, rivers, and waterfalls)

M: 598-599

High-fidelity system [sound]See also Stereophonic sound system *in this index*

Stereophonic sound system So: 892

High-frequency current [electricity]

Diathermy D: 185

High-fructose corn syrup

Dextrose D: 178

Sugar (Cornstarch and other starches) So: 959

High German

German language (High German) G: 138

Germany (Language) G: 150

High-hat [fish]

Drum D: 367

High Holidays [religion]

Judaism (Holidays and festivals) J: 181

High hurdles [race]Hurdling H: 452 *with picture***High islands** [geography]Pacific Islands (The high islands) P: 7 *with picture***High jump** [sport] H: 227 *with picture*Track and field (Jumping events) T: 355 *with picture*; (World track and field records)

T: 358

High-lead logging

Lumber (Transporting logs) L: 518

High-level programming language [computer]

Computer (Using programming languages)

Ci: 923

High-lift devices

Aerodynamics (Creating extra lift) A: 86

High magic

Witchcraft (Role of magic) W: 372

High Middle Ages [European history]

Middle Ages (The High Middle Ages) M: 526

High Museum of Art [Atlanta]Georgia (Museums) G: 117 *with picture***High Plains**

Oklahoma (Land regions) O: 724-726

High polymer [chemistry]

Resin, Synthetic R: 259

High-pressure sodium lamp

Electric light (High-pressure sodium lamps)

E: 175

High-pressure tire

Tire (History) T: 298

High priest [religion] H: 228**High-protein cereal**

Cereal C: 361

High RenaissancePainting (The High Renaissance) P: 54 *with picture***High-rise** [dwelling]

Prison (Prison buildings) P: 806

Shelter *picture on* S: 393**High school** H: 228See also Secondary education *in this index*

Agricultural education (High schools) A: 144

Careers (Teaching) C: 231

Curriculum (Curriculum content) Ci: 1197

Education (Vocational education) E: 88; (The organization of U.S. education) E: 90

Library (High school libraries) L: 245

Parochial school P: 177

Physical education (Secondary school programs) P: 432

School (High schools) S: 181; (The expanding

role of public schools) S: 184

Student government So: 932

Teaching (Teaching as a profession) T: 65 *with picture*; (Becoming a teacher) T: 67-68

Vocational education (Public high schools)

V: 434

High seas [international law] H: 228

Ocean (Who owns the ocean?) O: 665-666

High Sierra [region, California]

Yosemite National Park Y: 569

High Society [film]Jazz *picture on* J: 72**High-speed disperser** [machine]

Paint (Grinding) P: 24

High-speed trainMagnetic levitation train M: 55 *with picture*Electric railroad E: 187 *with picture*Europe *picture on* E: 405**High Tatras** [mountain range]

Slovakia (Land and climate) S: 508d

High technology

Technology (History of technology) T: 74

High-temperature gas-cooled reactor

Nuclear energy (Advanced fission reactors)

N: 594

High-temperature short-time method

Milk (Pasteurization) M: 548

High tide

Ocean (Tides) O: 659

Tide T: 280 *with diagram***High vacuum diffusion pump**

Pump (Jet pumps) P: 899

High Veld

Zimbabwe (Land) Z: 596

High Volume Instrument [machine]

Cotton (Classing) Ci: 1091

High-wheelerBicycle (Early bicycles) B: 292 *with picture***High wire performer**Circus *picture on* Ci: 565**High Yemen**

Yemen (Land) Y: 563

High-yield bond

Bond (Bond ratings) B: 454

Highboy [furniture]

Colonial life in America (Furnishings) Ci: 797-798

Higher animal See Vertebrate *in this index***Higher education**

Community college Ci: 898

Universities and colleges U: 206 *with pictures***Higher order determinant** [mathematics]

Determinant (Using higher order determinants)

D: 166

Higher Technology, School of

Quebec, University of Q: 38

Highholder [bird] See Flicker *in this index***Highhole** [bird] See Flicker *in this index***Highland** [region, Scotland]

Highland Clearances H: 229

Inverness I: 365

Scotland (Population) S: 213; (Land regions)

S: 217 *with map*; *picture on* S: 211

United Kingdom (The Scottish Highlands)

U: 59 *with picture and map***Highland Clearances** [Scottish history] H: 229**Highland climate**

Climate (Highland climates) Ci: 676d

Highland fling [dance]

Scotland (The arts) S: 215-217

Highland games [Scottish competitions]Nova Scotia (Visitor's guide) N: 560 *with picture*

Scotland (Recreation) S: 214

Highland Park [community]

Dallas (The city) D: 11

Highland Rim

Tennessee (Land regions) T: 146

Highlanders [people]

Gael G: 5

Scotland (Union with England) S: 220

Highlands [region, Scotland] See Highland *in this index***Highly saturated fat**

Fat (Structure) F: 52

Highsmith, Patricia [American author] H: 229**Highveld** [region]South Africa (The Plateau) So: 614 *with map***Highway**

Road R: 357

Rock R: 371

Route 66 R: 493

Traffic T: 366

- Transportation (Development of inland transport) T: 389; (Private transportation) T: 392
- Highway Administration, Federal** [U.S.] *See* Federal Highway Administration *in this index*
- Highway engineer**
Road (Planning) R: 358
- Highway maintenance**
Road (How roads and highways are maintained) R: 360
- Highway planner**
Road (Planning) R: 358
- Highway robbery** [crime]
Robbery R: 365
- "Highwayman, The"** [poem by Noyes]
Noyes, Alfred N: 578
- Higuchi Ichiyo** [Japanese author] H: 229
- Hijacking** H: 229
Airport (Airport security) A: 247
Aviation (Airline safety concerns) A: 991
September 11 terrorist attacks (The attacks) S: 310
Terrorism (Types of terrorism) T: 178
- Hijar** [community] *See* Hujar *in this index*
- Hijra** [Islamic history]
Calendar (The Islamic calendar) C: 29
Muhammad (The Hijra) M: 911
Muslims (Muhammad) M: 964-964a
Religion (Islam) R: 222
Saudi Arabia (The rise of Islam) S: 160
- Hiki** [runner]
Jinrikisha J: 127
- Hiking** [sport] H: 230
England (Recreation) *picture on* E: 297
- Hiking boot**
Camping (Clothing) C: 94
- Hilary, Saint** [pope]
Pope (table) P: 666
- Hilbert, David** [German mathematician]
Mathematics (Philosophies of mathematics) M: 307
- Hildebrand** *See* Gregory VII, Saint *in this index*
- Hildebrand** [legendary figure]
Nibelungenlied N: 395
- Hildreth, Horace A.** [American political leader]
Maine (table) M: 87
- Hilgard, Ernest** [American scientist]
Hypnotism (Scientific studies) H: 479-480
- Hilgard, Josephine** [American scientist]
Hypnotism (Scientific studies) H: 479-480
- Hill** [geography] H: 230
Mountain M: 891
- Hill, A. P.** [Confederate general]
Civil War (Battle of Antietam) Ci: 627
- Hill, Anita F.** [American law professor]
Thomas, Clarence T: 261
- Hill, Sir Archibald Vivian** [British physiologist]
Nobel Prizes (Physiology or medicine: 1922) N: 444
- Hill, Damon** [British race car driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Hill, David Bennett** [American political leader]
New York (table) N: 313
- Hill, David Octavius** [Scottish painter]
Europe *picture on* E: 413
- Hill, Geoffrey** [British poet]
English literature (Recent English poetry) E: 323
- Hill, George Roy** [American director]
Motion picture (Best achievement in directing: 1973) M: 862
- Hill, Graham** [British race driver] H: 230
Automobile racing (table: Grand Prix world champions) A: 980; (table: Indianapolis 500 winners) A: 980
- Hill, Isaac** [American political leader]
Kitchen Cabinet K: 337
New Hampshire (table) N: 223
- Hill, James Jerome** [American businessman]
H: 231
Saint Paul (History) S: 52
- Hill, Joe** [Swedish-American songwriter] H: 231
- Hill, John Fremont** [American political leader]
Maine (table) M: 87
- Hill, Octavia** [British social reformer] H: 231
- Hill, Phil** [American race driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Hill, Philip C.** [Canadian political leader]
Nova Scotia (table) N: 567
- Hill, Rowland** [British educator]
Postal services (The creation of the Penny Post) P: 706
- Hill-Burton Act** [1946]
Hospital (The 1900's) H: 374
- Hill Cipher** [cryptology]
Codes and ciphers (Substitution) Ci: 750
- Hill culture** [agriculture]
Potato (Planting and cultivating) P: 712-713
- Hill of Ares** [ancient Greece]
Areopagus A: 645
- Hill peoples**
Myanmar (People) M: 970a
- "Hill Wife, The"** [poem by Frost]
Frost, Robert Lee (His poems) F: 543
- Hillaby, Mount**
Barbados (Land) B: 104
- Hillary, Sir Edmund Percival** [New Zealand mountain climber] H: 231 *with picture*
Antarctica (Recent activities) A: 538
Mount Everest M: 884
Tenzing Norgay T: 172
- Hillbilly music**
Popular music (The rise of country music) P: 671
- Hillel I** [Jewish religious leader] H: 232
- Hillel Foundation** [organization]
B'nai B'rith (B'nai B'rith Hillel Foundations) B: 426
Hillel I H: 232
- Hillel the Elder** *See* Hillel I *in this index*
- Hiller, Wendy** [British actress]
Motion picture (Best performance by an actress in a supporting role: 1958) M: 863
- Hillerman, Tony** [American author] H: 232
- Hilliard, Nicholas** [English painter]
Elizabeth I *picture on* E: 239
- Hillman, John** [American prospector]
Crater Lake Ci: 1122
- Hillman, Sidney** [American labor leader] H: 232
- Hills, Carla Anderson** [American government official] H: 232 *with portrait*
- Hillsborough Bay**
Prince Edward Island (Land and climate) P: 790
- Hillsborough Convention** [1788]
North Carolina (Statehood) N: 492
- Hillsdale Home School**
Wisconsin (Places to visit) W: 356
- Hillyer, Robert Silliman** [American poet] H: 232
- Hilo** [Hawaii] H: 233
Mauna Loa M: 313
- Hilt**
Knife K: 345
Sword So: 1061 *with pictures*
- Hilton, Conrad Nicholson** [American businessman] H: 233
- Hilton, Edward** [English colonist]
New Hampshire (Settlement) N: 224
- Hilton, James** [British author] H: 233
- Hilton Head Island** [South Carolina]
South Carolina *pictures on* So: 641, So: 650
- Hilton Hotel Systems**
Hilton, Conrad Nicholson H: 233
- Him** [play by Cummings]
Cummings, E. E. Ci: 1191
- Himalaya** [mountains, Asia] H: 233 *with picture and map*
India (The land) I: 121 *with picture*
Mountain climbing (Challenge of the Himalaya) M: 897
Nepal (Land and climate) N: 126
Plate tectonics (Convergent plate boundaries) P: 562-563 *with diagram*
Seven Natural Wonders of the World (Mount Everest) S: 324 *with picture*
Tibet (The land) T: 276
- Himalayan bear**
Bear (Asiatic black bears) B: 185
- Himalayan ibex** [animal]
Animal *picture on* A: 475
Ibex I: 3
- Himalayan monal**
Bird (Birds of Europe and Asia) B: 346 *with picture*
- Himalia** [satellite]
Jupiter (Satellites) J: 200
- Himation** [clothing]
Clothing (Ancient times) Ci: 696-697
Greece, Ancient (Food, clothing, and shelter) G: 367
- Himes, Chester** [American author] H: 234
- Himmler, Heinrich** [Nazi leader] H: 234
Gestapo G: 175
Hitler, Adolf (Rise of the Nazis) H: 266
- Hina-Matsuri** [festival]
March M: 194
- Hinayana** [religion]
Buddhism (The Theravada) B: 669
- Hinchinbrook** [ship]
Nelson, Horatio (Joins the navy) N: 121
- Hinckley, John W., Jr.** [American public figure]
Insanity I: 277
Reagan, Ronald Wilson (Events at home) R: 167-168
- Hincks, Sir Francis** [Canadian political leader] H: 234
- Hind** [animal]
Red deer R: 188
- Hind, Henry Y.** [Canadian geologist]
Saskatchewan (North West Territories) S: 146
- Hind and the Panther, The** [poem by Dryden]
Dryden, John D: 370
English literature (John Dryden) E: 318
- Hindbrain**
Brain (In vertebrates) B: 559
- Hindemith, Paul** [German composer] H: 235
- Hindenburg** [airship]
Airship (The *Hindenburg*) A: 252 *with picture*
- Hindenburg, Paul von** [German political leader] H: 235
Germany (The Weimar Republic) G: 167
Hitler, Adolf (Rise of the Nazis) H: 266-267; (The New Order) H: 267 *with picture*
Junkers J: 197
Ludendorff, Erich Friedrich Wilhelm L: 515
Papan, Franz von P: 133
Siegfried Line S: 450
World War I (The Eastern Front) W: 456; (The Battle of Verdun) W: 458
- Hindenburg Line**
Siegfried Line S: 450
World War I (Allied failures) W: 461
- Hindgut**
Insect (Digestive system) I: 289 *with diagram*
- Hindi** [language] H: 235
Alphabet *picture on* A: 383
India (Languages) I: 114
- Hindu-Arabic numerals** *See* Arabic numerals *in this index*
- Hindu Kush** [mountains, Asia] H: 235
Afghanistan (The Central Highlands) A: 94
Pakistan *picture on* P: 92
- Hinduism** [religion] H: 235 *with pictures*
Asia (Religions) A: 773; (The people) A: 781 *with picture*
Bangladesh (Religion) B: 82
Bhagavad-Gita B: 276
Dance (Asian theatrical dance) D: 30
Dharma D: 178
Divorce (In other countries) D: 253
Feasts and festivals (In Hinduism) F: 58
Food (Religious reasons) F: 332
Ganges River G: 26 *with picture*
God G: 243
Heaven H: 161
India (Hinduism) I: 116 *with picture*; (History) I: 128
Karma K: 247
Kolkata (People) K: 363
Manu M: 168
Meditation M: 380
Monasticism (Non-Christian monasticism) M: 701
Mythology (Mythology and society) M: 988
New Age movement N: 178
Religion (How the major religions are organized) R: 218; (Hinduism) R: 220; (Buddhism) R: 220
Roy, Ram Mohan R: 494
Saint (Non-Christian saints) S: 29
Sculpture (India) S: 236 *with pictures*
Suttee So: 1013
Upanishads U: 212
Vishnu V: 429 *with picture*
World, History of the (The Mauryan Empire in India) W: 430 *with picture*
Yoga Y: 566
See also the list of Related Articles in the Hinduism article
- Hine, Lewis W.** [American sociologist]
Photography (The beginnings of modern photography) P: 426-427
- Hines, Earl** [American pianist] H: 237
Jazz (The 1920's) J: 70
- Hines, Edward N.** [American businessman]
Michigan (Interesting facts) M: 489
- Hines, "Fatha"** *See* Hines, Earl *in this index*
- Hinge joint** [anatomy]
Joint J: 155 *with diagram*
- Hinged window**

- Window W: 334
Hingis, Martina [Swiss tennis player] H: 238
Hinkle, James F. [American political leader]
 New Mexico (table) N: 272
Hinny [animal]
 Donkey D: 308
 Mule M: 913
Hinshelwood, Sir Cyril [British chemist]
 Nobel Prizes (Chemistry: 1956) N: 443
Hinter Rhine [river, Switzerland]
 Rhine River (The course of the Rhine) R: 292
 with map
Hinton, S. E. [American author] H: 238
Hip [anatomy] H: 238 with diagram
 Human body diagram on H: 422
Hip-hop [music]
 Rap music R: 141
Hip roof
 Roof R: 451 with picture
Hip straps
 Harness diagram on H: 63
Hipparchus [Greek ruler] H: 238
Hipparchus [Greek astronomer] H: 239
 Magnitude M: 62
 Ptolemy P: 854
 Star (Magnitude and luminosity) So: 842
Hippies [Greek ruler]
 Cleisthenes Ci: 661
 Hipparchus H: 238
Hippies H: 239
 Rock music (Growing social significance)
 R: 379
Hippo [former city]
 Augustine, Saint (His life) A: 888
Hippocampus [physiology]
 Brain (In thinking and remembering) B: 555
 Memory M: 392
Hippocrates [Greek doctor] H: 239
 Blood (History of blood research) B: 414
 Medicine (Greece and Rome) M: 372-373
 Mental illness (Early attitudes) M: 408
 Personality (Personality types) P: 302
 Science (Ancient Greece) S: 196
Hippocratic oath
 Hippocrates H: 239
 Medicine (Greece and Rome) M: 372-373
Hippodamus [Greek architect]
 City planning (Ancient times) Ci: 602 with diagram
 Piraeus P: 493
Hippodrome [New York City]
 Hippodrome H: 240
Hippodrome [sports] H: 240
 Byzantine Empire picture on B: 753
 Olympia O: 745
Hippolyta [Greek mythology]
 Hercules (The twelve labors) H: 198-199
Hippolyta [literary figure]
 Shakespeare, William (A Midsummer Night's Dream) S: 357
Hippolytus, Saint [antipope]
 Pope (table) P: 666
Hippopotamus [animal] H: 240 with pictures
 and map
 Animal picture on A: 477
Hira, Mount [Saudi Arabia]
 Religion (Islam) R: 222
Hiragana
 Japanese language J: 61
Hiram [king of Tyre]
 Phoenicia (The spread of Phoenician influence)
 P: 394-395
 Solomon So: 584
Hirayama, Kiyotsugu [Japanese astronomer]
 Asteroid (Orbits) A: 824
Hirayama family [astronomy]
 Asteroid (Orbits) A: 824
Hire purchase system [economics]
 Installment plan (How the plan works) I: 304
Hireling [English history]
 Shakespeare, William (Acting companies)
 S: 353-354
Hireling Shepherd, The [painting by Hunt]
 Pre-Raphaelite Brotherhood picture on P: 756
Hiring hall [labor]
 Labor movement (Other union activities) L: 7
 with picture
Hirohito [emperor of Japan] H: 242 with portrait
 Japan (World War II) J: 58 with picture;
 (Postwar boom) J: 58-59
Hiroshige [Japanese artist] H: 242 with picture
 Japanese print (The master print artists) J: 63
 Tokyo picture on T: 319
Hiroshima [Japan] H: 243 with picture
 Nuclear weapon N: 596; (World War II)
 N: 601; picture on N: 598
 World War II (The atomic bomb) W: 492
Hiroshima [book by Hersey]
 Hersey, John H: 216
Hiroshima No Pike [book by Maruki]
 Literature for children picture on L: 355
Hirshhorn, Joseph H. [American financier]
 Hirshhorn Museum and Sculpture Garden
 H: 243
Hirshhorn Museum and Sculpture Garden
 [Washington, D.C.] H: 243 with picture
 Smithsonian Institution (Museums) S: 519
 Washington, D.C. map on W: 76
Hirst, A. R. [American engineer]
 Road (Modern roads) R: 362
Hirudin [chemical]
 Leech L: 180
His House in Order [play by Pinero]
 Pinero, Arthur Wing P: 473
His Majesty's Opposition [government]
 United Kingdom (National government) U: 49
His Natural Life [book by Baldereed]
 Australia (Literature) A: 906
His Toy, His Dream, His Rest [book by
 Berryman]
 Berryman, John B: 272
Hisinger, Wilhelm von [Swedish geologist]
 Cerium C: 362
Hispania
 Spain (Roman conquest) So: 746
Hispanic Americans [people] H: 244 with pic-
 tures and map
 See also Cuban Americans; Mexican
 Americans; Puerto Ricans in this index
 Chicago (Ethnic groups) C: 426
 Minority group (Hispanic Americans) M: 610
 Name (Hispanic names) N: 5
 National Council of La Raza N: 32
 Racial profiling R: 61
 United States picture on U: 111
Hispanics See Hispanic Americans in this index
Hispaniola [island, West Indies] H: 259
 Ayllón, Lucas Vázquez de A: 995
 Columbus, Christopher (The first landing)
 Ci: 860-861; (Trouble, settlement, and
 exploration) Ci: 862; (Problems in
 Hispaniola) Ci: 862; (Fourth voyage west-
 ward) Ci: 863
 Dominican Republic (Land) D: 304
 Exploration (Columbus reaches America)
 E: 444
 Haiti H: 14; (History) H: 15
 Las Casas, Bartolomé de L: 80
 Ponce de León, Juan (Early life and career)
 P: 655
Hiss, Alger [American public figure] H: 259 with
 picture
 Chambers, Whittaker C: 372
 Nixon, Richard Milhous (U.S. representative)
 N: 430
 Truman, Harry S. (Problems at home) T: 472
 Un-American Activities Committee U: 19
Hissarlik [ruins]
 Troy (The archaeological Troy) T: 455
Histadrut [labor union]
 Eshkol, Levi E: 358
 Israel (Economy) I: 485
Histamine [physiology]
 Allergy (How an allergy develops) A: 373;
 (Emotional factors) A: 373
 Antihistamine A: 556
Histoire des derniers troubles de France [book
 by Matthieu]
 Biography (The Renaissance) B: 313
Histology [biology] H: 260
 Anatomy A: 448b
 Bichat, Marie François Xavier B: 289
Histoplasma capsulatum [fungus]
 Bird (In nature) B: 330
 Histoplasmosis H: 260
Histoplasmosis [disease] H: 260
 Bird (In nature) B: 330
 Fungal disease (In people) F: 558
Historia Naturalis [book by Pliny the Elder]
 Encyclopedia (The first reference works)
 E: 268a
 Geology (The Romans) G: 98
Historia Regum Britanniae [book by Geoffrey
 of Monmouth] See History of the Kings of
 Britain in this index
Historiae ab Urbe Condita [book by Livy]
 Livy L: 399
Historian
 History H: 260
 See also the list of Related Articles in the
 History article
Historian [office]
 Parliamentary procedure (Officers) P: 175
Historiated initial [art]
 Illuminated manuscript I: 78 with picture
 Manuscript (Illuminated manuscripts) M: 174
Historic house
 Museum (History museums) M: 938 with pic-
 ture
Historic peace church [religious group]
 Brethren B: 593
Historic Saint Mary's City [Maryland] See Saint
 Mary's City in this index
Historic Savannah
 Georgia (Places to visit) G: 122
Historic Sites Act [1935]
 National Park System (History) N: 58
Historic trail
 National Trails System N: 61
Historic village
 Museum (History museums) M: 938 with pic-
 ture
Historical and Critical Dictionary [book by
 Bayle]
 Biography (The 1700's) B: 313
Historical Association, American [organization]
 H: 260
Historical biography
 Biography (Forms of biography) B: 312
Historical Books [Old Testament]
 Bible (Books of the Hebrew Bible) B: 279-280
 Old Testament (Contents) O: 740-741
Historical geography
 Geography (Human geography) G: 94
Historical geology
 Geology G: 97
Historical linguistics
 Linguistics L: 335; (Comparative and historical
 linguistics) L: 336; (Comparative and his-
 torical research) L: 337
Historical novel [literature]
 Literature for children (Fiction) L: 358 with pic-
 tures
 Novel (Britain) N: 573
Historical Register for the Year 1736, The
 [book by Fielding]
 Fielding, Henry (His life) F: 94
Historical semantics
 Semantics S: 290
Histories [books by Herodotus]
 Herodotus H: 213
 History (The ancient Greeks and Romans)
 H: 261
Histories [book by Tacitus]
 History (The ancient Greeks and Romans)
 H: 261-262
 Latin literature (The Imperial Period) L: 116
 Tacitus, Cornelius T: 4
Histories or Tales of Past Times, with Morals
 [book by Perrault]
 Mother Goose (The history of Mother Goose
 literature) M: 842
Historia Naturalis [book by Pliny the Elder] See
 Natural History in this index
History H: 260
 Bible (The Bible as history) B: 284
 Greek literature (Historical literature) G: 377
 Mythology (Euhemerus's theory) M: 986
 Painting (History paintings) P: 33 with picture
 Pulitzer Prizes (table) P: 894
 World, History of the W: 420
 See also the list of Related articles in the
 World, History of the article
History and Present State of Virginia, The
 [book by Beverley]
 American literature (Virginia) A: 414
History and Technology, National Museum of
 See National Museum of American History
 in this index
History museum
 Museum (History museums) M: 938 with pic-
 ture
History of a Staircase [play by Vallejo]
 Spanish literature (Spanish literature today)
 So: 763
History of British India, A [book by Mill]
 Mill, James M: 552
History of England [book by Trevelyan]
 Trevelyan, George Macaulay T: 436
**History of England from the Accession of
 James II, The** [book by Macaulay]
 Macaulay, Thomas Babington M: 5

- History of Ireland, The** [book by Keating]
Irish literature (Modern works in Gaelic) I: 31
- History of King Richard III** [book by More]
Biography (The Renaissance) B: 313
- History of New York from the Beginning of the World to the End of the Dutch Dynasty, A** [book by Irving] See Knickerbocker's History of New York *in this index*
- History of Plymouth Plantation** [book by Bradford]
Bradford, William [1590-1657] B: 545
- History of Port-Royal** [book by Sainte-Beuve]
Sainte-Beuve, Charles Augustin S: 58
- History of Sexuality, The** [book by Foucault]
Foucault, Michel F: 429
- History of the Decline and Fall of the Roman Empire** [book by Gibbon]
Gibbon, Edward G: 185
History (Antiquarian research and the philosophes) H: 262
- History of the Dividing Line** [book by Byrd]
American literature (Virginia) A: 414
- History of the English Law** [book by Maitland]
Maitland, Frederic William M: 94
- History of the Famous Preacher** [book by Isla]
Spanish literature (The 1700's) So: 760
- History of the French Revolution** [book by Tniers]
Thiers, Louis Adolphe T: 258
- History of the Hoppers, The** [book by Parker]
Literature for children *picture on* L: 354
- History of the Kings of Britain** [book by Geoffrey of Monmouth]
Gawain, Sir G: 71
Geoffrey of Monmouth G: 91
- History of the Peloponnesian War** [book by Thucydides]
History (The ancient Greeks and Romans) H: 261
Oratory (Classical orators) O: 819
Thucydides T: 271
- History of the Russian State** [book by Karamzin]
Russian literature (Sentimentalism) R: 560
- History of the United States** [book by Adams]
Adams, Henry Brooks A: 33
- History of Tom Jones, The** [book by Fielding]
See *Tom Jones in this index*
- History of Woman Suffrage** [book]
Anthony, Susan Brownell A: 545
- Histosol** [soil]
Soil (How soils are classified) So: 575 *with map*
- Histotoxic anoxia** [disorder]
Anoxia A: 519
- Hit** See Base hit *in this index*
- Hit-and-run play**
Baseball (Baseball terms) B: 124
- Hitachi** [company]
Manufacturing (table) M: 170
- Hitchcock, Alfred** [American director] H: 263
Motion picture (Movies in the 1930's) M: 868 *with picture*
- Hitchcock, Ethan A.** [American government official]
Interior, Department of the (table) I: 325
McKinley, William (table) M: 342
Roosevelt, Theodore (table) R: 470
- Hitchcock, Frank H.** [American government official]
Taft, William Howard (table) T: 11
- Hitchcock, Henry-Russell** [American author]
Johnson, Philip Cortelyou J: 153
- Hitchcock, Tommy, Jr.** [American polo player]
Polo (History) P: 647-648
- Hitches**
Knots, hitches, and splices K: 355
- Hitchings, George Herbert** [American biochemist]
Eliot, Gertrude Belle E: 236
Nobel Prizes (Physiology or medicine: 1988) N: 445
- Hitchiti Indians** [American Indians]
Creek Indians Ci: 1126
- Hitler, Adolf** [German dictator] H: 264 *with pictures*
Austria *picture on* A: 939
Bonhoeffer, Dietrich B: 459
Bormann, Martin B: 488
Braun, Eva B: 566
Czechoslovakia (The Munich Agreement) Ci: 1215
Fascism (Fascism in Germany) F: 49-50
- Germany (Nazi Germany) G: 167; (World War II) G: 168
Goebbels, Joseph G: 246
Goering, Hermann Wilhelm G: 246
Hess, Rudolf H: 218
Hindenburg, Paul von H: 235
Holocaust H: 296
Hungary (World War II) H: 446
Italy (World War II) I: 517
Jodl, Alfred J: 130
Mein Kampf M: 386
Munich Agreement (Background) M: 927
Nazism N: 92
Olympic Games (Between the wars) O: 751
Papen, Franz von P: 133
Propaganda (Simplicity and repetition) P: 824; (Between the wars) P: 825; *pictures on* P: 823
Prussia (Decline of Prussia) P: 843
Siegfried Line S: 450
Stalin, Joseph (World War II) So: 827
Union of Soviet Socialist Republics (Stalin's policies) U: 36-37
United Kingdom ("Peace in our time") U: 70
World War II (The rise of dictatorships) W: 469-470; *picture on* W: 471
- Hitler, Alois** [father of]
Hitler, Adolf (Boyhood) H: 265
- Hitler Youth** [German history]
Hitler, Adolf (The New Order) H: 267
- Hitleriad, The** [book by Klein]
Klein, A. M. K: 343
- Hittites** [ancient people] H: 269 *with picture*
Cuneiform Ci: 1192
Hieroglyphics (Other hieroglyphic writing) H: 226-227 *with picture*
- Iron and steel (The Iron Age) I: 450
Mitanni M: 676
Ramses II R: 134
Sculpture (Middle Eastern) S: 233
Turkey (History) T: 509
Writing (Phonetization) W: 513
- Hitty, Her First Hundred Years** [book by Field]
Field, Rachel F: 92
- HIV** See Human immunodeficiency virus *in this index*
- Hiva Oa** [island, Pacific]
Marquesas Islands M: 217
- Hive** [biology]
Bee (The honey bee colony) B: 201 *with picture*; (As an industry) B: 206-207 *with picture*; *pictures on* B: 204
- Hives** [disorder] H: 270
Allergy A: 373
Skin (Other skin disorders) S: 491
- Hizbollah** [political group] See Hezbollah *in this index*
- Hkakabo Razi** [mountain]
Myanmar (Land regions) M: 970c *with map*
- HLA antigen**
Blood (The significance of blood groups) B: 412
Bone marrow transplant B: 457
Transplant (Preventing rejection) T: 380-381
- HMD** [electronics] See Head-mounted display *in this index*
- HMO** (health care) See Health maintenance organization *in this index*
- Hmong** [people] H: 270
Laos (People) L: 70
- Hnatyshyn, Ramon John** [Canadian political leader] H: 270
- Ho** [symbol]
Holmium H: 296
- Ho Chi Minh** [Vietnamese political leader]
H: 270 *with portrait*
Asia (The spread of Communism) A: 809
Communism (Expansion in Southeast Asia) Ci: 894
Geneva Accords G: 87
Indochina (Independence) I: 225
Vietnam (The August Revolution of 1945) V: 370; (The First Indochina War) V: 371
Vietnam War (The Indochina War) V: 373
- Ho Chi Minh City** [Vietnam] H: 270 *with picture*
Vietnam V: 364; *picture on* V: 368
Vietnam War (The end of the war) V: 376-377
- Ho Chi Minh Mausoleum**
Hanoi H: 53
- Ho Chi Minh Trail** [road]
Laos (History) L: 71-72
Vietnam War (The Viet Cong rebellion) V: 374
- HO gauge** [size]
Railroad, Model (Scale and size) R: 120 *with picture*
- Ho Quy Ly** [Vietnamese ruler]
Vietnam (Independence) V: 370
- Hoadly, George** [American political leader]
Ohio (table) O: 699
- Hoan, Daniel W.** [American political leader]
Milwaukee (The 1900's) M: 561
- Hoar, Ebenezer Rockwood** [American government official]
Grant, Ulysses S. (table) G: 316
Justice, Department of (table) J: 203
- Hoard, William D.** [American political leader]
Wisconsin (Agriculture) W: 363; (table) W: 365
- Hoare-Laval Agreement** [1935]
Laval, Pierre L: 128
- Hoarfrost** [weather]
Frost F: 542 *with pictures*
- Hoary bat** [animal]
Bat (Some kinds of bats) B: 161-162
- Hoatzin** [bird] H: 271 *with picture*
- Hoba West** [South West Africa]
Meteor (Meteorites) M: 431-432
- Hoban, James** [American architect]
Adams, John *picture on* A: 38
White House (The original building) W: 290
- Hobart** [city, Australia] H: 271
- Hobart, Garret Augustus** [American political leader] H: 272
McKinley, William (Crisis and triumph) M: 340
Vice President of the United States (table) V: 351; V: 349 *with portrait*
- Hobbes, Thomas** [English philosopher] H: 272
Age of Reason (Criticism of the Age of Reason) A: 139-140
Political science (Secularism) P: 639
Psychology (Beginnings) P: 849
- Hobbit, The** [book by Tolkien]
Tolkien, J. R. R. T: 322
- Hobble skirt**
Clothing (The 1900's) Ci: 703
- Hobby** H: 272
Bee (As a hobby) B: 207
Book collecting B: 468
Butterfly (How to collect butterflies) B: 742
Button (Button collecting) B: 745
Handicraft H: 45
Railroad, Model R: 119
Recreation (Kinds of recreation) R: 183
Rock (Rocks as a hobby) R: 373
Rocket, Model R: 391
Weaving W: 173
Woodworking W: 396
- Hobby, Oveta Culp** [American government official] H: 273
Eisenhower, Dwight David (Eisenhower's methods) E: 151-152
- Hobby, William Pettus** [American political leader]
Texas (table) T: 203
- Hobby magazine**
Magazine (Consumer magazines) M: 42
- Hobgoblin** [legendary figure]
Puck P: 870 *with picture*
- Hobo clown**
Clown Ci: 713
- Hobson, Laura Zametkin** [American author] H: 273
- Hoch, Edward Wallis** [American political leader]
Kansas (table) K: 234
- Hochdeutsch** See High German *in this index*
- Hochelaga** [former village]
Montreal (Exploration) M: 777
- Hochhuth, Rolf** [German dramatist] H: 273
German literature (German literature after 1945) G: 142
- Höchstädt, Battle of** [1704]
Blenheim, Battle of B: 400
- Hock** [zoology]
Horse (Legs and hoofs) H: 349-350
- Hockenhull, A. W.** [American political leader]
New Mexico (table) N: 272
- Hockey** [sport] H: 274 *with pictures*
Canada (Recreation and sports) C: 108-109 *with picture*
Field hockey F: 92
Glove *picture on* G: 235
Ice skating I: 10 *with picture*
Olympic Games (Winter Olympic Games) O: 746d; *picture on* O: 754
Ringette R: 343
Roller skating (Competitive roller skating) R: 403
Stanley Cup So: 838
- Hockey Hall of Fame**
Hall of fame (Sports halls of fame) H: 22

- Hockey (Famous players and All-Star teams)
H: 281
Stanley Cup So: 838
Toronto (Sports) T: 339
- Hockney, David** [British artist] H: 282 *with picture*
- Hod Carriers' Union**
Laborers' International Union of North America
L: 16
- Hodeida** [Yemen]
United Arab Republic U: 46
- Hodel, Donald P.** [American government official]
Energy, Department of (table) E: 276
Interior, Department of the (table) I: 325
Reagan, Ronald Wilson (table) R: 169
- Hoder** [Norse mythology]
Balder B: 38
Loki L: 426
- Hodges, Albert B.** [American chess player]
Chess (United States chess champions)
C: 414
- Hodges, George Hartshorn** [American political leader]
Kansas (table) K: 234
- Hodges, Jim** [American political leader]
South Carolina (table) So: 658
- Hodges, Johnny** [American saxophonist]
Ellington, Duke *picture on* E: 242
- Hodges, Luther Hartwell** [American political leader]
Commerce, Department of (table) Ci: 871
Johnson, Lyndon Baines (table) J: 151
Kennedy, John Fitzgerald (table) K: 266
North Carolina (table) N: 490
- Hodgkin, Sir Alan Lloyd** [British biophysicist]
Nobel Prizes (Physiology or medicine: 1963)
N: 445
- Hodgkin, Dorothy Crowfoot** [British chemist]
H: 283
- Hodgkin, Thomas** [British doctor]
Hodgkin's disease H: 283
- Hodgkin's disease** H: 283
Cancer (Classification by primary body site)
C: 167-168
- Hodgson, James D.** [American government official]
Labor, Department of (table) L: 2
Nixon, Richard Milhous (table) N: 433
- Hoe, Richard March** [American businessman]
Printing (New presses and typesetting machines) P: 803
- Hoegh, Leo A.** [American political leader]
Iowa (table) I: 391
- Hoes, Hannah** [wife of]
Van Buren, Martin (Van Buren's family) V: 271
- Hoeven, John** [American political leader]
North Dakota (table) N: 513
- Hoey, Clyde R.** [American political leader]
North Carolina (table) N: 490
- Hoff, Philip H.** [American political leader]
Vermont (table) V: 333
- Hoffa, James Phillip** [American labor leader]
H: 283
- Hoffa, James Riddle** [American labor leader]
H: 283
Hoffa, James Phillip H: 283
Kennedy, John Fitzgerald (Senator Kennedy)
K: 262-263
- Hoffer, Eric** [American philosopher] H: 283
- Hoffman, Dustin** [American actor] H: 283
Motion picture (Best performance by an actor: 1979, 1988) M: 862-863
- Hoffman, Harold G.** [American political leader]
New Jersey (table) N: 249
- Hoffman, John Thompson** [American political leader]
New York (table) N: 313
- Hoffmann, Ernst Theodor Amadeus** [German author] H: 283
German literature (Romanticism) G: 141
- Hoffmann, Josef** [Austrian architect]
Architecture (Early modern architecture in Europe) A: 627-628 *with picture*
- Hoffmann, Roald** [American chemist]
Nobel Prizes (Chemistry: 1981) N: 443
- Hofmann, Albert** [Swiss chemist]
LSD L: 512
- Hofmann, August Wilhelm von** [German chemist]
Formaldehyde F: 410
- Hofmann, Hans** [German-American painter]
H: 284
Drawing *picture on* D: 343
- Hofmannsthal, Hugo von** [Austrian author]
H: 284
Opera (Richard Strauss) O: 799;
(*Rosenkavalier, Der*) O: 807
- Strauss, Richard So: 922
- Hofstadter, Robert** [American physicist]
Nobel Prizes (Physics: 1961) N: 441
- Hog** [animal] H: 284 *with pictures*
China (Agriculture) C: 498 *with picture*
Farm and farming *picture on* F: 39
Iowa (Agriculture) I: 390
Meat packing (Slaughtering and dressing)
M: 351
Wart hog W: 44 *with picture*
Xenotransplant X: 544
See also the list of Related Articles in the Hog article
- Hog line**
Curling *diagram on* Ci: 1196
- Hog millet** [grain]
Millet M: 555
- Hog-nosed bat**
Mammal *picture on* M: 117
- Hog-nosed skunk**
Skunk S: 496
- Hogan** [dwelling] H: 288
Indian, American (Shelter) I: 136d; (Before European contact) I: 166-168; *picture on* I: 139
Navajo Indians N: 69
- Hogen, Ben** [American golfer] H: 288
Golf (U.S. Open) G: 265; *picture on* G: 266
- "Hogan's Alley"** [comic strip]
Outcault, Richard Felton O: 879
- Hogarth, Mary** [sister-in-law of]
Dickens, Charles (Personal life) D: 187
- Hogarth, William** [English artist] H: 288 *with picture*
Fielding, Henry *picture on* F: 94
- Hogarth Press** [publisher]
Woolf, Virginia W: 402
- Hogchoker** [fish]
Sole So: 582
- Hoge, James** [American inventor]
Ohio (Interesting facts) O: 681
- Hogfish**
Fish *picture on* F: 155
- Hogg, Frank** [Canadian astronomer]
Hogg, Helen Sawyer H: 288
- Hogg, Helen Sawyer** [American-Canadian astronomer] H: 288
- Hogg, James S.** [American political leader]
Texas (table) T: 203
- Hognose** [snake]
Adder A: 47
Animal (Playing dead) A: 496
Snake *picture on* S: 524
- Hogrogian, Nonny** [American artist] H: 289
Literature for children *picture on* L: 358
- Hogweed** [plant]
Ragweed R: 103
- Hohenstaufen** [German history] H: 289
Germany (The Holy Roman Empire) G: 162-163
Guelphs and Ghibellines G: 419
- Hohenzollern** [German history] H: 289
Berlin (History) B: 264
Germany (The rise of Prussia) G: 164
Prussia (The Prussian people) P: 842; (Early history) P: 842
Teutonic Knights T: 183
- Hohokam Indians** [American Indians]
Arizona (Early days) A: 688
Indian, American (Farming) I: 141; (Indians of the Southwest) I: 166; *picture on* I: 151
Phoenix (History) P: 398
Pima Indians P: 465
- Hohokam Pima National Monument** [Arizona]
H: 289
National Park System (table: National monuments) N: 51
- Hoist**
Flag *diagram on* F: 194, (Flags that talk) F: 208
- Hoist** [machine]
Block and tackle (Endless chain hoist) B: 405
with diagram
- Hoit, Albert Gallatin** [American painter]
Harrison, William Henry *picture on* H: 74
- Hoitsu, Sakei** [Japanese artist]
Painting (Landscapes and seascapes) P: 32-33
with picture
- Hojo family** [Japanese history]
Japan (Rise of the shogun) J: 54
- Hokan** [language group]
Indian, American (Language groups) I: 149-150
- Hokkaido** [island, Japan]
Japan (Hokkaido) J: 46 *with picture and map; picture on* J: 33
- Hokusai** [Japanese artist] H: 289 *with picture*
Japanese print (The master print artists) J: 63
- Holbein, Hans, the Elder** [German painter]
H: 290
- Holbein, Hans, the Younger** [German painter]
H: 290 *with picture*
Clothing *picture on* Ci: 700
Erasmus, Desiderius *picture on* E: 349
Germany (Painting and sculpture) G: 155
Henry VIII *picture on* H: 188
More, Saint Thomas (Character and writings)
M: 802; *picture on* M: 801
Renaissance *picture on* R: 238
- Holberg, Ludvig** [Danish dramatist] H: 290
Denmark (Arts) D: 136
- Holbrook, Frederick** [American political leader]
Vermont (table) V: 333
- Holbrook, Josiah** [American educator]
Adult education (During the 1800's) A: 69
Lyceum L: 532
- Holbrooke, Richard C.** [American diplomat]
United Nations (table) U: 86
- HOLC** [government agency]
New Deal (table) N: 201; (Helping the needy)
N: 201
- Holcomb, Marcus H.** [American political leader]
Connecticut (table) Ci: 967
- Holcomb, Silas A.** [American political leader]
Nebraska (table) N: 110
- Hold**
Wrestling W: 504 *with picture*
- Hold** [shipping]
Ship (Nautical terms) S: 416 *with diagram*
- Holdback straps**
Harness *diagram on* H: 63
- Holden, Bob** [American political leader]
Missouri (table) M: 668
- Holden, Phyllis** [wife of]
Dole, Robert Joseph (Early life) D: 285
- Holden, William** [American actor]
Motion picture (Best performance by an actor: 1953) M: 862
- Holden, William W.** [American political leader]
North Carolina (Interesting facts) N: 473; (table) N: 490
- Holdfast** [botany]
Seaweed (Kinds) S: 276
- Holding** [sports]
Football (Violations and penalties) F: 363
- Holding company** [economics] H: 290
- Hole** [electronics]
Electronics (Solid-state components) E: 210
Transistor (Transistor materials) T: 372
- Hole** [golf]
Golf (The course) G: 260
- Hole, William** [Scottish painter]
Scotland *picture on* S: 220
- Hole-in-one**
Golf (table) G: 261
- Hole machining**
Machine tool (Metal removal) M: 17 *with pictures*
- Holgate, Edwin** [Canadian painter]
Group of Seven G: 403
- Holi** [festival]
Feasts and festivals (In Hinduism) F: 58
India (Hinduism) I: 116 *with picture*
- Holiday** H: 290
Colonial life in America (Recreation) Ci: 802-803
Folklore (Holidays) F: 325
See also the list of Related Articles in the Holiday article
- Holiday** [play by Barry]
Barry, Philip B: 119
- Holiday, Billie** [American singer] H: 291 *with portrait*
Jazz (The swing era) J: 71
- Holiday World** [Santa Claus]
Indiana (Places to visit) I: 206 *with picture*
- Holiness Code** [Old Testament]
Leviticus L: 219
- Holiness movement** [religion]
Church of God in Christ, The C: 543
Churches of God C: 543
Pentecostal churches (Major Pentecostal churches) P: 275
Protestantism (The Methodist movement [the 1700's]) P: 835
- Holinshed, Raphael** [English historian]

- Holinshead's Chronicles* H: 292
Holinshead's Chronicles [book] H: 291
 Macbeth M: 5
 Shakespeare, William *picture on* S: 351
Holistic medicine H: 292
 New Age movement M: 178
Holker, John [British businessman]
 Industrial Revolution (Spread of the Industrial Revolution) I: 252
Holl, Frank [British artist]
 Painting (Painting outside France) P: 72
Holladay, Benjamin [American businessman]
 Wells, Fargo & Company W: 195
Holland [country] See *Netherlands in this index*
Holland [Michigan] H: 292
 Michigan (Visitor's guide) M: 498 *with picture*
Holland [breed]
 Chicken (table) C: 443
Holland [submarine]
 Holland, John Philip H: 292
 Submarina (Early submarines) So: 942-943
with picture
Holland, John Philip [Irish-American inventor]
 H: 292
 Submarina (Early submarines) So: 942
Holland, Kingdom of [Dutch history]
 Netherlands (Independence) N: 149
Holland, Spessard L. [American political leader]
 Florida (table) F: 260
Holland, William [American race driver]
 Automobile racing (table: Indianapolis 500 winners) A: 980
Holland Tunnel [New Jersey-New York]
 Hudson River tunnels (The Holland Tunnel)
 H: 407
 Tunnel (Motor-traffic tunnels) T: 491
Hollerith, Herman [American inventor]
 Computer (The first successful computer)
 Ci: 924b; *picture on* Ci: 924a
Holley, Alexander H. [American political leader]
 Connecticut (table) Ci: 967
Holley, Charles Hardin See *Holly, Buddy in this index*
Holley, Robert William [American physiologist]
 Nobel Prizes (Physiology or medicine: 1968)
 N: 445
Holliday, Doc [American gunfighter]
 Earp, Wyatt E: 15
Holliday, Frederick W. M. [American political leader]
 Virginia (table) V: 417
Holliday, Judy [American actress]
 Motion picture (Best performance by an actress: 1950) M: 862
Hollings, Ernest Frederick [American political leader]
 South Carolina (table) So: 658
Hollister, Meridian [American political leader]
 Ohio (table) O: 699
Hollow stalk bolete [mushroom]
 Mushroom *picture on* M: 944
Holloway, William J. [American political leader]
 Oklahoma (table) O: 730; (The 1920's) O: 732
Holly [tree] H: 292 *with picture*
 Christmas (Christmas decorations) C: 535
 Tree *pictures on* T: 422
Holly, Buddy [American musician] H: 293 *with portrait*
 Rock music (Artistic decline) R: 378
Hollyhock [plant] H: 293 *with picture*
 Flower *picture on* F: 277
Hollywood [California] H: 293 *with picture*
 California *picture on* C: 57
 Los Angeles (Recent developments) L: 470-471; *picture on* L: 461
 Motion picture (The birth of Hollywood)
 M: 865
Hollywood Africans [painting by Basquiat]
 Painting (Recent painting) P: 87-88 *with picture*
Hollywood Boulevard
 Los Angeles (Central Los Angeles) L: 460; *picture on* L: 457
Hollywood Bowl
 Hollywood H: 293
Hollywood Cemetery [Virginia]
 Richmond (Other interesting places to visit)
 R: 332
Hollywood Pictures [company]
 Walt Disney Company W: 20
Holm, Celeste [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1947) M: 863
Holm, Hanya [German-American choreographer]
 H: 294
Holm oak
 Oak (Other oaks) O: 636 *with picture*
Holmes, Arthur [Scottish geologist]
 Geology (Experimental geology) G: 99
Holmes, David [American political leader]
 Mississippi (table) M: 640; (Statehood) M: 642
Holmes, Don [American journalist]
 Feboaldson, Feboald F: 59
Holmes, Gabriel [American political leader]
 North Carolina (table) N: 490
Holmes, Larry [American boxer]
 Boxing (Recent developments) B: 535
Holmes, Oliver Wendell [American author]
 H: 294 *with portrait*
 American literature (Poetry) A: 418
 Essay (Personal essays) E: 359
Holmes, Oliver Wendell, Jr. [American jurist]
 H: 295 *with portrait*
 Civil rights (Limits of civil rights) Ci: 608
Lochner v. New York L: 410
Holmes, Robert D. [American political leader]
 Oregon (table) O: 845
Holmes, Sherlock [literary figure] H: 295
 Detective story (History) D: 163
 Doyle, Arthur Conan D: 316
Holmes, Simon H. [Canadian political leader]
 Nova Scotia (table) N: 567
Holmes v. Walton [U.S. history]
 Brearley, David B: 590
Holmgren test
 Color blindness Ci: 827
Holmium [element] H: 296
Holocaust [European history] H: 296 *with pictures*
 Germany (World War II) G: 168-169
 Holocaust Memorial Museum, United States
 H: 297
 Human rights (The development of human rights) H: 428-428a
 Jerusalem *picture on* J: 100
 Jews (The Holocaust) J: 124 *with picture*
 Kristallnacht K: 388
 Nazism (Expansion, war, and collapse) N: 93
 Schindler, Oskar S: 175
 Wallenberg, Raoul W: 17
 Zionism (The Balfour Declaration) Z: 599-600
Holocaust Memorial Museum, United States
 [Washington, D.C.] H: 297
 Washington, D.C. (South of the Mall) W: 75;
map on W: 76
Holocene Epoch [geology]
 Earth (table) E: 30
 Prehistoric animal (table) P: 740
Holofernes [Biblical figure]
 Judith J: 184
Hologram [photography]
 Holography H: 297 *with picture*
Holographic will [law]
 Will W: 306
Holography [photography] H: 297 *with pictures*
 Gabor, Dennis G: 4
 Laser (Recording, storing, and transmitting information) L: 82
Holulu [clothing]
 Hawaii (Clothing) H: 94
Holomuu [clothing]
 Hawaii (Clothing) H: 94
Holoplankton [organisms]
 Plankton P: 515
Holshouser, James E., Jr. [American political leader]
 North Carolina (table) N: 490; (The late 1900's)
 N: 493-494
Holst, Gustav [British composer] H: 297
Holstein [breed]
 Cattle (Holstein-Friesian) C: 310 *with picture*;
picture on C: 307
Holstein [region, Germany]
 Denmark (The Schleswig wars) D: 140
Holstein-Friesian [cattle]
 Cattle (Holstein-Friesian) C: 310 *with picture*;
 (table) C: 313
 Dairying (Dairy cattle) D: 6
Holsteinsborg [city, Greenland]
 Greenland (People) G: 384-385 *with picture*
Holt, Harold E. [Australian political leader]
 Australia (table) A: 925
Holt, Homer A. [American political leader]
 West Virginia (table) W: 225
Holt, Joseph [American government official]
 Buchanan, James (table) B: 661
Holt, Thomas M. [American political leader]
 North Carolina (table) N: 490
Holt, W. Elmer [American political leader]
 Montana (table) M: 757
Holton, A. Linwood, Jr. [American political leader]
 Virginia (table) V: 417; (Politics) V: 418;
 (Political changes) V: 422
Holtzman, Elizabeth [American political leader]
 Heckler, Margaret Mary H: 164
Holubtsi [food]
 Ukraine (Food and drink) U: 8
Holwell, John [British colonial official]
 Black Hole of Calcutta B: 389
Holy Alliance [European history] H: 297
 Alexander I [czar] A: 341
 Monroe Doctrine (Origins) M: 739
Holy Apostles, Church of the [Greece]
 Byzantine art (Architecture) B: 749-750
Holy Ark [religion] See *Ark of the Covenant in this index*
Holy Bible See *Bible in this index*
Holy Communion See *Communion in this index*
Holy day of obligation [religion]
 Roman Catholic Church (The Eucharist or Mass) R: 404
Holy Eucharist See *Communion in this index*
Holy Family on the Steps [painting by Poussin]
 Classicism (The qualities of classicism) Ci: 653
with picture
 Painting (Classicism) P: 61 *with picture*
Holy Ghost [religion]
 Trinity T: 447
Holy Grail [religion] H: 298 *with picture*
 Arthur, King A: 757
 Chrétien de Troyes C: 522d
 Galahad, Sir G: 7
 Knights and knighthood *picture on* K: 348
 Lancelot, Sir L: 56
 Mythology (Welsh myths) M: 984
 Round Table (Origin) R: 490-491 *with picture*
Holy Land
 Israel I: 478
 Palestine P: 103
Holy League [European history]
 Pius V, Saint P: 502
 Tilly, Count of T: 287
Holy of Holies [religion]
 Tabernacle T: 2
Holy Office, Congregation of the [religion]
 Inquisition I: 277
Holy orders [religion]
 Eastern Orthodox Churches (Sacraments)
 E: 46-47
 Roman Catholic Church (Worship) R: 404-405
Holy Place [religion]
 Tabernacle T: 2
Holy Roman Empire [European history] H: 298
with map
 Austria (Early years) A: 937
 Charlemagne (Military conquests) C: 378-379
 Czech Republic (The rise of Bohemia) Ci: 1213
 Czechoslovakia (Early history) Ci: 1215
 Europe (The Middle Ages) E: 409-410 *with map*
 Flag *picture on* F: 217
 Germany (The Holy Roman Empire) G: 162;
 (Conflicts with France) G: 164-165
 Habsburg, House of H: 3
 Italy (The Middle Ages) I: 513 *with map*
 Middle Ages (Feudal government) M: 524-525
with map
 See also the list of Related Articles in the Holy Roman Empire article
Holy Saturday [religion]
 Easter (Holy Saturday) E: 43
 Holy Week H: 299
Holy Scriptures See *Bible in this index*
Holy See [religion]
 Pope P: 660
Holy Sepulcher, Church of the [Jerusalem]
 Jerusalem (Christian sites) J: 96 *with picture and map*
Holy Sonnets [poems by Donne]
 Donne, John (His poetry) D: 308
Holy Spirit [religion]
 Christianity (Beliefs) C: 524
 Trinity T: 447
Holy Thursday [religion] See *Maundy Thursday in this index*
Holy tradition [religion]
 Eastern Orthodox Churches E: 45
Holy Trinity, Cathedral of the
 Quebec (Churches) Q: 36
Holy Trinity, Church of the [Saskatchewan]
 Saskatchewan (The coming of the missionaries) S: 146

404 Holy Trinity Church

Holy Trinity Church [Stratford-on-Avon]
Shakespeare, William (His last years) S: 349
with picture

Holy Trinity with the Virgin and Saint John, The [painting by Masaccio]
Masaccio M: 261 with picture

Holy Wars
Crusades (The First Crusade) Ci: 1160

Holy Week [religion] H: 299
Easter (Holy Week) E: 42 with picture
Lent L: 196b
Palm Sunday P: 109
Peru picture on P: 310

Holy Wisdom, Church of the See Hagia Sophia
in this index

Holy Writ
Writ W: 510

Holyfield, Evander [American boxer]
Boxing (Recent developments) B: 535 with
pictures
Tyson, Mike T: 542

Homage [European history] H: 299
Feudalism (The principles of feudalism) F: 82
Homage to Catalonia [book by Orwell]
Orwell, George O: 860

Homage to Mistress Bradstreet [poem by
Berryman]
Berryman, John B: 272

Homage to the Square [paintings by Albers]
Albers, Josef A: 311
Corcoran Gallery of Art picture on Ci: 1051

Hombori Tondo [mountain, Mali]
Mali (Land and climate) M: 108 with map

Hombre [book by Leonard]
Leonard, Elmore L: 198

Home
Animal (Animal homes and communities)
A: 501 with pictures
Colonial life in America (Colonists at home)
Ci: 796 with picture
Early childhood education (Activities planned
by families) E: 15
Electricity (In homes) E: 191
Family (Home life) F: 21
Home economics H: 300
House H: 380 with pictures
Lighting (In the home) L: 296 with picture
Reading (Learning in the home) R: 160
Safety (Safety at home) S: 9
Shelter S: 392
Solar energy picture on So: 578

Home, Lord [British political leader] See
Douglas-Home, Sir Alec in this index
"Home, Sweet Home" [song]
Payne, John Howard P: 204
Popular music (Revolutionary War to 1840)
P: 669

Home, The [book by Gilman]
Gilman, Charlotte Perkins G: 190

Home and School Association
Parent-teacher organizations (Home and
School Associations) P: 158

Home-built airplane
Airplane (Special-purpose planes) A: 212-213

"Home Burial" [poem by Frost]
Frost, Robert Lee (His poems) F: 543

Home-care aide
Day care (Day care for the elderly) D: 53
Medicine picture on M: 365

Home-delivery service
Restaurant (Fast-service restaurants) R: 262

Home economics H: 300
Family, Career and Community Leaders of
America F: 25

Home Insurance Building [Chicago]
Architecture (Early modern architecture in
America) A: 629

Arthur, Chester Alan picture on A: 755
Chicago (A city reborn) C: 435
Jenney, William Le Baron J: 92
Skyscraper (History) S: 498-499

Home mission
Missionary M: 620

Home network
Computer (Personal computers) Ci: 909

Home Owners Loan Corporation [U.S.]
New Deal (table) N: 201. (Helping the needy)
N: 201

Home page [computing]
Internet (Glossary of Internet terms) I: 350a.
(How the Internet works) I: 350c-350d

Home plate
Baseball (The infield) B: 126 with diagrams;
(Umpires) B: 130

Home range

Animal (Home range) A: 501
Deer (Life of a deer) D: 84
Mammal (Territoriality) M: 125
Orangutan O: 817
Raccoon (The life of a raccoon) R: 50

Home rule [Irish history]

Gladstone, William Ewart (Later political
career) G: 207
Home rule H: 301
Ireland (The Easter Rising) I: 427
Northern Ireland (Union with Britain) N: 524
Parnell, Charles Stewart P: 177
Ulster Unionist Party U: 16
United Kingdom (Gladstone and Disraeli) U: 69

Home rule [political science] H: 301
City (Governmental problems) Ci: 592
City government Ci: 594
Local government (Relations with higher lev-
els of government) L: 407
Progressive movement (Political reforms)
P: 814

Home Rule Bill [British history]
Gladstone, William Ewart (Later political
career) G: 207

Home run
Baseball (Reaching base) B: 129; (table:
Modern major league records) B: 137

Home schooling H: 301
Education (Control and support of U.S. educa-
tion) E: 91
School (Other kinds of schools) S: 182

Home shopping service
Television picture on T: 115

Home study [social work]
Adoption (The adoption process) A: 66
Home-study school See Correspondence
school in this index

Home theater system [electronics]
Stereophonic sound system (Types of sys-
tems) So: 892

Home to Harlem [book by McKay]
McKay, Claude M: 337

Home Truths [book by Gallant]
Gallant, Mavis G: 14

Home visitors [education]
Parent education (Home visitation) P: 157
Homecoming, The [play by Pinter]
Pinter, Harold P: 475

Homeland
South Africa (Provincial government) So: 609;
(Ways of life) So: 611

Homeland Security, Department of [proposal]
Homeland Security, Office of H: 301

Homeland Security, Office of [U.S.] H: 301
Bush, George Walker (Bush's administration)
8: 722f-723

Civil defense (Recent developments) Ci: 606
Ridge, Tom R: 336
September 11 terrorist attacks (The aftermath)
S: 310
United States, History of the (Recent events)
U: 195-196

Homeland Security Council
Homeland Security, Office of H: 301

Homeland Union Party [political party]
Lithuania (Government) L: 388

Homelessness H: 302 with picture
Colombia (Way of life) Ci: 770-781
Poverty (The distribution and rate of U.S.
poverty) P: 723

Homeopathic magic
Magic (Homeopathic magic) M: 49; (Magic
today) M: 51

Homeopathy [medicine] H: 302
Alternative medicine A: 388
Cancer (Alternative medicine) C: 173
Hahnemann, Samuel H: 7

Homeostasis [biology] H: 303
Motivation (Kinds of motives) M: 875

Homeowner insurance
Insurance (Homeowners' insurance) I: 313

Homer [Greek poet] H: 303 with portrait
Epic E: 342
Golden Age G: 255
Greece, Ancient (History) G: 372 with picture
Greek literature (Epic poetry) G: 377
Iliad I: 51
Odyssey O: 675
Poetry (Narrative poetry) P: 591

Homer [bird] See Homing pigeon in this index

Homer, Winslow [American painter] H: 304 with
picture
Civil War (The home front) Ci: 622

Education picture on E: 102
Painting (Painting outside France) P: 72

Homeric question [literature]
Homer (Analysts and unitarians) H: 303

Homestake Mine
Gold rush (Gold rushes in the United States)
G: 254

Lead L: 150
South Dakota So: 664; (Natural resources)
So: 677; (Mining) So: 679

Homestead [agriculture]
Homestead Act H: 305
Pioneer life in America (Establishing a home-
stead) P: 479

Ranching (History) R: 135
United States, History of the picture on U: 167
Western frontier life in America
(Homesteading on the Great Plains)
W: 234-235
Westward movement in America
(Homesteading on the Great Plains)
W: 251

Homestead [city, Florida]
Miami (History) M: 480-481

Homestead Act [1862] H: 304
Agriculture (Expansion in the United States)
A: 158

Civil War (Economy) Ci: 623
Johnson, Andrew (U.S. senator) J: 138
Public lands (Disposal of public lands) P: 858
Ranching (History) R: 135-136
United States, History of the (The end of the
western frontier) U: 179
Western frontier life in America (Building the
frontier) W: 232-233
Westward movement in America
(Homesteading on the Great Plains)
W: 251

Homestead association See Savings and loan
association in this index

Homestead National Monument [Nebraska]
National Park System (table: National monu-
ments) N: 51

Homestead Strike [1892] H: 305
Carnegie, Andrew (The homestead strike)
C: 242

Goldman, Emma G: 258
Labor movement (Opposition to unions)
L: 10

Homicide [crime] H: 305
Manslaughter M: 167
Murder M: 930

Homing behavior [zoology]
Duck (The life of a duck) D: 374

Homing guidance
Guided missile (Homing guidance) G: 426 with
diagram

Homing instinct
Salmon (The life of a salmon) S: 69

Homing pigeon H: 305 with picture
Pigeon (Domestic pigeons) P: 460; picture on
P: 459

Hominid [zoology]
Australopithecus A: 927
Prehistoric people (Prehuman ancestors)
P: 744 with pictures
Primate (The evolution of primates) P: 778b-
778c

Hominy [food] H: 306

Homo erectus [anthropology] H: 306
Fossil (Understanding ancient plants and ani-
mals) F: 423

Heidelberg jaw H: 166
Human being (Early human beings) H: 415
Java fossils J: 66
Leakey, Richard Erskine Frere L: 161
Peking fossils P: 230
Prehistoric people (The first human beings)
P: 745; (The multiple origins theory)
P: 746; (table) P: 752 with map; pictures
on P: 743, P: 748, P: 749

Homo ergaster [anthropology]
Leakey, Richard Erskine Frere L: 161

Homo Faber [book by Frisch]
Frisch, Max F: 535

Homo habilis [anthropology] H: 306
Homo erectus H: 306
Human being (Early human beings) H: 415
Johanson, Donald Carl J: 131
Leakey, Louis Seymour Bazett L: 161
Leakey, Richard Erskine Frere L: 161
Prehistoric people (The first human beings)
P: 745; (table) P: 752 with map; picture on
P: 748

- Homo Ludens** [book by Huizinga]
Huizinga, Johan H: 411
- Homo rudolfensis** [anthropology]
Homo habilis H: 306
Leakey, Richard Erskine Frere L: 161
Prehistoric people (The first human beings)
P: 745; (table) P: 752 *with map; pictures*
on P: 748
- Homo sapiens** [anthropology]
Heidelberg jaw H: 166
Human being (Scientific classification) H: 413;
(Human beings of today) H: 415
Human body *diagram* on H: 422
Neanderthals N: 93
Prehistoric people (The development of *Homo sapiens*) P: 746; *pictures* on P: 749;
(table) P: 752 *with map*
Races, Human R: 53 *with pictures*
Swanscombe fossil So: 1017
- Homo sapiens sapiens** [anthropology]
Human being (Scientific classification) H: 413
Prehistoric people *pictures* on P: 749
Races, Human R: 53 *with pictures*
- Homocysteine** [biochemistry]
Folic acid F: 315
- Homodont teeth** [anatomy]
Teeth (Teeth of animals) T: 86
- Homogeneous catalysis** [chemistry]
Catalysis C: 298
- Homogeneous society**
City (The people) Ci: 578-580
- Homogenization** [physics]
Milk (At a processing plant) M: 547-548 *with diagram*
- Homograft** [medicine]
Skin grafting S: 494
- Homologous structures** [biology] H: 306
- Homonym** [language] H: 307
- Homophile organization**
Gay rights movement (History of gay rights)
G: 73
- Homophone**
Homonym H: 307
Spelling (Spelling demons) So: 777
- Homosexuality** H: 307
Adolescent (Establishing a sexual identity)
A: 63
AIDS (How HIV is transmitted) A: 163; (History of AIDS) A: 165
Boy Scouts (Organization) B: 540
Civil rights (Major changes in the field of civil rights) Ci: 610
Family (Varieties of families) F: 20
Gay rights movement G: 73
Marriage (Laws concerning marriage) M: 220-221
Sexuality (Sexual orientation) S: 338b
Vermont (Recent developments) V: 337
- Honda** [automobile]
Sports car (History) So: 803 *with picture*
- Honda knot**
Cowboy (His rope) Ci: 1109
- Honda Motor Company** [company]
Automobile (Major producing countries and companies) A: 955-956
Manufacturing (table) M: 170
- Hondo** [book by L'Amour]
L'Amour, Louis L: 52
- Honduras** H: 308 *with pictures and maps*
El Salvador (Recent developments) E: 252
Indian, American (Indians of Middle America)
I: 169
World War II (table: The Allies) W: 471
See also the list of Related Articles in the Honduras article
- Honduras, British** [former name] *See Belize in this index*
- Honecker, Erich** [German political leader] H: 314
Germany (East Germany) G: 170
- Honegger, Arthur** [French composer] H: 314
- Honest Abe** [nickname]
Lincoln, Abraham (Search for a career) L: 314
- Honey** [food] H: 314 *with picture*
Bee (Food) B: 184
Bee (Making honey) B: 204
Beeswax B: 212
Sugar (Honey) So: 960
- Honey ant** [insect]
Ant (Protection against enemies) A: 525 *with picture*, (Honey ants) A: 527 *with picture*
- Honey badger**
Ratel R: 147 *with picture*
- Honey bear** *See Sloth bear in this index*
- Honey bee** [insect]
Bee B: 200 *with pictures*
Beeswax B: 212
Deseret D: 154
Honey H: 314 *with picture*
Insect (Legs) I: 287-288; (Reproduction) I: 292;
picture on I: 295
Pollen (Cross-pollination) P: 645 *with pictures*
- Honey bee mite** [insect]
Bee (Enemies) B: 205
- Honey extractor** [machine]
Honey (The honey industry) H: 315
- Honey locust** [tree] H: 315 *with picture*
Leaf *picture* on L: 154
Tree *pictures* on T: 422
- Honey mesquite** [shrub]
Mesquite M: 422
- Honey possum** [possum]
Possum P: 698
- Honey stomach** [anatomy]
Bee B: 200; (Making honey) B: 204
- Honey tangerine** [fruit]
Tangor T: 27
- Honeybloom** [plant]
Dogbane D: 283 *with picture*
- Honeycomb**
Bee (The honey bee colony) B: 201 *with picture*; (Making wax) B: 204-205 *with picture*
Beeswax B: 212
Honey H: 314 *with picture*; (The honey industry) H: 315
Insect *picture* on I: 295
- Honeycomb mirror**
Telescope (Reflecting telescopes) T: 104-105
- Honeycomb tripe** [food]
Tripe T: 447
- Honeycreeper** [bird]
Hawaiian honeycreeper H: 110 *with pictures*
- Honeydew** [entomology]
Ant (Dairying ants) A: 527 *with picture*
Aphid A: 565
- Honeydew melon** [fruit]
Muskmelon M: 963
- Honeyeater** [bird] H: 315 *with picture*
- Honeyguide** [bird]
Bird (Feeding methods) B: 350
- Honeyant** *See Honey ant in this index*
- Honeysuckle** [shrub] H: 316 *with picture*
Flower (Garden perennials) F: 281 *with picture*
- Honeywell, Ira** [Canadian settler]
Ottawa (Early days) O: 874
- Hong Kong** [administrative region, China] H: 316
with pictures and map
Asia *picture* on A: 787
China (Clash with the Western powers)
C: 502; (Hong Kong) C: 506
- Hong Kong** [city, Hong Kong]
Hong Kong (The major cities) H: 316 *with picture*
- Hong Kong, University of**
Hong Kong (Education) H: 318
- Hong Kong flu** [disease]
Influenza (Flu epidemics) I: 268b
- Hong Kong International Airport**
Airport (table) A: 245
Hong Kong (The land) H: 318
- Honi soit qui mal y pense** [inscription]
Garter, Order of the G: 46
- Honiara** [city, Solomon Islands] H: 320
- Honing** [industrial process]
Machine tool (Abrasive processes) M: 18-19
- Honiton lace** [fabric]
Lace *picture* on L: 21
- Honky-tonk** [music]
Country music (Honky-tonk music) Ci: 1098a;
(History) Ci: 1098a-1098b
- Honolulu** [Hawaii] H: 320 *with pictures and maps*
Hawaii (Population) H: 92 *with picture and map; picture* on H: 89
- Honolulu Academy of Arts**
Honolulu (Cultural life) H: 321
- Honor** *See Medals, decorations, and orders in this index*
- Honor, Court of**
Girl Scouts (Troops, groups, and councils)
G: 198
- Honor code**
United States Air Force Academy (Cadet life)
U: 197
United States Military Academy (The student body) U: 202
- Honor feather**
Indian, American *pictures* on I: 144
- Honor society**
Fraternity (Honor and recognition societies)
F: 496
- Honorable discharge**
Military discharge M: 543
- Honorary degree**
Degree, College (Honorary degrees) D: 92
- Honoré I** [prince of Monaco]
Monaco (History) M: 700
- Honorina** [Roman noblewoman]
Attila A: 879
- Honorius** [Roman emperor]
Gladiator G: 206
Rome, Ancient (table) R: 447
Theodosius I T: 252
- Honorius I** [pope] H: 323
Pope (table) P: 666
- Honorius II** [pope]
Pope (table) P: 666
- Honorius II** [antipope]
Pope (table) P: 666
- Honorius III** [pope] H: 323
Pope (table) P: 666
- Honorius IV** [pope]
Pope (table) P: 666
- Honshu** [island, Japan]
Japan (The land) J: 45 *with map*
- Hooch, Pieter de** [Dutch painter]
De Hooch, Pieter D: 92
- Hood** [clothing]
Caps and gowns C: 198 *with picture*
- Hood** [ship]
Bismarck B: 382
- Hood, Harrison** [American chemist]
Glass (table) G: 218
- Hood, John Bell** [Confederate general] H: 323
Civil War (The Atlanta campaign) Ci: 632;
(North to Nashville) Ci: 632
Tennessee (The Civil War) T: 154
- Hood, Mount** *See Mount Hood in this index*
- Hood, Robin** *See Robin Hood in this index*
- Hood, Samuel** [British admiral]
Mount Hood M: 885
- Hooded merganser** [duck]
Merganser M: 417
- Hooded pitohui** [bird]
Animal *picture* on A: 469
Pitohui P: 499 *with picture*
- Hooded seal** [animal]
Seal (Head) S: 266
- Hooded warbler** [bird]
Warbler *picture* on W: 34
- Hoodoo, The** [natural feature]
Yellowstone National Park (The Upper Loop)
Y: 559 *with map*
- Hoof** H: 324
Deer (Legs and hoofs) D: 83 *with picture*
Horse (Legs and hoofs) H: 349 *with picture*
Ungulate U: 25 *with picture*
- Hoof-and-mouth disease**
Foot-and-mouth disease F: 353
- Hooghly River** [India] H: 324
Kolkata K: 362
- Hook** [fishing] *See Fishhook in this index*
- Hook** [geography]
Beach B: 178
- Hook** [sports]
Bowling (How to bowl) B: 521-522 *with diagram*
- Hook, Captain** [literary figure]
Peter Pan P: 325
- Hookah**
Pipe P: 489
- Hooke, Robert** [English physicist] H: 324
Biology (Early discoveries with the microscope) B: 318 *with picture*
Botany (The development of modern botany)
B: 509
Cell (Before 1900) C: 337 *with picture*
Gas [physics] (Gas laws) G: 48
Mineral (The scientific study of mineral crystals) M: 571
Science (The scientific revolution) S: 198
- Hooked rug**
Rugs and carpets (Other methods) R: 516;
(History) R: 517
- Hooker** [player]
Rugby football (Rugby Union) R: 510-511
- Hooker, Joseph** [Union general] H: 324 *with portrait*
Civil War (Battle of Chancellorsville) Ci: 628
- Hooker, Thomas** [American colonial leader]
H: 324
Connecticut (English settlement) Ci: 968

Hartford H: 78
Hooker process
 Extrusion E: 459
Hooke's law [physics]
 Hooke, Robert H: 324
Hookham, Margaret [British dancer] See Fonteyn, Margot *in this index*
Hooks, Benjamin Lawson [American social reformer] H: 324 *with portrait*
Hookworm [animal] H: 324 *with diagram*
 Animal picture on A: 506
 Parasite (Parasites that feed on people and animals) P: 154
 Worm (Roundworms) W: 501 *with picture*
Hoop-and-pole game
 Indian, American (Recreation) I: 142-143 *with picture*
Hoop skirt
 Clothing (The 1700's) Ci: 701-702
Hoop tent
 Tent (Kinds of tents) T: 171
Hoopa Valley Reservation
 Yurok Indians Y: 586
Hooper, Ben W. [American political leader]
 Tennessee (table) T: 152
Hooper, Harry [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Hooper, William [American patriot] H: 325
Hoopoe [bird] H: 325 *with picture*
Hoosac Mountains [mountains, U.S.]
 Green Mountains G: 381
Hoosac tunnel [Massachusetts] H: 325
Hoosic River [Massachusetts-Vermont]
 Massachusetts (Rivers and lakes) M: 284
Hoosier Poet
 Riley, James Whitcomb R: 341
Hoosier Schoolmaster, The [book by Eggleston]
 Eggleston, Edward E: 118
Hoosier State
 Indiana I: 196
Hoot owl
 Owl (Important owls) O: 884
Hooton, Earnest Albert [American anthropologist] H: 325
Hoover, Allan [uncle of]
 Hoover, Herbert Clark (Boyhood) H: 326
Hoover, Herbert Clark [U.S. President] H: 326 *with pictures*
 Democratic Party (During the 1920's) D: 127
 Edison, Thomas Alva (Honors) E: 82 *with picture*
 Great Depression (Hoover's policies) G: 341
 Hoover Commission H: 332
 Iowa (Places to visit) I: 384; *picture on* I: 394
 Roosevelt, Franklin Delano (Election of 1932) R: 456
 Stanford University (Research program) So: 836
 World War I (The United States enters the war) W: 462
Hoover, Herbert Clark, Jr. [American government official]
 Hoover, Herbert Clark (Hoover's family) H: 327-328
Hoover, J. Edgar [American government official]
 H: 331 *with portrait*
 Federal Bureau of Investigation (History) F: 62
Hoover, Lou Henry [wife of Herbert Hoover]
 First ladies F: 143; (table) F: 142
 Hoover, Herbert Clark (Hoover's family) H: 327
Hoover Commission [U.S. history] H: 332
 Hoover, Herbert Clark (Elder statesman) H: 330-331
Hoover Dam [Colorado River, Arizona-Nevada]
 H: 332
 Arizona *picture on* A: 687-689
 California (Progress as a state) C: 62
 Colorado River Ci: 849 *with map*
 Hoover, Herbert Clark (Anti-depression action) H: 329
 Nevada N: 156; (Places to visit) N: 164 *with picture*
Hoover Institution on War, Revolution, and Peace [library]
 Hoover, Herbert Clark (Elder statesman) H: 330
 Stanford University (Research program) So: 836
Hoover Moratorium [U.S. history]
 Hoover, Herbert Clark (The Great Depression) H: 329
Hooverize [U.S. history]
 Hoover, Herbert Clark (Food administrator) H: 328

Hooverville [U.S. history]
 Great Depression (Human suffering) G: 340-341; *picture on* G: 339
 Hoover, Herbert Clark (The Great Depression) H: 329
 United States, History of the (The depression and the people) U: 188
Hop [plant] H: 332 *with picture*
 Brewing (Boiling) B: 595
Hop hornbeam [tree]
 Ironwood I: 454 *with picture*
Hop, step, and jump [sports]
 Track and field (Jumping events) T: 355
 Triple jump T: 447
Hopak [dance]
 Ukraine (The arts) U: 9
Hope, Bob [American entertainer] H: 333 *with portrait*
Hope, John [American educator] H: 333
Hope, Laura Lee [American author]
 Stratemeyer, Edward So: 920
Hope diamond
 Diamond (Famous diamonds) D: 182; *picture on* D: 181
Hope Theatre
 Shakespeare, William *picture on* S: 352
Hopewell [ship]
 Hudson, Henry (Northern voyages) H: 404
Hopewell Cape
 New Brunswick *picture on* N: 192
Hopewell Culture National Historical Park [Ohio]
 National Park System (table: National historical parks) N: 56-57
Hopewell Furnace National Historic Site [Pennsylvania]
 National Park System (table: National historic sites) N: 52-53
Hopewell Indians [American Indians]
 Indian, American (The first farmers) I: 152
 Mound builders (The Hopewell culture) M: 881
Hopi Ceremonial Dance [painting by Kabotie]
 Indian, American *picture on* I: 169
Hopi Indians [American Indians] H: 333
 Indian, American (Hunting, gathering, and fishing) I: 141; *pictures on* I: 139, I: 167, I: 169
 Kachina K: 208
 Mask (Ceremonial masks) M: 263-264
 Navajo Indians N: 70
 Rain dance R: 125
 Sculpture (As a record of history) S: 228-229; (The European impact) S: 244
 Snake dance S: 536
 United States *picture on* U: 116
 Wupatki National Monument W: 514
Hopkins, Anthony [British actor]
 Motion picture (Best performance by an actor: 1991) M: 862-863
Hopkins, Esek [American military leader]
 Navy, United States (The earliest colonial warships) N: 85-88
Hopkins, Sir Frederick [British biochemist]
 Nobel Prizes (Physiology or medicine: 1929) N: 444
 Vitamin (History) V: 432
Hopkins, Gerard Manley [British poet] H: 333
 English literature (Later Victorian literature) E: 321
 Poetry (Sounds) P: 594-595
 Rhyme R: 320
Hopkins, Harry Lloyd [American government official] H: 333
Hopkins, Johns [American philanthropist]
 H: 334
 Johns Hopkins University J: 135
Hopkins, Mark [American businessman]
 California (Early statehood) C: 62
Hopkins, Stephen [American patriot] H: 334
 Providence (Description) P: 839
Hopkinson, Francis [American patriot] H: 334
 Flag (First United States flags) F: 208-210
Hoplay-Woolrich, Cornell George [American author] See Woolrich, Cornell *in this index*
Hopper
 Railroad *pictures on* R: 108
Hopper, Edward [American painter] H: 334
 Drawing *picture on* D: 344
 Roaring Twenties (Cultural trends) R: 364
Hopper, Grace Murray [American computer scientist] H: 334
Hoppes, D. D. [American physicist]
 Parity [physics] P: 167

Hoppin, William W. [American political leader]
 Rhode Island (table) R: 311
Hops See Hop *in this index*
Hopscotch [book by Cortázar]
 Latin-American literature (Recent developments) L: 113
Hora [dance]
 Dance (Folk dances) D: 27-28
Horace [Roman poet] H: 334
 Epistle E: 344
 Latin literature (The Augustan Age) L: 116
 Satire S: 150h
Horace [play by Corneille]
 French literature (Classical drama) F: 520
Horatian ode [poetry]
 Ode O: 673
Horatian satire
 Satire S: 150h
Horatius [Roman legend] H: 334
Horeb See Mount Sinai *in this index*
Horehound [plant] H: 334
Horemheb [king of ancient Egypt]
 Egypt, Ancient (The New Kingdom) E: 143-144
 Tutankhamen T: 525
Horicon Marsh [Wisconsin]
 Wisconsin *picture on* W: 360
Horizon [astronomy] H: 335 *with diagram*
Horizon [club program]
 Camp Fire Boys and Girls (Club programs) C: 88-89
Horizon [geology]
 Soil (Characteristics of soils) So: 574 *with diagrams*
Horizon glass [measuring device]
 Sextant S: 336
Horizons '76
 Bicentennial Celebration, American B: 289
Horizontal bar [sports]
 Gymnastics (Men's events) G: 448-449
Horizontal-branch phase
 Star (Intermediate-mass stars) So: 848
Horizontal equity [economics]
 Taxation (Equity) T: 54
Horizontal merger [economics]
 Merger M: 418
Horizontal opposed engine
 Gasoline engine *picture on* G: 64
Horlick, William [American businessman]
 Wisconsin (Interesting facts) W: 347
Hormisdas, Saint [pope]
 Pope (table) P: 666
Hormonal dwarfism [biology]
 Dwarf (Hormonal dwarfism) D: 395
Hormone [botany]
 Plant (Factors affecting plant growth) P: 538 *with picture*
Hormone [physiology] H: 335
 Acne A: 27
 Adolescent (Physical development) A: 60-61
 Bird (Why birds migrate) B: 360
 Blood (Plasma) B: 407; (Carrying hormones) B: 410; *diagram on* B: 409
 Brain (In regulating body processes) B: 554-555
 Cell (Producing proteins) C: 333
 Cholesterol C: 520
 Depression D: 151
 Disease (Metabolic diseases) D: 229
 Drug (Other kinds of drugs) D: 352
 Dwarf (Hormonal dwarfism) D: 395
 Endorphin E: 272
 Epinephrine E: 343
 Estrogen E: 364
 Farm and farming (Livestock care) F: 39
 Food (Regulating body processes) F: 331
 Gland (Endocrine glands) G: 207
 Growth (In living things) G: 404
 Hypothalamus H: 481
 Instinct (How instinctive behavior works) I: 305
 Lipid (Kinds of lipids) L: 345
 Liver (Other functions) L: 394
 Menopause M: 402
 Metabolism (Control of metabolism) M: 424
 Migration (What triggers migrations) M: 539
 Ovary O: 881
 Placenta P: 505
 Pregnancy (How pregnancy affects women) P: 734b
 Prostaglandin P: 829
 Protein (How the body uses proteins) P: 832-833
 Reproduction, Human (The human reproductive system) R: 244

- Stress (How stress affects the body) So: 926
 Testosterone T: 182
 Weight control (Heredity) W: 182
- Hormone replacement therapy** [medicine]
 H: 338
 Osteoporosis (Prevention and treatment)
 O: 868
- Hormuz, Strait of**
 Persian Gulf P: 300 *with map*
- Horn** [geology]
 Seven Natural Wonders of the World (The Matterhorn) S: 324b
- Horn** [musical instrument] H: 339
 French horn F: 516 *with pictures*
- Horn** [saddle]
 Horse (The saddle) H: 351-352 *with picture*
- Horn** [zoology] H: 338 *with pictures*
 Animal picture on A: 494
 Rhinoceros R: 293 *with pictures*
- Horn, Cape** [South America]
 Cape Horn C: 188 *with maps*
- Horn Island** [island, Australia]
 Torres Strait Islands T: 341
- Horn Island** [island, Chile]
 Cape Horn C: 188 *with map*
- Horn of plenty** [symbol]
 Cornucopia Ci: 1066
- Hornaday, William Temple** [American zoologist]
 Buffalo (Protection of bison) B: 675
- Hornbeam** See *Ironwood in this index*
- Hornbein, Thomas F.** [American mountain climber]
 Mount Everest M: 884
- Hornbill** [bird] H: 339
 Bird (Birds of Europe and Asia) B: 346-347
with picture; (Bills) B: 362
- Hornblende** [mineral] H: 339
 Mineral picture on M: 566
- Hornblower, Horatio** [literary figure]
 Forester, Cecil Scott F: 403
- Hornbook** [education] H: 339 *with picture*
 Colonial life in America (Education) Ci: 803-804
- Horne, Lena** [American entertainer] H: 339 *with portrait*
- Horne, Marilyn** [American opera singer] H: 340
- Horned dace** [fish]
 Chub C: 540
- Horned grebe** [bird]
 Bird (Birds of inland waters and marshes)
 B: 340 *with picture*
- Horned lark** [bird]
 Bird (Birds of grasslands) B: 336 *with picture*;
picture on B: 355
 Lark L: 76 *with picture*
- Horned lizard** [animal] H: 340 *with picture*
 Lizard (Defenses) L: 400
- Horned owl** [bird]
 Owl (Important owls) O: 884
- Horned pout** [fish]
 Bullhead B: 697
- Horned puffin** [bird]
 Puffin P: 886 *with picture*
- Horned rattlesnake** See *Sidewinder in this index*
- Horned toad** [animal]
 Horned lizard H: 340 *with picture*
- Horned viper** [snake]
 Asp A: 814
 Desert picture on D: 155
- Horner, Henry** [American political leader]
 Illinois (table) I: 71
- Hornet** [aircraft]
 Air force picture on A: 182
- Hornet** [aircraft carrier]
 Aircraft carrier (History) A: 207
 Doolittle, James Harold D: 309
- Hornet** [insect] H: 340 *with picture*
 Insect picture on I: 283
 Wasp W: 110
- Hornets, New Orleans** [basketball team]
 Basketball (table) B: 150
 New Orleans (Recreation) N: 282
- Hornet's nest**
 Hornet H: 340
- Horney, Karen** [German-American psychiatrist]
 H: 340
- Hornsby, Rogers** [American baseball player]
 H: 341
 Baseball (table: Hall of Fame) B: 134, (The Babe Ruth Era) B: 136; (table: Modern major league records) B: 137
- Hornung, Paul** [American football player]
 Football (table) F: 363
- Hornussen** [sport]
 Switzerland (Sports) So: 1054 *with picture*
- Hornworm** [insect]
 Hawk moth H: 113
 Moth (Hawk moths) M: 841 *with picture*
- Hornwort** [plant] H: 341
 Bryophyte B: 656
 Plant (Bryophytes) P: 522 *with picture*;
 (Classification of plants) P: 546 *with picture*
- Horny toad** [animal]
 Horned lizard H: 340 *with picture*
- Höroldt, Johann** [German painter]
 Dresden china D: 347
 Porcelain (German porcelain) P: 677
- Horoscope** [astrology] H: 341
 Astrology (Principles of astrology) A: 826 *with picture*
 House H: 384
- Horowitz, Vladimir** [Russian-American pianist]
 H: 341
- Horror comics**
 Comics (Comic books) Ci: 870
- Horror film**
 Motion picture (Filmmaking in Europe) M: 866
with picture; (Movies in the 1930's)
 M: 868; *picture on M: 853*
- Horse** [animal] H: 342 *with pictures*
 Distemper D: 238
 Extinct animal (Types of extinction) E: 457
 Hand (Animal hands) H: 40
 Harness H: 63 *with picture*
 Horse racing H: 363
 Kentucky (Agriculture) K: 289
 Rodeo R: 397 *with picture*
 Skull S: 495 *with picture*
 Turkmenistan (Economy) T: 514a *with picture*
- Horse** [slang]
 Heroin H: 213
- Horse** [sports]
 Gymnastics (Men's events) G: 448 *with picture*
- Horse, Master of the**
 Royal Household of the United Kingdom
 R: 498
- Horse bean** [plant] See *Broad bean in this index*
- Horse bot fly** [insect]
 Bot fly B: 507
- Horse brier** [plant]
 Greenbrier G: 381
- Horse chestnut** See *Horsechestnut in this index*
- Horse Fair, The** [painting by Bonheur]
 Bonheur, Rosa B: 459 *with picture*
 Painting (Women artists) P: 73-74
- Horse Feathers** [film]
 Marx brothers M: 238 *with picture*
- Horse fly** [insect] H: 363 *with picture*
 Fly (table) F: 310; *picture on F: 308*
 Insect (Mouth parts) I: 286-287; *picture on I: 282*
- Horse latitudes** [geography] H: 363
 Calms, Regions of (The horse latitudes) C: 69
 Wind (General circulation) W: 329 *with diagram*
- Horse nettle** [plant]
 Solanum So: 576
- Horse racing** [sport] H: 363 *with pictures*
 Derby D: 152
 Furlong F: 566
 Gambling (Sports betting) G: 20
 Harness racing H: 63
 Ireland (Recreation) I: 420 *with picture*
 Steeplechasing So: 883
 United Kingdom picture on U: 57
- Horse show**
 Horse (Horse shows) H: 356
- Horse vault** [sports]
 Gymnastics (Men's events) G: 448
- Horseback riding**
 Horse (Saddle horses) H: 343, (Riding equipment) H: 351; (How to ride) H: 353 *with pictures*
 Indian, American (Indians of the Plains) I: 158
 Olympic Games (Summer Olympic Games)
 O: 746e-746f
- Horsebean** [plant] See *Broad bean in this index*
- Horsecar** [vehicle]
 Streetcar So: 925
 Transportation picture on T: 389
- Horsechestnut** H: 366 *with pictures*
 Bud picture on B: 665
 Tree picture on T: 422
- Horsefly** See *Horse fly in this index*
- Horsehair**
 Horse (Coat and skin) H: 348
- Horsehair worm** [animal] H: 367
- Horsehead Nebula**
 Orion O: 856
- Horseheel** [plant]
 Elecampane E: 158
- Horsehides**
 Baseball (Equipment) B: 125 *with diagram*
- Hörselberg** [mountain, Germany]
 Tannhäuser T: 29
- Horseless carriage**
 Automobile A: 946
- Horseanship**
 Horse (How to ride) H: 353 *with pictures*
- Horsepower** [unit of measure] H: 367
 Air conditioning (Capacity of air conditioners)
 A: 179-180
 Metric system (Mechanics) M: 437-440
 Power P: 727
- Horseradish** [plant] H: 367 *with picture*
- Horse's Mouth, The** [book by Cary]
 Cary, Joyce C: 270
- Horseshoe**
 Horse (Shoes) H: 356
 Transportation (The Middle Ages) T: 388
- Horseshoe Bay** [bay, Canada]
 British Columbia picture on B: 621
- Horseshoe Bend, Battle of** [1814]
 Alabama (Territorial days) A: 275; *picture on A: 277*
 Indian wars (In the South) I: 193 *with map*
 Jackson, Andrew (The Battle of Horseshoe Bend) J: 9
 Westward movement in America (Indian conflicts) W: 247
- Horseshoe Bend National Military Park**
 [Dadeville]
 Alabama (Places to visit) A: 266
 National Park System (table: National military parks) N: 55
- Horseshoe crab** [sea animal] H: 368 *with picture*
- Horseshoe Falls** [Canada]
 Niagara Falls N: 391 *with picture*; (Description)
 N: 391-392 *with picture*; (History) N: 392-393
 Ontario (Places to visit) O: 774 *with picture*;
 (Rivers, waterfalls, and lakes) O: 778
- Horseshoe magnet**
 Magnetism M: 58 *with picture*
- Horseshoe pitching** [game] H: 368 *with diagram*
- Horsetail** [plant] H: 369 *with picture*
 Plant (Horsetails) P: 522 *with picture*;
 (Classification of plants) P: 546-547 *with picture*
 Tree (Fossil trees) T: 415
- Horsley, John Calcott** [British artist]
 Christmas (Christmas cards) C: 536
 Greeting cards G: 387
- Horthy, Nicholas** [Hungarian political leader]
 Hungary (Between world wars) H: 446
- Horticulture** H: 369
 Farm and farming (Modern crop production)
 F: 33
 FFA picture on F: 85
 Fruit F: 544
 Gardening G: 30
 Vegetable V: 292
- Horton, Alonzo E.** [American businessman]
 San Diego (The city) S: 88
- Horton, Henry H.** [American political leader]
 Tennessee (table) T: 152
- Horton, Lester** [American choreographer]
 Ailey, Alvin A: 166
- Horus** [Egyptian god] H: 370
 Egypt, Ancient (Religion) E: 137; *picture on E: 140*
 Isis I: 462
 Mythology (The Great Ennead) M: 976; (The Osiris myth) M: 976-977 *with picture*
 Osiris O: 863
 Pharaoh P: 353
 Phoenicia picture on P: 393
 Relief picture on R: 213
 Sphinx (Egyptian sphinxes) So: 780
- Horvath, Les** [American football player]
 Football (table) F: 363
- Hose**
 Fire department (Firefighting) F: 123, (Fire trucks) F: 125-126
- Hose** [clothing]
 Clothing (The Renaissance) Ci: 700
- Hosea** [biblical figure]
 Hosea, Book of H: 370

Hosea, Book of [Old Testament] H: 370

Hosiery [clothing]

Stockings **So**: 905

Hospice [health care] H: 370

AIDS (Providing medical care) A: 165

Medicare **M**: 362

Palliative care **P**: 108

Social security (Medicare) **So**: 555

Hospice [travel]

Hospice **H**: 370

Hospital **H**: 371 *with pictures*

Emergency room **E**: 258 *with picture*

Hospice **H**: 370

Medicine (The United Kingdom) **M**: 366-367;

(During the Middle Ages) **M**: 373;

(Financing advanced medical care)

M: 377-378

Mental illness (Treatment settings) **M**: 408

Nightingale, Florence (Service in Crimea)

N: 420 *with picture*

Nursing (Hospital nurses) **N**: 617

Trauma center **T**: 405

Hospital for Sick Children Foundation

Foundations (Canadian foundations) **F**: 431;

(table) **F**: 430

Hospital insurance

Insurance (Basic types of health insurance)

I: 312

Medicare **M**: 362

Social security (Medicare) **So**: 555

Hospital of St. John of Jerusalem, Order of

the [military and religious order] *See* Knights

Hospitallers *in this index*

Hospitality careers

Careers (Tourism and hospitality) **C**: 233 *with*

pictures

Hospitality management

Home economics (Hospitality management)

H: 300

Hospitallers *See* Knights Hospitallers *in this*

index

Host [biology]

Balance of nature (Disease and parasites)

B: 35

Life (The biological environment) **L**: 275-276

Parasite **P**: 153

Remora **R**: 230

Tapeworm **T**: 40

Host [computing] *See* Server *in this index*

Host cell [biology]

Antiviral drug **A**: 560

Host country [international relations]

Peace Corps (How the corps works) **P**: 207

Hostage [law] **H**: 374a

Iran (Revolution and the Islamic Republic)

I: 406a *with picture*

Iran-contrat affair (Administration actions) **I**: 407

Kidnapping **K**: 312

Lebanon (War and terrorism) **L**: 173-174

Terrorism (Hijackings) **T**: 178

Treaty (Enforcement of treaties) **T**: 409

United States, History of the (The hostage cri-

sis) **U**: 194

Hostage, The [play by Behan]

Behan, Brendan **B**: 220

Irish literature (Drama) **I**: 432

Hostage negotiating team

Police (Other activities) **P**: 621-622

Hostel

Youth hostel **Y**: 574

Hostile environment [law]

Sexual harassment **S**: 337

Hostile takeover [business]

Business (Recent developments) **B**: 726

Merger **M**: 418

Hot-air balloon

Air picture on **A**: 167

Balloon (Hot-air balloons) **B**: 57 *with diagram*;

(Recreational uses) **B**: 59 *with picture*;

(Long-distance balloon flights) **B**: 62

Bomb (History) **B**: 452 *with picture*

Montgolfier brothers **M**: 766

Hot-air oven

Range (History) **R**: 138-139

Hot August Nights [festival]

Nevada (Visitor's guide) **N**: 164

Hot cereal

Cereal **C**: 361

Hot cross bun [food]

Easter (Other foods) **E**: 44

Hot-dip galvanizing [industrial process]

Galvanizing **G**: 17

Iron and steel (Finishing) **I**: 447-448

Hot dog [food]

Food (Interesting facts about food) **F**: 329

Meat packing (Sausage making) **M**: 351 *with*

picture

Sausage **S**: 163

Hot Five [band]

Armstrong, Louis **A**: 723

Jazz (The 1920's) **J**: 70

Hot flash [physiology]

Hormone replacement therapy **H**: 338

Menopause **M**: 402

Tamoxifen **T**: 23

Hot I Baltimore, The [play by Wilson]

Wilson, Lanford **W**: 317

Hot line [communications] **H**: 374a

Cold War (Easing Cold War tensions) **Ci**: 767

Union of Soviet Socialist Republics (Relations

with the United States) **U**: 39

Hot-melt adhesive

Adhesive **A**: 56

Hot-metal car

Iron and steel (Running a blast furnace) **I**: 441

Hot-metal typesetting

Printing (Typesetting) **P**: 797

Hot rod [automobile] **H**: 374a

Hot-rolling mill [machine]

Iron and steel (Rolling) **I**: 447 *with diagram*

Hot Seven [band]

Armstrong, Louis **A**: 723

Jazz (The 1920's) **J**: 70

Hot shoe [photography]

Photography (Artificial lighting devices) **P**: 419

Hot spot [computing]

World Wide Web **W**: 500

Hot spot [geology] **H**: 374a *with map*

Plate tectonics (Plate movement) **P**: 563

Hot spot [radioactivity]

Fallout (How fallout is distributed) **F**: 18

Hot Springs [Arkansas] **H**: 374b

Arkansas **A**: 694; (Visitor's guide) **A**: 704 *with*

picture; (Springs) **A**: 708

Hot springs [geology] **H**: 374b

Hot Springs National Park [Arkansas] **H**: 374b

with picture

Arkansas (Places to visit) **A**: 704

National Park System (table: National parks)

N: 48

Hot tub

Bath (Bathing for relaxation or pleasure)

B: 163

Hot type [printing]

Type **T**: 536 *with picture*

Hot vent [oceanography] **H**: 375 *with pictures*

Atlantic Ocean (The Mid-Atlantic Ridge)

A: 864; (Ocean life) **A**: 866

Archaea **A**: 593

Ballard, Robert Duane **B**: 43

Deep sea (The deep-sea floor) **D**: 82a *with pic-*

ture; (Life in the deep sea) **D**: 82a-82b

Ocean (Sediments) **O**: 654; (The food cycle)

O: 655-658; (Discoveries) **O**: 664

Pacific Ocean (The ocean floor) **P**: 14

Hot water heater

Plumbing (The water supply system) **P**: 577-

578 *with diagram*

Hot-water heating

Heating (Steam and hot-water heating sys-

tems) **H**: 159 *with diagram*

Hotbed [gardening] **H**: 376 *with diagram*

Cold frame **Ci**: 761

Hotbox

Railroad (Rolling stock) **R**: 107-108

Hotbox detector

Railroad (Rolling stock) **R**: 107-108

Hotel **H**: 377

See also Motel *in this index*

Hôtel de Bourgogne [Paris]

Drama (The French theater) **D**: 333

Hôtel de Ville [Paris]

Paris (Famous buildings) **P**: 163-164 *with map*

Hôtel des Invalides [Paris]

Paris (Museums and art galleries) **P**: 164-165

Hôtel Dieu [hospital, Paris]

Hospital (Early hospitals) **H**: 373

Hotel Employees and Restaurant Employees

International Union **H**: 377

Labor movement (table) **L**: 8

Hotel New Hampshire, The [book by Irving]

Irving, John **I**: 459

Hotel Universe [play by Barry]

Barry, Philip **B**: 119

Hothouse [gardening]

Greenhouse **G**: 382

Hotspot [geology] *See* Hot spot *in this index*

Hotspur [literary figure]

Shakespeare, William (*Henry IV*) **S**: 359

Hottentot [people] *See* Khoikhoi *in this index*

Houdan [breed]

Chicken (Other classes) **C**: 441

Houde, Camillien [Canadian political leader]

Montreal (The war issue) **M**: 778

Houdin, Jean Eugène Robert *See* Robert-

Houdin, Jean Eugène *in this index*

Houdini, Harry [American magician] **H**: 377 *with*

picture

Magician (Escape magic) **M**: 52 *with picture*

Houdon, Jean Antoine [French sculptor] **H**: 378

with picture

Richmond (The city) **R**: 332

Sculpture (European sculpture) **S**: 253-254

with picture

Virginia (Interesting facts) **V**: 399 *with picture*

Hough [district]

Cleveland (Social problems) **Ci**: 665;

(Downturn and racial tensions) **Ci**: 667

Houma Indians [American Indians]

Baton Rouge (Government and history) **B**: 166

Hound **H**: 378 *with picture*

Dog (Hounds) **D**: 266; *pictures on* **D**: 270

Hunting (Kinds of hunting) **H**: 450

"Hound of Heaven, The" [poem by Thompson]

Thompson, Francis **T**: 262

Houngan [religion]

Haiti (People) **H**: 14-15

Hounsfield, Sir Godfrey [British engineer]

Nobel Prizes (Physiology or medicine: 1979)

N: 445

Houphouët-Boigny, Félix [Côte d'Ivoire political

leader] **H**: 379

Côte d'Ivoire (History) **Ci**: 1085

Yamoussoukro **Y**: 550

Houppelande

Clothing (The Middle Ages) **Ci**: 698-699

Hour [time] **H**: 379

Hourglass [measuring device] **H**: 379 *with pic-*

ture

Time (Devices that measure time) **T**: 288

Hourglass style

Clothing (The 1800's) **Ci**: 702 *with picture*

Hours *See* Wages and hours *in this index*

Hours, Book of

Europe picture on **E**: 411

France picture on **F**: 463

Middle Ages picture on **M**: 522

Hours of Idleness [poems by Byron]

Byron, Lord (Byron's life) **B**: 748; (Byron's

poetry) **B**: 748

Housatonic

- Capitol, United States C: 197
House Committee on Un-American Activities [U.S.] See Un-American Activities Committee in *this index*
House cricket [insect]
 Cricket Ci: 1130 *with picture*
"House Divided, A" [speech by Lincoln]
 Lincoln, Abraham (The debates with Douglas) L: 317
House dust mite [animal] See Dust mite in *this index*
House finch [bird]
 Linnet L: 338
House flag
 Flag (Flags of the sea) F: 208
House fly [insect]
 Fly F: 308 *with pictures*; (table) F: 310
 Insect (Wings) I: 288; *picture on* I: 282
 Metamorphosis *pictures on* M: 428
House for Mr. Biswas, A [book by Naipaul]
 Naipaul, V. S. N: 4
House in Paris, The [book by Bowen]
 Bowen, Elizabeth B: 519
House Journal [publication]
 Constitution of the United States (Article I, Section 5) Ci: 1006
House Made of Dawn [book by Momaday]
 American literature (Works by minority writers) A: 425
 Indian, American (Achievements in the arts) I: 181
House mouse [animal]
 Mouse M: 900 *with picture*
House of Bernarda Alba, The [play by Garcia Lorca]
 Spanish literature (Drama) So: 763
House of Burgesses [U.S. history] H: 384
 Colonial life in America (Colonial government) Ci: 794 *with picture*
 Jamestown J: 28
 London Company L: 445
 Virginia (The course toward independence) V: 420
House of Chiefs [government]
 Botswana (Government) B: 510-511
House of Commons [Canada]
 Canada, Government of (How a bill becomes law in Canada) C: 134-135 *with pictures*; (The House of Commons) C: 138
 Prime minister of Canada (Roles of the prime minister) P: 778d
House of Commons [United Kingdom] H: 384
 Address, Forms of (Officials of the Commonwealth of Nations) A: 53
 England (Government) E: 292-293
 Parliament (The House of Commons) P: 172 *with picture*
 Speaker (In Britain) So: 768
 United Kingdom (Government) U: 49 *with picture*
House of Connelly, The [play by Green]
 Green, Paul Eliot G: 379
House of Earth, The [books by Buck]
 Buck, Pearl S. B: 663
House of Fame, The [poem by Chaucer]
 Chaucer, Geoffrey (Poetry) C: 388
House of Hope [fort]
 Connecticut (Dutch exploration) Ci: 968
House of Intellect, The [book by Barzun]
 Barzun, Jacques B: 123
House of Liberties [coalition]
 Italy (Recent developments) I: 519
House of Life, The [poems by Rossetti]
 Rossetti, Dante Gabriel R: 484
House of Lords [United Kingdom] H: 384
 Address, Forms of (Officials of the Commonwealth of Nations) A: 53
 England (Government) E: 292-293
 Lady L: 25
 Nobility (Privileges of the peerage) N: 450
 Parliament (The House of Commons) P: 172; (The House of Lords) P: 173 *with picture*
 United Kingdom (Government) U: 49-50; (Gladstone and Disraeli) U: 69
House of Mirth, The [book by Wharton]
 American literature (Women writers) A: 420
House of Representatives [government] H: 385 *with picture*
 Address, Forms of (Officials of the United States) A: 53
 Capitol, United States C: 197
 Congress of the United States (The House of Representatives) Ci: 943 *with picture*; (table) Ci: 943; (Passing a bill) Ci: 945; (Congressional ethics) Ci: 948
 Constitution of the United States (Article I) Ci: 1004; (Amendment 12) Ci: 1013
 Electoral College (The College in action) E: 164
 Impeachment (Procedure) I: 91
 Mace M: 11
 Speaker (In the United States) So: 768
 State government (Organization) So: 862
 United States, Government of the (The legislative branch) U: 138; (How a bill becomes law in the United States) U: 141
 United States, History of the (The election of 1824) U: 170
 Washington, D.C. *map on* W: 76
House of Slaves [building, Gorée]
 Gorée G: 274
House of the Faun [Pompeii]
 Atrium *picture on* A: 877
House of the Seven Gables, The [book by Hawthorne]
 Hawthorne, Nathaniel (His novels) H: 115
 Salem (Location and description) S: 60
House of the Spirits, The [book by Allende]
 Latin-American literature (Recent developments) L: 113
House of Wisdom [library]
 Muslims (The Abbasids) M: 964c
House on the Rock [Wisconsin]
 Wisconsin (Places to visit) W: 356
House plant
 Gardening (Kinds of indoor gardens) G: 36 *with pictures*; *picture on* G: 31
House-raising [custom]
 Pioneer life in America (A pioneer settlement) P: 479-480; (Social activities) P: 485
House slave
 Slavery (Functions of slaves) S: 503; (Conditions of slavery) S: 503
House sparrow [bird] H: 388 *with picture*
 Bird (Birds of urban areas) B: 333 *with picture*
 Sparrow So: 765 *with picture*
 Weaver W: 172
House spider H: 388
 Spider (table) So: 790; *pictures on* So: 785, So: 788
House That Ruth Built
 Ruth, Babe R: 568
House training
 Pet (House training) P: 321
House wrap [building construction]
 House (The frame) H: 382
House wren
 Bird (Birds of urban areas) B: 333 *with picture*
 Wren W: 504; *picture on* W: 503
Houseboat H: 388 *with picture*
 Boating (Sailboats) B: 429; *picture on* B: 431
 Shelter *picture on* S: 392
Housebreaking See Housetraining in *this index*
Household budget
 Budget (Personal and family budgets) B: 669
Household Management [book]
 Russian literature (Muscovite literature) R: 559
Household paint
 Paint (Kinds of paint) P: 23
Houseleek [plant] H: 389 *with picture*
Housetman, John [American actor]
 Motion picture (Best performance by an actor in a supporting role: 1973) M: 863
Houses of Parliament [London]
 Architecture (The Gothic Revival) A: 626
 Big Ben B: 297 *with picture*
 London (The Houses of Parliament) L: 435, *picture on* L: 431
 Parliament (The British Parliament) P: 172 *with pictures*
Housetraining [pets]
 Dog (Housetraining) D: 280
 Pet (House training) P: 321
Housewife [career]
 Women's movements (Decline after 1920) W: 385-386
Housing H: 389 *with pictures*
 See also Shelter in *this index*
 Chicago (Housing) C: 427 *with pictures*; (Efforts to improve public housing) C: 436-437
 City (The people) Ci: 582; (City problems) Ci: 590 *with picture*
 City planning Ci: 598 *with pictures*
 Condominium Ci: 929
 Federal Housing Administration F: 64
 Homelessness H: 302
 Indian reservation (Description) I: 188-189
 Levitt, William Laird L: 219
 Mortgage M: 820
 New York City (Housing) N: 332
 Old age (Housing) O: 739
 Open housing O: 789
 Russia (Way of life) R: 533 *with picture*
 Tenement T: 133
 United States, History of the (A new life style) U: 191 *with picture*
 Urban renewal (History) U: 220
 See also sections on the people and their way of life in specific country articles, such as Philippines (Way of life)
Housing, Census of
 Census (Kinds of censuses) C: 346-347
Housing and Home Finance Agency [U.S. history]
 Housing (Housing since 1900) H: 391-392
 Housing and Urban Development, Department of (History) H: 393
Housing and Urban Development, Department of [U.S.] H: 393 *with picture*
 Government National Mortgage Association G: 293
 Housing (Housing since 1900) H: 391-392
 Johnson, Lyndon Baines (The Great Society) J: 150
 Urban renewal (History) U: 220
 Washington, D.C. *map on* W: 76
Housing and urban development, secretary of [U.S.]
 Housing and Urban Development, Department of H: 393
 Flag *picture on* F: 211
Housing authority [government]
 Housing (Public housing) H: 391
Housing Authority, U.S. [U.S. history]
 Housing (Housing since 1900) H: 391-392
Housing code [law]
 Housing (Local housing controls) H: 391
Housing cooperative
 Cooperative (Housing cooperatives) Ci: 1036
Housing project
 Housing (Private housing projects) H: 390
Housman, A. E. [British poet] H: 393
Houssay, Bernardo Alberto [Argentine physiologist]
 Nobel Prizes (Physiology or medicine: 1947) N: 444
Houston [Texas] H: 394 *with pictures and map*
 Texas (Population) T: 188; (Transportation) T: 202; *picture on* T: 185
Houston, Charles H. [American educator]
 Spingarn Medal (table: 1950) So: 793
Houston, David F. [American government official]
 Agriculture, Department of (table) A: 161
 Treasury, Department of the (table) T: 407
 Wilson, Woodrow (table) W: 323
Houston, George Smith [American political leader]
 Alabama (table) A: 274
Houston, Sam [American political leader] H: 399 *with portrait*
 Alamo (The siege) A: 280-281
 Fort Sam Houston F: 416
 San Jacinto, Battle of S: 99
 Santa Anna, Antonio López de (War with Texas) S: 113
 Tennessee (table) T: 152
 Texas (table) T: 203; (The Texas revolution) T: 206 *with picture*; (The Republic of Texas) T: 207; (The Civil War and Reconstruction) T: 207
 Texas Rangers (Early days) T: 211
Houston Astros [team]
 Baseball (table) B: 130
 Houston (Recreation) H: 397-398
Houston Intercontinental Airport [Houston]
 Airport (table) A: 245
Houston Livestock Show and Rodeo
 Houston (Recreation) H: 397-398
Houston Museum of Natural Science
 Houston (Museums and libraries) H: 397 *with picture*
Houston Public Library
 Houston (Museums and libraries) H: 397
Houston Rockets [team]
 Basketball (table) B: 150
 Houston (Recreation) H: 397-398
Houston Ship Channel [waterway]
 Canal (table) C: 164
 Houston (Commercial city) H: 398 *with picture*
Houston Texans [team]
 Football (American Football Conference) F: 364

- Houston (Recreation) H: 397-398
Houstoun, John [American political leader]
 Georgia (table) G: 130
Houx, Frank L. [American political leader]
 Wyoming (table) W: 532
Houyhnhnm [fictional animal]
Gulliver's Travels G: 440
 Swift, Jonathan (*Gulliver's Travels*) So: 1040
Hove [former city] See Brighton and Hove in this index
Hovell, William [Australian explorer]
 Australia (Exploring the new land) A: 922-923
 with map
Hovenweep National Monument [Colorado-Utah]
 National Park System (table: National monuments) N: 51
Hovercraft [aircraft] See Air cushion vehicle in this index
Hoveve-Zion [organization]
 Zionism (Movement to Palestine) Z: 599
Hovey, Alvin P. [American political leader]
 Indiana (table) I: 214
Hovey, Richard [American poet]
 Carman, Bliss C: 240
Hovhanness, Alan [American composer] H: 399
Howland, Carl I. [American psychologist]
 Communication (The effects of media) Ci: 887
How Does a Poem Mean? [book by Ciardi]
 Ciardi, John Ci: 551
How Green Was My Valley [film]
 Ford, John F: 381
 Motion picture (Best picture: 1941) M: 861
How the Other Half Lives [book by Riis]
 Urban renewal (History) U: 220
"How to Make Our Ideas Clear" [essay by Peirce]
 Peirce, Charles Sanders P: 230
How to Succeed in Business Without Really Trying [musical]
 Loesser, Frank L: 420
How to Win Friends and Influence People
 [book by Carnegie]
 Carnegie, Dale C: 242
Howard, Catherine [wife of]
 Henry VIII [of England] H: 188
Howard, Charles [English admiral]
 England (The reign of Elizabeth I) E: 307-308
 Spanish Armada (The two fleets) So: 755-756
Howard, Desmond [American football player]
 Football (table) F: 363
Howard, Ebenezer [British architect]
 City picture on Ci: 587
Howard, George [American political leader]
 Maryland (table) M: 255
Howard, Henry [American political leader]
 Rhode Island (table) R: 311
Howard, Henry See Surrey, Earl of in this index
Howard, John [British explorer]
 West Virginia (White settlement) W: 226
Howard, John [British social reformer] H: 400
Howard, John Eager [American political leader]
 Maryland (table) M: 255
Howard, John Winston [Australian political leader] H: 400
 Australia (table) A: 925; (Recent developments) A: 925-926
Howard, Oliver Otis [American general]
 Cochise Ci: 743
 Freedmen's Bureau F: 500
Howard, Ron [American actor/director]
 Motion picture (Best achievement in directing: 2001) M: 862
Howard, Sidney [American dramatist] H: 400
Howard, Lord Thomas [English sea captain]
 Grenville, Sir Richard G: 390
Howard University [Washington, D.C.] H: 400
Howards End [book by Forster]
 Forster, E. M. F: 410
Howe, Earl See Howe, Richard in this index
Howe, Elias [American inventor] H: 400
 Clothing (The 1800's) Ci: 702
 Sewing machine (History) S: 333-334
 Singer, Isaac Merritt S: 472
Howe, Gordie [Canadian hockey player] H: 400
Howe, Irving [American critic]
 American literature (Essays) A: 425
Howe, John Ireland [American inventor]
 Pin P: 466
Howe, Joseph [Canadian political leader] H: 401
 Halifax (Government and history) H: 21
 Nova Scotia (Progress as a province) N: 568-570
 Tupper, Sir Charles (Entry into politics) T: 493;
 (Confederation) T: 494
Howe, Julia Ward [American author] H: 401
 with portrait
 "Battle Hymn of the Republic" B: 172
 Civil War (The home front) Ci: 622
 Mother's Day M: 843
Howe, Louis [American political leader]
 Roosevelt, Franklin Delano (Tragedy strikes) R: 455; (Return to politics) R: 455
Howe, Octavius T. [American pioneer]
 Pioneer life in America (Life on the trail) P: 486-487
Howe, Oscar [American painter]
 Indian, American picture on I: 160
Howe, Richard [British admiral] H: 401
 Maryland (The Revolutionary War) M: 258
Howe, Samuel Gridley [American social reformer] H: 401
 Bridgman, Laura Dewey B: 607
Howe, Timothy O. [American government official]
 Arthur, Chester Alan (table) A: 756
Howe, Viscount See Howe, William in this index
Howe, William [British general] H: 401
 Hale, Nathan (The fateful mission) H: 18
 Revolutionary War in America (The evacuation of Boston) R: 275; (The campaign in New York) R: 280; (Trenton and Princeton) R: 281
Howell, Richard [American political leader]
 New Jersey (table) N: 249
Howell, Varina [wife of]
 Davis, Jefferson (Davis's family) D: 47
Howells, William Dean [American author]
 H: 402
 American literature (Realists) A: 419
 August (Quotations) A: 887
 Novel (The United States) N: 573
Howitzer [weapon]
 Army, United States (Artillery) A: 734
 Artillery (Kinds of artillery) A: 762 with pictures
 Firearm picture on F: 133
 Mortar M: 820
"Howl" [poem by Ginsberg]
 American literature (Literature since 1945) A: 423
 Beat movement B: 189
 Ginsberg, Allen G: 192
Howland, Esther A. [American business-woman]
 Valentine's Day (Commercial valentines) V: 264
Howleglas [book]
 Eulenspiegel, Till E: 378
Howler [animal] H: 402
 Animal picture on A: 480
Howley, Richard [American political leader]
 Georgia (table) G: 130
Hoxha, Enver [Albanian political leader] H: 402
 Albania (World War II) A: 307-308
 Cold War (The Iron Curtain descends) Ci: 763
Hoyle, Edmond [English whist player] H: 402
Hoyle, Fred [British astronomer]
 Astronomy (Advances in astrophysics) A: 848
 Big bang B: 296
Hoyt, Henry Martyn [American political leader]
 Pennsylvania (table) P: 263
Hoyt, Waite [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Hozier, Clementine [wife of]
 Churchill, Sir Winston Leonard Spencer
 (Churchill's family) C: 547 with portrait
Hradčany [hill]
 Prague (The city) P: 730
Hrawi, Elias [Lebanese political leader]
 Lebanon (Recent developments) L: 174
Hrolf [Norman chieftan] See Rollo in this index
Hrungnir [Norse mythology]
 Thor T: 265
Hsen-Hsu Hu [Chinese botanist]
 Sequoia (The dawn redwood) S: 311
Hsi Chiang See Xi Jiang in this index
Hsi-Ling-Shi See Xilingshi in this index
Hsuan-tsang [Chinese explorer]
 Exploration (Chinese exploration) E: 442
Hsun-tzu [Chinese philosopher] See Xunzi in this index
HSV-2 [virus] See Herpes simplex virus, type 2 in this index
HTGR [nuclear reactor] See High-temperature gas-cooled reactor in this index
HTML [programming language]
- Berners-Lee, Tim B: 270
 Computer (The World Wide Web) Ci: 921
 Internet (Glossary of Internet terms) I: 350a;
 (The World Wide Web) I: 350e
 Web site W: 175
HTST method [pasteurization]
 Milk (Pasteurization) M: 548
HTTP [computer]
 Berners-Lee, Tim B: 270
 Computer (Internet software) Ci: 922
 Internet (Glossary of Internet terms) I: 350a
Hu Yaobang [Chinese government official]
 H: 402
 China (Deng Xiaoping) C: 506; (Protests) C: 506
Hu Yao-pang See Hu Yaobang in this index
Hua Guofeng [Chinese government official]
 China (Deng Xiaoping) C: 506
HUAC See Un-American Activities Committee in this index
Huaca [religion]
 Inca (Religion) I: 96-97
Hualalai [volcano]
 Hawaii (Hawaii) H: 100
Huang Chao [Chinese military leader]
 Tang dynasty (The fall of the dynasty) T: 26
Huang Hai See Yellow Sea in this index
Huang He [river, China] H: 402
 Asia (Rivers) A: 793
 China (The Mongolian Border Uplands) C: 492
 Famine (Too much rainfall) F: 26
 Flood (River floods) F: 236
 River (table) R: 352
Huang He Valley [region, China]
 Asia (The Huang He and Yangtze valleys) A: 805
 World, History of the (The Huang He Valley) W: 425
Huang Ho See Huang He in this index
Huang Kungwang [Chinese artist]
 Painting (Chinese painting) P: 44-46
Huangdi [emperor of China]
 Calendar (The Chinese calendar) C: 29
 Silk (Discovery of silk) S: 461
Huánuco coca [tree]
 Coca Ci: 742
Huaraches [clothing]
 Mexico (Clothing) M: 456
Huari Indians
 Indian, American (Indians of the Andes) I: 173-174
 Nazca N: 92
Huarte, John [American football player]
 Football (table) F: 363
Huáscar [Inca emperor]
 Inca (The empire) I: 98
Huascarán [mountain, Peru]
 Andes Mountains (Physical features) A: 452
 Peru (The highlands) P: 311
Huasipungo [book by Icaza]
 Latin-American literature (The early 1900's) L: 113
Huasos [cowboys]
 Chile (Clothing) C: 462; picture on C: 467
Huayna Capac [Inca emperor]
 Inca (The empire) I: 98
Hub [money]
 Money (Minting coins) M: 713 with pictures
Hub and spoke system
 Aviation (Recent developments) A: 991
Hub of the Universe [nickname]
 Boston B: 495
Hubbard, Cal [American umpire]
 Baseball (table: Hall of Fame) B: 134
Hubbard, Elbert [American publisher]
 García Iñiguez, Calixto G: 29
Hubbard, Gardiner Green [American lawyer]
 Bell, Alexander Graham (The Boston teacher) B: 240
 Telephone (The Bell System) T: 100
Hubbard, Henry [American political leader]
 New Hampshire (table) N: 223
Hubbard, John [American political leader]
 Maine (table) M: 87
Hubbard, L. Ron [American religious leader]
 Scientology S: 208
Hubbard, Lucius F. [American political leader]
 Minnesota (table) M: 602
Hubbard, Mabel [wife of]
 Bell, Alexander Graham (The Boston teacher) B: 240
Hubbard, Richard B. [American political leader]
 Texas (table) T: 203
Hubbard, Richard D. [American political leader]

- Connecticut (table) Ci: 967
- Hubbard, Samuel D.** [American government official]
Fillmore, Millard (table) F: 102
- Hubbard squash** [plant]
Squash (Winter squashes) So: 813 *with picture*
- Hubbell, Carl** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Hubbell Trading Post National Historic Site** [Arizona]
National Park System (table: National historic sites) N: 52-53
- Hubble, Edwin Powell** [American astronomer] H: 403
Andromeda Galaxy A: 457
Astronomy (Optical astronomy) A: 838-841; (Discovering other galaxies) A: 848 *with picture*
Galaxy (Origin of galaxies) G: 8b-9
Mount Wilson Observatory M: 890
Redshift R: 192
- Hubble Space Telescope** H: 403 *with picture*
Astronomy (Optical astronomy) A: 838-839; (Ultraviolet astronomy) A: 844; *picture on* A: 834
Exploration (Space exploration) E: 452 *with picture*
Jupiter (The impact of Comet Shoemaker-Levy 9) J: 200 *with picture*
Planet (The planets of our solar system) P: 510-511
Pluto P: 581 *with picture*
Satellite (History of satellite study) S: 150c-150d
Telescope (Producing detailed images) T: 103
- Hubble's law** [astronomy]
Galaxy (Origin of galaxies) G: 8b-9
- Hubel, David Hunter** [American physiologist]
Nobel Prizes (Physiology or medicine: 1981) N: 445
- Huber, Andrew** [American settler]
Hoover, Herbert Clark (Boyhood) H: 326
- Huber, Robert** [German chemist]
Nobel Prizes (Chemistry: 1988) N: 443
- Hubertusburg, Treaty of** [1763]
Seven Years' War (In Europe) S: 328
- Hubley, Faith** [American animator]
Animation (Animation in the mid-1900's) A: 514a
- Hubley, John** [American animator]
Animation (Animation in the mid-1900's) A: 514a
- Hübner, Johann** [German educator]
Encyclopedia (An age of experiment) E: 268a
- Hucksabee, Mike** [American political leader]
Arkansas (table) A: 712
- Huckleberry** [shrub] H: 404 *with picture*
- Huckleberry Finn, Adventures of** [book by Twain]
American literature (Mark Twain and Henry James) A: 420
Novel (The United States) N: 573
Twain, Mark (Productive years in Hartford) T: 529
- HUD** See Housing and Urban Development, Department of *in this index*
- Huddle** [group]
Fellowship of Christian Athletes F: 69
- Hudibras** [poem by Butler]
Butler, Samuel B: 729
- Hudson, Henry** [English explorer] H: 404 *with picture and map*
Canada, History of (Start of the fur trade) C: 142
Delaware (Exploration and early settlement) D: 110 *with picture*
Exploration (The French and English in North America) E: 446-447 *with map*
Flag *picture on* F: 209
New York (Exploration and settlement) N: 314
Northwest Passage N: 528
Pennsylvania (Exploration and settlement) P: 264
- Hudson, John** [son of]
Hudson, Henry (Northern voyages) H: 404
- Hudson, R. P.** [American physicist]
Parity (physics) P: 167
- Hudson, William Henry** [British naturalist] H: 405
- Hudson Bay** [bay, Canada] H: 405 *with map*
Canada (Rivers, waterfalls, and lakes) C: 118-119
Exploration (The French and English in North America) E: 446-447
- Hudson Bay Lowlands** [Canada]
Canada (Land regions) C: 112-117 *with map*
Manitoba (Land regions) M: 154 *with picture*
Ontario (Land regions) O: 776
Quebec (Land regions) Q: 22
- Hudson River** (New York) H: 405
Lincoln Tunnel L: 329
New York *picture on* N: 290
- Hudson River Railroad**
Vanderbilt, Cornelius V: 279
- Hudson River School** [art] H: 406 *with picture*
Church, Frederick Edwin C: 541
Cole, Thomas Ci: 771
- Hudson River tunnels** [New Jersey-New York] H: 406
Lincoln Tunnel L: 329
New York City (Transportation) N: 334-335
- Hudson seal** [fur]
Muskrat M: 963
- Hudsonian curlew** [bird]
Curlew Ci: 1195
- Hudson's Bay Company** H: 407 *with picture*
British Columbia (Schools) B: 616; (The border dispute) B: 628; (The colonial period) B: 630
Canada, History of (Exploration of the West) C: 145
Fur trade (The early fur trade) F: 564
Hudson, Henry (North American voyages) H: 404-405
Manitoba (Exploration) M: 160; (The Red River Colony) M: 160
Nevada (Exploration) N: 173
Northwest Territories (Creation of the Northwest Territories) N: 533
Nunavut (Arrival of the Europeans) N: 611-612
Ontario (Early settlement) O: 784
Prairie Provinces (History) P: 733
Radisson, Pierre Esprit R: 99
Saskatchewan (The coming of the fur traders) S: 146
Simpson, Sir George S: 468
Trading post T: 366
Victoria V: 357
Winnipeg (History) W: 341
- Hue** [city, Vietnam] H: 407
Vietnam (Independence) V: 370
- Hue** [color]
Color (Characteristics of color) Ci: 824 *with diagrams*
- Hueffer, Ford Madox** [British author] See Ford, Ford Madox *in this index*
- Huemul** [animal]
Deer (table) D: 85; (Central and South American deer) D: 85-86
- Huerta, Adolfo de la** [Mexican political leader]
Ávila Camacho, Manuel A: 993
- Huerta, Dolores Fernandez** [American activist] H: 408
- Huerta, Victoriano** [Mexican political leader]
Mexico (The Revolution of 1910) M: 472
Carranza, Venustiano C: 248
Mexico City (Revolution and growth) M: 478
Wilson, Woodrow (Crisis in Mexico) W: 323
- Huey P. Long Bridge** (New Orleans)
Louisiana (Transportation) L: 495
- Huffman, Donald R.** [American physicist]
Carbon (Fullerenes) C: 206
- Hufnagel, Charles** [American doctor]
Heart (Development of heart surgery) H: 144
- Hufstедler, Shirley Mount** [American government official] H: 408
- Huggins, Charles Brenton** [American physiologist]
Nobel Prizes (Physiology or medicine: 1966) N: 445
- Huggins, Miller** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Hugh Capet** [king of France] H: 408
Capetian dynasty C: 191
France (The Capetian dynasty) F: 471
- Hugh Keenleyside Dam**
British Columbia (The mid-1900's) B: 630
- "Hugh Selwyn Mauberley"** [poem by Pound]
Pound, Ezra Loomis P: 722
- Hughes, Charles** [British performer]
Circus (The birth of the circus) Ci: 562b
- Hughes, Charles Evans** [American jurist] H: 408 *with portrait*
Fairbanks, Charles Warren F: 8
Harding, Warren Gamaliel (Return to normalcy) H: 58
New York (table) N: 313
- Wilson, Woodrow (Election of 1916) W: 324
- Hughes, Edward David** [British chemist]
Ingold, Sir Christopher I: 270
- Hughes, Harold E.** [American political leader]
Iowa (table) I: 391
- Hughes, Harry R.** [American political leader]
Maryland (table) M: 255
- Hughes, Howard Robard** [American businessman] H: 408
Nevada (The mid-1900's) N: 176
- Hughes, Langston** [American author] H: 409
African Americans *picture on* A: 136k
American literature (The Harlem Renaissance) A: 422
Johnson, James P. J: 143
- Hughes, Richard J.** [American political leader]
New Jersey (table) N: 249
- Hughes, Sarah T.** [American jurist]
Johnson, Lyndon Baines (Assassination of President Kennedy) J: 148 *with picture*
Kennedy, John Fitzgerald (The new President) K: 267
- Hughes, Simon P.** [American political leader]
Arkansas (table) A: 712
- Hughes, Ted** [British poet] H: 409
English literature (Recent English poetry) E: 323
Plath, Sylvia P: 566
- Hughes, Thomas** [British author] H: 409
- Hughes, William Morris** [Australian political leader]
Australia (table) A: 925
- Hughes Tool Company**
Hughes, Howard Robard H: 409
- Hugo, Victor Marie** [French author] H: 409 *with portrait*
Drama (Romanticism) D: 337
French literature (Romantic poetry) F: 521; (Romantic drama) F: 521
Marx, Karl (*Das Kapital*) M: 237
- Hugoton field** [region, Kansas]
Helium (Production) H: 176
Kansas (Mining) K: 232
- Huguenots** [French history] H: 410 *with picture*
Calvin, John (Calvinism) C: 71
Florida (Exploration and Spanish settlement) F: 261
France (Religious wars) F: 473
Henry II (king of France) H: 186
Henry III [king of France] H: 186
Henry IV [king of France] H: 186
La Rochelle L: 78
Louis XIV L: 475
Nantes, Edict of N: 12
Reformation (John Calvin) R: 198
Richelieu, Cardinal (Strengthening the monarchy) R: 331
Saint Bartholomew's Day, Massacre of S: 31
- Huguenots, Les** [opera by Meyerbeer]
Meyerbeer, Giacomo M: 479
- Hui Neng, the Sixth Patriarch, Chopping Bamboo at the Moment of Enlightenment** [painting by Liang Kai]
Painting (Chinese painting) P: 44-46 *with picture*
- Hui-Tsung** [Chinese emperor] See Huizong *in this index*
- Huichol** [American Indian]
Mexico *picture on* M: 457
- Huidobro, Vicente** [Chilean poet]
Latin-American literature (The early 1900's) L: 113
- Huilliche Indians** [American Indians]
Araucanian Indians A: 592
- Huipil grande** [clothing]
Mexico (Clothing) M: 456
- Huis ten Bosch** [palace, The Netherlands]
Hague, The H: 6
- Huitzilopochtli** [Aztec god]
Aztec (Religion) A: 1000
Mythology (American Indian mythology) M: 985-986
- Huizinga, Johan** [Dutch historian] H: 411
- Huizong** [Chinese emperor] H: 411
- Hujer** [community]
Saudi Arabia (The founding of Saudi Arabia) S: 161
- Hukbong Magpapalayang Bayan** [Philippine history] See Huks *in this index*
- Huks** [Philippine history]
Guerrilla warfare (History) G: 420-421
Philippines (Independence) P: 380
- Hula** [dance]
Hawaii H: 88; (Dancing and music) H: 94 *with picture*

- Pacific Islands (Recreation) P: 6
Hula, Lake [former lake]
 Jordan River J: 167
Hulbert, William [American sportsman]
 Baseball (table: Hall of Fame) B: 134
Hull [botany]
 Cotton (Cotton seeds) Ci: 1086-1087
 Rice (Structure) R: 323 *with picture*; (Other uses) R: 323
Hull [city, England] H: 411
Hull [ship]
 Motorboat racing (Hull designs) M: 876 *with pictures*
 Sailing (Hull) S: 23 *with diagram*
 Ship (The chief parts of a ship) S: 424
 Submarine So: 939
Hull, Albert W. [American engineer]
 Electronics (The vacuum tube era) E: 215
 Vacuum tube (Development of the vacuum tube) V: 259
Hull, Bobby [Canadian hockey player] H: 411 *with portrait*
Hull, Charles J. [American businessman]
 Hull House H: 412
Hull, Clark Leonard [American psychologist]
 H: 412
 Hypnotism (Scientific studies) H: 479-480
Hull, Cordell [American statesman] H: 412 *with portrait*
 Roosevelt, Franklin Delano (Attitude toward Japan) R: 459
Hull, Isaac [American military leader] H: 412
Constitution Ci: 995
Hull, Jane Dee [American political leader]
 Arizona (table) A: 687; (The late 1900's) A: 691-692
Hull, Josephine [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1950) M: 863
Hull, William [American military leader] H: 412
 War of 1812 (Land campaign of 1812) W: 31
Hull House [Chicago] H: 412
 Addams, Jane A: 46
 Chicago (A city reborn) C: 435
 King, William Lyon Mackenzie (Education) K: 325
 Lathrop, Julia Clifford L: 90
 Progressive movement *picture on* P: 813
 Settlement house S: 324
Hull-Rust mine [Minnesota]
 Hibbing H: 221
Hulling [agriculture]
 Rice (Cleaning and hulling) R: 326-327 *with picture*
Hulme, Denis [New Zealand race driver]
 Automobile racing (table: Grand Prix world champions) A: 990
Hulme, Kerī [New Zealand author]
 New Zealand (The arts) N: 349
Hulse, Russell Alan [American physicist]
 Nobel Prizes (Physics: 1993) N: 442
Hum [historical region]
 Bosnia-Herzegovina (History) B: 492
Human behavior *See* Behavior *in this index*
Human being H: 412 *with pictures*
See also Female; Human body; Male *in this index*
 Animal (Animals and people) A: 471; (The future of animals) A: 504
 Anthropology A: 545
 Human Genome Project H: 427
 Mind M: 562
 Primate (Anthropoids) P: 778 *with picture*; (The evolution of primates) P: 778b-778c *with diagram*
 Psychology P: 847
Human body [anatomy] H: 416 *with pictures*
 Anatomy A: 448b
 Death (Medical aspects of death) D: 61
 Growth (Human growth) G: 404
 Human being (Characteristics of human beings) H: 413
 Leonardo da Vinci (Leonardo's works) L: 200a *with picture*
 Mind (The mind-body problem) M: 563
 Nutrition N: 624
 Water (Water in living things) W: 118
Human cannonball [circus act]
 Circus *picture on* Ci: 562a
Human capital
 Capital C: 192
 Economics (Making the economy grow) E: 59
Human chorionic gonadotropin [hormone]
 Pregnancy (Confirming pregnancy) P: 734a
 Testicular cancer T: 181
Human Comedy, The (books by Balzac)
 Balzac, Honoré de B: 70
 French literature (Romantic fiction) F: 521
 Novel (France) N: 573
Human development
 Aging A: 141
 Baby (The developing baby) B: 4 *with diagrams*; (Growth and development) B: 6 *with pictures*
 Cartilage C: 263
 Child C: 448 *with pictures*
 Developmental psychology D: 173
 Growth (Human growth) G: 404
 Home economics (Human development and family studies) H: 300
 Human being (Physical characteristics) H: 413-414
 Intelligence I: 317
 Language L: 62
 Learning L: 162
 Learning disabilities L: 165
 Liping L: 349
 Nutrition N: 624
 Personality P: 302
 Piaget, Jean P: 445
 Play P: 570
 Progeria P: 811
 Psychology P: 847
 Sleep (The need for sleep) S: 507
 Teeth (Kinds of teeth) T: 79
See also the list of Related Articles in the Human body article
Human ecology
 Home economics H: 300
 Sociology (Population characteristics) So: 564
Human engineering *See* Ergonomics *in this index*
Human environmental sciences *See* Home economics *in this index*
Human factors engineering *See* Ergonomics *in this index*
Human Genome Project [genetics] H: 427
 Biology (Current research and issues) B: 320-321
 Gene mapping G: 81
 Heredity (The Human Genome Project) H: 210
 Medicine (The challenge of genetics) M: 378
 Watson, James Dewey W: 147
 Wellcome Trust W: 193
Human geography
 Geography (Human geography) G: 94; *picture on* G: 92
Human growth hormone
 Heredity (The era of genetic engineering) H: 209
Human immunodeficiency virus
 AIDS A: 163
 Disease *picture on* D: 229
 Evolution (Direct observation of evolution) E: 431
 Transplant (Sources of donor organs) T: 380
Human papilloma virus
 Cancer (Viruses) C: 171
 Cervical cancer C: 364
Human races *See* Races, Human *in this index*
Human relations [psychology] H: 427
 Group dynamics G: 402
 Industrial relations I: 245
 Personnel management P: 304
 Psychology P: 847
 Segregation S: 285
 Social psychology So: 552
Human relations curriculum
 Education (Education for whom?) E: 107
Human reproduction *See* Reproduction, Human *in this index*
Human resources [economics]
 Labor force L: 3
Human resources development, Minister of [office]
 Canada, Government of (The Cabinet) C: 132; *diagram on* C: 137
Human resources management [business] *See* Personnel management *in this index*
Human rights H: 428
 Bill of rights B: 301
 Bosnia-Herzegovina (History) B: 492-493
 Civil rights Ci: 608
 Ford Foundation (Programs) F: 382
 Helsinki Accords H: 180
 Human Rights, Universal Declaration of H: 428a
 Human Rights Watch H: 430
 Slavery (Views of slavery) S: 502
 United Nations (Human rights) U: 88
 United Nations Commission on Human Rights U: 97
Human Rights, Commission on [United Nations]
 Human rights (Relief and other assistance) H: 428a
Human Rights, Universal Declaration of [1948] H: 428b
 Bill of rights (The United Nations General Assembly) B: 302
 Civil rights (Civil rights today) Ci: 611
 Freedom of assembly (In other countries) F: 504
 Human rights (The development of human rights) H: 428-428a
 Naturalization (History) N: 67
 United Nations (Human rights) U: 88
 United Nations Commission on Human Rights U: 97
Human Rights Act [United Kingdom, 1998]
 Bill of rights (English Bill of Rights) B: 302
Human Rights Watch [organization] H: 430
 Human rights (Independent organizations) H: 428a
Human sacrifice
 Aztec (Religion) A: 1000 *with picture*
 Inca (Religion) I: 96-97
 Indian, American (Why the Indians fought) I: 144-145; (Ceremonies) I: 148 *with picture*
 Maya (Religion) M: 322-323
 Mythology (American Indian mythology) M: 985-986
Human sciences *See* Home economics *in this index*
Human Sexual Response [book by Masters and Johnson]
 Masters and Johnson M: 297
Human Zoo, The [book by Morris]
 Morris, Desmond M: 816
Humana Building
 Louisville (History) L: 506-507
Humanae Vitae [encyclical, 1968]
 Paul VI P: 200
Humane Association, American
 Rodeo R: 397
Humane society H: 430
 Society for the Prevention of Cruelty to Animals So: 563 *with picture*
Humane Society of the United States [organization]
 Animal rights movement A: 510
Humanism [philosophy] H: 430
 Biography (The Middle Ages) B: 313
 Education (The Renaissance) E: 100
 French literature (The Renaissance) F: 519
 German literature (The Renaissance) G: 139
 History (The Humanist movement) H: 262
 Italian literature (Humanism and the Renaissance) I: 494
 Middle Ages (The growth of humanism) M: 528
 Nicholas V N: 403
 Painting (The Renaissance) P: 51
 Petrarch P: 327
 Philosophy (Terms used in philosophy) P: 384; (Modern philosophy) P: 387
 Renaissance (Humanism) R: 233-234; (Christian humanism) R: 237-238
 Sculpture (Italian Renaissance sculpture) S: 251
 Women's movements (From the Renaissance to the 1800's) W: 384
 World, History of (The Renaissance) W: 438
Humanistic psychology
 Maslow, Abraham Harold M: 265
 Psychology (Modern psychology) P: 850
Humanistic psychotherapy
 Psychotherapy (Humanistic psychotherapy) P: 852
Humanistic script
 Paleography P: 103
Humanistic theory [psychology]
 Education (How people learn) E: 96
Humanities
 Humanism H: 430
 Liberal arts L: 226
 Social science (Relationship to humanities) So: 553
Humber, River [England] H: 431

- Humber Bridge** [England]
Bridge (table: Suspension) B: 603
- Humbert** [Italian nobleman]
Savoy S: 166
- "Humble-Bee, The"** [poem by Emerson]
Emerson, Ralph Waldo (His poetry) E: 259
- Humboldt, Alexander von** *See* Humboldt, Baron von *in this index*
- Humboldt, Baron von** [German scientist]
H: 432
Botany (Later developments) B: 509
Geography (The growth of geography) G: 95-96
Geology (The rock dispute) G: 98-99
- Humboldt Current**
Peru Current P: 317
- Humboldt National Forest**
Great Basin National Park G: 336
- Humboldt River** [Nevada]
Nevada (Rivers and lakes) N: 166
- Humboldt Sink** [region, Nevada]
Great Basin G: 336 *with map*
- Humboldt University**
Berlin (The downtown areas) B: 260
Germany (Education) G: 151
- Humboldt's Gift** [book by Bellow]
Bellow, Saul B: 244
- Humboldt's woolly monkey**
Woolly monkey W: 402
- Hume, David** [Scottish philosopher] H: 432
Freethinker F: 509
Kant, Immanuel K: 244
Philosophy (Modern philosophy) P: 387-388
Political science (Liberalism) P: 639
Psychology (Beginnings) P: 849
- Hume, Hamilton** [Australian explorer]
Australia (Exploring the new land) A: 922-923 *with map*
- Hume, John** [Irish political leader]
Nobel Prizes (Peace: 1998) N: 449
Trimble, David T: 445
- Humectant** [chemical]
Food preservation (Additives) F: 343
- Humerus** [anatomy]
Arm A: 717 *with diagram*
Elbow E: 157 *with diagrams*
Frog picture on F: 537
Human body diagram on H: 422
Shoulder S: 439 *with picture*
- Humid continental climate**
Climate (Humid continental climates) Ci: 676c
- Humid oceanic climate**
Climate (Humid oceanic climates) Ci: 676c
- Humid subtropical climate**
Climate (Humid subtropical climates) Ci: 676c
- Humidifier** [machine] H: 432
Heating (Warm-air heating) H: 159; H: 157
- Humidity** [weather] H: 433 *with diagram*
Air (Moisture in the air) A: 167
Air conditioning (Controlling the moisture) A: 178
Dehumidifier D: 93
Heating (Warm-air heating) H: 159
Humidifier H: 432
Hygrometer H: 473
Rain (Rainfall distribution) R: 124
Weather (table: Weather terms) W: 157;
(Humidity) W: 158
- Hummer**
Automobile picture on A: 969
Jeep J: 75
- Hummingbird** [bird] H: 433 *with pictures*
Animal picture on A: 469
Bird (Feeding methods) B: 350; (How birds move) B: 350-352; picture on B: 329
Evolution picture on E: 427
Heart (Birds and mammals) H: 146-147
Pollen (Cross-pollination) P: 645
- Hummingbird moth** *See* Hawk moth *in this index*
- Hummock**
Swamp So: 1015
- Hummus** [food]
Chickpea C: 446
- Humor** [physiology]
Blood (History of blood research) B: 414
Drama (Elizabethan playwrights) D: 331-332
- Humor** [wit] H: 435
See also the list of Related Articles in the Humor article
- Humoral immune response** [physiology]
Immune system (The immune response) I: 88 *with diagram*
- Humorous Phases of Funny Faces** [film]
Animation (Early animation) A: 514
- Hump** [zoology]
Camel (The hump) C: 78 *with pictures*
- Hump, The** [military history]
Air force (World War II) A: 185-186
World War II (The China-Burma-India theater) W: 489; picture on W: 491
- Hump yard** (railroad)
Railroad (Freight operations) R: 109-110 *with pictures*
- Humpback** [disorder]
Hunchback H: 437
- Humpback salmon** *See* Pink salmon *in this index*
- Humpback whale** [sea animal] H: 436
Animal (Animal travelers) A: 502
Whale (Rorquals) W: 255-258 *with picture*;
(Group life) W: 261
- Humperdinck, Engelbert** [German composer]
H: 436
- Humphrey, George Magoffin** [American government official]
Eisenhower, Dwight David (table) E: 152
Treasury, Department of the (table) T: 407
- Humphrey, Hubert Horatio** [American political leader] H: 436 *with portrait*
Johnson, Lyndon Baines (Full-term President) J: 149
Minneapolis picture on M: 580
Minnesota (Politics) M: 602-603
Nixon, Richard Milhous (The 1968 election) N: 432
Political convention (Further reforms of the convention system) P: 630
Vice President of the United States (Growth of the vice presidency) V: 353
- Humphrey, Lyman Underwood** [American political leader]
Kansas (table) K: 234
- Humphrey, Muriel Buck** [wife of]
Humphrey, Hubert Horatio (Early life) H: 436
- Humphreys, Benjamin G.** [American political leader]
Mississippi (table) M: 640
- Humphreys, West H.** [American jurist]
Impeachment (History) I: 91-92
- Humphreys Peak**
Arizona (Land regions) A: 680
- Humuhumu-nukunuku-a-pua'a** [fish]
Fish picture on F: 154
- Humus** [earth] H: 437
Plumbing (The drainage system) P: 578-579
Sewage (Rural sewerage systems) S: 330-331
Soil (Plant and animal matter) So: 573
Topsoil T: 333
- Hun** [people] H: 437
Asia (Nomadic invasions) A: 805
Attila A: 879
Europe (Germanic invasions) E: 409
Goths G: 279
Russia (Early days) R: 547
- Hun Sen** [Cambodian political leader]
Cambodia (History) C: 73-74
- Hunchback** [disorder] H: 437
- Hunchback of Notre Dame, The** [book by Hugo]
Hugo, Victor Marie (His works) H: 410
French literature (Romantic fiction) F: 521
- Hundred** [English history]
Delaware (Local government) D: 109
Shire S: 429
- Hundred Acre Wood** [fictional place]
Milne, A. A. M: 556
- Hundred Days** [U.S. history]
Great Depression (The New Deal) G: 341
New Deal (The Hundred Days) N: 200
Roosevelt, Franklin Delano (The "Hundred Days") R: 457
- Hundred Days, The** [French history]
Louis XVIII L: 477
Napoleon I (The Hundred Days and Waterloo) N: 18
- Hundred Penny Box, The** [book by Mathis]
Literature for children picture on L: 375
- Hundred-year-old egg** [food]
Food (Interesting facts about food) F: 329
- Hundred Years' War** [1337-1453] H: 437
Agincourt, Battle of A: 141
England (The Hundred Years' War) E: 306 *with picture*
France (A period of wars) F: 473
Henry V [of England] H: 187
Joan of Arc, Saint J: 128
Middle Ages (A halt in progress) M: 528
- Philip VI P: 370
Poitiers, Battle of P: 603
Salic law S: 66
- Hung jury**
Jury (Petit juries) J: 202
Trial (Reaching a verdict) T: 437
- Hungarian Democratic Forum** [political party]
Hungary (Multiparty elections) H: 448
- Hungarian language** *See* Magyar *in this index*
- Hungarian oak** [tree]
Oak (Other oaks) O: 636
- Hungarian partridge** [bird]
Partridge P: 189
- Hungarian pointer** [dog]
Vizsla V: 433 *with picture*
- Hungarian Revolution** [1956]
Cold War (Unrest in Eastern Europe) Ci: 765
Hungary (Unsuccessful revolution) H: 447 *with picture*
- Hungarian Socialist Party**
Hungary (Politics) H: 439; (History) H: 445-448
- Hungary** H: 438 *with pictures and maps*
Cold War (Unrest in Eastern Europe) Ci: 765
Communism (In Eastern Europe) Ci: 896
Croatia (History) Ci: 1148a-1148b
Czech Republic (Habsburg rule) Ci: 1213
Germany (East Germany) G: 170
Magyars M: 64
North Atlantic Treaty Organization (History) N: 471
Slovakia (Hungarian rule) S: 509
Transylvania T: 402
Trianon, Treaty of T: 439
Warsaw Pact W: 39
World War II (table: The Axis) W: 471; (table: Military casualties) W: 497
See also the list of Related Articles in the Hungary article
- Hunger** H: 449
See also Starvation *in this index*
Population (Effects) P: 674
United Nations (Fighting hunger) U: 89
- Hunger strike**
Strike So: 928
- Hunkesni** *See* Sitting Bull *in this index*
- Hunkpapa Sioux Indians**
Gall G: 13
- Hunlen Falls**
British Columbia (Rivers, waterfalls, and lakes) B: 624
- Hunley** [submarine]
Submarine (Early submarines) So: 942
- Hunn, John** [American political leader]
Delaware (table) D: 109
- Huns** *See* Hun *in this index*
- Hunsdon, Lord** [English political leader]
Shakespeare, William (Acting companies) S: 353-354
- Hunt, E. Howard** [American public figure]
Watergate (The break-in and cover-up) W: 144
- Hunt, Frank W.** [American political leader]
Idaho (table) I: 42
- Hunt, George Wylie Paul** [American political leader]
Arizona (table) A: 687; (Progress as a state) A: 690
- Hunt, Guy** [American political leader]
Alabama (table) A: 274; (Recent developments) A: 278
- Hunt, H. L.** [American businessman] H: 449
- Hunt, Helen** [American actress]
Motion picture (Best performance by an actress: 1997) M: 862
- Hunt, Henry A.** [American educator]
Spingarn Medal (table: 1930) So: 793
- Hunt, Holman** *See* Hunt, William Holman *in this index*
- Hunt, Irene** [American author]
Newbery Medal (table) N: 359
- Hunt, James** [British race driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Hunt, James B., Jr.** [American political leader]
North Carolina (table) N: 490
- Hunt, Sir John** [British mountain climber]
Mount Everest M: 884
- Hunt, Kyle** [pen name]
Creasey, John Ci: 1123
- Hunt, Leigh** [British editor] H: 449
Keats, John (His life) K: 253
- Hunt, Lester C.** [American political leader]
Wyoming (table) W: 532
- Hunt, Linda** [American actress]
Motion picture (Best performance by an

actress in a supporting role: 1983) M: 863
Hunt, Richard Morris [American architect]
 H: 450
 Statue of Liberty (The pedestal) So: 873;
 (Inspiration and preparations) So: 876
Hunt, Timothy [British biologist]
 Nobel Prizes (Physiology or medicine: 2001)
 N: 445
Hunt, Walter [American inventor]
 Pin P: 466
 Sewing machine (History) S: 333-334
Hunt, Ward [American jurist]
 Supreme Court of the United States (table)
 So: 1000
Hunt, Washington [American political leader]
 New York (table) N: 313
Hunt, William H. [American government official]
 Arthur, Chester Alan (table) A: 756
 Garfield, James Abram (table) G: 42
Hunt, William Holman [British painter]
 Painting (The Pre-Raphaelite Brotherhood)
 P: 71
 Pre-Raphaelite Brotherhood P: 756 *with picture*
Hunt of the Unicorn, The [tapestries]
 Tapestry picture on T: 39
Hunt Oil Company
 Hunt, H. L. H: 449
Hunter, Catfish [American baseball player]
 Baseball (table: Hall of Fame) B: 134
Hunter, Evan See McBain, Ed *in this index*
Hunter, Holly [American actress]
 Motion picture (Best performance by an
 actress: 1993) M: 862
Hunter, John [British doctor]
 Surgery (History) So: 1007
Hunter, Kim [American actress]
 Motion picture (Best performance by an
 actress in a supporting role: 1951) M: 863
Hunter, Robert M. T. [Confederate political
 leader]
 Hampton Roads Conference H: 37
Hunter Mountain [New York]
 Catskill Mountains C: 305
Hunting H: 450
See also Whaling in this index
 Animal (Hunting) A: 505
 Conservation (Biodiversity conservation)
 Ci: 976; (Conservation in the United
 States) Ci: 985; (Africa) Ci: 990
 Egypt, Ancient (Recreation) E: 137
 Elephant E: 226
 Endangered species (Overhunting) E: 270
 Falconry F: 14
 Fox hunting F: 442
 Game G: 21
 Hound H: 378
 Indian, American (Hunting, gathering, and fish-
 ing) I: 141; (The first Americans) I: 151
 Inuit (Hunting and fishing) I: 354d
 Peregrine falcon P: 284
 Poaching P: 587
 Pointer P: 600
 Prehistoric people (The first human beings)
 P: 745; (The improvement of tools) P: 750
 Retriever R: 265
 Rifle R: 338 *with pictures*
 Safari S: 8
 Shotgun S: 438
 Wildlife conservation (Methods of wildlife con-
 servation) W: 304
Hunting and gathering [anthropology]
 Human being (Hunting and gathering soci-
 eties) H: 415
 Indian, American (Hunting, gathering, and fish-
 ing) I: 141
 Nomad N: 452
Hunting dog
 Dog (Sporting dogs) D: 268 *with pictures*
 Hunting (Kinds of hunting) H: 450
Hunting gull [bird] *See Jaeger in this index*
Hunting knife
 Knife (Types of knives) K: 345-346 *with pic-
 tures*
Hunting license
 Hunting (Game laws) H: 450
"Hunting of the Snark, The" [poem by Carroll]
 Carroll, Lewis (Other works) C: 249
Hunting spider
 Spider (Hunting spiders) So: 787 *with pictures*
Hunting Stewart pleid
 Tartan picture on T: 47
Hunting whip
 Horse (The whip) H: 351

Huntington [city, West Virginia] H: 451
Huntington, Collis Potter [American business-
 man]
 California (Early statehood) C: 62
Huntington, George [American physician]
 Huntington's disease H: 451
Huntington, Samuel [1731-1796, American
 patriot] H: 451
 Connecticut (table) Ci: 967
Huntington, Samuel [American political leader]
 Ohio (table) O: 699
Huntington Library [San Marino, California]
 Los Angeles (Museums) L: 466
Huntington's chorea (disease) *See*
 Huntington's disease *in this index*
Huntington's disease H: 451
 Brain (Genetic disorders) B: 557-558
 Genetic testing (Genes associated with dis-
 ease) G: 85
 Heredity (table) H: 204
Hunt, Jonathan [American political leader]
 Maine (table) M: 87
Huntsman [sports]
 Fox hunting F: 442
Huntsman, Benjamin [American inventor]
 Iron and steel (The first steel) I: 451
**Huntsman Marine Science Centre and
 Aquarium** [St. Andrews]
 New Brunswick (Places to visit) N: 188
Huntsman's-cup [plant]
 Pitcher plant P: 499
Huntsville [city, Alabama] H: 451
 Alabama A: 256; (Population) A: 260; (Early
 statehood) A: 275
Hunyadi, John [Hungarian nobleman]
 Hungary (The Kingdom of Hungary) H: 445
Hunza [region, Pakistan] H: 452
Hunzukuks [people]
 Hunza H: 452
Hupa Indians [American Indians]
 California (Early days) C: 60
 Indian, American pictures on I: 139
Huppa [canopy]
 Judaism (Special occasions) J: 181
Hural, Great [legislature]
 Mongolia (Government) M: 722
Hurd, Earl [American cartoonist]
 Animation (Pioneers of American animation)
 A: 514
Hurdling [sport] H: 452 *with picture*
 Track and field (Track events) T: 354 *with pic-
 ture*; (World track and field records) T: 358
Hurdy-gurdy [dance hall]
 Western frontier life in America
 (Amusements) W: 236
Hurdy-gurdy [musical instrument]
 Hand organ H: 41
Hurley, Charles F. [American political leader]
 Massachusetts (table) M: 288
Hurley, Patrick Jay [American diplomat]
 Hoover, Herbert Clark (table) H: 330
Hurley, Robert A. [American political leader]
 Connecticut (table) Ci: 967
Hurling [sport]
 Ireland (Recreation) I: 420
Huron, Lake [Canada-U.S.] *See Lake Huron in
 this index*
Huron Indians
 Canada, History of (Early settlements) C: 142
 Champlain, Samuel de (The founding of
 Quebec) C: 373
 Indian, American (Indians of the Northeast)
 I: 154-155
 Ontario (Indian days) O: 784
Huron National Forest
 Michigan (Places to visit) M: 498
Huronian [Canadian history]
 Ontario (Early settlement) O: 784
Hurricane [drawing by Leonardo]
 Leonardo da Vinci picture on L: 201
Hurricane [weather] H: 452 *with pictures and
 map*
 Arctic Ocean (Climate) A: 643
 Boating picture on B: 431
 Cuba (Climate) Ci: 1173
 Cyclone Ci: 1204
 Disaster (table) D: 223
 Galveston G: 18
 Insurance (Insurance today) I: 316
 Louisiana (Climate) L: 493
 Pacific Ocean (Tropical cyclones) P: 14
 Safety (During a hurricane) S: 15
 Typhoon T: 540
 Weather pictures on W: 166, W: 167

Wind (table) W: 330
Hurricane Andrew
 Florida (The late 1900's) F: 264-265
 Hurricane picture on H: 453
 Louisiana (Recent developments) L: 501
 Miami (History) M: 480-481
Hurricane Camille
 Hurricane (Hurricane damage) H: 455
Hurricane Floyd
 North Carolina (Recent developments) N: 494
Hurricane Georges
 Puerto Rico (Puerto Rico today) P: 884-885
Hurricane Gilbert
 Hurricane (Hurricane damage) H: 455
Hurricane Hugo
 Antigua and Barbuda (History) A: 556
 Charleston (Government and history) C: 383-
 384
 South Carolina (Recent developments)
 So: 662-663 *with picture*
Hurricane hunter [airplane]
 Hurricane (Forecasting hurricanes) H: 455
Hurricane Iniki
 Hawaii (Recent developments) H: 109
Hurricane Mitch
 Central America (Developments since the mid-
 1900's) C: 356
 Honduras (Recent developments) H: 313
 Nicaragua (Recent developments) N: 400-401
Hurricane warning
 Flag picture on F: 197
 Hurricane (Forecasting hurricanes) H: 455-456
Hurricane watch [meteorology]
 Hurricane (Forecasting hurricanes) H: 455-456
Hurricanes, Caroline
 Hockey (table: National Hockey League)
 H: 281
Hurston, Zora Neale [American author] H: 456
 American literature (The Harlem Renaissance)
 A: 422
Hurstwood, George [literary figure]
 Dreiser, Theodore D: 346
Hurt, William [American actor]
 Motion picture (Best performance by an actor:
 1985) M: 862-863
Hurtado, Miguel de la Madrid *See De la
 Madrid Hurtado, Miguel in this index*
Hus, John [Bohemian religious leader] H: 456
 Czech Republic (The rise of Bohemia) Ci: 1213
 Eck, Johann E: 50
 Lollards L: 427
 Moravian Church M: 801
 Prague (The city) P: 730
 Sigismund S: 453
Husain [grandson of Muhammad] *See Husayn
 in this index*
Husain, Maqbool F. [Indian painter]
 India (Painting) I: 119-120
Husák, Gustáv [Czechoslovak political leader]
 Czech Republic (The 1960's) Ci: 1214
 Czechoslovakia (The 1960's) Ci: 1216; (The
 Velvet Revolution) Ci: 1216
 Slovakia (The 1960's) S: 509
Husayn [Muslim ruler]
 Muslims (The Muslim Empire) M: 964c
 Shiites S: 401
Husayn-Ali, Mirzā *See Bahá'u'lláh in this index*
Husband
See also Divorce in this index
 Marriage M: 219; Parent in this index
Husbandry, Patrons of *See Grange, National in
 this index*
Hush money [crime]
 Extortion E: 457
Husk
 Coconut palm (The coconut) Ci: 746
 Corn (Appearance) Ci: 1057
Husky [dog]
 Siberian husky S: 446 *with picture*
Huss, John *See Hus, John in this index*
Hussars [soldiers] H: 457
Hussein [ruler of Mecca]
 Jordan (Independence) J: 164
 Ibn Saud I: 3
Hussein I [king of Jordan] H: 457 *with portrait*
 Abdullah II A: 9
 Israel picture on I: 489
 Jordan (History) J: 164-165
Hussein, Muna al- [Jordanian princess]
 Abdullah II A: 9
Hussein, Saddam [Iraqi political leader] H: 457
with portrait
 Iraq (National government) I: 409; (The repub-
 lic) I: 413-414 *with picture*

- Kuwait (History) K: 396
 Persian Gulf War P: 300b
- Husserl, Edmund** [German philosopher]
 Existentialism E: 436
 Phenomenology P: 356
 Philosophy (Modern philosophy) P: 387-390
- Hussites** [European history]
 Bohemia B: 437
 Hus, John H: 457
 Prague (History) P: 730
- Huston, Anjelica** [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1985) M: 863
- Huston, John** [American director] H: 457 *with portrait*
 Motion picture (Best achievement in directing: 1948) M: 862
- Huston, Walter** [American actor]
 Motion picture (Best performance by an actor in a supporting role: 1948) M: 863
- Hutch** [cage]
 Rabbit (Cage) R: 48
- Hutchings, Andrew Jackson** [nephew of] Jackson, Andrew (Jackson's family) J: 8
- Hutchings, John** [nephew of] Jackson, Andrew (Jackson's family) J: 8
- Hutchins, Robert Maynard** [American educator] H: 458
 Democracy (Famous quotations about democracy) D: 120
- Hutchinson, Anne Marbury** [American colonial leader] H: 458
 Rhode Island (Settlement) R: 312
- Hutchinson, Sara** [sister-in-law of Wordsworth] Coleridge, Samuel Taylor (His life) Ci: 771-772
- Hutchinson, Thomas** [British colonial official] H: 458
 Boston Tea Party B: 506
- Hutchinson, William** [husband of] Hutchinson, Anne Marbury H: 458
- Hutchinson Family** [singing group]
 Popular music (1840's to the Civil War) P: 669
- Hutchinson-Gilford Syndrome** *See* Progeria *in this index*
- Hutchinsonite** [mineral]
 Thallium T: 229
- Hutong** [street]
 Beijing (The city) B: 222
- Hutspot** [food]
 Netherlands (Food and drink) N: 141
- Hutt, William** [Canadian actor]
 Drama picture *on* D: 324
- Hutten, Ulrich von** [German author]
 German literature (The Renaissance) G: 139
- Hutter, Jacob** [Moravian religious leader]
 Hutterites H: 458
- Hutterian Brethren** [religious group]
 Hutterites H: 458
- Hutterites** [religious group] H: 458
 Alberta (Population) A: 316-317
 Anabaptists A: 447
- Hutton, James** [Scottish philosopher] H: 458
 Geology (The rock dispute) G: 98-99
 Lyell, Sir Charles L: 533
- Hutton, Timothy** [American actor]
 Motion picture (Best performance by an actor in a supporting role: 1980) M: 863
- Hutu** [people] H: 458
 Burundi (People) B: 713; B: 712, (History) B: 713
 Congo (Kinshasa) (The fall of Mobutu) Ci: 940e
 Ruanda-Urundi R: 499
 Rwanda R: 571
 Tutsi T: 526
- Huxley, Aldous** [British author] H: 459
 English literature (Fiction between the wars) E: 322
- Huxley, Andrew Fielding** [British biologist]
 Nobel Prizes (Physiology or medicine: 1963) N: 445
- Huxley, Sir Julian Sorell** [British biologist] H: 459
- Huxley, Thomas Henry** [British zoologist] H: 459
 Agnosticism A: 143
 Darwin, Charles Robert (The influence of Darwin's ideas) D: 40
- Huxman, Walter A.** [American political leader]
 Kansas (table) K: 234
- Huygens** [space probe]
 Cassini C: 276
 Saturn (Flights to Saturn) S: 153
 Titan T: 299
- Huygens, Christiaan** [Dutch physicist] H: 459
- Diffraction (How diffraction occurs) D: 201
 Light (Early ideas about light) L: 292
 Optics (History) O: 813
 Pendulum P: 237
 Physics (Newton) P: 439
 Radiation (Early theories and discoveries) R: 80
 Saturn (Rings) S: 152-153
- Huygens, Constantijn** [Dutch playwright]
 Netherlands (Arts) N: 142
- Huysman, Jacob** [Flemish painter]
 Butler, Samuel picture *on* B: 729
- HVI** [machine] *See* High Volume Instrument *in this index*
- Hwange National Park** [Zimbabwe]
 National park (table) N: 42f
- Hwarang** [military group]
 Karate (History) K: 247
- Hyacinth** [plant] H: 459 *with picture*
 Flower (Garden perennials) F: 280 *with picture*
 Poisonous plant (Some poisonous plants) P: 602
 Water hyacinth W: 134
- Hyacinth bean**
 Bean (Kinds of beans) B: 181
- Hyacinth macaw** [bird]
 Parrot (Kinds of parrots) P: 179
- Hyakutake, Comet**
 Comet (table) Ci: 868
- Hyaline membrane disease** H: 460
 Premature birth P: 755
- Hyannis** [Massachusetts]
 Cape Cod C: 188 *with map*
- Hyatt, Gilbert** [Canadian settler]
 Sherbrooke S: 396
- Hyatt, Isaiah** [American inventor]
 Plastics (The invention of Celluloid) P: 559
- Hyatt, John W.** [American inventor]
 Plastics (The invention of Celluloid) P: 559
- Hyatt's Mills**
 Sherbrooke S: 396
- Hybrid** [automobile]
 Automobile (The automobile today) A: 972 *with picture*
 Electric car (History) E: 165-166 *with picture*
 Global warming (Increased fuel efficiency) G: 232a
- Hybrid** [biology] H: 460 *with picture*
 Breeding B: 592
 Corn (Hybrid corn) Ci: 1059, (Development of hybrids) Ci: 1063
 Flower (Flower breeding) F: 298
 Fruit (Developing new varieties of fruit) F: 546
 Grafting (Uses of grafting) G: 298
 Hog (Kinds of hogs) H: 285
 Rice (Kinds of rice) R: 323-324
- Hybrid bicycle**
 Bicycle (Hybrids) B: 290
- Hybrid magnet** [electromagnet]
 Magnetism (Electromagnets) M: 60 *with picture*
- Hybrid perpetual rose**
 Rose R: 477
- Hybrid tea rose**
 Flower picture *on* F: 281
 Rose R: 477, picture *on* R: 478
- Hybrid vigor** [agriculture]
 Corn (Hybrid corn) Ci: 1059
- Hybrid word**
 Language (Linguistic terms) L: 63
- Hybridization** [horticulture]
 Breeding B: 592
 Fruit (Developing new varieties of fruit) F: 546
- Hybridoma** [cell]
 Monoclonal antibody M: 730
- Hydathode** [botany]
 Leaf (The blade) L: 153
- Hyde, Arthur M.** [American political leader]
 Agriculture, Department of (table) A: 161
 Hoover, Herbert Clark (table) H: 330
 Missouri (table) M: 668
- Hyde, Douglas** [Irish poet]
 Irish literature (Modern works in Gaelic) I: 431
- Hyde, Edward** [English political leader]
 Clarendon, Earl of Ci: 638
- Hyde Amendment** [law]
 Abortion (Abortion in the United States) A: 15-16
- Hyde Park** [district, Boston]
 Boston (Hyde Park and West Roxbury) B: 500
- Hyde Park** [park]
 London (Parks) L: 435
- Hyde Park Barracks**
 Sydney (The city) So: 1063
- Hyderabad** [city, India] H: 461
- Hydra** [animal] H: 461 *with picture*
 Animal picture *on* A: 497
- Hydra** [Greek mythology] H: 461
 Hercules (The twelve labors) H: 198-199
 Renaissance picture *on* R: 237
- Hydrangea** [shrub] H: 462 *with picture*
 Flower (Garden perennials) F: 281 *with picture*
- Hydrate** [chemistry] H: 462
- Hydrated aluminum hydroxide** [mineral]
 Bauxite B: 174
- Hydrated aluminum silicate** [mineral]
 Fuller's earth F: 555
- Hydrated lime** [chemical]
 Lime L: 306
- Hydrated silicate** [mineral]
 Asbestos (Types of asbestos) A: 765
- Hydraulic brake**
 Brake (Hydraulic brakes) B: 560 *with diagram*
- Hydraulic cement**
 Cement and concrete C: 342
- Hydraulic dredge**
 Dredging D: 346
- Hydraulic elevator**
 Elevator (How elevators work) E: 234
- Hydraulic engine** H: 462
 Engine E: 283
- Hydraulic engineering**
 Hydraulics H: 463
- Hydraulic oil**
 Transmission (The controller) T: 378
- Hydraulic press** [machine]
 Hydraulics H: 463, (Use of hydrostatic principles) H: 463 *with diagram*
- Hydraulic rescue tool**
 Fire department (Fire trucks) F: 125-126 *with picture*
- Hydraulic system**
 Tractor (Parts of a tractor) T: 360
- Hydraulic turbine** *See* Water turbine *in this index*
- Hydraulic**
 Mining (Surface mining methods) M: 574-575
- Hydraulics** [physics] H: 463 *with diagrams*
 Automobile (The steering system) A: 953-954, (The brake system) A: 954
 Fluid mechanics F: 304
 Levee L: 216
- Hydraulus** [musical instrument]
 Organ (History) O: 852
- Hydrazine** [chemical] H: 465
- Hydrazine hydrate** [chemical]
 Hydrazine H: 465
- Hydriodic acid** [chemical]
 Hydrogen iodide H: 470
- Hydrocarbon** [chemistry] H: 465
 Gas [fuel] (The composition of natural gas) G: 57
 Gasoline (Gasoline octane ratings) G: 61; (Gasoline blends and additives) G: 61
 Hydrogen (Occurrence) H: 469
 Natural gas liquids N: 64
 Petrochemicals (How petrochemicals are made) P: 329
 Petroleum (The uses of petroleum) P: 331
 Rubber (The chemistry of rubber) R: 501
 Smog (Photochemical smog) S: 519
- Hydrocephalus** [disease]
 Spina bifida So: 792
- Hydrochloric acid** [chemical] H: 465
 Acid A: 26, (The strength of an acid) A: 27
 Chlorine (Uses of chlorine) C: 516-517
 Halogen H: 27
 Hydrogen (Hydrogen compounds) H: 469
 Neutralization N: 154
 Stomach (The stomach's work) So: 907
- Hydrocortisone** [hormone] *See* Cortisol *in this index*
- Hydrocyanic acid**
 Prussic acid P: 843
- Hydrocyanic acid gas**
 Gas chamber G: 60
- Hydro-Drome** [hydrofoil]
 Hydrofoil (History) H: 468 *with picture*
- Hydrodynamics** [physics]
 Fluid mechanics (External fluid mechanics) F: 304
 Hydraulics H: 463, (Liquids in motion) H: 464 *with diagrams*
- Hydroelectric power**
 Columbia River Ci: 852
 Electric power (Hydroelectric power plants) E: 184 *with diagram*
 Fall line F: 16

416 Hydro-Electric Power Commission

- Niagara River (Water power) N: 394
 Water power W: 139
See also the Electric Power sections of specific state and province articles, such as Arizona (Electric Power)
- Hydro-Electric Power Commission** [Canada]
 Ontario (The early 1900's) O: 786
 Saint Lawrence Seaway (The hydroelectric power project) S: 44
- Hydroelectric power plant**
 Nuclear energy (The role of nuclear energy in power production) N: 580
 Turbine (Water turbines) T: 496
- Hydrofluoric acid** [chemical] H: 465
- Hydrofoil** [vehicle] H: 466 *with pictures*
 Boating (Sailboats) B: 429; *picture on B*: 431
 Missile boat M: 618
 Ship (Other passenger vessels) S: 417
 Transportation (Water transportation) T: 384-385
- Hydrogen** [element] H: 469
 Acid A: 27
 Airship (Lift) A: 250
 Atom A: 870 *with diagram*; (The mass number) A: 871 *with diagrams*
 Deuterium D: 172
 Electrolysis (How electrolysis works) E: 200-201
 Energy supply (Hydrogen) E: 279
 Fire (Gases) F: 121-122
 Haber process H: 2
 Isotope I: 476
 Moon *picture on M*: 794
 Relativity (General relativity) R: 211
 Spectrum So: 772
 Star (Fusion in stars) So: 846; (Evolution of stars) So: 848
 Sun (Composition) So: 975
 Tritium T: 448
See also the list of Related Articles in the Hydrogen article
- Hydrogen balloon**
 Balloon (The hydrogen balloon) B: 60
- Hydrogen bomb** [weapon]
 Bomb (Hydrogen bombs) B: 451 *with diagram*
 Cold War (The death of Stalin) Ci: 764; (The great blocs split) Ci: 768
 Deuterium D: 172
 Einsteinium E: 147
 Fusion F: 589
 Nuclear weapon N: 596
 Teller, Edward T: 129
- Hydrogen bond** [chemistry]
 Bond (Other linkages) B: 454
 Ice (The structure of ice) I: 5
 Water (How water is held together) W: 131
- Hydrogen chloride** [chemical]
 Chlorine (Uses of chlorine) C: 516
 Hydrochloric acid H: 465
 Hydrogen (Hydrogen compounds) H: 469
- Hydrogen cyanide** [chemical]
 Cyanide Ci: 1202
- Hydrogen fluoride** [chemical]
 Fluorine F: 306
 Hydrofluoric acid H: 465
- Hydrogen iodide** [chemical] H: 470
- Hydrogen ion**
 Acid A: 27
- Hydrogen peroxide** [chemical] H: 470
 Bleach B: 399
- Hydrogen sulfide** [gas] H: 470
 Damp D: 24
 Sulfide So: 966
- Hydrogenated tallow alcohol** [chemical]
 Detergent and soap (How detergents are made) D: 165
- Hydrogenation** [chemistry] H: 470
 Coal (Coal research) Ci: 730-731
 Fat (Structure) F: 52
 Hydrogen (Hydrogen compounds) H: 469
 Nickel (Industrial uses) N: 404
 Petroleum (Conversion) P: 345
- Hydrographic survey**
 Surveying (Other surveys) So: 1011
- Hydrography** [geography] H: 470
 Geology *picture on G*: 100
- Hydroiodic acid** [chemical]
 Hydrogen iodide H: 470
- Hydrolase** [enzyme]
 Malt M: 112
- Hydrolite** [rock]
 Geode G: 91
- Hydrologic cycle**
 Earth (Cycles on and in Earth) E: 22
- Hydrology H: 470
 Rain R: 122
 Water (Nature's water cycle) W: 120 *with diagram*
- Hydrological Decade, International**
 Water (The challenge of today) W: 132
- Hydrology** H: 470
 Geophysics G: 106
- Hydrolysis** [chemistry] H: 471
 Energy supply (Hydrogen) E: 279
- Hydrolyzer** [machine]
 Detergent and soap (Continuous processing) D: 164
- Hydromedusa** [animal]
 Ocean *picture on O*: 656
- Hydrometallurgy**
 Metallurgy (Leaching) M: 427
- Hydrometer** [measuring device] H: 471
- Hydronium ion** [chemistry]
 Hydrolysis H: 471
- Hydrophobia** [disease]
 Rabies R: 49
- Hydrophobia** [psychology]
 Phobia P: 392
- Hydrophone** [instrument]
 Ocean Drilling Program *picture on O*: 667
 Torpedo (How a torpedo works) T: 340b-340c *with diagram*
- Hydrophyte** *See Water plant in this index*
- Hydroplane** [boat] H: 471
 Motorboat racing (Hull designs) M: 876 *with picture*
- Hydroponics** [botany] H: 471 *with diagrams*
 Botany *picture on B*: 508
 Farm and farming (Special crop-growing methods) F: 37-38
- Hydropower** *See Energy supply in this index*
- Hydrosol** [chemistry]
 Colloid Ci: 777
- Hydrosphere** [geography] H: 472
 Earth (Earth's spheres) E: 18-20 *with picture*
- Hydrostatic balance** [instrument]
 Galileo (Early scientific interests) G: 11
- Hydrostatic extrusion** [industrial process]
 Extrusion E: 459
- Hydrostatics** [physics]
 Archimedes (His discoveries) A: 605
 Hydraulics H: 463
- Hydrosulfuric acid** [chemical]
 Hydrogen sulfide H: 470
- Hydrotherapy** [treatment] H: 472 *with picture*
- Hydrothermal circulation** [oceanography]
 Hot vent H: 375
- Hydrothermal metamorphism**
 Metamorphic rock M: 428
- Hydrothermal vent** [oceanography] *See Hot vent in this index*
- Hydrotropism** [botany]
 Plant (Factors affecting plant growth) P: 538-539
- Hydrous aluminum phosphate** [chemical compound]
 Turquoise T: 519
- Hydrous lanolin** [animal product]
 Lanolin L: 68
- Hydroxide** [chemistry] H: 473
 Base B: 123
 Hydrolysis H: 471
- Hydroxyl** [chemistry]
 Alcohol A: 334
- Hydroxyurea** [drug]
 Sickle cell anemia S: 448
- Hyena** [animal] H: 473 *with picture*
 Aardwolf A: 2 *with picture*
- Hyères, France, 1930** [photograph by Cartier-Bresson]
 Cartier-Bresson, Henri *picture on C*: 263
- Hygiene, Dental** *See Dental hygiene in this index*
- Hygiene, Public**
 Epidemic E: 343
 Public health P: 855
- Hyginus, Saint** [pope]
 Pope (table) P: 666
- Hygrometer** [instrument] H: 473
 Humidity *diagram on H*: 433
 Weather (Land-based observation stations) W: 162
- Hyksos** [ancient people] H: 474
 Egypt, Ancient (The Middle Kingdom) E: 143
- Hyman, Trina Scharf** [American artist]
 Caldecott Medal (table: 1985) C: 26
 Literature for children *picture on L*: 368, *picture on L*: 378
- Hymen** [anatomy]
 Vagina V: 559
- Hymenoptera** [entomology]
 Insect (table) I: 300; *pictures on I*: 283
- Hymn** [poem by Caedmon]
 Caedmon C: 12
- Hymn** [song] H: 474
 Chorale C: 522
 Greek literature (Medieval literature) G: 378
- "Hymn to Adversity"** [poem by Gray]
 Gray, Thomas G: 335
- Hymn to the Rising Sun** [play by Green]
 Green, Paul Eliot G: 379
- Hymnen** [music by Stockhausen]
 Stockhausen, Karlheinz So: 904
- Hymnes** [poems by Ronsard]
 Ronsard, Pierre de R: 450
- Hymns, Collection of** [book by Wesley]
 Wesley, Charles W: 197
- Hymns to the Night** [poems by Novalis]
 Novalis N: 571
- Hymnus** [music by Dvořák]
 Dvořák, Antonín D: 394
- Hyoid bone** [anatomy]
 Woodpecker *diagram on W*: 394
- Hyoscyamine** [medication]
 Henbane H: 184
- Hypatia** [Egyptian mathematician] H: 474
- Hypatia** [book by Kingsley]
 Kingsley, Charles K: 331
- Hyperactivity** [disorder]
 Attention deficit disorder A: 878
 Child (Other special problems) C: 452
 Learning disabilities (Types) L: 165
 Special education (Children with learning disabilities) So: 770-771
- Hyperacute rejection** [medicine]
 Xenotransplant X: 544
- Hyperbaric oxygen therapy** H: 475 *with picture*
 Oxygen tent O: 890
- Hyperbole** [mathematics] H: 475 *with diagram*
 Orbit O: 819 *with diagram*
- Hyperbole** [language]
 Figure of speech F: 97
 Humor (The humor of words) H: 435
- Hyperbolic geometry** [mathematics]
 Geometry (Non-Euclidean geometry) G: 104
- Hypercholesterolemia** [disorder]
 Cholesterol (Factors that cause high cholesterol levels) C: 520
- Hyperglycemia** [disorder]
 Diabetes (Symptoms) D: 179
- Hypergol** [fuel]
 Rocket (Liquid-propellant rockets) R: 388-389
- Hypericum** [plant]
 Saint-John's-wort S: 37 *with picture*
- Hyperinflation** [economics]
 Inflation (Hyperinflation) I: 267 *with picture*
 Money (The value of money) M: 714
- "Hyperion"** [poem by Keats]
 Keats, John (His work) K: 253-254
- Hyperion** [satellite]
 Saturn (table) S: 152; (Satellites) S: 153
- Hyperkinesis** [disorder]
 Amphetamine (Medical uses) A: 439
- Hyperlink** [computing]
 Computer (The World Wide Web) Ci: 921
 Internet (Glossary of Internet terms) I: 350a; (Publishing) I: 350a-350b
 World Wide Web W: 500
 Web site W: 175
- Hyperopia** *See Farsightedness in this index*
- Hyperersonic speed**
 Aerodynamics (Supersonic aerodynamics) A: 88
 Airplane (Supersonic airplanes) A: 238
 Wind tunnel W: 333
- Hypertension** [disorder] H: 475
 Blood pressure B: 416
 Cerebral hemorrhage C: 361
 Circulatory system (Disorders of the circulatory system) Ci: 561
 Disease (Diseases associated with aging) D: 230
 Drug (Antihypertensives) D: 352
 Heart (Risk factors) H: 137; (Progress in treatment and prevention) H: 145-146
 Nutrition (Heart disease) N: 630
 Reserpine R: 257
 Stroke (Causes) S: 930
- Hypertext** [computing]
 Berners-Lee, Tim B: 270
 Web site W: 175
 World Wide Web W: 500

Hypertext Markup Language [computing] See HTML *in this index*

Hypertext transfer protocol [computing] See HTTP *in this index*

Hyperthermia [disorder] H: 476
Weather (Reporting the weather) W: 169-170

Hyperthyroidism [disorder]
Thyroid gland (Overactive thyroid) T: 275
Goiter G: 248
Graves' disease G: 331

Hypertrophic cardiomyopathy [disorder]
Heart (Cardiomyopathy) H: 142-143

Hyperurbanization [sociology]
Local government (Local governments in developing countries) L: 409

Hyperventilation [disorder] H: 476
Alkalosis A: 369
Skin diving (Breath-hold diving) S: 493

Hyphae [biology]
Fungi (Parts of a fungus) F: 558-559 *with picture*
Mold M: 689
Mushroom (Parts of a mushroom) M: 941

Hyphen
Punctuation (The hyphen) P: 903

Hypnagogic hallucination [dream]
Narcolepsy N: 20

Hypnos [Greek mythology] H: 477
Morpheus M: 816
Mythology (table) M: 980

Hypnosis See Hypnotism *in this index*

Hypnotic drug
Depressant D: 149
Drug (Drugs that affect the nervous system) D: 352
Narcotic N: 21
Sedative S: 279

Hypnotism H: 477 *with pictures*
Mesmer, Franz Anton M: 421
Trance T: 369

Hypo [chemical]
Herschel, Sir John Frederick William H: 216
Photography (Developing black-and-white film) P: 420-421

Hypocenter [seismology] See Focus [earthquake] *in this index*

Hypochlorite [chemistry]
Disinfectant D: 235
Hypochlorous acid H: 480

Hypochlorous acid [chemical] H: 480

Hypochondria [psychology] H: 480
Mental illness (Somatoform disorders) M: 406

Hypocotyl [botany]
Germination G: 173
Plant (Germination) P: 536 *with picture*
Seed (How seeds sprout) S: 283

Hypodermic injection H: 480 *with pictures*
Drug *picture on* D: 350
Intravenous injection I: 353

Hypoglycemia [disorder] H: 480
Diabetes (Treatment) D: 179
Insulin (Diabetes) I: 308

Hyponymy [semantic relation]
Semantics S: 290

Hypophysis See Pituitary gland *in this index*

Hyposensitization [medicine]
Allergy (Diagnosis and treatment) A: 374
Hay fever (Treatment) H: 116

Hypotension [disorder]
Blood pressure B: 416

Hypotenuse [geometry]
Triangle (Properties and relationships of triangles) T: 438-439

Hypothalamus [anatomy] H: 481
Allergy (Emotional factors) A: 373
Brain (The brain stem) B: 551; (In regulating body processes) B: 554, *diagram on* B: 553
Emotion (Early theories about emotions) E: 261
Fever F: 83
Gland (Endocrine glands) G: 207-208; (table) G: 208
Hormone (Growth and sex hormones) H: 336; (Endocrine control hormones) H: 336
Human body (The endocrine system) H: 425
Perspiration P: 305
Steroid (The adrenal steroids) So: 895
Stress (How stress affects the body) So: 926
Temperature, Body (Warm-blooded animals) T: 130
Thirst T: 259

Hypothermia [medicine] H: 481
Safety (In winter sports) S: 12

Weather (Reporting the weather) W: 169-170

Hypothesis [science]
Popper, Karl Raimund P: 668
Psychology (Methods of psychological research) P: 847
Science (Forming a hypothesis) S: 195
Zoology (How zoologists work) Z: 610

Hypothyroidism
Goiter G: 248
Thyroid gland (Underactive thyroid) T: 274

Hypotonic cerebral palsy
Cerebral palsy (Types) C: 361

Hypoxia [disorder] See Anoxia *in this index*

Hyppolite, Hector [Haitian painter]
Latin America (Painting) L: 101-102

Hyracoridae [zoology]
Mammal (table) M: 129 *with picture*

Hyracotherium See Eohippus *in this index*

Hyrax [animal] H: 482 *with picture*
Mammal *picture on* M: 117, (table) M: 129 *with picture*

Hyssop [shrub] H: 482 *with picture*

Hysterectomy [medicine] H: 482
Cervical cancer C: 364
Surgery (Some common surgical operations) So: 1006

Hysteresis loss [physics]
Steinmetz, Charles Proteus So: 886

Hysteria [psychology] H: 482



I [letter] I: 1 *with pictures*

I [symbol]
Iodine (Properties of iodine) I: 370

I ...
Titles beginning with the Italian word I appear under their key words, as in Pagliacci, I

I Am a Cat [book by Natsume Soseki]
Natsume Soseki N: 63

"I Am Joaquín" [poem by Gonzales]
Gonzales, Rodolfo G: 268

I and the Village [painting by Chagall]
Chagall, Marc *picture on* C: 368

I. C. Sorosis [organization]
Sorority So: 597

"I came, I saw, I conquered" [quotation]
Caesar, Julius (Last victories) C: 13

I Ching [ancient book] I: 2

I, Claudius [book by Graves]
Graves, Robert G: 331

"I Have a Dream" [speech by King]
King, Martin Luther, Jr. K: 322

"I have not yet begun to fight!" [quotation]
Revolutionary War in America (Fighting at sea) R: 283

I-head engine
Gasoline engine (Valve arrangement) G: 64

"I Heard a Fly Buzz" [poem by Dickinson]
Dickinson, Emily (Her poems) D: 190
Poetry (Rhythm and meter) P: 591-593

"I Heard It Through the Grapevine" [song]
Gaye, Marvin G: 73

I-Kiribati [people]
Kiribati (People) K: 335

I Know Why the Caged Bird Sings [book by Angelou]
Angelou, Maya A: 460

"I Love You Truly" [song by Bond]
Bond, Carrie Jacobs B: 455

"I only regret that I have but one life to lose for my country" [quotation]
Hale, Nathan (The fateful mission) H: 18

I, Rigoberta Menchú [book by Menchú]
Menchú, Rigoberta M: 397

"I think, therefore I am" [proposition]
Descartes, René (His philosophy) D: 154

IAAF See Track and field *in this index*

Iachimo [literary figure]
Shakespeare, William (*Cymbeline*) S: 365

Iacobucci, Frank [Canadian jurist]
Supreme Court of Canada (table) So: 997 *with portrait*

Iacocca, Lee [American businessman] I: 2 *with portrait*

Automobile (Challenges to the Big Three) A: 972

IAEA See International Atomic Energy Agency *in this index*

Iago [literary figure]
Shakespeare, William (*Othello*) S: 363

Iamb
Poetry (Rhythm and meter) P: 591-594

Iambic pentameter [poetry]
Blank verse B: 398
English literature (The age of Chaucer) E: 316
Poetry (Rhythm and meter) P: 591-594

Iambic verse
Greek literature (Elegiac poetry) G: 377

Iapetus [satellite]
Satellite (Inert satellites) S: 150a-150c
Saturn (table) S: 152 *with picture*; (Satellites) S: 153

IATA See International Air Transport Association *in this index*

Iatrochemistry
Chemistry (Alchemy) C: 400-401

IAU [organization] See International Astronomical Union *in this index*

IBA [trade association] See International Bauxite Association *in this index*

Ibadan [Nigeria] I: 2

Ibadis [Muslim sect]
Oman (History) O: 759

Ibáñez, Vicente Blasco See Blasco Ibáñez, Vicente *in this index*

Ibáñez del Campo, Carlos [Chilean political leader]
Chile (Era of changes) C: 469

Ibans [people]
Dayaks D: 53
Malaysia (People) M: 98b-98c

Ibarbourou, Juana de [Uruguayan poet]
Latin-American literature (The early 1900's) L: 113

IBD [disorder] See Inflammatory bowel disease *in this index*

Ibeji [Nigeria]
Sculpture *picture on* S: 229

Iberia [music by Albéniz]
Albéniz, Isaac A: 311

Iberia [region, Europe] I: 2
Spanish language (Beginnings) So: 757

Iberian lynx [animal]
Lynx L: 536

Iberians [ancient people]
Iberia I: 2
Portugal (Population and ancestry) P: 687; (Early days) P: 692

Ibert, Jacques [French composer] I: 2

Iberville, Sieur d' [French-Canadian explorer]
I: 2
Le Moyne, Charles L: 189
Louisiana (Exploration and early settlement) L: 497-498
Mississippi (Exploration and early settlement) M: 641

IBEW See Electrical Workers, International Brotherhood of *in this index*

Ibex I: 3
Animal *picture on* A: 475
Goat (Wild goats) G: 239; *picture on* G: 240

Ibirapuera Park
São Paulo (The city) S: 117-118 *with picture*

Ibis I: 3
Bird (Birds of Central and South America) B: 345 *with picture*

Ibizan hound I: 3 *with picture*

Iblis [religion]
Devil D: 174

IBM See International Business Machines Corporation *in this index*

IBM clone [computer]
Computer (Personal computers) Ci: 909-910

Ibn Abd al-Wahhab, Muhammad [Saudi religious leader] See Abd al-Wahhab, Muhammad *in this index*

Ibn Battuta [Arab explorer] I: 3
Exploration (Muslim exploration) E: 442

Ibn Khaldun [Arab historian] I: 3

Ibn Qutaiba [Arabian scholar]
Encyclopedia (The first reference works) E: 268a

Ibn Roshd [Arabian philosopher]
Averroës A: 982

Ibn Saud [king of Saudi Arabia] I: 3
Saudi Arabia S: 155; (The founding of Saudi Arabia) S: 161

Ibn Saud, Muhammad [Saudi ruler]
Saudi Arabia (The Saud dynasty) S: 160-161

Ibn-Sina See Avicenna *in this index*

Ibn Tashfin, Yusuf [Berber leader]
Marrakech M: 218

Ibo [people] See Igbo *in this index*

Ibsen, Henrik [Norwegian dramatist] I: 4

Drama (Ibsen) D: 338

Grieg, Edvard G: 392

Realism (In drama) R: 172

Theater picture on T: 247

Ibuka, Masaru [Japanese businessman]

Sony Corporation SO: 594

Ibuprofen [drug] I: 4

ICAO See International Civil Aviation

Organization in this index

Icarus [legendary figure]

Ulysses (The Trojan War) U: 17-18

Icarus [Greek mythology]

Airplane (History) A: 229 with picture

Daedalus D: 3

Icaza, Jorge [Ecuadorian author]

Latin-American literature (The early 1900's)

L: 113

ICBM See Intercontinental ballistic missile in this index

ICC See Interstate Commerce Commission in this index

Ice I: 4 with pictures

See also Dry ice in this index

Arctic Ocean (Ice) A: 643; A: 641 with picture

Freezing point F: 510

Hail H: 8 with pictures

Iceberg I: 17 with pictures

Refrigeration (Ice refrigeration) R: 200

Snow S: 539 with pictures

Water (The properties of water) W: 129

Ice age [geology] I: 6 with picture and map

Climate (Causes of climate change) Ci: 676d

Earth (Earth's changing climate) E: 24

Indian, American (Early days) I: 151

La Brea tar pits L: 19

Lake Agassiz L: 35

Prehistoric animal (The ice ages) P: 741

Prehistoric people (The spread of settlement)

P: 751

Ice Age, The [book by Drabble]

Drabble, Margaret D: 317

Ice Age National Scientific Reserve

[Wisconsin]

Wisconsin (Places to visit) W: 356

Ice cream I: 8 with pictures

Pennsylvania (Interesting facts) P: 245

Ice cream cone

Food (Interesting facts about food) F: 329

Ice-crystal process [meteorology]

Rain (Formation of rain) R: 123-124 with diagram

Ice crystals

Rainmaking (Rainmaking methods) R: 129

Ice dancing

Ice skating I: 12 with diagrams

Ice fishing

Fishing F: 175

Ice floe [oceanography]

Antarctica (Coastal waters) A: 534

Ice-fog

Snow S: 539

Ice-formed pond

Pond (Kinds of ponds) P: 656

Ice hockey See Hockey in this index

Ice Hockey Federation, International See

International Ice Hockey Federation in this index

Ice house

Food preservation (Modern food preservation)

F: 344

Ice island [geography]

Arctic Ocean (Ice) A: 643

Ice milk

Ice cream (The composition of ice cream) I: 8

Ice nucleus

Rain (The ice-crystal process) R: 124

Snow (How snow forms) S: 539

Ice Petrol, International [organization]

Iceberg (Ice patrols) I: 18

Ice plant I: 9 with picture

Ice sheet

Ice age I: 6 with map

Antarctica (The Antarctic ice sheets) A: 532

Climate (Icecap climates) Ci: 676d

Glacier (Continental glaciers) G: 203

Icecap I: 19

Ice shelf

Antarctica (Coastal waters) A: 534

Climate (Icecap climates) Ci: 676d

Ice show

Ice skating picture on I: 10

Ice skating [sport] I: 10 with pictures

Netherlands (Holidays and recreation) N: 141

Olympic Games (Winter Olympic Games)

O: 746d-746e with picture

Safety (In winter sports) S: 12-13

Ice yachting

Iceboating I: 18 with pictures

Iceberg I: 17 with pictures

Antarctica (Coastal waters) A: 534

Arctic Ocean (Ice) A: 643

Glacier (How glaciers form) G: 203-204

Global warming picture on G: 232a

Water picture on W: 117

Iceberg Lake [Montana]

Glacier National Park (Lakes) G: 205-206

Iceberg lettuce

Lettuce (Kinds of lettuce) L: 213 with picture

Icebergia [nickname]

Alaska A: 283

Iceboating I: 18 with pictures

Icebox

Refrigeration (Ice) R: 200 with picture

Icebreaker [ship] I: 19 with picture

Canada picture on C: 120

Coast Guard, United States (Mobility) Ci: 735

with picture

Ship (Specialized types of vessels) S: 422

Icecap I: 19

Climate (Icecap climates) Ci: 676d

Glacier (Continental glaciers) G: 203

Greenland (The land) G: 385; [Ice sheet]

A: 532

Iced tea

Tea (Brewing tea) T: 63; (History) T: 63-64

Icefields Parkway [Alberta]

Jasper National Park J: 65

Icehouse

Meat packing (History) M: 352

Iceland I: 20 with pictures and map

Flag picture on F: 206

Scandinavia S: 171 with map

See also the list of Related Articles in the

Iceland article

Iceland poppy

Poppy P: 668

Iceland spar [mineral]

Polarized light (Polarizing materials) P: 618

Icelandic language

Iceland (People) I: 21

Icelandic literature

Saga S: 17

Skald S: 478

Icelandic low [meteorology]

Arctic (Climate) A: 638

Iceman Cometh, The [play by O'Neill]

O'Neill, Eugene Gladstone (His life) O: 762

ICFTU See International Confederation of Free

Trade Unions in this index

"Ichabod" [poem by Whittier]

Whittier, John Greenleaf W: 295

Ichiyo, Higuchi [Japanese author] See Higuchi

Ichiyo in this index

Ichneumon wasp [insect] I: 24 with picture

Insect (The variety of insects) I: 280-281; pic-

ture on I: 294

Ichthyology [zoology] I: 24

Biology (table) B: 317

Fish (Kinds of fish) F: 147

Zoology (What zoologists study) Z: 610

Ichthyornis [extinct bird]

Bird (The first known birds) B: 369

Ichthyosaur [extinct reptile]

Prehistoric animal (Other reptiles) P: 737

Ichthyostega

Fossil (Tracing the development of life) F: 423-424

Icibemba [language and culture] See Bemba in this index

Icing the puck [hockey]

Hockey (Defensive play) H: 278

Ickes, Harold Le Claire [American government

official] I: 24

Roosevelt, Franklin Delano (The "Hundred

Days") R: 457

Truman, Harry S. (table) T: 469

Icon [computing]

Computer (A mouse) Ci: 912-914

Computerized instruction (The personal com-

puter) Ci: 925

Icon [religion] I: 24 with picture

Byzantine art (Other art forms) B: 751 with

picture

Eastern Orthodox Churches (Church buildings)

E: 46

Painting (Medieval painting) P: 48-49 with pic-

ture

Russia (Painting and sculpture) R: 537 with

picture

Iconoclast [philosophy] I: 25

Byzantine art (Frescoes and mosaics) B: 750

Idolatry I: 47

Iconoclastic controversy [Byzantine history]

Byzantine art (Frescoes and mosaics) B: 750

Iconoscope [television] I: 25

Television (Early development) T: 125

Zworykin, Vladimir Kosma Z: 614

Iconostasis [religion]

Altar A: 388

Eastern Orthodox Churches (Church buildings)

E: 46

Icosahedron [geometry]

Polyhedron P: 650 with diagram

ICSI [reproduction] See Intracytoplasmic sperm

injection in this index

ICSU See International Council of Scientific

Unions in this index

Ictinus [Greek architect]

Parthenon P: 182

ICU [medicine] See Intensive care unit in this

index

Id [psychology]

Ego E: 119

Freud, Sigmund (On the mind) F: 530

Personality (Freud's psychoanalytic theory)

P: 302

Psychoanalysis (Psychoanalytic theory) P: 846

'Id al-Adha [Islamic festival] I: 25

'Id al-Fitr [Islamic festival] I: 25

Ramadan R: 132

Ida [asteroid]

Asteroid picture on A: 824

Satellite S: 150

IDA [organization]

Foreign aid (Worldwide lending programs)

F: 385

Ida, Mount

Crete (Land and climate) Ci: 1127

Idaho I: 26 with pictures and maps

See also the list of Related Articles in the

Idaho article

Idaho, University of I: 46

Idaho picture on I: 30

Idaho Falls [Idaho] I: 46

Idaho National Engineering and

Environmental Laboratory I: 46

Idaho (Postwar changes) I: 44

Idaho, University of I: 46

Idaho Power Company

Idaho (Postwar changes) I: 44-45

Idaho State University I: 46

IDDD [communications] See International Direct

Distance Dialing in this index

IDE [computing] See Integrated development

environment in this index

Idea [philosophy]

See also Forms, Theory of in this index

Hume, David (Hume's thought) H: 432

Idealism I: 46

Philosophy (Ancient philosophy) P: 386;

(Modern philosophy) P: 387-388

"Idea of a University, The" [lecture]

Newman, John Henry N: 379

Ideal Husband, An [play by Wilde]

Wilde, Oscar W: 302

Ideal type [sociology]

Sociology (Development of social research)

So: 566

Idealism [philosophy] I: 46

Berkeley, George B: 259

Fichte, Johann Gottlieb F: 90

Moore, G. E. M: 796

Philosophy (Metaphysics) P: 383; (Ancient phi-

losophy) P: 386

Ideas of Madame Aubray, The [play by Dumas]
Dumas, Alexandre, *films* D: 382

Ideas on the Philosophy of the History of Mankind [book by Herder]

Herder, Johann Gottfried von H: 199

Identical twins

Conjoined twins Ci: 950 *with picture*

Heredity (Heredity and environment) H: 205

Multiple birth (Kinds of multiple birth) M: 919

Reproduction, Human (Multiple birth) R: 246

Identification [criminology]

Fingerprinting F: 106

Footprinting F: 369 *with picture*

Identification [psychology]

Child (The preschool years) C: 449-450

Identity [psychology]

Adolescent (Psychological development) A: 62

Clothing (Protection) Ci: 688

Erikson, Erik Homburger E: 352

Identity crisis [psychology]

Adolescent (The "invention" of adolescence)

A: 60; (Identity and self-esteem) A: 62

Erikson, Erik Homburger E: 352

Identity: Youth and Crisis [book by Erikson]

Erikson, Erik Homburger E: 352

Ideograph [writing]

Alphabet (The earliest writing) A: 381

Hieroglyphics [Development of hieroglyphic

writing] H: 225

Writing (Ideographs) W: 512

Ideography See Ideograph in this index

Ideology [philosophy] I: 47

War (Clashing ideologies) W: 24

Ides [Roman calendar]

Month M: 767

Ides of March, The [book by Wilder]

Wilder, Thornton Niven W: 303

Idiographic study

Abnormal psychology (Studies in abnormal

psychology) A: 12

Idiom [language]

Dictionary (What dictionaries contain) D: 192

Language (Linguistic terms) L: 63

Slang S: 499

Idiom Neutral [language]

Universal language U: 205

Idiorhythmic religious life

Religious life (The Eastern Orthodox

Churches) R: 227

Idiot's Delight [play by Sherwood]

Sherwood, Robert Emmet S: 398

Iditabike [race]

Bicycle racing (Road races) B: 294

Iditerod [sled dog race] I: 47

Alaska (Visitor's guide) A: 290 *with picture*

Bicycle racing (Road races) B: 294

Nome N: 452

IDL See International Date Line in this index

Idlak [weapon]

Inuit (Hunting and fishing) I: 354d

Idle, Eric [British actor]

Cleese, John Ci: 661 *with picture*

Idler gear

Transmission (The gears) T: 378 *with diagram*

Ido [language]

Universal language U: 205

Idol of the Mind [philosophy]

Bacon, Francis (His philosophy) B: 18

Idolatry [religion] I: 47

Idris I [king of Libya]

Libya (Independence) L: 268

Idris ibn Abdallah [Arab leader]

Morocco (Arab conquest) M: 814

Muslims (The fall of the Abbasids) M: 964c

Idrisid dynasty

Morocco (Arab conquest) M: 814

IDS Center [Minneapolis]

Architecture *picture on* A: 606

Minneapolis (The city) M: 580-581

Minnesota *picture on* M: 585

Idumea [ancient region]

Edom E: 85

Idyl [poetry] I: 47

Tennyson, Lord (His poems) T: 169-170

Idylls of the King [book by Tennyson]

Lancelot, Sir L: 56

Tennyson, Lord (His poems) T: 169-170

IEA

International Energy Agency I: 339

Ieper [Belgium]

Ypres Y: 574

IES [organization]

Lighting (In offices, stores, and factories)

L: 296-297

Ieyasu Tokugawa [Japanese political leader]

See Tokugawa Ieyasu in this index

If He Hollers Let Him Go [book by Himes]

Himes, Chester H: 234

IFAD See International Fund for Agricultural

Development in this index

IFC [organization] See International Finance

Corporation in this index

Ife [city, Nigeria]

Ife I: 47

Nigeria (The arts) N: 414

Ife [former country] I: 47

Benin B: 250

Pottery (Early pottery) P: 718; *picture on*

P: 717

IFLA

Library (International library programs) L: 254

IFP [South African political party] See Inkatha

Freedom Party in this index

IFR [aviation]

Airplane (Safety) A: 227

Map (Navigation maps) M: 177-178

Ifter [meal]

Ramadan R: 132

IG

Inspector General I: 304

Igal [clothing] See Iqal in this index

Igbo [people] I: 47

Nigeria (People) N: 411

Sculpture (Royal and public sculpture) S: 240

with picture

Igitur [poem by Mallarmé]

Mallarmé, Stéphane M: 110

Igloo [dwelling] I: 48 *with diagrams*

See also Snowhouse in this index

Ignarro, Louis Joseph [American pharmacolo-

gist]

Nobel Prizes (Physiology or medicine: 1998)

N: 445

Ignatieff, George [Canadian diplomat]

United Nations (table) U: 86

Ignatius, Saint [early Christian] I: 48

Ignatius Loyola, Saint See Loyola, Saint

Ignatius in this index

Igneous rock [geology] I: 48

Earth (Earth's rocks) E: 20-21 *with picture*

Gem (Sources of gems) G: 77

Mountain (Volcanic mountains) M: 892

Rock R: 371 *with pictures*

Ignis fatuus [light]

Will-o'-the-wisp W: 307

Ignition [engine] I: 49 *with diagram*

Automobile (How an automobile works)

A: 949; (The electrical system) A: 954;

diagram on A: 951

Diesel engine (How a diesel engine works)

D: 199

Gasoline engine (Ignition system) G: 65

Induction coil I: 240 *with diagram*

Magneto M: 62

Rocket (Solid-propellant rockets) R: 388

Ignition coil

Ignition (Parts of an ignition system) I: 49 *with*

diagrams

Ignition switch [battery ignition]

Ignition (Parts of an ignition system) I: 49 *with*

diagram

Ignition system

Rocket (Liquid-propellant rockets) R: 388-389

Ignition temperature

Combustion Ci: 867

Fire (How fire is produced) F: 121

Igrayne [legendary figure]

Arthur, King A: 757

Iguaçu Falls [falls, Argentina-Brazil] I: 50

Argentina (Northern Argentina) A: 652-653

with picture

Brazil *picture on* B: 579

National park (Argentina) N: 42b *with picture*

Iguaçu National Park [Brazil]

National park (Argentina) N: 42b *with picture;*

(table) N: 42g

Iguaçu River [Argentina-Brazil]

Brazil (The Central and Southern Plateaus)

B: 580

Iguaçu Falls I: 50

Iguala, Plan of [Mexican history]

Iturbide, Agustín de I: 520

Iguana [reptile] I: 50 *with picture*

Animal *picture on* A: 480

Galapagos Islands G: 8 *with picture*

Iguanodon [dinosaur] I: 50 *with picture*

Dinosaur (True dinosaurs) D: 206b-206c;

(Dinosaur discoveries) D: 213; *picture on*

D: 207

Iguazú Falls [falls, Argentina-Brazil] See Iguazu

Falls in this index

Iguazú National Park [Argentina]

National park (Argentina) N: 42b; (table)

N: 42g

Ihara Saikaku [Japanese author]

Japanese literature (The Tokugawa period)

J: 62

Ihram [garment]

Islam (The Five Pillars of Islam) I: 463-464

IIHF See International Ice Hockey Federation in

this index

Ijma [religion]

Shari'a S: 374

IJsselmeer [region, the Netherlands]

Netherlands N: 138

Ikard, Bose [American frontiersman]

Western frontier life in America (The people)

W: 235

Ike [nickname]

Eisenhower, Dwight David E: 148

Ikebana [flower arranging]

Japan (Recreation) J: 40

Ikeda, Kikunae [Japanese chemist]

Monosodium glutamate M: 733

Ikeya-Seki, Comet [astronomy]

Comet (table) Ci: 868

Ikhwan [religious group]

Saudi Arabia (The founding of Saudi Arabia)

S: 161

Ikiru [film]

Kurosawa, Akira K: 393

II ...

Titles beginning II appear under their key

words, as in Trovatore, II

ILA [labor union]

Bridges, Harry B: 607

Île-de-France [French history]

Middle Ages (Feudal government) M: 524 *with*

map

Île de France [Mauritian history]

Mauritius (History) M: 317

Île de la Cité [island]

Paris (The city) P: 161-162 *with map; picture*

on P: 160

Île d'Orléans [island]

Quebec (Places to visit) Q: 20 *with picture*

Quebec, Battle of (Bombardment of Quebec)

Q: 37

Ile Saint Jean

Prince Edward Island (Exploration and early

history) P: 791

Ileitis [disorder] See Crohn's disease in this

index

Ileum [anatomy]

Crohn's disease Ci: 1150

Iliac artery [anatomy]

Artery (Principal arteries) A: 751

Human body *diagram on* H: 422

Iliac vein [anatomy]

Human body *diagram on* H: 422

Iliad [poem by Homer] I: 51

Achaean A: 25

Epic E: 342

Greek language (Development of ancient

Greek) G: 376

Greek literature (Epic poetry) G: 377

Hector H: 164

Homer H: 303

Mythology (Greek mythology) M: 978

Odyssey O:

Dinosaur *picture on* D: 206c
 Frog *picture on* F: 537
 Hip H: 238 *with diagram*
 Human body *diagram on* H: 422
 Pelvis P: 233 *with diagram*
Ilkhans [Mongol history]
 Mongol Empire (Breakup) M: 721
Illecillewaet Glacier [British Columbia]
 Selkirk Mountains S: 290
Illegal alien I: 51
 Alien A: 367
 Amnesty (Since the early 1900's) A: 437-438
 Border Patrol, United States B: 487
 Deportation D: 149
 Fourteenth Amendment F: 438
 Hispanic Americans (Who are the Hispanic Americans?) H: 245; (Mexican immigration) H: 253; (Stricter immigration laws) H: 254
 Immigration (The fourth wave) I: 83
 Immigration and Naturalization Service I: 86
Illegal procedure
 Football (Violations and penalties) F: 363-364
Illica, Luigi [Italian librettist]
 Opera (*Bohème, La*) O: 801; (*Madama Butterfly*) O: 804; (*Tosca*) O: 807
Illilouette Falls
 Yosemite National Park (Waterfalls) Y: 570
Illimani [mountain, Bolivia]
 Andes Mountains (Physical features) A: 452
Illini Indians See Illinois Indians *in this index*
Illiniwek Indians See Illinois Indians *in this index*
Illinoian ice age [geology]
 Ice age (Evidence of ice ages and their climates) I: 6-7
Illinois I: 52 *with pictures and maps*
 See also the list of Related Articles in the Illinois article
Illinois, University of I: 77
 Chicago (Education) C: 427
 Illinois *picture on* I: 56
Illinois and Michigan Canal [Illinois]
 Illinois (Early statehood) I: 74
Illinois and Michigan National Heritage Corridor [historic area]
 Illinois (Places to visit) I: 62
Illinois Confederacy [American Indians]
 Illinois (Indian days) I: 72
Illinois ex rel. McCollum v. Board of Education [U.S. history]
 Religious education (Public schools) R: 225
Illinois Indians [American Indians] I: 78
 Illinois I: 53; (Indian days) I: 72
Illinois Institute of Technology
 Architecture *picture on* A: 632
 Mies van der Rohe, Ludwig M: 536
Illinois River I: 78
 Illinois (Rivers and lakes) I: 64-66 *with picture*
Illinois Waterway
 Illinois (Rivers and lakes) I: 64-66
Illiteracy
 See also Literacy *in this index*
 Education (How can performance be improved?) E: 105-106
Illness See Disease *in this index*
Illuminance [light] See Illumination *in this index*
Illuminated manuscript I: 78 *with picture*
 Book (The Middle Ages) B: 466
 Byzantine art (Other art forms) B: 751 *with picture*
 Calligraphy C: 68
 Manuscript (European manuscripts of the Middle Ages) M: 173 *with picture*
 Painting (Medieval painting) P: 48-49 *with pictures*
 Scribe S: 226
Pictures
 Bible *picture on* B: 283
 Book *picture on* B: 464
 Communication *picture on* Ci: 881
 Crossbow *picture on* Ci: 1156
 England *picture on* E: 307
 Europe *picture on* E: 411
 Gothic art *picture on* G: 279
 Joan of Arc, Saint *pictures on* J: 128
 Law *picture on* L: 135
 Middle Ages *pictures on* M: 522, M: 523
Illuminated printing [engraving]
 Blake, William B: 397

Illuminating Engineering Society of North America
 Lighting (In offices, stores, and factories) L: 296-297
Illuminating grenade
 Grenade G: 390
Illuminating shell [ammunition] See Star shell *in this index*
Illumination [art] See Illuminated manuscript *in this index*
Illumination [light]
 Foot-candle F: 353
 Light (The brightness of light) L: 291
Illuminations [poems by Rimbaud]
 Rimbaud, Arthur R: 341
Illusion [vision]
 Magician (Illusions) M: 51
 Perception (Learning, emotion, and motivation) P: 283
 Ventriiloquism V: 309
 See also Optical illusion *in this index*
Illusionist
 Magician (Illusions) M: 51
Illusionistic surrealism [art]
 Painting (Surrealism) P: 81
Illustration [art]
 Encyclopedia (Illustrations) E: 266; (Illustrating the article) E: 267
 Printing (Preparing illustrations for reproduction) P: 797
Illustration award
 Caldecott Medal C: 26
 Literature for children (Awards) L: 366
Illustration model
 Modeling (Kinds of models) M: 684
Illustrations of the Huttonian Theory [book by Playfair]
 Geology (The rock dispute) G: 98-99
"Illustrations of the Logic of Science" [essays by Peirce]
 Pragmatism P: 729
Illustrative cartoon
 Cartoon (Illustration) C: 266 *with picture*;
 (Developing the idea) C: 266-267
Illyrians [ancient people]
 Albania (History) A: 307
 Bosnia-Herzegovina (History) B: 492
Ilmen, Lake [Russia]
 Lake Ilmen L: 39
Ilmenite [mineral] I: 78
 Titanium (Location of deposits) T: 300
ILO See International Labour Organization *in this index*
Iloilo [Philippines] I: 79
Ilus [legendary figure]
 Troy T: 454
ILWU [labor union]
 Bridges, Harry B: 607
I'm No Angel [film]
 West, Mae W: 198
Image [light]
 Lens (Creating an image) L: 196 *with diagrams*
 Mirror M: 616 *with diagrams*
 Telescope (Producing detailed images) T: 103
 Television (The television camera) T: 121
Image [religion]
 Icon I: 24
 Idolatry I: 47
Image assembly [printing] See Page makeup *in this index*
Image dissector [electronics]
 Farnsworth, Philo Taylor F: 46
Image intensifier
 Fluoroscopy F: 306
 Night vision systems N: 419
Image orthicon I: 79
 Iconoscope I: 25
Imager [instrument]
 Hubble Space Telescope (How the telescope works) H: 403
Imagery [language]
 Shakespeare, William (Imagery) S: 367
Imaginary Landscape No. 4 [music by Cage]
 Cage, John C: 14
Imaginary number
 Mathematics (Branches of mathematics) M: 303
 Gauss, Carl Friedrich G: 70
 Square root (Square roots of negative numbers) So: 812
Imagination I: 79
 Dream (What dreams consist of) D: 344

Imaging [astronomy]
 Satellite (How scientists study satellites) S: 150c
Imagists [art]
 Painting (New image painting) P: 87
Imagists [literature]
 American literature (Modernist poetry) A: 421
 Doolittle, Hilda D: 309
 Free verse F: 500
 Lowell, Amy L: 510
 Poetry (Poetry of the 1900's) P: 597
Imago [entomology] I: 79
 Metamorphosis (The adult, or imago) M: 429
Imam [religious leader]
 Islam (The Five Pillars of Islam) I: 463-464;
 (Divisions of Islam) I: 466
 Muslims (Ali) M: 964b
 Shiites S: 400
Imamah [clothing]
 Sudan (Clothing) So: 953
Imami Shia [religion]
 Islam (Divisions of Islam) I: 466
Imari porcelain
 Porcelain (Oriental porcelain) P: 676-677
Imbolc [holiday]
 Witchcraft (Witchcraft as a religion) W: 371-372
IMF See International Monetary Fund *in this index*
Imhotep [ancient Egyptian doctor] I: 79
 Pyramids (The first pyramids) P: 916
Imitation [music]
 Bach, Johann Sebastian (His works) B: 16
Imitation [psychology]
 Education (History) E: 97
 Personality (Personality development) P: 303
Imitation diamond
 Diamond (Imitation diamonds) D: 183
Imitation of Christ [book by Thomas à Kempis]
 Thomas à Kempis T: 262
Imitations of Horace [book by Pope]
 Pope, Alexander P: 667
Imitative magic
 Magic (Homeopathic magic) M: 49
Immaculate Conception [religion] I: 79
 Annunciation A: 518
 Duns Scotus, John D: 386
 Pius IX P: 503
Immaculate Conception, The [painting by Murillo]
 Murillo, Bartolomé Esteban M: 930 *with picture*
Immersion Cinema [exhibit]
 National Museum of Natural History *picture on* N: 41
Immersion education
 Bilingual education (Immersion education) B: 300
Immersion experience
 Aquarium, Public (Displaying exhibits) A: 579
Immersion foot [disorder] I: 79
Immigrant See Immigration *in this index*
Immigration I: 80 *with pictures*
 Alien A: 367
 Asian Americans (History of Asian immigration) A: 812d
 Canada (Population) C: 104
 Chicago (People) C: 426; (Growth as a city) C: 435
 City (Cultural variety in cities) Ci: 593
 Colonial life in America (Population growth) Ci: 790
 Cuba (Foreign relations) Ci: 1179
 Deportation D: 149
 Ellis Island E: 243
 Hispanic Americans H: 244; (The history of Hispanic-American immigration) H: 250 *with pictures*; (Hispanic Americans today) H: 257
 Home economics (History) H: 300
 Illegal alien I: 51
 Kindergarten (Kindergartens today) K: 319
 London (Ancestry) L: 430
 Minority group (How a group becomes a minority) M: 609
 Multiculturalism M: 919
 New York City (The growing city) N: 341-342 *with picture*
 Statue of Liberty (Growth as a symbol) So: 878
 United States (Ancestry) U: 108-109

- United States, History of the (A growing population) U: 177-178 *with picture*
- Immigration Act** [1924]
Asian Americans (Asian immigration halted) A: 812e
Oriental exclusion acts O: 855
- Immigration Act** [1990]
Citizenship (Laws passed by Congress) Ci: 571
- Immigration and Nationality Act** [1952]
Asian Americans (Restrictions lifted) A: 812f
Citizenship (Laws passed by Congress) Ci: 571
Immigration (A temporary decline—1930-1965) I: 82-83
Oriental exclusion acts O: 855
- Immigration and Naturalization Service** [U.S.] I: 86
Border Patrol, United States B: 487
Naturalization (Naturalization in the United States) N: 66
- Immigration Reform and Control Act** [1986]
Hispanic Americans (Stricter immigration laws) H: 254
Immigration (The fourth wave) I: 83
- Immoralist, The** [book by Gide]
Gide, André G: 187
- Immortal Thirty-Three** [Uruguayan history]
Uruguay (Independence) U: 227
- Immortality** [religion] I: 86
Death D: 61
Egypt, Ancient (Religion) E: 137-138
Mythology (Mythical beings) M: 974
Plato (Immortality of the soul) P: 568
- Immortals, The**
French Academy F: 511
- Immortelle** [plant] I: 86 *with picture*
- Immovable feast** [religion]
Calendar (The Christian church calendar) C: 29
- Immune deficiency disease** *See*
Immuno deficiency disease in this index
- Immune globulins** [physiology]
Gamma globulin G: 23
- Immune reaction** *See* Immune response in this index
- Immune response**
Disease (Immune responses) D: 231
Immune system I: 87; (The immune response) I: 88 *with diagrams*
Interferon I: 324
Interleukin I: 336
- Immune system** [physiology] I: 87 *with pictures*
AIDS A: 163
Addison's disease A: 48
Allergy (How an allergy develops) A: 373
Biology (Current research and issues) B: 320
Blood (Protecting against disease) B: 410
Cancer (Biological response modifiers) C: 172
Chronic fatigue syndrome C: 539
Cyclosporine Ci: 1204
Disease (Disorders of the immune system) D: 229; (Immune responses) D: 231
Heredity (The era of genetic engineering) H: 209
Inoculation I: 276
Interleukin I: 336
Lupus L: 526
Monoclonal antibody M: 730
Pasteur, Louis (His work in medicine) P: 193
Prophylaxis P: 827
Stress (Stress-related illnesses) So: 927
Thymus T: 274
Transplant (Preventing rejection) T: 380
Virus (Virus diseases in human beings) V: 426
- Immunity** [physiology]
See also Immune system in this index
Immune system I: 87
Disease (Immune responses) D: 231-232
Immunization (Active immunization) I: 89; (Passive immunization) I: 90
- Immunity, Congressional**
Constitution of the United States (Article I, Section 6) Ci: 1006
House of Representatives (Salary and privileges) H: 386
Senate (Salary and privileges) S: 294
- Immunity, Diplomatic**
Diplomacy (Diplomatic immunity) D: 216
- Immunization** [medicine] I: 89
Drug (Vaccines) D: 351
Hay fever (Treatment) H: 116
Health (Public health) H: 127
Immune system (Active immunity) I: 88b-88c
Medicine (The medical revolution) M: 376-377
- Immunoassay** [test]
Drug testing D: 366
- Immuno deficiency disease**
Immune system (Disorders of the immune system) I: 88c
- Immunoglobulin** [physiology]
Immune system (The immune response) I: 88; (Recent advances) I: 89
- Immunology** [medicine]
Biology (table) B: 317
Immune system I: 87
Medicine (The development of immunology) M: 374
Prophylaxis P: 827
- Immunosuppressive drug**
Drug (Immunosuppressive drugs) D: 353
Immune system (The cell-mediated immune response) I: 88a-88b
Myasthenia gravis M: 970f
Transplant (Preventing rejection) T: 380-381
- Immunotherapy** [medicine]
Cancer (Biological response modifiers) C: 172
- IMO**
International Maritime Organization I: 342
- Imogen** [literary figure]
Shakespeare, William (*Cymbeline*) S: 365
- Impact** [physics]
Motion (Momentum and kinetic energy) M: 844
- Impact basin**
Mars (Craters and impact basins) M: 226
Meteor (Impact craters and basins) M: 432
- Impact crater**
Meteor (Impact craters and basins) M: 432
Venus (Surface and atmosphere) V: 311-312 *with picture*
- Impact printer** [electronic device]
Printer (Impact printers) P: 795
- Impact process**
Extrusion E: 459
- Impact vehicle**
Space exploration (Space probes) So: 708
- Impacted wisdom tooth** [anatomy]
Teeth (Permanent teeth) T: 79-80
- Impala** [animal] I: 90 *with picture*
Animal picture on A: 494
Antelope picture on A: 542
- Impasto** [art]
Painting (Other materials) P: 36; (The Dutch masters) P: 62-64
- Impatiens** [plant] I: 90
- Impeachment** [government] I: 91
Arizona (The late 1900's) A: 691-692
Clinton, Bill (Domestic events) Ci: 682f
Congress of the United States (Impeaching and trying federal officials) Ci: 946
Constitution of the United States (Article I, Section 2) Ci: 1004-1005; (Article I, Section 3) Ci: 1005; (Article II, Section 4) Ci: 1009
House of Representatives (Other powers and duties) H: 387
Johnson, Andrew (Impeachment) J: 140
Nixon, Richard Milhous (Events at home) N: 435-437
President of the United States (Term of office) P: 758-762; (The impeachment of Bill Clinton) P: 769
Reconstruction (The impeachment of Johnson) R: 178
Senate (Other powers and duties) S: 295
United States, History of the (Impeachment) U: 195
Watergate (The resignation of Nixon) W: 145
- Impedance** [electricity]
Ohm's law O: 707
- Impeller**
Pump (Centrifugal pumps) P: 899 *with diagram*
- Imperative mood** [grammar]
Conjugation Ci: 951
Mood (Imperative mood) M: 781
Sentence (Sentence classifications) S: 303
- Imperfect flower**
Flower (Variations in flower structure) F: 294
Plant picture on P: 531
Pollen (Self-pollination) P: 645-646
- Imperforate stamp**
Stamp collecting (Separations) So: 830; *picture on So: 831*
- Imperial Airways**
Aviation (The first airlines) A: 988
- Imperial angelfish**
Fish picture on F: 155
- Imperial British East Africa Company**
Kenya (British rule) K: 303
- Imperial City** [district]
Beijing (The city) B: 222 *with map*
- Imperial Conference** [British history]
Canada, History of (Independence) C: 150
Commonwealth of Nations (History) Ci: 876
- Imperial Council Shrine Guilds of America, Inc.**
Masonry (Organization) M: 267
- Imperial gallon** [unit of measure]
Gallon G: 16
Weights and measures (Inch-pound units) W: 187
- Imperial gauge**
Wire (Sizes of wire) W: 343
- Imperial Hotel** [Tokyo]
Wright, Frank Lloyd (Early career) W: 507
- Imperial Mosque** [Isfahan, Iran]
Architecture diagram on A: 614
- Imperial Palace** [Tokyo]
Tokyo (The Imperial Palace) T: 316; *picture on T: 320*
- Imperial parrot** [animal]
Endangered species (table) E: 270
- Imperial Period** [literature]
Latin literature (The Imperial Period) L: 116
- Imperial pint** [unit of measure]
Pint P: 475
Weights and measures (Miscellaneous weights and measures) W: 184
- Imperial Russian Nuptial Crown**
Crown picture on Ci: 1158
- Imperial Technical School** [Moscow]
Vocational education (Early vocational education in schools) V: 435
- Imperial topaz** [gem]
Topaz T: 332
- Imperial University** [ancient China]
Confucianism (Early Confucianism) Ci: 936-937
- Imperial Valley** [region, California] I: 92
Irrigation map on I: 457
Mexico (The Pacific Northwest) M: 460
- Imperial War Cabinet** [British history]
Borden, Sir Robert Laird (War leader) B: 486; *picture on B: 484*
- Imperialism** [political science] I: 92
Colonialism Ci: 813
Communism (Lenin's contributions) Ci: 890
United Kingdom (Gladstone and Disraeli) U: 69
World, History of the (Imperialism) W: 445; (The birth of new nations) W: 448
- Imperialist, The** [book by Duncan]
Canadian literature (Fiction: 1850-1918) C: 158
- Impetigo** [disease] I: 93
Skin (Infections) S: 490
- Implantable defibrillator** [device]
Defibrillator D: 88
- Implantable pump** [medicine]
Drug (Entrance into the body) D: 353
- Implantation** [pregnancy]
Reproduction, Human (The first days of pregnancy) R: 246-247
- Implicit Price Index** [economics]
Inflation (Measuring inflation) I: 267
- Implied authority** [law]
Agent A: 140
- Implied line**
Photography (Line) P: 412
- Implied powers**
Congress of the United States (Origin of power) Ci: 943
Constitution of the United States (The supreme law of the land) Ci: 998
Executive order E: 436
Marshall, John (Chief justice) M: 230
McCulloch v. Maryland M: 335
- Implied warranty** [law]
Consumerism (The right to quality) Ci: 1018
- Implosion method**
Nuclear weapon (Fission weapons) N: 596-597
- Implosion-type fission bomb**
Nuclear weapon diagram on N: 598

Impluvium [architecture]Atrium A: 877 *with picture***Import** See Exports and imports *in this index***Import quota**

Economics (World trade) E: 63-64

Exports and imports (Import restrictions) E: 455

Importance of Being Earnest, The [play by Wilde]

Wilde, Oscar W: 302

Imported cabbageworm [insect]Insect (Quarantine systems) I: 285 *with picture***Impossibility theorem** [economics]

Arrow, Kenneth Joseph A: 743

Impotence [physiology] I: 94**Impression**

Engraving (Printing the engraving) E: 325

Fossil (How fossils form) F: 425 *with picture***Impression** [philosophy]

Hume, David (Hume's thought) H: 432

Philosophy (Modern philosophy) P: 387-388

Impression cylinder [printing]

Printing (Offset presses) P: 798-799

Impression: Sunrise [painting by Monet]

Monet, Claude M: 703

Impressionism [art] I: 94 *with picture*

Classical music (The 1900's) C: 649

Expressionism E: 455

France (Painting) F: 462

German literature (Impressionism) G: 142

Monet, Claude M: 703 *with picture*

Morisot, Berthe M: 805

Painting (Edouard Manet and the impressionists) P: 71; (Painting outside France) P: 72-73

Pissarro, Camille P: 496 *with picture*

Postimpressionism P: 708

Realism (In painting) R: 172

Renoir, Pierre Auguste R: 241 *with picture***Impressment Act** [1863]

Civil War (Economy) C: 623

Impressment of seamen [American history]

War of 1812 (Impressment of seamen) W: 29

Kidnapping K: 311

Imprinting

Instinct (Instinct and learning) I: 305

Imprisonment, False

False imprisonment F: 19

Impromptu speech

Public speaking (Delivering the speech) P: 866

A Guide to Speaking Skills Research

Guide: 22

Improper fraction

Fraction (Improper fractions) F: 449-450

Improvisation [music]

Classical music (Solo music) C: 643

Jazz J: 68

Improvisation [theater]

Drama (Commedia dell' arte) D: 331

Impulse [physiology]

Brain (The brain's chemical messengers)

B: 556

Nervous system (How the nervous system works) N: 132 *with diagram*; (How neurons carry impulses) N: 134 *with diagrams***Impulse buying**

Advertising (Other ways of advertising) A: 75

Impulse turbineTurbine (Kinds of turbines) T: 496 *with picture***Impulsive sound**

Sound (Noises) So: 599

Imputed income

Income I: 100

Imu [cooking]

Hawaii (Food) H: 94

In [symbol]

Indium I: 224

In a Green Night: Poems [poems by Walcott]

Walcott, Derek W: 7

In a Mist [music by Beiderbecke]

Beiderbecke, Bix B: 222

In Abraham's Bosom [play by Green]

Green, Paul Eliot G: 379

In America [book by Sontag]

Sontag, Susan So: 594

In Chancery [book by Galsworthy]

Galsworthy, John G: 16

In Cold Blood [book by Capote]

Capote, Truman C: 197

Novel (The novel today) N: 575

In commission [military]

Commission, Military C: 872

In Dahomey [play]

Williams, Bert W: 310

In Defense of the Earth [poems by Rexroth]

Rexroth, Kenneth R: 288

In Dubious Battle [book by Steinbeck]

Steinbeck, John So: 885

"In Flanders Fields" [poem by McCrae]

McCrae, John M: 334

In-goal [sports]

Rugby football (Rugby Union) R: 510; (Rugby League) R: 511

In God We Trust [motto]

National Motto, United States N: 40

In-ground pool

Swimming pool So: 1048

In-laws

Family (Family relationships) F: 21

In-line engine

Automobile (The engine) A: 949

Gasoline engine *picture on* G: 64**In Memoriam** [poem by Tennyson]

Tennyson, Lord (His life) T: 169

English literature (Later Victorian literature)

E: 321

In Our Time [stories by Hemingway]

Hemingway, Ernest (Early life) H: 180

In Praise of Folly [book by Erasmus] See *Praise of Folly in this index***In Retrospect: The Tragedy and Lessons of Vietnam** [book by McNamara]

McNamara, Robert Strange M: 344

In Search of Myself [book by Grove]

Grove, Frederick Philip G: 404

In-service training

Education (Who should teach?) E: 107

Teaching (Continuing professional development) T: 69

In situ solution mining

Uranium (Mining uranium) U: 215

"In the City of Slaughter" [poem by Bialik]

Bialik, Chaim Nachman B: 278

In the Clearing [poems by Frost]

Frost, Robert Lee (His life) F: 542-543

In the Heart of the Country [book by Coetzee]

Novel (The novel today) N: 575

In the Heat of the Night [film]

Motion picture (Best picture: 1967) M: 861

In the Night Kitchen [book by Sendak]

Sendak, Maurice S: 296

In the Park [painting by Laurencin]Laurencin, Marie *picture on* L: 122**In the Shadow of the Glen** [play by Synge]

Synge, John Millington So: 1067

In the Shadow of Tomorrow [essays by Huizinga]

Huizinga, Johan H: 411

In the South Seas [book by Stevenson]

Stevenson, Robert Louis (Other writings)

So: 898-899

In the Steppes of Central Asia [music by Borodin]

Borodin, Alexander B: 490

In-vehicle navigation systemMap (Navigation maps) M: 177 *with picture***In vitro fertilization**

Fallopian tube F: 18

Fertilization F: 78

Infertility (Treatment) I: 265

Medical ethics M: 361

Multiple birth (Fertility drugs) M: 920

Pregnancy (Becoming pregnant) P: 734a

"In Westminster Abbey" [poem by Betjeman]

Betjeman, John B: 275

In Which We Serve [film]

Lean, David L: 162

Inadmissible Evidence [play by Osborne]

Osborne, John O: 861

Inarching

Grafting (Other kinds of grafting) G: 299

Inauguration [ceremony]President of the United States (The inauguration) P: 762-763 *with picture*

Vice President of the United States

(Inauguration) V: 350

Inboard engine

Boating (Motorboats) B: 428

Motorboat racing (Hull designs) M: 876

Inboard-outboard [boat]Boating *picture on* B: 430**Inboard-outboard motor**

Boating (Motorboats) B: 428

Inborn need

Human relations (Individual needs) H: 427

Inbreeding [genetics]

Hybrid (Producing hybrid plants) H: 461

Livestock (Breeding livestock) L: 398

Zoo (Wildlife conservation) Z: 604

Inca [American Indians] I: 95 *with pictures and maps*

Architecture (Pre-Columbian architecture) A: 614

Bolivia (History) B: 446

Chinchilla C: 509

De Soto, Hernando D: 160

Ecuador (Indian period) E: 73

Indian, American (Empires and states) I: 144;

(Pottery) I: 145; (Weaving) I: 146 *with picture*;

(Beliefs) I: 147; (Shamans) I: 148;

(Writing) I: 150; (Indians of the Andes)

I: 173-174 *with pictures*; *pictures on*

I: 140, I: 143

Machu Picchu M: 20

Panama (The Spanish colonial period) P: 120

Peru (History) P: 314 *with picture*

Pizarro, Francisco (Conquest of Peru) P: 504

with pictures

Potato (History) P: 713

Quinoa Q: 42

Road (From the 500's to the 1800's) R: 361

Vicuña V: 358

World, History of the (Civilizations in the Americas) W: 437 *with picture***Incandescence**

Luminescence L: 522

Incandescent lampEdison, Thomas Alva (The Wizard of Menlo Park) E: 78-79 *with picture*Electric light (Incandescent lamps) E: 174 *with picture*

Electric power (Early developments) E: 186

Interior design (Selecting accessories) I: 333

Invention *picture on* I: 356

Latimer, Lewis Howard L: 90

Lighting (Lighting devices) L: 298

Projector P: 816

Incantation

Magic (Magic words) M: 49

Incapacitation

Prison (How prisons operate) P: 806

Incarnation [religion]

Annunciation A: 518

Roman Catholic Church (Sin, the Incarnation, and salvation) R: 404

Incendiary bombBomb (Incendiary bombs) B: 450 *with diagram***Incense** I: 99

Frankincense F: 485

Incentive [psychology]

Fatigue F: 54

Incentive bonus

Bonus B: 463

Inceptisol [soil]

Soil (How soils are classified) So: 575-576

*with map***Incest**

Abortion (Arguments for abortion) A: 15

Family (Ancient families) F: 21-22

Marriage (Marriage in other cultures) M: 222

Inch [unit of measure] I: 99 *with pictures***Inch-pound system** [measurement]

Metric system M: 436; (The inch-pound system) M: 437

Weights and measures (Measurement systems) W: 184; (Comparison of measurement systems) W: 185; (Inch-pound units) W: 187

Inchcape Rock [reef, Scotland] I: 99**"Inchcape Rock, The"** [poem by Southey]

Inchcape Rock I: 99

Inchon [city, Korea] I: 99**Inchon landing** [Korean War]

Amphibious warfare (History of amphibious warfare) A: 442

Korean War (The Inchon landing) K: 381 *with map***Inchworm** [insect] See *Measuring worm in this index***Incidence, Angle of** [physics] See *Angle of incidence in this index*

Incident at Vichy [play by Miller]

Miller, Arthur M: 553

Incident light meter

Photography (Exposure meters) P: 418-419

Incidental music

Classical music (Orchestral music) Ci: 644

Opera O: 790

Incidents from the Massacre at Chios [painting by Delacroix]

Delacroix, Eugène D: 95

Incidents in the Life of a Slave Girl [book by Jacobs]

African American literature (The 1800's) A: 136a

Child, Lydia Maria C: 454

Incineration

Waste disposal (Incineration) W: 113

Incinerator [furnace] I: 99 *with picture*

Waste disposal (Incineration) W: 113

Incision

Surgery (A typical operation) So: 1006

Incisor [anatomy]

Beaver (Teeth) B: 193 *with picture*

Elephant (Tusks and teeth) E: 228

Rodent R: 397 *with picture*

Squirrel (The origin and development of squirrels) So: 815

Teeth (Deciduous teeth) T: 79; (Permanent

teeth) T: 79 *with pictures*

Incitatus [horse]

Horse (table: Famous horses in history and legend) H: 361

Inclined orbit

Space exploration (Kinds of earth orbits) *diagrams on* So: 697

Inclined plane I: 100 *with picture*

Machine (Inclined plane) M: 15 *with pictures*

Inclinometer [measuring device] I: 100

Inclusion [gem]

Emerald E: 257

Inclusive fitness (biology)

Hamilton, William Donald H: 33

Inco Limited

Thompson T: 262

Incoherent light

Laser (Characteristics of laser light) L: 84-85

Income I: 100 *with diagrams*

African Americans (Disappointments and controversy) A: 136q

Budget (Estimating income) B: 670; (Economic effects of the national budget) B: 671-672

Capitalism (Capitalism in its ideal form) C: 194

Careers (Probable earnings) C: 216

Cost of living Ci: 1079

Economics (Distribution of incomes) E: 61

Great Depression (Uneven distribution of income) G: 339

Inflation (Effects on income) I: 268

Investment I: 366; (table) I: 366; (Direct investments) I: 367

National income N: 37

Poverty (Measuring poverty) P: 723

Income bond

Bond (Kinds of bonds) B: 454

Income distribution

Great Depression (Uneven distribution of income) G: 339

Income fund

Mutual fund M: 969

Income statement

Accounting (Financial reports) A: 23

Bookkeeping (Bookkeeping and financial statements) B: 473 *with picture*

Income tax I: 102 *with diagrams*

Capital gains tax C: 192

Constitution of the United States (Article I, Section 9) Ci: 1007-1008; (Amendment 16) Ci: 1014

Flat tax F: 228

Friedman, Milton F: 533

Internal revenue (History) I: 337

Internal Revenue Service I: 337

Progressive movement (Economic reforms) P: 813-814

Recession (Fighting recession) R: 175

Tax Court, United States T: 52

Taxation (Income taxes) T: 52; (Taxation in the United States) T: 54

Incompatibility

Divorce (No-fault divorce) D: 253

Incompetence [law] I: 105

Incomplete metamorphosis (biology)

Metamorphosis (Other examples) M: 429

Incomplete protein

Protein (Proteins in the diet) P: 832 *with diagrams*

Nutrition (Proteins) N: 625

Incompletely penetrant disease

Genetic testing (Genes associated with disease) G: 85-86

Incompressible fluid

Fluid F: 304

Incongruity

Humor (The humor of situation) H: 435

Incontinence [disorder] I: 105

Bladder B: 395

Prostate cancer P: 829

Incorporation [law]

Corporation Ci: 1070

Delaware (Economy) D: 106

Incorporation [sociology]

Minority group (How a group becomes a minority) M: 609

Incorporation, Articles of

Charter C: 385

Corporation Ci: 1070

Incubation (biology) I: 106

Animal (Incubation) A: 498 *with picture*

Reptile (Reproduction) R: 252

Incubation period [disease]

Disease (table) D: 226

Incubator [machine] I: 106

Chicken (Breeding and hatching) C: 443; *picture on* C: 444

Egg (How embryos develop) E: 117-118

Hospital *picture on* H: 373

Incubation I: 106

Inculation

Moral education (Methods of moral education) M: 799

Incunabula [books]

Book (The development of printed books) B: 466-467

Library of Congress L: 263

Incus [anatomy]

Ear (The middle ear) E: 7-8 *with diagram; diagram on* E: 10

IND

New York City (Transportation) N: 334-335

Indefatigable Island

Galapagos Islands G: 7 *with map*

Indefinite, The (philosophy)

Anaximander A: 448b

Indefinite article

Article (The indefinite articles) A: 758

Indefinite pronoun

Pronoun P: 820

Indemnity

Insurance I: 309

Managed care plans M: 131

Indemnity Only [book by Paretsky]

Paretsky, Sara P: 159

Indentured servant [U.S. history] I: 106

African Americans (Colonial times) A: 136d

Colonial life in America (The lower class) Ci: 793

Immigration (The first wave) I: 81-82

Plantation (Slave-labor plantations) P: 550

United States, History of the (The colonists) U: 154-155

Westward movement in America (The earliest settlements) W: 244-245

Independence [child development]

Adolescent (Independence and responsibility) A: 62

Baby (From 6 to 12 months) B: 7

Child (The preschool years) C: 449; (The early school years) C: 450

Parent (The role of parents) P: 156; (Changes in parenthood) P: 156

Independence [Missouri] I: 106

Mormons (Mormons in the Middle West) M: 808

Young, Brigham (Mormon leader) Y: 571

Independence [ship]

Aircraft carrier (History) A: 207

Independence, Declaration of *See* Declaration of Independence *in this index*

Independence, War for *See* Revolutionary War in America *in this index*

Independence Day [Mexico]

Hidalgo y Costilla, Miguel H: 224

Independence Day I: 106

July J: 188

United States, History of the *picture on* U: 156

Independence Hall [Philadelphia] I: 107

National Park System (table: National historical parks) N: 56-57

Pennsylvania *picture on* P: 265

Philadelphia (Downtown Philadelphia) P: 359; *picture on* P: 361

Independence Medal [Turkey]

Medals, decorations, and orders (table) M: 359

Independence movements [political science]

Africa (The movement to independence) A: 134

Asia (The end of colonialism) A: 807

Latin America (The wars of independence)

L: 107

Nationalism (Different forms of nationalism)

N: 62

Union of Soviet Socialist Republics (Threats to unity) U: 40-41

See also the History section of specific country articles, such as Peru (History)

Independence National Historical Park

[Pennsylvania]

National Park System (table: National historical parks) N: 56-57

Philadelphia (Downtown Philadelphia) P: 359

Independence Plaza

Montevideo M: 764b *with picture*

Independent agency [government]

President of the United States (The independent agencies) P: 764

United States, Government of the (Executive departments and agencies) U: 140

Independent assortment [genetics]

Heredity (Genetic recombination) H: 203; (Mendel's laws) H: 208

Independent Assortment, Law of [biology]

Heredity (Mendel's laws) H: 208

Mendel, Gregor Johann (His work) M: 398

Independent clause

Clause Ci: 657

Independent counsel [law] I: 107

Grand jury G: 308

Independent Counsel, Office of [U.S.]

Independent counsel I: 107

Independent living program

Foster care F: 429

Children's Bureau C: 457

Independent National Party [U.S. history]

Greenback Party G: 381

Independent Order of ...

Independent orders appear under their key words, as in Odd Fellows, *Independent Order of*

Independent prosecutor [law] *See* Independent counsel *in this index*

Independent Republican Party

Giscard d'Estaing, Valéry G: 201

Independent-Republicans [political party]

Minnesota (Politics) M: 602-603; (The mid-1900's) M: 606

Independent school

United Kingdom (Education) U: 56-57

Independent Smallholders' and Peasants' Party [political party]

Hungary (Politics) H: 439; (Multiparty elections) H: 448

Independent station

Television (Commercial stations) T: 114

Independent study

Library (High school libraries) L: 245

Independent Subway

New York City (Transportation) N: 334-335

Independent Television Commission

London (Communication) L: 438-439

Television (In Europe) T: 116

Independent Theatre Society [theater group]

Drama (Early realism) D: 338

Independent treasury [U.S. history]

Van Buren, Martin (The independent treasury) V: 272

Independent Treasury Act [1846]

Polk, James Knox (An independent treasury) P: 643

Indeterminate inflorescence [botany]

Inflorescence I: 268a *with pictures*

Raceme R: 51

Indeterminate sentence [law]

Sentence S: 304

- Index** [mathematics]
Root R: 473
- Index** [reference] I: 107
Book (Inside a book) B: 464-465
Encyclopedia (Arrangement of content) E: 266;
(Indexing) E: 267
Map (Map indexes) M: 179 *with picture*
- Index, The** See *Index of Forbidden Books in this index*
- Index fund**
Mutual fund M: 969
- Index glass** [instrument]
Sextant S: 337
- Index Medicus** [reference]
Library (United States government libraries)
L: 248
- Index of Forbidden Books** I: 107
Paul IV P: 200
- Index of refraction** [physics]
Gem (Index of refraction) G: 77
Refraction R: 199
- Indexation** [economics]
Cost of living Ci: 1079
Income tax (Effects of inflation) I: 103
Inflation (Effects on income) I: 268
- Indexes, Standard & Poor's** [stock market]
Standard & Poor's indexes So: 833
- Indexing** [economics] See *Indexation in this index*
- Indexing** [information science]
Information retrieval (How information retrieval works) I: 268b
- India** I: 108 *with pictures and maps*
Asia (Way of life in South Asia) A: 780; *picture on A: 770*
Agriculture
India (Agriculture) I: 125 *with picture and map*
Irrigation *picture on I: 458*
Tea T: 62
Art and architecture
India (The arts) I: 119
Bell *picture on B: 239*
Furniture (India) F: 572
Gupta dynasty (Cultural life under the guptas) G: 442
Music (Indian music) M: 956
Painting (Indian painting) P: 44 *with picture*
Sculpture (India) S: 236 *with pictures*
Communications and mass media
Television (In Asia) T: 116
Defense
Air force (The Indian Air Force) A: 184
Army (The Indian Army) A: 726
Independence Day I: 107
Navy (Major navies of the world) N: 78-79
Health and welfare
Birth control (Birth control today) B: 379
History
India (History) I: 128 *with pictures*
Asia (Other struggles) A: 810
Asian Americans (History of Asian immigration) A: 812d-812e
Besant, Annie Wood B: 273
Clinton, Bill (International affairs) Ci: 682f
Cold War (The great blocs split) Ci: 768
Da Gama, Vasco (Voyage to India) D: 4
Enclave E: 265
Exploration (Chinese exploration) E: 442
Famine (Causes of famine) F: 26
Gandhi, Mohandas Karamchand G: 24
Kashmir K: 248
Medicine (China and India) M: 372
Mountbatten, Louis M: 899
Nehru, Jawaharlal N: 120 *with picture*
Pakistan (History) P: 98-99
Philosophy (Oriental philosophy) P: 385-386
Science (Early civilizations) S: 196
United Kingdom *picture on U: 68*
United Nations (Arms control) U: 92-93
World, History of the (The Mauryan Empire in India) W: 430 *with picture*; (The age of invasions of India) W: 436; (The Islamic empires) W: 441-442
World War II (table: The Allies) W: 471; (The China-Burma-India theater) W: 489-490
Language and literature
Sanskrit literature S: 112
Manufacturing
India (Manufacturing) I: 125
People
India (People) I: 111
Caste C: 279
Clothing *picture on Ci: 693*
Divorce (In other countries) D: 253
Family *picture on F: 20*
Suttee So: 1013
Religion
India (Religion) I: 116 *with pictures*
Hinduism H: 235 *with pictures*
Mythology (Mythology and society) M: 988
Social and cultural life
India (Way of life) I: 114 *with pictures*
Dance (Asian theatrical dance) D: 30
Drama (India) D: 336 *with picture*
Fable F: 3
Segregation (Segregation in other countries) S: 286
Technology and science
Fishing industry (Inland fisheries) F: 182
Nuclear energy (The spread of nuclear capability) N: 591
Space exploration (India) So: 727
Transportation
India (Transportation) I: 127
Railroad (In other countries) R: 113-114
See also *the list of Related Articles in the India article*
- India, Star of** [gem]
Sapphire S: 122
- India rubber**
Goodyear, Charles G: 270
- Indian, American** I: 136 *with pictures and maps*
Alaska (Land-use issues) A: 304
American Indian Movement A: 411
Arizona (The mid-1900's) A: 691
Black Seminole B: 391
Bolivia (Population and ancestry) B: 443
Canada (Ancestry) C: 104-105 *with picture*
Carson, Kit (Military career) C: 250
Catlin, George C: 304
Columbus, Christopher (The first landing)
Ci: 860; (Columbus' impact on history)
Ci: 864
Exploration (Columbus reaches America)
E: 444
Fur trade F: 564
Guerrilla warfare (History) G: 420
Hispanic Americans (In Mexico) H: 247
Interior, Department of the I: 324
La Farge, Oliver L: 27
Menchú, Rigoberta M: 397
Minority group (American Indians) M: 610
Mission life in America M: 618 *with picture*
Name (American Indian names) N: 5
National Congress of American Indians N: 31
North America (People) N: 458
Northwest Territories (People) N: 532;
(Government) N: 533
Peru P: 306; (Ways of life) P: 309
Segregation (Other segregation in the United States) S: 286
Tribe T: 440
Culture
Arrowhead A: 744 *with pictures*
Buffalo ceremonies B: 679
Curare Ci: 1193
Dance (Ritual ethnic dances) D: 27 *with picture*
Doll (Traditional dolls) D: 287
Folk music (American folk music) F: 321
Food (Foods of the New World) F: 336; *picture on F: 329*
Ghost Dance G: 182
Gila Cliff Dwellings National Monument
G: 189
Horse (Horses and people) H: 360-361
Indian reservation I: 188
Lacrosse (History) L: 25
Language (Other language families) L: 65-66
Lévi-Strauss, Claude L: 218
Mask (Ceremonial masks) M: 263-264
Mound builders M: 881 *with pictures*
Music (American Indian music) M: 956 *with picture*
Mythology (American Indian mythology)
M: 985 *with picture*
Peace pipe P: 209
Pemmican P: 233
Pyramids (American pyramids) P: 917-919
with picture
Raccoon (People and raccoons) R: 51
Rain dance R: 125
Rubber (First uses) R: 500
Sand painting S: 107
Science (Early civilizations) S: 196
Sculpture (Indian sculpture of the Americas)
S: 242 *with pictures*
Shelter (In early America) S: 394
Slavery (The Middle Ages) S: 501-502
Sun dance So: 987
Tomahawk T: 324 *with pictures*
Totem T: 344 *with picture*
Wampum W: 22
- History**
American literature (Beginnings of American literature) A: 414
Canoeing (History) C: 182
Code talkers Ci: 749
Colonial life in America Ci: 786; (Before the arrival of the European settlers) Ci: 788; (Early English settlements) Ci: 788-789; (Colonists and Indians) Ci: 791
Cotton (Early days) Ci: 1092
Five Civilized Tribes F: 191
French and Indian wars F: 511 *with picture and map*
Guatemala (Indians) G: 413
Harrison, William Henry (Entry into politics)
H: 75
Indian Territory I: 189 *with map*
Indian wars I: 190 *with pictures*
Jackson, Andrew (The Indian issue) J: 13
Las Casas, Bartolomé de L: 80
Latin America (Ancestry) L: 94 *with picture*; (The first inhabitants) L: 104 *with picture*; (The conquest of the Indians)
L: 106 *with picture*
Peru (History) P: 314
Pioneer life in America (Before the arrival of the pioneers) P: 477; (Pioneers and Indians) P: 485; (Indians on the Plains)
P: 487
Quahar Q: 5
Trading post T: 366 *with picture*
United States, History of the (The first Americans) U: 150 *with pictures*; (British policy changes) U: 156-157; (Expansion and the Indians) U: 168 *with picture*; (The end of the western frontier) U: 179
Western frontier life in America (Indian fighting) W: 239
Westward movement in America (Indian conflicts) W: 247 *with picture*
Whale (American whaling) W: 262
World, History of the (Civilizations in the Americas) W: 437 *with pictures*
See also *the list of Related Articles in the Indian, American, article*
- Indian, American race** [theory]
Races, Human (The geographical-race theory)
R: 54
- Indian, Asian race** [theory]
Races, Human (The geographical-race theory)
R: 54
- Indian, Cigar store** [sculpture]
Folk art (Sculpture) F: 317 *with picture*
- Indian Act** [1876]
Indian, American (In Canada) I: 178
- Indian Affairs, Bureau of** [U.S.] I: 184 *with picture*
American Indian Movement A: 411
Indian, American (In the United States) I: 178-178a; (In the United States) I: 179
Indian reservation I: 188; (History) I: 189
Washington, D.C. *map on W: 76*
- Indian Affairs and Northern Development, Department of** [Canada]
Indian, American (In Canada) I: 178b
- Indian affairs and northern development, Minister of** [office]
Canada, Government of (The Cabinet) C: 132, *diagram on C: 137*
- Indian bean** [tree]
Catalpa C: 297
- Indian blanket**
Indian, American *pictures on I: 162, I: 167, I: 168*
- Indian braiding**
Weaving (Weaving without a loom) W: 174
- Indian-Bridge Town** [former name]
Bridgetown B: 607

Indian chief See *Chief in this index*

Indian Citizenship Act [law]

Indian, American (In the United States) I: 179

Indian Claims Commission [U.S.] I: 185

Indian cobra

Cobra Ci: 741 *with picture*

Indian corn

Corn Ci: 1056; (Kinds of corn) Ci: 1058-1059 *with picture*

Indian Desert [region, India-Pakistan]

Thar Desert T: 231

Indian dipper [plant]

Pitcher plant P: 499

Indian elephant

Elephant E: 226 *with pictures*
Endangered species (table) E: 270

Indian Empire, Order of the [organization]

Knighthood, Orders of *picture on K*: 347

Indian fig See *Prickly pear in this index*

Indian Gaming Regulatory Act [1988]

Indian, American (Social and economic progress) I: 180-181

Indian Guides [organization]

Y-Indian Guides Y: 548

Indian Head [rock, Colorado]

Garden of the Gods G: 29

Indian head cent [money]

Cent *pictures on C*: 350

Coin collecting *picture on C*: 758

Indian hemp [plant]

Dogbane D: 283

Indian Hunters Pursuing the Buffalo [painting by Rindisbacher]

Indian, American *picture on I*: 141

Indian Law, Institute for the Development of

Deloria, Vine, Jr. D: 118

Indian mahseer [fish]

Minnow M: 607

Indian mallow [plant] See *Velvetleaf in this index*

Indian Mills [U.S. history]

Indian reservation (History) I: 189

Indian National Congress [history of India]

India (Rise of Indian nationalism) I: 131; (World War II [1939-1945]) I: 132; (Independence and partition) I: 133

Indian Ocean I: 185 *with map*

Bay of Bengal B: 175 *with map*

Deep sea (The deep-sea floor) D: 82a

Fishing industry (Where fish are caught)

F: 181-182

Hurricane H: 452

Ocean (The world ocean) O: 651 *with picture*

Indian Opinion [newspaper]

Gandhi, Mohandas Karamchand (Gandhi's early life) G: 24-25

Indian paintbrush [plant] I: 187

Flower *picture on F*: 284

Indian peafowl

Peacock P: 211

Indian pipe [plant] I: 187 *with picture*

Flower *picture on F*: 284

Plant (Photosynthesis) P: 538 *with picture*

Indian poke [plant]

Hellebore H: 177

Indian python

Python P: 922 *with picture*

Indian Rebellion [1857-1859] I: 187

India (The Indian Rebellion) I: 130

Indian Removal Act [1830]

Choctaw Indians C: 519

Indian, American (In the United States) I: 178-178a *with picture*

Indian wars (Along the frontier) I: 192

Trail of Tears T: 368

Indian Reorganization Act [1934]

Indian Affairs, Bureau of I: 184

Indian reservation I: 188 *with map*

Indian, American (In the United States) I: 178-178a; (The preservation of Indian culture) I: 180 *with picture*

Indian wars (Along the frontier) I: 192

Indian reserve

Indian, American (After European contact)

I: 166; (In Canada) I: 178

Indian reservation I: 188

Indian rhinoceros

Animal *picture on A*: 477

Rhinoceros (Kinds of rhinoceroses) R: 294 *with picture*

Indian rice See *Wild rice in this index*

Indian root

Spikenard So: 792

Indian rug

Rugs and carpets (Oriental rugs) R: 516-517

Indian Self-Determination and Education

Assistance Act [1975]

Indian, American (Political gains) I: 182

Indian Affairs, Bureau of I: 184

Indian-shot canna [plant]

Canna C: 178

Indian Society of Lighting Engineers

Lighting (In offices, stores, and factories)

L: 296-297

Indian summer [weather] I: 189

Indian Territory [former region, U.S.] I: 189 *with map*

Five Civilized Tribes F: 191

Indian, American (In the United States) I: 178-178a

Oklahoma (Progress toward statehood) O: 732

Pioneer life in America (Pioneers and Indians)

P: 485

Trail of Tears T: 368

Westward movement in America (Closing of the frontier) W: 252

Indian tobacco

Lobelia L: 405

Indian tribe

Indian, American (Tribes) I: 143

Indian turnip [plant]

Jack-in-the-pulpit J: 2

Indian wars [U.S. history] I: 190 *with pictures and map*

Buffalo Soldiers B: 680

Colonial life in America (Colonists and Indians) Ci: 791

Pioneer life in America (Pioneers and Indians) P: 485

Smallpox S: 513

United States, History of the (Expansion and the Indians) U: 168

Western frontier life in America (Indian fighting) W: 239

Westward movement in America (Indian conflicts) W: 247 *with picture*; (The last Indian wars) W: 250 *with picture*

Wounded Knee W: 502

See also *specific Indian wars, such as Seminole wars or Modoc War in this index*

Indiana I: 196 *with pictures and maps*

Vincennes V: 385

See also *the list of Related Articles in the Indiana article*

Indiana [book by Sand]

French literature (Romantic fiction) F: 521

Sand, George S: 106

Indiana, Port of

Indiana I: 218; *picture on I*: 217

Indiana Dunes National Lakeshore [Indiana]

Indiana *picture on I*: 208

National Park System (table: National lakeshores) N: 58

Indiana Gazette [newspaper]

Indiana (Communication) I: 213

Indiana Jones and the Last Crusade [film]

Lucas, George L: 513

Indiana Jones and the Temple of Doom [film]

Lucas, George L: 513

Indiana Pacers

Basketball (table) B: 150

Indiana State University I: 219

Indiana Territory [U.S. history]

Indiana (Territorial days) I: 215

Michigan (Territorial period) M: 509

Indiana University I: 220 *with picture*

Knight, Bob K: 346

Indianapolis [Indiana] I: 220 *with pictures and map*

Indiana (Average monthly weather) I: 210; *picture on I*: 197

Metropolitan area (Metropolitan federation)

M: 444

Indianapolis Colts

Football (National Football League) F: 364

Indianapolis 500 [race]

Automobile racing (Indy car racing) A: 977

with picture; (Growth of organized automobile racing) A: 979-980

Indiana (Visitor's guide) I: 206 *with picture*; *picture on I*: 218

Indianapolis Motor Speedway and Museum

[Indianapolis]

Indianapolis (Recreation) I: 222 *with map*

Indianapolis Museum of Art

Indiana (Museums) I: 201

Indians See *Indian, American in this index*

Indians, Cleveland See *Cleveland Indians in this index*

Indians Bartering [painting by Smyth]

Indian, American *picture on I*: 149

Indians Hunting Buffalo with Bows and

Lances [painting by Catlin]

Indian, American *picture on I*: 136a

Indicative mood [grammar]

Conjugation Ci: 951

Mood M: 780

Indicator [chemistry]

Liquid crystal *picture on L*: 347

Indicolite [mineral]

Tourmaline T: 348

Indictment [law] I: 223

Grand jury G: 308

Jury (Grand juries) J: 202

Law enforcement (Trial) L: 141

Indies [islands]

East Indies E: 40

Indian, American I: 136

West Indies W: 201

Indifference analysis [economics]

Pareto, Viltredo P: 159

Indigestion I: 223

Antacid A: 529

Dyspepsia D: 398

Indigo [dye] I: 223

Dye (Natural dyes) D: 396

Pinckney, Elizabeth Lucas P: 467

Indigo bunting [bird] I: 223 *with picture*

Bunting B: 700

Indigo lactarius [fungus]

Mushroom (Nonpoisonous mushrooms) M: 943-945

Indigotin [dye]

Indigo I: 223

Indinavir [drug]

AIDS (Treatments) A: 164

Indio, El [book by López y Fuentes]

Latin-American literature (The early 1900's) L: 113

Indirect-contact freezing

Food, Frozen (Indirect-contact freezing) F: 338

Indirect democracy

Democracy D: 120

Indirect extrusion [industrial process]

Extrusion E: 459

Indirect-fired furnace

Furnace (Sources of heat) F: 567

Indirect induction [hypnosis]

Hypnotism (Inducing hypnosis) H: 477

Indirect investment

Investment (Kinds of investments) I: 366

Indirect primary

Primary election (Direct and indirect) P: 777

Indirect tax

National income (Determining national income) N: 37-38

Taxation (Taxes on transactions) T: 53

Indium [element] I: 224

Individual [philosophy]

Existentialism (What is existentialism?) E: 436-437

Individual differences

Clothing (Protection) Ci: 688

Personality P: 302

Individual income tax

Income tax (Types of income taxes) I: 102

Individual medley race

Swimming (Kinds of races) So: 1044

Individual psychology

Adler, Alfred A: 58

Individual racism

Racism (Types of racism) R: 62

Individual retirement account

Bank (Commercial banks) B: 90

Pension (Individual pension plans) P: 273

Individual rights

Government (Individual rights) G: 286

Individualism [philosophy]

Political science (Liberalism) P: 639

Individualists [Chinese history]

Painting (Chinese painting) P: 44-46

Individualized instruction

426 Individualized study

Curriculum (Curriculum planning) Ci: 1197
Middle school M: 535
Reading (Individualized reading programs)
R: 159

Individualized study
Universities and colleges (Instruction) U: 210

Indo-Aryan [languages]
Aryans A: 764
Language (Indo-European) L: 64

Indo-Aryans [people]
Asia (The people) A: 781
India (Ancestry) I: 111
Mythology (Comparing myths) M: 975

Indo-European languages
Language (Indo-European) L: 64 *with map, diagram on L: 66*
Africa (Languages) A: 104-105
English language (Origins) E: 313
India (Languages) I: 114
Linguistics (Comparative and historical research) L: 337

Indo-Europeans [people]
Mythology (Comparing myths) M: 975;
(Roman mythology) M: 981; (Celtic mythology) M: 983
World, History of the (The advance of civilization) W: 426

Indo-Iranians [people]
Aryans A: 765

Indochina [Asian history] I: 224 *with maps*
Cold War (The death of Stalin) Ci: 764-765
Foreign Legion F: 386
France (The Fourth Republic) F: 475-476
Geneva Accords G: 87
Guerrilla warfare (History) G: 420
Vietnam War (The Indochina War) V: 373

Indochina War [1946-1954]
Dien Bien Phu, Battle of D: 198
Indochina (Independence) I: 225
Vietnam (The First Indochina War) V: 371
Vietnam War (The Indochina War) V: 373

Indochinese forest ox
Kouprey K: 386 *with picture*

Indonesia I: 226 *with pictures and maps*
Agriculture picture on A: 147
Asia (Education) A: 785; (The arts) A: 785
Batik B: 165
Borneo B: 489 *with map*
Dance (Asian theatrical dance) D: 30
East Timor E: 40; (History) E: 41
Exploration (Exploring the Pacific) E: 447
Music (Indonesian music) M: 956 *with picture*
Netherlands (History) N: 148-150
Orchestra picture on O: 823
Standard of living (table) So: 834
Timor T: 293
United Nations (Membership questions) U: 95-96
See also the list of Related Articles in the Indonesia article

Indonesian Democratic Party of Struggle [political party]
Indonesia (Politics) I: 227

Indonesian National Party
Indonesia (The rise of nationalism) I: 237

Indoor air pollution
Environmental pollution (Air pollution) E: 331, *picture on E: 333*

Indoor archery
Archery (Indoor archery) A: 603

Indoor garden
Gardening (Kinds of indoor gardens) G: 36

Indoor Radon Abatement Act [1988]
Radon (Protection against radon) R: 100

Indoor relief
Welfare (Early welfare laws) W: 191

Indoxyl [chemical]
Indigo I: 223

Indra [Hindu god]
Mythology (Comparing myths) M: 975;
(Mythology and society) M: 988

Indri [animal]
Lemur L: 189

Induced abortion
Abortion A: 14

Induced drag
Aerodynamics (Induced drag) A: 87

Induced labor
Childbirth (Methods of childbirth) C: 456

Inductance [electricity] I: 239
Electronics (Passive components) E: 212

Henry H: 185

Inductance coil [electricity]
Inductance I: 239

Induction, Electric [electricity] I: 240

Induction, Electromagnetic [physics]
Electric generator (Basic principles) E: 170
Electricity (Electricity and magnetism) E: 196
Electromagnetism E: 203
Energy supply (The Industrial Revolution) E: 280
Faraday, Michael F: 28
Henry, Joseph H: 189
Induction coil I: 240
Invention (The Industrial Revolution) I: 361
Lenz's law L: 197
Magnetometer M: 62
Radio (Early development) R: 91
Seismograph S: 288
Transformer T: 371

Induction, Military
Draft, Military D: 318

Induction coil [electricity] I: 240 *with diagram*
Gasoline engine (Ignition system) G: 65

Induction motor
Electric motor (AC motors) E: 181

Inductive coupling
Artificial heart A: 760

Inductive method [logic] I: 240
Bacon, Francis (His philosophy) B: 18
Logic L: 425
Philosophy (Logic) P: 384
Reason R: 173
Science (Mathematics and logic) S: 192-193;
(Using logic) S: 194

Inductor
Electronics (Passive components) E: 212

Indulgence [religion] I: 240
Luther, Martin (The Ninety-Five Theses) L: 527
Reformation (Martin Luther) R: 197 *with picture*
Roman Catholic Church (The Reformation) R: 408
Tetzel, Johann T: 183

Indus River [Pakistan] I: 240
Asia (The Indus Valley) A: 805
Lake (Irrigation) L: 34
River (table) R: 352
Tarbela Dam T: 42

Indus River dolphin [animal]
River dolphin R: 354

Indus Valley civilization [history of India] I: 241 *with pictures*
Asia (History) A: 804
Cotton (Early days) Ci: 1092
Cymbal Ci: 1205
India (Earliest times) I: 128
Pakistan (History) P: 98
Sculpture (Indus Valley) S: 235 *with pictures*
World, History of the (The Indus Valley) W: 425 *with picture*

Indus Valley Railway [India]
Indus River I: 241

Industrial arbitration
Arbitration (Industrial, or labor, arbitration) A: 592

Industrial arts I: 242
Safety (In other school areas) S: 12
See also the list of Related Articles in the Industrial Arts article

Industrial Average [investment]
Dow Jones averages D: 315

Industrial capitalism
Industrial Revolution (The role of capital) I: 251

Industrial chemistry
Chemistry (Growth of industrial chemistry) C: 405

Industrial city
City (Industrial cities) Ci: 585 *with pictures*

Industrial commission
Social security (Workers' compensation) So: 555-556

Industrial design I: 244 *with picture*
Packaging P: 18
Sweden (Industrial design) So: 1027

Industrial diamond
Diamond D: 181, (Industrial uses) D: 182 *with pictures*; (Synthetic diamonds) D: 183

Industrial Disputes Investigation Act [1907]
King, William Lyon Mackenzie (Early political and public career) K: 325

Industrial drawing

Industrial arts (Industrial arts courses) I: 242-243

Industrial economist
Economics (Careers in economics) E: 65

Industrial education
Industrial arts I: 242

Industrial engineering
Engineering (Industrial engineering) E: 287 *with picture*

Industrial Estates Limited
Nova Scotia (The early to middle 1900's) N: 570

Industrial literature
Russian literature (The period of industrial literature) R: 564

Industrial medicine
Hamilton, Alice H: 33

Industrial nurse
Nursing (Occupational, or industrial, health nurses) N: 618

Industrial organization
Industry (Industrial organization) I: 261

Industrial paint
Paint (Industrial paints) P: 24

Industrial pollution *See* Environmental pollution *in this index*

Industrial psychology I: 244
Psychology (Major fields of psychology) P: 848

Industrial radiography [manufacturing]
Radiation (In industry) R: 75

Industrial relations I: 245
See also Labor-management relations;
Personnel management *in this index*

Industrial research
Manufacturing (How science helps manufacturing) M: 171

Industrial Revolution I: 246 *with pictures*
Architecture (The Industrial Revolution) A: 625; (Early modern architecture in Europe) A: 627
Army (The rise of modern armies) A: 727-728
Child labor (Abuses of child labor) C: 455
City (Industrial cities) Ci: 585 *with picture*
City planning (The Industrial Revolution) Ci: 603
Clothing (The 1700's) Ci: 701
Coal (Developments in England) Ci: 731-732
Communism (The ideas of Marx) Ci: 890
Conservation (The Industrial Revolution) Ci: 984 *with picture*
Democracy (The spread of democracy) D: 123
Energy supply (The Industrial Revolution) E: 280
Environmental pollution (The growth of pollution) E: 338
Europe (Industry) E: 402; (The Industrial Revolution) E: 413 *with picture*
Fashion (Why fashions change) F: 51
Home economics (History) H: 300
Invention (The Industrial Revolution) I: 361; *picture on I: 359*
Labor movement (Other possible origins) L: 9
London (The world's largest city) L: 441
Marx, Karl (Early development) M: 237
Sales (History) S: 64
Shelter (The Industrial Revolution) S: 394
Socialism So: 560
Sweatshop So: 1019 *with picture*
Technology (The Industrial Revolution) T: 75
Textile (The Industrial Revolution) T: 219
United Kingdom (The Industrial Revolution) U: 67
Wages and hours (Hours) W: 3
War (Technological advancements) W: 26
Weaving (History) W: 175
Women's movements (Forces of change) W: 384
World, History of the (The Industrial Revolution) W: 444

Industrial Revolution, The [book by Toynbee]
Toynbee, Arnold T: 352

Industrial technology
Human being (Industrial societies) H: 415
Technology T: 74 *with pictures*

Industrial union
Industrial Workers of the World I: 255
Labor movement (Types of unions) L: 7

Industrial Workers of the World [U.S. history] I: 255
Hill, Joe H: 231
Labor movement (The Industrial Workers of

the World) L: 11 *with picture*
 Syndicalism So: 1067
Industrialism See Industrial Revolution in this index
Industry I: 256 *with pictures*
 See also Industrial Revolution in this index
 Air conditioning (In business and industry) A: 176
 Automation A: 944
 Careers (Production) C: 229
 Cartel C: 251
 Colonial life in America (The economy) Ci: 809
 Communication (Communications systems) Ci: 878-879
 Electricity (In industry) E: 191
 Environmental pollution (Business and industry) E: 336; (Wastefulness in the industrialized world) E: 339; *picture on* E: 332
 Gay Nineties (Industrial growth) G: 72
 Industrial relations I: 245
 Input-output analysis I: 276
 Lighting (In offices, stores, and factories) L: 296-297
 Mathematics (In industry) M: 302
 Nationalization N: 63
 Occupational medicine O: 647
 Radiation (In industry) R: 75
 Safety (Safety on the job) S: 13
 Tariff (Why tariffs are levied) T: 43; (Arguments against tariffs) T: 43
 Trade (Trade and specialization) T: 361
 United States, History of the (Industrialization and reform) U: 176 *with picture*; (Life during the industrial era) U: 179
 Water (Water for industry) W: 118 *with pictures*
 X rays (In industry) X: 541
 See also the list of Related Articles in the Industry article
Industry, Minister of [office]
 Canada, Government of (The Cabinet) C: 132; *diagram on* C: 137
Industry and Humanity [book by King]
 King, William Lyon Mackenzie (Early political and public career) K: 325
Indy car
 Automobile racing (Indy car racing) A: 977 *with picture*
Indy Racing League
 Automobile racing (Racing organizations) A: 976; (Indy car racing) A: 977-978
Inert gas [chemistry]
 Helium H: 175
 Noble gas N: 451
 Radon R: 100
Inertia [physics] I: 262 *with pictures*
 Centripetal force C: 358
 Force (Overcoming inertia) F: 369
 Gyroscope (Gyroscopic inertia) G: 453 *with diagram*
 Inertial guidance I: 263
 Kilogram K: 316
 Mass M: 268
 Matter M: 310
 Motion (The first law) M: 845
 Relativity (Inertial frames) R: 210
 Tide (Tidal forces) T: 280
Inertial air cleaner
 Air cleaner (Types of air cleaners) A: 175-176
Inertial confinement [physics]
 Nuclear energy (Experimental fusion devices) N: 592-593
Inertial frame [physics]
 Relativity (Inertial frames) R: 210; (Special relativity) R: 210
Inertial guidance [navigation] I: 263 *with diagram*
 Airplane (Navigating across oceans) A: 227
 Guided missile (Preset guidance) G: 426
 Gyroscope (History) G: 454
 Navigation (Inertial guidance) N: 74
 Submarine (Ballistic missile submarines) So: 941
Inertial mass [physics]
 Relativity (General relativity) R: 211-212
Inertial navigation system
 Inertial guidance I: 263
 Navigation (Inertial guidance) N: 74
 Submarine (Ballistic missile submarines) So: 941
Inertial reference system See Inertial naviga-

tion system in this index
Inertial welding
 Welding (Solid-state bonding) W: 189
Inexhaustible resource
 Conservation Ci: 974
Infallibility, Papal [religion]
 Pope (The powers of the pope) P: 660
 Roman Catholic Church (Vatican Council I) R: 410
 Vatican Council I V: 289
Infant See Baby in this index
Infant botulism
 Botulism B: 514
Infant mortality I: 264
 Baby B: 4
 Birth and death rates B: 377
Infant school [education]
 Alternative school (History) A: 389
 Nursery school (History) N: 616
Infanticide [homicide] I: 264
 National Right to Life Committee N: 60
Infantile paralysis See Poliomyelitis in this index
Infantry [military] I: 265
 Army A: 724
 Army, United States (Infantry) A: 734 *with picture*
 Rangers R: 139
Infantry Tactics [book]
 Scott, Winfield S: 223
Infection [disorder]
 Abscess A: 17
 Blood (Infections) B: 414
 Boil B: 438 *with diagrams*
 Disease (Infectious diseases) D: 227
 Gamma globulin G: 23
 Inflammation I: 266
 Lister, Sir Joseph L: 349
 Lymphatic system (Fighting infection) L: 535
 Sexually transmitted disease (Factors in the spread of STD's) S: 338b
 Surgery (Antiseptics and asepsis) So: 1004
 Virus (How a virus infects an organism) V: 426 *with diagrams*
Infectious disease
 Blood transfusion (Risks of transfusion) B: 417
 Disease D: 225 *with picture*; (Infectious diseases) D: 227
 Water pollution (Human illness) W: 138
Infectious Diseases, Institute for [Berlin]
 Koch, Robert K: 360
Infectious hepatitis [disease]
 Hepatitis (Hepatitis A) H: 192
Infectious mononucleosis
 Mononucleosis M: 731
Infective endocarditis [disorder]
 Mitral valve prolapse M: 679
Inferior vena cava [anatomy]
 Heart (Blood vessels) H: 135 *with picture*
 Human body (The blood vessels) H: 421; *diagram on* H: 422
 Vein V: 295
Infernal Machine, The [play by Cocteau]
 Cocteau, Jean Ci: 747
Inferno
 Divine Comedy D: 242
Inferno [book by Strindberg]
 Strindberg, August So: 929
Infertility [biology] I: 265
 Fallopian tube F: 18
 Sterility So: 893
Infield
 Baseball (The infield) B: 126 *with diagrams*
Infielder
 Baseball (Player positions) B: 127
Infinite series [mathematics]
 Series S: 316; (Working with infinite series) S: 317
 Binomial theorem B: 310
 Mathematics (Branches of mathematics) M: 303
Infinite set [mathematics]
 Set theory (Kinds of sets) S: 321
Infinitesimal [mathematics]
 Mathematics (Branches of mathematics) M: 303
Infinitive [grammar]
 Adverb (Adverbs that split an infinitive) A: 71
 Verb (Finite and nonfinite verbs) V: 315
Infinity [mathematics] I: 266
 Calculus (Finding areas) C: 24; (The definite

integral) C: 24-25
Inflammable air
 Cavendish, Henry C: 322
Inflammation [disorder] I: 266
 Heart (Inflammatory heart disease) H: 142
Inflammatory bowel disease [disorder] I: 266
Inflammatory colitis [disease]
 Colitis Ci: 772
Inflammatory heart disease
 Heart (Inflammatory heart disease) H: 142
Inflation [economics] I: 266 *with picture*
 Capitalism (Stabilizing the economy) C: 195
 Consumer Price Index Ci: 1017
 Cost of living Ci: 1079
 Credit (Credit and the economy) Ci: 1124-1125
 Deflation D: 88
 Depreciation D: 149
 Economics (Economic stability) E: 63
 Ford, Gerald Rudolph (The national scene) F: 376-377
 Germany (The Weimar Republic) G: 167 *with picture*
 Income tax (Effects of inflation) I: 103
 Interest (Inflation) I: 322
 Investment (Direct investments) I: 367
 Money (Money and the economy) M: 714
 Mortgage M: 821
 National income (Determining national income) N: 37-38
 Nixon, Richard Milhous (The national scene) N: 433-434
 Poverty (The causes of poverty) P: 724
 Price control P: 775
 Rationing R: 148
 Recession R: 175
 Taxation (Elasticity) T: 54
Inflation-indexed bond
 Investment (Bonds) I: 367-368
Inflationary universe
 Cosmology (Other theories) Ci: 1078
Inflection [grammar] I: 268a
 Case C: 271
 Comparison Ci: 902b
 Declension D: 80
 English language (Grammar) E: 312
 Grammar (Principles of English grammar) G: 303
 Parts of speech P: 189
Inflorescence [botany] I: 268a *with pictures*
 Pineapple (The pineapple plant) P: 472
 Raceme R: 51
Influence
 Power (Forms of power) P: 727
Influence of Sea Power upon History, The [book by Mahan]
 Mahan, Alfred Thayer M: 65
Influenza I: 268b *with picture*
 Disease (table) D: 226; (Death rates from diseases in the United States) D: 233 *with picture*
 Hospital *picture on* H: 374
 Virus *diagram on* V: 427
Infomercial [advertising]
 Television (Commercial stations) T: 114-115
Informal censorship
 Censorship (Censorship methods) C: 346
Informal education
 Education E: 86 *with picture*
Information
 Public speaking (Approach to a speech) P: 865
Information [law]
 Law enforcement (Trial) L: 141
Information, Bureau of [U.S. history]
 Espionage (History) E: 358
Information, Freedom of
 Freedom of Information Act F: 505
Information age
 United States, History of the (The spread of high technology) U: 194 *with pictures*
Information Agency, United States See United States Information Agency in this index
Information for Playwrights [magazine]
 Writing (Scriptwriting) W: 512
Information highway See Information super-highway in this index
Information Power: Building Partnerships for Learning [book]
 Library (School library standards) L: 245
Information professional [librarian]
 Library (Careers for librarians) L: 255 *with picture*

Information resource center

Library (United States government libraries)
L: 248

Information retrieval I: 268b

Database D: 41 *with picture*
Index I: 107

Internet (Research) I: 350a

Laser (How lasers are used) L: 82

Library (Information science and technology)
L: 251

Microfilm M: 514

Office work O: 677

Information science I: 269

See also *Information theory in this index*

Information retrieval I: 268b

Library (Information science and technology)
L: 251; (Educational requirements) L: 256

Information Science, American Society for

Library (Information science and technology)
L: 251

Information service

Library (Assisting patrons) L: 236

Information Services, Division of

Library (Special libraries) L: 250

Information technology

Information science I: 269

Information Telegraph Agency of Russia

TASS T: 50

Information theory I: 269

Library (Information science and technology)
L: 251

Informational appeal

Advertising (Basic appeals) A: 76

Informational defect [law]

Product liability suit P: 810

Informed consent

Genetic testing (Promises and challenges of
genetic testing) G: 86

Transplant (Sources of donor organs) T: 380

Inform, The [book by O'Flaherty]

Irish literature (Fiction and poetry) I: 432-433
O'Flaherty, Liam O: 679

Inform, The [film]

Ford, John F: 381

InfoTrac [reference]

A Guide to Research Skills Research
Guide: 31

Infrared array detector [instrument]

Telescope (Infrared telescopes) T: 108

Infrared Astronomical Satellite

Astronomy (Infrared astronomy) A: 842
Telescope (Infrared telescopes) T: 108

Vega V: 291

Infrared astronomy

Astronomy (Infrared astronomy) A: 842

Infrared energy [physics]

Thermography T: 254

Infrared photography

Geography (The use of scientific instruments)
G: 94-95

Infrared radiation thermometer

Thermometer (Radiation thermometers) T: 255
with picture

Infrared rays [light] I: 269 *with picture*

Astronomy (The electromagnetic spectrum)
A: 839; (Infrared astronomy) A: 842

Camera (Automatic controls) C: 80-81

Color *diagram on* Ci: 818

Electromagnetic waves (Uses of electromag-
netic waves) E: 202-203 *with diagram*

Gas [fuel] (Gas in industry) G: 51-52

Gold (Other uses) G: 251 *with picture*

Greenhouse effect (The natural greenhouse
effect) G: 382

Heat (Radiation) H: 151

Heating (Steam and hot-water heating sys-
tems) H: 159

Hubble Space Telescope (How the telescope
works) H: 403

Laser (Gas lasers) L: 85

Light (Electromagnetic waves) L: 285

Night vision systems N: 419

Radiation (Electromagnetic radiation) R: 75-76
with picture

Remote control (The parts of a remote control
system) R: 230

Remote sensing R: 231

Telescope (What telescopes do) T: 102-103;
(Infrared telescopes) T: 108

Thallium T: 229

Weather (Air temperature) W: 157; (Weather

satellites) W: 163-164

Infrared Space Observatory [spacecraft]

Astronomy (Infrared astronomy) A: 842

Infrared telescope

Astronomy (Infrared astronomy) A: 842

Telescope (Infrared telescopes) T: 108 *with
picture*

Infrared Telescope [Mauna Kea]

Astronomy (Infrared astronomy) A: 842

Infrared Telescope Facility [Mauna Kea]

Astronomy (Infrared astronomy) A: 842

Infrasound [physics]

Acoustics (Other areas of acoustics) A: 29

Elephant (Senses) E: 229

Infrastructure

City planning (The master plan) Ci: 599

Local government (Population changes)
L: 407-408

Infringement [law]

Copyright (Owners' rights) Ci: 1047

Patent (How patents protect inventors) P: 194

Trademark (In the United States) T: 365-366

Ingalls, John James [American editor] I: 270**Inge, William [American dramatist] I: 270****Ingersoll, Charles R. [American political leader]**

Connecticut (table) Ci: 967

Ingersoll, Jared [American political leader]

I: 270

Ingersoll, Robert Green [American lawyer]

I: 270

Blaine, James Gillespie B: 396

**Ingham, Samuel D. [American government offi-
cial]**

Jackson, Andrew (table) J: 11; (Split with
Calhoun) J: 11

Treasury, Department of the (table) T: 407

Ingold, Sir Christopher [British chemist] I: 270**Ingólfur Arnason [Norse explorer]**

Iceland (Early days) I: 23

Ingot

Aluminum (Casting the molten aluminum)
A: 393-394

Gold (Money) G: 251

Iron and steel (Ingot casting) I: 445 *with dia-
gram*

Magnesium (How magnesium is obtained)
M: 54

Ingraham, Hubert [Bahamian political leader]

Bahamas (History) B: 29

Ingraham, Joseph [American sea captain]

Marquesas Islands M: 217

**Ingres, Jean Auguste Dominique [French
painter] I: 270**

Drawing *picture on* D: 343

Painting (Later neoclassicism) P: 67 *with pic-
ture*

Ingrid of Sweden [wife of]

Frederik IX F: 498

Inguri Dam [Inguri River, Georgia]

Dam (table) D: 18

Ingushetia [republic, Russia]

Chechnya C: 390

INH [drug]

Isoniazid I: 475

Tuberculosis (Treatment of tuberculosis) T: 479

Inhalant [drug] I: 271

Drug *picture on* D: 350

Drug abuse (Abuse of legal drugs) D: 361

Inhalation See Inspiration in this index**Inhalational anthrax**

Anthrax A: 545

Inhaler [medicine]

Bronchodilator B: 636

Inheritance [law]

Dower D: 316

Genealogy G: 82

Law (Private law) L: 130

Nobility N: 450

Primogeniture P: 780

Will W: 306

Inheritance tax I: 271

Taxation (Other taxes) T: 53

Inhibitory postsynaptic potential

Nervous system (Transmission across synap-
ses) N: 135

In-house agency

Advertising (Advertising departments) A: 77

Inis [island] I: 271**Initial [letter]**

Illuminated manuscript I: 78 *with picture*

Initial public offering [investment] I: 271**Initial velocity**

Ballistics (Interior ballistics) B: 56

Initiation ceremony

Indian, American (Children) I: 136c

Mysteries M: 972

Initiative and referendum [political science]

I: 271

Law (By direct action of the people) L: 132

Progressive movement (Political reforms)
P: 814

State government (Initiative and referendum)
So: 864

Initiative 200 [law]

Affirmative action A: 91

Initiative 300 [law]

Nebraska (Late 1900's) N: 115

**Injection [mechanics] See Fuel injection in this
index****Injection [medicine] See Hypodermic injection;
Intravenous injection; Lethal injection in this
index****Injection method [food processing]**

Bacon B: 18

Injection molding [industrial process]

Plastics (Making plastic products) P: 557; *pic-
ture on* P: 558

Polypropylene P: 651

Polyvinyl chloride P: 652

Injera [food]

Ethiopia (Way of life) E: 369

Injunction [law] I: 272

Equity E: 348

Norris-La Guardia Act N: 457

Pure food and drug laws (Enforcement)
P: 908-909

Injury

Bleeding B: 399

Blindness (Causes of blindness) B: 401-402

Blister B: 403

Brain (Injuries) B: 557

Bruise B: 650

Burn B: 708

Concussion Ci: 929

First aid F: 136

Frostbite F: 543

Mayhem M: 328

Nosebleed N: 549

Paralysis P: 152

Repetitive strain injury R: 242

Safety S: 9

Scar S: 172

Sports medicine So: 804

Sprain So: 805

Trauma center T: 405

Whiplash W: 280

Workers' compensation W: 405

Injustice to Tou O [play by Guan Hanqing]

Chinese literature (Drama and fiction) C: 512

Ink I: 272

Drawing (Materials and techniques) D: 342

Engraving (Printing the engraving) E: 325

Painting (Chinese painting) P: 44; (Japanese
painting) P: 47

Pen P: 233

Printing (Process color printing) P: 802

Inkatha Freedom Party [political party] I: 273

South Africa (Political parties) So: 609; (The
dismantling of apartheid) So: 620

Xhosa X: 544

Inkberry [plant]

Pokeweed P: 603 *with picture*

Inkjet copying

Copying machine (Inkjet copying) Ci: 1046

Inkjet printer [electronic device] I: 273

Computer (Printers) Ci: 916

Mechanical drawing (Creating a drawing)
M: 354

Printing (Digital printing) P: 801

Inky cap [fungus]

Mushroom (Nonpoisonous mushrooms)
M: 943-945

Inlaid linoleum

Linoleum L: 338

Inland marine insurance

Insurance (Other kinds of property and liability
insurance) I: 313-314

Inland navigation

Inland waterway I: 273

Lake (Travel and trade routes) L: 34

Inland revenue [taxation] I: 273**Inland Rules**

Boating (Boating regulations) **B**: 429
Inland Voyage, An [book by Stevenson]
Stevenson, Robert Louis (Early life) **So**: 897
Inland waterway **I**: 273
Inlay [decoration] **I**: 274 *with picture*
Inlet valve
Plumbing (How toilets work) **P**: 579 *with diagrams*
INMARSAT [satellite system]
Communications Satellite Corporation **Ci**: 889
Inmate
Prison **P**: 805
Inn
Hotel (History) **H**: 377
United States, History of the *picture on* **U**: 165
Inner bark
Tree (Trunk and branches) **T**: 416 *with diagram*
Inner city [district]
City (Description) **Ci**: 589; (The people)
Ci: 589-590
Inner core [geology]
Earth *diagram on* **E**: 20; (Earth's interior) **E**: 23
Inner ear
Deafness (Types of hearing loss) **D**: 57
Ear (The inner ear) **E**: 8 *with diagram*; (How sounds travel to the inner ear) **E**: 9; *diagram on* **E**: 7
Inner Harbor [Baltimore]
Maryland (Places to visit) **M**: 248 *with picture*
Inner Hebrides [islands, Scotland]
Hebrides **H**: 163
Inner Light [religion]
Quakers (History) **Q**: 4
Inner Mongolia See Mongolia, Inner *in this index*
Inner Temple [London]
Inns of Court **I**: 276
Inner tube
Tire (History) **T**: 298
Innes plaid
Tartan *picture on* **T**: 47
Inness, George [American painter] **I**: 274 *with picture*
Inning
Baseball (The game) **B**: 128; (Rule changes) **B**: 133
Innings
Cricket (The game) **Ci**: 1132
Innocence [plant]
Bluet **B**: 425
Innocent III [pope] **I**: 275
Christianity *picture on* **C**: 525
Crusades (The Fourth Crusade) **Ci**: 1161
Langton, Stephen Cardinal **L**: 61
Pope (The peak of papal power) **P**: 663; *picture on* **P**: 663
Roman Catholic Church (Innocent III) **R**: 407
Innocent III [antipope]
Pope (table) **P**: 666
Innocent IV [pope] **I**: 275
Innocent XI [pope]
Roman Catholic Church (Gallicanism) **R**: 409
Innocents Abroad, The [book by Twain]
Twain, Mark (Return to the East) **T**: 529
Innovation
Invention **I**: 3541
Inns of Court [English history] **I**: 276
London (The Inns of Court) **L**: 437
Innsbruck [Austria] **I**: 276
Ino [legendary figure]
Golden Fleece **G**: 255
Inoculation [medicine] **I**: 276
Inönü, İsmet [Turkish political leader]
Turkey (The Republic of Turkey) **T**: 511
Inorganic chemistry **I**: 276
Inorganic compound
Compound **Ci**: 906
Inorganic fertilizer
Fertilizer (Inorganic fertilizers) **F**: 79
Inositol [vitamin]
Lipid (Kinds of lipids) **L**: 345
Inouye, Daniel Ken [American political leader]
Asian Americans (Individual achievements)
A: 812c; (Japanese internment) **A**: 812e-812f
McCain, John Sidney, III **M**: 331
Input [economics]
Business (Productive resources) **B**: 724
Industry (What industry needs for production)
I: 256-257 *with diagram*
Input [information]

Automation (How automation works) **A**: 945
Input device [electronics]
Computer (Input devices) **Ci**: 912 *with picture*
Electronics (How an electronic system works)
E: 208
Input-mix [economics]
Industry (Management) **I**: 258
Input-output analysis [economics] **I**: 276 *with diagram*
Input shaft [mechanical device]
Transmission (A torque converter) **T**: 377 *with diagram*
Input voltage [electricity]
Transformer **T**: 371
Inquest [law] **I**: 277
Jury (Coroner's juries) **J**: 202
Medical examiner **M**: 361
Inquilinos [people]
Chile (Rural life) **C**: 460-462
Inquiry into the Causes and Effects of the Variolae Vaccinae [book by Jenner]
Jenner, Edward (Recognition) **J**: 91
Inquisition [European history] **I**: 277
Counter Reformation (Counteracting Protestantism) **Ci**: 1096
Galileo (Galileo and the Roman Catholic Church) **G**: 11-12
Jews (Jews in Christian Europe) **J**: 122-123
Paul IV **P**: 200
Portugal (Years of decline) **P**: 694
Roman Catholic Church (Innocent III) **R**: 407
Spain (Union of the Spanish kingdoms)
So: 747
Spanish literature (The 1500's) **So**: 758
Torquemada, Tomás de **T**: 340c
Witchcraft (Middle Ages to the 1700's) **W**: 372
INS See Immigration and Naturalization Service *in this index*
Insane asylum
Abnormal psychology (History) **A**: 12
Insanity [law] **I**: 277
Mental illness **M**: 404
Inscriptions and Belles Lettres, The Academy of
Institute of France **I**: 305
Insect **I**: 278 *with pictures*
Arthropod **A**: 752 *with picture*
Brain (In invertebrates) **B**: 559
Compound eye **Ci**: 906 *with diagram*
Cotton (Insects) **Ci**: 1090 *with picture*
Disease (Spread of infectious diseases) **D**: 228
Entomology **E**: 327
Forestry (Diseases and pests) **F**: 407
Gardening (Caring for the garden) **G**: 35-36
Lawn *pictures on* **L**: 143
Molting **M**: 697
Nervous system (In invertebrates) **N**: 136
Parasite (Parasites that feed on people and animals) **P**: 154 *with pictures*
Plant (Insect-eating plants) **P**: 542 *with pictures*; (Plant enemies) **P**: 543 *with picture*
Plant quarantine **P**: 550
Prehistoric animal (The move onto land) **P**: 737
Protective coloration **P**: 831
Rain forest (Plants and animals) **R**: 126a
Virus (How viruses are used) **V**: 428
See also the *list of Related Articles in the Insect article*
Insect bite
First aid (Injected poisons) **F**: 138; (Animal bites or stings) **F**: 138
Insect Comedy, The [play by Čapek]
Čapek, Karel **C**: 191
Insecticide **I**: 302 *with picture*
Agriculture (Agricultural chemicals) **A**: 159
Gulf War syndrome **G**: 438
Insect (Insect control) **I**: 284-285
Pest control (Pesticides) **P**: 318
Typhus (Treatment) **T**: 541
Virus (How viruses are used) **V**: 428
Insectivore [zoology] **I**: 303
Mammal (What mammals eat) **M**: 121, (table)
M: 128 *with picture*
Tree shrew **T**: 434
Insectivorous plant See Carnivorous plant *in this index*
Insert [advertising]
Newspaper (Preparing advertisements) **N**: 383
Insertion device [physics]
X rays (Synchrotron radiation) **X**: 542-543
Insertion point [computing]

Computer (A keyboard) **Ci**: 912
Laptop computer **L**: 74
Inside Passage [waterway, North America] **I**: 303
Alaska (Visitor's guide) **A**: 290
British Columbia (Places to visit) **B**: 620 *with picture*
Juneau **J**: 194
Inside the Third Reich [book by Speer]
Speer, Albert **So**: 775
Insight [psychology]
Learning (Insight learning) **L**: 163
Mysticism **M**: 972
Insignia [emblems] **I**: 303
Air Force, United States *pictures on* **A**: 189
Army, United States *pictures on* **A**: 732
Boy Scouts *pictures on* **B**: 538
Canada, Armed Forces of *pictures on* **C**: 129
Girl Scouts **G**: 196 *with picture*
Knighthood, Orders of *pictures on* **K**: 347
Marine Corps, United States *pictures on*
M: 207
Navy, United States *pictures on* **N**: 86
Insolvency [law]
Bankruptcy (In the United States) **B**: 97
Insomnia [psychology] **I**: 303
Health (Rest and sleep) **H**: 125-126
Inspector General [military officer] **I**: 304
Inspector-General, The [play by Gogol]
Gogol, Nikolai **G**: 248
Drama (Russian drama and Chekhov) **D**: 338
Russian literature (Late romanticism) **R**: 561-562
Inspiration [physiology]
Diaphragm **D**: 184
Lung (Gas exchange in the lungs) **L**: 523-524
Respiration (The process of breathing) **R**: 260 *with diagram*
Installment plan [economics] **I**: 304
Credit (Types of credit) **Ci**: 1124
Instant camera
Camera (Instant cameras) **C**: 83 *with picture*
Instant coffee
Coffee (Instant coffee) **Ci**: 754
Instant film
Photography (Instant processing) **P**: 424
Instant replay
Television (Putting a show on the air) **T**: 111-113
Instant-start lamp
Fluorescent lamp **F**: 305
Instant tea
Tea (Grades of tea) **T**: 62-63; (History) **T**: 63-64
Instantaneous north pole
North Pole **N**: 517
Instantaneous rate of change
Calculus (Limits) **C**: 23
Instantaneous south pole
South Pole **So**: 686
Instantaneous speed
Calculus (Limits) **C**: 23
Instauratio Magna [book by Bacon]
Bacon, Francis **B**: 18
Instep [anatomy]
Foot (The bones) **F**: 352
Soccer (Kicking) **So**: 547
Instinct [psychology] **I**: 304
Dog (Behavior) **D**: 277
Ethology **E**: 373
Institute for Advanced Study [Princeton, New Jersey] **I**: 305
Einstein, Albert (Einstein in the United States)
E: 147
Flexner, Abraham **F**: 234
Institute for Heavy Ion Research [Darmstadt, Germany] See Heavy Ion Research Center *in this index*
Institute for Public Affairs
Illinois, University of (The Springfield campus)
I: 77
Institute for Scientific and Technical Information, Canada
Library (Canadian government libraries) **L**: 249
Institute for the Development of Indian Law
Deloria, Vine, Jr. **D**: 118
Institute for Theoretical Physics [Copenhagen, Denmark]
Bohr, Niels **B**: 438
Institute of Electrical and Electronics Engineers
Engineering (table) **E**: 289

Institute of France [organization] I: 305
Institute of International Education
 Fulbright Scholarship F: 554
 Scholarship (International scholarships) S: 178
Institute of International Law [organization]
 Nobel Prizes (Peace; 1904) N: 447
Institute of Medicine [organization]
 National Academy of Sciences N: 27
 National Research Council N: 60
Institute of Public Opinion, American
 Gallup, George Horace G: 16
Institute of Texas Cultures
 San Antonio (Cultural life) S: 85
Institutes [book by Justinian]
 Justinian Code J: 204
Institutes of the Christian Religion [book by Calvin]
 Calvin, John (His life) C: 70
Institutio Oratoria [book by Quintilian] See *Training of an Orator, The in this index*
Institution
 Foster care F: 428
 Sociology (Social institutions) So: 564
Institution, Public
 Library L: 234 *with pictures*
 School S: 180 *with pictures*
Institution of Lighting Engineers
 Lighting (In offices, stores, and factories) L: 296-297
Institutional racism
 Racism (Types of racism) R: 62
International Revolutionary Party [political party]
 Mexico (Politics) M: 451; M: 474
 Zedillo Ponce de León, Ernesto Z: 592
Instruction set [electronics]
 Computer chip (Instruction sets) Ci: 924f
Instructional game
 Computerized instruction (Types of programs) Ci: 924h
Instructional materials center
 Library (School libraries) L: 244
Instructional media See Audio-visual materials *in this index*
Instructor [occupation]
 Universities and colleges (Faculty) U: 208
Instrument [spiritualism] See Medium [spiritualism] *in this index*
Instrument, Musical See Musical instrument *in this index*
Instrument Flight Rules See IFR *in this index*
Instrument Landing System
 Airplane (Safety) A: 227-228
 Airport (Air traffic control) A: 246-247 *with diagram*
Instrument transformer [electricity]
 Transformer T: 372
Instrumental conditioning [psychology]
 Learning (Instrumental conditioning) L: 163
 Mouse picture on M: 902
Instrumental music
 Classical music (Instrumental music) Ci: 643
Instrumentalism [philosophy]
 Dewey, John D: 177
 Pragmatism P: 729
Insufficiency [disorder]
 Heart (Other heart disorders) H: 141
Insular Cases [1901]
 McKinley, William (McKinley's second Administration [1901]) M: 341
 Territory (In the United States) T: 176
Insular Mountains [North America]
 British Columbia (Land regions) B: 622
Insulation I: 306 *with pictures*
 Cable (Cable construction) C: 4
 Camping (Sleeping bags) C: 93
 Cork (Uses) Ci: 1055
 Energy supply picture on E: 281
 Environmental pollution (Environmental do's and don'ts) E: 337
 Fiberglass (Uses) F: 89
 Heat (How heat travels) H: 151
 House (Insulation) H: 382 *with diagram*
 Talc T: 19
Insulation board [building material]
 Forest products (Fiber products) F: 401-402
Insulator, Electric I: 308 *with picture*
 Capacitor C: 186
 Electric current (Conductors and insulators) E: 168
 Electricity (Conductors and insulators) E: 193

Electronics (Electronic circuits) E: 208-209
Insulin [hormone] I: 308
 Best, Charles Herbert B: 274
 Biology (Current research and issues) B: 320-321
 Diabetes (Causes) D: 179; (Treatment) D: 179
 Drug (Animals) D: 355; (The drug revolution) D: 359
 Genetic engineering (Uses of genetic engineering) G: 84a; (History) G: 84b
 Hormone (Metabolic hormones) H: 335
 Human body (The endocrine system) H: 425
 Pancreas P: 128
Insulin-dependent diabetes [disease]
 Diabetes (Causes) D: 179
Insulin receptor [anatomy]
 Insulin (How insulin acts in the body) I: 308
Insulin resistance
 Diabetes (Causes) D: 178-179
Insulin shock therapy
 Shock treatment S: 429
Insurability
 Insurance (How premiums are figured) I: 310-311
Insurance I: 309 *with diagrams*
 See also Health insurance; Life insurance *in this index*
 Connecticut (Service industries) Ci: 965
 Health insurance, National H: 129
 Investment (Life insurance policies) I: 369
 Malpractice suit M: 112
 Medicine (Providing medical care) M: 366
 Nebraska (Service industries) N: 108
 No-fault insurance N: 438
 Postal Service, United States (Extra protection) P: 700
 Railway brotherhoods R: 122
 Underwriting U: 21
 Unemployment insurance U: 24
 Workers' compensation W: 405
Insurance agent
 Insurance (How insurance is sold) I: 315
 Sales (Other types of selling) S: 62; (Steps in selling) S: 62-63
Insurance City [nickname]
 Hartford H: 78
Insurance Institute for Highway Safety
 Safety (Private organizations) S: 15
Insurgente, L' [ship]
 Constellation Ci: 994
Insutu Group [company]
 Automatic flight control system (History) A: 944
Intact dilation and extraction See Partial-birth abortion *in this index*
Intaglio [engraving] I: 317
 Offset O: 678
 Printing (Recess printing) P: 800 *with diagram*
 Relief R: 212
 Sculpture (Kinds of sculpture) S: 230
 Stamp collecting (Printing) So: 830
Intake manifold
 Automobile (The fuel system) A: 950 *with diagram*
 Carburetor C: 208
 Gasoline engine (Fuel system) G: 65
Intake port [engine]
 Fuel injection F: 552
Intake stroke
 Automobile (The engine) A: 949
Intake valve
 Gasoline engine (Valves) G: 64 *with pictures*
Intangible product
 Intellectual property I: 317
Integer [mathematics] I: 317
 Logarithms (Common logarithms) L: 424
 Rational number R: 148
Integral [mathematics]
 Calculus (The definite integral) C: 24
Integral appreciation [anthropology]
 Gamio, Manuel G: 23
Integral calculus
 Calculus C: 22; (Integral calculus) C: 23
 Mathematics (Branches of mathematics) M: 303
 Torricelli, Evangelista T: 341
Integral nationalism
 Nationalism (Different forms of nationalism) N: 62
Integral train
 Railroad (Rolling stock) R: 107-108

Integrated circuit
 Computer (Miniaturization) Ci: 924c; *picture on* Ci: 914
 Computer chip Ci: 924e
 Electricity (Controlling electric current) E: 195
 Electronics (Types of electronic circuits) E: 209-210; (Passive components) E: 212; (The solid-state revolution) E: 215-216
 Invention (Recent developments) I: 364
 Kilby, Jack K: 315
 Noyce, Robert N: 578
Integrated development environment [computing]
 Computer (Compiling or assembling a program) Ci: 923
Integrated pest management [agriculture]
 Environmental pollution (Agriculture) E: 337-338
 Farm and farming (Pest control) F: 34
 Insect (Chemical control) I: 285
 Pest control P: 317; (Integrated pest management) P: 318
Integrated services digital network See ISDN *in this index*
Integration See Segregation *in this index*
Integumentary system [anatomy]
 Human body (The skin) H: 418
Intel Corporation
 Manufacturing (table) M: 170
 New Mexico *picture on* N: 269
 Noyce, Robert N: 578
Intellect [psychology]
 Plato (Psychology and politics) P: 568
Intellectual cycle
 Biorhythm B: 326
Intellectual play [recreation]
 Play P: 570 *with picture*
Intellectual property I: 317
 Public domain P: 855
Intelligence [information]
 Central Intelligence Agency C: 356
 Codes and ciphers Ci: 749; (Communications intelligence) Ci: 750
 Espionage E: 358
 Federal Bureau of Investigation F: 62
 Intelligence service I: 319
 Police (Criminal intelligence) P: 621
 Terrorism (Intelligence efforts) T: 178
 War (Information and intelligence) W: 24
Intelligence [psychology] I: 317
 Animal (A table of animal intelligence) A: 493
 Extraterrestrial intelligence E: 458
 Heredity (Heredity and environment) H: 205
 Mammal (Intelligence) M: 121
 Races, Human (Race and discrimination) R: 59-60
 Teaching (Guiding and assisting student learning) T: 66
 Testing (Kinds of tests) T: 181
Intelligence and Security Command
 Army, United States (Organization of the Army) A: 736-737
Intelligence gathering
 Radar (In the military) R: 65-66
Intelligence quotient [psychology] I: 318
 Binet, Alfred B: 309
 Child (Differences in intelligence) C: 451
 Mental retardation (Diagnosis of mental retardation) M: 410
Intelligence service [military] I: 319
 Central Intelligence Agency C: 356
Intelligence test See Intelligence quotient *in this index*
Intelligencer [newspaper]
 West Virginia (Communication) W: 224
Intelligent design theory
 Evolution (Acceptance of evolution) E: 433-434
Intelligent materials [engineering] See Smart materials *in this index*
Intelligent transportation system
 Transportation (Problems of modern transportation) T: 397
Intelsat, Ltd. [company] I: 319
 Communications Satellite Corporation Ci: 889
Intelsat 1 [satellite]
 Communications satellite (History) Ci: 888b-889
Intendant [office]
 Canada, History of (The royal province) C: 142
Intensity

- Ear (The sense of hearing) **E**: 9; (How sounds reach the brain) **E**: 10
 Lighting (Quantity of light) **L**: 297
 Photography (Intensity) **P**: 413
 Sound (table) **So**: 599; (Intensity and loudness) **So**: 600-601 *with diagram*
Intensity [book by Koontz]
 Koontz, Dean K: 365
Intensity of rainfall [meteorology]
 Rain (Characteristics of rain) **R**: 122-123
Intensive care unit [medicine] **I**: 320 *with picture*
 Heart (Diagnosis and treatment) **H**: 139
 Hospital (Hospital units) **H**: 372
 Neonatology **N**: 124
Intensive farming
 Agriculture (Kinds of agriculture) **A**: 148 *with picture*
Intensive pronoun
 Pronoun **P**: 819
Intent [law]
 Murder **M**: 930
Intentionality [philosophy]
 Phenomenology **P**: 356
Interaction
 Sociology (Social behavior) **So**: 564
Interactive environment [computer]
 Computer (Educational software) **Ci**: 920
 Video game **V**: 359
 Web site **W**: 175
Interactive learning
 Computerized instruction **Ci**: 924h
Interactive program [software] **I**: 320
 Multimedia **M**: 919
Interactive television
 Television (Digital television) **T**: 126-128
Interactive video entertainment system
 Television (Video entertainment systems) **T**: 110c
Inter-Allied Declaration [1941]
 United Nations (The founding of the UN) **U**: 94
Inter-American conferences
 Pan-American conferences **P**: 113
 Monroe Doctrine (The Good Neighbor Policy) **M**: 740
Interamerican Cup
 Soccer (International competition) **So**: 548
Inter-American Development Bank
 Foreign aid (Regional development programs) **F**: 385
Inter-American Highway
 Pan American Highway (Development) **P**: 114
Inter-American Treaty of Reciprocal Assistance [1947]
 Latin America (The movement to establish unity) **L**: 109
 Pan-American conferences (Stronger ties) **P**: 113
Interborough Rapid Transit
 New York City (Transportation) **N**: 334-335
Intercalated Games
 Olympic Games (The modern games) **O**: 750-751
Intercardinal points [navigation]
 Compass **Ci**: 902b
Intercellular material [anatomy]
 Collagen **Ci**: 773
Interception
 Football (Advancing the ball) **F**: 360-361
Interchange
 Railroad (Freight operations) **R**: 109-110
 Road (Primary highways) **R**: 358;
 (Intersections) **R**: 358-359
Interchangeable parts [manufacturing]
 Mass production **M**: 269
 Automobile (The birth of the automobile industry) **A**: 963-964
Intercity train
 Railroad (Passenger service) **R**: 105
Intercollegiate Athletics, National Association of
 See National Association of
 Intercollegiate Athletics *in this index*
Intercollegiate Commission
 Caps and gowns **C**: 199
Intercolonial Railway [Canada]
 Fleming, Sir Sandford **F**: 233
Intercom [communications] **I**: 320
Intercontinental ballistic missile
 Air force (Missiles) **A**: 183; (Major air forces of the world) **A**: 184
 Air Force, United States (Missiles) **A**: 191
 Cold War (The missile gap) **Ci**: 765
 Guided missile (Ballistic missiles) **G**: 425
 Nuclear weapon (The Cold War) **N**: 601-602
 Rocket (Military use) **R**: 386
Intercostal space [anatomy]
 Rib **R**: 320
Intercourse, Sexual See Sexual intercourse *in this index*
Intercropping [agriculture]
 Forestry (Community forestry) **F**: 406
Interdependence
 Human relations **H**: 427
 World, History of the (The interdependence of nations) **W**: 448
Interdependence of animals
 Symbiosis **So**: 1065
Interdependence of plants
 Symbiosis **So**: 1065
Interdict [religion]
 Middle Ages (The power of the church) **M**: 525-526
Interdiction attack [warfare]
 Air force (Combat missions) **A**: 182-183
Interdigital ringworm [disease]
 Ringworm **R**: 344
Interest [economics] **I**: 321
 Bond **B**: 454
 Certificate of deposit **C**: 363
 Check (Checks and the economy) **C**: 391
 Credit (Lending institutions) **Ci**: 1124
 Federal Reserve System (History) **F**: 66
 Investment (table) **I**: 366; (Indirect investments) **I**: 367; (Life insurance policies) **I**: 369; (Indirect investments) **I**: 367-368
 Money (The role of the Federal Reserve System) **M**: 716
 Percentage (Interest) **P**: 282
 Usury **U**: 229
Interest test
 Testing (Kinds of tests) **T**: 181
Interests [psychology]
 Careers (Interests) **C**: 215
Interexchange carrier
 Telephone (Routing the call) **T**: 96
Interface [computing]
 Computer (Operating system software) **Ci**: 916-917
Interface programmer board [electronics]
 Audio-visual materials (Filmstrips and slides) **A**: 882
Interfacing [sewing]
 Sewing (Facings) **S**: 333
Interference [physics] **I**: 323 *with diagram*
 Cable (Cable construction) **C**: 4
 Diffraction (How diffraction occurs) **D**: 201
 Interferometer **I**: 324
 Light (Interference) **L**: 286 *with pictures*
 Sound (Beats) **So**: 604 *with diagrams*
 Waves (Interference) **W**: 153; *diagram on W*: 151
Interference [sports]
 Football (Violations and penalties) **F**: 363
Interference fringe [physics]
 Interference **I**: 324 *with diagram*
 Light (Interference) **L**: 286
Interference pattern [physics]
 Astronomy (Optical astronomy) **A**: 838-841
 Inertial guidance (Strap-down systems) **I**: 263
 Light (The nature of light) **L**: 284
Interferometer [instrument] **I**: 324
 Astronomy (Optical astronomy) **A**: 838-841;
 (Radio astronomy) **A**: 843
 Michelson, Albert Abraham **M**: 487
Interferometry [science]
 Astronomy (Optical astronomy) **A**: 838-841
with picture; (Radio astronomy) **A**: 843
Interferon [protein] **I**: 324
 AIDS (Treatments) **A**: 164
 Cold, Common (Prevention) **Ci**: 761
 Disease (Immune responses) **D**: 231-232
 Genetic engineering (Uses of genetic engineering) **G**: 84a
 Hepatitis (Hepatitis C) **H**: 192
 Multiple sclerosis **M**: 921
 Virus (Virus diseases in human beings) **V**: 426-427
Interfraternity council
 Fraternity (Organization) **F**: 496
Interglacial age [geology]
 Ice age **I**: 6
Interglossa [language]
 Universal language **U**: 205
Intergovernmental Committee for European Migration See Intergovernmental Committee for Migration *in this index*
Intergovernmental Committee for Migration
 Refugee **R**: 203
Inter-Governmental Maritime Consultative Organization [UN]
 International Maritime Organization **I**: 343
Intergovernmental Panel on Climate Change
 Global warming (Analyzing global warming) **G**: 232b
Intergovernmental Relations, Commission on [U.S.]
 States' rights (Later developments) **So**: 866-867
Interim committee
 State government (Organization) **So**: 862-864
Interior, Department of the [U.S.] **I**: 324 *with pictures*
 Coal (Government regulation) **Ci**: 729-730
 National Park Service **N**: 42j
 Territory (Pacific Islands) **T**: 177
 Washington, D.C. *map on W*: 76
Interior, Secretary of the [office]
 Interior, Department of the **I**: 324
 Flag *picture on F*: 211
Interior architecture
 Interior design **I**: 326
Interior decoration See Interior design *in this index*
Interior design **I**: 326 *with pictures*
 Furniture **F**: 568 *with pictures*
 Home economics (Design, production, and distribution of consumer goods) **H**: 300
 House (Interior design) **H**: 383
 Lighting (In the home) **L**: 296; (Lighting devices) **L**: 298
 Painting (Decoration) **P**: 34
Interior Design Educators Council
 Interior design (Training) **I**: 334
Interior designer [career]
 Interior design **I**: 326; (Careers in interior design) **I**: 334
Interior environment
 Interior design **I**: 326
Interior monologue [literature] See Stream of consciousness *in this index*
Interior of the Hut of a Mandan Chief, The [painting by Bodmer]
 Indian, American *picture on I*: 159
Interior Plains
 North America (Land regions) **N**: 462
 United States *map on U*: 122; (The Interior Plains) **U**: 124; *picture on U*: 121
Interior Salish [American Indians]
 Salish Indians (The Interior Salish) **S**: 67
Interjection [grammar] **I**: 336
Interlaced scanning [electronics]
 Television (The television camera) **T**: 121-122
Interleukin [protein] **I**: 336
 Oncology **O**: 761
Interlibrary loan system
 Library (The growth of information and technology) **L**: 238; (State libraries) **L**: 249
Interlingua [language] **I**: 336
 Universal language **U**: 205
Interlining [sewing]
 Quilt **Q**: 41
Interlock knit
 Textile (Weft knitting) **T**: 214
Interlude
 Drama (Farces and interludes) **D**: 330
 Opera (The orchestra) **O**: 793
Intermediate care facility
 Nursing home (Intermediate care facilities) **N**: 621
Intermediate color
 Color (Producing color harmony) **Ci**: 823-824
with diagram
Intermediate frequency [electronics]
 Radio (The tuner) **R**: 88-89
Intermediate-range ballistic missile [weapon]
 Air force (Missiles) **A**: 183; (Major air forces of the world) **A**: 184
 Guided missile (Ballistic missiles) **G**: 425
Intermediate-Range Nuclear Forces Treaty [1987]
 Congress of the United States (Approving treaties) **Ci**: 946

432 Intermediate school

Gorbachev, Mikhail Sergeyevich (International policies) G: 272
 Nuclear weapon (Limiting numbers) N: 601
Intermediate school See *Middle school in this index*
Intermediate-term loan
 Interest (Length of a loan) I: 322
Intermezzo [music] I: 336
 Drama (Intermezzi and operas) D: 330
 Opera (Opera seria and opera buffa) O: 797
 Pergolesi, Giovanni Battista P: 287
 "Intermezzo" [music by Mascagni]
 Opera (*Cavalleria Rusticana*) O: 803
Intermittent motion
 Motion picture (The camera) M: 857
Intermittent volcano
 Volcano (Classifying volcanic activity) V: 442
Intermodal train
 Railroad (At interchanges) R: 110
Intermolecular force [chemistry]
 Bond (Other linkages) B: 454
Intermontane Basin
 Colorado (Land regions) Ci: 838
Internal auditor
 Accounting (Auditing) A: 23
Internal colonialism
 Minority group (Internal colonialism) M: 609
Internal-combustion engine I: 336
 Automobile (How an automobile works)
 A: 949 *with pictures*
 Carburetor C: 208
 Diesel engine D: 199 *with diagrams*
 Gasoline engine G: 63 *with diagrams*
 Heat (Changing heat into motion) H: 153-154
 Invention (The late 1800's) I: 362
 Lenoir, Jean Joseph Étienne L: 196
 Rotary engine R: 485 *with pictures*
Internal energy
 Heat (Temperature and heat) H: 150 *with diagram*
Internal fertilization
 Animal (Sexual reproduction) A: 496 *with diagram*
 Fertilization F: 78
 Fish (How fish reproduce) F: 169
 Reproduction (Reptiles and birds) R: 243
Internal gear [mechanics]
 Transmission (Planetary gears) T: 377 *with diagrams*
Internal medicine [profession] I: 336
 Medicine (table) M: 369
Internal memory See *Random-access memory in this index*
Internal parasite [organism]
 Cattle (Diseases) C: 312-314
Internal reconstruction
 Linguistics (Internal reconstruction) L: 336
Internal revenue I: 337
 Inland revenue I: 273
 Internal Revenue Service I: 337
Internal Revenue Service [U.S.] I: 337
 Income tax (Paying the individual income tax)
 I: 104; (Processing income tax returns)
 I: 105
 Internal revenue (The Internal Revenue Service) I: 337
 Tax Court, United States T: 52
 Washington, D.C. *map on* W: 76
Internal revenue stamp
 Stamp So: 829
Internal rhyme
 Rhyme R: 320
Internal Security, Committee on
 Un-American Activities Committee U: 19
Internal senses
 Senses (Internal senses) S: 302, *diagrams on*
 S: 301
Internal waters
 Territorial waters T: 176
International Advertising Association
 Advertising (Advertising in other countries)
 A: 78
International Afro-American Museum [former name]
 Museum of African American History M: 940
International Air Transport Association I: 337
 Aviation (Other aviation organizations) A: 986
International airport
 Airport (Commercial service airports) A: 243,
 (World's 25 busiest airports) A: 245
International Amateur Athletic Association

Track and field T: 354, (Organizations) T: 356
International America's Cup Class
 America's Cup A: 431
International arbitration
 Arbitration (International arbitration) A: 592
International Archery Federation
 Archery (Target archery) A: 602-603
International Association of Bridge, Structural and Ornamental Iron Workers
 Labor movement (table) L: 8
International Association of Fire Fighters
 Labor movement (table) L: 8
International Association of Lions Clubs See
 Lions Clubs International *in this index*
International Association of Machinists and Aerospace Workers See *Machinists and Aerospace Workers, International Association of in this index*
International Astronautical Federation
 Astronautics A: 833
International Astronomical Union
 Astronomy (Astronomy associations) A: 849
 Star (Names of stars) So: 842
International Atomic Energy Agency [UN]
 I: 337
 Eisenhower, Dwight David (Foreign affairs)
 E: 152-153
 Nuclear energy (The first peaceful uses)
 N: 591
 Nuclear Nonproliferation Treaty N: 595
 United Nations (Peaceful uses of nuclear energy) U: 89
International Balloon Fiesta [Albuquerque]
 New Mexico (Annual events) N: 265 *with picture*
International Bank for Reconstruction and Development See *World Bank in this index*
International Bauxite Association
 Aluminum (In other countries) A: 396
 Bauxite (The bauxite industry) B: 175
International Bowling Federation
 Bowling (The 1900's) B: 525
International Boxing Federation
 Boxing (Regulation) B: 532
International Bridge [Michigan-Ontario]
 Soo Canals (The Canadian canal) So: 595 *with map*
International Brigade [Spanish history]
 Spain (Civil war) So: 750
International Broadcasting Bureau
 United States Information Agency U: 200
 Voice of America V: 437
International Brotherhood of Electrical Workers See *Electrical Workers, International Brotherhood of in this index*
International Brotherhood of Magicians
 Magician (Becoming a magician) M: 52
International Brotherhood of Painters and Allied Trades
 Labor movement (table) L: 8
International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers of America See *Teamsters Union in this index*
International Bureau
 Postal Union, Universal P: 708
International Bureau of Weights and Measures I: 338
 Weights and measures (Measurement systems) W: 184
International Business Machines Corporation
 I: 338
 Computer (Personal computers) Ci: 909-910,
 (Manufacturing) Ci: 924, (The first successful computer) Ci: 924b
 Encyclopedia (Today's encyclopedias) E: 268b-269
 Gates, Bill G: 67
 Manufacturing (table) M: 170
 Watson, Thomas John W: 148
International Campaign to Ban Landmines
 [organization]
 Nobel Prizes (Peace: 1997) N: 449
 Mine warfare (Efforts to ban land mines)
 M: 564-565
International Chamber of Commerce [organization]
 Chamber of commerce C: 371
International Church of the Foursquare Gospel [religious group]
 McPherson, Aimee Sample M: 344

International Circus Festival of Monte Carlo
 [Monaco]
 Circus (Places to visit and annual events)
 Ci: 566 *with picture*
International Civil Aviation Organization [UN]
 I: 338
 Airport A: 242
 Aviation (The International Civil Aviation Organization) A: 986
International code
 Flag (Flags that talk) F: 208 *with pictures*
 Morse code M: 820 *with picture*
 Radio, Amateur R: 95
International Coffee Agreement [1963]
 Coffee (History) Ci: 755
International Cometary Explorer [space probe]
 Space exploration (Probes to comets) So: 711
International Commission for the Protection of the Danube River
 Water (The challenge of today) W: 132
International Commission on National Parks
 National park (International concern for national parks) N: 42j
International Commission on Radiological Protection
 Radiation (Dose) R: 79-80
International Committee of the Red Cross
 [organization]
 Nobel Prizes (Peace: 1963) N: 448
 Red Cross (The Red Cross in other lands)
 R: 187
International Composers' Guild
 Varèse, Edgard V: 285
International Confederation of Free Trade Unions I: 338
 Labor movement (International organizations)
 L: 15
International Convention on the Elimination of All Forms of Racial Discrimination
 [1969]
 United Nations (Human rights) U: 88-89
International cooperation, Minister for [office]
 Canada, Government of (The Cabinet) C: 132;
diagram on C: 137
International copyright
 Copyright (International copyright) Ci: 1048
International Council for the Exploration of the Sea [organization]
 Fishing industry (International commissions and treaties) F: 187
International Council of Scientific Unions
 I: 338
International Court of Justice [UN] I: 338
 Central Intelligence Agency C: 357
 Court (International courts) Ci: 1102
 Hague, The H: 6 *with picture*
 International law (Courts and arbitration) I: 341
 International relations (International law)
 I: 344-345
 United Nations (The six major UN organs)
 U: 78; (Other main organs) U: 84
International Covenant on Civil and Political Rights [1966]
 Human rights (Treaties) H: 428a
International Covenant on Economic, Social, and Cultural Rights [1966]
 Human rights (Treaties) H: 428a
International Criminal Court
 Court (Courts around the world) Ci: 1102-1104
 International relations (International law) I: 345
 United Nations (Human rights) U: 88-89
 War crime (The United Nations and war crimes) W: 27
International Criminal Tribunal for the former Yugoslavia
 Milošević, Slobodan M: 556
International Criminal Police Organization
 Interpol I: 350f
International culture
 Culture (The boundaries of cultures) Ci: 1187-1188
International DanceSport Federation
 Ballroom dancing B: 63
International Date Line [geography] I: 339 *with map*
 Hurricane H: 452
 Time (Worldwide time zones) T: 292 *with diagrams; map on* T: 290
International Development Association [UN]
 Foreign aid (Worldwide lending programs)
 F: 385

World Bank W: 450
International Development Cooperation Agency [U.S.]
 Agency for International Development A: 140
 State, Department of (Since World War II) So: 861
International Direct Distance Dialing
 Telephone (Improvements in telephone technology) T: 101
International Education, Institute of
 Fulbright Scholarship F: 554
 Scholarship (International scholarships) S: 178
International Electrical Congress
 Metric system (Evolution of the metric system) M: 441
International Electrotechnical Commission
 Metric system (Evolution of the metric system) M: 441
International Energy Agency I: 339
International Exchange of Scholars, Council for
 Fulbright Scholarship F: 554
International Expositions, Bureau of
 World's fair W: 500
International Falls [Minnesota]
 Minnesota (table: Average monthly weather) M: 598
International Federation of Library Associations and Institutions
 Library (International library programs) L: 254
International Federation of Red Cross and Red Crescent Societies
 Red Cross (The Red Cross in other lands) R: 187
International Fencing Federation
 Fencing (Fencing organizations) F: 71
International Finance Corporation I: 340
 Foreign aid (Worldwide lending programs) F: 385
International Fisherman's race
Bluenose B: 423
International flag code
 Flag (Flags that talk) F: 208 *with pictures*
International Foundation for Education and Self-Help
 Sullivan, Leon Howard So: 970
International 4-H Youth Exchange
 4-H (4-H sponsors) F: 435
International Fund for Agricultural Development [UN] I: 340
International Geophysical Year
 Antarctica (Recent activities) A: 538
International gold standard [economics]
 Exchange rate E: 435
International Grand Championship Walking Horse Show
 Tennessee *picture on* T: 138
International Gymnastics Federation
 Gymnastics (Organization) G: 450
International Harvester Company
 McCormick, Cyrus Hall M: 334
International House [trade]
 Louisiana (The mid-1900's) L: 500
International Hydrographic Organization
 Southern Ocean So: 688
International Hydrological Programme
 Water (The challenge of today) W: 132
International Ice Hockey Federation
 Hockey (Amateur organization) H: 280;
 (Amateur development) H: 281
International Interior Design Association
 Interior design (Training) I: 334
International Jazz Festival [Montreal]
 Quebec *picture on* Q: 14
International Joint Commission I: 340
 Saint Lawrence Seaway (First construction plans) S: 44
International Labour Conference
 International Labour Organization I: 340
International Labour Organization I: 340
 Foreign aid (Technical assistance and relief) F: 384
 Freedom of assembly (In other countries) F: 504
International language
 Universal language U: 205
 Esperanto E: 358
 Language (Universal languages) L: 66
International Latin style
 Ballroom dancing B: 63
International law I: 340

Grotius, Hugo G: 400
 International relations (International law) I: 344
 Law (Public law) L: 130-131; (Developments in international law) L: 137
 Peace (From the 1400's to the 1700's) P: 206
 Treaty port T: 409
 War crime (The United Nations and war crimes) W: 27
See also the list of Related Articles in the International Law article
International Law, Institute of [organization]
 Nobel Prizes (Peace: 1904) N: 447
International Law Association
 Field, David Dudley, Jr. F: 92
International Law Commission [U.N.]
 War crime (The United Nations and war crimes) W: 27
International Load Convention
 Ship (Safety at sea) S: 424
International Longshoremen's and Warehousemen's Union [labor union]
 Bridges, Harry B: 607
International Longshoremen's Association
 Bridges, Harry B: 607
 Labor movement (table) L: 8
International Maritime Organization [UN]
 I: 342
International Meteorological Organization
 World Meteorological Organization W: 451
International Military Tribunal
 Nuremberg Trials (The trials) N: 612-613
International Monetary Conference [1944]
 Bretton Woods B: 594
 Morgenthau, Henry, Jr. M: 805
 New Hampshire (The mid-1900's) N: 226-227 *with picture*
International Monetary Fund [UN] I: 343
 Balance of payments (How the balance of payments is determined) B: 35
 Bretton Woods B: 594
 Globalization (Features of globalization) G: 233
 Money (International reserves) M: 716-718
 New Hampshire (The mid-1900's) N: 226-227
 Special Drawing Rights So: 770
International money order
 Money order (U.S. postal money orders) M: 719
International Morse Code
 Morse code M: 820 *with picture*
International nautical mile [unit of measure]
 Knot K: 355
 Mile M: 542
International Negotiation Network Council
 Carter, Jimmy (Later years) C: 259
International Network for the Improvement of Banana and Plantain [organization]
 Banana (The banana industry) B: 73
International News Service
 Hearst, William Randolph H: 131
International Nickel Company
 Manitoba (The mid-1900's) M: 162
 Thompson T: 262
International Olympic Committee [organization] I: 343
 Blood doping B: 416
 Olympic Games (The International Olympic Committee) O: 746a; (Olympic competition) O: 746b
International Order of the Rainbow for Girls [organization]
 Rainbow for Girls R: 128
International Organization for Standardization
 International standard book number I: 347
 Smart card S: 513
 Television (Digital television) T: 126-127
International Organization of Good Templars
 Good Templars, International Organization of G: 269
International Pacific Halibut Commission
 Fishing industry (International commissions and treaties) F: 187
International Peace Bureau [organization]
 Nobel Prizes (Peace: 1910) N: 447
International Peace Garden [Manitoba-North Dakota] I: 343
 North Dakota (Places to visit) N: 504 *with picture*
International Peace Park
 Waterton-Glacier International Peace Park W: 147

International Petroleum Company
 Peru (The growth of U.S. influence) P: 315;
 (Socialistic reforms) P: 315-316
International Phonetic Alphabet
 Alphabet (The alphabet today) A: 383
 Phonetics (An international phonetic alphabet) P: 400
International Physicians for the Prevention of Nuclear War
 Nobel Prizes (Peace: 1985) N: 449
International Planned Parenthood Federation
 Planned Parenthood Federation of America P: 515
International Political Science Association
 Political science (Contemporary ideas) P: 639
International Pro Hockey League
 Hockey (Professional hockey) H: 281
International prototype kilogram [measurement]
 Metric system (Evolution of the metric system) M: 441
 Weights and measures W: 184
International quarantine
 Quarantine Q: 7
International Red Cross and Red Crescent Movement
 Red Cross (The Red Cross in other lands) R: 187
International Red Cross Conference [organization]
 Red Cross (The Red Cross in other lands) R: 187
International Refugee Organization
 Refugee R: 203
 United Nations (Aid to refugees) U: 88
International relations I: 343 *with pictures*
 Balance of power B: 36
 Cold War C: 762
 Foreign policy F: 386
 Political science (International relations) P: 638
 State, Department of So: 858
 Technical assistance T: 73
 Treaty T: 408
 Treaty port T: 409
See also the list of Related Articles in the International relations article
International Research and Exchanges Board
 Scholarship (International scholarships) S: 178
International reserves [economics]
 Money (International reserves) M: 716-718
International Rice Research Institute
 [Philippines]
 Rice (History) R: 327
International Rose Test Gardens
 Portland [Oregon] (Education and cultural life) P: 683-684
International Rugby Board [organization]
 Rugby football (History) R: 513
International Rules
 Boating (Boating regulations) B: 429
International Rules of the Road
 Ship (Safety at sea) S: 424
International Safety of Life at Sea conventions
 Ship (Safety at sea) S: 424
International Seabed Authority [organization]
 Law of the Sea Convention L: 142
International Settlements, Bank for *See Bank for International Settlements in this index*
International Skating Union
 Ice skating (History) I: 16
 International Olympic Committee I: 343
International Society for Krishna Consciousness *See Hare Krishna in this index*
International Softball Federation
 Softball (History) So: 572
International Space Station [astronomy]
 I: 346a *with pictures*
 Exploration (Space exploration) E: 452
 National Aeronautics and Space Administration N: 28
 Space exploration (The International Space Station) So: 722
 United States, History of the (The International Space Station) U: 195
International Special Olympic Games
 Special Olympics So: 771
International Species Information System
 [database]
 Zoo (Wildlife conservation) Z: 604

International standard book number I: 347**International standard style**

Ballroom dancing B: 63

International studies

Johns Hopkins University J: 135

International Style [design]Architecture (The International Style) A: 630;
picture on A: 632

Furniture (Recent developments) F: 584

Gropius, Walter *picture on* G: 398House *picture on* H: 381

Jahn, Helmut J: 21

Johnson, Philip Cortelyou J: 153

Le Corbusier L: 174

International Style of Buddhist art

Sculpture (Korea) S: 238; (Japan) S: 239

International System of Units *See* Metric system *in this index***International Table Tennis Federation**

Table tennis T: 3

International Technical Commission

Suez Canal (History) So: 958

International Telecommunication Union (UN) I: 347**International Telecommunications Satellite Consortium** *See* Intelsat, Ltd. *in this index***International Telegraph Union**

International Telecommunication Union I: 347

Telegraph (Service expansion and improvement) T: 91

International Tennis Federation

Tennis (Amateur tennis) T: 165

International trade I: 347 *with picture**See also* Trade *in this index*

Convertibility Ci: 1024

Economics (World trade) E: 63

Exchange rate E: 435

Exports and imports E: 454

Free trade F: 499

General Agreement on Tariffs and Trade G: 82

Globalization G: 232b

Great Depression G: 338

Japan (Postwar boom) J: 58

Money (International finance) M: 716

North American Free Trade Agreement N: 470

Reciprocal trade agreement R: 175

Sanctions, Economic S: 106

Ship S: 402; (The United States merchant marine) S: 425

Tariff T: 43

World Trade Organization W: 451

International trade, Minister for [office]Canada, Government of (The Cabinet) C: 132;
diagram on C: 137**International Trade, U.S. Court of**Court of International Trade, United States
Ci: 1105**International Trade Commission, United States I: 349****International Trade Mart**

Louisiana (The mid-1900's) L: 500

New Orleans (Downtown New Orleans)
N: 279**International Ultraviolet Explorer [spacecraft]**

Astronomy (Ultraviolet astronomy) A: 844

International Union for the Conservation of Nature and Natural Resources [organization]

Endangered species (Protecting endangered species) E: 270

National park (International concern for national parks) N: 42j

Wildlife conservation (International cooperation) W: 305

International Union for the Protection of Nature [organization]

National park (International concern for national parks) N: 42j

International Union of Bricklayers and Allied Craftsmen

Labor movement (table) L: 8

International Union of Electronic, Electrical, Salaried, Machine, Furniture Workers

Labor movement (table) L: 8

International Union of Operating EngineersEngineers, International Union of Operating
E: 291

Labor movement (table) L: 8

International Union of Pure and Applied Chemistry [organization]

Bohrium B: 438

Dubnium D: 371

Element, Chemical E: 219

Element 110 E: 224

Element 111 E: 224

Hassium H: 83

Meitnerium M: 387

Mendelevium M: 398

Nobelium N: 450

Rutherfordium R: 569

Seaborgium S: 264

Transuranium element T: 401

International Union of Pure and Applied Physics [organization]

Bohrium B: 438

Dubnium D: 371

Hassium H: 83

Meitnerium M: 387

Rutherfordium R: 569

Seaborgium S: 264

International Union, United Automobile, Aerospace and Agricultural Implement Workers of America *See* United Automobile Workers *in this index***International war**

War W: 23

International waters

High seas H: 228

International Whaling Commission

Conservation (Ocean conservation) Ci: 978-979

Whale (The future of whales) W: 264

International Wildlife Conservation Park [zoo]New York City (The Bronx) N: 328; (Parks)
N: 338**International Women's Day**

March M: 195

International Woodworkers of AmericaCarpenters and Joiners of America, United
Brotherhood of C: 246**International Workingmen's Association [European history]**Marx, Karl (Move to London) M: 237; (The
Communist Manifesto) M: 237

Socialism (Karl Marx) So: 560

"Internationale, The" [song] I: 349**Internationalization**

Aviation (Internationalization) A: 991

Internet [communication network] I: 350 *with pictures*Advertising (Internet) A: 76 *with picture*;
(Recent developments) A: 80-81

Auction A: 881

Bank (Providing a means of payment) B: 89;
(Electronic banking) B: 89-90

Book (Modern books) B: 468

Business (Recent developments) B: 726

Careers (Finding job opportunities) C: 217 *with picture*

Codes and ciphers (Modern applications of cryptography) Ci: 752

Communication (The development of the Internet) Ci: 886

Computer (The Internet) Ci: 920

Copyright (Users' rights) Ci: 1048

E-commerce E: 2

Electronic publishing E: 205

Etiquette (Internet etiquette) E: 374

Globalization G: 233

Intellectual property I: 317

Invention (Recent developments) I: 364

Investment (How investors buy stocks) I: 369

Journalism (Online journalism) J: 172

Manufacturing (How science helps manufacturing) M: 171-172

Map M: 176

Marketing (Market research) M: 214;
(Distribution) M: 214

Medicine (Computers and electronic communication) M: 370

Museum (Museums today) M: 940

Online service O: 763

Postal services (Technological advancements)
P: 707

Postal Service, United States (Electronic services) P: 700

Privacy, Right of P: 808a

Recording industry (History) R: 182

Remote control (History) R: 231

Sales (Current trends in sales) S: 65

Sales tax S: 62

Slang (Sources of slang) S: 500

Teaching (Guiding and assisting student learning) T: 66

Technology (The computer age) T: 75

Telecommunications T: 89

Telephone (Modems) T: 97-98

World Wide Web W: 499

Internet appliance [machine]

Internet (New technologies) I: 350f

Internet cafeInternet *picture on* I: 350; (Internet availability)
I: 350e**Internet Corporation for Assigned Names and Numbers**

Internet (How the Internet works) I: 350c-350d

Internet game

Game (Internet games) G: 22

Internet library

Library (The growth of information and technology) L: 238

Internet service provider [computing]

Computer (Internet service providers [ISP's] and online services) Ci: 921

E-mail E: 2

Internet (Communications) I: 350-350a; (How the Internet works) I: 350c

Web site W: 175

Internist [medicine]

Medicine (Primary care physicians) M: 366

Internal medicine I: 336

Internment campAsian Americans (Japanese internment)
A: 812e

Concentration camp (Other concentration camps) Ci: 927

Mineta, Norman Yoshio M: 572

World War II (In the United States and Canada) W: 494-495

Internode [botany]

Stem So: 887

Sugar cane So: 962

Internship

Cooperative education Ci: 1037

Inter-Parliamentary Union [organization] I: 350f**Interphase [biology]**

Cell (Mitosis) C: 330

Interplanetary medium [astronomy]

Solar system So: 580

Interplanetary probeRocket (Launching probes and satellites)
R: 386**Interplanetary space [astronomy]**

Space exploration (Space between the planets) So: 696

Interplate earthquake

Earthquake (Where and why earthquakes occur) E: 36

Interpointing [printing]

Braille B: 550

Interpol [police] I: 350f

Police (Interpol) P: 623

Interposition [chess]

Chess (How chess is played) C: 413

Interposition [U.S. history]

States' rights (Later developments) So: 866

Interpreter [computing]

Computer (Interpreting a program) Ci: 923

Interpretive reporting

Journalism (Informing the public) J: 172

Interprovincial Pipeline

Pipeline (In Canada) P: 491

Interregnum [European history]Holy Roman Empire (Problems of the empire)
H: 299**Interrogation point**

Punctuation (The question mark) P: 902

Interrogative [grammar]

Adjective (Classifying adjectives) A: 57

Adverb (Interrogative adverbs) A: 71

Pronoun P: 819

Sentence (Sentence classifications) S: 303

Interrupted Sleep, The [painting by Boucher]Boucher, François *picture on* B: 515**Interscholastic sports**

Physical education (Secondary school programs) P: 432

Intersection [mathematics]Set theory (Using set theory) S: 322 *with diagram***Intersection [road]**

Road (Intersections) R: 358

- Interstate commerce I:** 350f
Gibbons v. Ogden G: 185
 Granger cases G: 311
- Interstate Commerce Act** [1887]
 Interstate commerce (The Interstate Commerce Act) I: 351
 Cleveland, Grover (Other actions) Ci: 671
 Railroad (Regulation and control of U.S. railroads) R: 118
- Interstate Commerce Commission** [U.S.] I: 351
 Government regulation G: 293
 Interstate commerce (The Interstate Commerce Act) I: 351
 Public utility (History) P: 867
- Interstate highway**
 Road (How roads and highways are paid for) R: 360
 United States *map* on U: 134
- Interstellar cloud** [astronomy]
 Heliosphere H: 175
- Interstellar dust** [astronomy]
 Interstellar medium I: 352
 Milky Way (Shape of the galaxy) M: 550
- Interstellar medium** [astronomy] I: 352
- Interstellar neutral** [astronomy]
 Heliosphere (Magnetic field) H: 175
- Interstellar space** [astronomy]
 Cosmic rays Ci: 1076
 Heliosphere H: 175
 Space exploration (Space between the stars) So: 696
 Voyager V: 451
- Interstitial fluid** [physiology]
 Human body (The lymphatic system) H: 424
 Lymphatic system L: 533; (Return of interstitial fluid) L: 534
- Interstitial pneumonia** [disorder]
 Pneumonia (How pneumonia develops) P: 586
- Interval**
 Music (Harmony) M: 951
- Intervention** [international relations] I: 352
 Monroe Doctrine M: 739
 World War II (The United States enters the war) W: 477
- Intervertebral disk** [anatomy]
 Back B: 17
 Sciatica S: 190
 Spine So: 792 *with picture*
- Interview**
 Careers (Being interviewed) C: 219
 Journalism (Television journalism) J: 175
 Newspaper (Gathering information) N: 382 *with picture*
 Public opinion poll (Interviewing the sample) P: 863 *with picture*
 A Guide to Research Skills Research Guide: 34
- Inter-vivos trust** [economics]
 Trust fund (Kinds of trusts) T: 474
- Intestate** [law]
 Will W: 306
- Intestinal autointoxication** [disorder]
 Intoxication I: 353
- Intestinal juice** [physiology]
 Digestive system (In the small intestine) D: 203
- Intestine** [anatomy] I: 352 *with diagram*
 Alimentary canal A: 368 *with diagram*
Campylobacter C: 97
 Catgut C: 301
 Colon Ci: 785
 Colon cancer Ci: 785
 Colostomy Ci: 850
 Crohn's disease Ci: 1150
 Diarrhea D: 184
 Digestive system (In the small intestine) D: 203 *with diagrams*
 Giardiasis G: 184
 Gland (table) G: 209
 Human body *diagram* on H: 422
 Incontinence I: 105
 Inflammatory bowel disease I: 266
 Laxative L: 148
- Inthanon Mountain**
 Thailand (The Mountainous North) T: 225 *with picture*
- Intifada** [uprising]
 Arab-Israeli conflict (The first intifada) A: 582a
 Arabs (The Arab-Israeli conflict) A: 589-590
 Israel (Recent developments) I: 489-490
- Palestine (The continuing conflict and peace efforts) P: 105-106
 Palestine Liberation Organization (History) P: 106
- Intima** [anatomy]
 Vein V: 295
- "Intimations of Immortality"** [poem by Wordsworth]
 Wordsworth, William (Later career) W: 404
- Intolerable Acts** [1774] I: 353
 Adams, Samuel (The patriot) A: 44
 Boston Port Act B: 505
 Quebec Act Q: 38
 Revolutionary War in America (The Intolerable Acts) R: 273
 United States, History of the (The Intolerable Acts) U: 158
- Intolerance** [film]
 Griffith, D. W. G: 393
- Intoxication** [disorder] I: 353
 Driving while intoxicated D: 348
- Intracartilaginous bone formation**
 Bone (Development of bones) B: 456
- Intracloud lightning**
 Lightning (The charges) L: 300 *with picture*
- Intracoastal Waterway System** [U.S.]
 Inland waterway (Intracoastal Waterway System) I: 274
- Intracytoplasmic sperm injection** [reproduction]
 Infertility (Treatment) I: 265
- Intradermal injection**
 Hypodermic injection H: 480
- Intramembranous bone formation**
 Bone (Development of bones) B: 456
- Intramural sports I:** 353
 Football F: 354
 Physical education (Secondary school programs) P: 432
- Intramuros** [district]
 Manila (Description) M: 142
- Intramuscular injection**
 Hypodermic injection H: 480
- Intranet** [computing]
 Computer (Intranets) Ci: 923
- Intransitive verb**
 Verb (Transitive and intransitive verbs) V: 315
- Intraocular lens** [medicine]
 Cataract C: 299
 Eye (Cataract) E: 466
- Intraplate earthquake**
 Earthquake (Intraplate earthquakes) E: 37
- Intropsychic theory** [psychology]
 Abnormal psychology (Theories of abnormal psychology) A: 12
- Intrastate commerce**
 Interstate commerce I: 350f
- Intrauterine device**
 Birth control (Methods of birth control) B: 378-379
- Intravenous injection I:** 353
 Intensive care unit I: 320
 Hypodermic injection H: 480
- Intrepid** [spacecraft]
 Conrad, Charles, Jr. Ci: 973
- Intrinsic criticism**
 Criticism (Kinds of literary criticism) Ci: 1146
- Introduced species** [biology]
 Invasive species I: 354j
 Tree (How people help trees spread) T: 430
- Introduction**
 Public speaking (Introduction) P: 866
- Introduction and Allegro** [music by Elgar]
 Elgar, Sir Edward William E: 235
- Introduction to the Devout Life, An** [book by Francis de Sales]
 Francis de Sales, Saint F: 481
- Introduction to the Method of Leonardo da Vinci** [essay by Valéry]
 Valéry, Paul V: 265
- Introduction to the Science of Sociology** [book by Burgess and Park]
 Collective behavior Ci: 774
- Introduction to the Study of Experimental Medicine** [book by Bernard]
 Bernard, Claude B: 270
- Introductions** [customs]
 Address, Forms of A: 53
 Etiquette (Introduction etiquette) E: 373
- Introspection**
 Psychology (Structuralism) P: 849
- Introvert** [psychology] I: 353
 Jung, Carl Gustav (His theories) J: 195
 Testing (Kinds of tests) T: 181-182
- Intruder, The** [play by Maeterlinck]
 Maeterlinck, Maurice M: 41
- Intrusive rock**
 Igneous rock I: 48
 Rock (Intrusive rocks) R: 371
- Intubation** [medical procedure]
 Croup Ci: 1157
- Intuitionism** [philosophy]
 Mathematics (Philosophies of mathematics) M: 307
- Intumescent coating**
 Fireproofing F: 135
- Inuit** [people] I: 354 *with pictures*
 Alaska (Population) A: 286; (Land-use issues) A: 304
 Aleuts A: 340
 Arctic (Inuit) A: 639 *with picture*
 Canada (Ancestry) C: 104-105 *with picture*; (Arctic life) C: 107
 Clothing *pictures* on Ci: 686, Ci: 695
 Greenland (People) G: 384
 Igloo I: 48
 Indian, American (Shelter) I: 136d; (Peoples of the Arctic) I: 152 *with picture*; (Current issues) I: 182-183; *pictures* on I: 138
 Indian reservation I: 188
 Iqaluit I: 397
 Kayak K: 250a
 Labrador L: 17
 Manitoba (Interesting facts) M: 145
 Mythology (Mythical places) M: 974
 Newfoundland and Labrador (Early European exploration) N: 375
 North America (People) N: 458-459
 Northwest Territories (People) N: 532; (Government) N: 533; (Recent developments) N: 534
 Nunavut N: 608; (People) N: 609
 Quebec (Indian days) Q: 30
 Races, Human (Climatic adaptations) R: 58
 Seal (Hunting of seals) S: 267
 United States, History of the (America before colonial times) U: 150
 Walrus W: 20
 Whale (The future of whales) W: 264
- Inuit-Inupiaq** [language]
 Inuit I: 354; (Language) I: 354f
- Inuit Tapirisat of Canada** [organization]
 Indian, American (In Canada) I: 178b
- Inuk** [person] See *Inuit in this index*
- Inuktitut** [language]
 Nunavut N: 608; (People) N: 609; (Education) N: 610
- Inuvialuit** [people]
 Northwest Territories (The High Arctic) N: 531; (People) N: 532
- Inuvik** [Northwest Territories] I: 354j *with picture*
- Invaders, The** [U.S. history]
 Wyoming (The Johnson County War) W: 536
- Invalid argument**
 Logic L: 425
- Invalides, Hôtel des** [Paris]
 Paris (Museums and art galleries) P: 164-165
- Invar** [metal]
 Nickel (Industrial uses) N: 404
- Invar tape** [measuring device]
 Surveying (Surveying tools) So: 1011
- Invasive cervical cancer** [disorder]
 Cervical cancer C: 364
- Invasive species** [biology] I: 354j *with picture*
- Invention I:** 354l *with pictures*
 Culture (How cultures change) Ci: 1189
 Edison, Thomas Alva E: 77
 Leonardo da Vinci (Drawings and scientific studies) L: 200-200a; (Leonardo's importance) L: 201
 Patent P: 194
 Public domain P: 855
 United States, History of the (Development of new products) U: 177 *with pictures*
 See also *the list of Related Articles in the Invention article*
- Inventory map**
 Map (Types of maps) M: 177-178 *with picture*; (Development of thematic and inventory mapping) M: 185
- Inverness** [Scotland] I: 365
- Inverse of fraction** [mathematics]

436 Inverse square law

Fraction (Division) F: 448-449
Inverse square law [physics]
 Light (The brightness of light) L: 291
Inversion [biochemistry]
 Honey H: 314
Inversion [weather]
 Weather (How people affect the weather) W: 170
 Smoke S: 520
Invert sugar
 Candy (Types of candies) C: 175-176
Invertebrate [zoology] I: 366
 Animal (Kinds of animals) A: 472;
 (Invertebrates and vertebrates) A: 488
 with diagram; (A table of animal intelligence) A: 493
 Brain (The brain in animals) B: 558
 Circulatory system (Invertebrates) Ci: 561
 Deep sea (Life in the deep sea) D: 82a with pictures
 Heart (Hearts of animals) H: 146 with diagram
 Nervous system (In invertebrates) N: 136
 Prehistoric animal (The earliest animals) P: 736; (Invertebrates) P: 737
 Sleep (Sleep among animals) S: 506
Invertebrate paleontology [geology]
 Lamarck, Chevalier de L: 50
 Paleontology P: 103
Inverted U hypothesis [economics] See Kuznets hypothesis in this index
Investigation, Crime
 Criminal justice system (The police) Ci: 1143
Investigative reporting
 Journalism (Investigating wrongdoing) J: 172
 Newspaper (Gathering information) N: 382
Investigator [ship]
 Northwest Passage picture on N: 529
Investigatory grand jury
 Grand jury G: 308
Investiture [ceremony]
 Feudalism (The principles of feudalism) F: 82
 Girl Scouts (Daisy Girl Scouts) G: 197
 Knighthood, Orders of (Honorary orders) K: 347 with picture
 Netherlands (National government) N: 139
Investiture, Right of [Church history]
 Gregory VII, Saint G: 387
 Paschal II P: 190
Investment [economics] I: 366 with picture
 Certificate of deposit C: 363
 Economics (table) E: 58
 Gross domestic product (Measuring the GDP) G: 399
 Industry (Capital) I: 257
 Inflation (Effects on investment) I: 268
 Internet (Business transactions) I: 350b
 Margin M: 198
 Mutual fund M: 969
 United States, History of the (Investment and banking) U: 178
Investment banking I: 369
 Bank (Investment banks) B: 91
 Initial public offering I: 271
Investment Canada [agency]
 New Democratic Party N: 203
Investment credit
 Credit (Types of credit) Ci: 1124
Investment-grade rating
 Bond (Bond ratings) B: 454
Investment Review Agency, Federal [Canada]
 Trudeau, Pierre Elliott (The national scene) T: 464
Invincible Armada See Spanish Armada in this index
Invisible glass
 Glass (Specialty glasses) G: 212-213
Invisible hand [economics]
 Economics (Capitalism) E: 59
 Smith, Adam S: 515
Invisible ink I: 369
Invisible light See Infrared rays; Ultraviolet rays in this index
Invisible Man [book by Ellison]
 African American literature (The 1900's) A: 136a
 Ellison, Ralph E: 244
 Novel (After World War II) N: 574
Invitation to the Sideshow [painting by Seurat]
 Postimpressionism picture on P: 709
Invitations [custom]
 Etiquette (Invitation etiquette) E: 373

Letter writing (Personal letters) L: 212 with pictures
Invoice
 Bill (In commerce) B: 300
Involucre [botany]
 Four-o'clock F: 437 with picture
Involuntary act See Reflex action in this index
Involuntary manslaughter
 Manslaughter M: 167
 Murder M: 930
Involuntary muscle
 Human body (Smooth muscles) H: 419
 Muscle (Smooth muscles) M: 934-935
Inwood [district]
 New York City (Manhattan) N: 323-326
Inyangani, Mount
 Zimbabwe (Land) Z: 596
Inyo National Forest [California]
 Devils Postpile National Monument D: 175
Io [astronomy] I: 370 with picture
 Galileo G: 13
 Jupiter (Satellites) J: 200
 Satellite (Currently active satellites) S: 150a with picture
 Space exploration picture on So: 694
 Voyager V: 451
Io [Greek mythology] I: 369 with picture
 Bosphorus B: 494
 Hera H: 193
Io moth
 Moth picture on M: 840
IOC See International Olympic Committee in this index
Iodine [element] I: 370
 Disinfectant D: 235
 Goiter G: 248
 Halogen H: 27
Iodized salt [food]
 Iodine (Uses of iodine) I: 370
 Salt (How table salt is made) S: 74
Iodophor [chemical]
 Disinfectant D: 235
 Iodine (Uses of iodine) I: 370
Iolani Palace
 Honolulu (The city) H: 320
Iole [Greek mythology]
 Hercules (The death of Hercules) H: 199
Ion [book by Plato]
 Plato (The early dialogues) P: 568
Ion [chemistry] I: 371 with pictures
 Atom (Electric charge) A: 872
 Base B: 123
 Bond (An ionic bond) B: 454
 Brain (The chemistry of the brain) B: 555
 Comet (Direction of the tails) Ci: 868
 Cosmic rays (Galactic cosmic rays) Ci: 1076
 Electricity (Ions) E: 192 with diagram
 Electrolyte E: 202
 Electron E: 204
 Halogen H: 27
 Hydroxide H: 473
 Ionosphere I: 373
 Matter (Structure of matter) M: 310-311
 Molecule (Polar molecules and ionic substances) M: 692
 Nervous system (The beginning of an impulse) N: 135
 Ocean (Composition) O: 654
 Particle accelerator P: 184
 Particle detector (Cloud chambers) P: 186
 Plasma P: 552
 Reduction R: 192
 Sun (Composition) So: 975-976
Ion-exchange process
 Water softening W: 140
Ion microscope I: 372 with picture
 Microscope (Other kinds of microscopes) M: 519
Ion rocket
 Rocket (Electric rockets) R: 389 with diagram
 Space exploration (Developing more efficient rockets) So: 728
Ion tail [astronomy]
 Comet (Direction of the tails) Ci: 868
 Solar wind So: 582
Ionesco, Eugène [French dramatist] I: 372
 Drama (Theater of the absurd) D: 340
 Romania (The arts) R: 419
Ionian [ancient region]
 Ionians I: 373
Ionian Islands [Greece] I: 372 with map

Greece (The Ionian Islands) G: 358 with map
Ionian Sea [Mediterranean] I: 373
Ionian War [413-404 B.C.]
 Peloponnesian War P: 232
Ionians [ancient people] I: 373
 Greece, Ancient (The people) G: 367
Ionic bond
 Bond B: 454
 Materials (The role of bonds) M: 301
Ionic column [architecture]
 Architecture (table) A: 608-609 with picture;
 (Classical Greek architecture) A: 615
 Column (The Greek orders) Ci: 865 with picture
Ionic compound [chemistry]
 Bond B: 454
Ionic crystal
 Ion (Ions in solids) I: 371 with pictures
Ionic lattice [chemistry]
 Salt, Chemical S: 75
Ionisation [music by Varèse]
 Varèse, Edgard V: 285
Ionization
 Ion I: 371
 Fluorescent lamp F: 305
 Gamma rays G: 23
 Irradiation I: 455
 Isotope (Separating isotopes) I: 476-477
 Kirlian photography K: 336
 Physics (Fluid and plasma physics) P: 438
 Radiation (Effects of radiation) R: 79
 Radiation sickness R: 82
 X rays (Uses of X rays) X: 541-542
Ionization detection
 Smoke detector S: 520
Ionization grid
 Rocket (Electric rockets) R: 389
Ionizing radiation
 Cancer (Radiation) C: 170
 Food preservation (Irradiation) F: 343
 Radiation (Ionizing ability) R: 79
Ionosphere [atmosphere] I: 373
 Air (The thermosphere) A: 173 with diagram
 Arecibo Observatory A: 645
 Ion I: 371
 Radar (The first uses of radar) R: 71
 Radio (Transmitting radio waves) R: 87 with diagram
 Thermosphere T: 256
"Ionych" [story by Chekhov]
 Russian literature (Late realism) R: 562-563
I.O.U. [debt] I: 373
Iowa I: 374 with pictures and maps
 See also the list of Related articles in the Iowa article
Iowa [ship]
 Battleship (The modern battleship) B: 172-173
Iowa, Territory of [U.S. history]
 Iowa (Territorial days) I: 393-395
Iowa, University of I: 396
Iowa Historical Building [Des Moines]
 Iowa (Places to visit) I: 384
Iowa Indians I: 397
Iowa River
 Iowa (Rivers and lakes) I: 386
Iowa State University of Science and Technology I: 397
 Iowa picture on I: 379
Ipcress File, The [book by Deighton]
 Deighton, Len D: 93
Ipecac [medication] I: 397
 First aid (Swallowed poisons) F: 137
Iphigenia [legendary figure] I: 397
Iphigenia in Aulis [opera by Gluck]
 Gluck, Christoph Willibald G: 235
Iphigenia in Aulis [play by Euripides]
 Euripides E: 378
Iphigenia in Tauris [opera by Gluck]
 Gluck, Christoph Willibald G: 235
Iphigenia in Tauris [play by Goethe]
 Goethe, Johann Wolfgang von (Middle years) G: 247
IPM [agriculture] See Integrated pest management in this index
IPO [investment] See Initial public offering in this index
I.Q. See Intelligence quotient in this index
Iqal [clothing]
 Saudi Arabia (Clothing) S: 157-158
Iqaluit [city, Nunavut] I: 397
 Nunavut N: 608 with picture

Iqbal, Sir Muhammad [Pakistani philosopher] I: 397

Ir [symbol] Iridium I: 429

IR thermometer See Infrared radiation thermometer *in this index*

IRA [finance] See Individual retirement account *in this index*

IRA [Irish history] See Irish Republican Army *in this index*

Iraklion [Crete] Crete Ci: 1127

Irala, Domingo Martínez de [Spanish colonial official] Paraguay (Early days) P: 149

Iran I: 398 *with pictures and maps*
Aryans A: 765
Carter, Jimmy (The Iranian crisis) C: 258
Earthquake *picture on* E: 33
Hostage H: 374a
Iran-contra affair I: 407
Khamenei, Ali K: 308a
Khatami, Mohammad K: 308b
Khomeini, Ruhollah K: 308b
Kurds K: 392
Kuwait (History) K: 396
Middle East (More conflict) M: 534
Mohammad Reza Pahlavi M: 687
Muslims (The Safavid dynasty) M: 964d
Organization of the Petroleum Exporting Countries O: 854
Persian Gulf War (Background to the war) P: 300b
Safavid dynasty S: 8
Shari'a S: 373
Shiites S: 400
Standard of living (table) So: 834
State, Department of (Since World War II) So: 861
United States, History of the (The hostage crisis) U: 194
World War II (table: The Allies) W: 471
See also *the list of Related Articles in the Iran article*

Iran-contra affair [U.S. history] I: 407 *with picture*
Bush, George Herbert Walker (Election as president) B: 719
Reagan, Ronald Wilson (The Iran-contra affair) R: 170
Weinberger, Caspar Willard W: 188

Iran-Iraq War [1980-1988]
Hussein, Saddam H: 457
Iran (The war with Iraq) I: 406b
Iraq (War with Iran) I: 414
Persian Gulf War (Background to the war) P: 300b
War (Stalemates) W: 25

Iran Liberation Movement
Iran (Politics) I: 399

Iraq I: 408 *with pictures and maps*
Army, United States (The Persian Gulf War) A: 740
Bush, George Herbert Walker (Persian Gulf War) B: 721
Chemical-biological-radiological warfare (History) C: 397
Clinton, Bill (International affairs) Ci: 682e, (International affairs) Ci: 682f
Cold War (The Eisenhower Doctrine) Ci: 765
Egypt (Recent developments) E: 133-134
Flag *picture on* F: 203
Gulf War syndrome G: 438
Hussein, Saddam H: 457
Jordan (Recent developments) J: 165-166
Kurds K: 392
Kuwait (History) K: 396
Map *picture on* M: 184
Mesopotamia M: 421
Middle East (More conflict) M: 534
Organization of the Petroleum Exporting Countries O: 854
Persian Gulf War (Background to the war) P: 300b
Qatar (History) Q: 3
Saudi Arabia (The Persian Gulf War) S: 162
Slavery (Ancient times) S: 501
United Nations (Military actions) U: 91-92
United States, History of the (International cooperation) U: 195
World War II (table: The Allies) W: 471

See also *the list of Related Articles in the Iraq article*

IRAS See Infrared Astronomical Satellite *in this index*

Irawadi River See Irrawaddy River *in this index*

Irazú [volcano, Costa Rica] Costa Rica (Revolutions and reforms) Ci: 1084

IRB [Irish history] Ireland (The Easter Rising) I: 427

IRBM [weapon] See Intermediate-range ballistic missile *in this index*

Iredell, James [American political leader] North Carolina (table) N: 490

Ireland [country] I: 416 *with pictures and maps*
Boston (Ethnic groups) B: 501
British-Irish Council B: 632
Christmas (In England, Ireland, Scotland, and Wales) C: 530
De Valera, Eamon D: 173
Euro E: 378
Fenian movement F: 71
Flag *picture on* F: 217
Freedom of speech (In other countries) F: 507
Gaelic language G: 5
Great Irish Famine G: 343
Halloween (Halloween customs and symbols) H: 24a; (Halloween around the world) H: 25
Home rule H: 301
Lloyd George, David (Prime minister) L: 403
North-South Ministerial Council N: 518
Northern Ireland N: 521
Senate (Senates in other countries) S: 296
Steeplechasing So: 883
United Kingdom (Troubles with Ireland) U: 68; (Gladstone and Disraeli) U: 69; (Postwar problems) U: 70
Vikings (The Norwegian Vikings) V: 382
See also *Irish literature in this index and the list of Related Articles in the Ireland article*

Ireland, John [American political leader] Texas (table) T: 203

Ireland, John [American religious leader] Saint Paul (History) S: 52

Ireland, Plantation of [Irish history] Ireland (The conquest of Ireland) I: 426

Ireland, Republic of
Ireland (The Republic of Ireland) I: 427
See also *Ireland in this index*

Ireland, Ward Stone [American inventor] Shorthand machine S: 437

Irenæus, Saint [Christian theologian] I: 429

Irene [Byzantine empress] Nicene Councils N: 402

Irene [early Christian] Sebastian, Saint S: 277

Irène [play by Voltaire] Voltaire (Later years) V: 446-447

Irgun Zvai Leumi [Israeli history] Begin, Menachem B: 219

Irhil M'Goun [mountain, Africa] Atlas Mountains A: 869

Irian Barat [former name] Indonesia (Irian Jaya) I: 234

Irian Jaya [province, Indonesia] Indonesia (Irian Jaya) I: 234; (Independence) I: 237; (Indonesia under Sukarno) I: 238; (Indonesia under Suharto) I: 238-239
Netherlands (Political changes) N: 150
New Guinea (Political units) N: 206 *with map*; (History) N: 207

Iridium [element] I: 429

Irigoyen, Hipólito [Argentine political leader] Argentina (Reform movements) A: 658; (Military dictatorships) A: 658

Iris [anatomy] Eye (The uveal tract) E: 460 *with picture*
Iritis I: 434

Iris [plant] I: 429 *with picture*
Fleur-de-lis F: 234
Flower (Garden perennials) F: 278 *with picture*; F: 301 *with picture*
Orrisroot O: 859

Iris borer [insect] Iris I: 429

Irish, William [pen name] Woolrich, Cornell W: 402

Irish Christian Brothers [religious group] Religious life (table) R: 227

Irish Church Act [1869]

United Kingdom (Gladstone and Disraeli) U: 69

Irish elk
Elk (The European elk) E: 242

Irish Famine, Great [1845-1848] See Great Irish Famine *in this index*

Irish Free State
De Valera, Eamon D: 173
Ireland (The Irish Free State) I: 427
Irish literature (The Irish literary revival) I: 431-432
Irish Republican Army (Division in the IRA) I: 433
Northern Ireland (The division of Ireland) N: 524
United Kingdom (Postwar problems) U: 70

Irish language
Gaelic language G: 5

Irish Literary Revival
Yeats, William Butler Y: 555
Drama (Irish drama) D: 339
Ireland (The arts) I: 421

Irish Literary Theatre [Dublin] Yeats, William Butler Y: 555

Irish literature I: 430
Drama (Irish drama) D: 339
Emerald Isle E: 258
Mythology (The Irish cycles) M: 983
See also *the list of Related Articles in the Irish Literature article*

Irish Melodies [poems by Moore] Irish literature (Prose and poetry) I: 431
Popular music (Revolutionary War to 1840) P: 669

Irish moss [plant] I: 433
Prince Edward Island (Interesting facts) P: 783 *with picture*

Irish potato
Potato (History) P: 713

Irish Republican Army [Irish history] I: 433
Adams, Gerry A: 33
Ireland (The Irish Free State) I: 427
Irish literature (Drama) I: 432
Mountbatten, Louis M: 899
Northern Ireland (The civil rights movement) N: 525
Sinn Féin S: 473
Trimble, David T: 445

Irish Republican Brotherhood [Irish history] Ireland (The Easter Rising) I: 427
Irish literature (The Irish literary revival) I: 431-432

Irish Sea I: 434
England (The land) E: 299

Irish setter [dog] I: 434 *with picture*
Dog *picture on* D: 269
Pet *picture on* P: 319
Setter S: 323

Irish stew
Ireland (Food and drink) I: 420

Irish terrier I: 434
Dog *picture on* D: 272

Irish tweed [fabric] Ireland *picture on* I: 425

Irish water spaniel I: 434
Dog *picture on* D: 268

Irish whiskey
Whiskey W: 282

Irish wolfhound I: 434
Dog *pictures on* D: 265, D: 270
Wolfhound W: 378

Iritis [disorder] I: 434
Eye (Diseases of the uveal tract) E: 467
Leprosy (Symptoms) L: 204

Irkutsk [city, Russia] I: 434

IRO See International Refugee Organization *in this index*

Iron [element] I: 435
See also *Iron and steel in this index*
Anemia (Insufficient production of red blood cells) A: 458
Baby (Vitamins and iron) B: 9
Nutrition (Minerals) N: 625-626; (Deficiency diseases) N: 630-631
Plant (Nutrient deficiencies) P: 543

Iron [sports]
Golf (Golf clubs) G: 262 *with pictures*

Iron Age [anthropology] I: 435
Iron and steel (The Iron Age) I: 450
Lake dwelling L: 37

Iron and steel I: 436 *with pictures and maps*
See also *Iron* [element]; *Iron ore in this index*

Alabama (State prosperity) A: 276
Edison, Thomas Alva (Ore milling) E: 80
Galvanizing G: 17
Materials (Metals and alloys) M: 300d *with picture*
Nickel (Industrial uses) N: 404
Pittsburgh P: 500a; (Manufacturing) P: 500d *with picture*
Recycling R: 184
Rust R: 567
Iron
Alloy (Alloys of iron) A: 377
Cast iron C: 279
Colonial life in America (Ironmaking) Ci: 811
Electromagnet E: 202
Hematite H: 180
Hibbing H: 221
Industrial Revolution (Coal and iron) I: 249 *with picture*
Iron Age I: 435
United States, History of the *picture on* U: 176
Steel
Alloy (Characteristics of alloys) A: 377 *with pictures*
Fireproofing F: 134
Great Lakes (Commerce) G: 345
Michigan *picture on* M: 504
Railroad (Tracks) R: 108-109
Sound (table) So: 601
Tempering T: 130
Vanadium V: 268
See also the list of Related articles in the Iron and steel article
Iron and Steel, Amalgamated Association of
Homestead Strike H: 305
Iron and Steel Association, American
Iron and Steel Institute, American I: 453
Iron and Steel Institute, American I: 453
Iron Chancellor [name for Bismarck]
Bismarck, Otto von (Bismarck's wars) B: 382
Iron Cross
Medals, decorations, and orders (table) M: 359 *with picture*
Iron Crown of Lombardy
Crown (Iron Crown of Lombardy) Ci: 1158
Iron Curtain [international relations] I: 453
Churchill, Sir Winston Leonard Spencer (Leader of the opposition) C: 549
Cold War (The Iron Curtain descends) Ci: 763
Communism (World War II) Ci: 893
Union of Soviet Socialist Republics (Beginnings of the Cold War) U: 38
World War II (New power struggles) W: 496-497
Iron-deficiency anemia [disorder]
Iron (How bodies use iron) I: 435
Iron Duke, The See Wellington, Duke of *in this index*
Iron Gate [region, Romania-Yugoslavia]
Danube River D: 35
Yugoslavia (Rivers and lakes) Y: 578 *with map*
Iron Guard [political party]
Carol II C: 244
Romania (Depression and fascism) R: 424
Iron John: A Book About Men [book by Bly]
Bly, Robert B: 426
Iron lung [machine] I: 453 *with picture*
Respirator R: 262
Iron Market
Port-au-Prince P: 680
Iron meteorite
Meteor (Meteorites) M: 431
Iron Molders, National Union of
Labor movement (The first nationwide labor organizations) L: 9
Iron notch
Iron and steel (Running a blast furnace) I: 441
Iron ore
Brazil (Mining) B: 581
Hematite H: 180
Iron and steel (Sources of iron ore) I: 437, (Mining and processing iron ore) I: 438
Michigan (Natural resources) M: 503; (Mining) M: 506
Minnesota (Natural resources) M: 599, (Mining) M: 601; (Industrial development) M: 604; (The early 1900's) M: 604; (The mid-1900's) M: 606
Iron Ore Company of Canada
Mulroney, Brian (Business executive) M: 917

Iron oxide [chemical]
Iron (Properties) I: 435
Iron and steel (Processing) I: 439-440
Jasper J: 65
Rock (Chemical sediments) R: 372
Rust R: 567
Taconite T: 5
Iron plant
Aspidistra A: 816
Iron pyrite [mineral]
Pyrite P: 920
Mineral *picture on* M: 568
Iron rust [chemistry]
Rust R: 567
Iron triangle
Korean War *map on* K: 383
Ironclad [ship]
Battleship (Development of the battleship) B: 172
Civil War (First battle between ironclads) Ci: 626 *with picture*
Monitor and Merrimack M: 724
Warship (Warships of the 1800's) W: 41; *picture on* W: 42
Ironman [sports competition]
Triathlon T: 440
Irons, Jeremy [British actor]
Motion *picture* (Best performance by an actor: 1990) M: 862-863
Ironsides [English history]
Cromwell, Oliver (Rise to power) Ci: 1151
Ironsides, Old See Constitution [ship] *in this index*
Ironwood [tree] I: 453 *with picture*
Ironwork, Decorative I: 454 *with pictures*
Ironworker
Building trade (Career opportunities) B: 686
Ironworld [Minnesota]
Minnesota (Places to visit) M: 594
Irony [humor] I: 454
Humor (The types of humor) H: 435-436
Satire S: 150h
Iroquoian [languages]
Iroquois Indians I: 455
Iroquois [horse]
Horse (table: Famous horses in history and legend) H: 361
Iroquois Confederacy See Iroquois League *in this index*
Iroquois Indians [American Indians] I: 455
Canada, History of (Threats to expansion) C: 142
Cayuga Indians C: 323
Champlain, Samuel de (The founding of Quebec) C: 373
Hiawatha H: 221
Indian, American (Shelter) I: 136d; (Federations) I: 143-144; (Shamans) I: 147-148; (Indians of the Northeast) I: 154 *with picture*; *pictures on* I: 138, I: 156
Mask (Ceremonial masks) M: 263-264
Montagnais Indians M: 741
Montreal (French settlement) M: 777
New York (Statehood) N: 315
Ontario (Indian days) O: 784
Quebec (Early days) Q: 36
Seneca Indians S: 297
Toronto (History) T: 340
Iroquois League
Cayuga Indians C: 323
Hands Lake H: 46
Hiawatha H: 221
Indian, American (Federations) I: 143-144; (Indians of the Northeast) I: 154
Iroquois Indians I: 455
Mohawk Indians M: 688
Seneca Indians S: 297
Iroquois long house [dwelling]
Cayuga Indians C: 323
Indian, American (Shelter) I: 136d
Iroquois Long House [federation]
Iroquois Indians I: 455
Iroquois Steeplechase [Nashville]
Tennessee *picture on* T: 145
Iroquois Theater Fire [1903]
Chicago (Tragedy and racial conflict) C: 435
Irradiation [physics] I: 455
See also Radiation *in this index*
Food preservation (Irradiation) F: 343
Irrational number

Decimal system (Decimals and fractions) D: 72
Mathematics (The Greeks) M: 306
Pi P: 445
Quasicrystal Q: 9
Rational number R: 148
Irrawaddy River [Myanmar] I: 455
Myanmar (Land regions) M: 970c *with map*
Irrawaddy River Valley
Myanmar *picture on* M: 970d
Irreconcilable differences [law]
Divorce (No-fault divorce) D: 253
Irregular galaxy [astronomy]
Galaxy (Shapes of galaxies) G: 8a-8b *with picture*
Magellanic Clouds M: 48
Irregulars [Irish history]
Irish Republican Army (Division in the IRA) I: 433
Irrevocable trust [law]
Trust fund (Kinds of trusts) T: 474
Irrigation [agriculture] I: 456 *with pictures and map*
Desert (Desert land and climate) D: 156
Egypt (Agriculture) E: 128
Environmental pollution (Soil pollution) E: 334
Farm and farming (Water management) F: 33 *with picture*
Food supply (Making farmland more productive) F: 349
Grand Coulee Dam G: 308 *with picture*
Indian, American (Farming) I: 141
Oasis O: 638 *with picture*
Rice (Planting) R: 325-326 *with picture*
Water (Water for irrigation) W: 118 *with picture*; (Water and civilization) W: 132
Irritant poison
Poison (Kinds of poisons) P: 601
IRS See Internal Revenue Service *in this index*
IRT [transportation]
New York City (Transportation) N: 334-335
Irvin, Monte [American baseball player]
Baseball (table: Hall of Fame) B: 134
Irving, Clifford [American author]
Hughes, Howard Robard H: 409
Irving, Sir Henry [British actor]
Terry, Ellen T: 180
Irving, John [American author] I: 459
Irving, Washington [American author] I: 460 *with portrait*
American literature (Literature of a young nation [1788-1830]) A: 415
Rip Van Winkle R: 349
Santa Claus (Santa's appearance) S: 114
United States, History of the (A national culture) U: 165
Irving, William [brother of]
Irving, Washington (Early career) I: 460
Irvington [New Jersey] I: 461
Irwin, James Benson [American astronaut]
I: 461 *with portrait*
Invention *picture on* I: 362
Space exploration (Other moon landings) So: 719; *picture on* So: 720
Irwin, Jared [American political leader]
Georgia (table) G: 130
Irwin, Lord [history of India]
India (New Constitution) I: 132
Irwin, Walter W. [American aviator]
Airplane (table) A: 232
Irwin, William [American political leader]
California (table) C: 59
Is Sex Necessary? [book by Thurber]
Thurber, James T: 273
Isa bin Salman Al-Khalifa [emir of Bahrain]
Bahrain (History) B: 30-31
Isaa [Japanese poet]
Poetry (Lyric poetry) P: 591
Isaac [Biblical figure] I: 461
Abraham A: 17
Ishmael I: 462
Jacob J: 19
Jews (Beginnings) J: 120
Isaac, Bobby [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1970) A: 981
Isaac Asimov's Science Fiction Magazine
Science fiction (Growing popularity) S: 205
Isaacs, Alick [British biochemist]
Interferon I: 324
Isaacs, Jorge [Colombian author]

- Colombia (The arts) Ci: 781
 Latin-American literature (Romanticism) L: 112
- Isabela** [Spanish colony]
 Columbus, Christopher (Trouble, settlement, and exploration) Ci: 862
- Isabela Island**
 Galapagos Islands G: 7 *with map*
- Isabella** [literary figure]
 Shakespeare, William (*Measure for Measure*) S: 362
- Isabella I** [queen of Castile and Aragon] I: 461 *with picture*
 Boabdil B: 427
 Castile and Aragon C: 279
 Columbus, Christopher (Years of waiting) Ci: 858; (Trouble, settlement, and exploration) Ci: 862; (Third voyage westward) Ci: 862; (Fourth voyage westward) Ci: 863; (Final days) Ci: 863
 Exploration (Columbus reaches America) E: 444
 Ferdinand V F: 73
 Granada G: 304
 Spain (Union of the Spanish kingdoms) So: 747
 Torquemada, Tomás de T: 340c
- Isabella II** [queen of Spain]
 Spain (The reign of Isabella II) So: 749
- Isabella moth** [insect]
 Woollybear W: 402
- Isabella Stewart Gardner Museum**
 Massachusetts (Museums) M: 275
- Isabella tiger moth**
 Insect *picture on* I: 282
 Moth *picture on* M: 840
- Isacks, Bryan L.** [American geologist]
 Plate tectonics (History of tectonic theory) P: 564-565
- Isaiah** [Biblical figure]
 Lucifer L: 514
 Isaiah, Book of I: 462 *with picture*
- Isaiah, Book of** [Old Testament] I: 461 *with picture*
 Bible (Books of the Hebrew Bible) B: 279-280
 Lucifer L: 514
- Isan** [region] *See* Khorat Plateau *in this index*
- Isapomuxika**
 Crowfoot Ci: 1158
- ISBN**
 International standard book number I: 347
- Iscaiot, Judas** [apostle] *See* Judas Iscaiot *in this index*
- Ischium** [anatomy]
 Dinosaur *picture on* D: 206c
 Hip H: 238 *with diagram*
 Human body *diagram on* H: 422
 Pelvis P: 233 *with diagram*
- ISDN** [electronics]
 Internet (How the Internet works) I: 350c
 Telephone (Models) T: 97
- Isenheim altarpiece** [paintings by Grünewald]
 Grünewald, Matthias G: 406
- Isère** [ship]
 Statue of Liberty (Construction and dedication) So: 877-878
- Isfahan** [city, Iran] I: 462
 Abbas I A: 4
 Architecture *diagram on* A: 614
 Iran (The Safavid dynasty) I: 406; *picture on* I: 398
 Safavid dynasty S: 8
- Islerwood, Christopher** [British-American author] I: 462
 Auden, W. H. A: 881
- Ishiguro, Kazuo** [British author]
 English literature (Recent English fiction) E: 323
 Novel (The novel today) N: 575
- Ishihara test**
 Color blindness Ci: 827
- Ishikari Plain** [region]
 Japan (Hokkaido) J: 46
- Ishmael** [Biblical figure] I: 462
 Abraham A: 16
 'Id al-Adha I: 25
 Kaaba K: 208
 Muslims (Before Muhammad) M: 964
- Ishmaelites** [ancient people]
 Joseph J: 167
- Ishtar** [Assyrian goddess]
 Assyria (Religion) A: 821
 Astarte A: 823
- Ishtar Gate** [Babylon]
 Babylon (The New Babylonian Empire) B: 12
- Isidia** [biology]
 Lichen (How lichens grow) L: 269
- Isidore** [Spanish religious leader]
 Encyclopedia (The first reference works) E: 268a
- Isidorus of Miletus** [Byzantine architect]
 Architecture (Byzantine architecture) A: 617
- Isinglass** [animal product] I: 462
 Surgeon So: 934
- ISIS** [database] *See* International Species Information System *in this index*
- Isis** [Egyptian goddess] I: 462
 Egypt, Ancient (Religion) E: 137; *picture on* E: 140
 Hieroglyphics *picture on* H: 225
 Horus H: 370
 Mythology (The Great Ennead) M: 976; (The Osiris myth) M: 976 *with picture*
- Iskra** [newspaper]
 Lenin, V. I. (Beginnings of revolution) L: 192
- Isla, José Francisco de** [Spanish author]
 Spanish literature (The 1700's) So: 760
- Isla Española, La**
 Hispaniola H: 259
- Islam** [religion] I: 463 *with pictures*
See also Muslims *in this index*
 Afghanistan (The coming of Islam) A: 95; *picture on* A: 93
 Africa (The rise of Islam) A: 131
 Algeria (Religion) A: 362
 Allah A: 370
 Angel A: 460
 Arabs A: 585; (Religion) A: 586; (The rise and spread of Islam) A: 588
 Dervish D: 153
 Education (Religion and early Western education) E: 98
 Egypt (Religion) E: 124
 Feasts and festivals (In Islam) F: 58
 Flag *picture on* F: 216
 Harem H: 60
 'Id al-Adha I: 25
 'Id al-Fitr I: 25
 Jerusalem J: 94a; (Holy places) J: 95
 Jews (The Jews under Islam) J: 122
 Khalid ibn al-Walid K: 308a
 Middle Ages (The rise of Islam) M: 524
 Missionary M: 620
 Muhammad M: 910
 Ottoman Empire (People) O: 877
 Qa'ida, Al-Q: 2
 Quran Q: 44
 Ramadan R: 132
 Religion (How the major religions are organized) R: 218; (Islam) R: 222 *with picture*
 Resurrection R: 264
 Saint (Non-Christian saints) S: 29
 Saudi Arabia S: 155; (Religion) S: 158
 Sculpture (Asian sculpture) S: 236
 Shari'a S: 373
 Shiites S: 400
 Sunnites So: 991
 Taliban T: 19
 Turkey T: 502 *with picture*
 World, History of the (The Islamic world) W: 434; (The Islamic empires) W: 441
 Yemen (History) Y: 563
- Islam, Nation of** *See* Black Muslims; Nation of Islam *in this index*
- Islamabad** [city, Pakistan] I: 466
 Pakistan (Provincial and local government) P: 93
- Islamic architecture**
 Architecture (Islamic architecture) A: 613
 Asia (The arts) A: 783
 Sculpture (Asian sculpture) S: 236
 World, History of the *picture on* W: 436
- Islamic art** I: 467 *with pictures*
 Arabesque A: 582b
 Arabs (Literature and the arts) A: 587
 Asia (The arts) A: 780 *with picture*
 Painting (Islamic painting) P: 48 *with picture*
 Sculpture (Asian sculpture) S: 236
 World, History of the (The Islamic world) W: 434-435 *with picture*
- Islamic Association**
 Indonesia (The rise of nationalism) I: 237
- Islamic bank**
 Bank (Africa) B: 91
- Islamic calendar**
 Calendar (The Islamic calendar) C: 29
 Ramadan R: 132
- Islamic miniature paintings**
 Islamic art (Books) I: 470
- Islamic Party of Malaysia**
 Malaysia (Political parties) M: 98b
- Islamic Republic of Pakistan** *See* Pakistan *in this index*
- Islamic Salvation Front** [political party] *See* Front Islamique du Salut *in this index*
- Islamization** [policy]
 Pakistan (Struggle for democracy) P: 92
- Island** I: 471 *with diagrams*
 Atlantic Ocean (The Atlantic seafloor) A: 864
 Evolution (Geographic distribution of species) E: 430
 Inis I: 271
- Island** [road]
 Road (Intersections) R: 358
- Island** [ship]
 Aircraft carrier A: 206 *with pictures*
- Island arc**
 Deep sea (The deep-sea floor) D: 82a
 Island (Volcanic islands) I: 472
 Mountain (Volcanic mountains) M: 892
- Island Beach State Park** [New Jersey]
 New Jersey *picture on* N: 241
- Island hopping** [warfare]
 Nimitz, Chester William N: 424
 World War II (Island hopping in the Central Pacific) W: 488
- Island of Cythera, The** [painting by Watteau]
 Painting (Rococo painting) P: 65 *with picture*
 Watteau, Antoine W: 149
- Island white bear**
 Bear (American black bears) B: 184
- Islanders, New York**
 Hockey (table: National Hockey League) H: 281
 New York City (Sports) N: 338
- Islands of Langerhans** [anatomy] *See* Islets of Langerhans *in this index*
- Islands of the Blessed** [Greek mythology]
 Elysium E: 253
- Islands of Thieves**
 Mariana Islands M: 199
- Islas de los Ladrones**
 Mariana Islands M: 199
- Islas Malvinas** *See* Falkland Islands *in this index*
- Isle of Man** [island, Irish Sea]
 Man, Isle of M: 130 *with maps*
- Isle of Orleans** [former region]
 Louisiana (Spanish rule) L: 498
- Isle of Pines** [Pacific]
 New Caledonia N: 200
- Isle of Wight** [island, England]
 Wight, Isle of W: 300
- Isle Royale** [Michigan]
 Ecology E: 53
 Michigan (Islands) M: 500
- Isle Royale National Park** [Michigan] I: 474
 Lake Superior (Description) L: 45 *with map*
 National Park System (table: National parks) N: 48
- Isles, Council of the** *See* British-Irish Council *in this index*
- Isles of Shoals** [islands, New Hampshire]
 New Hampshire (Coastline) N: 220
- Islets of Langerhans** [anatomy]
 Gland (table) G: 208
 Insulin I: 308
 Pancreas P: 128
- Ismaelillo** [poems by Martí]
 Martí, José Julián M: 233
- Ismael I** [king of Iran]
 Iran (The Safavid dynasty) I: 406
 Muslims (The Safavid dynasty) M: 964d
 Safavid dynasty S: 8
- Ismael Pasha** [Egyptian government official]
 Egypt (Muhammad Ali and modernization) E: 131
 Baker, Sir Samuel White B: 32
 Suez Canal (History) So: 958
- Ismailli Khoja Muslims**
 Tajikistan (People) T: 18a
- Ismailli Shiah** [sect]
 Islam (Divisions of Islam) I: 466
- Isn't It Romantic** [play by Wasserstein]
 Wasserstein, Wendy W: 112

ISO [organization] See International Organization for Standardization *in this index*

ISO number

Photography (Speed) P: 418

Isobar [meteorology] I: 474 *with map*

Hurricane (The life of a hurricane) H: 453

Map (Thematic maps) M: 178

Isobar [physics]

Atom (The mass number) A: 871-872

Isobutane [gas]

Butane and propane B: 728

Isomers I: 475

Isocrates [Greek orator] I: 474

Isotopsid

Plant (Classification of plants) P: 546

Isotoflurane [drug]

Halothane H: 27

Isograft [medicine]

Skin grafting S: 494

Isogram [cartography]

Map (Thematic maps) M: 178

Isolationism [political science] I: 474

America First Committee A: 407

Foreign policy (Public opinion) F: 387

Iron Curtain I: 453

Monroe Doctrine (The Monroe doctrine and isolationism) M: 740

Roosevelt, Franklin Delano (Neutrality acts) R: 459

United Kingdom (Gladstone and Disraeli) U: 69

United States, History of the (Looking backward) U: 186

World War II (The United States enters the war) W: 477

Isolde [legendary figure]

Tristan T: 448

Isoline [cartography]

Map (Thematic maps) M: 178

Isolt [legendary figure]

Tristan T: 448

Isomeric transition [physics]

Gamma rays G: 23

Isomers [chemistry] I: 475

Chemistry (Development of organic chemistry) C: 404

Isometric drawing

Mechanical drawing *diagram on M: 354*

Isometric system

Crystal (Classifying crystals) Ci: 1166 *with picture*

Gem (Crystal shape) G: 77

Isometrics [exercise] I: 475

Isomorphism [chemistry] I: 475

Mineral (Mineral composition and structure) M: 570-571

Isoniazid [medication] I: 475

Tuberculosis (Treatment of tuberculosis) T: 479

Isonicotinic acid hydrazide See Isoniazid *in this index*

Isocetane [chemical]

Gasoline (Gasoline octane ratings) G: 61

Octane O: 669

Isoprene [chemical]

Rubber (The chemistry of rubber) R: 501

Isopropanol

Alcohol (Propanol) A: 335

Isoptera [entomology] I: 475

See also Termite *in this index*

Insect (table) I: 299, *picture on I: 281*

Isosceles triangle [geometry]

Triangle (Kinds of triangles) T: 438 *with diagram*

Isotherm [meteorology] I: 475 *with map*

Arctic (Arctic lands) A: 636

Humboldt, Baron von H: 432

Isothermal line [meteorology]

Isotherm I: 475 *with map*

Isotope [physics] I: 476 *with diagrams*

See also Radioisotope *in this index*

Atom (The mass number) A: 871; (Atomic weight) A: 872 *with diagrams*

Cobalt (Uses) Ci: 741

Element, Chemical (The periodic table of the elements) E: 219

Fallout F: 18

Ice age (Evidence of ice ages and their climates) I: 6-7

Nuclear energy (Isotopes) N: 581

Radiation (Naturally radioactive substances) R: 77

Soddy, Frederick So: 569

Uranium (Uranium isotopes) U: 214;

(Separating uranium isotopes) U: 215

Isotope geology

Geochemistry G: 90

Isotretinoin [drug]

Acne A: 28

Israel [Biblical figure] See Jacob *in this index*

Israel [country] I: 478 *with pictures and maps*

Air force (The Israeli Air Force) A: 184

Arab-Israeli conflict A: 582 *with map*

Arab League A: 582b

Arabs (Since independence) A: 589

Army *picture on A: 726*

Asia (Way of life in Southwest Asia) A: 774-778

Citizenship (Naturalization) Ci: 570

Cooperative (In other countries) Ci: 1036

Gaza Strip G: 74

Hebrew language H: 161

Holocaust (After the Holocaust) H: 296b

Hussein I H: 457

Immigration (Asia) I: 85

Jericho J: 93

Jerusalem (History) J: 100-101

Jews (The rebirth of Israel) J: 124; (The Jews today) J: 125

Jordan (History) J: 164-165

Kibbutz K: 310

Lebanon (War and terrorism) L: 173

Middle East (History) M: 532-533

Olympic Games (Terrorism in Munich) O: 752

Palestine (World War II and the division of Palestine) P: 105 *with map*; (The continuing conflict and peace efforts) P: 105

Palestine Liberation Organization P: 106

Palestinians P: 107

Persian Gulf War (Iraq's response) P: 300d

Rabin, Yitzhak R: 50

Saudi Arabia (Continued progress) S: 161-162

Standard of living (table) So: 834

Suez crisis So: 958

Syria (History) So: 1074-1075

United Nations (Peacekeeping operations) U: 90-91

West Bank W: 199

Zionism Z: 599

See also Arab-Israeli Wars and Palestine *in this index*, and the Related Articles in the Israel article

Israel, Ancient

David D: 45

Education (The beginning of formal education) E: 97

Jacob J: 19

Jews (The kingdom of Israel) J: 121 *with map*

Joshua J: 169

Moses M: 828

Palestine (Early history and settlement) P: 104

Prophet P: 827

Saul S: 163

Solomon So: 584

Israel Broadcasting Authority

Israel (Transportation and communication) I: 486

Israel Labor Party [Israel]

Israel (Politics) I: 479, (Unity government) I: 489

Peres, Shimon P: 285

Shamir, Yitzhak S: 371

Israel Museum

Jerusalem (Culture) J: 99

Israel Potter [book by Melville]

Melville, Herman (His literary career) M: 390-391

Israel Workers' Party See Mapai *in this index*

Israeli-Arab agreement [1993] See Arab-Israeli peace agreements *in this index*

Israeli-Arab wars See Arab-Israeli conflict *in this index*

Israelites [people]

See also Hebrews *in this index*

Canaanites C: 97

Exodus E: 438

Jews (Beginnings) J: 120-121

Judaism (The covenant with God) J: 179

Moses M: 828

Old Testament O: 740

Philistines P: 382

Religion (Judaism) R: 219

Tabernacle T: 2 *with picture*

Israfil [book by Allen]

Allen, Hervev A: 371

"Israfil" [poem by Poe]

Poe, Edgar Allan (Poe's life) P: 589

Issas [people]

Djibouti (People) D: 256

Issue fee [law]

Patent (How patents protect inventors) P: 194

Issus, Battle of [333 B.C.]

Darius III D: 37

Istanbul [Turkey] I: 490 *with picture*

See also Constantinople *in this index*

Architecture *picture on A: 618*

Asia (City life) A: 779

Bosporus B: 494

Middle East *picture on M: 530*

Muslims (The Ottoman Empire) M: 964d

Turkey T: 502 *with picture*

Istanbul University

Istanbul (Education and cultural life) I: 491

Isthmian Games (ancient Greece) I: 492

Corinth Ci: 1053

Olympic Games (The ancient games) O: 750

Isthmus [geography] I: 492 *with map*

Isthmus of ...

Isthmuses appear under their key words, as in Panama, Isthmus of

Istiqlal Party

Morocco (Independence) M: 815

Istria [region]

Croatia (History) Ci: 1148a-1148b

I.S.U.

Ice skating (History) I: 16

It Happened One Night [film]

Motion picture (Best picture: 1934) M: 861

"It Seems to Me" [column]

Broun, Heywood Campbell B: 642

"It Was a Lover and His Lass" [song]

Morley, Thomas M: 805

Itaipu Dam [Brazil]

Brazil (The Central and Southern Plateaus)

B: 580; (Energy sources) B: 581; *picture on B: 583*

Paraguay (Energy sources) P: 148

Italy See Italy *in this index*

Italian, The [book by Radcliffe]

Gothic novel G: 279

Italian corn salad [plant]

Valerian V: 265

Italian greyhound [dog] I: 492 *with picture*

Italian Journey [book by Goethe]

Goethe, Johann Wolfgang von (Middle years) G: 247

Italian language I: 492

Italian literature I: 494

Italy (Language) I: 502

Phonetics (Phonetics and spelling) P: 400

Italian literature I: 494

Drama (Italian Renaissance drama) D: 330,

(Italy) D: 335; (Italian drama) D: 339

Italy (Literature) I: 494

See also the list of Related Articles in the

Italian Literature article

Italian millet [grain]

Millet M: 555

Italian overture [music]

Overture O: 881

Italian Republic, Order of Merit of the

Medals, decorations, and orders (table) M: 359 *with picture*

Italian Somaliland

Somalia (History) So: 589

Italian sonnet

Poetry (Forms) P: 595

Italian Symphony [music by Mendelssohn]

Mendelssohn, Felix (His music) M: 399-400

Italian Tyrol [region, Italy]

Tyrol T: 542 *with map*

Italics [printing] I: 495

Handwriting (Early forms of writing) H: 49-50

Proofreading (Proofreaders' marks) P: 822

Type (Classes of type) T: 537 *with picture*

Italicus, Silius [Roman poet]

Latin literature (The Imperial Period) L: 116

Italo-Ethiopian War [1935-1936] I: 495

Italy I: 496 *with pictures and maps*

Art and architecture

Italy (Arts) I: 504-506 *with pictures*

Classical music (History) Ci: 645-646

Furniture (Italy) F: 572 *with picture*; (The

early 1600's) F: 574 *with picture*

Opera (The development of opera) O: 797

with pictures

- Painting (The Renaissance) P: 51 *with pictures*
 Pottery picture on P: 717
 Sculpture (Italian Renaissance sculpture) S: 251 *with pictures*
 Theater (Italy) T: 248
Finance and banking
 Euro E: 378
Government
 Italy (Government) I: 497
 Communism (In non-Communist countries) Ci: 897
History
 Italy (History) I: 512
 Albania (World War II) A: 307
 Bank B: 88 *with picture*
 City-state Ci: 603
 Colonialism (Later colonialism) Ci: 814
 Depression (Effects on society) D: 150
 Eritrea (History) E: 353
 Ethiopia (Haile Selassie) E: 371
 Fascism (Fascism in Italy) F: 49
 Garibaldi, Giuseppe G: 43
 Greece (World War II) G: 363
 Holy Roman Empire H: 298 *with map*
 Italo-Ethiopian War I: 495
 League of Nations (Why the League failed) L: 160
 Libya (Italian control) L: 267
 Mussolini, Benito M: 967
 Napoleon III (Foreign affairs) N: 19-20
 Renaissance (The Italian Renaissance) R: 233
 Revolution of 1848 R: 269
 San Marino (country) (History) S: 104
 Spanish Civil War (Foreign assistance) So: 756a
 Tyrol T: 542 *with map*
 Victor Emmanuel II V: 355
 World War I (The fighting ends) W: 463;
 (The Italian Front) *map on W: 459*
 World War II (The invasion of Italy) W: 482
with picture; (table: Military casualties) W: 497
Language and literature
 See Italian language; Italian literature in this index
People
 Italy (People) I: 499-502
 Christmas (In Italy) C: 531
 Valentine's Day (In Europe) V: 261
 See also the list of Related Articles in the Italy article
Italy, Kingdom of [European history]
 Italy (The Kingdom of Italy) I: 515-516 *with map*
Itamaraty Palace [Brasília]
 Brazil picture on B: 576
ITAR-TASS (news agency)
 TASS T: 50
Itard, Jean Marie [French doctor]
 Speech therapy (History) So: 773-774
Itatiaia National Park [Brazil]
 National park (table) N: 42g
Itauguá (town, Paraguay)
 Paraguay (The arts) P: 147
Itch mite [animal]
 Mite picture on M: 678
 Scabies S: 169
Itching Parrot, The [book by Fernández de Lizardi]
 Latin-American literature (The 1800's) L: 112
 Mexico (Literature) M: 459
ITF [organization]
 Tennis (Amateur tennis) T: 165
Ithaca (island, Greece)
 Ionian Islands I: 373 *with map*
Odyssey (The *Odyssey* begins) O: 675
Ithna Ashari [sect] See Imami Shiah in this index
Itjavy [ancient city]
 Egypt, Ancient (The Middle Kingdom) E: 143
It's a Wonderful Life [film]
 Capra, Frank C: 198
It's Too Late Now [book by Milne]
 Milne, A. A. M: 556
ITU See International Telecommunication Union in this index
Iturbide, Agustín de [emperor of Mexico]
 I: 520
 Mexico (Independence) M: 471
 Santa Anna, Antonio López de (Young soldier) S: 112
IUCN [organization] See International Union for the Conservation of Nature and Natural Resources in this index
IUD
 Birth control (Methods of birth control) B: 378-379
IUPAC [organization] See International Union of Pure and Applied Chemistry in this index
Ivan I, the Moneybag [Russian nobleman]
 Russia (The rise of Moscow) R: 548
Ivan III, the Great [grand prince of Moscow]
 I: 520
 Moscow (History) M: 826-827
 Russia (The rise of Moscow) R: 548
Ivan IV, the Terrible [czar of Russia] I: 520
 Romanov R: 426
 Russia (Ivan the Terrible) R: 548 *with picture*; (table: Czars and empresses) R: 549
Ivan V (brother of)
 Peter I, the Great (Early life) P: 323
 Russia (Peter the Great) R: 549; (table: Czars and empresses) R: 549
Ivan VI (czar of Russia)
 Russia (table: Czars and empresses) R: 549
Ivan Susanin (opera by Glinka)
 Glinka, Mikhail Ivanovich G: 231
Ivan the Terrible [plays by Tolstoy]
 Tolstoy, Alexei T: 322
Ivanhoe [book by Scott]
 Robin Hood R: 367
 Scott, Sir Walter (The Waverley novels) S: 222
Ivanov, Alexander (American chess player)
 Chess (United States chess champions) C: 414
"I've Got You Under My Skin" [song by Porter]
 Porter, Cole P: 682
Iverson, Allen [American basketball player]
 I: 520
Ives, Burl [American actor]
 Motion picture (Best performance by an actor in a supporting role: 1958) M: 863
Ives, Charles Edward [American composer]
 I: 520
Ives, James Merritt [American lithographer]
 Currier and Ives Ci: 1197
Ivins, Marsha S. [American astronaut]
 International Space Station picture on I: 346b
Ivory I: 520 with pictures
 Byzantine art (Other art forms) B: 751
 Conservation (Africa) Ci: 990
 Elephant E: 226
Ivory, Vegetable See Vegetable ivory in this index
Ivory-billed woodpecker
 Woodpecker (Kinds) W: 394 *with picture*
Ivory black (pigment) I: 521
Ivory Coast See Côte d'Ivoire in this index
Ivory-nut palm
 Ivory palm I: 522
Ivory palm [tree] I: 522 *with pictures*
Ivvavik National Park (Yukon Territory)
 Canada (table: National parks and national park reserves) C: 113
Ivy [plant] I: 522 *with pictures*
Ivy geranium
 Flower picture on F: 292
Ivy League suit
 Clothing (The 1900's) Ci: 703
Iwan [architecture]
 Architecture (Islamic architecture) A: 613-614
with diagram
 Islamic art (Madrasahs) I: 468
 Mosque M: 831
Iwane, Matsui [Japanese general]
 Nanking Massacre N: 11
IWC [organization] See International Whaling Commission in this index
Iwo Jima [island, Pacific] I: 523 *with picture*
 World War II (Closing in on Japan) W: 490-491
with picture
Iwo Jima [photograph by Rosenthal]
 Iwo Jima picture on I: 523
Iwo Jima Statue [Arlington, Virginia]
 Marine Corps, United States picture on M: 206
 Washington, D.C. (Marine Corps War Memorial) W: 78 *with picture*
IWW See Industrial Workers of the World in this index
Ix Chel [Maya god]
 Maya (Religion) M: 322
Ixtacihuatl [volcano, Mexico] I: 522 *with picture*
 Mexico (The Plateau of Mexico) M: 460
 Mountain (table) M: 894 *with diagram*
Ixtacihuatl-Pococatepetl National Park (Mexico)
 National park (table) N: 42g
Iyar [month]
 Calendar (The Hebrew calendar) C: 29
Izaak Walton League of America [conservation organization] I: 523
Izabel, Lake
 Guatemala (The Northern Plain) G: 414 *with map*
Izalco [volcano]
 El Salvador picture on E: 248
Izenour, Steven [American author]
 Venturi, Robert V: 310
Izmir (Turkey) I: 524
 Turkey (Tourism) T: 509
Iztaccihuatl See Ixtacihuatl in this index
Izu Islands [islands, Pacific]
 Tokyo (The Tokyo Metropolitan Prefecture) T: 313-314
Izvestia [newspaper]
 Kennedy, John Fitzgerald (Other developments) K: 266
 Moscow (Communications) M: 826
Izzard [letter]
 Z Z: 587

J [letter] J: 1 *with pictures*
J. C. Penney Company
 Penney, James Cash P: 243
J-Class yacht
 America's Cup A: 431
J. P. Morgan & Company [bank]
 Morgan, John Pierpont M: 802
J particle [nuclear particle] See Psi particle in this index
 Psi particle P: 844
J. S. Fry and Sons [British company]
 Chocolate (History) C: 519
J. S. Morgan and Company [bank]
 Morgan, Junius Spencer M: 802
J. W. McConnell Foundation See McConnell Family Foundation in this index
JA [organization] See Junior Achievement in this index
Jabal ad Duruz [mountain, Syria]
 Syria (The mountains) So: 1073 *with map*
Jabal Katrinah [mountain]
 Egypt (The Sinai Peninsula) E: 126 *with map*
Jabara, James [American pilot]
 Ace A: 24
Jabbar, Kareem Abdul- [American basketball player] See Abdul-Jabbar, Kareem in this index
Jebes, Edmond [French author]
 French literature (Recent French literature) F: 523
Jabiru [bird] J: 2
 Stork So: 911
Jaçana [bird] J: 2 *with picture*
Jacaranda [tree] J: 2 *with picture*
J'Accuse [letter]
 Dreyfus, Alfred (Efforts to clear Dreyfus's name) D: 347
 Zola, Émile Z: 602
Jack [imaginary person]
 Halloween (Jack-o'-lanterns) H: 24b
Jack [animal]
 Donkey D: 308
Jack [flag]
 Flag (Military flags) F: 195-208
Jack [machine] See Jackscrew in this index
Jack [sports]
 Lawn bowling L: 144
Jack Frost [legendary figure] J: 2
Jack-in-the-pulpit [plant] J: 2
Jack Miner Migratory Bird Foundation
 Miner, Jack M: 565
Jack-o'-lantern J: 2
 Halloween (Jack-o'-lanterns) H: 24b *with picture*

442 Jack-o'-lantern mushroom

- Pumpkin P: 901
Will-o'-the-wisp W: 307
- Jack-o'-lantern mushroom**
Mushroom (Poisonous mushrooms) M: 945
with picture
- Jack pine** [tree]
Pine (Eastern pines) P: 468; picture on P: 470
- Jack Pine, The** [painting by Thomson]
Thomson, Tom T: 265 with picture
- Jack rabbit** [animal] J: 3 with picture
Animal picture on A: 483
Hare picture on H: 60
- Jack Russell terrier** [dog] J: 3 with picture
- Jack the Ripper** [British criminal] J: 3
- Jack-up rig**
Petroleum (Offshore drilling) P: 340 with picture
- Jackal** [dog] J: 3 with picture
- Jackass hare**
Jack rabbit picture on J: 3
- Jackdaw** [bird] J: 4 with picture
- Jacketed bullet**
Rifle (History) R: 339-340
- Jackhammer**
Pneumatic tool P: 586
- Jackknife** [scenery]
Theater (Changing scenery) T: 240
- Jackling, Daniel C.** [American engineer]
Copper (Industrial developments) Ci: 1044
- Jacks** [game] J: 4 with picture
- Jackscrow**
Machine (Screw) M: 15 with picture
Screw (Uses) S: 225
- Jackson** [Mississippi] J: 4
Mississippi pictures on M: 623, M: 627
- Jackson, Alan** [American musician]
Country music (Modern country music)
Ci: 1098c-1098d with picture
- Jackson, Alexander Young** [Canadian painter]
J: 5 with picture
Group of Seven G: 402
- Jackson, Andrew** [U.S. President] J: 6 with pictures
Alabama (Territorial days) A: 275
Bank (The Second Bank of the United States) B: 93
Biddle, Nicholas B: 295
Calhoun, John Caldwell (Early career) C: 35
Democratic Party (Origin) D: 125
Duel D: 378
Florida (The second Spanish period) F: 262
Indian wars (In the South) I: 193
Kitchen Cabinet K: 337
O'Neale, Peggy O: 761
Polk, James Knox (Lawyer and legislator) P: 641
President of the United States (Strengthening the office) P: 768
Taney, Roger Brooke T: 25
Tennessee (Building the state) T: 153
Tyler, John (Governor and senator) T: 533
United States, History of the (Politics and the "common man") U: 170
Whig Party (The Whig Party of the 1800's) W: 280
- Jackson, Bo** [American athlete]
Football (table) F: 363
- Jackson, Charles T.** [American chemist]
Long, Crawford Williamson L: 446
Morton, William Thomas Green M: 821
- Jackson, Ed** [American political leader]
Indiana (table) I: 214
- Jackson, George** [American frontiersman]
Western frontier life in America (The people) W: 235
- Jackson, Glenda** [British actress]
Motion picture (Best performance by an actress: 1970, 1973) M: 862
- Jackson, Hancock Lee** [American political leader]
Missouri (table) M: 668
- Jackson, Helen Hunt** [American author] J: 14
September (Quotations) S: 309
- Jackson, Howell E.** [American jurist]
Supreme Court of the United States (table) So: 1000
- Jackson, Jesse Louis** [American social reformer] J: 15 with portrait
African Americans (Black politics today) A: 136q, picture on A: 136o
- Jackson, Joseph Jefferson** See Jackson, Shoeless Joe in this index
- Jackson, Lady** [British economist]
Ward, Barbara W: 35
- Jackson, Mahalia** [American singer] J: 15
- Jackson, Maynard** [American political leader]
Atlanta (The mid-1900's) A: 861
- Jackson, Michael** [American singer] J: 15 with portrait
Rock music (Rock videos) R: 380
Television picture on T: 121
- Jackson, Rachel Robards** [wife of]
Jackson, Andrew (Jackson's family) J: 8; picture on J: 9
- Jackson, Reggie** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Jackson, Robert Houghwout** [American jurist] J: 15
- Jackson, Sarah Yorke** [daughter-in-law of]
White House hostesses W: 291
- Jackson, Shirley** [American author] J: 16
- Jackson, Shoeless Joe** [American baseball player] J: 16
- Jackson, Stonewall** [Confederate general] J: 16 with portrait
Civil War (First Battle of Bull Run) Ci: 626;
(The peninsular campaign) Ci: 626; (Battle of Chancellorsville) Ci: 628
Ewell, Richard Stoddert E: 434
Friedrich, Barbara F: 533
Lee, Robert Edward (Opening campaigns) L: 178
- Jackson, Thomas Jonathan** See Jackson, Stonewall in this index
- Jackson, Thomas Penfield** [American jurist]
Gates, Bill G: 67
- Jackson, Travis** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Jackson, William** [American political leader]
Constitution of the United States (The Constitutional Convention) Ci: 999-1000
- Jackson, William Henry** [American photographer] J: 17
Fur trade picture on F: 565
Photography (The beginnings of modern photography) P: 426-427
Pioneer life in America picture on P: 476
Wyoming picture on W: 534
- Jackson Five** [singers]
Jackson, Michael J: 15
- Jackson Hole** [region, Wyoming]
Grand Teton National Park G: 309
- Jackson Hole Wildlife Park** [Wyoming]
Wyoming (Places to visit) W: 524
- Jackson Lake** [Wyoming]
Grand Teton National Park G: 309
- Jackson Park**
Chicago picture on C: 426
- Jackson Square** [district]
New Orleans (Downtown New Orleans) N: 279
- Jacksonian Democracy** [U.S. history]
United States, History of the (Jacksonian Democracy) U: 170
- Jackson's Mill** [farm, Weston]
West Virginia (Places to visit) W: 216
- Jacksonville** [Florida] J: 17 with picture and map
Florida picture on F: 243
- Jacksonville Jaguars**
Football (National Football League) F: 364
- Jackstaff**
Flag (table) F: 193
- Jackstones** [game]
Jacks J: 4 with picture
- Jacob** [Biblical figure] J: 19
Esau E: 356
Isaac I: 461
Jews (Beginnings) J: 120
Joseph J: 167
Rachel R: 60
- Jacob, François** [French geneticist]
Monod, Jacques Lucien M: 731
Nobel Prizes (Physiology or medicine: 1965) N: 445
- Jacob, John Edward** [American social reformer] J: 19 with portrait
- Jacob Wrestling with the Angel** [painting by Gauguin] See *Vision After the Sermon, The* in this index
- Jacobean drama**
Drama (Jacobean and Caroline drama) D: 332
English literature (Jacobean drama) E: 317
- Jacobin pigeon** [bird]
Pigeon picture on P: 459
- Jacobins** [French history] J: 20
French Revolution (The National Convention) F: 526; (Terror and equality) F: 526
- Mirabeau, Comte de M: 615
Robespierre R: 366
- Jacobite** [British history]
Scotland (Union with England) S: 220
- Jacobite Rebellion** [1745]
Tartan T: 48
- Jacobs, Harriet Ann** [American author]
African American literature (The 1800's) A: 136a
- Jacobs, Joseph** [British author] J: 20
Storytelling (The 1800's) So: 914
- Jacobsen, Arne** [Danish architect]
Denmark (Arts) D: 136
- Jacobson, Eddie** [American businessman]
Truman, Harry S. (Businessman) T: 467
- Jacobson's organ** [zoology]
Amphibian (Sense organs) A: 440
Reptile (Sense organs) R: 251-252
Snake (Sense organs) S: 528 with diagram
- Jacquard, Joseph Marie** [French inventor] J: 20
Computer (Early punched-card computing devices) Ci: 924a
Weaving (History) W: 175
- Jacquard loom** [machine]
Computer (Early punched-card computing devices) Ci: 924a
Jacquard, Joseph Marie J: 20
Weaving (History) W: 175
- Jacques Cartier, Mount** [Quebec]
Gaspé Peninsula G: 66
- Jacques the Fatalist** [book by Diderot]
Diderot, Denis D: 195
- Jade** [gem] J: 20
China (The arts) C: 488-489 with picture
Gem picture on G: 78
World, History of the picture on W: 431
- Jade Emperor** [Taoist deity]
Religion picture on R: 221
- Jadeite** [mineral]
Jade (Jadeite) J: 20
- Jadwiga** [queen of Poland]
Poland (The Polish empire) P: 612
- Jaeger** [bird] J: 20
Bird (Birds of the Arctic) B: 343 with picture
- Jaeger** [gun]
Rifle (History) R: 339
- Jaffa** [Israel] J: 20
Tel Aviv T: 88
- Jagan, Cheddi B.** [Guyanese political leader]
Guyana (History) G: 446-447
- Jagan, Janet** [Guyanese political leader]
Guyana (History) G: 446-447
- Jagannath** [Puri, India] See *Juggernaut* in this index
- Jagdeo, Bharrat** [Guyana political leader]
Guyana (History) G: 446-447
- Jaggard, Isaac** [English printer]
Shakespeare, William (Folios) S: 368
- Jagger, Dean** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1949) M: 863
- Jagger, Mick** [British musician]
Rolling Stones R: 403
Rock music picture on R: 376
- Jagiełło, Władysław** [Grand Duke of Lithuania]
Lithuania (History) L: 389
Poland (The Polish empire) P: 612
- Jagiellonian dynasty** [Polish history]
Poland (The Polish empire) P: 612
- Jagiellonian University** [Poland]
Kraków K: 387
Poland (Education) P: 605
- Jaguar** [automobile]
Automobile picture on A: 967
Sports car (History) So: 803
- Jaguar** [wild cat] J: 21
Animal pictures on A: 472, A: 481
Rain forest picture on R: 126c
Sculpture (Early sculpture) S: 243 with picture
- Jaguars, Jacksonville** See Jacksonville Jaguars in this index
- Jaguarundi** [wild cat] J: 21
- Jahan, Shah** See Shah Jahan in this index
- Jahangir** [Mughal emperor]
India (The coming of the Europeans) I: 130
Mughal Empire M: 910
- Jahn, Friedrich Ludwig** [German educator]
Gymnastics G: 448
- Jahn, Helmut** [American architect] J: 21 with picture
- Jai elai** [sport] J: 21 with picture
Mexico (Recreation) M: 457-458
- Jail**
Prison (Jails) P: 806

- Jail fever**
Newgate Prison N: 378
- Jailhouse Rock** [film]
Rock music *picture on R*: 377
- Jainism** [religion] J: 22 *with picture*
India (Jainism) I: 117
Monasticism (Non-Christian monasticism) M: 701
Religion *picture on R*: 215
- Jakarta** [city, Indonesia] J: 22
Indonesia *pictures on I*: 0226, I: 0227
- Jakeš, Miloš** [Czech political leader]
Czechoslovakia (The Velvet Revolution) Ci: 1216
- Jakob, Alfons M.** [German physician]
Creutzfeldt-Jakob disease Ci: 1128
- Jallabiyah** [clothing]
Sudan (Clothing) So: 953
- Jalna** [book by De la Roche]
De la Roche, Mazo D: 95
- Jam** [food]
Jelly and jam J: 89
- Jamaat-i-Islami** [political movement]
Muslims (Reform and renewal) M: 965
- Jamahiriya, Great Socialist People's Libyan Arab** [official name]
Libya L: 264
- Jamaica** [country] J: 23 *with picture and map*
Flag *picture on F*: 201
Morgan, Sir Henry (Early career) M: 803
Rap music R: 141
Reggae R: 204
- Jamaica** [district]
New York City (Queens) N: 329-330
- Jamaica mignonette** [shrub]
Henna H: 185
- Jamaica pepper** [spice] *See Allspice in this index*
- Jamaica Plain** [district, Boston]
Boston (The south side) B: 500
- Jambalaya** [food]
Cajuns C: 19
- Jamboree**
Boy Scouts (Jamborees) B: 540
- James** [kings of England and Scotland] J: 25
- James I** [king of England] J: 25
Bible (The King James Version) B: 286
England (The first Stuarts) E: 308
English literature (The early and middle 1600's) E: 317
Fawkes, Guy F: 57
Ireland (Religious persecution) I: 426
Mary, Queen of Scots (Her reign) M: 239
Northern Ireland (Protestant settlement) N: 524
Nova Scotia (The struggle in Acadia) N: 568
Shakespeare, William (The King's Men) S: 348
Tudor, House of T: 481
Virginia (The Jamestown settlement) V: 418;
(Royal governors and Cromwell) V: 418
- James I** [king of Scotland]
James J: 25
- James II** [king of England] J: 25
Boyne, Battle of the B: 541
England (The Restoration) E: 309
Ireland (Religious persecution) I: 426
Monmouth, Duke of M: 730
New England, Dominion of N: 203
Penn, William (Arrested again) P: 242
Rye House Plot R: 574
- James II** [king of Scotland]
James J: 25
- James III** [king of Scotland]
James J: 25
- James IV** [king of Scotland]
Henry VII [of England] H: 188
James J: 25
Scotland (The House of Stuart) S: 219
- James V** [king of Scotland]
James J: 25
Mary, Queen of Scots M: 239
Scotland (The House of Stuart) S: 219
- James VI** [king of Scotland] *See James I* [king of England] *in this index*
- James, Daniel, Jr.** [U.S. general] J: 25 *with portrait*
- James, Epistola of** [New Testament] J: 26
James, Saint J: 27
- James, Frank** [American bandit]
James, Jesse J: 27
- James, Henry** [1843-1916, American author] J: 26
American literature (Mark Twain and Henry James) A: 420 *with portrait*
Novel (The United States) N: 573
- James, Jesse** [American bandit] J: 26 *with portrait*
Missouri *picture on M*: 670
Western frontier life in America (Crime) W: 238-239 *with picture*
- James, P. D.** [English writer] J: 27
- James, Ralph A.** [American physicist]
Americium A: 431
Curium Ci: 1195
- James, Saint** [Biblical figure] J: 27
- James, Thomas** [English explorer]
James Bay J: 27
Manitoba (Exploration) M: 160
- James, Thomas L.** [American government official]
Garfield, James Abram (table) G: 42
- James, Will** [American author]
Newbery Medal (table) N: 359
- James, William** [American philosopher] J: 27
American literature (Nonfiction writers) A: 420
Emotion (Early theories about emotions) E: 261
James, Henry (His life) J: 26
Peace Corps (History) P: 208
Pragmatism P: 729
Psychology (Psychology becomes a science) P: 849
- James A. Garfield National Historic Site** [Ohio]
National Park System (table: National historic sites) N: 52-53
- James Bay** [bay, Canada] J: 27
Hudson Bay H: 405 *with map*
- James Island** [Galapagos Islands]
Galapagos Islands G: 7 *with map*
- James Island** [Gambia]
Gambia G: 18
- James-Lange theory of emotions**
Emotion (Early theories about emotions) E: 261
- James Madison Memorial Building** [Washington, D.C.]
Washington, D.C. *map on W*: 76
- James Peak** [mountain, Colorado]
Moffat Tunnel M: 686
- James R. Thompson Center** [Chicago]
Jahn, Helmut J: 21 *with picture*
- James River** [South Dakota]
South Dakota (Land regions) So: 674
- James River** [Virginia] J: 28
- James Stuart: Duke of Richmond and Lennox** [painting by Van Dyck]
Clothing *picture on Ci*: 701
- James the Greater, Saint** [apostle] J: 28
- James the Less, Saint** [apostle] J: 28
- James Whitcomb Riley Home** [Greenfield]
Indiana (Places to visit) I: 206
- Jameson, Sir Leander Starr** [British colonial leader]
Boer War B: 435
- Jameson Raid** [South African history]
Rhodes, Cecil John (Conflict with the Boers) R: 317
- Jamestown** [Virginia] J: 28
Colonial life in America (Why the colonists came to America) Ci: 787 *with picture*;
(Early English settlements) Ci: 788
Exploration (The French and English in North America) E: 446-447
Indian wars (Jamestown) I: 191
London Company L: 445
Smith, John S: 517
- Jamestown Colonial National Historical Park**
See Colonial National Historical Park in this index
- Jamestown Settlement** [Virginia]
Colonial life in America (Places to visit) Ci: 800 *with picture*
- Jammeh, Yahya** [Gambian political leader]
Gambia (History) G: 19-20
- Jammu and Kashmir** *See Kashmir in this index*
- Jämtland** [region, Sweden]
Sweden *picture on S*: 1020
- Janáček, Leoš** [Czech composer] J: 29
Czech Republic (The arts) Ci: 1211
- Janata Party** [political party]
Vajpayee, Atal Bihari V: 260
- Janco, Marcel** [Romanian artist]
Dadaism D: 2 *with picture*
- Jane de Chantal, Saint** [French religious leader]
Francis de Sales, Saint F: 481
- Jane Eyre** [book by Brontë]
Brontë sisters (Their works) B: 637
- Janin, Louis** [American businessman]
Hoover, Herbert Clark (Engineer and businessman) H: 328
- Janissaries** [soldiers] J: 29
Army (Armies in the Middle Ages) A: 727
Muslims (The Ottoman Empire) M: 964d
Ottoman Empire (The beginning of the empire) O: 878
- Janklow, William J.** [American political leader]
South Dakota (table) So: 680
- Janney, Eli** [American inventor]
Railroad (Engineering improvements) R: 117
- Jannings, Emil** [German actor]
Motion picture (Best performance by an actor: 1927-28) M: 862
- Jannus, Tony** [American aviator]
Airplane (The golden age) A: 235
Aviation (The first airlines) A: 988
- Jansen, Cornelius** [Belgian religious leader] J: 29
- Jansenism** [religion]
Jansen, Cornelius J: 29
Pascal, Blaise P: 190
Roman Catholic Church (Jansenism) R: 409
- Jansky, Karl Guthe** [American engineer] J: 29
- Janson, Eric** [Swedish settler]
Illinois (Places to visit) I: 62
- Janssen, Jules** [French astronomer]
Sun (History of modern solar study) So: 986
- Janssen, Pierre J.** [French astronomer]
Helium H: 176
- Janssen, Zacharias** [Dutch optician]
Microscope (History of the microscope) M: 520
- Jansz, Willem** [Dutch explorer]
Australia (European discovery) A: 922 *with map*
Exploration (Exploring the Pacific) E: 447
- January** [month] J: 30 *with pictures*
Calendar (The Romans) C: 30
- Janus** [Roman mythology] J: 31
New Year's Day (Early customs) N: 289
- Japan J: 32** *with pictures and maps*
Asia (Way of life in East Asia) A: 785
Flag *pictures on F*: 203, F: 217
Agriculture
Japan (Agriculture) J: 49
Art and architecture
Japan (The arts) J: 43 *with pictures*
Architecture (Japanese architecture) A: 613 *with picture*
Asia (The arts) A: 789
Dance *picture on D*: 25; (Asian theatrical dance) D: 30
Drama (Japan) D: 336 *with picture*
Fan F: 27
Furniture (Japan) F: 572; *picture on F*: 571
Ivory (Ivory carving) I: 521 *with picture*
Lacquerware L: 23
Music (Japanese music) M: 956 *with picture*
Painting (Landscapes and seascapes) P: 33 *with picture*; (Japanese painting) P: 47 *with picture*
Sculpture (Japan) S: 239 *with picture*
Communications and mass media
Japan (Transportation) J: 51
Newspaper (In Asia) N: 386
Television (In Asia) T: 116
Education
Japan (Education) J: 42 *with picture*
Asia (Education) A: 789
Government
Japan (Government) J: 33
Clinton, Bill (International affairs) Ci: 682e
Health and welfare
Abortion (In other countries) A: 16
History
Japan (History) J: 52 *with pictures*
Air force (World War II) A: 185-186
Asia (The people) A: 786; (The rise of the Japanese Empire) A: 807
Asian Americans (History of Asian immigration) A: 812d
Aviation (World War II [1939-1945]) A: 990
China (The fall of the Manchus) C: 503 *with map*; (War with Japan) C: 504-505
Chinese-Japanese wars C: 509
Colonialism (Later colonialism) Ci: 814
Derning, W. Edwards D: 119
Gentlemen's agreement G: 90
Hong Kong (British control) H: 319-320
India (World War II [1939-1945]) I: 132
Indonesia (Independence) I: 237
Kamakura period K: 212

- Korea (Korea under Japan) K: 376
 League of Nations (Disagreement among members) L: 160
 MacArthur, Douglas (World War II) M: 3;
 (The occupation of Japan) M: 4
 Manchuria (History) M: 134
 Myanmar (World War II) M: 970d
 Nanking Massacre N: 11
 Palau (History) P: 102
 Pearl Harbor P: 218
 Perry, Matthew Calbraith P: 294
 Russo-Japanese War R: 566
 Ryukyu Islands (History) R: 574
 Seoul (History) S: 307
 Shogun S: 433
 Thailand (In World War II (1939-1945))
 T: 227
 Union of Soviet Socialist Republics (History)
 U: 35-37
 Vietnam (The August Revolution of 1945)
 V: 370
 World, History of the (The rise of Japanese
 civilization) W: 435-436; (Developments
 in China and Japan) W: 442-443
 World War I (Fighting elsewhere) W: 457
 World War II (The rise of dictatorships)
 W: 469-470; (Aggression on the march)
 W: 470; (Japan attacks) W: 477; (The
 war in Asia and the Pacific) W: 486 with
 pictures; (table: Military casualties)
 W: 497; (Peace with Japan) W: 498
- Manufacturing**
 Automobile (Major producing countries and
 companies) A: 958; (The rise of interna-
 tional automaking) A: 972; picture on
 A: 960
 Electronics (Manufacturing and sales) E: 214
 Iron and steel (In other countries) I: 450
- Natural resources**
 National park (Japan) N: 42c with picture
- People**
 Japan (People) J: 35 with pictures
 Ainu A: 166
 Asia (Life in Japan) A: 788 with picture
 Doll (Traditional dolls) D: 287; (Doll festivals
 and customs) D: 287 with picture
 Judo J: 184
 Karate (History) K: 247
- Recreation and sports**
 Baseball (Baseball around the world) B: 131-
 132 with picture
 Martial arts (Japanese martial arts) M: 234
- Religion**
 Japan (Religion) J: 40 with pictures
 Asia (Religions) A: 786
 Religion (Shinto) R: 222 with picture
 Shinto S: 401
- Social and cultural life**
 Japan (Way of life) J: 38 with pictures
 Birth control (In other countries) B: 379
 Library (Australia and the Far East) L: 253
 Paperwork (Paper handicrafts) P: 138
 Segregation (Segregation in other countries)
 S: 286
- Technology and science**
 International Space Station I: 346b
 Space exploration (Japan) So: 727
- Transportation**
 Railroad (Intercity trains) R: 105; (In other
 countries) R: 113-114
 Ship (Merchant fleets of other countries)
 S: 426
- See also the list of Related articles in the
 Japan article
- Japan, Sea of J: 60**
Japan Current See Kuroshio in this index
Japan Railways Group
 Japan (Transportation) J: 51
Japan Sinks [book by Komatsu]
 Science fiction (Growing popularity) S: 205-
 206
- Japanese** [people]
 Oriental exclusion acts O: 855
- Japanese Alps**
 Japan (Honshu) J: 45
- Japanese American Evacuation Claims Act**
 [1948]
 Asian Americans (Japanese internment)
 A: 812e-812f
- Japanese Americans**
 Asian Americans (History of Asian immigra-
 tion) A: 812d with picture
 Concentration camp (Other concentration
 camps) Ci: 927
- Minority group (Asian Americans) M: 610
 World War II (In the United States and
 Canada) W: 494-495 with picture
- Japanese beetle** [insect] J: 60 with picture
 Beetle (Scarabs) B: 217
 Insect picture on I: 285
- Japanese bobtail** [cat]
 Cat (Short-haired breeds) C: 290-291 with pic-
 ture
- Japanese boxwood** [tree]
 Box B: 525
- Japanese Canadians** [people]
 Canada, History of (World War II) C: 150-151
- Japanese cherry tree**
 Taft, William Howard (Life in the White House)
 T: 11-12
 Washington, D.C. (The Tidal Basin) W: 73-74
 with picture; picture on W: 74
- Japanese chin** [dog] J: 60 with picture
- Japanese ivy** [plant]
 Ivy I: 522
- Japanese language** J: 60
 Alphabet (Japanese) A: 384
 Japan (Language) J: 38
 Language (Other language families) L: 65 with
 map
- Japanese literature** J: 61
 Drama (Japan) D: 336
- Japanese macaque** [animal]
 Macaque M: 3 with picture
- Japanese maple** [tree]
 Maple (Other maples) M: 187 with picture
- Japanese plum**
 Plum (Kinds of plums) P: 577 with picture
- Japanese print** [art] J: 62 with pictures
 Drama picture on D: 337
- Japanese river fever** [disease]
 Chigger C: 447
- Japanese spaniel** [dog]
 Japanese chin J: 60 with picture
- Japanese-wood oil** [tree product]
 Tung oil T: 486
- Japanese yew** [plant]
 Plant picture on P: 520
- Japheth** [Biblical figure]
 Noah N: 439
- Japurá River** [river, Brazil]
 Amazon River (The course of the Amazon)
 A: 403
- Jar**
 City picture on Ci: 577
 Glass (Glass containers) G: 212
- Jarabe tapatio** [dance]
 Mexico (Music) M: 459-460 with picture
- Jarche** [poetry]
 Spanish literature (Early medieval literature)
 So: 757
- Jardin Botanique** [botanical garden]
 Montreal (Parks) M: 774; picture on M: 776
- Jardine, Al** [American musician]
 Beach Boys B: 179
- Jardine, William M.** [American government offi-
 cial]
 Coolidge, Calvin (table) Ci: 1032
 Hoover, Herbert Clark (table) H: 330
- Jargon** [language]
 Language (Linguistic terms) L: 63
 Slang S: 499
- Jarl, Birger** [Swedish statesman]
 Stockholm (History) So: 905
- Jarlishof** [ancient city]
 City picture on Ci: 577
- Jarrah** [tree]
 Eucalyptus E: 376
- Jarrell, Randall** [American poet] J: 64
- Jarret de Verchères, Marie Madeleine** [French-
 Canadian public figure]
 Verchères, Marie Madeleine Jarret de V: 315
- Jarrett, Dale** [American race driver]
 Automobile racing (table: NASCAR Winston
 Cup champion) A: 981
- Jarrett, Ned** [American race driver]
 Automobile racing (table: NASCAR Winston
 Cup champions, 1961, 1965) A: 981
- Jaruzelski, Wojciech** [Polish political leader]
 J: 64 with portrait
 Poland (History) P: 611-614
- Jarves, Deming** [American businessman]
 Glass (Early American glass) G: 222
- Jarvik, Robert K.** [American doctor]
 Artificial heart A: 760
 Heart (The first heart transplants and artificial
 hearts) H: 145
- Jarvik-7** [artificial heart]
- Artificial heart A: 760
- Jarvis, Anna** [American public figure]
 Mother's Day M: 843 with portrait
- Jarvis, Gregory B.** [American astronaut]
 Space exploration (The Challenger disaster)
 So: 725
- Jarvis, T. J.** [American political leader]
 North Carolina (table) N: 490
- Jasmine** [plant] J: 64 with picture
- Jason** [Greek mythology] J: 64
 Argonauts A: 660
 Golden Fleece G: 255
 Medea M: 360
 Mythology (Greek heroes) M: 979
- Jason and Medea**
 Ballet picture on B: 52
- Jasper** [mineral] J: 65
 Gem picture on G: 78
- Jasper National Park** [Alberta] J: 65 with picture
 Canada (table: National parks and national park
 reserves) C: 113
- Jasper ware**
 Wedgwood ware W: 179 with picture
- Jaspers, Karl** [German philosopher] J: 65
- Jataka** [story]
 Buddha (Later life) B: 667
- Jaundice** [disorder] J: 65
 Hepatitis H: 192
 Liver (Diseases of the liver) L: 394
- Java** [breed]
 Chicken (table) C: 443
- Java** [coffee]
 Coffee (Kinds of coffee) Ci: 754-755
- Java** [computer language]
 Computer (Using programming languages)
 Ci: 923
- Java** [island, Indonesia]
 Indonesia (The Greater Sunda Islands) I: 233
 with map; (Agriculture) I: 235; (Dutch rule)
 I: 237
 Dance (Asian theatrical dance) D: 30
 Raffles, Sir Thomas Stamford R: 101
 Asia (The arts) A: 785
- Java fossils** [anthropology] J: 66
 Dubois, Eugène D: 372
 Homo erectus H: 306
- Java man** [prehistoric people] See Java fossils
 in this index
- Java Sea, Battle of the** [1942]
 World War II (The war in Asia and the Pacific)
 W: 486
- Javacheff, Christo** [Bulgarian artist] See Christo
 in this index
- Javan, Ali** [American physicist]
 Laser (History) L: 86
- Javan rhinoceros**
 Rhinoceros (Kinds of rhinoceroses) R: 294
- Javanese** [people]
 Indonesia (People) I: 227
- Javanese cat**
 Cat (Long-haired breeds) C: 292
- Javanese dancing**
 Indonesia (The arts) I: 232 with picture
- Javelin** [weapon] J: 66 with picture
 Track and field (Throwing events) T: 356;
 (World track and field records) T: 358-359
- Javelina** [animal]
 Peccary P: 226
- Jaw** [anatomy]
 Animal (Teeth and jaws) A: 491 with picture
 Face F: 3
 Head diagram on H: 123
- Java** [island, Indonesia] See Java in this index
- Jawera, Sir Dawda** [Gambian political leader]
 Gambia (History) G: 19
- Jawbone** [anatomy]
 Human body diagram on H: 422
- Jawed fish**
 Fish (Kinds of fish) F: 147
- Jawfish**
 Fish picture on F: 170
- Jawhar** [Egyptian military leader]
 Cairo (History) C: 17
- Jawless fish**
 Fish (Kinds of fish) F: 147
- Jaworski, Leon** [American lawyer]
 Watergate (The tape controversy) W: 144
- Jaws** [film]
 Spielberg, Steven So: 792
- Jaws of life** [tool] See Hydraulic rescue tool in
 this index
- Jay** [bird] J: 66 with picture
- Jay, John** [American statesman] J: 67 with por-
 trait

- Adams, John (Diplomat) **A**: 36
 Constitution of the United States (The background of the Constitution) **Ci**: 1000
Federalist, *The* **F**: 67
 Jay Treaty **J**: 67
 New York (table) **N**: 313
 Revolutionary War in America (The Treaty of Paris) **R**: 285
 United States, History of the (Foreign affairs) **U**: 162-163
- Jay Treaty** [1794] **J**: 67
 Monroe, James (Opposition to Washington) **M**: 736
 United States, History of the (Foreign affairs) **U**: 162-163
- Washington, George (Relations with Britain) **W**: 106; (Cabinet scandal) **W**: 106
 Westward movement in America (The Northwest Ordinance) **W**: 247
- Jaya, Puncak** [mountain, New Guinea] Indonesia (Irian Jaya) **I**: 234
- Jayakarta** [former name] Jakarta (History) **J**: 22-23
- Jayapura** [city, Indonesia] Indonesia (Irian Jaya) **I**: 234
- Jaycees** [organization] **J**: 67
- Jayewardene, Junius Richard** [Sri Lankan political leader] Sri Lanka (History) **So**: 819
- Jayhawker State** Kansas **K**: 216
- Jayhawkers** Kansas **K**: 216
- Jayne, William** [American government official] South Dakota (Territorial days) **So**: 681
- Jazernicki, Yitzhak** See Shamir, Yitzhak *in this index*
- Jazirah** [region, Sudan] Sudan (Central Sudan) **So**: 954
- Jazz** [book by Morrison] Morrison, Toni **M**: 817
- Jazz** [music] **J**: 68 *with pictures*
 Band (Jazz bands) **B**: 74
 Music (Western music) **M**: 955
 New Orleans (The arts) **N**: 281 *with picture*
 Popular music (Ragtime, jazz, and blues) **P**: 670 *with picture*; (The recording era) **P**: 671
 United States *picture on* **U**: 118
 United States, History of the *picture on* **U**: 186
See also the list of Related Articles in the Jazz article
- Jazz, Utah** Basketball (table) **B**: 150
- Jazz Age** See Roaring Twenties *in this index*
- Jazz dance** Dance (European and American theatrical dance) **D**: 31-32
- Jazz Epistles** [musical group] Masekela, Hugh **M**: 263
- Jazz festival** Jazz (The spread of jazz) **J**: 72-73
- Jazz rock** Rock music (Rock goes pop) **R**: 379
- Jazz Singer, The** [film] Jolson, Al **J**: 157
 Motion picture (The movies talk) **M**: 867
- Jazz Workshop** Mingus, Charles **M**: 573
- J.B.** [play by MacLeish] MacLeish, Archibald **M**: 24
- JCC** Jewish community centers **J**: 119
- JCC Association** Jewish community centers **J**: 119
- JCS** See Joint Chiefs of Staff *in this index*
- J.D.** [degree] Law (Law education) **L**: 138
- Je t'aime** [paintings by Motherwell] Motherwell, Robert **M**: 843
- Jean** [grand duke of Luxembourg] Luxembourg (History) **L**: 531
- Jean Baptiste de la Salle, Saint** [French educator] **J**: 75
- Jean-Christophe** [book by Rolland] Rolland, Romain **R**: 402
- Jean Lafitte National Historic Park and Preserve** [Louisiana] Louisiana (Places to visit) **L**: 488
 New Orleans (Libraries and museums) **N**: 282
- Jeanne d'Arc** See Joan of Arc, Saint *in this index*
- Jeanneret-Gris, Charles Édouard** See Le Corbusier *in this index*
- Jeans** [clothing] **J**: 75
 Fashion (Why fashions change) **F**: 51
 Strauss, Levi **So**: 922
- Jebusites** [ancient people] Jerusalem (Ancient times) **J**: 100
- Jeddah** See Jidda *in this index*
- Jeep** [vehicle] **J**: 75
- Jeepney** [vehicle] Philippines *picture on* **P**: 375
- Jeffers, Robinson** [American poet] **J**: 75
- Jefferson, Arthur Stanley** [American actor] See Laurel, Stan *in this index*
- Jefferson, Jane Randolph** [mother of] Jefferson, Thomas (Boyhood) **J**: 76-77
- Jefferson, Joseph** [American actor] **J**: 75
- Jefferson, Martha** [daughter of Thomas Jefferson] See Randolph, Martha Jefferson *in this index*
- Jefferson, Martha Skelton** [wife of] Jefferson, Thomas (Jefferson's family) **J**: 78; (Congressman) **J**: 80
- Jefferson, Mount** [New Hampshire] New Hampshire (Mountains) **N**: 220
- Jefferson, Peter** [father of] Jefferson, Thomas (Boyhood) **J**: 76-77
- Jefferson, State of** [U.S. history] **J**: 75
- Jefferson, Thomas** [U.S. President] **J**: 76 *with pictures*
 Astrology *picture on* **A**: 827
 Burr, Aaron (Gains recognition) **B**: 711
 Democratic Party (Origin) **D**: 125
 Jefferson Memorial **J**: 88
 Monroe, James (Soldier) **M**: 734
 Monticello **M**: 767
 Mount Rushmore National Memorial *picture on* **M**: 887
 President of the United States (Strengthening the office) **P**: 768
 Revolutionary War in America *picture on* **R**: 276
 Richmond (The city) **R**: 332
 Slavery (Views of slavery) **S**: 502-503
 Virginia (table) **V**: 417; (*The Mother of Presidents*) **V**: 421
 Washington, D.C. (Choosing the capital) **W**: 85
Early years
 Adams, John (National politics) **A**: 36
 Alien and Sedition Acts **A**: 368
 Bank of the United States **B**: 96
 Declaration of Independence *picture on* **D**: 77
 Democratic-Republican Party **D**: 128
 Hamilton, Alexander (Secretary of the treasury) **H**: 32
 Jouett, Jack **J**: 169
 Mazzei, Philip **M**: 329
 State, Department of (Establishment) **So**: 860
 United States, History of the (The Declaration of Independence) **U**: 158; (Solving financial problems) **U**: 162
 Vice President of the United States (Early days) **V**: 352-353
 Washington, George (Cabinet) **W**: 102 *with picture*
- President*
 Adams, John (Later years) **A**: 39
 Lewis and Clark expedition (Jefferson's plans) **L**: 222
 Louisiana Purchase **L**: 502
 Madison, Dolley Payne **M**: 31
 Marshall, John **M**: 229
 Spoils system **So**: 798
 United States, History of the (Jeffersonian democracy) **U**: 163 *with picture*
 White House (The original building) **W**: 290
- Jefferson Airplane** [musical group] Rock music (Growing social significance) **R**: 379
- Jefferson City** [Missouri] **J**: 88
- Jefferson Memorial** [Washington, D.C.] **J**: 88
 National Park System (table: National memorials) **N**: 54
 Washington, D.C. (The Tidal Basin) **W**: 73-74 *with picture*; *map on* **W**: 76
- Jefferson National Expansion Memorial** [Saint Louis] National Park System (table: National memorials) **N**: 54
 Saint Louis (The city) **S**: 46; (Museums) **S**: 48
- Jefferson Territory** [U.S. history] **J**: 88
 Colorado (The gold rush) **Ci**: 845
- Jeffersonian democracy** Democracy (American democracy) **D**: 123
 Jefferson, Thomas **J**: 76
 United States, History of the (Jeffersonian democracy) **U**: 163
- Jefferys, C. W.** [Canadian painter] Macdonald, Sir John Alexander *picture on* **M**: 9
- Jeffords, James Merrill** [American political leader] **J**: 88
 Democratic Party (Mixed results) **D**: 128
- Jeffords, Thomas J.** [American frontiersman] Cochise **Ci**: 743
- Jeffreys, Lord** [English jurist] Monmouth, Duke of **M**: 730
- Jeffries, James Jackson** [American boxer] **J**: 88
- Jeffries, John** [American doctor] Balloon (The growth of ballooning) **B**: 61
 Blanchard, Jean-Pierre **B**: 397
- Jehovah** [religion] **J**: 88
- Jehovah's Witnesses** [religious group] **J**: 88
- Jehu** [Biblical figure] Elisha **E**: 238
- Jekyll, Gertrude** [British landscape architect] Lutyens, Sir Edwin Landseer **L**: 530
- Jellaba** [clothing] Morocco (Way of life) **M**: 811-812
- Jellicoe, John Rushworth** [British admiral] **J**: 89
 Jutland, Battle of **J**: 204
 World War I (The war at sea) **W**: 460
- Jelly and jam** [food] **J**: 89
 Pectin **P**: 227
- Jellyfish** [sea animal] **J**: 89 *with pictures*
 Animal *picture on* **A**: 486
 Cnidarian **Ci**: 715
- Jemison, Mae Carol** [American astronaut] **J**: 90 *with portrait*
- Jemison, Mary** [American settler] **J**: 90
- Jenghis Khan** See Genghis Khan *in this index*
- Jenifer, Daniel of St. Thomas** [American political leader] **J**: 90
- Jenkins, Ferguson** [American baseball player] Baseball (table: Hall of Fame) **B**: 134
- Jenkins, Roy Harris** [British political leader] **J**: 90
- Jenkins v. Georgia** [U.S. history] Obscenity and pornography (In the United States) **O**: 643-644
- Jenks, Joseph, Jr.** [American settler] Pawtucket **P**: 204
- Jenne** [Mali] **J**: 91
- Jenner, Edward** [British doctor] **J**: 91 *with pictures*
 Medicine (The development of immunology) **M**: 374; *picture on* **M**: 373
- Jenner, Sir William** [British doctor] **J**: 91
- Jennet** [animal] Donkey **D**: 308
- Jenney, William Le Baron** [American architect] **J**: 92 *with portrait*
 Architecture (Early modern architecture in America) **A**: 629
 Chicago (Architecture) **C**: 428
 Skyscraper (History) **S**: 498-499
- Jennings, Hugh** [American baseball player] Baseball (table: Hall of Fame) **B**: 134
- Jennings, Jonathan** [American political leader] Indiana (table) **I**: 214; (Early statehood) **I**: 216
- Jennings, Sarah** [wife of the Duke of Marlborough] See Churchill, Sarah Jennings *in this index*
- Jennings, Waylon** [American singer] Country music (Modern country music) **Ci**: 1098*c* *with picture*
- Jenny** [animal] Donkey **D**: 308
- Jenny** [machine] See Spinning jenny *in this index*
- Jenny wren** [bird] See House wren *in this index*
- Jensen, Adolf E.** [German anthropologist] Mythology (Jensen's theory) **M**: 988
- Jensen, J. Hans** [German physicist] **J**: 92
- Jensen, James A.** [American scientist] *Supersaurus* **So**: 995
- Jensen, Johannes Vilhelm** [Danish author] Denmark (Arts) **D**: 136
- Jensen, Leslie** [American political leader] South Dakota (table) **So**: 680
- Jenson, Nicolas** [French printer] **J**: 92
 Book (The spread of printed books) **B**: 467
- Jerboa** [animal] **J**: 92 *with picture*
- Jerboa marsupiel mouse** [animal] See Kultarr *in this index*
- Jeremiah** [Hebrew prophet]

446 Jeremiah, Book of

Jeremiah, Book of J: 92 *with picture*
Jeremiah, Book of [Old Testament] J: 92 *with picture*
 Old Testament (Development) O: 741
Jeremiah, Letter of [Bible]
 Bible (Development of the Christian Old Testament) B: 282
Jericho [city, West Bank] J: 93
 Arab-Israeli conflict (Peacemaking) A: 582a
 Joshua J: 169
Jerimoth Hill
 Rhode Island (Land regions) R: 306
Jerkin
 Clothing (The Renaissance) Ci: 700
Jerky [food]
 Western frontier life in America (Food) W: 235-236
Jerne, Niels Kaj [British-born physiologist]
 Nobel Prizes (Physiology or medicine: 1984) N: 445
Jeroboam I [Biblical figure] J: 93
 Solomon So: 584
Jeroboam II [Biblical figure] J: 93
Jerome, Saint [Christian scholar] J: 93 *with portrait*
 Bible (The first translations) B: 285-286 *with picture*
 Old Testament (Translations) O: 741
 Vulgate V: 453
Jersey [animal]
 Cattle (Jersey) C: 310 *with picture*; (table) C: 313
 Dairying (Dairy cattle) D: 6
Jersey [fabric] J: 94
Jersey [island, English Channel] J: 93
 Channel Islands C: 375 *with map*
Jersey City [New Jersey] J: 94 *with picture*
 Freedom of assembly (In the United States) F: 504
Jersey fabric
 Textile (Knitted fabrics) T: 214
Jersey Giant [breed]
 Chicken (table) C: 443
Jersey Lily, The [nickname]
 Langtry, Lillie L: 61
Jerusalem [Israel] J: 94a *with pictures and map*
 Aqueduct (Ancient aqueducts) A: 581
 David (King of Israel) D: 45
 Hezekiah H: 221
 Israel I: 478 *with picture*
 Jeremiah, Book of J: 93
 Jews (The kingdom of Israel) J: 121 *with map*; (Roman rule) J: 122
 Judea J: 182
Jerusalem [book by Lagerlöf]
 Lagerlöf, Selma L: 30
Jerusalem [book by Mendelssohn]
 Mendelssohn, Moses M: 400
Jerusalem, Temple in See Temple in Jerusalem *in this index*
Jerusalem artichoke [plant] J: 102 *with picture*
Jerusalem Bible, The
 Bible (Modern English translations) B: 286-287
Jerusalem Conquered [book by Tasso]
 Tasso, Torquato T: 50
Jerusalem Delivered [book by Tasso]
 Italian literature (Humanism and the Renaissance) I: 494
 Tasso, Torquato T: 50
Jervas, Charles [English painter]
 Swift, Jonathan picture on So: 1040
Jervis, Sir John [British admiral]
 Nelson, Horatio (Wounded at Calvi) N: 122
Jess [falconry]
 Falconry F: 14
Jessamine [plant]
 Jasmine J: 64
Jester [clown] J: 102
Jester, Beauford H. [American political leader]
 Texas (table) T: 203
Jesuits [religious group] J: 103
 Counter Reformation (Catholic reform) Ci: 1096
 Loyola, Saint Ignatius L: 511
 Pope (Renaissance and Reformation) P: 664
 Religious life (Religious life in the 1500's and 1600's) R: 227
 Roman Catholic Church (The Counter Reformation) R: 408-409
 Xavier, Saint Francis X: 543
Jesup, Thomas [American general]
 Seminole Indians S: 293
Jesus Christ J: 104 *with pictures*
 See also Christianity *in this index*

A.D. A: 31
 Antichrist A: 553
 Arianism A: 661
 Barabbas B: 102
 B.C. B: 178
 Byzantine art *pictures on* B: 749, B: 750, B: 751
 Candlemas Day C: 175
 Christianity (Jesus's ministry) C: 524 *with picture*
 Christmas C: 528 *with picture*
 Easter E: 42
 Faith healing F: 12
 God G: 243
 Golden rule G: 256
 Gospels G: 277
 Grace G: 296
 Holy Grail H: 298
 Icon *picture on* I: 25
 Jerusalem (Christian sites) J: 96; (Roman rule) J: 101
 Jews (Roman rule) J: 122
 Joseph J: 167
 Judas Iscariot J: 182
 Madonna and Child M: 37 *with picture*
 Mary M: 238
 Messiah M: 423
 Millennium M: 553
 Mormons (Church doctrines) M: 806
 New Testament N: 287
 Painting (Religious subjects) P: 32
 Parable P: 141
 Peter, Saint P: 324
 Pilate, Pontius P: 462
 Religion (Christianity) R: 222
 Resurrection R: 264 *with picture*
 Roman Catholic Church (Roman Catholic beliefs) R: 403-404
 Samaritans S: 78
 Shroud of Turin S: 442 *with pictures*
 Thomas, Saint T: 262
 Transfiguration T: 371
Jesus in His Times [book by Daniel-Rops]
 Daniel-Rops, Henri D: 34
Jésus Island (Quebec)
 Laval L: 128
Jesus Opens the Eyes of a Man Born Blind
 [painting by Duccio di Buoninsegna]
 Jesus Christ *picture on* J: 106
Jet [coal] J: 109
 Gem *picture on* G: 78
Jet [magazine]
 Johnson, John Harold J: 143
Jet airplane
 Airplane (Types of airplanes) A: 210 *with pictures*; (History) A: 229-238
 Air force (The development of jet aircraft) A: 186
 Aircraft, Military (The jet age) A: 205
 Aviation (A new age of flight) A: 990
 Jet propulsion J: 110 *with pictures*
 Korean War (The air war) K: 382
Jet engine
 Airplane (Jet engines) A: 220 *with picture*
 Guided missile (The engine) G: 424
 Jet propulsion J: 110 *with diagrams*
 Kerosene (Uses) K: 306
 Rocket (Rocket propellant) R: 385
Jet exhaust
 Airplane (Jet engines) A: 220
Jet propulsion J: 110 *with pictures*
 See also Jet airplane; Jet engine *in this index*
 Turbine (Gas turbines) T: 497-498
Jet Propulsion Laboratory [Pasadena, California] J: 115
Jet pump
 Pump (Jet pumps) P: 899
Jet stream [atmosphere] J: 115 *with map*
 Air turbulence A: 200
 Weather (Planetary-scale systems) W: 158-159
Jeté
 Ballet (table) B: 45 *with picture*
Jethro [Biblical figure]
 Moses (Early life) M: 828-829
Jets, New York See New York Jets *in this index*
Jetsam [wreckage]
 Flotsam, jetsam, and lagan F: 267
Jetty [wall] J: 116 *with picture*
Jeux [music by Debussy]
 Debussy, Claude D: 66
Jew See Jews *in this index*
Jewel [award]
 Knighthood, Orders of (Honorary orders) K: 347 *with pictures*

Jewel [ornament] J: 116
 See also Jewelry *in this index*
 Gem G: 77
 Jewelry J: 116
 Watch (Mechanical watches) W: 114
 See also the list of Related Articles in the Gem article
Jewel bearing
 Jewel J: 116
Jewel Cave National Monument [South Dakota] J: 116
 National Park System (table: National monuments) N: 51
Jewell, Marshall [American government official]
 Connecticut (table) Ci: 967
 Grant, Ulysses S. (table) G: 316
Jewelry [ornament] J: 116 *with pictures*
 Etruscans *picture on* E: 375
 Fabergé, Peter Carl F: 2
 Gem G: 77
 Gold (Jewelry) G: 251
 Indian, American *picture on* I: 146
 Providence (Economy) P: 839
 Rhode Island (Manufacturing) R: 309 *with picture*; (Industrial growth) R: 313
 See also the list of Related articles in the Gem article
Jewett, Charles Coffin [American librarian]
 Library (Libraries in the United States) L: 261-262
Jewett, Sarah Orne [American author] J: 119
Jewfish [fish] See Goliath grouper *in this index*
Jewish Agency [organization]
 Zionism (The Balfour Declaration) Z: 599
Jewish Antiquities [book by Josephus]
 Josephus, Flavius J: 169
Jewish calendar
 Calendar (The Hebrew calendar) C: 29
Jewish community centers J: 119
Jewish Congress, World [organization]
 World Jewish Congress W: 450
Jewish Documentation Center [Vienna]
 Wiesenthal, Simon W: 299
Jewish feasts
 Judaism (Holy days and festivals) J: 181
Jewish law
 Hillel I H: 232
 Talmud T: 21
Jewish literature
 Hebrew literature H: 162
 Yiddish literature Y: 566
Jewish State [book by Herzl]
 Herzl, Theodor H: 217
Jewish Theological Seminary of America
 J: 119
Jewish Women, National Council of J: 119
Jews [people] J: 120 *with pictures and maps*
 See also Judaism *in this index*
 Abraham A: 16
 Anti-Semitism A: 558
 Arab-Israeli conflict A: 582
 Asia (The people) A: 778
 Babi Yar B: 3
 Circumcision Ci: 561
 Concentration camp Ci: 927
 Cossacks Ci: 1079
 Czech Republic (People) C: 1210
 Food (Religious reasons) F: 332
 Germany (Religion) G: 151; (Nazi Germany) G: 167-168
 Ghetto (Early ghettos) G: 181
 Haskalah H: 82
 Hebrew language H: 161
 Hitler, Adolf H: 264
 Holocaust H: 296
 Immigration (Asia) I: 85 *with picture*
 Israel (Jews) I: 480
 Jerusalem (The people of Jerusalem) J: 96
 Kristallnacht K: 388
 Minority group (Jews) M: 610
 Moses M: 828
 Netherlands (World War II) N: 149-150
 New York City (Ethnic groups) N: 331 *with picture*
 Old Testament O: 740
 Palestine (Early history and settlement) P: 104
 Peter, Saint (Life as an apostle) P: 324-325
 Races, Human (Race and discrimination) R: 59
 Russia (People) R: 532
 Schindler, Oskar S: 175
 Segregation (Segregation in other countries) S: 286
 Spain (Union of the Spanish kingdoms) So: 747

- Union of Soviet Socialist Republics (People)
U: 31
- Vatican Council II (The work of the council)
V: 289-290
- Wallenberg, Raoul W: 17
- Wandering Jew W: 23
- Warsaw (History) W: 38
- Western Wall W: 242
- World War II (In the United States and Canada) W: 494-495
- Yiddish language Y: 565
- Yiddish literature Y: 566
- Zunz, Leopold Z: 613
- See also the list of Related articles in the Jews article and Israel; Israel, Ancient; and Judaism in this index*
- Jew's-harp** [musical instrument] J: 125 *with pictures*
- Jezebel** [film]
Davis, Bette D: 47
- Jharkhand** [state]
India (Recent developments) I: 134
- Jhelum River** [India]
Kashmir K: 248
- Jiang Qing** [Chinese political leader] J: 125
China (Deng Xiaoping) C: 506
- Jiang Zemin** [Chinese political leader] J: 126 *with portrait*
- Jiangxi province** [China]
Mao Zedong (His life) M: 174-175
- Jib** [device]
Crane C: 1120
- Jibing** (Sails) S: 24 *with diagram*
- Jibing**
Sailing (Trimming and tacking) S: 26
- Jicama** [plant] J: 126 *with picture*
- Jicarilla Apache** [American Indians]
Apache Indians A: 562
- Jidda** [city, Saudi Arabia] J: 126
- Jig** [lure]
Fishing *picture on F: 177*
- Jigger** *See Chigger in this index*
- Jigging**
Ceramics (Making ceramics) C: 360
Pottery (Shaping the clay) P: 716-717
- Jigme Dorji Wangchuk** [king of Bhutan]
Bhutan (History) B: 278
- Jigme Singye Wangchuk** [king of Bhutan]
Bhutan (History) B: 278
- Jigsaw** [tool]
Saw (Power saws) S: 167 *with picture*
- Jihad** [religion]
Qa'ida, Al- Q: 2
Qutb, Sayyid Q: 44
- Jim Crow** [U.S. history] J: 126
Brown v. Board of Education of Topeka B: 645
Segregation (Jim Crow laws) S: 285
- Jim-suit** [diving]
Exploration (Deep-sea exploration) E: 451
- Jiménez, Juan Ramón** [Spanish poet] J: 126
- Jiménez de Quesada, Gonzalo** [Spanish explorer] J: 127
Colombia (Early days) C: 783
- Jimmu Tenno** [legendary figure] J: 127
- Jimmy Carter National Historic Site** [Georgia]
National Park System (table: National historic sites) N: 52-53
- Jimson weed** [plant] J: 127 *with picture*
Nightshade N: 421 *with picture*
- Jin Mao Building** [Shanghai, China]
Shanghai (History) S: 372
Skyscraper (table) S: 498 *with picture*
- Jingdezhen** [city, China]
Porcelain (Oriental porcelain) P: 676
- "Jingle Bells"** [song]
Buchanan, James B: 658
- Jingoism** [politics] J: 127
Patriotism (Abuses of patriotism) P: 198
- Jinmen** [island] *See Quemoy in this index*
- Jinnah, Mohammad Ali** [Pakistani political leader] J: 127
India (New Constitution) I: 132
Pakistan (The nationalist movement) P: 99;
(Independence) P: 99
- Jinni** [Arab mythology] *See Genie in this index*
- Jinrikisha** [vehicle] J: 127
Pedicab P: 228
- Jirga** [tribal council]
Afghanistan (Government) A: 92a *with picture*
Pashtuns P: 190
- Jitney** [play by Wilson]
Wilson, August W: 316
- Jiu Zhang Suan Shu** [book]
Mathematics (Chinese mathematics) M: 306
- Jiva** [religion]
Jainism J: 22
- Jivaro Indians** [American Indians] J: 127 *with picture*
Indian, American (Before European contact) I: 175-176 *with picture*
- Joachim** [Biblical figure]
Anne, Saint A: 517
- Joachim I** [king of Naples]
Murat, Joachim M: 929
- Joachim, Joseph** [German violinist]
Brahms, Johannes (His life) B: 548
- Joachim with the Shepherds** [painting by Giotto]
Painting (The 1300's) P: 51-52 *with picture*
- Joachimsthaler** [money]
Dollar D: 295
- Joan of Arc, Saint** [French patriot] J: 128 *with picture*
Hundred Years' War H: 437
- Joan of Arc Chapel**
Milwaukee (Annual events and places of interest) M: 560-561
- Joan of Arc's Day**
Holiday (In other countries) H: 291
- Joanna of Castile** [mother of Charles V] *See Juana of Castile in this index*
- João** [king of Kongo]
Nzinga Nkuwu N: 633
- Job**
Career education C: 213
Careers C: 214 *with pictures*
Technology (Challenges of technology) T: 76-77
For a list of articles on career opportunities, see the Related Articles in the Careers article
- Job** [Biblical figure]
Job, Book of J: 129
- Job, Book of** [Old Testament] J: 129
- Job bank**
Employment Service, United States E: 264
- Job Corps** [U.S.] J: 129
- Job discrimination**
Civil rights (Major changes in the field of civil rights) C: 610
Sexual harassment S: 337
- Job factory**
Factory (Kinds of factories) F: 5
- Job fair**
Careers *picture on C: 214*
- Job-lot factory**
Factory (Kinds of factories) F: 5
- Job performance evaluation**
Industrial psychology (Industrial psychologists) I: 245
- Job safety**
Safety (Safety on the job) S: 13
- Job satisfaction**
Industrial psychology (Organizational psychologists) I: 245
- Job shadowing**
Careers (Sources of information) C: 216
- Job training**
Cooperative education C: 1037
- Job Training Partnership Act** [1982]
Poverty (Measures to improve job opportunities) P: 725
Vocational education (Other sources) V: 434;
(The 1900's) V: 435
- Jobber** [work]
Automobile (Selling) A: 960
Clothing (Ready-to-wear clothes) C: 704-705
- Jobs, Steve** [American engineer]
Computer (The personal computer) C: 924c *with picture*
- Job's Daughters** [organization] J: 129
- Jocasta** [Greek mythology]
Oedipus O: 676
- Jochanaan** [opera character]
Opera (*Salome*) O: 807
- Jocho** [Japanese sculptor]
Sculpture (Japan) S: 239
- Jockey** [career]
Horse racing (Thoroughbred horses) H: 363-364; (Jockeys) H: 364 *with picture*;
(History) H: 366
- Jockey Club**
Horse racing (Regulation) H: 365
- Jodelle, Étienne** [French dramatist]
French literature (The Renaissance) F: 519-520
- Jodhpurs** [clothing]
Horse (Clothes for riding) H: 351
- Jodi, Alfred** [Nazi general] J: 130
Nuremberg Trials (The trials) N: 612-613
World War II (Victory in Europe) W: 484
- Jodrell Bank Observatory** [England] J: 130
Lovell, Sir Bernard L: 509
- Joe Turner's Come and Gone** [play by Wilson]
Wilson, August W: 316
- Joel, Book of** [Old Testament] J: 130
- Joersz, E. W.** [American aviator]
Airplane (table) A: 232
- Joe's Flying Circus** [World War II]
Foss, Joseph Jacob F: 421
- Joey** [animal]
Kangaroo (The life of a kangaroo) K: 214 *with picture*
- Joey** [clown]
Clown C: 714
- Joffe, Joseph Jacques Césaire** [French general] J: 130
World War I (The Western Front) W: 455-456;
(The Battle of Verdun) W: 458; (Allied failures) W: 461
- Joffe Falls**
Quebec (Rivers, waterfalls, and lakes) Q: 24
- Joffrey, Robert** [American choreographer]
J: 130
Ballet (Ballet in the United States) B: 53-54
- Joffrey Ballet**
Arpino, Gerald A: 743
Ballet (Ballet in the United States) B: 53-54
Joffrey, Robert J: 130
- Jog Falls** [waterfall, India]
Waterfall (table: Famous waterfalls of the world) W: 143
- Jogaila** *See Jagiello, Wladyslaw in this index*
- Jogging** J: 130
Running R: 520
- Jogues, Saint Isaac** [French missionary] J: 131
- Johannesburg** [city, South Africa] J: 131 *with picture*
- Johansen, Hjalmar** [Norwegian explorer]
Nansen, Fridtjof N: 12
- Johanson, Donald Carl** [American anthropologist] J: 131
- Johansson, Erik** [father of]
Gustav I Vasa G: 443
- John** [antipope]
Pope (table) P: 666
- John** [king of England] J: 131 *with picture*
England (Magna Carta) E: 306
Innocent III (Imperial power) I: 275
Langton, Stephen Cardinal L: 61
Magna Carta M: 53
Parliament (History) P: 174
Philip II [king of France] P: 368
Plantagenet P: 550
- John I** [king of France]
France (table) F: 471
- John I** [king of Kongo]
Nzinga Nkuwu N: 633
- John I** [king of Portugal]
Portugal (Founding the Portuguese nation) P: 693
- John II, the Good** [king of France]
Charles V [of France] C: 381
France (table) F: 471
Poitiers, Battle of P: 603
- John II** [king of Portugal]
Cape of Good Hope C: 188
Columbus, Christopher (Presentation of the plan to Portugal) C: 858
- John III** [pope]
Pope (table) P: 666
- John III** [king of Portugal]
Xavier, Saint Francis X: 543
- John III Sobieski** [king of Poland] J: 132 *with portrait*
- John IV** [king of Portugal]
Portugal (Spanish conquest) P: 694
- John VI** [king of Portugal] J: 132
Portugal (A weakening monarchy) P: 694
Rio de Janeiro (History) R: 346
- John XVI** [antipope]
Pope (table) P: 666
- John XXII** [pope] J: 132
- John XXIII** [antipope] J: 132
- John XXIII** [pope] J: 132
Pope (The papacy today) P: 665 *with picture*
Vatican Council II V: 289
- John, Elton** [British singer] J: 133
- John, Epistles of** [New Testament] J: 133
- John, Gospel of** [New Testament]
Bible (Books of the New Testament) B: 282-283 *with picture*

448 John, Knights of Saint

- Gospels G: 277
New Testament (Books) N: 287
John, Knights of Saint See *Knights of Saint John in this index*
- John, Saint** [apostle] J: 133
James the Greater, Saint J: 28
Jesus Christ (Ministry) J: 106
Revelation, Book of R: 266
- John Adams Building** [Washington, D.C.]
Washington, D.C. map on W: 76
- John Brown's Body** [poem by Benét]
Benét, Stephen Vincent B: 248
"John Brown's Body" [song]
"Battle Hymn of the Republic" B: 172
Brown, John (Harpers Ferry) B: 643-644
- John Bull** [symbol] J: 133 with picture
John Bull's Other Island [play by Shaw]
Irish literature (Drama) I: 432
- John Chrysostom, Saint** [Syrian religious leader] See *Chrysostom, Saint John in this index*
- John D. and Catherine T. MacArthur Foundation** See *MacArthur Foundation in this index*
- John Day Fossil Beds National Monument** [Oregon] J: 133
National Park System (table: National monuments) N: 51
- John F. Kennedy** [ship]
Aircraft carrier (The United States carrier fleet) A: 206
- John F. Kennedy Center for the Performing Arts** See *Kennedy Center for the Performing Arts in this index*
- John F. Kennedy International Airport** [New York City]
New York City (Queens) N: 329-330
- John F. Kennedy Library** [Boston]
Pei, I. M. P: 230 with picture
- John F. Kennedy Space Center** [Florida] See *Kennedy Space Center in this index*
- John Fitzgerald Kennedy National Historic Site** [Massachusetts]
National Park System (table: National historic sites) N: 52-53
- John H. Glenn Research Center** [Cleveland]
Ohio (The mid-1900's) O: 703
- John Hancock Tower** [Boston]
Boston (Back Bay) B: 497 with picture; picture on B: 495
- John Hay Library** [Brown University]
Rhode Island (Libraries) R: 300-301
- John Henry** [legendary figure]
Henry, John H: 188
Folklore (Legends) F: 324
- John Howard Association** J: 133
- John James Audubon Memorial Museum, The**
Kentucky (Museums) K: 277 with picture
- John Lackland** See *John [king of England] in this index*
- John Marshall House**
Virginia (Places to visit) V: 408
- John Martin Reservoir** [Arkansas River]
Colorado (Rivers and lakes) C: 840-841
- John Muir National Historic Site** [California]
National Park System (table: National historic sites) N: 52-53
- John of Gaunt** [English nobleman] J: 134
Chaucer, Geoffrey (Life) C: 388
Lancaster L: 55
Richard II R: 329
- John of Montecorvino** [Italian missionary]
Mongol Empire (European contacts) M: 721
- John of the Cross, Saint** [Christian religious leader]
Spanish literature (The 1500's) So: 758-759
- John P. Robarts Research Library** [Toronto]
Library picture on L: 247
- John Paul I** [pope] J: 134
Pope (table) P: 666
- John Paul II** [pope] J: 134
Galileo (Galileo and the Roman Catholic Church) G: 11-12
Poland (Antigovernment protests) P: 614
Pope P: 660 with pictures; (The daily life of the pope) P: 661; (The papacy today) P: 665 with picture; (table) P: 666
Roman Catholic Church (John Paul II) R: 412
- John Pennakamp Coral Reef State Park** [Key Largo]
Florida (Places to visit) F: 252 with picture
- John Simon Guggenheim Memorial Foundation**
Guggenheim, Meyer G: 422
- John the Baptist, Saint** [Biblical figure] J: 134 with picture
Baptism B: 101
Elizabeth, Saint E: 241
Herod Antipas H: 212
Jesus Christ (Public life) J: 106
New Testament (The public ministry of Jesus) N: 287
Opera (*Salome*) O: 807
- John the Good** See *John II, the Good in this index*
- Johncock, Gordon** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Johnny Appleseed** [American frontiersman]
See *Appleseed, Johnny in this index*
- Johnny Crow's Garden** [book by Brooke]
Brooke, Leonard Leslie B: 639
- Johnny darter** [fish]
Darter picture on D: 38
- Johnny Reb**
Civil War (The enlisted men) C: 620
- Johnny Tremain** [book by Forbes]
Forbes, Esther F: 369
- Johns, Jasper** [American artist] J: 135
Painting (The revival of subject matter) P: 86 with picture
- Johns Hopkins Hospital** [Baltimore]
Hopkins, Johns H: 334
- Johns Hopkins University** J: 135
Hopkins, Johns H: 334
Maryland picture on M: 241
- Johnson, Andrew** [U.S. President] J: 136 with pictures
Grant, Ulysses S. (National hero) G: 315
Impeachment (History) I: 91
Lincoln, Abraham (Election of 1864) L: 323-324
Nebraska (Statehood) N: 112
President of the United States (The decline of the Presidency) P: 768
Reconstruction (Johnson's plan) R: 177; (The impeachment of Johnson) R: 178
Stanton, Edwin McMasters So: 838
Tennessee (table) T: 152; (Building the state) T: 153; (The Civil War) T: 154
United States, History of the (Reconstruction) U: 175
- Johnson, Ban** [American sportsman]
Baseball (table: Hall of Fame) B: 134
- Johnson, Ben** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1971) M: 863
- Johnson, Ben** [Canadian athlete]
Olympic Games (Charges of steroid use) O: 753
- Johnson, Benj. F., of Boone** [pen name]
Riley, James Whitcomb R: 341
- Johnson, Byron I.** [Canadian political leader]
British Columbia (table) B: 627
- Johnson, Cave** [American government official]
Polk, James Knox (table) P: 643
- Johnson, Charles Spurgeon** [American sociologist] J: 142
- Johnson, Daniel** [Canadian political leader]
Quebec (table) Q: 29
- Johnson, Earvin, Jr.** See *Johnson, Magic in this index*
- Johnson, Eliza McCordle** [wife of Andrew Johnson]
First ladies (table) F: 142
Johnson, Andrew (Johnson's family) J: 137
- Johnson, Esther** [friend of]
Swift, Jonathan (His life) So: 1039
- Johnson, Eyvind** [Swedish author]
Nobel Prizes (Literature: 1974) N: 446
- Johnson, Herschel Vespasian** [American political leader] J: 142
- Johnson, Hiram Warren** [American political leader] J: 142
California (Progress as a state) C: 62
Harding, Warren Gamaliel (The smoke-filled room) H: 57
Taft, William Howard (Election of 1912) T: 12
- Johnson, Hugh Samuel** [American government official] J: 143
- Johnson, Jack** [American boxer] J: 143
Boxing picture on B: 534
Jeffries, James Jackson J: 88
- Johnson, James P.** [American pianist] J: 143
Jazz (The 1920's) J: 70
- Johnson, James Weldon** [American poet]
J: 143 with portrait
- Johnson, John Arthur** See *Johnson, Jack in this index*
- Johnson, John Harold** [American publisher]
J: 143
Magazine (History) M: 43-45
- Johnson, John Mercer** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) C: 935 with picture
- Johnson, Joseph** [American political leader]
Virginia (table) V: 417
- Johnson, Judy** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Johnson, Lady Bird** [wife of Lyndon B. Johnson]
First ladies (table) F: 142
Johnson, Lyndon Baines (Marriage) J: 146 with picture
- Johnson, Louis A.** [American government official]
Truman, Harry S. (table) T: 469
- Johnson, Louisa** [wife of John Quincy Adams]
See *Adams, Louisa Johnson in this index*
- Johnson, Luci Baines** [daughter of]
Johnson, Lyndon Baines (Marriage) J: 146
- Johnson, Lynda Bird** [daughter of]
Johnson, Lyndon Baines (Marriage) J: 146
- Johnson, Lyndon Baines** [U.S. President] J: 144 with pictures
Cold War (Soviet-American relations) C: 768
Congress of the United States (Continued struggle for power) C: 948
Democratic Party (The Great Society) D: 128
Great Society G: 349
Kennedy, John Fitzgerald (Steps to the White House) K: 263; (The new President) K: 267; picture on K: 264
President of the United States (The Vietnam War) P: 769
Texas (The mid-1900's) T: 208
United States, History of the (The civil rights movement) U: 192; (The Vietnam War) U: 193
Vice President of the United States (Growth of the vice presidency) V: 353
Vietnam War (The Gulf of Tonkin incident) V: 375
- Johnson, Magic** [American basketball player]
J: 152 with portrait
Basketball picture on B: 154
- Johnson, Marguerite** See *Angelou, Maya in this index*
- Johnson, Michael** [American athlete]
Olympic Games (The recent games) O: 753-754
- Johnson, Paul B.** [American political leader]
Mississippi (table) M: 640
- Johnson, Pauline** [Canadian author] J: 152
Canadian literature (Poetry: 1850-1918) C: 157-158
- Johnson, Philip Cortalyou** [American architect]
J: 152
Architecture (The International Style) A: 630; (Architecture today) A: 632-633; picture on A: 606
- Johnson, Pierre Marc** [Canadian political leader]
Quebec (table) Q: 29; (Recent developments) Q: 32
- Johnson, Randy** [American baseball player]
J: 153
- Johnson, Reverdy** [American government official]
Justice, Department of (table) J: 203
Taylor, Zachary (table) T: 60
- Johnson, Richard L.** [American aviator]
Airplane (table) A: 232
- Johnson, Richard Mentor** [American political leader] J: 153
Vice President of the United States (Election) V: 350; V: 348 with portrait
- Johnson, Robert Wood** [American businessman]
Johnson Foundation J: 154
- Johnson, Samuel** [British author] J: 153
Biography (The 1700's) B: 313
Boswell, James B: 506
Dictionary (Early English dictionaries) D: 194
English literature (The Age of Johnson) E: 319 with picture
Metaphysical poets M: 429
Shakespeare, William (Neoclassical criticism) S: 369
- Johnson, Samuel Ealy, Jr.** [father of]
Johnson, Lyndon Baines (Boyhood) J: 145

- Johnson, Thomas** [American political leader]
Maryland (The Revolutionary War) **M**: 258
Supreme Court of the United States (table)
So: 1000
- Johnson, Tom L.** [American political leader]
Cleveland (Continued growth and progress)
Ci: 667
Progressive movement (Political reforms)
P: 814
- Johnson, Uwe** [German author]
German literature (German literature after
1945) **G**: 142
- Johnson, Virginia Eshelman** [American
researcher]
Masters and Johnson **M**: 297
- Johnson, Walter** [American baseball player]
J: 154
Baseball (The early 1900's) **B**: 135-136; (table:
Hall of Fame) **B**: 134; (table: Modern
major league records) **B**: 137
- Johnson, William** [American jurist]
Supreme Court of the United States (table)
So: 1000
- Johnson, Sir William** [British general] **J**: 154
Brant, Joseph **B**: 564
- Johnson, William Samuel** [American political
leader] **J**: 154
- Johnson County Cattle War** [1892]
Western frontier life in America (Crime)
W: 238
Wyoming (The Johnson County War) **W**: 536;
picture on **W**: 535
- Johnson Foundation** **J**: 154
Foundations (table) **F**: 430
- Johnson grass**
Sorghum (Grassy sorghums) **So**: 596
- Johnson Library** [Austin] *See* Lyndon Baines
Johnson Library *in this index*
- Johnson Publishing Company**
Johnson, John Harold **J**: 143
- Johnson Space Center** [Texas] **J**: 154
Astronaut (Training the astronauts) **A**: 831
Electronics *picture on* **E**: 207
Texas **T**: 184; (Places to visit) **T**: 194 *with pic-
ture*; (The late 1900's) **T**: 208
- Johnson Wax Building** [Racine, Wisconsin]
Architecture (Frank Lloyd Wright) **A**: 629-630
Wright, Frank Lloyd (Later career) **W**: 507
- Johnston, Albert Sidney** [Confederate general]
J: 154
Civil War (The war in the West—1862-1864)
Ci: 629
- Johnston, Franz** [Canadian painter]
Group of Seven **G**: 402
- Johnston, Henry S.** [American political leader]
Oklahoma (The 1920's) **O**: 732
- Johnston, Joseph Eggleston** [Confederate
general] **J**: 154
Civil War (The Atlanta campaign) **Ci**: 632; (The
South surrenders) **Ci**: 633-634
Lee, Robert Edward (Opening campaigns)
L: 178
- Johnston, Philip** [American engineer]
Code talkers **Ci**: 749
- Johnston, Rita** [Canadian political leader]
British Columbia (table) **B**: 627
- Johnston, Samuel** [American political leader]
North Carolina (table) **N**: 490
- Johnston, Serah Bush** [stepmother of]
Lincoln, Abraham (Boyhood) **L**: 312
- Johnstown** [Pennsylvania] **J**: 155
- Johnstown flood** [1889]
Johnstown **J**: 155
- Johnstown Flood National Memorial**
[Pennsylvania]
National Park System (table: National memori-
als) **N**: 54
- JOIDES Resolution** [research ship]
Ocean Drilling Program **O**: 667
- "Join or Die"** [cartoon by Franklin]
Cartoon *picture on* **C**: 265
Franklin, Benjamin (The Plan of Union) **F**: 489
- Joiner** [carpenter]
Carpentry **C**: 247
- Joint** [anatomy] **J**: 155 *with pictures*
Ankle **A**: 515 *with diagram*
Ankylosis **A**: 516
Arthritis **A**: 751 *with diagrams*
Arthroscopy **A**: 753 *with picture*
Dislocation **D**: 235
Hip **H**: 238 *with diagram*
Human body (The skeletal system) **H**: 418
Knee **K**: 345
Orthopedics **O**: 860
- Rheumatism **R**: 291
Rheumatology **R**: 291
Shoulder **S**: 439 *with picture*
Sprain **So**: 805
- Joint administration** [political unit]
Commonwealth of Nations (Dependencies)
Ci: 876
- Joint and survivorship annuity**
Insurance (Annuities) **I**: 311
- Joint bar** [construction]
Railroad (Tracks) **R**: 108-109
- Joint Chiefs of Staff** **J**: 155
Defense, Department of (Organization) **D**: 87
- Joint command**
Air Force, United States (Combat commands)
A: 192-193
- Joint committee**
Congress of the United States (Working in
committees) **Ci**: 944
House of Representatives (The speaker and
other leaders) **H**: 387; (Committees)
H: 387
State government (Organization) **So**: 862-864
- Joint Global Ocean Flux Study**
Atlantic Ocean (New techniques) **A**: 867
Marine biology (Biological oceanographers)
M: 205
- Joint Institute for Nuclear Research**
Bohrium **B**: 438
Dubnium **D**: 371
Hassium **H**: 83
Rutherfordium **R**: 569
Seaborgium **S**: 264
Transuranium element **T**: 401
- Joint operation** [warfare]
Army **A**: 724
- Joint session**
Congress of the United States (When
Congress meets) **Ci**: 943 *with picture*
- Joint staff**
Joint Chiefs of Staff **J**: 155
- Joint-stock company** **J**: 156
Colonial life in America (Why the colonists
came to America) **Ci**: 787
- Joint tenancy** [law] **J**: 156
- Joinville, Jean de** [French author]
French literature (Early prose) **F**: 519
- Joist**
Building construction (Beams, girders, and
columns) **B**: 682-683
House (The frame) **H**: 382 *with diagram*
- Jojoba** [plant] **J**: 156
- Joke**
Humor **H**: 435
- Jokul** [Norse mythology]
Jack Frost **J**: 2
- Jola** [people]
Gambia (People) **G**: 18
- Jolie, Angelina** [American actress]
Motion picture (Best performance by an
actress in a supporting role: 1999) **M**: 863
- Joliet Junior College**
Community college **Ci**: 898
- Joliot-Curie, Frédéric** [French physicist]
Joliot-Curie, Irène **J**: 156
Nobel Prizes (Chemistry: 1935) **N**: 442
- Joliot-Curie, Irène** [French physicist] **J**: 156
Nobel Prizes (Chemistry: 1935) **N**: 442
- Jolliet, Louis** [French-Canadian explorer] **J**: 156
Exploration (The French and English in North
America) **E**: 446-447 *with map*
Illinois (French and British control) **I**: 72
Iowa (Exploration and early settlement) **I**: 393
Marquette, Jacques **M**: 217
Michigan (French exploration and settlement)
M: 508
Missouri River (History) **M**: 575-576
- Jolly Roger** [flag]
Pirate (How pirates lived) **P**: 494 *with picture*
- Jolson, Al** [American singer] **J**: 157
Communication (Famous first words) **Ci**: 884
- Jolthead porgy** [fish]
Porgy **P**: 679 *with picture*
- Joly, Henri-G.** [Canadian political leader]
Quebec (table) **Q**: 29
- Jomon** [Japanese history]
Japan (Ancestry) **J**: 35; (Early days) **J**: 52
- Jonah** [Biblical figure]
Jonah, Book of **J**: 157
- Jonah, Book of** [Old Testament] **J**: 157
- Jonathan, Brother** [U.S. history] *See* Brother
Jonathan *in this index*
- Jonathan, Leabua** [Lesotho political leader]
Lesotho (History) **L**: 207-208
- Jonathan apple**
Apple (table) **A**: 571 *with picture*
- Joncaire, Daniel de** [French frontiersman]
Buffalo (History) **B**: 678
- Jones, Abselom** [American religious leader]
J: 157
African Methodist Episcopal Church **A**: 136t
- Jones, Alan** [Australian race driver]
Automobile racing (table: Grand Prix world
champions) **A**: 980
- Jones, Ben A.** [American horse trainer]
Kentucky Derby **K**: 297
- Jones, Bobby** [American golfer] **J**: 157
- Jones, Brian** [British musician]
Rolling Stones **R**: 403
- Jones, Brian** [British pilot]
Balloon (Long-distance balloon flights) **B**: 62
- Jones, Casey** [American railroad engineer]
J: 157
Tennessee (Places to visit) **T**: 144
- Jones, Christopher** [English navigator]
Mayflower **M**: 327
- Jones, David C.** [American military leader]
Joint Chiefs of Staff (table) **J**: 156
- Jones, Davy** [legendary figure] **J**: 158
- Jones, Donald F.** [American geneticist]
Corn (Development of hybrids) **Ci**: 1063
- Jones, Elizabeth Orton** [American artist]
Caldecott Medal (table: 1945) **C**: 26
- Jones, Ernest** [British psychoanalyst] **J**: 158
Shakespeare, William (Modern critics) **S**: 369
- Jones, Frederick McKinley** [American inventor]
Meat packing (History) **M**: 352
- Jones, Inigo** [English architect] **J**: 158 *with pic-
ture*
Architecture (Later Renaissance architecture)
A: 621-622
England (The arts) **E**: 298-299
Masque **M**: 268
- Jones, J. Walter** [Canadian political leader]
Prince Edward Island (table) **P**: 791
- Jones, James C.** [American political leader]
Tennessee (table) **T**: 152
- Jones, James Earl** [American actor]
Drama *picture on* **D**: 341
- Jones, Jennifer** [American actress]
Motion picture (Best performance by an
actress: 1943) **M**: 862
- Jones, Jesse Holman** [American government
official]
Commerce, Department of (table) **Ci**: 871
- Jones, Jim** [American public figure]
Cult (Modern cults) **Ci**: 1185
Guyana (History) **G**: 446-447
- Jones, Jo** [American musician]
Basie, Count **B**: 140
- Jones, John Luther** *See* Jones, Casey *in this
index*
- Jones, John Paul** [American military leader]
J: 158
Revolutionary War in America (Fighting at sea)
R: 283
- Jones, Kenney** [British musician]
Who, The **W**: 296
- Jones, LeRoi** [American author] *See* Baraka,
Amiri *in this index*
- Jones, Marion** [American athlete]
Olympic Games *picture on* **O**: 748
- Jones, Mary Harris** [American social reformer]
J: 159 *with portrait*
- Jones, Parnelli** [American race driver]
Automobile racing (table: Indianapolis 500 win-
ners) **A**: 980
- Jones, Paula Corbin** [American public figure]
Clinton, Bill (Domestic events) **Ci**: 682f
- Jones, Quincy** [American musician] **J**: 159 *with
portrait*
- Jones, Roy, Jr.** [American boxer]
Boxing *picture on* **B**: 535
- Jones, Samuel M.** [American political leader]
Progressive movement (Political reforms)
P: 814
- Jones, Shirley** [American actress]
Motion picture (Best performance by an
actress in a supporting role: 1960) **M**: 863
- Jones, Steve** [American golfer]
Golf (U.S. Open) **G**: 265
- Jones, Tom** [literary figure] *See* Tom Jones *in
this index*
- Jones, Tommy Lee** [American actor]
Motion picture (Best performance by an actor
in a supporting role: 1993) **M**: 863
- Jones, William** [American political leader]
Madison, James (table) **M**: 35

- Jones Act** [1916]
Wilson, Woodrow (Foreign affairs) W: 323
- Jones Act** [1917]
Puerto Rico (United States rule) P: 883
- Jonestown** [Guyana]
Cult (Modern cults) Ci: 1185
Guyana (History) G: 446-447
- Jonker**
Diamond (Famous diamonds) D: 182
- Jonquil** [plant] J: 159 *with picture*
Daffodil D: 3
Narcissus N: 20
- Jonson, Ben** [English dramatist] J: 159
Drama (Elizabethan playwrights) D: 331-332
English literature (Jacobean drama) E: 317
Humor (Puns) H: 435
Masque M: 268
Shakespeare, William (Shakespearean criticism) S: 369
- Joplin, Janis** [American singer]
Rock music (Growing social significance) R: 379
- Joplin, Scott** [American composer] J: 160
- Joppa** [former name]
Jaffa J: 20
- Jordan J: 160** *with pictures and maps*
Arabs picture on A: 584
Flag picture on F: 203
Jerusalem (British rule) J: 101
Middle East (Palestine) M: 533
Palestine Liberation Organization (History) P: 106
West Bank (History and government) W: 200
- Jordan, Barbara Charline** [American political leader] J: 166
- Jordan, Ernst Pascual** [German physicist] J: 166
- Jordan, Hamilton** [American government official]
Carter, Jimmy (The national scene) C: 257
- Jordan, I. King** [American educator]
Deafness (Deaf community and culture) D: 59-60
- Jordan, Michael** [American basketball player] J: 166
Basketball picture on B: 154
- Jordan, Vernon Eulion, Jr.** [American social reformer] J: 166
- Jordan River** [Israel-Jordan] J: 167
Dead Sea D: 55
Israel (The Rift Valley) I: 482-484
Jordan (The Jordan River Valley) J: 163
River (table) R: 352
West Bank (Land and climate) W: 199
- Joropo** [dance]
Venezuela (Recreation) V: 301
- José, Don** [opera character]
Opera (*Carmen*) O: 802
- Joseph** [husband of Mary] J: 167
Jesus Christ (The Nativity) J: 104 *with picture*
- Joseph** [son of Jacob] J: 167
Jews (Beginnings) J: 120-121
Judah J: 178
- Joseph I** [Holy Roman emperor]
Succession wars (The War of the Spanish Succession) So: 950
- Joseph II** [Holy Roman emperor]
Roman Catholic Church (Gallicanism) R: 409
- Joseph, Chief** [American Indian chief] J: 168 *with portrait*
Indian wars (The Nez Perce War) I: 194
Montana (Indian fighting) M: 758-760 *with picture*
Nez Perce Indians N: 391
Oregon (Indian wars) O: 846-848
- Joseph and His Brothers** [book by Mann]
Mann, Thomas M: 164
- Joseph Andrews** [book by Fielding]
Fielding, Henry (His novels) F: 94
- Joseph of Arimathea** [Biblical figure] J: 168
Holy Grail (Early history of the Grail) H: 298;
(The search for the Grail) H: 298
Jesus Christ (The Crucifixion) J: 108-109
Tomb T: 326
- Josephine** [wife of Napoleon I] J: 168 *with portrait*
Napoleon I (Marriage) N: 15 *with picture*;
(Divorce and remarriage) N: 17
- Josephism** [religion]
Pope (The 1700's and 1800's) P: 665
- Josephson, Brian** [British physicist]
Nobel Prizes (Physics: 1973) N: 441
- Josephus, Flavius** [Jewish historian] J: 169
- Joshua** [Biblical figure] J: 169
- Amalekites A: 399
Jericho J: 93
Jordan River J: 167
- Joshua tree**
Joshua Tree National Park J: 169
Tree picture on T: 430
Yucca Y: 575
- Joshua Tree National Park** [California] J: 169
National Park System (table: National parks) N: 48
Tree picture on T: 430
- Josiah** [king of Judah] J: 169
- Joslyn Art Museum**
Nebraska (Museums) N: 98
- Jospin, Lionel Robert** [French government official]
France (Recent developments) F: 478
- Joss, Addie** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Jost van Dyke** [island]
Virgin Islands, British V: 397
- Jostedal Glacier** [Norway]
Icecap I: 19
- Jotunheim** [Norse mythology]
Mythology (The construction of the world) M: 984-985
- Jouett, Jack** [American patriot] J: 169
- Jouffroy d'Abbans, Marquis Claude de** [French shipbuilder]
Ship (The first steamboats) S: 411
- Jouhaux, Léon** [French statesman]
Nobel Prizes (Peace: 1951) N: 447
- Joule** [unit of measure] J: 169
British thermal unit B: 632
Calorie C: 70
Energy (Units of work and energy) E: 274-275
Power P: 727
Work W: 405
- Joule, James Prescott** [British physicist] J: 169
Heat (Heat and energy) H: 155
Mayer, Julius Robert von M: 327
Physics (Developments in the 1800's) P: 440
Science (Scientific advances of the 1800's) S: 200
- Joule-Thomson effect**
Liquid air (Making liquid air) L: 347
- Joule-Thomson expansion**
Liquid air (Making liquid air) L: 347
- Joule's Law** [physics]
Joule, James Prescott J: 169
- Journal** [book by Goncourt]
French literature (Naturalism) F: 522
- Journal** [literature]
Diary D: 184
- Journal bearing** [machine]
Bearing B: 188 *with diagrams*
- Journal box**
Railroad (Rolling stock) R: 107-108
- Journal de Montréal, Le** [newspaper]
Quebec (Communication) Q: 28-29
- Journal of a Residence on a Georgian Plantation** [book by Kemble]
Kemble, Fanny K: 258
- Journal of a Tour to the Hebrides** [book by Boswell]
Boswell, James B: 506
- Journal of a Voyage to Lisbon, The** [book by Fielding]
Fielding, Henry (His life) F: 94
- Journal of Negro Education**
Howard University H: 400
- Journal of Religious Thought**
Howard University H: 400
- Journal to Stella** [book by Swift]
Swift, Jonathan (His life) So: 1039
- Journalism J: 170** *with pictures*
See also Magazine; Newspaper *in this index*
Editorial E: 83
Foreign correspondent F: 385
Freedom of the press F: 507
Missouri (Interesting facts) M: 651
News service N: 379
Pulitzer Prizes (Prizes in journalism) P: 887;
(tables) P: 889
War correspondent W: 27
Writing (Preparing for a writing career) W: 511
- Journalist**
Journalism J: 170 *with picture*; (Careers in journalism) J: 175
See also the list of Related articles in the Journalism article
- Journey of the Magi** [fresco by Gozzoli]
Italy picture on I: 514
- Journey to Parnassus** [poem by Cervantes]
Cervantes, Miguel de (His literary career) C: 363-364
- Journey to the End of the Night** [book by Céline]
Céline, Louis-Ferdinand C: 325
- Journeyman** [labor]
Apprentice A: 575
Guild (Craft guilds) G: 428
Labor movement (Craft guilds) L: 9
- Joust** [combat]
Knights and knighthood (Tournaments) K: 350 *with picture*
Maryland M: 241 *with picture*
- Jove** *See* Jupiter [Roman mythology] *in this index*
- Jovian** [Roman emperor]
Rome, Ancient (table) R: 447
- Jovian planet** [astronomy]
Planet P: 507
- Joyce, James** [Irish author] J: 176
Fable F: 3
Irish literature (James Joyce) I: 432
Novel (New directions in the novel) N: 573-574
- Joyce, William** [British public figure]
Old Bailey O: 740
- Joyeuse Entrée** [Belgian history]
Belgium (The Middle Ages) B: 232-233
- Joyner-Kersey, Jackie** [American athlete] J: 177
- Joystick** [electronic device]
Computer (A joystick) Ci: 915
Video game (How video games work) V: 359
- Juan, Don** [father of]
Juan Carlos I J: 177
- Juan, Don** [literary figure] *See* Don Juan *in this index*
- Juan Carlos I** [king of Spain] J: 177
Franco, Francisco (As dictator) F: 483
Spain (Political changes) So: 751 *with picture*
- Juan Diego, Saint** [Mexican saint] J: 177
- Juan de Fuca, Strait of** [Washington]
Puget Sound P: 886
- Juan Fernández** [islands, Pacific] J: 177
- Juana Inés de la Cruz** [Mexican poet] J: 178
Latin American literature (Colonial literature) L: 111-112
- Juana of Castile** [mother of Charles V]
Maximilian I M: 319
- Juárez** [Mexico] J: 178
- Juárez, Benito Pablo** [Mexican political leader] J: 178
Maximilian M: 319
Mexico (Reform) M: 472; (The French invasion) M: 472
- Juárez Law** [Mexican history]
Juárez, Benito Pablo J: 178
- Juba** [king of Numidia]
Numidia N: 608
- Juba** [city, Sudan]
Sudan (Way of life) So: 953
- Jubba River**
Somalia (Land and climate) So: 589 *with map*
- Jubilee Jim** [nickname]
Fisk, James F: 189
- Jubilee Singers**
Spiritual S: 796
- Juchen** [people]
Manchus M: 135
- Juchereau de Saint Denis, Louis** [French frontiersman]
Louisiana (Exploration and early settlement) L: 497-498
- Judah** [Biblical figure] J: 178
Joseph J: 167
- Judah** [ancient country]
See also Judea *in this index*
David (Early life) D: 45
Jerusalem (Ancient times) J: 100
Jews (The divided kingdom) J: 121 *with map*
Palestine (Early history and settlement) P: 104
- Judah Halevi** [Hebrew poet] *See* Halevi, Judah *in this index*
- Judah Maccabee** [Jewish leader] J: 178
Jerusalem (Ancient times) J: 100
Jews (The Hellenistic period) J: 121
- Judaism** [religion] J: 179 *with pictures*
See also Jews *in this index*
Abraham A: 16
Assumption A: 820
Bar mitzvah B: 102
Bat mitzvah B: 162
Bible B: 279; (The Bible in worship) B: 287
Christianity (Beliefs) C: 524

- Divorce (The divorce rate) D: 254-255
 Education (Religion and early Western education) E: 98
 Fast F: 52
 Feasts and festivals (In Judaism) F: 58
 Heaven H: 161
 High priest H: 228
 Israel (Religion) I: 481
 Jehovah J: 88
 Jerusalem J: 94a; (Holy places) J: 95
 Kabbalah K: 208
 Kosher K: 384
 Marriage (Wedding ceremonies and customs) M: 221
 Old Testament O: 740
 Parochial school P: 178
 Paul, Saint (Paul's letters and ideas) P: 201
 Pharisees P: 354
 Priest P: 776
 Rabbi R: 46
 Religion (How the major religions are organized) R: 218; (Judaism) R: 219 *with picture*
 Resurrection R: 264
 Sabbath S: 2
 Sadducees S: 8
 Saint (Non-Christian saints) S: 29
 Star of David So: 853
 Talmud T: 21
 Ten Commandments T: 132
 World, History of the (Civilizations of southwest Asia) W: 426
Judas Iscariot [apostle] J: 182
 Potter's field P: 715
Judas Maccabaeus See Judah Maccabee in *this index*
Judas tree
 Redbud R: 190
Juddah See Jidda in *this index*
Jude, Epistle of [New Testament] J: 182
Jude, Saint [apostle] J: 182
Jude the Obscure [book by Hardy]
 Hardy, Thomas H: 59
Judea [ancient country] J: 182
 See also Judah [ancient country] in *this index*
 Jerusalem (Roman rule) J: 101
 Jesus Christ *map on* J: 106
 Palestine (Roman rule) P: 104
Judean Hills
 Israel (The Judeo-Galilean Highlands) I: 482
Judge [Jewish history]
 Judges, Book of J: 183
Judge [office] J: 182
 Address, Forms of (Officials of the Commonwealth of Nations) A: 53
 Court Ci: 1101
 Law (Common law systems) L: 132; (How laws are changed) L: 132
 State government (Judicial branch) So: 864
 United States, Government of the (Judges) U: 145
Judge, Thomas L. [American political leader]
 Montana (table) M: 757
Judge advocate general [military officer] J: 183
Judges, Book of [Old Testament] J: 183
Judgment [law] J: 183
 Clerk of court Ci: 662b
Judgment [psychology]
 Ethics (Aristotle) E: 366
Judgment Day
 Resurrection R: 264
Judgment Day [book by Farrell]
 Farrell, James T. F: 48
Judgment of Paris [myth]
 Venus V: 310
Judicial combat
 Duel D: 378
Judicial Committee of the Privy Council
 Supreme Court of Canada (History) So: 997
Judicial Conference of the United States
 J: 183
Judicial Department
 Constitution of the United States (Article III) Ci: 1009
 Justice, Department of J: 202
Judicial methodology
 Supreme Court of the United States
 (Controversy on the court) So: 1001
Judicial oath [law]
 Oath O: 639
Judicial restraint [law]
 Holmes, Oliver Wendell, Jr. (Supreme Court justice) H: 295
Judicial review [law] J: 183
 Constitution Ci: 995
 Constitution of the United States (Article III, Section 2) Ci: 1009
 Government (The U.S. Constitution) G: 286
 Law (Public law) L: 130-131; (Beginnings of U.S. law) L: 136
Marbury v. Madison M: 193
 Marshall, John (Chief justice) M: 230
 Supreme Court of the United States (Authority of the Supreme Court) So: 998
 United States, Government of the (Authority of the courts) U: 141
Judicial Yuan [court]
 Taiwan (Government) T: 15-16
Judiciary Act [1789]
 Ellsworth, Oliver E: 244
 Jefferson, Thomas (The courts) J: 84
 Supreme Court of the United States (How the Supreme Court is organized) So: 998
Judiciary Act [1801]
 Jefferson, Thomas (The courts) J: 84
Judiciary Act [1925]
 Taft, William Howard (Chief justice) T: 12
Judith [Biblical figure] J: 184
Judith [ship]
 Drake, Sir Francis (Early life) D: 321
Judith Mountains
 Montana (Land regions) M: 752
Judith with the Head of Holofernes [painting by Klimt]
 Painting (Symbolism) P: 76 *with picture*
Judo [sport] J: 184 *with pictures*
 Martial arts M: 234
 Olympic Games (Summer Olympic Games) O: 746e-746f
Judo Federation, United States
 Judo (Learning judo) J: 184
Judogi
 Judo (Learning judo) J: 184
Judoka
 Judo (Learning judo) J: 184
Judson, Adoniram [American missionary]
 J: 185
 Baptists (Early history) B: 101
Judson, Clara Ingram [American author]
 Laura Ingalls Wilder Award (table) L: 121
Judson, Whitcomb L. [American inventor]
 Zipper Z: 600
Jugan, Jeanne [French religious leader]
 Little Sisters of the Poor L: 392
Juggernaut [Puri, India] J: 185 *with picture*
Juggling J: 186 *with picture*
Jugnauth, Aneerood [Mauritian political leader]
 Mauritius (History) M: 317
Jugoslavia See Yugoslavia in *this index*
Jugular vein [anatomy] J: 186 *with diagram*
 Human body *diagram on* H: 422
Jugurtha [king of Numidia]
 Numidia N: 608
Juice [drink]
 Wine W: 336
Juilliard, Augustus [American philanthropist]
 J: 186
 Juilliard Musical Foundation J: 186
Juilliard Musical Foundation J: 186
 Juilliard, Augustus J: 186
Juilliard School J: 186
 New York *picture on* N: 296
Jujitsu See Judo in *this index*
Jujutsu See Judo in *this index*
Julenissen
 Christmas (In Denmark, Norway, and Sweden) C: 531
Julgröt
 Christmas (In Denmark, Norway, and Sweden) C: 531
Julia [literary figure]
 Shakespeare, William (*The Two Gentlemen of Verona*) S: 357
Julia Ward Howe [book by Richards]
 Richards, Laura Elizabeth Howe R: 329
Julian [Roman emperor] J: 186
Julian, Percy Lavon [American chemist] J: 187 *with portrait*
Julian calendar J: 187
 Calendar (The Julian calendar) C: 31
 Gregorian calendar G: 387
Juliana [queen of the Netherlands] J: 187 *with portrait*
 Netherlands (Holidays and recreation) N: 141; (Political changes) N: 150
 Ottawa (Annual events) O: 873
 Wilhelmina W: 306
Juliet [literary figure]
 Shakespeare, William (*Romeo and Juliet*) S: 358
Juliette Low World Friendship Fund
 Girl Scouts (History) G: 200
Julio-Claudian emperors
 Rome, Ancient (The height of the empire) R: 446-447
Julius I, Saint [pope]
 Pope (table) P: 666
Julius II [pope] J: 187
 Michelangelo (Early life) M: 483-484; (The Sistine Chapel) M: 484; (The tomb of Julius II) M: 484
 Pope (table) P: 666
 Swiss Guard So: 1049
Julius III [pope]
 Pope (table) P: 666
Julius Caesar [play by Shakespeare]
 Shakespeare, William *picture on* S: 344; (*Julius Caesar*) S: 360
 Blank verse B: 398
 Caesar, Julius (Assassination) C: 13
Julius Nepos [Roman emperor]
 Rome, Ancient (table) R: 447
Jultomten
 Christmas (In Denmark, Norway, and Sweden) C: 531
July [month] J: 188 *with pictures*
 Julian calendar J: 187
July Ordinances [French history]
 July Revolution J: 190
July Revolution [1830] J: 190 *with picture*
 France (The revolutions of 1830 and 1848) F: 474
Jumada I [month]
 Calendar (The Islamic calendar) C: 29
Jumada II [month]
 Calendar (The Islamic calendar) C: 29
Jumanji [book by Van Allsburg]
 Literature for children *picture on* L: 370
Jumbo [elephant]
 Elephant E: 226
Jumbo jet [airplane]
 Aviation (Aircraft manufacturing) A: 984; *picture on* A: 983
Jumhuri Tojikiston [country, Asia] See Tajikistan in *this index*
Jumna River [India] See Yamuna River in *this index*
Jump shot
 Basketball (Changes in the game) B: 151-152
 Luisetti, Hank L: 516
Jumping
 Frog (Legs) F: 536
Jumping bean [toy] J: 190 *with pictures*
Jumping cholla cactus [plant]
 Cactus (Kinds of cactuses) C: 10 *with picture*
Jumping competition
 Horse (Jumping) H: 357 *with picture*
 Long jump L: 448
 Track and field (World track and field records) T: 358
Jumping mouse [animal] J: 190 *with pictures*
Jumping spider
 Spider (Jumping spiders) So: 787 *with picture*; (table) So: 790; *pictures on* So: 783, So: 785, So: 787
Junco [bird] J: 191 *with picture*
Junction [electronics]
 Semiconductor (Using doped crystals) S: 292
 Thermocouple T: 253
 Transistor (Transistor materials) T: 372
Junction [road]
 Road (Bypasses) R: 358
June [month] J: 192 *with pictures*
June Bug [airplane]
 Airplane (Other pioneer planes and fliers) A: 233 *with picture*
 Curtiss, Glenn Hammond Ci: 1199
June War [1967]
 Arab-Israeli conflict (The 1967 war) A: 582a
Juneau [city, Alaska] J: 194 *with picture*
 Alaska A: 282 *with picture*
Juneau, Solomon [American settler]
 Milwaukee M: 558; (Early development) M: 561
Junebug [insect] J: 194 *with picture*
 Antennae *picture on* A: 544
 Beetle (Scarabs) B: 217
 Insect (Hearing) I: 290-291; *picture on* I: 283
Juneteenth
 June J: 192
Jung, Carl Gustav [Swiss psychologist] J: 194 *with portrait*

Extrovert E: 459
 Freud, Sigmund (His life) F: 530
 Introvert I: 353
 Mythology (Mythology and the individual) M: 988
Jungfrau [mountain, Switzerland] J: 195
 Alps *picture on* A: 385
 Mountain (table) M: 894 *with diagram*
Jungle J: 195
 Indian, American (Indians of the Tropical Forest) I: 175
Jungle, The [book by Sinclair]
 Consumerism (Beginnings of consumerism) Ci: 1019
 Roosevelt, Theodore (Domestic problems) R: 470
 Sinclair, Upton S: 468
Jungle Book, The [book by Kipling]
 Kipling, Rudyard (Kipling in America) K: 334
Jungle fowl [bird] *See* Junglefowl *in this index*
Jungle music [jazz sound]
 Ellington, Duke E: 242
Junglefowl [bird] J: 195 *with picture*
Junior Achievement [organization] J: 196
Junior bantamweight [boxing]
 Boxing (table) B: 530
Junior Chamber of Commerce
 Jaycees J: 67
Junior Citizens [former name]
 Jaycees J: 67
Junior college *See* Community college *in this index*
Junior featherweight [boxing]
 Boxing (table) B: 530
Junior flyweight
 Boxing (table) B: 530
Junior Girl Scouts
 Girl Scouts (Junior Girl Scouts) G: 197
Junior high school J: 196
 Library (Middle school and junior high school libraries) L: 244-245
 School (Junior high schools) S: 181; (High schools) S: 181
Junior Leaders [scouts]
 Girl Scouts (Senior Branches) G: 199
Junior League [baseball]
 Little League Baseball L: 391
Junior Leagues [organizations] J: 196
Junior lightweight
 Boxing (table) B: 530
Junior middleweight
 Boxing (table) B: 530
Junior Order Knights of Pythias
 Knights of Pythias K: 352
Junior welterweight
 Boxing (table) B: 530
Juniper [shrub] J: 196 *with picture*
 Tree *pictures on* T: 425
Junipero Serra *See* Serra, Junipero *in this index*
Junius [month]
 Calendar (The Romans) C: 30
Junk [ship] J: 197 *with picture*
 Ship (Sailing ships in the 1900's) S: 411 *with picture*
 Transportation (Water transportation) T: 384-385; *picture on* T: 388
Junk bond
 Bond (Bond ratings) B: 454
Junkers [airplane]
 Airplane (World War I [1914-1918]) A: 234-235; (The golden age) A: 235; *picture on* A: 232
Junkers [German history] J: 197
Junkers, Hugo [German inventor]
 Airplane (World War I [1914-1918]) A: 234
Junket
 Congress of the United States (Congressional travel) Ci: 947
Juno [Roman mythology] J: 197
See also Hera *in this index*
 June J: 192
 Mythology (table) M: 980; (Roman divinities) M: 981
Juno I
 Rocket (The space age) R: 391
Juno and the Paycock [play by O'Casey]
 O'Casey, Sean O: 646
Junta [government] J: 197
 Chile (Independence) C: 468; (Marxism and military rule) C: 470
Junta de Defensa Nacional [Spanish history]
 Spanish Civil War (Rebellion leads to civil war) So: 756a
Junto [U.S. history]

Adult education (The colonial period) A: 69
Jupiter [planet] J: 198 *with pictures*
 Astronomy (How the planets move) A: 835
 Callisto C: 68
 Cassini, Giovanni Domenico C: 277
 Europa E: 379
 Galileo (Mature scientific career) G: 11; G: 12
 Ganymede G: 27
 Io I: 370
 Planet P: 507 *with pictures*
 Satellite (Currently active satellites) S: 150a; (table: Satellites of the solar system) S: 150b
 Space exploration (Probes to Jupiter and beyond) So: 710; *picture on* So: 709
Jupiter [rocket]
 Rocket (High-altitude rockets) R: 390-391
 Space exploration *picture on* So: 698
 Voyager V: 451
Jupiter [Roman mythology] J: 201
See also Zeus *in this index*
 Diana D: 183
 God (Cosmic Gods) G: 243
 Juno J: 197
 Mythology (table) M: 980; (Roman divinities) M: 981; (Frazer's theory) M: 986-987
 Quirinal Hill Q: 43
 Rx R: 46
 Thursday T: 273
 Venus V: 310
Juppé, Alain [French political leader]
 France (Socialists win power) F: 478
Jure [canton]
 Switzerland (After the wars) So: 1061
Jura [mountains, Europe] J: 201
 Switzerland (The Jura Mountains) So: 1054
Jurassic Park [film]
 Motion picture (The computer revolution) M: 872 *with picture*
Jurassic Period [geology]
 Dinosaur (Kinds of dinosaurs) D: 206b
 Earth (table) E: 30; *map on* E: 31
 Forest *picture on* F: 398
 Prehistoric animal (Birds) P: 738; (table) P: 739
Jurchen [people]
 Manchus M: 135
Jurgen [book by Cabell]
 Cabell, James Branch C: 3
Jurisdiction [law]
 Government (Elements of government) G: 282
Jurisdictional strike [labor]
 Labor movement (Handling labor disputes) L: 6-7
 Strike (Kinds of strikes) So: 928
 Taft-Hartley Act T: 13
Jurisprudence
 Law (Ancient Roman law) L: 133
Jurisprudence, Doctor of [degree]
 Law (Law education) L: 138
 Lawyer L: 147
Jurist *See* Judge [office] *in this index*
Juror [law]
 Jury (Petit juries) J: 202
Juruá River [river, Brazil]
 Amazon River (The course of the Amazon) A: 403
Jury [law] J: 201
See also Trial *in this index*
 Constitution of the United States (Article III, Section 2) Ci: 1009-1010; (Amendment 6) Ci: 1012; (Amendment 7) Ci: 1012
 Court (How courts work) Ci: 1101
 England (Struggles for power) E: 305
 Grand jury G: 308
 Henry II [of England] H: 185
 Judge J: 182
 Magna Carta (Promises in the charter) M: 53
Jus civile [Roman Empire]
 Law (Ancient Roman law) L: 133-134
Jus gentium [Roman Empire]
 Law (Ancient Roman law) L: 133-134
Jus sanguinis [law]
 Citizenship (Birth) Ci: 570
 Nationality N: 63
Jus soli [law]
 Citizenship (Birth) Ci: 570
 Nationality N: 63
Just, Ernest Everett [American biologist] J: 202
Just Around the Corner [film]
 Temple, Shirley *picture on* T: 131
Just So Stories [book by Kipling]
 Kipling, Rudyard (Later career) K: 334
Just war
 War (Ethical and legal aspects of war) W: 24

Justice [office]
 Court of appeals Ci: 1105
 Judge J: 182
 Supreme Court of the United States (Membership) So: 998; (table) So: 1000
Justice [philosophy]
 Ethics (Plato) E: 366
 Law L: 130
Justice [play by Galsworthy]
 Galsworthy, John G: 17
Justice, Department of [U.S.] J: 202 *with picture*
 Antitrust laws A: 560
 Federal Bureau of Investigation (Criminal investigation) F: 62
 Immigration and Naturalization Service I: 86
 Police (Federal law enforcement agencies) P: 622
 Washington, D.C. *map on* W: 76
Justice, Minister of [office]
 Attorney general A: 880
 Canada, Government of (The Cabinet) C: 132; *diagram on* C: 137
Justice, Palace of [Paris]
 Paris (Famous buildings) P: 163-164 *with map*
Justice of the peace [office] J: 203
 Breach of the peace B: 588
Justice Statistics, Bureau of [U.S.]
 Police (Federal law enforcement agencies) P: 622
Justicialist Party
 Argentina (Politics) A: 647
Justifiable homicide
 Homicide H: 305
Justification [typography]
 Linotype (How the linotype works) L: 338
Justification by faith [religion]
 Luther, Martin (Justification by faith) L: 527
 Paul, Saint (Paul's letters and ideas) P: 201
 Reformation (Martin Luther) R: 197
Justin I [Byzantine emperor]
 Justinian I J: 204
Justin the Martyr, Saint [Christian author]
 J: 204
Justine [book by Durrell]
 Durrell, Lawrence D: 389
Justinian I [Byzantine emperor] J: 204
 Byzantine Empire (The empire under Justinian I) B: 754; *picture on* B: 752
 Clothing *picture on* Ci: 698
 Istanbul (History) I: 491
 Italy (The Middle Ages) I: 513
 Justinian Code J: 204
 Law (Civil law systems) L: 132
 Plato (Plato's place in Western thought) P: 569
 Rome (Early days) R: 434
 Theodora T: 252
 World, History of the (The Byzantine Empire) W: 434
Justinian Code [Roman law] J: 204
 Byzantine Empire (The empire under Justinian I) B: 754
 Civil law Ci: 607
 Justinian I J: 204
 Law (Civil law systems) L: 132
 Library (Medieval collections) L: 259
 World, History of the (The Byzantine Empire) W: 434
Jute [fiber] J: 204
 Materials (Biological materials) M: 300d
 Rope (Natural-fiber rope) R: 476
Jute [plant]
 Jute J: 204
 Bangladesh (Agriculture) B: 84 *with picture*
Jutes [ancient people] J: 204
 Anglo-Saxons A: 464 *with map*
 England (The Germanic invasions) E: 304
Jutland [region]
 Denmark D: 132; (The land) D: 137 *with picture and map*
 Jutes J: 204
Jutland, Battle of [1916] J: 204
 Battleship (The modern battleship) B: 172
 Jellicoe, John Rushworth J: 89
 World War I (The war at sea) W: 460
Juvenal [Roman poet] J: 205
 Satire S: 150h
Juvenalian satire
 Satire S: 150h
Juvenile [law]
 Juvenile delinquency J: 205
Juvenile correctional institution
 Prison (Juvenile correctional institutions) P: 806

Juvenile court [law] J: 205
Minor M: 608

Juvenile delinquency [law] J: 205
Adolescent (Delinquency) A: 64
Juvenile court J: 205
Reformatory R: 199

Juvenile Delinquent Acts [1908]
Juvenile court (In Canada) J: 205

Juvenile detention center
Reformatory R: 199

Juvenile officer
Police (Juvenile work) P: 621

Juvenila water [geology]
Mineral water M: 572

JWB [organization]
Jewish community centers J: 119

K

K [letter] K: 207 *with pictures*

K [symbol]
Potassium P: 710

K2 [mountain, Kashmir] K: 208
Mountain (table) M: 894 *with diagram*

K-gui [weapon]
Depth charge D: 152

K. of C. [abbreviation]
Knights of Columbus K: 352 *with picture*

Kaaba [shrine, Mecca] K: 208
Hajj H: 17
Islam (The Five Pillars of Islam) I: 463-464 *with picture*
Mecca (The city) M: 352
Muhammad (His religious life) M: 910
Muslims (Before Muhammad) M: 964

Kabaka [title]
Ganda G: 24
Uganda (History) U: 4

Kabalega Falls [Uganda]
National park (table) N: 42f
Nile River *picture on* N: 423

Kabat, Elvin A. [American biochemist]
Immune system (Further breakthroughs) I: 88d

Kabbah, Ahmad Tejan [Sierra Leone political leader]
Sierra Leone (History) S: 452

Kabbalah [religion] K: 208
Hebrew literature (Medieval works) H: 162
Jews (Jews in Christian Europe) J: 122-123

Kabila, Joseph [Congolesse political leader]
Congo (Kinshasa) (National government) Ci: 940; (Recent developments) Ci: 940e

Kabila, Laurent Désiré [Congolesse political leader]
Congo (Kinshasa) (National government) Ci: 940; (The fall of Mobutu) Ci: 940e

Kabotie, Fred [American painter]
Indian, American *picture on* I: 169

Kabuki [drama]
Drama (Japan) D: 336-337 *with picture*
Dance (Asian theatrical dance) D: 30
Japan (Theater) J: 43 *with picture*
Japanese literature (The Tokugawa period) J: 62

Kabul [city, Afghanistan] K: 208
Afghanistan A: 92 *with picture*
City *picture on* Ci: 575

Kabyle [people]
Berbers B: 256

Kachin [people]
Myanmar (Early days) M: 970d

Kachina [ceremony] K: 208
Indian, American (Ceremonies) I: 148; *picture on* I: 169
Mask (Ceremonial masks) M: 263-264
Pueblo Indians (Early life) P: 871

Kachina [doll]
Kachina K: 208
Doll (Doll festivals and customs) D: 287
Hopi Indians H: 333
Indian, American *picture on* I: 168
Sculpture (The European impact) S: 244 *with picture*
United States *picture on* U: 116

Kachina mask
Indian, American *picture on* I: 167

Kaczynski, Theodore J. [American terrorist]
Terrorism (Terrorism in the 1900's) T: 179

Kádár, János [Hungarian political leader] K: 208

Hungary (Beginnings of change) H: 448

Kadazan Harvest Festival
May M: 320

Kaddafi, Muammar Muhammad al- *See* Qadhafi, Muammar Muhammad al- *in this index*

Kaddish [prayer]
Judaism (Special occasions) J: 181-182

Kadesh, Battle of [1285 B.C.]
Hittites (History) H: 269
Ramses II R: 134

Kadohadacho Indians *See* Caddo Indians *in this index*

Kadooment Day [holiday]
August A: 886

KADU [political party] *See* Kenya African Democratic Union *in this index*

Kaesong [city, Korea]
Korean War (The truce talks) K: 382

Kaffir [racial term]
South Africa (Arrival of Europeans) So: 617-618

Kaffiyeh [clothing]
Arabs (Clothing) A: 587
Jordan (Way of life) J: 162-163 *with picture*

Kafir [food] K: 209

Kafka, Franz [Czech author] K: 209 *with portrait*
German literature (Expressionism) G: 142
Novel (New directions in the novel) N: 573-574

Kagera River [Africa]
Rwanda (Land) R: 571 *with map*

Kahlo, Frida [Mexican artist] K: 209
Painting (Modern Mexican painting) P: 83-84 *with picture*

Kahn, Louis Isadore [American architect] K: 209

Kahoolawe [island, Hawaii]
Hawaii (Kahoolawe) H: 100

Kahului [city]
Hawaii (Maui) H: 100

Kai-shek, Chiang *See* Chiang Kai-shek *in this index*

Kaibab Plateau [Arizona]
Balance of nature (Upsetting the balance) B: 35

Kaien Island [British Columbia]
Prince Rupert P: 794

Kaieteur Fall
Waterfall (table: Famous waterfalls of the world) W: 143

Kaieteur National Park [Guyana]
National park (table) N: 42g

Kailas, Mount [Tibet]
Himalaya (Peaks) H: 233

Kain [clothing]
Indonesia (Clothing) I: 229

Kaiser [title] K: 210

Kaiser, Georg [German dramatist] K: 210
Drama (Expressionism) D: 339

Kaiser, Henry John [American engineer] K: 210

Kaiser Aluminum and Chemical Corporation
Aluminum (In the United States) A: 396

Kaiser-Frazer Corporation
Kaiser, Henry John K: 210

Kaiser Jeep Corporation
Kaiser, Henry John K: 210

Kaiser Wilhelm Canal [Germany] *See* Kiel Canal *in this index*

Kaiser Wilhelm Memorial Church [Germany]
Berlin (The downtown areas) B: 260-261 *with picture*

Kaiser Wilhelm Society
Max Planck Society for the Advancement of Science M: 318

Kaka [bird]
Parrot (Kinds of parrots) P: 179

Kakadu National Park [Australia]
National park (Australia) N: 42b; (table) N: 42f

Kakiamon porcelain
Porcelain (Oriental porcelain) P: 676

Kala-azar [disease] K: 210

Kalaallit Nunaat [official name] *See* Greenland *in this index*

Kalahari Desert [region, Africa] K: 210 *with picture and map*
Botswana (Land and climate) B: 511-512 *with picture*
San S: 83
South Africa (The Namib and Kalahari deserts) So: 615 *with map*

Kalahari Gamsbok National Park [South Africa]
National park (South Africa) N: 42d; (table) N: 42f

Kalakaua [king of Hawaii]

Hawaii (Growth of constitutional government) H: 106-108

Kalanga [people]
Botswana (People) B: 511

Kalianaale, Jonah Kuhio [American political leader]
Hawaii (Statehood) H: 109

Kalb, Johann [German-American general]
K: 211

Kale [plant] K: 211

Kaleidoscope [toy] K: 211 *with pictures*

Kalevala [poem]
Finland (The arts) F: 112 *with picture*; (Control by Russia) F: 116
Sibelius, Jean S: 444

Kali [Hindu goddess]
Hinduism (Divinities) H: 236 *with picture*
Thug T: 272

Kalidasa [Indian author]
Gupta dynasty (Cultural life under the guptas) G: 442-443
Sanskrit literature (The Classical period) S: 112

Kalimantan [region, Borneo]
Indonesia (The Greater Sunda Islands) I: 233 *with map*
Borneo (The land and its resources) B: 489

Kalina, Al [American baseball player]
Baseball (table: Hall of Fame) B: 134

Kalinga, Conquest of [history of India]
Ashoka A: 769
India (The Mauryan Empire) I: 128-129

Kaliningrad [city, Russia] K: 211

Kallima [insect]
Mimicry M: 561

Kalmar, Union of [1397]
Denmark (A great power) D: 139-140
Sweden (Union with Norway and Denmark) So: 1032-1033

Kalmia [plant]
Mountain laurel M: 898

Kalmuk [people]
Minority group (Minority groups in other countries) M: 610

Kalmus, Herbert T. [American engineer]
Technicolor T: 73

Kalsomina [paint]
Calcimine C: 20

Kalua pig [food]
Hawaii (Food) H: 94

Kamakura [Japan]
Buddhism *picture on* B: 668
Japan (Sculpture) J: 43 *with picture*

Kamakura period [Japanese history] K: 212
Sculpture (Japan) S: 239 *with picture*

Kamchadals [people]
Arctic (Americanoids) A: 639

Kamchatka Peninsula [region, Russia] K: 212
Exploration (The Russians in Siberia) E: 447
Russia (The East Siberian Uplands) R: 541 *with map*

Kameez [clothing]
India (Clothing) I: 117

Kamehameha I [king of Hawaii] K: 212
Hawaii (The kingdom of Hawaii) H: 106 *with picture*
Honolulu (History) H: 322 *with picture*

Kamehameha II [king of Hawaii]
Hawaii (The kingdom of Hawaii) H: 106

Kamehameha III [king of Hawaii]
Hawaii (Schools) H: 94; (Growth of constitutional government) H: 106

Kamehameha IV [king of Hawaii]
Hawaii (Growth of constitutional government) H: 106-108

Kamehameha V [king of Hawaii]
Hawaii (Niihau) H: 102; (Growth of constitutional government) H: 106-108

Kamenev, Lev [Soviet political leader]
Union of Soviet Socialist Republics (Stalin gains power) U: 36

Kamerun [former colony]
British Cameroons B: 611

Kamet, Mount [Asia]
Himalaya (Peaks) H: 233

Kami [religion]
Shinto S: 401

Kamiakin [American Indian chief]
Washington (Territorial days) W: 66

Kamikaze [pilot] K: 212
World War II (The liberation of the Philippines) W: 489 *with picture*

Kamloops [British Columbia] K: 212
British Columbia (Places to visit) B: 620

Kampala [Uganda] K: 212

Uganda *picture on* U: 3
Kampong [district]
 Jakarta (The city) J: 22
 Malaysia (Way of life) M: 98c
Kampuchea See Cambodia *in this index*
Kana
 Japanese language J: 61
Kanaks [people] See Melanians *in this index*
Kanamori, Hiroo [Japanese seismologist]
 Moment magnitude M: 697
Kanawha
 West Virginia (Civil War and statehood)
 W: 226-228
Kanawha River [West Virginia] K: 212
Kanchenjunga, Mount See Mount
 Kanchenjunga *in this index*
Kandahar [Afghanistan] K: 212
Kandel, Eric Richard [American biologist]
 Nobel Prizes (Physiology or medicine: 2000)
 N: 445
Kandinsky, Wassily [Russian painter] K: 213
with picture
 Painting (Expressionism) P: 78-79 *with picture*;
 (Nonobjective painting in Russia) P: 79
Kändler, Johann [German sculptor]
 Dresden china D: 347 *with picture*
Kane, Paul [Canadian painter] K: 213
 Indian, American *pictures on* I: 154, I: 155,
 I: 162, I: 166
 Minnesota *picture on* M: 603
Kanem [former empire] K: 213
 Nigeria (Early kingdoms) N: 417
K'ang [bed]
 Furniture (China) F: 571
Kang Rimpoche [mountain, Tibet]
 Himalaya (Peaks) H: 233
Kanga [garment]
 Tanzania (Clothing) T: 32
Kangaba [former state]
 Sundiata Keita So: 990
Kangaroo [animal] K: 213 *with pictures*
 Animal *picture on* A: 477
 Australia (Native animals) A: 913 *with picture*;
picture on A: 916
 Conservation (Australia) Ci: 989
Kangaroo apple [plant]
 Solanum So: 576
Kangaroo court [U.S. history] K: 215
Kangaroo rat [animal] K: 215 *with picture*
 Animal *picture on* A: 482
 Jerboa J: 92
Kanha National Park [India]
 National park (table) N: 42f
Kania, Stanisław [Polish political leader]
 Poland (Antigovernment protests) P: 614
Kanishka [Asian ruler] K: 215
Kankan Mousa [Mali ruler] See Mansa Musa *in*
this index
Kanner, Leo [American psychiatrist]
 Autism A: 941
Kannon Temple
 Tokyo (Shrines and temples) T: 316
Kano, Jigoro [Japanese sportsman]
 Judo (History) J: 185
Kano school [Japanese history]
 Painting (Japanese painting) P: 47
Kanpur [India] K: 215
Kansa Indians [American Indians] K: 215
 Kansas K: 216
 Kansas City [Missouri] (History) K: 243
Kansai
 Japanese language J: 61
Kansai International Airport [Osaka]
 Japan (Transportation) J: 51-52
Kansan ice age [geology]
 Ice age (Evidence of ice ages and their cli-
 mates) I: 6-7
Kansas K: 216 with pictures and maps
 Brown, John (The abolitionist) B: 643
 Buchanan, James (The struggle over slavery)
 B: 660
 Kansas-Nebraska Act K: 243
 Missouri (The Civil War) M: 671
 United States, History of the (Social disorder)
 U: 174
See also the list of Related Articles in the
Kansas article
Kansas, University of K: 240
 Kansas (Museums) K: 221 *with picture*
Kansas City [Kansas] K: 240 *with picture*
Kansas City [Missouri] K: 240 *with picture and*
map
 Pendergast, Thomas Joseph P: 236
Kansas City Board of Trade

Wheat (Buying and selling wheat) W: 274
Kansas City Chiefs
 Football (National Football League) F: 364
Kansas City Royals
 Baseball (table) B: 130
Kansas City Star
 Nelson, William Rockhill N: 123
Kansas Cosmosphere and Space Center
 [Hutchinson]
 Kansas (Places to visit) K: 226 *with picture*
Kansas-Nebraska Act [1854] K: 243
 African Americans (The deepening division
 over slavery) A: 136f-136g *with picture*
 Civil War (The Kansas-Nebraska Act) Ci: 616;
 (Developments in the political party sys-
 tem) Ci: 616
 Democratic Party (The slavery issue) D: 125
 Missouri Compromise M: 674
 Nebraska (Territorial days) N: 112
 Pierce, Franklin (The Kansas-Nebraska Act)
 P: 456
 Popular sovereignty P: 672
 Republican Party (Origin) R: 253
 United States, History of the (The Kansas-
 Nebraska Act) U: 173
 Wisconsin (Statehood) W: 366
Kansas River
 Kansas (Rivers and lakes) K: 228-230 *with pic-
 ture*
Kant, Immanuel [German philosopher] K: 244
 Ethics (Kant) E: 367
 Existentialism (What is existentialism?) E: 436-
 437
 Fichte, Johann Gottlieb F: 90
 Philosophy (Modern philosophy) P: 387-389
 Political science (Liberalism) P: 639
 Schopenhauer, Arthur S: 186
Kantemir, Antioch [Russian author]
 Russian literature (Western influences) R: 559
Kantor, Mickey [American government official]
 Commerce, Department of (table) Ci: 871
Kantorovich, Leonid Vitaliyevich [Russian
 economist]
 Nobel Prizes (Economics: 1975) N: 449
KANU [political party] See Kenya African
 National Union *in this index*
Kanuri [people]
 Niger (People) N: 407-408
Kanzu [garment]
 Tanzania (Clothing) T: 32
Kaolin [clay] K: 244
 Alumina A: 390
 Clay Ci: 658
 Macon M: 25
 Porcelain P: 675
 Pottery (Porcelain) P: 716
Kapiolani Park
 Hawaii (Places to visit) H: 98
Kapital, Das [book by Marx]
 Economics (Karl Marx and Communism) E: 65
 Engels, Friedrich E: 283
 Marx, Karl (Move to London) M: 237; (*Das*
Kapital) M: 237
Kapitsa, Pyotr [Soviet physicist]
 Nobel Prizes (Physics: 1978) N: 441
 Superfluid So: 994
Kaplan, Dora [Russian assassin]
 Lenin, V. I. (Rule by terror) L: 194
Kaplan, Victor [Austrian inventor]
 Turbine (History) T: 498-499
Kaplan turbine
 Turbine (Water turbines) T: 496 *with pictures*
Kapok [fiber] K: 244 *with pictures*
Kapok tree [tree]
 Kapok K: 244 *with picture*
Kaposi's sarcoma [disease]
 AIDS (Opportunistic illnesses) A: 163
Kappa
 Fairy F: 10
Kappa Alpha Society
 Fraternity F: 495
Kappa Alpha Theta
 Sorority So: 597
Kaprow, Allan [American artist]
 Performance art P: 285
Kapuas Range
 Borneo (The land and its resources) B: 489
Kapuas River
 Borneo (The land and its resources) B: 489
Kara Sea [Arctic Ocean] K: 244
Karabiner [tool]
 Climbing (Technical climbing) Ci: 680
Karachi [Pakistan] K: 244
 Muslims *picture on* M: 966

Pakistan P: 92 *with picture*
Kerageorgievic dynasty [Serbian history]
 Peter I P: 323
Karagiye Depression [Kazakhstan]
 Kazakhstan (Land and climate) K: 250b *with*
map
Karajan, Herbert von [Austrian conductor]
 K: 245
Karakoram Range [mountains, India-Pakistan]
 Himalaya H: 233
Karakul [animal] K: 245 *with picture*
 Sheep (Coarse-wooled sheep) S: 382; *picture*
on S: 381
Karakum [desert, Turkmenistan] K: 246
 Turkmenistan (Land and climate) T: 514a *with*
map
Karakum Canal [Turkmenistan]
 Karakum K: 246
Keramenlis, Constantine See Caramanlis,
 Constantine *in this index*
Karami, Rashid [Lebanese political leader]
 Lebanon (War and terrorism) L: 173-174
Karamojong [people]
 Uganda (People) U: 2-3
Karamu [feast]
 Kwanzaa K: 398
Karamu House
 Cleveland (The arts) Ci: 665
Karamzin, Nikolai [Russian author]
 Russian literature (Sentimentalism) R: 560
Karan, Donna [American fashion designer]
 K: 246
Karanga [people]
 Africa (Eastern, central, and southern king-
 doms) A: 132-133
 Zimbabwe (History) Z: 597
Karat [unit of measure]
See also Carat *in this index*
 Carat C: 202
 Gold (Gold alloys) G: 251
 Weights and measures (Miscellaneous
 weights and measures) W: 184
Karate [sport] K: 246 *with picture*
 Martial arts M: 234
Karatepe-Aslantas National Park [Turkey]
 National park (table) N: 42f
Karelia [republic, Russia] K: 247
 Finland (The new republic) F: 117; (World War
 II) F: 117-118
Karelian Isthmus [region, Soviet Union]
 Russo-Finnish wars (The Winter War) R: 565
Karelin, Alexander [Russian wrestler]
 Olympic Games *picture on* O: 749
Karen [people]
 Myanmar (Early days) M: 970d
Karenga, Maulana [American educator]
 Kwanzaa K: 397
Kariba Dam [Zambezi River]
 Zambezi River Z: 588
 Zambia Z: 588
 Zimbabwe (Economy) Z: 596-597
Kariba Lake [Zambia-Zimbabwe]
 Zambia Z: 588
 Zimbabwe (Economy) Z: 596-597
Karimov, Islam A. [Uzbek political leader]
 Uzbekistan (History) U: 254
Kerkadai [beverage]
 Sudan (Food and drink) So: 953
Karl-Marx-Stadt [Germany] See Chemnitz *in*
this index
Karl Marx University [Leipzig]
 Germany (Education) G: 151
Karl of Hohenzollern [German prince] See Carol
I in this index
Karle, Jerome [American chemist]
 Nobel Prizes (Chemistry: 1985) N: 443
Karlfeldt, Erik Axel [Swedish author]
 Nobel Prizes (Literature: 1931) N: 446
Karloff, Boris [British actor] K: 247 *with portrait*
Karlovy Vary [Czech Republic] K: 247
Karlsbad [Czech Republic] See Karlovy Vary *in*
this index
Karlskirche [church]
 Vienna (The city) V: 362
Karma [religion] K: 247
 Hell H: 177
 Hinduism (Reincarnation and karma) H: 237
 Reincarnation R: 208
 Religion (A doctrine of salvation) R: 216
 Sikhism S: 455
 Witchcraft (Role of magic) W: 372
Karnak, Temple of [Egypt]
 Hatshepsut H: 86
 Seti I S: 323

- Sphinx (Egyptian sphinxes) So: 780
Thutmose III T: 274
- Karolinska Institute** [Sweden]
Nobel Prizes N: 439
- Károlyi, Michael** [Hungarian political leader]
Hungary (Between world wars) H: 446
- Karoo** [region, South Africa]
South Africa (The Cape Mountains Region)
So: 615 *with map*
- Karpov, Anatoly** [Russian chess player]
Chess *picture on C: 412*; (World chess championships) C: 414; (History) C: 415
Kasparov, Garry K: 248
- Karrer, Paul** [Swiss chemist]
Nobel Prizes (Chemistry: 1937) N: 442
- Karsh, Yousuf** [Canadian photographer] K: 247
- Karst** [region, Slovenia]
Slovenia (Land and climate) S: 511
- Karstens, Harry P.** [American mountain climber]
Mount McKinley M: 886
- Kart racing** [sport] K: 248
- Karting** [sport]
Automobile racing (Other kinds of racing)
A: 979
- Karzai, Hamid** [Afghan political leader]
Afghanistan (Government) A: 92a; (Recent developments) A: 97 *with picture*
- Kasai** [province, Congo]
Congo (Kinshasa) (Civil disorder) Ci: 940e
- Kasavubu, Joseph** [Congolesse political leader]
Cold War (Africa) Ci: 766
Congo (Kinshasa) (Independence) Ci: 940d-940e
- Kasha** [food]
Buckwheat B: 665
- Kashmir** [region, India-Pakistan] K: 248
India (Independence and partition) I: 133;
(India under Indira Gandhi) I: 133-134;
(Religious and ethnic unrest) I: 134;
(Recent developments) I: 134-135
Pakistan (Independence) P: 99; (Recent developments) P: 100
- Kaskaskia** [Illinois]
Illinois (Early national period) I: 72-74
- Kasner, Edward** [American mathematician]
Googol G: 270
- Kasparov, Garry** [Russian chess player] K: 248
Chess *picture on C: 412*; (World chess championships) C: 414; (History) C: 415
- Kassebaum, Nancy Landon** [American political leader] K: 248 *with portrait*
- Kassem, Abdul Karim** [Iraqi political leader]
Iraq (The republic) I: 413-414
- Kastler, Alfred** [French physicist]
Nobel Prizes (Physics: 1966) N: 441
- Kastrup Airport** [Copenhagen]
Denmark (Transportation) D: 139
- Kata**
Judo (Judo contests) J: 185
Karate (Basic techniques) K: 246
- Katabatic wind**
Southern Ocean (Winds) So: 688a
- Katakana**
Japanese language J: 61
- Katamewaza**
Judo (Judo techniques) J: 184
- Katanga** [former province]
Congo (Kinshasa) (Civil disorder) Ci: 940e;
(Rebuilding the nation) Ci: 940e
- Katchina** [ceremony] *See Kachina in this index*
- Katcina** [ceremony] *See Kachina in this index*
- Katerina Ismailova** [opera by Shostakovich]
Shostakovich, Dimitri S: 438
- Kathak** [dance]
Dance (Asian theatrical dance) D: 30
India (Music and dance) I: 120-121
- Kathakali** [dance]
Dance (Asian theatrical dance) D: 30
- Katharevousa** [language]
Greek language (Development of modern Greek) G: 376-377
Greek literature (Modern Greek literature) G: 378
- Katherine** [literary figure]
Shakespeare, William (*The Taming of the Shrew*) S: 356
- Kathmandu** [Nepal] K: 249
Nepal (People) N: 125-126 *with picture*
- Katipunan** [political group]
Philippines (Revolt against the Spaniards) P: 379-380
- Katmai National Park** [Alaska] K: 249
National Park System (table: National parks) N: 48
- Katmandu** *See Kathmandu in this index*
- Katsina** [Africa]
Hausa H: 86
- Katydid** [insect] K: 249
Grasshopper (Long-horned grasshoppers) G: 328; *picture on G: 327*
Insect *picture on I: 280*
- Katyn Massacre** [European history] K: 249
- Katz, Sir Bernard** [British physiologist]
Nobel Prizes (Physiology or medicine: 1970) N: 445
- Katzenbach, Nicholas deBelleville** [American government official]
Johnson, Lyndon Baines (table) J: 151
Justice, Department of (table) J: 203
- KAU** [political party]
Kenya (Opposition to the British) K: 303
- Kauai** [island, Hawaii]
Hawaii (Kauai) H: 102
- Kauffmann, Angelica** [Swiss-born painter] K: 249
- Kaufman, George S.** [American dramatist] K: 249
Ferber, Edna F: 72
Hart, Moss H: 77
- Kaufman, Irving** [American jurist]
Rosenberg, Julius and Ethel R: 481
- Kaumualii** [Hawaiian ruler]
Hawaii (The kingdom of Hawaii) H: 106
- Kaunakes**
Clothing (Ancient times) Ci: 696-697 *with picture*
- Kaunas** [city, Lithuania] K: 250
- Kaunda, Kenneth David** [Zambian political leader] K: 250 *with portrait*
Zambia (History) Z: 589-590
- Kaunitz, Wenzel Anton von** [Austrian statesman]
Maria Theresa M: 199
Seven Years' War (In Europe) S: 328
- Kauravas** [legendary figures]
Mahabharata M: 65
- Kava** [drink]
Pacific Islands (Recreation) P: 6-7
- Kava** [shrub] K: 250
- Kavaic acid** [juice]
Kava K: 250
- Kavanagh, Edward** [American political leader]
Maine (table) M: 87
- Kavanagh, Patrick** [Irish poet]
Irish literature (Fiction and poetry) I: 432-433
- Kaw Indians** *See Kansa Indians in this index*
- Kaw River** *See Kansas River in this index*
- Kawabata, Yasunari** [Japanese author]
Japanese literature (The modern period) J: 62
Nobel Prizes (Literature: 1968) N: 446
- Kawasaki disease** [disease] K: 250
- Kay, John** [British inventor]
Industrial Revolution (Weaving machines) I: 249
Invention (Economic needs) I: 355
- Kayak** [boat] K: 250 *with picture*
Inuit (Transportation) I: 354c *with pictures; picture on I: 354d*
- Kayaking** [sport]
Olympic Games (Summer Olympic Games) O: 746e-746f
- Kayapó Indians**
Gê Indians G: 75
Indian, American *picture on I: 183*
- Kaye, Danny** [American entertainer] K: 250a
- Kaye, Nora** [American dancer] K: 250a
- Kayibanda, Gregoire** [Rwandese political leader]
Rwanda (History) R: 571-572
- Kazakhs** [people]
Kazakhstan (People) K: 250a
China (Nationalities) C: 481 *with map*
- Kazakhstan** [country] K: 250a
Almaty A: 380
Astana A: 823
Flag *picture on F: 203*
Russia (The new nation) R: 555
Strategic Arms Reduction Treaty So: 919
- Kazan** [city, Russia] K: 252
- Kazan, Elia** [American director] K: 252
Motion picture (Best achievement in directing: 1947, 1954) M: 862
- Kazan Retto** [islands, Pacific]
Iwo Jima I: 523
- Kazantzakis, Nikos** [Greek author] K: 252
- Kazembe** [former kingdom]
Lunda L: 523
- Kaziranga National Park** [India]
- National park (table) N: 42f
- KBO** [astronomy]
Kuiper belt K: 392
- KC-10** [aircraft]
Air Force, United States *picture on A: 192*
Aircraft, Military (Tankers) A: 203 *with picture*
- KC-135** [aircraft]
Aircraft, Military (Tankers) A: 203
- KCA tribes**
Kiowa Indians K: 333
- KDKA** [radio station, Pittsburgh]
Journalism (Radio journalism) J: 175
Radio (The start of broadcasting) R: 92
- Kea** [bird] K: 252 *with picture*
Parrot (Kinds of parrots) P: 179
Sheep (Enemies of sheep) S: 383
- Kealakekua Bay**
Hawaii (Places to visit) H: 98
- Kean, Edmund** [English actor] K: 253
- Kearny, Philip** [American general] K: 253
- Kearny, Stephen Watts** [American general] K: 253
Mexican War (The occupation of New Mexico and California) M: 446
- Kearsarge** [ship]
Alabama A: 255 *with picture*
- Kearsarge, Mount**
New Hampshire (Mountains) N: 220
- Keating, Charles H., Jr.** [California banker]
Cranston Alan MacGregor Ci: 1121
- Keating, Geoffrey** [Irish author]
Irish literature (Modern works in Gaelic) I: 431
- Keating, Paul** [Australian political leader]
Australia (table) A: 925; (Recent developments) A: 925-926
- Keating, William H.** [American explorer]
Minnesota (The Louisiana Purchase) M: 603-604
- Keaton, Buster** [American actor] K: 253 *with picture*
- Keaton, Diane** [American actress]
Motion picture (Best performance by an actress: 1977) M: 862
- Keats, Ezra Jack** [American author]
Caldecott Medal (table: 1963) C: 26
Literature for children *picture on L: 369*
- Keats, John** [British poet] K: 253
English literature (Romantic poetry) E: 320
- Kebara Cave** [Israel]
- Prehistoric people (The single origin theory) P: 747 *with picture*
- Kable, John** [British religious leader]
Oxford Movement O: 887
- Kebnekaise, Mount**
Sweden (The Mountain Range) So: 1028 *with map*
- Keck Foundation, W. M.** [organization]
Foundations (Science and technology) F: 431
- Keck Observatory** [Hawaii] K: 254
Observatory (Ground-based observatories) O: 644-645 *with picture*
Telescope (Reflecting telescopes) T: 104-105; *picture on T: 109*
- Kedesh** [ancient city]
Cities of refuge Ci: 568
- Kedrova, Lila** [Russian-French actress]
Motion picture (Best performance by an actress in a supporting role: 1964) M: 863
- Keech, Ray** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Keefe, Tim** [American baseball player]
Baseball (table: Hall of Fame) B: 134
- Keek-wilie house**
British Columbia (Early days) B: 628
- Keel** [ship]
Sailing (Hull) S: 23; (Controlling direction) S: 25
Ship (Nautical terms) S: 416
Vikings (The Vikings as shipbuilders) V: 381
- Keel-billed toucan** [bird]
Rain forest *picture on R: 126c*
- Keelboat** [boat]
Flatboat F: 228
- Keeler, Wee Willie** [American baseball player]
Baseball (Early strategy and stars) B: 133; (table: Hall of Fame) B: 134
- Keeler, William H. Cardinal** [American religious leader]
Cardinal (table: American cardinals) C: 211
- Keenan, Philip C.** [American astronomer]
Star (The Hertzsprung-Russell diagram) So: 845-846
- Keene, Carolyn** [American author]
Stratemeyer, Edward So: 920

Keening [ritual]

Irish literature (Modern works in Gaelic) I: 431

Keep [defense]

Castle (Structure) C: 280

Keeper [occupation]

Zoo (Caring for zoo animals) Z: 606

Keeshond [dog] K: 254Dog *picture on* D: 275**Kefauver, Estes** [American political leader]

K: 254

Television (Early programs) T: 119

Tennessee (The mid-1900's) T: 156 *with picture***Kegel exercise**

Incontinence I: 106

Keglers

Bowling (Modern forms of bowling) B: 525

Keillor, Garrison [American humorist] K: 254**Keita, Modibo** [Malian political leader]

Mali (History) M: 109

Keith, Harold Verne [American author]

Newbery Medal (table) N: 359

Keizersgracht [canal]Amsterdam (The city) A: 443-444 *with picture***Kejimikujik Lake**

Nova Scotia (Rivers and lakes) N: 562-564

Kejimikujik National Park

Canada (table: National parks and national park reserves) C: 113

Nova Scotia (Places to visit) N: 560

Kekkonen, Urho Kaleva [Finnish political leader]

Finland (Postwar developments) F: 118; (The late 1900's) F: 118

Kekuku, Joseph [Hawaiian musician]

Hawaii (Dancing and music) H: 94

Kekulé von Stradonitz, Friedrich August

[German chemist]

Benzene B: 255

Chemistry (Development of organic chemistry) C: 404

Kell, George [American baseball player]

Baseball (table: Hall of Fame) B: 134

Kellar, Harry [American magician]

Magician (Illusions) M: 51-52

Keller, Gottfried [Swiss author] K: 254**Keller, Helen Adams** [American public figure]K: 255 *with picture*Autograph *picture on* A: 943Sullivan, Anne Mansfield *So*: 969**Keller Endowment Fund**

Keller, Helen Adams (She helps others) K: 255

Kelley, Clarence M. [American government official]

Federal Bureau of Investigation (History) F: 62-63

Kelley, Florence [American social reformer]

K: 255

Wald, Lillian D. *W*: 7**Kelley, Joe** [American baseball player]

Baseball (table: Hall of Fame) B: 134

Kelley, Oliver Hudson [American government official]Grange, National *G*: 310**Kelleys Island** [Lake Erie]

Ohio (Places to visit) O: 690

Kellogg, Frank Billings [American political leader] K: 256

Kellogg-Briand Pact K: 256

Kellogg, John Harvey [American businessman]

Battle Creek B: 172

Health food (History) H: 129

Michigan (Interesting facts) M: 489

Kellogg, Steven [author]

Regina Medal (table: 1989) R: 206

Kellogg, W. K. [American businessman] K: 256

Health food (History) H: 129

Kellogg Foundation K: 256

Michigan (Interesting facts) M: 489

Kellogg Bird Sanctuary

Michigan (Places to visit) M: 498

Kellogg-Briand Pact [1928] K: 256

Briand, Aristide B: 597

France (Between World Wars) F: 475

International law (After World War I) I: 342

Kellogg CompanyBattle Creek B: 172 *with picture***Kellogg Foundation** K: 256

Foundations (table) F: 430

Kells, Book of See Book of Kells in this index**Kelly, Dan** [Australian outlaw]

Kelly, Ned K: 257

Kelly, Eric Philbrook [American author]

Newbery Medal (table) N: 359

Kelly, Gene [American dancer] K: 256Animation *picture on* A: 514a**Kelly, George** [American baseball player]

Baseball (table: Hall of Fame) B: 134

Kelly, George Edward [American dramatist]

K: 256

Kelly, Grace [American actress] K: 256

Motion picture (Best performance by an actress: 1954) M: 862

Rainier III R: 129

Kelly, J. D. [Canadian painter]Macdonald, Sir John Alexander *picture on*

M: 8

Kelly, King [American baseball player]

Baseball (Early strategy and stars) B: 133; (table: Hall of Fame) B: 134

Kelly, Ned [Australian outlaw] K: 257**Kelly, Sharon Pratt** [American political leader]K: 257 *with portrait***Kelly, William** [American metallurgist]

Iron and steel (The birth of modern steelmaking) I: 451

Kelly Air Mail Act [1925]

Aviation (Aviation progress) A: 988

Kelly gang [Australian criminals]

Kelly, Ned K: 257

Kelmscott ChaucerBook *picture on* B: 464**Kelmscott Press**Book (The 1800's) B: 467-468; *picture on*

B: 464

Morris, William M: 817

Keloid [disorder] K: 257

Scar S: 172

Kelp [plant] K: 257 *with picture*

Algae (Brown algae) A: 349

Balance of nature (Upsetting the balance)

B: 35

Ocean (The importance of the ocean) O: 654; *pictures on* O: 651, O: 656Seaweed (Kinds) S: 276 *with picture***Kelsey, Henry** [British explorer]

Manitoba (Exploration) M: 160

Saskatchewan (The coming of the fur traders)

S: 146

Kelso, Jack [American frontiersman]

Lincoln, Abraham (Life on his own) L: 313-314

Kelso, Louis [American lawyer]Employee Stock Ownership Plan *E*: 263**Keltic** See Celtic language in this index**Kelvin, Lord** [British physicist] K: 258

Physics (Developments in the 1800's) P: 440

Kelvin scale [temperature]

Absolute zero A: 17

Gas [physics] (Gas laws) *G*: 48-49

Kelvin, Lord K: 258

Metric system (Structure of the metric system) M: 437

Star (Color and temperature) *So*: 843Sun *So*: 975

Temperature T: 130

Kemakeza, Sir Allan [Solomon Islands political leader]Solomon Islands (History) *So*: 586**Kemal Atatürk** See Atatürk, Kemal in this index**Kemble, Fanny** [British actress] K: 258**Kemet** See Egypt, Ancient in this index**Kemijoki** [river, Finland]

Finland (Rivers) F: 114

Kemp, Jack French [American political leader]

K: 258

Kempe, C. Henry [American doctor]

Child abuse C: 455

Kempe, Will [English actor]

Shakespeare, William (Acting companies)

S: 353-354

Kempenland

Belgium (The Kempenland) B: 230

Kemper, James L. [American political leader]

Virginia (table) V: 417

Kempis, Thomas à [German author]

Thomas à Kempis T: 262

Kenai Fjords National Park [Alaska] K: 258

National Park System (table: National parks)

N: 48

Kendall, Amos [American political leader]

Jackson, Andrew (table) J: 11

Kitchen Cabinet K: 337

Kendall, Edward Calvin [American biochemist]

Nobel Prizes (Physiology or medicine: 1950)

N: 444

Kendall, George W. [American publisher]War correspondent *W*: 27**Kendall, Henry Way** [American physicist] K: 258

Nobel Prizes (Physics: 1990) N: 442

Kendrew, Sir John Cowdery [British physicist]

K: 259

Nobel Prizes (Chemistry: 1962) N: 443

Kendrick ProjectWyoming (Progress as a state) *W*: 536**Keneally, Thomas** [Australian author] K: 259

Australia (Literature) A: 906

Kenna, John Edward [American political leader]

K: 259

Kennan, George Frost [American diplomat]

K: 259

Kennebec River [Maine] K: 259

Maine (Rivers and lakes) M: 82

Kennebunkport [Maine]Maine *picture on* M: 84**Kennedy, Anthony McLeod** [American jurist]

K: 259

Supreme Court of the United States *picture on* *So*: 999**Kennedy, Cape** See Cape Canaveral in this index**Kennedy, Caroline** [daughter of John F.

Kennedy] See Schlossberg, Caroline

Kennedy in this index

Kennedy, Edward Moore [American political leader] K: 259 *with portrait*

Kennedy, John Fitzgerald (Boyhood) K: 260-261

Kennedy, Eunice See Shriver, Eunice Kennedy in this index**Kennedy, George** [American actor]

Motion picture (Best performance by an actor in a supporting role: 1967) M: 863

Kennedy, Jacqueline Lee Bouvier See

Onassis, Jacqueline Kennedy in this index

Kennedy, Jean [sister of] See Smith, Jean

Kennedy in this index

Kennedy, John Fitzgerald [U.S. President]K: 260 *with pictures*

Arlington National Cemetery A: 717

Clinton, Bill (School life) *Ci*: 682b *with picture*Cold War (The Cuban missile crisis) *Ci*: 767Cuban missile crisis *Ci*: 1180Democratic Party (The New Frontier) *D*: 127Great Society (Development) *G*: 349Guantánamo *G*: 411Johnson, Lyndon Baines *J*: 144, (VicePresident) *J*: 148

Massachusetts (The mid-1900's) M: 293

Nixon, Richard Milhous (Defeat by Kennedy) N: 431 *with picture*Onassis, Jacqueline Kennedy *O*: 761Oswald, Lee Harvey *O*: 869Peace Corps (History) *P*: 208Pearson, Lester Bowles *picture on* *P*: 223Space exploration (Apollo: Mission to the moon) *So*: 714

Television (The 1960's) T: 119

Texas (The mid-1900's) T: 208

United States, History of the (The civil rights movement) *U*: 192Vietnam War (The Viet Cong rebellion) *V*: 374Warren Report *W*: 37White House (Rebuilding and redecorating) *W*: 290**Kennedy, John Fitzgerald, Jr.** [son of John F.

Kennedy]

Kennedy, John Fitzgerald (Kennedy's family)

K: 262; *picture on* K: 265

Kennedy, Joseph Patrick (His family) K: 269-270

Onassis, Jacqueline Kennedy *O*: 761**Kennedy, John Pendleton** [American government official]

Fillmore, Millard (table) F: 102

Kennedy, Joseph P. [brother of John F.

Kennedy]

Kennedy, John Fitzgerald (Boyhood) K: 260

Kennedy, Joseph Patrick (His family) K: 269

Kennedy, Joseph P. II [American political leader]

Kennedy, Joseph Patrick (His family) K: 269

Kennedy, Joseph Patrick [American financier]

K: 269

Kennedy, John Fitzgerald (Family background) K: 260

Kennedy, Joseph William [American chemist]Plutonium *P*: 581**Kennedy, Kathleen** [sister of]

Kennedy, John Fitzgerald (Boyhood) K: 260-261

Kennedy, Joseph Patrick (His family) K: 269

Kennedy, Patricia [sister of] See Lawford,

Patricia Kennedy in this index

Kennedy, Patrick [great-grandfather of]

- Kennedy, John Fitzgerald (Family background) K: 260
- Kennedy, Patrick** [American political leader]
Kennedy, Joseph Patrick (His family) K: 269-270
- Kennedy, Patrick J.** [grandfather of]
Kennedy, John Fitzgerald (Family background) K: 260
- Kennedy, Robert Francis** [American political leader] K: 270
Johnson, Lyndon Baines (The widening Vietnam War) J: 150-151
- Kennedy, John Fitzgerald (Boyhood) K: 260-261; *picture on* K: 263
- Kennedy, Rose Fitzgerald** [American public figure]
Kennedy, John Fitzgerald (Family background) K: 260
Kennedy, Joseph Patrick (His family) K: 269
- Kennedy, Rosemary** [sister of]
Kennedy, John Fitzgerald (Boyhood) K: 260-261
- Kennedy, Joseph Patrick (His family) K: 269
- Kennedy, Ted** See Kennedy, Edward Moore *in this index*
- Kennedy, Thomas L.** [Canadian political leader]
Ontario (table) O: 783
- Kennedy Center for the Performing Arts** [Washington, D.C.] K: 270
Kennedy, John Fitzgerald (The world mourns) K: 267-268
Smithsonian Institution (Affiliated institutions) S: 519
Washington, D.C. (John F. Kennedy Center for the Performing Arts) W: 75
- Kennedy International Airport** See John F. Kennedy International Airport *in this index*
- Kennedy Library** [Boston]
Pei, I. M. P: 230 *with picture*
- Kennedy Space Center** [Florida] K: 270 *with map*
Cape Canaveral C: 187
Kennedy, John Fitzgerald (The world mourns) K: 267-268
- Kennekuk** [American Indian]
Kickapoo Indians K: 310
- Kennelly-Heaviside layer** [atmosphere]
Radio (Transmitting radio waves) R: 87
- Kennesaw Mountain, Battle of** [1864]
Civil War (table) Ci: 624; (The Atlanta campaign) Ci: 632
- Kenneth III** [king of Scotland]
Scotland (Beginning of the Scottish kingdom) S: 219
- Kenny, Elizabeth** [Australian nurse] K: 271
- Kensington Gardens** [park]
London (Parks) L: 435-436
- Kensington rune stone** [archaeology] K: 271
- Kent, Edward** [American political leader]
Maine (table) M: 87
- Kent, James** [American jurist] K: 271
- Kent, Rockwell** [American artist] K: 271 *with picture*
- Kent, William** [American political leader]
Muir Woods National Monument M: 912
- Kent, William** [English architect]
Architecture (The Palladian Revival) A: 623 *with picture*
- Kent State Shooting** [U.S. history]
Nixon, Richard Milhous (Foreign policy) N: 432-433
Vietnam War (The invasion of Cambodia) V: 376
- Kente cloth** [fabric]
Ashanti A: 767
- Kentish Guards** [U.S. history]
Greene, Nathanael G: 382
- Kenton, Stan** [American bandleader] K: 271
- Kentucky** K: 272 *with pictures and maps*
Boone, Daniel B: 476 *with pictures*
Indian wars (Lord Dunmore's War) I: 192
Kentucky and Virginia Resolutions K: 295
Westward movement in America (Crossing the Appalachians) W: 246
See also the list of Related Articles in the Kentucky article
- Kentucky, University of** K: 295
Kentucky picture on K: 277
- Kentucky and Virginia Resolutions** [1798] K: 295
Adams, John (The Alien and Sedition Acts) A: 38
Alien and Sedition Acts A: 368
Jefferson, Thomas (Vice President) J: 81-82
- Nullification N: 603
States' rights (Early history) So: 866
United States, History of the (The Alien and Sedition Acts) U: 163
- Kentucky bass** [fish]
Bass (Black bass) B: 156-157 *with picture*
- Kentucky bluegrass** [plant]
Bluegrass B: 423
Grass *picture on* G: 325
Lawn (Planting the grass) L: 142
- Kentucky coffeetree** [tree] K: 295
- Kentucky Dam** [Tennessee River]
Kentucky picture on K: 292
Kentucky Lake K: 297 *with map*
Tennessee Valley Authority (The dams) T: 158-159 *with map*
- Kentucky Derby** [race] K: 295
Kentucky (Interesting facts about Kentucky) K: 273 *with picture*
Louisville L: 504
- Kentucky Derby Museum** [Louisville]
Kentucky (Places to visit) K: 282
- Kentucky Fair and Exposition Center**
Louisville (Recreation) L: 506
- Kentucky Gazette, The** [newspaper]
Kentucky (Communication) K: 289
- Kentucky Horse Park** [Lexington]
Kentucky (Places to visit) K: 282
- Kentucky Lake** [Kentucky-Tennessee] K: 297 *with map*
Kentucky picture on K: 283
Tennessee (Rivers and lakes) T: 148
- Kentucky rifle** [gun]
Rifle (History) R: 339-340
Westward movement in America (The Old West) W: 245
- Kenya** [country] K: 297 *with pictures and maps*
Africa *picture on* A: 135
Clothing *pictures on* Ci: 686, Ci: 692
Kikuyu K: 314
Mau Mau M: 312
National park (Kenya) N: 42c
- Kenya, Mount** See Mount Kenya *in this index*
- Kenya African Democratic Union** [political party]
Kenya (History) K: 303-304
- Kenya African National Union** [political party]
Kenya (Politics) K: 298
Moi, Daniel Toroitich arap M: 688
- Kenya African Union** [political party]
Kenya (Opposition to the British) K: 303
- Kenya People's Union** [political party]
Kenya (Building the new nation) K: 304
- Kenyanthropus platyops** [hominid]
Leakey, Meave Gillian L: 161
Prehistoric people P: 744
- Kenyatta, Jomo** [Kenyan political leader] K: 305 *with portrait*
Kenya (History) K: 303
Mau Mau M: 312
- Keogh plan**
Pension (Individual pension plans) P: 273-274
- Keokuk** [American Indian chief]
Black Hawk B: 387
- Keokuk Dam** [Mississippi River]
Iowa (The coming of the railroads) I: 395; *picture on* I: 394
- Keoladeo National Park** [India]
National park (table) N: 42f
- Kepler, Johannes** [German astronomer] K: 305 *with portrait*
Astronomy (Sun-centered theories) A: 835; (Developing the modern view) A: 847
Brahe, Tycho B: 548
Ellipse E: 243
Gravitation G: 331
Physics (The Renaissance) P: 438-439
Planet (How planets move) P: 508-509
Science (The rebirth of science) S: 197
Space exploration (The dawn of the space age) So: 706
- Kepler's laws** See Planetary motion, Laws of *in this index*
- Keppler, Joseph** [American cartoonist]
Cartoon (Editorial cartoons) C: 263-265
- Kerala** [state, India]
India (Christianity) I: 117
- Keratin** [protein] K: 305
Hair (The root and shaft) H: 9
Horn H: 338
Skin (Epidermis) S: 489; (Hair, nails, and glands) S: 489
- Keratinization** [zoology]
Hair (The root and shaft) H: 9 *with diagram*
- Keratinocyte** [biology]
Skin (Epidermis) S: 489
- Keratoconus** [disorder]
Contact lens (Hard contact lenses) Ci: 1020
Eye (Diseases of the cornea) E: 467
- Kerathyaline** [chemical]
Skin (Epidermis) S: 489
- Keratotic ringworm** [disease]
Ringworm R: 344
- Keratotomy, Radial** [medicine]
Nearsightedness N: 93
- Kerch Strait**
Black Sea B: 390 *with map*
- Kerensky, Alexander Feodorovich** [Russian political leader] K: 306
Lenin, V. I. (The October Revolution) L: 193
- Kerf**
Saw S: 166
- Kermit the Frog** [puppet]
Henson, Jim H: 191
- Kermode's bear**
Bear (American black bears) B: 184
- Kern, Jerome** [American composer] K: 306
Musical comedy (Musical comedy matures) M: 960
- Kern, John Worth** [American political leader] K: 306
- Kernel** [botany]
Corn Ci: 1056
Nut N: 621
Rice (Structure) R: 323
Seed (Kinds of seeds) S: 281
Wheat (Food for people) W: 266; (Structure) W: 267-268 *with diagram*
- Kernel** [grammar]
Sentence (Sentence patterns) S: 303
- Kerner, Otto** [American political leader]
Johnson, Lyndon Baines (Problems at home) J: 151
- Kerner Commission Report** [U.S. history]
African Americans (Unrest in the cities) A: 136c
Johnson, Lyndon Baines (Problems at home) J: 151
Riot (During the 1900's) R: 349
- Kernite** [mineral]
Borax B: 481
- Kerogen** [geology]
Oil shale O: 708
Petroleum (How petroleum was formed) P: 334
- Kerosene** [fuel] K: 306
Fuel (Petroleum) F: 550
Petroleum (History of the use of petroleum) P: 347
- Kerosene lamp**
Fire (Light) F: 122
Invention *picture on* I: 356
Lamp (Fat or oil lamps) L: 52-53 *with picture*
- Kerosine** See Kerosene *in this index*
- Kerouac, Jack** [American author] K: 306
- Kerr, Sir John Robert** [Australian political leader]
Australia (Political crisis) A: 925
- Kerr, Robert S.** [American political leader]
Oklahoma (The mid-1900's) O: 734
- Kerr Reservoir** [lake, North Carolina-Virginia]
Virginia (Rivers and lakes) V: 412-413
- Kerry** [cattle]
Cattle (Other dairy cattle) C: 311
- Kerry blue terrier** [dog] K: 306
Dog picture on D: 273
- Kersta, Lawrence G.** [American physicist]
Voiceprint V: 437
- Kerwin, Joseph P.** [American astronaut]
Astronaut (Achievements in space) A: 829-830
- Kesey, Ken** [American author]
American literature (Experimental styles) A: 424
- Kesselring, Albert** [German general]
World War II (The invasion of Italy) W: 482
- Kestrel** [bird] K: 306
Bird (Birds of grasslands) B: 336 *with picture*
Falcon (The American kestrel) F: 14 *with picture*
- Ketamine** [drug]
Drug abuse (Club drugs) D: 363
- Ketch** [boat]
Sailing (Yawls, ketches, and schooners) S: 24 *with picture*
- Ketchikan** [Alaska] K: 307
Alaska (Places to visit) A: 290 *with picture*
- Ketchup** [food] K: 307
- Ketoacidosis** [disorder]

Diabetes (Symptoms) D: 179
Keton [clothing]
 Phenicia (Trade and manufacturing) P: 393-394
Kettering, Charles Franklin [American inventor] K: 307
 Starter (Automobile starters) So: 857
Kettering Laboratories
 Kettering, Charles Franklin K: 307
Ketterle, Wolfgang [German physicist]
 Nobel Prizes (Physics: 2001) N: 442
Kettle Hill, Battle of [1898]
 Rough Riders R: 490
 Spanish-American War (Land battles) So: 754
with picture
Kettledrum [musical instrument] See *Timpani in this index*
Ketubim [Old Testament]
 Bible (Books of the Hebrew Bible) B: 279-280
 Old Testament O: 740
keV [unit of measure]
 Particle accelerator (How accelerators work) P: 184
Kevoorkian, Jack [American physician]
 Euthanasia (Self-induced euthanasia) E: 421
Kew-bias glass
 Glass (Types of art glass) G: 220
Kew Gardens [London]
 London (Parks) L: 435-436
Keweenaw National Historical Park [Michigan]
 National Park System (table: National historical parks) N: 57
Keweenaw Peninsula [region, Michigan]
 Lake Superior (Description) L: 45 *with map*
Kewpie doll
 Doll (The early 1900's) D: 291 *with picture*
Key [botany]
 Maple M: 186 *with pictures*
Key [construction]
 Plaster (Plaster bases) P: 552
Key [cryptology]
 Codes and ciphers Ci: 749
Key [geography]
 Florida Keys F: 266
Key [lock]
 Lock L: 410 *with pictures*
Key [music] K: 307
 Music (Harmony) M: 951-952
Key [musical instrument]
 Key K: 307
Key [telegraph]
 Telegraph (The Morse telegraph) T: 90 *with picture*
Key [typewriter]
 Typewriter (How a typewriter works) T: 538 *with picture*
Key, David M. [American government official]
 Hayes, Rutherford Birchard (Civil service reform) H: 121
Key, Francis Scott [American public figure] K: 307
 National anthem N: 28
 "Star-Spangled Banner" So: 853
 War of 1812 (Campaigns of 1814) W: 31
Key-in-knob lock
 Lock (Types of locks) L: 410 *with picture*
Key Largo [play by Anderson]
 Anderson, Maxwell A: 452
Key ring
 Ring *picture on R: 342*
Key signature [music]
 Music (Indicating pitch) M: 953 *with pictures*
Key West [Florida] K: 308
 Florida (Places to visit) F: 252
 Florida Keys F: 266 *with picture*
Key word
 Codes and ciphers (Substitution) Ci: 750
Keyboard [machine] K: 308 *with picture*
See also Computer keyboard *in this index*
 Monotype (How the Monotype works) M: 733
 Typewriter (How a typewriter works) T: 538 *with pictures*; (History) T: 539
Keyboard instrument
 Classical music (Solo music) Ci: 643
 Music (Keyboard instruments) M: 950; *pictures on M: 949*
 Piano P: 445 *with pictures*
Keyes field [region, Oklahoma]
 Helium (Production) H: 176
Keyhole saw [tool]
 Saw (Handsaws) S: 166-167 *with picture*
Keying [television] *See* Matting *in this index*
Keynes, John Maynard [British economist] K: 308

Capitalism (Changing attitudes toward capitalism) C: 195
 Consumption Ci: 1020
 Economics (New solutions for old problems) E: 65
Keynesian economics
 Depression (Fiscal policy) D: 151
 Friedman, Milton F: 533
 Inflation (The Keynesian Theory) I: 268
 Keynes, John Maynard K: 308
 Robinson, Joan Violet R: 369
Keypad [music]
 Key K: 307
Keypoint address
 Political convention (Organizing the convention) P: 629
Keypad
 Computer (A keyboard) Ci: 912
 Keyboard K: 308 *with picture*
 Telephone (The dialing mechanism) T: 94
Keys of the Kingdom, The [book by Cronin]
 Cronin, A. J. Ci: 1152
Keystone Cops [film characters]
 Sennett, Mack S: 301
Keystone Province [nickname]
 Manitoba M: 145
Keystone State
 Pennsylvania P: 245
Keyword *See* Key word *in this index*
KGB [Soviet history] K: 308a
Kha [people]
 Indochina (The Viets) I: 224-225
Khachaturian, Aram Illich [Soviet composer] K: 308a
Khadija [wife of]
 Muhammad (Early life) M: 910
Khafji [Saudi Arabia]
 Persian Gulf War (The ground war) P: 300d
Khafré [king of ancient Egypt]
 Egypt, Ancient (Painting and sculpture) E: 139
 Pyramids (The pyramids of Giza) P: 917
 Sphinx (Egyptian sphinxes) So: 780
Khair-ed-Din [Barbary pirate]
 Barbarossa B: 105
Khalid [king of Saudi Arabia]
 Saudi Arabia (Continued progress) S: 161-162
Khalid ibn al-Walid [Arab general] K: 308a
Khalifman, Alexander [Russian chess player]
 Chess (World chess champions) C: 414
Khalkha Mongolian [language]
 Mongolian (The people) M: 722
Khama, Seretse [Botswana political leader]
 Botswana (History) B: 512
Khamenei, Ali [Iranian political leader] K: 308a
 Iran (The death of Khomeini) I: 406b
Khamsein [weather]
 Egypt (Climate) E: 127
 Israel (Climate) I: 484
Khan [title] K: 308a
Khan, Genghis *See* Genghis Khan *in this index*
Khan, Kublai *See* Kublai Khan *in this index*
Khan, Yahya [Pakistani military leader]
 Bangladesh (East Pakistan) B: 85
 Pakistan (Civil war) P: 99-100
Khanate [Asian history]
 Kyrgyzstan (History) K: 400
 Uzbekistan (History) U: 254
Khania [Crete]
 Crete Ci: 1127
Khao Yai National Park [Thailand]
 National park (table) N: 42f
Kharg Island [island, Iran]
 Iran (Transportation and communication) I: 405
with picture
Kharijites [religious group]
 Islam (Divisions of Islam) I: 466
 Muslims (Ali) M: 964b
Kharkov [Ukraine] K: 308a
 Ukraine (Climate) U: 10
Khartoum [Sudan] K: 308a
 Sudan So: 952 *with map*; *picture on So: 954*
Khatami, Mohammad [Iranian political leader] K: 308b
Khatami, Mohammad [Iranian political leader]
 Iran (Recent developments) I: 406b
Khayyam, Omar *See* Omar Khayyam *in this index*
Khazari, al- [book by Halevi]
 Halevi, Judah H: 19
Khazars [ancient people]
 Russia (Early days) R: 547
Khedive [title]
 Egypt (Muhammad Ali and modernization) E: 131

Khitans [people]
 Beijing (History) B: 223
 Cathay C: 301
Khmer [people]
 Cambodia (People) C: 72
 Thailand (History) T: 226
Khmer empire [Cambodian history]
 Cambodia (History) C: 72-73
 Indochina (The Khmer) I: 225
Khmer Rouge
 Cambodia (History) C: 72-73 *with picture*
 Norodom Sihanouk N: 457
 Phnom Penh P: 391
 Vietnam (Invasion of Cambodia) V: 372
Khnun [Egyptian god]
 Egypt, Ancient (Religion) E: 137
Khoikhoi [people] K: 308b
 South Africa (History) So: 617
Khoisan [people]
 Africa (Peoples of Africa) A: 104
 South Africa (History) So: 617
Khoisan language
 Africa (Languages) A: 104-105
 San S: 83
Khomeini, Ruhollah [Iranian religious leader] K: 308b
 Asia *picture on A: 811*
 Carter, Jimmy (The Iranian crisis) C: 258 *with picture*
 Iran I: 398; (Revolution and the Islamic Republic) I: 406a *with picture*; (The death of Khomeini) I: 406b
 Mohammad Reza Pahlavi M: 687
 Rushdie, Salman R: 522
Khons, Temple of [Egypt]
 Architecture *picture on A: 611*
Khorana, Har Gobind [American physiologist]
 Nobel Prizes (Physiology or medicine: 1968) N: 445
Khorat Plateau
 Thailand (The land) T: 224-225
Khrushchev, Nikita Sergeyevich [Soviet political leader] K: 308b *with portrait*
 Brezhnev, Leonid Ilyich (Rise to power) B: 596
 Cold War (The spirit of Geneva) Ci: 765; (The spirit of Camp David) Ci: 766; (The U-2 incident) Ci: 766; (The troika proposal) Ci: 766; (The Berlin Wall) Ci: 767; (The Cuban missile crisis) Ci: 767; *picture on Ci: 769*
 Communism (Under Stalin's successors) C: 893
 Cuban missile crisis Ci: 1180
 Eisenhower, Dwight David (U-2 incident) E: 154 *with picture*
 Kennedy, John Fitzgerald (Cuba) K: 265
 Malenkov, Georgi Maximilianovich M: 105
 Nixon, Richard Milhous (Overseas missions) N: 431 *with picture*
 Russia (The Cold War) R: 554
 Union of Soviet Socialist Republics (History) U: 35-38 *with picture*
 Zhukov, Georgi Konstantinovich Z: 595
Khufu [king of Ancient Egypt] K: 309
 Pyramids (The pyramids of Giza) P: 917
Khuzistan Plain [Iran]
 Iran (The Khuzistan Plain) I: 404
Khyber Pass [region, Afghanistan-Pakistan] K: 309 *with maps*
 Afghanistan (Transportation and communication) A: 95
 Pakistan (Land and climate) P: 96 *with picture and map*
Kiangya [ship]
 Shipwreck (table: Major shipwrecks) S: 428
Kibbutz K: 310
 Asia (Country life) A: 779
 Israel (Rural life) I: 481
Kibo [mountain summit]
 Kilimanjaro K: 315 *with picture*
Kick [sports]
 Karate (Basic techniques) K: 246 *with picture*
 Soccer (Kicking) So: 547
Kickapoo Indians K: 310
Kickapoo Prophet [nickname]
 Kickapoo Indians K: 310
Kickboxing [sport] K: 310 *with picture*
 Martial arts M: 234
 Thailand (Recreation) T: 224 *with picture*
Kicker [machine]
 Fur (Dressing) F: 563
Kickoff [sports]
 Football (How football is played) F: 358-359
with picture

- Soccer (Starting the game) **So**: 546
Kid, The [film]
 Chaplin, Charlie **C**: 376 *with picture*
Kidd, William [Scottish pirate] **K**: 311
 Pirate (Pirates of the Caribbean and other areas) **P**: 495
Kidnapped [book by Stevenson]
 Stevenson, Robert Louis (Novels) **So**: 898
Kidnapping [law] **K**: 311
 Lindbergh, Charles Augustus (The Lindbergh kidnapping) **L**: 331
 Terrorism **T**: 177
Kidney [anatomy] **K**: 311 *with diagrams*
 Bladder **B**: 395 *with diagram*
 Blood *diagram on B*: 409
 Diuretic **D**: 240
 Elimination **E**: 236
 Evolution (Embryology) **E**: 431
 Frog *picture on F*: 537
 Gland (table) **G**: 208
 Hantavirus **H**: 54
 Human body *diagram on H*: 422
 Hypertension **H**: 475
 Kidney stone **K**: 312
 Nephritis **N**: 127
 Urine **U**: 221
Kidney bean
 Bean (Kinds of beans) **B**: 181 *with picture*
Kidney stone **K**: 312
Kidney transplant
 Organ donation **O**: 852
 Surgery (History) **So**: 1007-1008
 Transplant (Organ transplants) **T**: 379 *with picture*; (Survival rates) **T**: 381
Kidwell, John [British horticulturist]
 Hawaii (Growth of constitutional government) **H**: 106-108
Kiefer, Anselm [German painter] **K**: 313 *with picture*
 Painting (Neoexpressionism) **P**: 87 *with picture*
Kial, Treaty of [1814]
 Denmark (Wars with Sweden) **D**: 140
 Norway (Union with Sweden) **N**: 545
Kiel Canal [waterway, Germany] **K**: 313
 Canal (table) **C**: 164
Kiely, Benedict [Irish author]
 Irish literature (Fiction and poetry) **I**: 432-433
Kierkegaard, Søren Aabye [Danish philosopher] **K**: 313
 Denmark (Arts) **D**: 136
 Existentialism **E**: 436
Kieschner, Sidney [American dramatist]
 Kingsley, Sidney **K**: 331
Kieselguhr [earth]
 Dynamite (History) **D**: 397
Kiesinger, Kurt Georg [German political leader]
 Germany (West Germany) **G**: 170
Kiav [city, Ukraine] **K**: 314 *with picture*
 Ukraine **U**: 5 *with picture*; (Way of life) **U**: 8
Kievan Rus [historic region]
 Russia (Ancestry) **R**: 532; (The state of Kievan Rus) **R**: 547
 Ukraine (History) **U**: 12
Kigali [city, Rwanda] **K**: 314
 Rwanda **R**: 570
Kikoi wrap [garment]
 Tanzania (Clothing) **T**: 32
Kikuyu [people] **K**: 314
 Bantu **B**: 99 *with picture*
 Kenya (Population and ethnic groups) **K**: 298-299 *with picture*; (Opposition to the British) **K**: 303
 Mau Mau **M**: 312
Kilauea [volcano, Hawaii] **K**: 315
 Hawaii (Hawaii) **H**: 100, *picture on H*: 89
 Hawaii Volcanoes National Park **H**: 110
 Pacific Islands *picture on P*: 7
 Volcano *picture on V*: 438
Kilbourn, Byron [American settler]
 Milwaukee (Early development) **M**: 561
Kilbourntown House
 Milwaukee (Annual events and places of interest) **M**: 560-561
Kilby, Jack [American engineer] **K**: 315
 Nobel Prizes (Physics: 2000) **N**: 442
 Noyce, Robert **N**: 578
Kildare, Monastery of [Ireland]
 Bridget, Saint **B**: 607
Kilgour, Gaills McCrae [wife of]
 Turner, John Napier (Entry into politics) **T**: 516-517 *with picture*
Kilimanjaro [volcano, Tanzania] **K**: 315 *with picture*
 Kenya *picture on K*: 298
 Mountain (table) **M**: 894 *with diagram*
 Tanzania **T**: 30
Kilimanjaro National Park [Tanzania]
 National park (table) **N**: 42f
Kill Devil Hill [North Carolina]
 Wright brothers (Flying experiments) **W**: 509
Kill switch [safety device]
 Motorboat racing (Safety equipment) **M**: 877
Kill Van Kull [waterway]
 New York City (The city) **N**: 323;
 (Transportation) **N**: 334
Killarney [Ireland] **K**: 315
Killarney, Lakes of [Ireland]
 Lakes of Killarney **L**: 49 *with map*
 Ireland (Rivers and lakes) **I**: 422
Killdeer [bird] **K**: 316
 Bird *pictures on B*: 355, **B**: 357
 Protective coloration **P**: 831
"Killozer" [story by Sturgeon]
 Sturgeon, Theodore **So**: 934
Killebrew, Harmon [American baseball player]
 Baseball (table: Hall of Fame) **B**: 134
Killer bee
 Bee (Sting) **B**: 202
Killer cell
 Thymus **T**: 274
Killer smog [pollution]
 Air pollution (Health) **A**: 198
Killer whale [sea animal] **K**: 316 *with picture*
 Balance of nature (Upsetting the balance) **B**: 35
 Dolphin (Other species) **D**: 297 *with picture*;
 (Swimming and diving) **D**: 299; *picture on D*: 298
 Whale (Life span) **W**: 261; *picture on W*: 257
Killington Mountain [Vermont]
 Vermont *picture on V*: 327
Killy, Jean-Claude [French skier]
 Skiing (The middle and late 1900's) **S**: 487
Kilmer, Joyce [American author] **K**: 316
Kiln [industry]
 Brick (Firing bricks) **B**: 598
 Cement and concrete (Burning) **C**: 344
 Ceramics (Making ceramics) **C**: 360
 Clay **Ci**: 658
 Pottery (Firing) **P**: 718
Kilo [prefix]
 Metric system (Use of standard prefixes) **M**: 437; (Metric prefixes) **M**: 439
Kilobyte [unit of measure]
 Computer (Computer code) **Ci**: 911
Kilocalorie [unit of measure]
 Calorie **C**: 70
Kilogram [unit of measure] **K**: 316
 Metric system (Structure of the metric system) **M**: 437; (The metric system at a glance) **M**: 438-439 *with picture*;
 (Evolution of the metric system) **M**: 441
 Weight **W**: 181
 Weights and measures **W**: 184
Kilogram calorie [unit of measure]
 Calorie **C**: 70
Kilohertz [unit of measure] **K**: 316
Kilometer [unit of measure] **K**: 316
 Metric system (Kinds of metric units) **M**: 436;
 (The metric system at a glance) **M**: 438 *with pictures*
Kilopascal [unit of measure]
 Aerodynamics (Principles of aerodynamics) **A**: 85
 Pascal **P**: 189
Kiloton [unit of measure]
 Nuclear weapon (Limiting testing) **N**: 600-601
Kilowatt [unit of measure] **K**: 316
 Electric generator **E**: 170
 Watt **W**: 148
Kilowatt-hour [unit of measure]
 Electric meter (Utility meters) **E**: 177
 Kilowatt **K**: 316
Kilrain, Jake [American boxer]
 Boxing (From bare knuckles to gloves) **B**: 533
 Mississippi *picture on M*: 623
Kilt [clothing]
 Scotland *picture on S*: 214
 Tartan **T**: 47
Kiltartan [language]
 Gregory, Lady **G**: 388
Kim [book by Kipling]
 Kipling, Rudyard (Later career) **K**: 334
Kim Dae Jung [Korean political leader]
 Kim Jong Il **K**: 317
 Korea (Recent developments in South Korea) **K**: 378 *with picture*
 Nobel Prizes (Peace: 2000) **N**: 449
Kim Il Sung [Korean political leader] **K**: 317
 Kim Jong Il **K**: 317
 Korea (North Korea) **K**: 377
Kim Il Sung University [Korea]
 Korea (Education) **K**: 372
Kim Jae Kyu [Korean assassin]
 Korea (South Korea) **K**: 377
Kim Jong Il [Korean political leader] **K**: 317
 Korea (Recent developments in North Korea) **K**: 378 *with picture*
Kim Sung-ju *See Kim Il Sung in this index*
Kim Young Sam [Korean political leader]
 Korea (South Korea) **K**: 377
Kimax [glass]
 Glass (Borosilicate glass) **G**: 213
Kimbanguists [people]
 Congo (Kinshasa) (Religion) **Ci**: 940a
Kimberley [city, South Africa] **K**: 317
Kimberlite [geology]
 Diamond (Where natural diamonds are found) **D**: 181-182
Kimchi [food]
 Asian Americans (Asian influences on American culture) **A**: 812c
 Korea (Food and drink) **K**: 371
Kimono [clothing]
 Japan (Clothing) **J**: 39
Kin, Next of [law]
 Next of kin **N**: 390
Kin selection [biology] *See Inclusive fitness in this index*
Kinabalu National Park [Malaysia]
 National park (table) **N**: 42f
Kinchinunga, Mount *See Mount Kanchenjunga in this index*
Kindergarten [education] **K**: 317 *with picture*
 Careers (Teaching) **C**: 231
 Early childhood education (Formal education programs) **E**: 15
 Education (The organization of U.S. education) **E**: 89
 Fröbel, Friedrich Wilhelm August **F**: 535
 Hearst, Phoebe Apperson **H**: 131
 Missouri (Interesting facts) **M**: 651
 School (Kindergartens) **S**: 181; (The expanding role of public schools) **S**: 184
 Teaching *picture on T*: 65
Kindertotenlieder [music by Mahler]
 Mahler, Gustav **M**: 65
Kindling temperature
 Camping (Building a campfire) **C**: 94-96
Kiner, Ralph [American baseball player]
 Baseball (table: Hall of Fame) **B**: 134
Kinescope [television]
See also Picture tube in this index
 Television (Amplifiers and separators) **T**: 123-124; (Early development) **T**: 125
 Zworykin, Vladimir Kosma **Z**: 614
Kinesics **K**: 319
 Body language **B**: 435
 Communication (The study of communication) **Ci**: 887
Kinetic energy [physics]
 Energy **E**: 273; (Kinetic energy) **E**: 275 *with diagram*
 Evaporation (How evaporation occurs) **E**: 422
 Motion (Momentum and kinetic energy) **M**: 844
 Wind power **W**: 331
Kinetic friction [physics]
 Friction (Kinds of friction) **F**: 532
Kinetic sculpture
 Sculpture (Form and treatment) **S**: 230-231
Kinetic theory of gases [physics]
 Chemistry (Development of physical chemistry) **C**: 404
 Gas [physics] (How gases behave) **G**: 48
 Maxwell, James Clerk **M**: 319
Kinetoscope [machine]
 Edison, Thomas Alva (Motion pictures) **E**: 80
 Motion picture (The invention of motion pictures) **M**: 864
King [chess]
 Chess (The board and the men) **C**: 412 *with diagram*; (The moves) **C**: 413
King [entomology]
 Termite (Life and habits) **T**: 173
King [title] **K**: 319
 Address, Forms of (Officials of the Commonwealth of Nations) **A**: 53
 Crown **Ci**: 1158
 Divine right of kings **D**: 242
 Emperor **E**: 261

Primogeniture P: 780
Sovereignty So: 689
King, Angus [American political leader]
Maine (table) M: 87
King, B. B. [American singer] K: 319 *with portrait*
King, Betsy [American golfer]
Golf (U.S. Women's Open) G: 265
King, Billie Jean [American tennis player]
K: 320
Tennis (Tennis today) T: 168
King, Coretta Scott [American social reformer]
K: 320 *with portrait*
King, Martin Luther, Jr. (Early life) K: 320
King, Cyril E. [American political leader]
Virgin Islands (Progress under the United States) V: 397
King, Dorothy Gardner [mother of]
Ford, Gerald Rudolph (Family background) F: 372
King, Edward P., Jr. [American general]
Bataan Peninsula B: 162
King, Ernest Joseph [American admiral]
Navy, United States (World War II [1939-1945]) N: 89
World War II (The Allies attack in Europe and Northern Africa) W: 478
King, Franklin Hiram [American agriculturist]
Silo S: 463
King, George E. [Canadian political leader]
New Brunswick (table) N: 196
King, Horatio [American government official]
Buchanan, James (table) B: 661
King, Isabel [sister of]
King, William Lyon Mackenzie (Boyhood) K: 324
King, Isabel Grace Mackenzie [mother of]
King, William Lyon Mackenzie (Boyhood) K: 324
King, Janet [sister of]
King, William Lyon Mackenzie (Boyhood) K: 324
King, John [grandfather of]
King, William Lyon Mackenzie (Boyhood) K: 324
King, John [father of]
King, William Lyon Mackenzie (Boyhood) K: 324
King, John Alsop [American political leader]
New York (table) N: 313
King, Karl [American composer] K: 320
King, Macdougall [brother of]
King, William Lyon Mackenzie (Boyhood) K: 324; (Early political and public career) K: 325
King, Martin Luther, Jr. [American social reformer] K: 320 *with pictures*
African Americans (The civil rights movement) A: 136m *with picture*
Alabama (Interesting facts) A: 257; (The mid-1900's) A: 278 *with picture*
Atlanta *picture on* A: 860
Civil disobedience (History of civil disobedience) Ci: 607
King, Coretta Scott K: 320
Malcolm X M: 103
Martin Luther King, Jr., Day M: 235
Martin Luther King, Jr., National Historic Site M: 235
Mays, Benjamin Elijah M: 329
Memphis (The people) M: 394-395
Nobel Prizes (Peace: 1964) N: 448 *with picture*
Tennessee (The mid-1900's) T: 156-157
United States, History of the (Poverty and discrimination) U: 191
King, Richard [American steamboat captain]
King Ranch K: 328
King, Rodney G. [American public figure]
African Americans (Disappointments and controversy) A: 136q
Bush, George Herbert Walker (National affairs) B: 720-721
Christopher, Warren Minor C: 537
Los Angeles (Recent developments) L: 470
Riot (During the 1900's) R: 349
King, Rufus [American political leader] K: 323
Louisiana Purchase (Trouble begins) L: 502
Van Buren, Martin (U.S. senator) V: 271
King, Stephen [American author] K: 323
Book (Modern books) B: 468
King, Thomas Starr [American religious leader]
K: 323
King, Tom [British bandit]

Turpin, Dick T: 519
King, William [American political leader]
Maine (table) M: 87; (Statehood) M: 89
King, William Lyon Mackenzie [Canadian political leader] K: 324 *with pictures*
Canada, History of (Independence) C: 150
Liberal Party L: 227
Saint Laurent, Louis Stephen (Entry into public life) S: 39-40
King, William Rufus Devane [American political leader] K: 328 *with portrait*
King and I, The [musical]
Rodgers, Richard R: 398
King Arthur See Arthur, King *in this index*
King bird-of-paradise [bird]
Bird-of-paradise B: 374 *with picture*
King Center [Atlanta, Georgia]
King, Coretta Scott K: 320
King cobra [snake]
Cobra Ci: 742
Snake *picture on* S: 534
King Conchobar [legendary figure]
Irish literature (Heroic tales, romances, and sagas) I: 430-431
King crab [sea animal]
Horseshoe crab H: 368
See also Red king crab *in this index*
King Crimson [musical group]
Rock music (Rock goes pop) R: 379
King George's War [1744-1748]
Canada, History of (The colonial wars) C: 143
French and Indian wars (King George's War) F: 512
Louisbourg L: 477
Succession wars (The War of the Austrian Succession) So: 950
King Hedley II [play by Wilson]
Wilson, August W: 316
King-Horn [literary figure] K: 328
King-Horn [poem]
King-Horn K: 328
King Island [Pacific]
Tasmania (Location, size, and description) T: 49
King James Version [Bible]
Bible (The King James Version) B: 286;
(Modern English translations) B: 286-287;
picture on B: 285
English literature (Prose writings) E: 317
Hampton Court Conference H: 36
James I J: 25
King John [play by Shakespeare]
Shakespeare, William (*King John*) S: 357
King Khalid International Airport [Saudi Arabia]
Airport A: 242
King Kong [film]
Animation *picture on* A: 514
King Lear [play by Shakespeare]
Shakespeare, William (*King Lear*) S: 363
King mackerel [fish]
Kingfish K: 329 *with picture*
Mackerel M: 24
King Memorial Library, Martin Luther
[Washington, D.C.]
Washington, D.C. *map on* W: 76
King of Kings, The [film]
De Mille, Cecil Blount D: 119
King of Saxony bird-of-paradise [bird]
Bird-of-paradise B: 374 *with picture*
King of the Cowboys [nickname]
Rogers, Roy R: 400
King Peak [mountain, Yukon territory] K: 328
King penguin
Penguin *picture on* P: 239
King Philip [Indian chief] See Philip, King *in this index*
King Philip's War [1675-1678]
Indian wars (King Philip's War) I: 191
Massachusetts (King Philip's War) M: 291
Philip, King P: 370
Rhode Island (King Philip's War) R: 312
King Pym [English history]
Pym, John P: 915
King Ranch [Texas] K: 328
King snake See Kingsnake *in this index*
King Solomon's Mines [book by Haggard]
Haggard, H. Rider H: 6
King Square [park, Saint John]
New Brunswick *picture on* N: 184
King vulture [bird]
Vulture (New World vultures) V: 453-454
King William's School
Maryland (Schools) M: 244

King William's War [1689-1697]
Canada, History of (The colonial wars) C: 143
French and Indian wars (King William's War) F: 512
Kingbird K: 328 *with picture*
Bird (Birds of grasslands) B: 336 *with picture*
Kingdom [biology] K: 328
Classification, Scientific (Groups in classification) Ci: 654
Plant P: 516
Kingdom of ...
Kingdoms appear under their key words, as in
Sardinia, Kingdom of
Kingfish [fish] K: 329 *with picture*
Kingfish [nickname]
Long, Huey Pierce L: 446
Kingfisher [bird] K: 329 *with picture*
Bird (Birds of inland waters and marshes) B: 340 *with picture*; (How birds move) B: 350-352
Kinghead [plant]
Ragweed R: 103
Kinglet [bird] K: 330 *with picture*
Bird (Birds of forests and woodlands) B: 334 *with picture*
Kingmaker
Warwick, Earl of [English political leader] W: 44
Kings, Books of [Old Testament] K: 330
Kings, Los Angeles
Hockey (table: National Hockey League) H: 281
Kings, Sacramento
Basketball (table) B: 150
Kings, Valley of the See Valley of the Kings *in this index*
King's Bench, Court of
Law *picture on* L: 135
Kings Canyon [canyon, California]
Kings Canyon National Park K: 330
Kings Canyon National Park [California] K: 330 *with picture*
National Park System (table: National parks) N: 48
King's College [former name]
Columbia University (History) Ci: 853
King's College, University of K: 331
Universities and colleges (First universities in the Americas) U: 210
King's College chapel
Cambridge University *picture on* C: 75
King's Court [European history]
Curia regis Ci: 1194
Kings Dominion [Virginia]
Virginia (Places to visit) V: 408
Kings Landing Historical Settlement [Prince William]
New Brunswick (Places to visit) N: 188 *with picture*
King's Men [theater group]
Shakespeare, William (*The King's Men*) S: 348
Kings Mountain, Battle of [1780]
Revolutionary War in America (table) R: 276;
(Kings Mountain) R: 285
South Carolina (The Revolutionary War) *picture on* So: 659-660
Kings Peak [mountain]
Rocky Mountains (Chief ranges of the Rockies) R: 395
Utah (Land regions) U: 240
Kings Point
United States Merchant Marine Academy U: 200
Kings River [river, California]
Kings Canyon National Park K: 330
Kingsley, Ben [British actor]
Motion picture (Best performance by an actor: 1982) M: 862-863
Kingsley, Charles [British author] K: 331
Kingsley, Mary Henrietta [British explorer] K: 331
Kingsley, Sidney [American dramatist] K: 331
Kingsley, Zephaniah [American settler]
Jacksonville (Cultural life and recreation) J: 18
Kingsley Plantation State Historical Memorial
[Florida]
Jacksonville (Cultural life and recreation) J: 18
Kingsmere [estate]
King, William Lyon Mackenzie (Retirement and death) K: 327
Kingsnake K: 331
Milk snake M: 550
Snake *picture on* S: 532
Kingston [Jamaica] K: 331 *with picture*

Jamaica J: 23 *with map*
Kingston [Tennessee]
 Tennessee T: 135
Kingston, Maxine Hong [American author]
 American literature (Works by minority writers) A: 425
Kingston Martello Towers [Ontario]
 Canada (table: National historic sites) C: 114
Kingston upon Hull [England]
 Hull H: 411
Kingstown [St. Vincent and the Grenadines]
 K: 332
 Saint Vincent and the Grenadines S: 57 *with picture*
Kinich Ahau [Maya god]
 Maya (Religion) M: 322
Kinkejou [animal] K: 332 *with picture*
Kinneret, Lake [Israel-Syria]
 Galilee, Sea of G: 10 *with maps*
Kinnock, Neil Gordon [British political leader]
 K: 332
Kino, Eusebio Francisco [Italian priest and explorer] K: 332
 Arizona (Spanish exploration) A: 688 *with picture*
 Mission life in America (Western missions) M: 618-619
Kinsella, Thomas [Irish poet]
 Irish literature (Fiction and poetry) I: 432-433
Kinsey, Alfred Charles [American biologist]
 K: 332
Kinsey Report, The [books by Kinsey]
 Kinsey, Alfred Charles K: 333
Kinshasa [city, Congo (Kinshasa)] K: 333 *with picture*
 Congo (Kinshasa) Ci: 940 *with picture*
Kinship [sociology]
 Family F: 20; (Non-Western families) F: 24
 Pacific Islands (Villages) P: 5
Kintpuash [American Indian leader] *See* Captain Jack *in this index*
Kiowa Indians [American Indians] K: 333
Kipfer, Paul [Swiss balloonist]
 Balloon (Balloon explorations of the upper atmosphere) B: 61
Kipling, Rudyard [British author] K: 333 *with portrait*
 Limpopo River L: 309
Kipped herring [food]
 Herring (Uses) H: 216
 Scotland (Food and drink) S: 214
Kirby-Smith, Edmund *See* Smith, Edmund
Kirby in this index
Kirchhoff, Gustav Robert [German physicist]
 Cesium C: 364
 Optics (History) O: 813
Kirchhoff's laws [physics]
 Electric circuit (Circuit mathematics) E: 167
Kirchner, Ernst Ludwig [German artist]
 Expressionism *picture on* E: 456
 Painting (Expressionism) P: 78
Kiribati [country] K: 335 *with picture and map*
 Flag *picture on* F: 203
 Line Islands L: 333
Kirilenko, Andrei Pavlovich [Soviet political leader] K: 336
Kiritimati Atoll K: 336 *with map*
Kiriyenko, Sergei [Russian political leader]
 Russia (The new nation) R: 555
Kirk, Ron [American political leader]
 Dallas (Recent developments) D: 15
Kirke, Sir David [English settler]
 Newfoundland and Labrador (Colonization) N: 375
 Quebec (Early days) Q: 36
Kirkland, Lane [American labor leader] K: 336
Kirkpatrick, Jeane Jordan [American government official] K: 336
Kirkwall [Orkney Islands]
 Orkney Islands O: 856
Kirkwood, Samuel Jordan [American political leader] K: 336
 Garfield, James Abram (table) G: 42
Kirlian photography K: 336 *with picture*
Kirov, Sergey [Russian political leader]
 Saint Petersburg [Russia] (History) S: 55
Kirov Ballet
 Ballet (Ballet in Russia) B: 52-53
 Russia (Ballet) R: 537
Kirov Theater
 Saint Petersburg [Russia] (Education and cultural life) S: 55
Kirstein, Lincoln Edward [American director]
 K: 337

Kirtland [Ohio]
 Mormons (Mormons in the Middle West) M: 808
Kisatchie National Forest [Louisiana]
 Louisiana (Places to visit) L: 488
Kishinev [capital city, Moldova] *See* Chisinau *in this index*
Kiska [island]
 Alaska (Interesting facts) A: 283
Kiss of the Spider Woman, The [book by Puig]
 Novel (The novel today) N: 575
Kissimmee River [Florida]
 Everglades (Environmental problems) E: 424
 Florida (The late 1900's) F: 264-265
Kissinger, Henry Alfred [American government official] K: 337
 Ford, Gerald Rudolph (Foreign affairs) F: 378
 International relations *picture on* I: 344
 Vietnam War (Invasion of the south) V: 376
Kit [animal]
 Beaver (The young) B: 194 *with picture*
 Rabbit (Young) R: 48
Kit Carson House
 Taos T: 36
Kit fox [animal]
 Animal *picture on* A: 483
 Fox (Kinds of foxes) F: 440
Kitasato, Shibasaburo [Japanese bacteriologist]
 Immune system (Early discoveries) I: 88d
Kitchen
 Interior design *picture on* I: 330
 Mount Vernon *picture on* M: 889
 Safety (In the kitchen) S: 10
 Sailing *picture on* S: 25
 Zoo (Diet) Z: 606; *picture on* Z: 608
Kitchen Cabinet [U.S. history] K: 337
 Cabinet (Development of the Cabinet) C: 3
 Jackson, Andrew (The spoils system) J: 10-11
"Kitchen debate" [U.S. history]
 Nixon, Richard Milhous (Overseas missions) N: 431 *with picture*
Kitchener [Ontario] K: 337
Kitchener, Horatio Herbert [British military leader] K: 338
 Boer War B: 435
Kitchin, W. W. [American political leader]
 North Carolina (table) N: 490
Kite [bird] K: 338 *with picture*
Kite [toy] K: 338 *with pictures*
 Airplane (Early experiments and ideas) A: 229
 Helicopter (Lift) H: 171
Kite, Tom [American golfer]
 Golf (U.S. Open) G: 265
Kithare [musical instrument]
 Classical music *picture on* Ci: 647
Kitimat [British Columbia] K: 341
Kitt Peak National Observatory [Arizona]
 Arizona A: 671; (Places to visit) A: 678
 National Optical Astronomy Observatories N: 42
 National Radio Astronomy Observatory N: 59
 Sun (Earth-based studies) So: 986 *with picture*
Kittatinny Mountains [New Jersey-Pennsylvania]
 Delaware Water Gap D: 114
 New Jersey (Land regions) N: 242
Kitten [animal]
 Cat (Growth and development) C: 293 *with pictures*
Kittinger, Joseph W., Jr. [American balloonist]
 Balloon (Balloon explorations of the upper atmosphere) B: 61-62
Kitti's hog-nosed bat
 Mammal *picture on* M: 117
Kittiwake [bird] K: 341 *with picture*
 Gull (Their homes) G: 439
Kitty Hawk [North Carolina]
 Wright brothers W: 508
Kitty Hawk [ship]
 Aircraft carrier (The United States carrier fleet) A: 206
Kitzhaber, John [American political leader]
 Oregon (table) O: 845
Kiva [architecture]
 Anasazi (Way of life) A: 448a
 Archaeology *picture on* A: 597
 Architecture (Pre-Columbian architecture) A: 614
 Mesa Verde National Park M: 420
Kivi, Aleksis [Finnish author]
 Scandinavian literature (The Golden Age) S: 171
Kivu, Lake [Rwanda-Zaire]
 Lake Tanganyika L: 46 *with map*

Rwanda (Land) R: 571 *with map*
Kiwanis International [organization] K: 341 *with picture*
Kiwi [bird] K: 342 *with picture*
 Bird (Birds of Australia and the Pacific Islands) B: 349 *with picture*; (Smell, taste, and touch) B: 365
 New Zealand (Animal life) N: 353
Kiwi fruit K: 342 *with picture*
Kjolen Mountains
 Norway (Land regions) N: 541 *with map*
 Sweden (The Mountain Range) So: 1028
KKK *See* Ku Klux Klan *in this index*
KLA [political group] *See* Kosovo Liberation Army *in this index*
Klaipeda [city, Lithuania] K: 342
Klamath Indians [American Indians] K: 343
Klamath Mountains [mountains, California-Oregon]
 California (Land regions) C: 48
 Oregon (Land regions) O: 838
Klan *See* Ku Klux Klan *in this index*
Klaproth, Martin Heinrich [German chemist]
 Cerium C: 362
 Titanium (Discovery and manufacture) T: 300
 Uranium U: 214
 Zirconium Z: 600
Klaus, Karl [Russian chemist]
 Ruthenium R: 569
Kleberg, Richard M. [American political leader]
 Johnson, Lyndon Baines (Entry into politics) J: 146
Klebs, Edwin [German pathologist]
 Löffler, Friedrich August Johannes L: 420
Klee, Paul [Swiss painter] K: 343
Klee Wyck [book by Carr]
 Carr, Emily C: 248
Klein, A. M. [Canadian author] K: 343
Klein, Calvin [American fashion designer] K: 343
Klein, Chuck [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Klein, F. A. [Prussian missionary]
 Moabite stone M: 681
Klein, Lawrence Robert [American economist]
 K: 343
Klein, Ralph [Canadian political leader]
 Alberta (table) A: 328
Kleindienst, Richard G. [American government official]
 Justice, Department of (table) J: 203
 Nixon, Richard Milhous (table) N: 433
 Watergate W: 144
Kleist, Heinrich von [German author] K: 343
Klem, Bill [American umpire]
 Baseball (table: Hall of Fame) B: 135
Klempner, Otto [German conductor] K: 344
Kleppe, Thomas S. [American government official]
 Ford, Gerald Rudolph (table) F: 378
Kleptomania [psychology] K: 344
Klima, Viktor [Austrian political leader]
 Austria (Recent developments) A: 940
Klimt, Gustav [Austrian artist] K: 344
 Painting (Symbolism) P: 76 *with picture*
Kline, Franz [American painter] K: 344
 Abstract expressionism *picture on* A: 18
Kline, Kevin [American actor]
 Motion picture (Best performance by an actor in a supporting role: 1988) M: 863
Kling, Florence [wife of William G. Harding] *See* Harding, Florence Kling *in this index*
Klint, Kaare [Danish architect]
 Furniture (Modern Scandinavian design) F: 583; *picture on* F: 584
Klipspringer [animal]
 Antelope (Kinds of antelope) A: 542
Klismos [chair]
 Furniture (Ancient Greece) F: 570 *with picture*
Klomp [clothing]
 Netherlands (Rural life) N: 141
Klondike [region, Yukon Territory] K: 344 *with picture and map*
 Yukon Territory (Service industries) Y: 583-584 *with map*
Klondike Days [custom]
 Edmonton (Culture and recreation) E: 84-85
Klondike Gold Rush [1897-1898]
 Klondike K: 344 *with picture*
 Alaska (The gold rush) A: 301
 Gold rush (Gold rushes in other countries) G: 254
 Yukon Territory (History) Y: 585-586 *with picture*
Klondike River [Yukon Territory]

Klondike K: 344 *with map*
 Yukon River (Upper Yukon) Y: 582
 Yukon Territory (History) Y: 585

Klondike solitaire [card game]
 Solitaire So: 584 *with picture*

Klopstock, Friedrich Gottlieb [German poet]
 German literature (The Storm and Stress movement) G: 140

Klossowski de Rola, Balthasar [French artist]
See Balthus in this index

Kluane National Park
 Canada (table: National parks and national park reserves) C: 113

Klug, Sir Aaron [South African chemist]
 Nobel Prizes (Chemistry: 1982) N: 443

Klutznick, Philip M. [American government official]
 Carter, Jimmy (table) C: 257
 Commerce, Department of (table) Ci: 871

Klystron
 Particle accelerator (How accelerators work) P: 184-185

Radar (Continued progress) R: 72

Klyuchevskaya [volcano]
 Siberia (The land and climate) S: 444

Knapp, Seaman A. [American farmer]
 4-H (History) F: 436

Knebel, John A. [American government official]
 Ford, Gerald Rudolph (table) F: 378

Knecht Ruprecht
 Christmas (Gift giving) C: 534

Knee [anatomy] K: 345 *with diagrams*
 Arthroscopy A: 753 *with picture*

Knee jerk [physiology]
 Nervous system (Simple pathways) N: 134
 Reflex action R: 194

Kneecap [anatomy]
 Knee K: 345
 Leg (The knee joint) L: 182 *with diagram*

Kneeling archer [sculpture]
 Sculpture (China) S: 238 *with picture*

Kneip, Richard F. [American political leader]
 South Dakota (table) So: 680

Kneset
 Israel (National government) I: 479 *with picture*

Knickerbocker, Diedrich [pen name]
 Irving, Washington (Early career) I: 460

Knickerbocker Base Ball Club of New York [baseball team]
 Baseball (Alexander Cartwright) B: 132 *with picture*

Knickerbockers, New York
 Basketball (table) B: 150
 New York City (Sports) N: 338

Knickerbocker's History of New York [book by Irving]
 Irving, Washington (Early career) I: 460
 Santa Claus (Santa's appearance) S: 114

Knickers
 Clothing (The 1800's) Ci: 702

Knife [tool] K: 345 *with pictures*
 Indian, American picture on I: 175

Knife in the Water [film]
 Motion picture (Movies in the 1960's) M: 871

Knife River Indian Villages National Historic Site [North Dakota]
 National Park System (table: National historic sites) N: 52-53

Knifefish
 Fish picture on F: 157

Knight *See* Knights and knighthood *in this index*

Knight [chess]
 Chess (The board and the men) C: 412 *with diagram*; (The moves) C: 413

Knight, Bob [basketball coach] K: 346 *with portrait*

Knight, Eric [British-American author] K: 346

Knight, Robert Montgomery *See* Knight, Bob *in this index*

Knight bachelor [title]
 Knighthood, Orders of (Honorary orders) K: 347

Knight Commander [title]
 Knighthood, Orders of (Honorary orders) K: 347

Knight Grand Cross [title]
 Knighthood, Orders of (Honorary orders) K: 347

Knight of the Burning Pestle, The [play by Beaumont]
 Beaumont, Francis B: 191
 English literature (Jacobean drama) E: 317

Knighthood, Orders of [awards] K: 346 *with pictures*

Bath, Order of the B: 165

Knights, Teutonic *See* Teutonic Knights *in this index*

Knights and knighthood [European history]
 K: 348 *with pictures*
 Address, Forms of (Officials of the Commonwealth of Nations) A: 53
 Armor (During the Middle Ages) A: 720
 Army (Armies in the Middle Ages) A: 727
 Etiquette (The origins of etiquette) E: 374
 Feudalism (Knighthood under feudalism) F: 82 *with picture*
 Heraldry (The development of heraldry) H: 194 *with pictures*
 Medals, decorations, and orders (History) M: 359
 Middle Ages (Life of the people) M: 526

Knights Hospitallers [religious and military order] K: 351
 Crusades picture on Ci: 1160
 Knights Templars K: 353
 Malta (History) M: 113-114

Knights of Ak-Sar-Ben
 Omaha (History) O: 756-757

Knights of Columbus K: 352 with picture

Knights of Labor K: 352
 Cleveland, Grover (Labor problems) Ci: 670
 Cooperative (History) Ci: 1036
 Labor movement (The first nationwide labor organizations) L: 9-10 *with picture*
 United States, History of the (Early reform efforts) U: 181

Knights of Malta *See* Knights Hospitallers *in this index*

Knights of Pythias K: 352 with picture

Knights of Rhodes [military and religious order]
See Knights Hospitallers *in this index*

Knights of Saint John [fraternal organization] K: 352

Knights of St. John of Jerusalem [religious and military order] *See* Knights Hospitallers *in this index*

Knights of the Bath [award] *See* Bath, Order of the *in this index*

Knights of the Round Table *See* Round Table *in this index*

Knights Templars [European history] K: 353
 Cyprus (History) Ci: 1207
 Masonry (The lodges and degrees of Masonry) M: 267 *with picture*

Knit [stitch]
 Knitting (Knitting the fabric) K: 354
 Textile T: 212; (Knitted fabrics) T: 214 *with picture*; (The age of modern textiles) T: 219

Knitted rug
 Rugs and carpets (Other methods) R: 516

Knitting [handicraft] K: 353 *with pictures*

Knitting machine K: 354 with picture
 Rugs and carpets (Other methods) R: 516
 Textile picture on T: 216

Knock
 Gasoline (Gasoline octane ratings) G: 61
 Octane number O: 669

Knockout
 Boxing (Scoring a fight) B: 528
 Kickboxing K: 311

Knoll, Hans [German designer]
 Furniture (Recent developments) F: 584

Knoll International
 Furniture (Recent developments) F: 584

Knopf, Alfred A. [American publisher] K: 355

Knorr [ship]
 Ship picture on S: 407
 Vikings (The Vikings as shipbuilders) V: 381

Knossos [ancient Greece] K: 355
 Architecture (Minoan architecture) A: 615 *with picture*
 Clothing picture on Ci: 696
 Crete picture on Ci: 1128
 Greece, Ancient picture on G: 373
 Minotaur M: 611
 Painting (Aegean painting) P: 41 *with picture*

Knot [unit of measure] K: 355
 Mile M: 542
 Ship (Nautical measurements) S: 416

Knotmeter [measuring device]
 Log (A tachometer) L: 421

Knots, hitches, and splices K: 355 with diagrams
 Fishing pictures on F: 178
 Macramé M: 26 *with picture*

Knotted stitch
 Embroidery (Embroidery stitches) E: 257 *with picture*

Needlepoint N: 118

Knott's Berry Farm
 California (Places to visit) C: 46
 Los Angeles (Metropolitan area) L: 462-463

Knottweed [plant] K: 357

Know-Nothings [U.S. history] K: 357
 Civil War (Developments in the political party system) Ci: 616
 Immigration (The second wave) I: 82
 Johnson, Andrew (Governor) J: 138
 Pierce, Franklin P: 454
 Riot (During the 1800's) R: 348-349
 United States, History of the (Political and institutional splits) U: 173
 Washington Monument W: 110

Knowledge
See also Truth *in this index*
 Artificial intelligence (Knowledge representation and reasoning) A: 760
 Empiricism E: 262
 Existentialism (What is existentialism?) E: 436-437
 Hume, David H: 432
 Kant, Immanuel (Kant's ideas) K: 244
 Philosophy (Epistemology) P: 383-384

Knowles, Warren P. [American political leader]
 Wisconsin (table) W: 365

Knowles, William Standish [American chemist]
 Nobel Prizes (Chemistry: 2001) N: 444

Knox, Frank [American political leader] K: 357

Knox, Henry [American general] K: 358
 Revolutionary War in America (The evacuation of Boston) R: 275
 Veterans' organizations (In the United States) V: 344
 Washington, George (Cabinet) W: 102 *with picture*

Knox, John [Scottish religious leader] K: 358 *with picture*
 Edinburgh E: 77
 Scotland (The Scottish Reformation) S: 219

Knox, Philander Chase [American political leader]
 Taft, William Howard (Foreign affairs) T: 11

Knox, William Franklin *See* Knox, Frank *in this index*

Knox class
 Frigate F: 534

Knoxville [Tennessee] K: 358 *with picture*
 Tennessee picture on T: 139
 Tennessee, University of T: 158

Knoxville World's Fair
 Knoxville (Government and history) K: 359 *with picture*
 Tennessee (Recent developments) T: 157 *with picture*

Knuckle ball
 Baseball (Pitching) B: 127-128

Knuckle walking [locomotion]
 Chimpanzee (The life of a chimpanzee) C: 471-472

Knuckling down
 Marbles M: 193

KO
 Boxing (Scoring a fight) B: 528

Koala [animal] K: 359 *with picture*
 Australia picture on A: 916

Koan [religion]
 Zen Z: 593

Kobe [Japan] K: 360

København [Denmark] *See* Copenhagen *in this index*

Kobold [goblin]
 Fairy F: 10

Kobuk Valley National Park [Alaska] K: 360
 National Park System (table: National parks) N: 48

Koch, Edward I. [American political leader]
 New York City (A time of change) N: 343

Koch, Robert [German doctor] K: 360
 Antibiotic (History) A: 552
 Bacteria (History) B: 21-22
 Bacteriology (Studying bacteria) B: 22; (History) B: 22
 Medicine (Scientific study of the effects of disease) M: 375 *with picture*
 Tuberculosis T: 477

Koch, Rudolph [German printer]
 Book (The 1800's) B: 467-468

Koch snowflaka [geometry]
 Fractal F: 443 *with diagram*

Kochanowski, Jan [Polish poet]
 Poland (The arts) P: 607

- Kocharian, Robert** [Armenian political leader]
Armenia (History) A: 718b-719
- Köchel, Ludwig** [German cataloger]
Mozart, Wolfgang Amadeus (His style)
M: 907-908
- Köchel number** [music]
Mozart, Wolfgang Amadeus (His style)
M: 907-908
- Kocher, Emil Theodor** [Swiss physician]
Nobel Prizes (Physiology or medicine: 1909)
N: 444
- Koch's postulates**
Bacteriology (Studying bacteria) B: 22
- Kodak** [camera]
Eastman, George E: 47
Photography (The beginnings of modern photography) P: 426 *with picture*
- Kodály, Zoltán** [Hungarian composer] K: 360
- Kodiak bear**
Animal picture on A: 485
Bear (Brown bears) B: 184
- Kodiak Island**
Exploration (The Russians in Siberia) E: 447
- Koestler, Arthur** [Hungarian-British author]
K: 361
- Kofun era** [Japanese history] K: 361
Japan (Early days) J: 52-53
- Kogawa, Joy** [Canadian author]
Canadian literature (Modern English-Canadian fiction) C: 160
- Koguryo** [former region]
Korea (Early years) K: 375-376
- Koh-i-noor** [gem]
Diamond (Famous diamonds) D: 182; *picture on D: 181*
Gem (Some famous gems) G: 79
- Kohala** [volcano]
Hawaii (Hawaii) H: 100
- Kohemp** [fiber]
Kudzu K: 392
- Kohl, Helmut** [German political leader] K: 361
with portrait
Germany (The unification of East and West Germany) G: 171
- Köhler, Georges Jean Franz** [German physiologist]
Nobel Prizes (Physiology or medicine: 1984)
N: 445
- Kohler, Walter J., Jr.** [American political leader]
Wisconsin (table) W: 365
- Köhler, Wolfgang** [German-American psychologist] K: 361
Learning (Insight learning) L: 163
- Kohlrabi** [plant] K: 361 *with picture*
Evolution (Artificial selection) E: 432 *with picture*
- Kohn, Walter** [Austrian-born American chemist]
Nobel Prizes (Chemistry: 1998) N: 443
- Kohoutek, Comet** [astronomy]
Comet (table) Ci: 868
- Koiné** [language]
Greek language (Development of ancient Greek) G: 376
- Koivisto, Mauno** [Finnish political leader]
Finland (The late 1900's) F: 118
- Kojiki** [book]
Shinto S: 401
- Kokanee** [fish]
Fish picture on F: 159
Salmon (Kinds of salmon) S: 70
- Kokitch, Casimir** [American dancer]
De Mille, Agnes picture on D: 119
- Koko** [gorilla]
Gorilla (Gorillas in captivity) G: 276
- Kokoschka, Oskar** [Austrian painter] K: 362 *with picture*
Painting (People) P: 31 *with picture*
- Kokpar** [sport]
Kazakhstan (People) K: 250a-250b
- Kola nut** K: 362 *with picture*
- Kola Peninsula** [Russia]
Sami S: 78
- Kola Sami** [people]
Sami S: 79
- Kölen Mountains** [mountains, Norway-Sweden]
Sweden (The Mountain Range) So: 1028
- Kolff, Willem** [Dutch-born doctor]
Artificial heart A: 760
- Kolkata** [city, India] K: 362 *with pictures*
Black Hole of Calcutta B: 388
- Kolkhozy** [agriculture] See Collective farm in this index
- Kölln** [former village]
Berlin (Early days) B: 264
- Kollwitz, Käthe** [German artist] K: 363 *with picture*
- Köln** [Germany] See Cologne in this index
- Kolokol** [newspaper]
Herzen, Alexander Ivanovich H: 217
- Komandorskiye Islands** [Bering Sea]
Commander Islands Ci: 870
- Komarov, Vladimir M.** [Russian cosmonaut]
Astronaut (Accidents in space) A: 830
Space exploration (Voskhod and Gemini: The first multiperson space flights) So: 714
- Komatsu, Sakyo** [Japanese author]
Science fiction (Growing popularity) S: 205-206
- Komodo dragon** [reptile] K: 364 *with picture*
Lizard (Sizes of lizards) L: 399
Monitor M: 724
National park (Other interesting national parks) N: 42e-42h *with picture*
- Komodo National Park** [Indonesia]
National park (table) N: 42f; (Other interesting national parks) N: 42e-42h *with picture*
- Komondor** [dog] K: 364 *with picture*
- Kompendium der Psychiatrie** [book by Kraepelin]
Abnormal psychology (History) A: 12
- Kompong Som** [city, Cambodia]
Cambodia (Economy) C: 72
- Komunyakaa, Yusef** [American author]
African American literature (Recent developments) A: 136a
- Kon-Tiki** [book by Heyerdahl]
Heyerdahl, Thor H: 220
- Kon-Tiki** [raft]
Heyerdahl, Thor H: 220 *with picture*
Oslo O: 864
Raft R: 102
- Kong Qiu** See Confucius in this index
- Kongo** [former kingdom] K: 364
Congo (Kinshasa) (Early days) Ci: 940d
Nzinga Nkuwu N: 633
- Kongo** [people]
Congo (Brazzaville) (People) Ci: 939
- König, Friedrich** [German inventor]
Printing (New presses and typesetting machines) P: 803
- Königgrätz, Battle of** [1866]
Seven Weeks' War S: 325
- Königsberg** [former name]
Kaliningrad K: 212
- Konigsburg, Elaine** [American author] K: 365
Regina Medal (table: 2001) R: 206
- Konoye, Prince Fumimaro** [Japanese political leader] K: 365
- Koobi Fora National Park** [Kenya]
Lake Turkana L: 47
- Kookaburra** [bird] K: 365 *with picture*
Australia (Native animals) A: 914 *with picture*
Bird (Birds of Australia and the Pacific Islands) B: 349 *with picture*
Kingfisher K: 329
- Koolau Range** [mountains]
Hawaii (Oahu) H: 102
- Koontz, Dean** [American author] K: 365
- Koopmans, Tjalling Charles** [American economist]
Nobel Prizes (Economics: 1975) N: 449
- Kootenai Indians** See Kutenai Indians in this index
- Kootenay National Park**
Canada (table: National parks and national park reserves) C: 113
- Kootenay River** [Canada-U.S.]
British Columbia (Rivers, waterfalls, and lakes) B: 624
- Kopechne, Mary Jo** [American public figure]
Kennedy, Edward Moore K: 259
- Koplik's spots** [disorder]
Measles (Cause and effects) M: 345
- Kopp, Elisabeth** [Swiss political leader]
Switzerland (After the wars) So: 1061
- Koppel, Ted** [American newscaster] K: 365
- Köppen, Wladimir** [German climatologist]
Climate (Kinds of climates) Ci: 676a
- Köppen Hill** [hill, Germany]
Pied Piper of Hamelin P: 453
- Korai** [carvings]
Sculpture (Archaic sculpture) S: 245
- Korakuen Garden** [Tokyo]
Tokyo (Parks and gardens) T: 316
- Koran** [religious book] See Quran in this index
- Korat cat**
Cat (Short-haired breeds) C: 290-291; *picture on C: 288*
- Korbut, Olga** [Soviet gymnast]
Union of Soviet Socialist Republics picture on U: 33
- Kore** [sculpture]
Sculpture (Archaic sculpture) S: 245 *with picture*
- Korea** K: 366 *with pictures and maps*
See also Korean War; North Korea; South Korea in this index
Asia (Religions) A: 786
Asian Americans (History of Asian immigration) A: 812d-812e
Chinese-Japanese wars C: 509
Japan (Imperialism) J: 57
Martial arts (Korean martial arts) M: 234
Russo-Japanese War (Underlying causes) R: 566
Sculpture (Korea) S: 238 *with picture*
See also the list of Related articles in the Korea article
- Korea, Democratic People's Republic of** See North Korea in this index
- Korea, Republic of** See South Korea in this index
- Korea Strait**
Yellow Sea Y: 557
- Korean language**
Korea (Language) K: 370
Language (Other language families) L: 65 *with map*
- Korean War** [1950-1953] K: 379 *with pictures and maps*
Air force (Air forces in limited wars) A: 186
Air Force, United States (The Korean War) A: 195
Army (Armies in the nuclear age) A: 728
Army, United States (The Korean War) A: 739; *picture on A: 730*
Asia (The spread of Communism) A: 809
Brainwashing B: 560
Cold War (The Korean War) Ci: 764
Communism (The Cold War) Ci: 895
Eisenhower, Dwight David (Presidential candidate) E: 151; (Foreign affairs) E: 152
International law (After World War II) I: 342
International relations (Collective security) I: 345
Korea (A divided nation) K: 376-377
Korean War Veterans Memorial K: 384
MacArthur, Douglas (The Korean War) M: 4
Marine Corps, United States (The 1900's) M: 209
Navy (Navies during the Cold War) N: 80
Navy, United States (The Korean War [1950-1953]) N: 89
Prisoner of war P: 808a
Seoul (History) S: 307
Stalin, Joseph (The Cold War) So: 827
Truman, Harry S. (The Korean War) T: 471
United Nations (Military actions) U: 91
United States, History of the (The Korean War) U: 190
Unknown soldier U: 212
War (table) W: 25
World, History of the (The rise of Communism) W: 446
- Korean War Veterans Memorial** [Washington, D.C.] K: 384
National Park System (table: National memorials) N: 54
Washington, D.C. (The Korean War Veterans Memorial) W: 73 *with picture*
- Korean Workers' Party** [Korea]
Korea (North Korea) K: 368
- Koresh, David** [American public figure]
Cult (Modern cults) Ci: 1185
Reno, Janet R: 240
- Kornberg, Arthur** [American biochemist]
Cell (The 1900's) C: 337-338
Nobel Prizes (Physiology or medicine: 1959) N: 445
- Kornilov, Lavr** [Russian general]
Russia (The October Revolution) R: 553
Union of Soviet Socialist Republics (The October Revolution) U: 35
- Koror** [city, Palau]
Palau P: 101
- Kortright, Elizabeth** [wife of] See Monroe, Elizabeth Kortright in this index
- Koryaks** [people]
Arctic (Americanoids) A: 639
- Koryo** [Korean history]
Korea (Early years) K: 375-376
- Korzeniowski, Józef Teodor Konrad Nalecz**

See Conrad, Joseph *in this index*

Kosciuszko, Mount See Mount Kosciuszko *in this index*

Kościuszko, Tadeusz [Polish patriot] K: 384
Poland (The partitions) P: 612

Kosciuszko National Park
Mount Kosciuszko M: 885

Kosher [religion] K: 384

Judaism (Dietary laws) J: 181

Košice [city, Slovakia] K: 384

Kosinski, Jerzy [American author]
American literature (Experimental styles)
A: 424

Kosode with Plum Tree and Flowering Plants
[painting by Hōitsū]
Painting (Landscapes and seascapes) P: 32-33
with picture

Kosovo [province, Serbia] K: 385 *with maps*
Albania (Recent developments) A: 309
Clinton, Bill (International affairs) Ci: 682f
Europe (Recent developments) E: 416
Milošević, Slobodan M: 556
Serbia S: 313; (History) S: 314-315
United States, History of the (Keeping peace
in the Balkans) U: 195
Yugoslavia (Local government) Y: 577; (Ethnic
tensions) Y: 580

Kosovo Liberation Army [political group]

Kosovo K: 385

Serbia (History) S: 314-315

Yugoslavia (Ethnic tensions) Y: 580-581

Kosrae [island, Pacific]

Caroline Islands C: 244

Pacific Islands, Trust Territory of the P: 13
Micronesia, Federated States of (Government)
M: 515

Kossel, Albrecht [German physiologist]
Nobel Prizes (Physiology or medicine: 1910)
N: 444

Kossuth, Lajos [Hungarian patriot] K: 385
Debrecen D: 65
Hungary (Habsburg rule) H: 445-446

Kostunica, Vojislav [Yugoslav political leader]
Milošević, Slobodan M: 556
Serbia (History) S: 314-315

Yugoslavia (Recent developments) Y: 581

Kosygin, Aleksei Nikolaevich [Soviet political
leader] K: 385

Cold War (The great blocs split) Ci: 768;
(Soviet-American relations) Ci: 768

Johnson, Lyndon Baines (Other develop-
ments) J: 151

Russia (The Cold War) R: 554

Trudeau, Pierre Elliott *picture on* T: 462
Union of Soviet Socialist Republics (History)
U: 35-39

Kotoku [emperor of Japan]

Japan (Chinese influence) J: 53

Kotor [Yugoslavia]

Yugoslavia *picture on* Y: 576

Kott, Jan [Polish critic]

Shakespeare, William (Modern critics) S: 369

Kotte [city, Sri Lanka] See Sri Jayawardenepura
in this index

Kotzebue Sound

Alaska (Coastline) A: 294

Kouchibouguac National Park [New
Brunswick]

Canada (table: National parks and national park
reserves) C: 113

Koufax, Sandy [American baseball player]
K: 386

Baseball (table: Hall of Fame) B: 135; (Recent
developments) B: 137-138

Koulouri [island, Greece] See Salamis *in this
index*

Kountché, Seyni [Niger political leader]
Niger (History) N: 409

Kouprey [animal] K: 386 *with picture*

Kouroi [carvings]

Sculpture (Archaic sculpture) S: 245

Koussevitzky, Serge [Russian-American con-
ductor] K: 386

Kowloon [Hong Kong]

Hong Kong (The major cities) H: 316 *with pic-
ture*

Kowloon Peninsula [region, Hong Kong]
Hong Kong H: 316

Koxinga [Chinese military leader]

Taiwan (History) T: 18

Kozhedub, Ivan [Russian pilot]

Ace A: 24

Kpelle [people]

Liberia (People) L: 229

KPU [political party]

Kenya (Building the new nation) K: 304

Kr [symbol]

Krypton K: 389

Kraepelin, Emil [German psychiatrist]

Abnormal psychology (History) A: 12

Mental illness (Medical approaches) M: 409

Kraft process [industrial process]

Paper (Pulping processes) P: 134-135

Krahn [people]

Liberia (Recent developments) L: 232

Krak des Chevaliers [castle, Syria]

Crusades *picture on* Ci: 1160

Krakatau [volcanic island, Indonesia] K: 386

Flood (Seacoast floods) F: 237

Indonesia (The Greater Sunda Islands) I: 233

Volcano (table) V: 441 *with map*

Krakatoa [volcanic island, Indonesia] See
Krakatau *in this index*

Kraków [city, Poland] K: 386

Poland *picture on* P: 608

Kramer vs. Kramer [film]

Motion picture (Best picture: 1979) M: 861

Kramnik, Vladimir [Russian chess player]

Chess (History) C: 415

Krasnodar [city, Russia]

Russia *picture on* R: 534

Krätschmer, Wolfgang [German physicist]

Carbon (Fullerenes) C: 206

Kravchuk, Leonid Makarovich [Ukrainian politi-
cal leader]

Ukraine (Independence) U: 13

"Krazy Kat" [cartoon]

Cartoon *picture on* C: 264

Krebs, Arthur [French engineer]

Airship (The first airships) A: 251

Krebs, Edwin Gerhard [American physiologist]
Nobel Prizes (Physiology or medicine: 1992)
N: 445

Krebs, Sir Hans Adolf [German biochemist]
K: 387

Krebs cycle [biochemistry]

Metabolism (Catabolism) M: 424

Respiration (Cellular respiration) R: 261

Kreisler, Fritz [Austrian violinist] K: 387

Kremlin [Moscow] K: 387

Moscow (The city) M: 823 *with picture and
map*

Russia (Architecture) R: 536

Krenz, Egon [German political leader]

Germany (East Germany) G: 170

Kreps, Juanita Morris [American government
official] K: 387

Kretschmer, Ernst [German psychiatrist]

Personality (Personality types) P: 302

Kreuger, Ivar [Swedish businessman]

Match (The first safety matches) M: 300a

Krewe [organization]

Mardi Gras M: 197

New Orleans (Annual events) N: 282

Krieghoff, Cornelius [Canadian painter]

Canada (Painting and sculpture) C: 109 *with
picture*

Kriemhild [legendary figure]

Nibelungenlied N: 395

Krikalev, Sergei K. [Russian cosmonaut]

International Space Station (History) I: 346b
with picture

Krill [sea animal] K: 388 *with picture*

Animal *picture on* A: 485

Antarctica (Animal life) A: 534; *picture on*
A: 531

Blue whale B: 421

Fin whale F: 103

Humpback whale H: 436

Southern Ocean (Commercial resources)
So: 688b

Krimml Falls [waterfall, Austria]

Waterfall (table: Famous waterfalls of the
world) W: 143

Kringle [food]

Denmark (Food and drink) D: 135

Kringle, Kris [legendary figure]

Santa Claus (Santalike characters in other
countries) S: 114

Krio [language]

Sierra Leone (People) S: 451

Kris Kringle [legendary figure]

Santa Claus (Santalike characters in other
countries) S: 114

Krishna [Hindu god] K: 388

Bhagavad-Gita B: 276

India (Hinduism) I: 116

Juggernaut J: 185

Vishnu V: 429

Kristallnacht [German history] K: 388

Holocaust (Before the Holocaust) H: 296-296a

Germany (Nazi Germany) G: 167-168

Kristin Lavransdatter [book by Undset]

Undset, Sigrid U: 21

Kristofferson, Kris [American singer]

Country music *picture on* Ci: 1098d

Krk Bridge [Croatia]

Bridge (table: Concrete arch) B: 603

Kroc, Ray [American businessman]

McDonald's Corporation M: 335

Kroemer, Herbert [American physicist]

Nobel Prizes (Physics: 2000) N: 442

Kroetsch, Robert [Canadian author]

Canadian literature (Modern English-Canadian
fiction) C: 160

Krogh, Sack August Steenberg [Danish
physiologist]

Nobel Prizes (Physiology or medicine: 1920)
N: 444

Krol, John Joseph Cardinal [American religious
leader]

Cardinal (table: American cardinals) C: 211

Kroll, William [Luxembourg businessman]

Titium (Discovery and manufacture) T: 300

Krone, Julie [American jockey]

Horse racing (History) H: 366

Kronos See Cronus [Greek mythology] *in this
index*

Kropotkin, Peter [Russian prince]

Anarchism A: 448

Kroto, Sir Harold [British chemist]

Carbon (Fullerenes) C: 206

Nobel Prizes (Chemistry: 1996) N: 443

Kru [people]

Côte d'Ivoire (People) Ci: 1084a

Krug, Julius A. [American government official]
Truman, Harry S. (table) T: 469

Kruger, Paulus [South African political leader]
K: 388

Kruger, Stephanus Johannes Paulus See
Kruger, Paulus *in this index*

Kruger National Park [South Africa] K: 388

National park (South Africa) N: 42d *with pic-
ture*; (table) N: 42f

South Africa (The Plateau) So: 614 *with pic-
ture*

Krumgold, Joseph [American author]

Newbery Medal (table) N: 359

Krung Thep [Thailand] See Bangkok *in this
index*

Krupa, Gene [American drummer] K: 389

Krupp [family] K: 389

Krupp, Alfred [German businessman]

Krupp K: 389

Industrial Revolution (Spread of the Industrial
Revolution) I: 252-253

Krupp, Alfred [German industrialist]

Krupp K: 389

Krupp, Friedrich [German industrialist]

Krupp K: 389

Krupp, Gustav [German industrialist]

Krupp K: 389

Krupp works

Krupp K: 389

Essen E: 359

Krupskaya, Nadezhda Konstantinovna

[Russian political leader] K: 389

Lenin, V. I. (Young revolutionist) L: 192

Krylov, Ivan [Russian author]

Fable F: 3

Russian literature (The classical movement)
R: 559-560

Krypton [element] K: 389

'Ksen Indian Village and Museum [British
Columbia]

British Columbia (Places to visit) B: 620 *with
picture*

Kshatriya

Caste C: 279

Hinduism (Caste) H: 236-237

Ku Klux Klan [organization] K: 389 *with picture*
African Americans (The first years of freedom)
A: 136h-136i *with picture*; (During the
early 1900's) A: 136j

Oklahoma (The 1920's) O: 732

Reconstruction (Violence against blacks)

R: 177

Texas (The Civil War and Reconstruction)

T: 207

United States, History of the (Reconstruction)

U: 175; (Looking backward) U: 186-187

Ku Klux Klan Act [1871]

- Force bill F: 371
- Kuala Lumpur** [city, Malaysia] K: 390
Malaysia M: 98a *with picture*
Petronas Towers P: 350
- Kuala Lumpur International Airport**
Malaysia (Transportation) M: 100
- Kuba** [former kingdom]
Congo (Kinshasa) (Early days) Ci: 940d
- Kubasov, Valery N.** [Soviet cosmonaut]
Astronaut (Achievements in space) A: 829-830
- Kubelsky, Benjamin** [American entertainer] *See* Benny, Jack *in this index*
- Kubitschek, Juscelino** [Brazilian political leader]
Brasília (History) B: 565
Brazil (Return to constitutional government) B: 585
- "Kubla Khan"** [poem by Coleridge]
Coleridge, Samuel Taylor (His writing) Ci: 772
- Kublai Khan** [Mongol ruler] K: 391 *with map*
Exploration (European exploration) E: 442
Mongol Empire (Kublai Khan) M: 721
Polo, Marco (Journey to China) P: 648
World, History of the (China) W: 435
- Kubrick, Stanley** [American director] K: 391
Motion picture (Movies in the 1960's) M: 871
- Kuchma, Leonid Danylovich** [Ukrainian political leader] K: 391
Ukraine (Independence) U: 13; (Recent developments) U: 14
- Kudu** [animal] K: 391
Antelope *picture on A*: 543
- Kudzu** [plant] K: 392
- Kufah, Al** [city, Iraq]
Islamic art (Calligraphy) I: 468
- Kufic** [writing]
Islamic art (Calligraphy) I: 468
- Kufuor, John A.** [Ghanaian political leader]
Ghana (History) G: 179-180
- Kuhn, Richard** [German chemist]
Nobel Prizes (Chemistry: 1938) N: 442
- Kuiper, Gerard Peter** [American astronomer]
Kuiper belt K: 392
Satellite (History of satellite study) S: 150c
- Kuiper Airborne Observatory**
Observatory (Airborne observatories) O: 645
- Kuiper belt** [astronomy] K: 392
Comet (Orbits) Ci: 868 *with diagram*
Oort cloud O: 788
Solar system (Our solar system) So: 580
Triton T: 448
- Kuiper belt object** [astronomy]
Pluto P: 580
- Kujala Kadphises** [Kushan emperor]
Kushan Empire K: 394
- Kukenaam Falls** [Venezuela]
Cuquenán Falls Ci: 1193
- Kukis** [people]
India (Religious and ethnic unrest) I: 134
- Kuklin, Susan** [American author]
Literature for children (Information books) L: 359-360
- Kukuiklan** [Maya god]
Chichén Itzá C: 439
- Kulikovo, Battle of** [1380]
Russia (The rise of Moscow) R: 548 *with picture*
- Kultarr** [animal]
Marsupial mouse M: 233
- Kulwicki, Alan** [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1992) A: 981
- Kumaratunga, Chandrika Bandaranaike** [Sri Lankan political leader]
Bandaranaike, Sirimavo B: 75
Sri Lanka (History) So: 819-820
- Kumasi** [city, Ghana]
Ashanti A: 767
- Kumbi Saleh** [ancient city]
Ghana Empire G: 180 *with map*
- Kumquat** [fruit] K: 392 *with picture*
- Kun, Béla** [Hungarian political leader]
Hungary (Between world wars) H: 446
- Kung fu** [sport]
Karate K: 246
Martial arts (Chinese martial arts) M: 234
- Kunitz, Stanley** [American poet]
Poet laureate (table: Poets laureate of the United States) P: 590
- Kuomintang Party** [Chinese history]
Chiang Kai-shek C: 419
China (The early republic) C: 503-504
Mao Zedong (His life) M: 174
Sun Yat-sen (The Kuomintang Party) So: 989; (His later efforts) So: 989
- Taiwan (Government) T: 15-16; (History) T: 18
- Kur River** [Russia]
Caspian Sea C: 275 *with map*
- Kurdish Autonomous Region**
Iraq (Local government) I: 409; (The republic) I: 413-414
- Kurdistan** [historic region]
Kurds K: 392
- Kurds** [people] K: 392
Bush, George Herbert Walker (Persian Gulf War) B: 721
Iraq (The republic) I: 413-414; (Recent developments) I: 415
Persian Gulf War (Consequences of the war) P: 300d-301
Turkey (People) T: 505 *with picture*; (Recent developments) T: 512
- Kurfürstendamm** [street, Berlin]
Berlin (The downtown areas) B: 260-261
Germany *picture on G*: 152
- Kurgan** [ancient culture]
Linguistics (Comparative and historical research) L: 337
- Kuril Islands** [Pacific] K: 393
- Kurosawa, Akira** [Japanese director] K: 393
Motion picture (Postwar realism) M: 869-870
- Kuroshio** [current, Pacific] K: 393 *with map*
Alaska (Climate) A: 296
Japan (Climate) J: 48
- Kursk** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Kursk, Battle of** [1943]
World War II (The Soviet advance) W: 484
- Kurtzman, Harvey** [American artist]
Comics (Comic books) Ci: 870
- Kusaie Island** [Pacific] *See* Kosrae Island *in this index*
- Kusch, Polykarp** [German-American physicist]
Lamb, Willis Eugene, Jr. L: 51
Nobel Prizes (Physics: 1955) N: 441
- Kush** [ancient country] K: 393 *with map*
Nubia N: 578
- Kushan Empire** [ancient country] K: 394
India (The Mauryan Empire) I: 128-129
Kanishka K: 215
Pakistan (Invasions and conquests) P: 98
- Kushans** [people]
Afghanistan (Early invasions) A: 95
- Kuskokwim River** [river, Alaska]
Alaska (Rivers and lakes) A: 294
- Kussmaul, Adolf** [German doctor]
Speech therapy (History) So: 773-774
- Kutenai Indians** [American Indians] K: 394
- Kutta condition** [physics]
Aerodynamics (Lift) A: 85-86
- Kuuaruon** [title]
Nuer N: 602
- Kuvasz** [dog] K: 394 *with picture*
- Kuwait** [country] K: 394 *with pictures and map*
Army, United States (The Persian Gulf War) A: 740
Asia *picture on A*: 778
Bush, George Herbert Walker (Persian Gulf War) B: 721
Flag *picture on F*: 203
Hussein, Saddam H: 457
International relations (The Persian Gulf War) I: 346
Iraq (The Persian Gulf War) I: 414; (Recent developments) I: 415
Middle East (More conflict) M: 534
Persian Gulf War P: 300a
Saudi Arabia (The Persian Gulf War) S: 162
United Nations (Military actions) U: 91-92
United States, History of the (The Persian Gulf War) U: 195
- Kuwait** [city] K: 397; (Land and climate) K: 395; (History) K: 396
Persian Gulf War *picture on P*: 300d
- Kuwait Oil Company**
Kuwait (History) K: 396
- Kuybyshev** [city, Russia] *See* Samara *in this index*
- Kuznets, Simon** [American economist] K: 397
- Kuznets cycles** [economics]
Kuznets, Simon K: 397
- Kuznets hypothesis** [economics]
Kuznets, Simon K: 397
- Kvant laboratories** [space exploration]
Mir M: 614 *with picture*
- Kwahu Plateau**
Ghana (Land) G: 179 *with map*
- Kwajalein** [islands, Pacific]
Marshall Islands (History) M: 231
- World War II (Island hopping in the Central Pacific) W: 488-489
- Kwakiutl Indians** [American Indians] K: 397
Indian, American *picture on I*: 162
- Kwame Nkrumah** *See* Nkrumah, Kwame *in this index*
- Kwan** [martial arts]
Martial arts (Korean martial arts) M: 234
- Kwangju Massacre** [Korean history]
Korea (South Korea) K: 377
- Kwanzaa** [holiday] K: 397
Christmas (In the United States and Canada) C: 529
- Kwashiorkor** [disorder] K: 398
Famine (Death and disease) F: 26
Malnutrition M: 111
Nutrition (Deficiency diseases) N: 630 *with picture*
Protein (Proteins in the diet) P: 832
- Kwaśniewski, Aleksander** [Polish political leader]
Poland (Free elections) P: 614-615
- Kyanite** [mineral] K: 398
Mineral *picture on M*: 569
- Kyd, Thomas** [English dramatist] K: 398
Drama (Elizabethan playwrights) D: 331
English literature (Elizabethan drama) E: 317
- Kylian, Jiří** [Czech choreographer]
Ballet (Ballet in Europe) B: 54
- Kynopolis** [ancient city]
Anubis A: 562
- Kyoto** [Japan] K: 398
- Kyoto Protocol** [1997]
Bush, George Walker (International issues) B: 723
Global warming (Agreement on global warming) G: 232b
- Kyphosis** *See* Hunchback *in this index*
- Kyrenia Mountains** [Cyprus]
Cyprus (Land and climate) Ci: 1206 *with picture and map*
- Kyrgyz** [people]
Kazakhstan (History) K: 251
Kyrgyzstan (People) K: 398
Union of Soviet Socialist Republics (People) U: 31
- Kyrgyzstan** [country, Asia] K: 398 *with picture and map*
Flag *picture on F*: 203
- Kyushu** [island, Japan]
Japan (Kyushu) J: 46 *with picture and map*
- Kyzyl** [city, Tuva]
Tuva T: 527
- Kyzylkum** [desert, Kazakhstan-Uzbekistan] K: 400
Uzbekistan (Land and climate) U: 254

L

- L** [letter] L: 1 *with pictures*
- L' ...**
Titles beginning L' appear under their key words, as in Après-midi d'un faune, L'
- L-1** [spacecraft]
Space exploration (Soviet attempts to reach the moon) So: 720
- L-band** [communications]
Communications satellite (How communications satellites work) Ci: 888b
- L-dopa** [chemical]
Brain (Parkinson disease) B: 558
Dopamine D: 309
Parkinson disease (Treatment with drugs) P: 171
- L-head engine**
Gasoline engine (Valve arrangement) G: 64
- L-tryptophan** [biochemistry] *See* Tryptophan *in this index*
- La** [symbol]
Lanthanum L: 69
- La ...**
Titles beginning with La appear under their key words, as in Bohème, La. Place names beginning La are alphabetized as single words: La Brea tar pits appears after Labrador
- La Amistad National Park** [Costa Rica-Panama]
National park (table) N: 42g
- Laayoune** [Western Sahara] *See* El Aaiun *in this index*

- Laban** [Biblical figure]
Jacob J: 19
- Laban, Rudolf von** [German dancer]
Ballet (Preserving a ballet) B: 50
- Labanotation** [choreography]
Ballet (Preserving a ballet) B: 50; *diagram on* B: 49
- Labarum** [Roman Empire]
Flag picture on F: 216
- Labe River**
Elbe River E: 157
- Label** [heraldry]
Heraldry picture on H: 195
- Labeling**
Bar coding B: 102
Clothing (Protecting the public) Ci: 705
Consumerism Ci: 1017
Nutrition (Nutrition guidelines) N: 626
Packaging (Packaging regulations) P: 19
Pure food and drug laws (Labeling of foods) P: 908
- Labella** [entomology]
Fly (Head) F: 309 *with diagram*
- La Belle** [shipwreck]
Archaeology (Working underwater) A: 597
- Lalberge, Albert** [Canadian author]
Canadian literature (Fiction: 1850-1918) C: 158
- Labium** [entomology]
Insect (Mouthparts) I: 286 *with diagrams*
Mosquito (How a mosquito "bites") M: 832 *with diagram*
- La Boétie, Étienne de** [French author]
Montaigne, Michel Eyquem de M: 741
- LaBonte, Terry** [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1984, 1996) A: 981
- Labor** [birth]
Baby (Birth) B: 6
Childbirth (The birth process) C: 456
Pregnancy (Changes in the uterus) P: 734b
Reproduction, Human (Birth) R: 248 *with pictures*
- Labor** [economics]
Labor force L: 3
Marx, Karl (*Das Kapital*) M: 237
Productivity P: 810
State government (Business and labor) So: 865
- Labor** [unions] *See* Labor movement *in this index*
- Labor, Department of** [U.S.] L: 2 *with picture*
Washington, D.C. map on W: 76
- Labor, Division of** *See* Division of labor *in this index*
- Labor, Knights of** *See* Knights of Labor; Knights of Labor *in this index*
- Labor, Secretary of** [office]
Labor, Department of L: 2
Flag picture on F: 211
- Labor arbitration**
Arbitration (Industrial, or labor, arbitration) A: 592
- Labor camp**
Communism (Under Stalin) Ci: 892-893
- Labor Day** [holiday] L: 2
- Labor economist**
Economics (Careers in economics) E: 65
- Labor force** L: 3
Economics (Making the economy grow) E: 59
Industry (Labor) I: 258
- Labor income** [economics]
Flat tax F: 228
- Labor legislation**
Child labor (Early child labor laws) C: 455
Strike (Kinds of strikes) So: 928
Workers' compensation W: 405
- Labor-management relations**
See also Industrial relations *in this index*
Lockout L: 413
National Mediation Board N: 40
Strike So: 928
Taft-Hartley Act T: 13
Workers' compensation W: 405
- Labor-Management Relations Act** *See* Taft-Hartley Act *in this index*
- Labor-Management Reporting and Disclosure Act**
Labor movement (Charges of corruption) L: 13
- Labor movement** L: 4 *with pictures*
Bonus B: 463
City (Description) Ci: 585-587; (Government) Ci: 588
Cleveland, Grover (Labor problems) Ci: 670
Haymarket Riot H: 121
Industrial Revolution (Life during the Industrial Revolution) I: 251
Roosevelt, Theodore (Friend of labor) R: 468
Syndicalism So: 1067
United States, History of the (Social reform) U: 171; (The underprivileged) U: 179; (Early reform efforts) U: 181; (Agriculture and labor) U: 187
Workers' compensation W: 405
World, History of the (The Industrial Revolution) W: 444-445
See also the list of Related Articles in the Labor Movement article
- Labor Party** [Australia] *See* Australian Labor Party *in this index*
- Labor Party** [Norway]
Norway (Politics) N: 539
- Labor Party, American** [U.S. history]
Labor Party (In other countries) L: 16-17
- Labor Party, Socialist** [political party]
Labor Party (In other countries) L: 16-17
- Labor Party of Australia** *See* Australian Labor Party *in this index*
- Labor relations** [business] *See* Personnel management *in this index*
- Labor riot**
Riot (Major riots in the United States) R: 349 *with picture*
- Labor Statistics, Bureau of** [U.S.] L: 16
Consumer Price Index Ci: 1017
Cost of living Ci: 1079
- Labor theory of value** [economics]
Ricardo, David R: 321
- Labor union**
Labor movement L: 4
American Federation of Labor and Congress of Industrial Organizations A: 410
Boycott B: 541
Coal (Labor unions) Ci: 728
Economics (Distribution of incomes) E: 61-62
Gay Nineties (Industrial growth) G: 72
Homestead Strike H: 305
Industrial Revolution (The working class) I: 251
International Confederation of Free Trade Unions I: 338
Labor, Department of (Functions) L: 2
National Labor Relations Act N: 39
Norris-La Guardia Act N: 457
Railroad (Railroad systems) R: 112-113
Strike So: 928
Taft-Hartley Act T: 13
Teamsters Union T: 72
United States, History of the (Early reform efforts) U: 181
- Laboratory** L: 16
Crime laboratory Ci: 1140
Edison, Thomas Alva E: 77 *with pictures*
Hospital (Professional services departments) H: 371
Safety (In other school areas) S: 12
Universities and colleges (Research and laboratory work) U: 210
- Laboratory glassware**
Glass picture on G: 211; (Specialty glasses) G: 212
- Laboratory school** [education] L: 16
Nursery school (History) N: 616
- Laboratory technician**
Medicine (Other careers in medicine) M: 371
Public health picture on P: 856
- Laborers' International Union of North America** L: 16
Labor movement (table) L: 8
- Laboulaye, Édouard-René Lefebvre de** [French historian]
Statue of Liberty (Inspiration and preparations) So: 876; picture on So: 874
- Labour, Minister of** [office]
Canada, Government of (The Cabinet) C: 132; *diagram on* C: 137
- Labour Day**
Holiday (In Canada) H: 291
- Labour Gazette** [newspaper]
King, William Lyon Mackenzie (Early political and public career) K: 325
- Labour Organization, International** *See* International Labour Organization *in this index*
- Labour Party** [New Zealand]
Clark, Helen Elizabeth Ci: 639
New Zealand (Political parties) N: 347
- Labour Party** [United Kingdom] L: 16
Blair, Tony B: 397
Fabian Society F: 2
Foot, Michael F: 353
Labor movement (In other countries) L: 14
Liberal Democrats L: 226
MacDonald, James Ramsay M: 5
Socialism (World Wars I and II) So: 561
United Kingdom (Politics) U: 54; (The rise of the Labour Party) U: 70
- Labour Representation Committee** [Great Britain]
Labour Party (History) L: 16
- La Bourgogne and Cromartyshire** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Labrador** [region, Canada] L: 17 *with picture and map*
- Labrador Boundary Decision of 1927**
Newfoundland and Labrador picture on N: 376
- Labrador City** [Newfoundland]
Labrador (People and economy) L: 18
- Labrador Current** [Arctic Ocean] L: 19 *with map*
Arctic Ocean (Currents, water masses, and tides) A: 643
Atlantic Ocean (Currents) A: 866
Maine (Climate) M: 83
Ocean (Circulation) O: 658
- Labrador duck**
Bird (Extinct birds) B: 369-370
Duck (Sea ducks) D: 376
- Labrador retriever** L: 19
Dog picture on D: 268
- Labrador tea** [plants] L: 19
Flower picture on F: 284
- Labrador Trough** [region, Canada]
Labrador (People and economy) L: 18
- Labradorite** [mineral]
Feldspar F: 68
- La Brea tar pits** [California] L: 19
Los Angeles (Visitor's guide) L: 468 *with picture*
- Labrousse, Henri** [French architect]
Architecture (The Industrial Revolution) A: 625
- Labrum**
Insect (Mouthparts) I: 286 *with diagrams*
- La Bruyère, Jean de** [French author] L: 19
French literature (Classical prose) F: 520
- Laburnum** [tree] L: 19
- Labyrinth** [anatomy]
Ear (The inner ear) E: 8 *with diagram*
- Labyrinth** [Greek legend] L: 19 *with picture*
Daedalus D: 3
Minos M: 611
Minotaur M: 611
- Labyrinth hedge**
New Harmony picture on N: 228
- Labyrinth of Fate, The** [book by Mena]
Spanish literature (The 1400's) So: 758
- Labyrinth of Solitude** [book by Paz]
Paz, Octavio P: 205
- Labyrinth spider**
Spider (table) So: 790; picture on So: 788
- Labyrinthine organs** [anatomy]
Ear (The inner ear) E: 8-9
- Labyrinthodont** [extinct animal]
Amphibian picture on A: 441
- Lac** [animal product] L: 20
Lacquer L: 22
Resin R: 259
- Lac** [money]
Rupe R: 521
- Lac du Chat**
Lake Erie L: 37
- Lac Laronge III** [painting by Stella]
Stella, Frank picture on So: 887
- Lac Léman** [lake, France-Switzerland]
Lake Geneva L: 38 *with map*
- Lac St.-Pierre** [lake, Quebec]
Saint Lawrence River (The course of the St. Lawrence) S: 41
- Lac Vieux Desert** [region, Michigan-Wisconsin]
Wisconsin River W: 370
- Lacalle, Luis Alberto** [Uruguayan political leader]
Uruguay (Recent developments) U: 229
- Laccadive Islands** [India] L: 20
- Lace** [fabric] L: 20 *with pictures*
Crochet picture on Ci: 1148c
Paraguay (The arts) P: 147 *with picture*
Textile (Other textiles) T: 215
- Lacedaemon** [ancient city] *See* Sparta *in this index*

- La Ceiba** [city, Honduras] L: 22
Lacemaker, The [painting by Vermeer]
 Vermeer, Jan V: 317
Lacertid lizard [reptile]
 Lizard (Reproduction) L: 400-401
Lacewing [insect] L: 22 *with picture*
 Insect *picture on* I: 281
 Larva *picture on* L: 79
Lacey Bird and Game Act [1900]
 Conservation (The rise of the conservation movement) Ci: 985
La Chaussée, Pierre de [French dramatist]
 Drama (France) D: 335
Laches [book by Plato]
 Plato (The early dialogues) P: 568; (The theory of forms) P: 568
Lachesis [mythology]
 Fates F: 54
Lachine Canal [waterway, Quebec]
 Canada (table: National historic sites) C: 114
 Montreal (The early 1800's) M: 778
 Quebec (Transportation) Q: 28
Lachmann, Hedwig [German librettist]
 Opera (*Salome*) O: 807
Lackland, John See John [king of England] *in this index*
Lackland Air Force Base [Texas] L: 22
Lacède Liguist, Pierre [French frontiersman]
 Missouri (Exploration and settlement) M: 669
 Saint Louis (Early settlement) S: 49
Laclos, Pierre de [French author]
 Age of Reason (The orderliness of nature) A: 139
Lacombe, Albert [Canadian religious leader]
 Alberta (The missionaries) A: 329
La Condamine, Charles Marie de [French explorer]
 Rubber (First uses) R: 500-501
Laconia [department, Greece]
 Sparta So: 766
Laconia [New Hampshire]
 New Hampshire *picture on* N: 217
Lacquer [finish] L: 22
 Lacquerware L: 23 *with picture*
 Paint (Industrial paints) P: 24
 Varnish V: 286
Lacquer [recording]
 Phonograph (How phonograph records are made) P: 401
Lacquer tree [tree]
 Lacquer L: 23
Lacquerware L: 23 *with pictures*
Lacrimal bone [anatomy]
 Face F: 3
Lacrimal gland
 Eye (The outer parts) E: 460 *with picture*
 Gland (Exocrine glands) G: 208; (table) G: 209
 Tears T: 72 *with picture*
Lacrima sac [anatomy]
 Eye (The outer parts) E: 460 *with picture*
La Crosse [Wisconsin] L: 23
Lacrosse [sport] L: 23 *with picture*
 Indian, American (Recreation) I: 142; *picture on* I: 156
Lactalbumin [protein]
 Albumin A: 333
Lactarius [fungus]
 Mushroom (Nonpoisonous mushrooms) M: 943-945
Lactase [enzyme]
 Milk (Milk in the human diet) M: 546
Lactate ester [chemical]
 Lactic acid L: 25
Lactation [zoology] L: 25
 Breast B: 590
 Pregnancy (Changes in breasts) P: 734b
Lacteal [anatomy]
 Intestine (The small intestine) I: 352-353
 Lymphatic system (Absorption of fats) L: 535
Lactic acid [chemical] L: 25
Lactobacillus bulgaricus [bacteria]
 Yogurt Y: 567
Lactometer [measuring device]
 Hydrometer H: 471
Lacto-ovo-vegetarian
 Vegetarianism V: 294
Lactose [sugar]
 Carbohydrate (Kinds of carbohydrates) C: 203; (How the body uses carbohydrates) C: 204
 Lactic acid L: 25
 Milk (Carbohydrates) M: 546
 Nutrition (Carbohydrates) N: 625
 Sugar (Kinds of sugar) So: 959; (Milk) So: 960
Lactose intolerance [disorder]
 Milk (Milk in the human diet) M: 546
Lacto-vegetarian
 Vegetarianism V: 294
Ladd, Herbert W. [American political leader]
 Rhode Island (table) R: 311
Ladd & Company
 Hawaii (The kingdom of Hawaii) H: 106
Ladd Memorial Stadium [Mobile]
 Mobile (The city) M: 681
Ladder
 Fire department (Firefighting) F: 123 *with picture*; (Fire trucks) F: 125-126 *with picture*
Ladder company
 Fire department (Firefighting) F: 123
Ladder truck
 Fire department (Firefighting) F: 123; (Fire trucks) F: 125-126 *with picture*
Laden, Osama bin [Saudi businessman] See Bin Laden, Osama *in this index*
Ladewig, Marion [American bowler] L: 25 *with portrait*
Ladies Auxiliary to the Veterans of Foreign Wars
 Veterans of Foreign Wars of the United States V: 344
Ladies-delight [plant]
 Pansy P: 131
Ladies' Home Journal [magazine]
 Magazine (table) M: 45
Ladies Oriental Shrine of North America
 Masonry (Organization) M: 267
Ladies Pro Bowlers Tour
 Bowling (Professional bowling) B: 524
Ladies Professional Golf Association
 Golf (Tournaments) G: 264; (Women's golf) G: 266
 Zaharias, Babe Didrikson Z: 588
La Digue [island]
 Seychelles S: 339
Ladin [language]
 Italy (Language) I: 502
Ladinos [people]
 Guatemala (People) G: 413
Ladoga, Lake [Russia] See Lake Ladoga *in this index*
Ladrone
 Pirate P: 494
Ladrones, Islas de los
 Mariana Islands M: 199
Lady [title] L: 25
 Duke D: 380
 Knighthood, Orders of (Honorary orders) K: 347
 Middle Ages (Life of the people) M: 526
 Nobility (Privileges of the peerage) N: 450
Lady Amherst's pheasant
 Bird (Birds of Europe and Asia) B: 346 *with picture*
Lady and the Tramp [film by Disney]
 Disney, Walt (Full-length movies) D: 236 *with picture*
Lady beetle [insect] See Ladybug *in this index*
Lady Byng Trophy
 Hockey (Professional leagues) H: 279-280
Lady Byron Vindicated [book by Stowe]
 Stowe, Harriet Beecher (Other works) So: 916
Lady Chatterley's Lover [book by Lawrence]
 Lawrence, D. H. L: 145
Lady Godiva [English public figure] See Godiva, Lady *in this index*
Lady in waiting
 Lady L: 25
Lady Jean [painting by Bellows]
 Bellows, George Wesley *picture on* B: 245
Lady Macbeth [literary figure]
 Shakespeare, William (*Macbeth*) S: 363
Lady Macbeth of Mtsensk [opera by Shostakovich]
 Shostakovich, Dimitri S: 438
Lady mayoress
 Lady L: 25
Lady Murasaki [Japanese author] See Murasaki Shikibu *in this index*
Lady of Lyons, The [play by Bulwer-Lytton]
 Bulwer-Lytton, Edward George Earle Lytton B: 697
"Lady of Shalott, The" [poem by Tennyson]
 Tennyson, Lord (His poems) T: 169-170
Lady of the bedchamber [title]
 Royal Household of the United Kingdom R: 498
Lady of the Camellias, The [play by Dumas]
 Dumas, Alexandre, fils D: 382
 Opera (*Traviata, La*) O: 807-808
Lady of the Lake [legendary figure]
 Lancelot, Sir L: 56
Lady of the Lake, The [poem by Scott]
 Scott, Sir Walter (His life) S: 222
 "Hail to the Chief" H: 8
"Lady, or the Tiger?, The" [story by Stockton]
 Stockton, Frank Richard So: 906
Lady Oracle [book by Atwood]
 Atwood, Margaret A: 880
Lady Sings the Blues [book by Holiday]
 Holiday, Billie H: 291
Lady Windermere's Fan [play by Wilde]
 Wilde, Oscar W: 302
Lady with a Pink [painting by Memling]
 Clothing *picture on* Ci: 700
Lady with an Ermine [painting by Leonardo]
 Leonardo da Vinci *picture on* L: 200
Lady with the Unicorn, The [tapestries]
 Tapestry (History) T: 40
 Unicorn *picture on* U: 26
Ladybird See Ladybug *in this index*
Ladybug [insect] L: 25 *with picture*
 Beetle (Ladybugs) B: 217
 Insect (Insect control) I: 284-285 *with picture*; *pictures on* I: 283, I: 296
Lady's eardrop [plant]
 Fuchsia F: 549
Lady's Not for Burning, The [play by Fry]
 Fry, Christopher F: 549
Lady's-slipper [plant] L: 26 *with picture*
 Orchid O: 825
Lady's-thumb [plant]
 Smartweed S: 513
Ladysmith Black Mambazo [musical group]
 South Africa (The arts) So: 614
Laënnec, René Théophile Hyacinthe [French doctor] L: 26
 Stethoscope So: 895
Laerdal Tunnel [Norway]
 Tunnel (table) T: 491; (History) T: 491-492
Laertes [legendary figure]
 Ulysses (The Trojan War) U: 17-18
Laertes [literary figure]
 Shakespeare, William (*Hamlet*) S: 361-362
Laetare Medal [award]
 Notre Dame, University of (Educational program) N: 551
Laetoli [Tanzania]
 Leakey, Mary Douglas L: 161
Laetrile [drug] L: 26
La Farge, John [American painter] L: 26 *with picture*
 Stained glass (Decline and revival) So: 823
La Farge, Oliver [American author] L: 26
La Fayette, François de [husband of]
 La Fayette, Madame de L: 27
La Fayette, Madame de [French author] L: 27
 French literature (Classical prose) F: 520
 Novel (Early novels) N: 572
Lafayette, Marquis de [French general] L: 27 *with portrait*
 Monroe, James (Life in the White House) M: 737
 Morse, Samuel Finley Breese (Morse as artist) M: 818 *with portrait*
 Revolutionary War in America (Valley Forge) R: 283; (The end of the war) R: 285
Lafayette Escadrille [military unit]
 Air Force, United States (World War I) A: 194
 Nordhoff and Hall N: 453
"Lafayette, we are here" [quotation]
 Pershing, John Joseph (World War I) P: 296
Laffin, Julie [American performance artist]
 Performance art *picture on* P: 286
Laffite, Jean [American pirate] L: 28
 Jackson, Andrew (Glory at New Orleans) J: 9
 New Orleans (The early 1800's) N: 284
Laffite, Pierre [brother of]
 Laffite, Jean L: 28
Laffoon, Ruby [American political leader]
 Kentucky (table) K: 290
Laffite, Jean See Laffite, Jean *in this index*
La Flesche, Susan [American doctor]
 Picotte, Susan La Flesche P: 452
La Follette, Belle Case [American journalist]
 L: 29
La Follette, Philip Fox [American political leader] L: 29

Progressive Party (The La Follette Progressives) P: 814
 Wisconsin (table) W: 365; (The La Follette Progressives) W: 368

La Follette, Robert Marion, Sr. [American political leader] L: 29 *with portrait*
 Progressive movement (Political reforms) P: 814
 Progressive Party (The La Follette Progressives) P: 814
 Wisconsin (table) W: 365; (The Progressive Era) W: 366 *with picture*

La Follette, Robert Marion, Jr. [American political leader] L: 29
 Progressive Party (The La Follette Progressives) P: 814
 Wisconsin (The Progressive Era) W: 366; (The La Follette Progressives) W: 368

La Follette Progressives See Progressive Party *in this index*

La Follette's Magazine
 La Follette, Belle Case L: 29

La Fontaine, Henri [Belgian statesman]
 Nobel Prizes (Peace) 1913) N: 447

La Fontaine, Jean de [French poet] L: 29 *with picture*
 Fable F: 3
 French literature (Classical poetry) F: 520
 Literature for children (Folk literature) L: 357-358

LaFontaine, Sir Louis Hippolyte [Canadian political leader] L: 29
 Baldwin, Robert B: 40

La Framboise, Joseph [French explorer]
 South Dakota (Exploration and fur trade) So: 681

Lag bolt
 Bolt B: 449 *with picture*

Lagan [wreckage]
 Flotsam, jetsam, and lagan F: 267

Lagash [ancient city]
 Sumer (History) So: 972

Lager [drink]
 Alcoholic beverage (Beer) A: 336
 Beer B: 211

Lagerfeld, Karl [German-born fashion designer] L: 30

Lagerkvist, Pär Fabian [Swedish author] L: 30

Lagerlöf, Selma [Swedish author] L: 30
 Sweden (Arts) So: 1026-1027

Lagomorpha [zoology]
 Mammal (table) M: 129 *with picture*

Lagoon [geography] L: 30
 Atoll A: 870 *with pictures*
 Coral reef (Kinds of coral reefs) Ci: 1048a

Lagos [city, Nigeria] L: 30 *with picture*
 Abuja A: 19
 City picture on Ci: 575

Lagos Escobar, Ricardo [Chilean political leader]
 Chile (Recent developments) C: 470

Lagosuchus [extinct animal]
 Dinosaur (Dinosaur ancestors) D: 206b

La Grande River [Quebec]
 Hudson Bay H: 405

Lagrange, Joseph-Louis [French mathematician] L: 31

Lagrange point [physics]
 Star (Binary stars) So: 852

Lagting [government]
 Faroe Islands F: 47
 Norway (National government) N: 537-539

La Guardia, Fiorello Henry [American political leader] L: 31 *with portrait*
 New York City (Formation of Greater New York) N: 342
 Norris-La Guardia Act N: 457

La Guardia Airport [New York City]
 New York City (Queens) N: 329-330

La Have River
 Nova Scotia (Rivers and lakes) N: 562

Lahej [sultanate]
 South Arabia, Federation of So: 639

Lahontan, Lake [geology]
 Nevada (Rivers and lakes) N: 166-168

Lahore [Pakistan] L: 31
 Pakistan (The Islamic impact) P: 99
 Punjab P: 903

Lahoud, Emile [Lebanese political leader]
 Lebanon (Recent developments) L: 174

Lahr, Bert [American actor]
 Drama picture on D: 340
 Garland, Judy picture on G: 44

Lai [poem]
 French literature (Narrative poetry) F: 518-519

Lai de Lanval [poem by de France]
 Launfal, Sir L: 121

Laika [dog]
 Space exploration (The space race begins) So: 707

Laing, Alexander Gordon [Scottish explorer]
 Exploration (The exploration of Africa) E: 448 *with map*

Laird, Melvin Robert [American political leader] L: 31

Laissez faire [economics] L: 31
 Capitalism (How capitalism differs from central planning) C: 193-194; (The development of capitalism) C: 195
 Democratic Party (After the Civil War) D: 125-126
 Freedom (Economic freedom) F: 501
 Greenspan, Alan G: 386
 Keynes, John Maynard K: 308a
 Lochner v. New York L: 410
 Mercantilism M: 412
 Welfare state W: 192

Laity [religion]
 Protestantism (The importance of the laity) P: 834
 Religion (How the major religions are organized) R: 218
 Roman Catholic Church (Pastor and parish) R: 405
 Vatican Council II (The work of the council) V: 289-290

Laius [Greek mythology]
 Oedipus O: 676
 Mythology (Lévi-Strauss's theory) M: 988

Lajeunesse, Gabriel [literary figure]
 Longfellow, Henry Wadsworth (Narrative poems) L: 450

Lajoie, Napoleon [American baseball player]
 Baseball (table: Hall of Fame) B: 135

Lakandula [Manilian ruler]
 Manila (History) M: 143

Lakatoi
 Ship (Sailing ships in the 1900's) S: 411 *with picture*

Lake [dye] L: 35
 Mordant M: 801

Lake [geography] L: 32 *with pictures*
 Climate (Oceans and large lakes) Ci: 676a
 World (Water) W: 418
 See also the list of Related articles in the Lake article

Lake, Everett J. [American political leader]
 Connecticut (table) Ci: 967

Lake, Simon [American inventor]
 Submarine (Early submarines) So: 942-943

Lake, Veronica [American actress]
 Hairdressing (The 1900's) H: 12

Lake Agassiz [former lake] L: 35

Lake Ainslie [Nova Scotia]
 Nova Scotia (Rivers and lakes) N: 564

Lake Albano [Italy] L: 35

Lake Albert [Africa] L: 35
 Baker, Sir Samuel White B: 32
 Exploration (The exploration of Africa) E: 449

Lake Arresø [Denmark]
 Denmark (Lakes and rivers) D: 138

Lake Athabasca [Canada] L: 35 *with map*
 Alberta (Land regions) A: 322-324
 Exploration (Crossing North America) E: 447

Lake Atitlán [lake, Guatemala]
 Guatemala picture on G: 414
 Latin America picture on L: 91

Lake Baikal [Siberia] L: 35 *with map*
 Exploration (The Russians in Siberia) E: 447
 Lake (table) L: 34
 Russia (Rivers and lakes) R: 541 *with picture*
 Siberia (The land and climate) S: 444 *with map*

Lake Balaton [lake, Hungary]
 Hungary (Rivers and lakes) H: 443 *with map; picture on H: 442*

Lake Balkhash [Kazakhstan] L: 36

Lake Bangweulu [Zambia] L: 36

Lake Baykal [Siberia] See Lake Baikal *in this index*

Lake Bonneville [former lake]
 Great Salt Lake G: 348
 Utah (Rivers and lakes) U: 242

Lake Burley Griffin [lake, Australia]
 Canberra picture on C: 166

Lake carrier [ship]

Saint Lawrence Seaway (The seaway today) S: 45

Lake Chad [Africa] L: 36

Lake Champlain [Canada-U.S.] L: 36 *with map*
 Vermont (Rivers and lakes) V: 328-330; *picture on V: 335*

Lake Champlain, Battle of [1814]
 Macdonough, Thomas M: 11
 War of 1812 (Lake Champlain) W: 32

Lake Chapala [lake, Mexico]
 Mexico (The Plateau of Mexico) M: 460

Lake Charles [city, Louisiana] L: 36

Lake Chaubunagungamaug [Massachusetts]
 Massachusetts (Rivers and lakes) M: 284-285

Lake Chelan National Recreation Area [Washington]
 National Park System (table: National recreation areas) N: 49
 Washington W: 60

Lake Chicot [Arkansas]
 Arkansas (Rivers and lakes) A: 706-708

Lake Chilwa [Mozambique]
 Stanley and Livingstone (Livingstone's discoveries) So: 837 *with map*

Lake Clark National Park [Alaska] L: 36
 National Park System (table: National parks) N: 48

Lake Clark National Preserve [Alaska]
 National Park System (table: National preserves) N: 58

Lake Coeur d'Alene [Idaho]
 Idaho (Rivers, waterfalls, springs, and lakes) I: 38

Lake Como [Italy] L: 37 *with map*

Lake Constance [Europe] L: 37
 Switzerland (The Swiss Plateau) So: 1055 *with map*

Lake Conway
 Arkansas picture on A: 704

Lake Country [region, Chile]
 Chile (The Central Valley) C: 464-465

Lake Diefenbaker [Saskatchewan]
 Saskatchewan (Rivers and lakes) S: 138-140

Lake District
 Finland (Land regions) map on F: 113

Lake District [region, England]
 England (The Pennines) E: 300 *with picture*
 United Kingdom (The Pennines) U: 59

Lake District National Park [England]
 National park (Other interesting national parks) N: 42e *with picture; table* N: 42g

Lake Drummond [Virginia]
 Virginia (Rivers and lakes) V: 412-413

Lake dwelling [archaeology] L: 37

Lake Edward [Africa] L: 37

Lake El Azúcar [Mexico]
 Rio Grande (Lower course) R: 347

Lake Erie [Canada-U.S.] L: 37 *with map*
 Cleveland (Economy) Ci: 666
 Great Lakes G: 344 *with map*
 Ohio (Shoreline) O: 692

Lake Erie, Battle of [1813]
 War of 1812 (Lake Erie) W: 32
 Ohio O: 702; *picture on O: 700*
 Perry, Oliver Hazard P: 294 *with picture*

Lake Eyre [Australia] L: 38
 Australia (Land regions) A: 908

Lake Forest College L: 38

Lake Francis Case [South Dakota]
 South Dakota (Rivers and lakes) So: 676

Lake Geneva [France-Switzerland] L: 38 *with map*
 Rhône River R: 319
 Switzerland (The Swiss Plateau) So: 1055 *with map*

Lake George [New York]
 New York (Lakes) N: 306

Lake Grundl [Austria]
 Austria picture on A: 934

Lake Guanoco [Venezuela]
 Asphalt (Asphalt production) A: 815

Lake Havasu City [city, Arizona]
 London Bridge L: 445

Lake Hula [former lake]
 Jordan River J: 167

Lake Huron [Canada-U.S.] L: 38 *with map*
 Great Lakes G: 344 *with map*
 Lake (table) L: 34

Lake Ilmen [Russia] L: 39

Lake Itasca [Minnesota] L: 39
 Minnesota (Lakes, rivers, and waterfalls) M: 598; (The Louisiana Purchase) M: 603-604

- Mississippi River (The course of the Mississippi) M: 646; *picture on* M: 648
- Lake Izabal** [Guatemala]
Guatemala (The Northern Plain) G: 414 *with map*
- Lake Joseph** [Ontario]
Muskoka Lakes M: 963
- Lake Kinneret** [Israel-Syria]
Galilee, Sea of G: 10 *with maps*
- Lake Kivu** [Africa]
Lake Tanganyika L: 46 *with map*
Rwanda (Land) R: 571 *with map*
- Lake Ladoga** [Russia] L: 39
Lake Onega L: 43
Leningrad, Siege of L: 195
Russia (Rivers and lakes) R: 541
- Lake Lahontan** [former lake]
Nevada (Rivers and lakes) N: 166-168
- Lake Louise** [Alberta] L: 39 *with map*
Alberta *picture on* A: 320
National park *picture on* N: 42a
- Lake Lugano** [Italy-Switzerland] L: 40
- Lake Maggiore** [Italy-Switzerland] L: 40
- Lake Malawi** [Africa]
Exploration (The exploration of Africa) E: 449
Malawi M: 97 *with picture and map*
- Lake Malawi National Park** [Malawi]
National park (table) N: 42f
- Lake Manasarowar** [Tibet]
Himalaya (Peaks) H: 233
- Lake Manitoba** [Manitoba] L: 40 *with map*
- Lake Maracaibo** [Venezuela] L: 40 *with map*
Venezuela (The Maracaibo Basin) V: 302; *picture on* V: 304
- Lake Marion** [U.S.]
South Carolina (Rivers, waterfalls, and lakes) So: 652-654
- Lake Mattamuskeet** [North Carolina]
North Carolina (Rivers, waterfalls, and lakes) N: 484
- Lake McConaughy** [Nebraska]
Nebraska (Rivers and lakes) N: 106-107
- Lake McDonald** [Montana]
Glacier National Park (Lakes) G: 205-206
- Lake Mead** [Arizona-Nevada] L: 40 *with map*
Hoover Dam H: 332
Las Vegas (The Las Vegas metropolitan area) L: 88
National Park System (Areas preserved for recreational use) N: 46; (table: National recreation areas) N: 49
Nevada (Rivers and lakes) N: 166-168
- Lake Mead National Recreation Area** [Arizona-Nevada]
National Park System (Areas preserved for recreational use) N: 46
- Lake Mégantic** [Quebec]
Quebec (Rivers, waterfalls, and lakes) Q: 24
- Lake Melville** [Newfoundland and Labrador]
Newfoundland and Labrador (Rivers and lakes) N: 370 *with map*
- Lake Memphremagog** [Canada-U.S.]
Vermont (Rivers and lakes) V: 328-330
- Lake Mendota** [Wisconsin]
Madison M: 30
- Lake Meredith National Recreation Area** [Texas]
National Park System (table: National recreation areas) N: 49
- Lake Merritt** [California]
Oakland (Description) O: 637 *with picture*
- Lake Michigan** [U.S.] L: 40 *with map*
Chicago *pictures on* C: 420, C: 424
Chicago Sanitary and Ship Canal C: 438
Great Lakes G: 344 *with map*
Lake (Climate) L: 33; (table) L: 34
- Lake Mistassini** [Quebec]
Quebec (Rivers, waterfalls, and lakes) Q: 24
- Lake Mohave**
Nevada *picture on* N: 166
- Lake Monona** [Wisconsin]
Madison M: 30
- Lake Muskoka** [Ontario]
Muskoka Lakes M: 963
- Lake Nasser** [Egypt-Sudan] L: 41 *with map*
Aswan High Dam A: 851
- Lake Neagh** [Northern Ireland] *See* Lough Neagh *in this index*
- Lake Ngami** [Botswana]
Stanley and Livingstone (Livingstone's discoveries) So: 837 *with map*
- Lake Nicaragua** [Nicaragua] L: 41
- Lake Nyasa** [Africa] L: 42 *with map*
Exploration (The exploration of Africa) E: 449
Lake (table) L: 34
Malawi M: 97 *with picture and map; picture on* M: 98
Stanley and Livingstone (Livingstone's discoveries) So: 837 *with map*
- Lake O' The Cherokees** [Oklahoma] L: 42 *with map*
- Lake Oahe** [South Dakota]
South Dakota (Rivers and lakes) So: 676
- Lake of Bays** [Ontario]
Muskoka Lakes M: 963
- Lake of Lucerne** [Switzerland] L: 42
- Lake of the Clouds** [Michigan]
Michigan *picture on* M: 488
- Lake of the Ozarks** [Missouri] L: 42 *with map*
Missouri (Places to visit) M: 660, (Rivers and lakes) M: 662; (Progress as a state) M: 671
- Lake of the Woods** [Canada-U.S.] L: 42 *with map*
- Lake of Thun** [Switzerland] L: 43
- Lake Ohrid** [Albania-Yugoslavia]
Albania (Land) A: 306
- Lake Okeechobee** [Florida] L: 43
- Lake Onega** [Russia] L: 43
- Lake Ontario** [Canada-U.S.] L: 43 *with map*
Great Lakes G: 344 *with map*
Lake (Climate) L: 33
- Lake Oroville** [California]
Oroville Dam O: 858
- Lake Ouachita** [Arkansas] L: 44 *with map*
- Lake Pátzcuaro** [Mexico]
Tarascan Indians T: 42
- Lake Peipus** [Estonia-Russia] L: 44
Estonia (Land and climate) E: 362 *with map*
- Lake Placid** [city, New York]
Lake Placid L: 44
- Lake Placid** [New York] L: 44
New York (Places to visit) N: 302; *picture on* N: 308
Olympic Games (Boycotts) O: 753
- Lake Poets** [English literature] L: 44
- Lake Pontchartrain** [Louisiana] L: 44 *with map*
Louisiana (Rivers, bayous, and lakes) L: 490-492
New Orleans (The city) N: 278
- Lake Pontchartrain Causeway** [bridge, Louisiana]
Bridge (table: Combination) B: 603
Lake Pontchartrain L: 45 *with map*
Louisiana (Transportation) L: 495
- Lake Poopó** [Bolivia]
Andes Mountains (Glaciers, lakes, and rivers) A: 453
- Lake Powell** [Arizona-Utah] L: 45 *with map*
Glen Canyon Dam G: 226
- Lake Roosevelt National Recreation Area** [Washington]
National Park System (table: National recreation areas) N: 49
- Lake Rossignol** [Nova Scotia]
Nova Scotia (Rivers and lakes) N: 562
- Lake Rudolf** *See* Lake Turkana *in this index*
- Lake Saint Clair** [Michigan-Ontario] L: 45
- Lake Saint Clair National Park** [Australia]
National park (table) N: 42f
- Lake Saint Francis** [Canada]
Saint Lawrence River (The course of the St. Lawrence) S: 41
- Lake Saint Lawrence** [New York]
Saint Lawrence Seaway (The seaway system) S: 43, (The hydroelectric power project) S: 44, (Construction of the seaway) S: 45
- Lake Saint Louis** [Canada]
Saint Lawrence River (The course of the St. Lawrence) S: 41
- Lake Sakakawea** [North Dakota]
Garrison Dam G: 46
North Dakota (Places to visit) N: 504; (Rivers and lakes) N: 508 *with picture*
- Lake Scutari** [Albania-Yugoslavia]
Albania (Land) A: 306
- Lake Sevan** [Yugoslavia (Rivers and lakes) Y: 578 *with map*
- Lake Sevan** [Armenia]
Armenia (Land and climate) A: 718a-718b *with map*
- Lake Sharpe** [South Dakota]
South Dakota (Rivers and lakes) So: 676
- Lake Siskiwiit** [Michigan]
Isle Royale National Park I: 474
- Lake Springfield** [Illinois]
Springfield So: 807
- Lake States**
North Central States N: 495
- Lake sturgeon** [fish]
Sturgeon So: 934
- Lake Superior** [Canada-U.S.] L: 45 *with map*
Great Lakes G: 344 *with map*
Lake (table) L: 34
Minnesota *picture on* M: 584
- Lake Superior Museum of Transportation** [Duluth]
Minnesota (Museums) M: 589
- Lake Tahoe** [California-Nevada] L: 46 *with map*
California (Rivers, waterfalls, and lakes) C: 50-51
Nevada (Rivers and lakes) N: 166-168; *picture on* N: 157
Washoe Indians W: 110
- Lake Tana** [Ethiopia] L: 46
- Lake Taneycomo** [Missouri]
Branson B: 564
- Lake Tanganyika** [Africa] L: 46 *with map*
Exploration (The exploration of Africa) E: 449
Lake (table) L: 34
Stanley and Livingstone So: 837 *with map*
- Lake Taupo** [New Zealand]
New Zealand (Lakes, rivers, and waterfalls) N: 353 *with map*
- Lake Texcoco** [Mexico]
Aztec (The Aztec empire) A: 999
Mexico (The growth of villages) M: 468
Mexico City (The city) M: 476
Tenochtitlan T: 170
- Lake Texoma** [Oklahoma-Texas] L: 46 *with map*
- Lake Tiberias** [Israel-Syria]
Galilee, Sea of G: 10 *with maps*
- Lake Titicaca** [Bolivia-Peru] L: 47 *with map*
Bolivia (The Andean Highlands) B: 445 *with picture*
Peru (The highlands) P: 311
South America (Lakes) So: 628 *with picture*
- Lake Torrens** [Australia] L: 47
- Lake Trasimeno, Battle of** [217 B.C.]
Hannibal (His military campaigns) H: 52
- Lake trout** [fish]
Trout (Other trout) T: 454 *with picture*
Lake Superior (Recreation and commerce) L: 45-46
- Lake Tsana** [Ethiopia]
Lake Tana L: 46
- Lake Turkana** [Kenya] L: 47
Homo erectus H: 306
Homo habilis H: 306
Kenya (Rivers and lakes) K: 302
Leakey, Richard Erskine Frere L: 161
Prehistoric people (Three species) P: 745
- Lake Ullswater** [England]
National park *picture on* N: 42e
- Lake Union** [Washington]
Seattle (The city) S: 272
- Lake Vänern**
Sweden (The Swedish Lowland) So: 1028 *with map*
- Lake Vättern**
Sweden (The Swedish Lowland) So: 1028 *with map*
- Lake Victoria** [Africa] L: 47 *with map*
Exploration (The exploration of Africa) E: 449
Lake (table) L: 34
- Lake Vista** [community]
New Orleans (Residential districts) N: 279
- Lake Volta** [Ghana] L: 48 *with map*
Ghana (Land) G: 179 *with map*
- Lake Washington** [Washington]
Seattle (The city) S: 272
- Lake Washington Ship Canal** [waterway, Washington]
Canal (table) C: 164
Washington (Transportation) W: 64
- Lake whitefish** [fish]
Whitefish W: 292
- Lake Windermere** [England]
Windermere W: 333
- Lake Winnebago** [Wisconsin] L: 48
Wisconsin (Rivers, waterfalls, and lakes) W: 358-360
- Lake Winnipeg** [Manitoba] L: 48 *with map*
Manitoba (Rivers and lakes) M: 154 *with map*
- Lake Winnepigosis** [Manitoba] L: 48
- Lake Winnepesaukee** [New Hampshire]
New Hampshire (Places to visit) N: 216; (Rivers and lakes) N: 220-221

Lake Wobegon [fictional place]

Keillor, Garrison K: 254

Lake Wörther [Austria]

Austria *picture on* A: 932

Lake Xochimilco [Mexico] L: 48

Lakehurst [New Jersey]

Airship (The *Hindenburg*) A: 252

Lakeland terrier [dog] L: 48 *with picture*

Laker [ship]

Canada (Waterways and ports) C: 126

Saint Lawrence Seaway (The seaway today)
S: 45

Lakers, Los Angeles

Basketball (table) B: 150

Lakes of Killarney [Ireland] L: 49 *with map*

Lakes-to-Gulf Waterway

Illinois (Transportation) I: 70

Lakmé [opera by Delibes]

Delibes, Léo D: 116

Lakota Indians

North Dakota (History) N: 513

Sculpture *picture on* S: 244

Sioux Indians S: 474

Wounded Knee W: 502

Lakshadweep [territory, India]

Laccadive Islands L: 20

La Leche League International L: 49

Lallement, Pierre [French inventor]

Bicycle (Early bicycles) B: 292 *with picture*

Lalo, Édouard [French composer] L: 49

Lam, Wilfredo [Cuban painter]

Cuba (The arts) Ci: 1172

Lama [title]

Lamaism L: 49

Lamaism [religion] L: 49

Asia (Religion) A: 791

Bhutan (People) B: 277

Mongolia (The people) M: 722

Tibet (Religion and culture) T: 277

Lamar, Joseph R. [American jurist]

Supreme Court of the United States (table)
So: 1000

Lamar, Lucius Quintus Cincinnatus [American political leader] L: 49

Lamarck, Chevalier de [French biologist] L: 49

Evolution E: 426; (Early theories) E: 432

Heredity (Early ideas about heredity) H: 208

Zoology (History) Z: 610-611

Lamartine, Alphonse de [French author] L: 50

French literature (Romantic poetry) F: 521

La Mauricie National Park [Quebec]

Canada (table: National parks and national park reserves) C: 113

Lamaze method

Childbirth (Methods of childbirth) C: 456-457

Lamb [animal]

See also Sheep *in this index*

Easter (Easter symbols) E: 43-44

Lamb [food] L: 50

Lamb [food] L: 50

Easter (Easter symbols) E: 43-44

Meat (Kinds of meat) M: 347; *pictures on*
M: 348

Meat packing (Slaughtering and dressing)
M: 351

Mutton M: 969

Lamb, Charles [British author] L: 50 *with portrait*

English literature (Romantic prose) E: 320

Essay (Personal essays) E: 359

February (Quotations) F: 61

Shakespeare, William (Romantic criticism)
S: 369

Lamb, Mary Ann [British author] L: 51

"Lamb, The" [poem by Blake]

Blake, William B: 397

Lamb, Willis Eugene, Jr. [American physicist]
L: 51

Lamb of God

Easter (Easter symbols) E: 43-44

Lambaréné [Gabon]

Gabon G: 3 *with map*

Lambert, John [American political leader]

New Jersey (table) N: 249

Lambert crazyweed [plant]

Locoweed L: 418

Lambert-St. Louis International Airport

Airport (table) A: 245

Lambeth Conferences [religion]

Anglicans (Organization) A: 463

Lamborghini Diablo [automobile]

Sports car So: 802 *with picture*

Lamb's-quarters [plant] L: 51

Lamb's wool

Wool (Types of wool) W: 399

Lambton, John George *See* Durham, Earl of *in this index*

Lame duck [politics]

Lame Duck Amendment L: 51

Lame Duck Amendment [U.S. Constitution]

L: 51

Constitution of the United States (Amendment

20) Ci: 1015

Hoover, Herbert Clark (Election of 1932)

H: 330

Lamellar layer

Shell (How shells are formed) S: 385

Lament for Art O'Leary, The [poem by

O'Leary]

Irish literature (Modern works in Gaelic) I: 431

Lament for Ignacio Sanchez Mejias [poem by

García Lorca]

García Lorca, Federico G: 29

Lamentations [Old Testament] L: 51

Tishah be-Av T: 299

Lamer, Antonio [Canadian jurist] L: 51

LaMettrie, Julien de [French philosopher]

Materialism M: 300b

"Lamia" [poem by Keats]

Keats, John (His work) K: 253-254

Lamina *See* Blade [botany] *in this index*

Laminar flow [atmosphere]

Aerodynamics (Friction drag) A: 87

Laminated glass

Glass (Specialty glasses) G: 212; (table) G: 218

Laminating [industrial process] L: 51

Bamboo (How bamboo is used) B: 71

Plastics (Making plastic products) P: 557-558

with picture

Laminitis [disease]

Horse (Medical care) H: 356

Lamizana, Sangoule [African general]

Burkina Faso (History) B: 707

Lamm, Richard D. [American political leader]

Colorado (table) Ci: 844

Lammas [holiday]

Witchcraft (Witchcraft as a religion) W: 371-
372

Lammas Day [festival]

August A: 886

Lammmergeier [bird] L: 52 *with picture*

Lamoille Lake

Nevada (Rivers and lakes) N: 166-168

Lamone

Chicken (table) C: 443

Lamont, Daniel S. [American government official]

Cleveland, Grover (table) Ci: 672

Lamont, Robert P. [American government official]

Commerce, Department of (table) Ci: 871

Hoover, Herbert Clark (table) H: 330

LaMoore, Louis Dearborn [American author]

See L'Amour, Louis *in this index*

Lamour, Dorothy [American actress]

Hope, Bob H: 333

L'Amour, Louis [American author] L: 52

Lamp L: 52 *with pictures*

Electric light E: 174 *with pictures*

Interior design (Selecting accessories) I: 333

Lighting (Lighting devices) L: 298; (Lighting

problems) L: 297-298

Safety lamp S: 16 *with picture*

Lamp chimney

Lamp (Fat or oil lamps) L: 52 *with pictures*

Lamp shade

Lighting (Quantity of light) L: 297

Lamp shell [animal] *See* Brachiopoda *in this index*

Lampblack

Soot So: 595

Lamper eel [sea animal]

Lamprey (Destructiveness) L: 55

LAMPF

Los Alamos National Laboratory L: 455

Lampman, Archibald [Canadian poet] L: 54

Canadian literature (Poetry: 1850-1918)

C: 157-158

Lamprey [animal] L: 54 *with pictures*

Animal *picture on* A: 507

Fish (Lampreys and hagfish) F: 148 *with picture*

Hagfish H: 6

Lake Superior (Recreation and commerce)

L: 45-46

Lampworking [industrial process]

Glass (Lampworking) G: 216 *with picture*

LAN [computing] *See* Local area network *in this index*

Lan-chou [China] *See* Lanzhou *in this index*

Lan Xang [Laotian history]

Indochina (A new kingdom) I: 225

Laos (History) L: 71

Vientiane V: 363

Lane [chimpanzee]

Chimpanzee (Chimpanzees and people) C: 473

Lanai [island]

Hawaii (Lanai) H: 102

Lancaster [city, Pennsylvania] L: 55

Pennsylvania *picture on* P: 244

United States capitals U: 199

Lancaster [English history] L: 55

England (The Wars of the Roses) E: 306;

(table) E: 308

Henry IV [of England] H: 186

Henry VI [of England] H: 187

Plantagenet P: 550

Wars of the Roses W: 38

York Y: 568

Lancaster, Burt [American actor]

Motion picture (Best performance by an actor:
1960) M: 862-863

Lancaster, Duke of *See* John of Gaunt *in this index*

Lancaster County

Evolution (Genetic drift) E: 429

Pennsylvania Dutch P: 270

Lancaster Sound [Canada]

Exploration (Arctic exploration) E: 449

Lancaster Turnpike [U.S. history]

Road (Early American roads) R: 361

Turnpike T: 519

Lance [fireworks]

Fireworks (How fireworks work) F: 135

Lance [industry]

Iron and steel (The basic oxygen process
[BOP]) I: 443 *with diagram*; (The open-
hearth process) I: 444-445 *with diagram*

Lence [weapon]

Knights and knighthood (Armor) K: 350 *with picture*

Spear So: 768

Lance corporal

Rank, Military (table) R: 140

Lanceleaf lungwort [plant]

Lungwort L: 525

Lancelet [sea animal] *See* Amphioxus *in this index*

Lancelot, Sir [legendary figure] L: 56 *with picture*

Arthur, King A: 757

Galahad, Sir G: 7

Round Table (The decline of the Round Table)
R: 491

Lancet window

Window W: 334

Lancewood [wood] L: 56

Land *See* Property; Real estate *in this index*

Land, Edwin Herbert [American inventor] L: 56

Polarized light (Polarizing materials) P: 618

Land, Frank S. [American businessman]

DeMolay, Order of D: 129

Land, The [film]

Flaherty, Robert Joseph F: 225

Land, The [play by Colum]

Colum, Padraic Ci: 851

Land art [sculpture]

Sculpture (Environmental sculpture) S: 259-
260 *with picture*

Land Bank Association, Federal

Farm Credit System (Organization) F: 45

Land-based observation station [weather]

Weather (Land-based observation stations)
W: 162

Land Between the Lakes [recreation area]

Kentucky (Places to visit) K: 282

Land captain [Russian history]

Russia (Alexander III) R: 551

Land disposal

Waste disposal (Land disposal) W: 113

Land Force Command

Canada, Armed Forces of (Organization)
C: 128

Land-Grant Act [1862]

- Land-grant university** [U.S. history] L: 56
Agricultural education (Colleges and universities) A: 144
Agricultural experiment station A: 145
Cooperative Extension System Ci: 1037
- Land iguana**
Iguana I: 50
- Land League** [Irish history]
Parnell, Charles Stewart P: 177
- Land management**
Land Management, Bureau of L: 57
Public lands (Management of public lands) P: 858
- Land Management, Bureau of** [U.S.] L: 57
National Trails System N: 61
- Land mile**
Mile M: 542
- Land mine**
Arms control (History of arms control) A: 721-722
Mine warfare (Land mines) M: 564 *with pictures*
United Nations *picture on* U: 90
- Land of Enchantment** [name for]
New Mexico N: 256
- Land of Evangeline** [region]
Nova Scotia N: 555
- Land of Infinite Variety** [name for]
South Dakota So: 664
- Land of Lincoln** [name for]
Illinois I: 52
- Land of Shining Mountains** [name for]
Montana M: 742
- Land of the South Slavs** [name for]
Yugoslavia Y: 576
- Land plaster**
Gypsum G: 451
- Land Purchase Act** [1875]
Prince Edward Island (Member of the union) P: 791
- Land reform** [economics] L: 57
George, Henry G: 108
Mexico (Agriculture) M: 465-466
- Land slug** [animal]
Slug S: 512 *with picture*
- Land speculator** [U.S. history]
Pioneer life in America (How the pioneers obtained land) P: 479
- Land survey**
Surveying (Types of surveys) So: 1010-1011
- Land tenure** [European history]
Feudalism (The beginnings of feudalism) F: 81
- Land turtle**
Turtle T: 520
- Land-use map**
City planning *picture on* Ci: 600
United States *map on* U: 130
- Landau** [vehicle]
Carriage C: 248
- Landau, Lev Davidovich** [Russian physicist]
Nobel Prizes (Physics: 1962) N: 441
- Landau, Martin** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1994) M: 863
- Lander, Richard Lemon** [British explorer]
Exploration (The exploration of Africa) E: 448
- Landers, Ann** [American journalist] L: 57 *with portrait*
Van Buren, Abigail V: 269
- Landes, Bertha Knight** [American political leader] L: 57
- Landfill**
Environmental pollution (Solid waste) E: 334
Hazardous wastes (Disposal of hazardous wastes) H: 122
Incinerator I: 99
Plastics (Plastics and the environment) P: 560
Recycling R: 184
Waste disposal (Land disposal) W: 113 *with picture*
- Landing** [aviation]
Aircraft carrier (Flight operations) A: 206
Airplane *diagram on* A: 224
Space exploration (Returning to the earth) So: 701
- Landing** [logging]
Lumber (table) L: 518; (Transporting logs) L: 518
- Landing craft** [ship]
Amphibious ship A: 442 *with picture*
Ducted propeller *picture on* D: 377
Warship (Amphibious warfare ships) W: 40
- Landing gear**
Airplane (The landing gear) A: 216; *pictures on* A: 215, A: 219
- Landing of Columbus** [painting by Vanderlyn]
Columbus, Christopher *picture on* Ci: 860
- Landing of William Penn** [painting by Ferris]
Penn, William *picture on* P: 243
- Landing radar**
Radar (In space travel) R: 68
- Landing ship—tank**
Warship (Warships in the two world wars) W: 41-42 *with picture*
- Landing strip**
Airport (Runways) A: 245
- Landis, Kenesaw Mountain** [American jurist] L: 57
Baseball (The Black Sox Scandal) B: 136; (table: Hall of Fame) B: 135
Jackson, Shoeless Joe J: 16
- Ländler** [dance]
Folk dancing F: 320
- Landlord**
Lease L: 166
Middle Ages (Barbarian Europe) M: 523
Tenant T: 132
Tenant farming T: 132
- Landmark status** [law]
Architecture (Architecture today) A: 632-633
- Lando** [pope]
Pope (table) P: 666
- Landolphia** [vine]
Rubber (The rubber tree) R: 502
- Landon, Alfred Mossman** [American political leader] L: 57 *with portrait*
Kansas (table) K: 234; (The Great Depression) K: 238
Kassebaum, Nancy Landon K: 249
Knox, Frank K: 357
Roosevelt, Franklin Delano (Election of 1936) R: 458
- Landowska, Wanda** [Polish musician] L: 58
- Landrace** [hog]
Hog (Kinds of hogs) H: 285 *with picture*
- Landrieu, Moon** [American government official]
Carter, Jimmy (table) C: 257
Housing and Urban Development, Department of (table) H: 393
- Landrum-Griffin Act** [1959]
Labor movement (Charges of corruption) L: 13
- Landry, Bernard** [Canadian political leader]
Quebec (table) Q: 29; (Recent developments) Q: 32-33
- Lands, Public** See Public lands *in this index*
- Land's End** [region, England] L: 58
- Landscape** [painting by Cole]
Cole, Thomas *picture on* Ci: 771
- Landscape Architects, American Society of**
Landscape architecture (History) L: 59
- Landscape architecture** L: 58 *with pictures*
Gardening G: 30
House (Landscaping) H: 383
Le Nôtre, André L: 196
New Harmony *picture on* N: 228
Olmsted, Frederick Law O: 745
Road (Roadside improvement) R: 360
Tree (Planting and caring for trees) T: 431
- Landscape contractor** [occupation]
House (Landscaping) H: 383
- Landscape painting**
Painting (Landscapes and seascapes) P: 32 *with picture*; (Chinese painting) P: 44-45; (Romanticism) P: 68 *with picture*
China (Painting) C: 488 *with picture*
Church, Frederick Edwin C: 541 *with picture*
Turner, J. M. W. T: 515
- Landscape with Polyphemus and Galatea** [painting]
Painting (Roman painting) P: 42-43
- Landscape with Satyr** [drawing by Titian]
Drawing *picture on* D: 344
- Landscape with the Fall of Icarus** [painting by Bruegel]
Painting (The northern Renaissance) P: 57 *with picture*
- Landscaping** See Gardening; Landscape architecture *in this index*
- Landseer, Sir Edwin** [British painter]
Painting (Art for a new public) P: 70 *with picture*
- Landsgemeinde** [government]
Switzerland (Cantonal and local government) So: 1051
- Landside** [tool]
Plow (The moldboard plow bottom) P: 575
- Landslide** [geology] L: 59
Tsunami T: 475
- Landsmål**
Norway (Language) N: 539
- Landsteiner, Karl** [Austrian-American physiologist] L: 59
Blood (History of blood research) B: 414
Blood transfusion (History) B: 417
Rh factor R: 289
- Landtag**
Austria (The Parliament) A: 929
- Lane**
Bowling (The lane) B: 523
- Lane, Fitz Hugh** [American artist]
Painting (Landscapes and seascapes) P: 32 *with picture*
- Lane, Franklin K.** [American government official]
Interior, Department of the (table) I: 325
Wilson, Woodrow (table) W: 323
- Lane, Harriet** [niece of]
Buchanan, James (Life in the White House) B: 661 *with picture*
White House hostesses W: 291
- Lane, Henry Smith** [American political leader]
Indiana (table) I: 214
- Lane, Joseph** [American political leader]
Washington (Territorial days) W: 66
- Lane, William Preston, Jr.** [American political leader]
Maryland (table) M: 255
- Lane Memorial Bridge**
Maryland *picture on* M: 257
- Laney, Benjamin T.** [American political leader]
Arkansas (table) A: 712
- Lanfranc** [English religious leader] L: 59
- Lang, Andrew** [Scottish author] L: 60
- Lang, Eddie** [American guitarist]
Jazz (The 1920's) J: 70-71
- Lang, Fritz** [German-American director] L: 60
Motion picture (The movies talk) M: 867
- Langaha** [snake]
Snake (Body shape) S: 525-526
- Langdell, Christopher Columbus** [American educator]
Case method C: 272
- Langdon, John** [American political leader] L: 60
New Hampshire (table) N: 223
- Langdon, Olivia** [wife of]
Twain, Mark (Return to the East) T: 529
- Lange, Carl G.** [Danish physiologist]
Emotion (Early theories about emotions) E: 261
- Lange, Christian Louis** [Norwegian statesman]
Nobel Prizes (Peace: 1921) N: 447
- Lange, David Russell** [New Zealand political leader] L: 60 *with portrait*
New Zealand (International tensions) N: 356
- Lange, Dorothea** [American photographer] L: 60 *with picture*
Photography (The photographic revolution) P: 427-428 *with picture*
- Lange, Jessica** [American actress]
Motion picture (Best performance by an actress: 1994) M: 862; (Best performance by an actress in a supporting role: 1982) M: 863
- Langen, Eugen** [German inventor]
Gasoline engine (Development of the gasoline engine) G: 66
- Langer, William** [American political leader]
North Dakota (table) N: 513
- Langevin, Hector-Louis** [Canadian patriot]
Abbott, Sir John Joseph Caldwell (Prime minister) A: 6
Confederation of Canada (Fathers of Confederation) Ci: 935 *with picture*
- Langevin, Paul** [French physicist]
Zworykin, Vladimir Kosma Z: 614
- Langhorne, Nancy** [British political leader] See Astor, Lady *in this index*
- Langland, William** [English poet] L: 60
English literature (The age of Chaucer) E: 316
- Langlet, Nils** [Swedish chemist]
Helium H: 176
- Langley** [ship]
Aircraft carrier (History) A: 207
Langley, Samuel Pierpont L: 61
- Langley, Samuel Pierpont** [American engineer] L: 61

- Airplane (Powered flight) A: 230-231
 Bell, Alexander Graham (His later life) B: 241
 Bolometer B: 449
- Langley Air Force Base** [Virginia] L: 61
- Langlie, Arthur B.** [American political leader]
 Washington (table) W: 65
- Langlois Globe**
 Globe G: 233
- Langmuir, Irving** [American chemist]
 Nobel Prizes (Chemistry: 1932) N: 442
- Langrenus** [Dutch astronomer]
 Moon (Early observations with telescopes)
 M: 792
- Langshan**
 Chicken (Asiatic class chickens) C: 441; (table)
 C: 443
- Langton, Stephen Cardinal** [English religious
 leader] L: 61
- Langtry** [Texas]
 Bean, Judge Roy B: 182 *with picture*
- Langtry, Lillie** [British actress] L: 61
 Bean, Judge Roy B: 182
- Language** L: 62 *with pictures and map*
 Alphabet A: 381
 Artificial intelligence (Natural language pro-
 cessing) A: 760
 Autism (Symptoms) A: 941
 Bilingual education B: 300
 Brain (In the use of language) B: 554
 Chimpanzee (Chimpanzees and people) C: 473
 Communication (Interpersonal communication)
 Ci: 878; (Prehistoric times) Ci: 879; (The
 study of communication) Ci: 887
 Culture (Using symbols) Ci: 1187
 Education (History) E: 97
 Etymology E: 375
 Europe (Languages) E: 390 *with map*
 Grammar G: 303
 Human being (Cultural characteristics) H: 414
 Indian, American (Language) I: 149
 Linguistics L: 335
 Philosophy (The philosophy of language)
 P: 385; (Medieval philosophy) P: 387
 Prehistoric people (The development of
 speech) P: 751
 Races, Human (The social significance of race)
 R: 59
 Reading R: 155
 Rhythm R: 320
 Richards, I. A. R: 329
 Sign language S: 453
 Speech So: 772
 United States (Language) U: 110
 Wittgenstein, Ludwig W: 374
 Women's movements (On attitudes and val-
 ues) W: 388
 World (Languages) W: 414
*See also the list of Related Articles in the
 Language article*
- Language** [book by Bloomfield]
 Bloomfield, Leonard B: 418
- Language, Programming** *See* Computer lan-
 guage *in this index*
- Language arts** L: 67
See also Language *in this index*
- Language discrimination**
 Civil rights (Civil rights in Canada) Ci: 610
- Language-experience method**
 Reading (The language-experience method)
 R: 158 *with picture*
- Language family**
 Language (Language families) L: 64 *with map*
- Language laboratory** [education]
 Language *picture on* L: 63
- Language minority** [sociology]
 Hispanic Americans H: 244
- Langue d'oc and langue d'oïl** [French language]
 French language (Old French) F: 517
 Troubadour T: 453
 Trouvère T: 454
- Langur** [animal] L: 67 *with picture*
 Monkey *picture on* M: 728
 Primate (Old World monkeys) P: 778a
- Lanham, S. W. T.** [American political leader]
 Texas (table) T: 203
- Lanier, Jaron** [American artist/scientist]
 Virtual reality V: 426
- Lanier, Sidney** [American poet] L: 68
- La Niña** [current]
 El Niño E: 245; (Climate with La Niña) E: 246
 Ocean (Discoveries) O: 664
 Pacific Ocean (El Niño) P: 14-15
- Lankester, Sir Edwin Ray** [British biologist]
 L: 68
- Lanolin** [animal product] L: 68
- Lansdowne, Marquess of** [Canadian statesman]
 L: 68
- L'Anse aux Meadows National Historic Park**
 [Newfoundland]
 Canada (table: National historic sites) C: 114
 Newfoundland and Labrador (Places to visit)
 N: 368 *with picture*
- Lansing** [Michigan] L: 68
- Lansing, Robert** [American government official]
 L: 69
- Langston, Tolbert** [American inventor]
 Monotype (History) M: 733
 Printing (New presses and typesetting
 machines) P: 803
 Type (History) T: 537
- Lanternfish** L: 69 *with picture*
 Fish *picture on* F: 156
- Lanthanide** [chemistry]
 Element, Chemical *diagram on* E: 221
 Rare earth R: 144
- Lanthanum** [element] L: 69
- Lantz, Walter** [American animator]
 Animation (Animation in the mid-1900's)
 A: 514a
- Lanugo** [hair]
 Reproduction, Human (Stages of growth)
 R: 248
- Lanval** [book by Marie de France]
 Knights and knighthood (Knighthood in litera-
 ture) K: 351
- Lanzhou** [China] L: 69
- Lao Lum** [people]
 Laos (People) L: 70
- Lao People's Revolutionary Party** [Laotian
 political party]
 Laos (Government) L: 70
- Lao Sung** [people]
 Laos (People) L: 70
- Lao Thoeng** [people]
 Laos (People) L: 70
- Lao Tzu** *See* Laozi *in this index*
- Lao-tzu** [book] *See* *Classic of the Way and the
 Virtue, The* *in this index*
- Laocoön** [Greek mythology] L: 69 *with picture*
 Trojan War (The fall of Troy) T: 449
 Troy (The legendary Troy) T: 454
- Laocoön** [sculpture]
 Vatican City (Vatican Palace) V: 287
- Laodicea** [ancient Syrian city]
 Latakia L: 90
- Laokoön** [essay by Lessing]
 Lessing, Gotthold Ephraim L: 208
- Laos** L: 70 *with pictures and map*
 Cold War (The death of Stalin) Ci: 764; (The
 Vietnam War) Ci: 769
 Flag *picture on* F: 203
 France (The Fourth Republic) F: 475-476
 Geneva Accords G: 87
 Indochina I: 224 *with map*
 Thailand (History) T: 226-227
 Vientiane V: 363
 Vietnam War (Other effects in Southeast Asia)
 V: 377; *map on* V: 374
- Laozi** [Chinese philosopher] L: 72
 Religion *picture on* R: 221
- Laparoscope** [instrument]
 Laparoscopy L: 72 *with picture*
 Surgery (Instruments) So: 1005
- Laparoscopic sterilization**
 Birth control (Methods of birth control)
 B: 378
 Laparoscopy L: 72
- Laparoscopy** [medicine] L: 72 *with pictures*
- La Paz** [Bolivia] L: 73 *with picture*
 Bolivia B: 442; (Population and ancestry)
 B: 443 *with picture*
 Latin America *picture on* L: 96
- Lapel button**
 Button B: 745 *with picture*
- Lapel microphone** *See* Lavalier microphone *in
 this index*
- Lapidary** [handicraft] L: 73
 Diamond (How diamonds are cut to make jew-
 els) D: 182
 Gem (Cutting and polishing) G: 79
- Lapis lazuli** [mineral] L: 73 *with picture*
 Afghanistan (Mining) A: 94-95
 Gem *picture on* G: 78
 Ultramarine U: 16
- Lapiths** [ancient people]
 Centaur C: 350 *with picture*
- Laplace, C. P. T.** [French sea captain]
 Hawaii (The kingdom of Hawaii) H: 106
- Laplace, Marquis de** [French astronomer] L: 74
 Nebular hypothesis N: 116
- Laplace, Pierre Simon de** *See* Laplace, Marquis
de in this index
- Lapland** [region, Scandinavia] *map on* L: 74
 Sami (Land and climate) S: 79
- Lapland rosebay**
 Flower *picture on* F: 283
- Laplas** [Voodoo worshipper]
 Voodoo V: 449
- La Plata** [former name]
 Sucre So: 951
- La Plata, Rio de** *See* Río de la Plata *in this index*
- La Plata, United Provinces of** [Argentine histo-
 ry]
 Argentina (Independence) A: 656-657 *with
 map*
- La Plata, Viceroyalty of** [Argentine history]
 Argentina (Colonial days) A: 656 *with map*
- La Plata dolphin**
 River dolphin R: 355 *with picture*
- Lapointe, Ernest** [Canadian political leader]
 Saint Laurent, Louis Stephen (Entry into public
 life) S: 39
- Laporte, Pierre** [Canadian government official]
 Canada, History of (The separatist threat)
 C: 153
 Montreal (The separatist movement) M: 779
 Quebec (Recent developments) Q: 32
 Trudeau, Pierre Elliott (The national scene)
 T: 464
- Lappet** [zoology]
 Tragopan T: 368
- Lapping** [industrial process]
 Machine tool (Abrasive process) M: 18-19
- Lapps** *See* Sami *in this index*
- Laptop computer** L: 74
 Computer (Personal computers) Ci: 909-910
with picture
- Lapwai Mission Station**
 Idaho (Exploration and early settlement) I: 42
- Lapwing** [bird] L: 75 *with picture*
- La Quebrada cliffs** [Mexico]
 Acapulco A: 21
- Lar** [Roman mythology]
 Lares and penates L: 76
- Laramie** [Wyoming] L: 75
- Laramie, Jacques** [American explorer] L: 75
- Laramie Mountains** [mountains, Wyoming]
 Wyoming (Land regions) W: 526
- Laramie Treaty** [1868]
 South Dakota (Territorial days) So: 681
 Spotted Tail So: 804
- Larceny** [crime] L: 75
 Crime (table) Ci: 1137
 Embezzlement E: 256
 Robbery R: 365
- Larch** L: 75
 Tree (Needleleaf trees) T: 414; *pictures on*
 T: 425, T: 426
- Larch suillus** [mushroom]
 Mushroom *picture on* M: 944
- Lard** [food] L: 76
 Hog (Food) H: 286
 Meat packing (Slaughtering and dressing)
 M: 351
- Lardner, Ring** [American author] L: 76
- Laredo** [Texas] L: 76
- Lares and penates** [Roman mythology] L: 76
 Vesta V: 342
- La Reunion** [U.S. history]
 Dallas (History) D: 15
- Large Binocular Telescope**
 Telescope (Reflecting telescopes) T: 104-105
- Large Blue Horses, The** [painting by Marc]
 Germany *picture on* G: 155
 Painting (Expressionism) P: 78-79
- Large Electron-Positron collider** [machine] *See*
 LEP2 synchrotron *in this index*
- Large-firm sector** [economics]
 Japan (Manufacturing) J: 49
- Large Hadron Collider** [machine]
 Particle accelerator (How accelerators work)
 P: 184-186
- Large intestine** [anatomy]
 Colon [anatomy] Ci: 785
 Colon cancer Ci: 785
 Frog *picture on* F: 537

- Human body (The small intestine and large intestine) H: 420; *diagram on H: 422*
 Intestine (The large intestine) I: 353 *with diagram*
- Large-leaf linden** [tree]
 Linden L: 332
- Large Magellanic Cloud** [astronomy]
 Magellanic Clouds M: 48
 Supernova So: 994
- Large numbers, Law of**
 Insurance I: 309
- Large-scale map**
 Map (Scale) M: 178
- Large skipper** [insect]
 Butterfly *picture on B: 734*
- Large White**
 Hog (Other breeds) H: 286
- Largemouth bass**
 Bass (Black bass) B: 156 *with picture*
 Fish *picture on F: 158*
- Larger Westminster Catechism**
 Catechism C: 299
- Largillière, Nicolas de** [French painter]
 Clothing *picture on Ci: 701*
- Largo**
 Music (table) M: 954
- "Largo al factotum"** [aria]
 Opera (*Barber of Seville, The*) O: 801
- Lariat**
 Cowboy (His rope) Ci: 1109
- Larionov, Mikhail** [Russian artist]
 Painting (Nonobjective painting in Russia) P: 79
- Larisa** [Greece]
 Thessaly T: 258
- Lark** [bird] L: 76 *with picture*
 Bird (Birds of grasslands) B: 336 *with pictures; picture on B: 355*
- Lark, The** [play by Anouilh]
 Anouilh, Jean A: 519
- Lark, The** [play by Fry]
 Fry, Christopher F: 549
- Lark bunting** [bird]
 Bird (Birds of grasslands) B: 336 *with picture*
 Bunting B: 700
- Lark sparrow** [bird]
 Sparrow So: 764 *with picture*
- Larkin, Philip** [British poet] L: 77
 English literature (Literature after World War II) E: 322-323
- Larkin Building** [Buffalo, New York]
 Architecture (Frank Lloyd Wright) A: 629-630
 Wright, Frank Lloyd (Early career) W: 507
- Larkspur** [plant] L: 77 *with picture*
 Flower *picture on F: 277*
- La Rochefoucauld, Duc de** [French author]
 L: 77
- La Rochelle** [France] L: 78
- La Rocque, Jean-François de** [French explorer]
 See Roberval, Sieur de *in this index*
- Larousse, Pierre** [French publisher]
 Encyclopedia (Today's encyclopedias) E: 268b
- Larra, Mariano José de** [Spanish author]
 Spanish literature (The 1800's) So: 761
- Larrabee, William** [American political leader]
 Iowa (table) I: 391
- Larrezolo, Octaviano Ambrosio** [American political leader] L: 78
 New Mexico (table) N: 272
- Larson, Gary** [American cartoonist] L: 78
 Cartoon *picture on C: 264*
- Larson, John A.** [American inventor]
 Lie detector L: 271
- Larson, Morgan F.** [American political leader]
 New Jersey (table) N: 249
- Lartet, Louis** [French anthropologist]
 Prehistoric people (table) P: 752
- Lertius** [Roman legend]
 Horatius H: 334
- Larva** [zoology] L: 78 *with pictures*
 Ant (Reproduction) A: 524-525 *with picture*
 Ant lion A: 529 *with picture*
 Barnacle B: 114
 Beetle (The life cycle of beetles) B: 216 *with diagram*
 Bot fly B: 507
 Butterfly (The larva) B: 740-741 *with pictures*
 Cocoon Ci: 747
 Fish (How fish live) F: 165 *with picture*
 Grub G: 406
 Insect *picture on I: 282*; (Complete metamorphosis) I: 293
- Metamorphosis (The larva) M: 428 *with picture*
- Moth (The life cycle of moths) M: 838-839 *with pictures*
- Salamander (The life of a salamander) S: 60
- Tadpole T: 6
- Tapeworm T: 40
- See also *the list of Related Articles in the Larva article*
- Laryngitis** [disorder] L: 78
 Voice (Straining the voice) V: 437
- Larynx** [anatomy] L: 79 *with diagram*
 Cancer (Classification by primary body site) C: 167-168
 Frog (Voice) F: 537-538
 Hiccup H: 223
 Human body (The air passages) H: 420-421, *diagram on H: 422*
 Laryngitis L: 78
 Respiration (Structures of breathing) R: 260
 Sound (The human voice) So: 598
 Voice (The human voice) V: 436 *with diagram*
- LAS** [chemical]
 Detergent and soap (The development of detergents) D: 165-166
- Las ...**
Titles beginning Las appear under their key words, as in Meninas, Las. Names beginning Las are alphabetized as single words: Las Charcas appears after Lascaux Cave
- La Sal Mountains**
 Utah (Land regions) U: 240-242
- La Salle, Jean Baptiste de** See Jean Baptiste de la Salle, Saint *in this index*
- La Salle, Sieur de** [French explorer] L: 79 *with picture and map*
 Arkansas (Exploration and settlement) A: 712
 Colorado (Exploration and settlement) Ci: 845
 Exploration (The French and English in North America) E: 446-447 *with map*
 Hennepin, Louis H: 185
 Indiana (Exploration and settlement) I: 215
 Iowa (Exploration and early settlement) I: 393
 Louisiana L: 478; (Exploration and early settlement) L: 497
 Memphis (History) M: 396
 Michigan (French exploration and settlement) M: 508
 Mississippi (Exploration and early settlement) M: 641
 Missouri (Exploration and settlement) M: 669
 Nebraska (Exploration) N: 111
 New Orleans (History) N: 284
 New York (Under English rule) N: 314-315
 North Dakota (Exploration and early settlement) N: 513
 Ohio (Exploration and settlement) O: 700
 Ohio River (History) O: 706
 Oklahoma (Early days) O: 731
 South Dakota (Exploration and fur trade) So: 681
 Tennessee (Exploration) T: 153
 Texas (French exploration) T: 204
 Tonty, Henri de T: 330
- LaSalle Street**
 Chicago (Downtown Chicago) C: 420-421
- La Scala** [opera house]
 Abbado, Claudio A: 4
 Italy *picture on I: 505*
 Toscanini, Arturo T: 343
- Las Casas, Bartolomé de** [Spanish missionary]
 L: 80
 Latin-American literature (Colonial literature) L: 111
- Lascaux Cave** [France]
 Cave (table) C: 320
 Horse *picture on H: 360*
 Painting (Prehistoric painting) P: 40 *with picture*
 Prehistoric people *picture on P: 751*
- Las Chercas** [community]
 Guatemala (Indian period) G: 416
- Las Cruces** [New Mexico] L: 80
- Laser** [physics] L: 81 *with pictures*
 Biomedical engineering (Bioinstrumentation) B: 324
 Birthmark B: 380
 Bomb (Guided bombs) B: 450
 Compact disc (Audio CD's) Ci: 901 *with diagram*
 Crime laboratory *picture on Ci: 1141*
- Electric light (Lasers) E: 176
- Electronics (Light-emitting devices) E: 213; *picture on E: 206*
- Fingerprinting (How fingerprints are recorded) F: 106
- Holography H: 297 *with diagram*
- Hospital *picture on H: 373*
- Invention (Recent developments) I: 364
- Light (Other sources of light) L: 283
- Machine tool (High-energy rate forming) M: 19
- Nearsightedness N: 93
- Nuclear energy (Experimental fusion devices) N: 592-593
- Photocomposition P: 405 *with diagram*
- Physics (Advances in the mid-1900's) P: 442 *with picture*
- Printing (Electronic imagesetting) P: 797; (Digital printing) P: 801
- Radar (Continued progress) R: 72-73
- Science *picture on S: 193*
- Surveying (Surveying tools) So: 1011
- Uranium (Separating uranium isotopes) U: 215-216 *with diagram*
- Laser altimeter** [instrument]
 Altimeter A: 390
- Laser glass**
 Glass (Specialty glasses) G: 212-213
- Laser gyroscope** [tool]
 Gyroscope (Optical gyroscopes) G: 454 *with picture*
- Laser** (Guiding) L: 83
- Laser in situ keratomileusis** [surgery] See LASIK *in this index*
- Laser Interferometer Gravitational-Wave Observatory**
 Observatory (Gravitational observatories) O: 645-646
 Relativity (Gravitational waves) R: 212
- Laser isotope separation**
 Uranium (Separating uranium isotopes) U: 215-216 *with diagram*
- Laser platemaker** [machine]
 Printing (Electronic imagesetting) P: 797
- Laser printer**
 Computer (Printers) Ci: 916 *with picture*
 Magazine (Editing and assembling an issue) M: 43
 Printer (Laser printers) P: 795
 Printing (Digital printing) P: 801
- Laser radar**
 Radar (How radar works) R: 68
- Laser range finder** [instrument]
 Range finder R: 139
- Laser ranging** [measurement]
 Mountain (Measuring mountains) M: 896
- Laser scanner** [machine]
 Botany *picture on B: 509*
- LaserWriter** [printer]
 Desktop publishing D: 158
- LASH ship**
 Ship (LASH ships) S: 419 *with picture*
- LASIK** [surgery]
 Eye (Defects of the eye) E: 464
- Lasing diode**
 Radar *picture on R: 72*
- Lasker, Emanuel** [German chess player]
 Chess (World chess champions) C: 414
- Laski, Harold Joseph** [British educator]
 L: 87
- Lesorde, Tom** [American baseball manager]
 Baseball (table: Hall of Fame) B: 135
- Las Palmas** [Canary Islands]
 Canary Islands C: 165 *with picture*
- Laspeyresia saltitans** [insect]
 Jumping bean J: 190 *with picture*
- Lassalle, Ferdinand** [German socialist]
 Bebel, August B: 196
- Lassen, Peter** [American frontiersman]
 Lassen Peak L: 87
- Lassen Peak** [volcano, California] L: 87
 Cascade Range C: 271
 Mountain (table) M: 894 *with diagram*
 Volcano (table) V: 441 *with map*
- Lassen Volcanic National Park** [California] L: 87
 National Park System (table: National parks) N: 48
- Lassi** [drink]
 Pakistan (Food and drink) P: 96
- Lassie Come-Home** [book by Knight]
 Knight, Eric K: 346
- Lasso, Orlando di** [Flemish composer] L: 87
 Classical music (Instrumental music) Ci: 646

Lassone, J. M. F. de [French chemist]
Carbon monoxide C: 207

Lassus, Roland de
Lasso, Orlando di L: 87

Lasswell, Harold D. [American political scientist]
Communication (Communication and politics) Ci: 888

Last [tool]
Shoe (The shoe industry in the United States) S: 431

Last and First Men [book by Stapledon]
Science fiction (The early 1900's) S: 205
Stapledon, Olaf So: 839

Last Chance Gulch [Montana]
Helena H: 168

Last Chronicle of Barset, The [book by Trollope]
Trollope, Anthony T: 449

Last Days of Pompeii, The [book by Bulwer-Lytton]
Bulwer-Lytton, Edward George Earle Lytton B: 697

Last Emperor, The [film]
Motion picture (Best picture: 1987) M: 861

Last Forty Years, The [book by Dent]
Dent, John Charles D: 143

Last Frontier
Alaska A: 283

Last Judgment, The [painting by Bosch]
Bosch, Hieronymus picture on B: 491

Last Judgment, The [painting by Michelangelo]
Michelangelo (The Last Judgment) M: 486
Painting (Religious subjects) P: 32
Religion picture on R: 216
Sistine Chapel S: 477 with picture

Last Laugh, The [film]
Motion picture (Filmmaking in Europe) M: 866

Last Look [dance by Taylor]
Taylor, Paul T: 57

Last name
Name N: 5

Last of Mr. Norris, The [book by Isherwood]
Isherwood, Christopher I: 462

Last of the Mohicans, The [book by Cooper]
Cooper, James Fenimore Ci: 1034
Mahican Indians M: 65
Novel (The United States) N: 573
Uncas U: 19

Last of the Red Hot Lovers [play by Simon]
Simon, Neil S: 466

Last Poems [book by Housman]
Housman, A. E. H: 393

Last quarter
Moon (Phases) M: 783-784

Last Supper [religion]
Holy Grail H: 298
Jesus Christ (The Last Supper) J: 107
Mass M: 269

Last Supper, The [painting by Leonardo da Vinci]
Jesus Christ picture on J: 104
Leonardo da Vinci (Paintings) L: 200b-201

Last Supper, The [painting by Tintoretto]
Painting (Mannerism) P: 56-57 with picture
Tintoretto T: 295

Last Temptation of Christ, The [book by Kazantzakis]
Kazantzakis, Nikos K: 252

Last Temptation of Christ, The [film by Scorsese]
Scorsese, Martin S: 210

Last Tycoon, The [book by Fitzgerald]
Fitzgerald, F. Scott F: 190

Lastex
Fiber (Synthetic fibers) F: 87-88

Lasting machine
Shoe (The shoe industry in the United States) S: 431, (History) S: 432

Lastman, Pieter [Dutch artist]
Rembrandt (Early years) R: 228, (Leiden years) R: 228

Las Vegas [Nevada] L: 87 with picture
Nevada N: 156 with picture; (Population) N: 160; (Visitor's guide) N: 164; (table: Average monthly weather) N: 169
Presley, Elvis P: 772

Las Vegas Convention Center
Las Vegas (Industry) L: 89

Latakia [Syria] L: 90

Latchstring [door]
Pioneer life in America (A pioneer settlement) P: 479-481

Late blight [plant disease]
Rot R: 485

Late George Apley, The [book by Marquand]
Marquand, John Phillips M: 217

Lata Mattia Pascal, The [book by Pirandello]
Pirandello, Luigi P: 493

Lateen sails [ship]
Ship (Lateen-rigged ships) S: 407 with picture
Caravel C: 202
Exploration (Medieval exploration) E: 441; (The great age of European exploration) E: 442-443 with picture
Galleon G: 15
Invention (The Middle Ages) I: 359

Latency [human development]
Psychoanalysis (Psychoanalytic theory) P: 846

La Tène style
Celts C: 342

Latent heat [physics]
Heat (Changes in state) H: 153
Refrigeration (Effects of heat transfer) R: 200
Water (The properties of water) W: 129-130

Latent image
Photography (Exposing the film) P: 410 with picture

Latent nystagmus [disorder]
Nystagmus N: 633

Lateral [waterway]
Irrigation (Bringing irrigation water to farms) I: 457

Lateral arch
Foot (The arches) F: 352

Lateral bud
Bud B: 665 with diagram
Plant (Stems) P: 530 with picture

Lateral chromatic aberration [optics]
Aberration (Chromatic aberration) A: 11

Lateral epicondylitis [injury]
Repetitive strain injury R: 242

Lateral fissure
Brain (The cerebrum) B: 550b with diagram

Lateral line [zoology]
Fish (The senses of fish) F: 164 with diagram; (Touch and the lateral line system) F: 164
Shark (Senses) S: 375

Lateral moraine [geology]
Glacier (How glaciers shape the land) G: 204-205 with diagram
Moraine M: 799

Lateral surface [geometry]
Cylinder Ci: 1204

Lateral Councils [religion]
Alexander III A: 341
Innocent III (Spiritual authority) I: 275
Nicholas II [pope] N: 402
Pope (Early days) P: 662
Roman Catholic Church (Innocent III) R: 407

Lateral Palace [Rome]
Pope (The 1700's and 1800's) P: 665

Lateral Treaty [1929]
Papal States P: 133

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lateral Treaty [1929]
Pope (The 1700's and 1800's) P: 665
Vatican City (History) V: 288-289

Lathrop, Dorothy P. [American artist]
Caldecott Medal (table: 1938) C: 26

Lathrop, Julia Clifford [American government official] L: 90 with portrait
Hull House H: 412

Latimer, Hugh [English religious leader] L: 90
Puritans (History) P: 910

Latimer, Lewis Howard [American inventor]
L: 90

Latin America L: 91
See also Central America; South America in this index

Agriculture (Latin America) A: 153
Bank (Latin America) B: 92

Conservation (Latin America) Ci: 988
Immigration (Latin America) I: 84

Indian, American (In Latin America) I: 178; (Indians in the early and mid-1900's) I: 178b; (Current issues) I: 182-183

Liberation theology L: 228
Manufacturing (In Latin America) M: 170

Newspaper (In Latin America) N: 386
Petroleum (Latin America) P: 333

Population (World population) P: 672
Roman Catholic Church (In Latin America) R: 411

Spanish America So: 753
Television (In Latin America) T: 116

Textile (In Latin America) T: 218
Welfare (Welfare around the world) W: 190

World, History of the (The colonization of America) W: 441; (Imperialism) W: 445

See also the list of Related Articles in the Latin America article

Latin American culture
Hispanic Americans (Cultural backgrounds) H: 246

Latin American literature L: 111

Latin cross
Cross Ci: 1155 with picture
Saint Peter's Basilica (History) S: 53-54

Latin grammar school [education]
School (History of Canadian schools) S: 185

Latin language L: 114
Case (Cases in Latin) C: 272

English language (The development of English) E: 313
Italian language (Development) I: 493

Italian literature (Humanism and the Renaissance) I: 494

Latin literature (Language and form) L: 115
Linguistics (Comparative reconstruction) L: 336

Old Testament (Translations) O: 741
Romance languages R: 415

Romania (Language) R: 417
Spanish literature So: 757

Latin League [ancient Rome]
Rome, Ancient (The early republic) R: 445

Latin literature L: 114
Classicism (Rome) Ci: 653

Drama (Roman drama) D: 328
See also the list of Related Articles in the Latin literature article

Latin music
Hispanic Americans (Entertainment and arts) H: 248 with pictures

Latin Quarter [district]
Paris (Schools and libraries) P: 165

Latin rite [religion]
Vatican Council II (The work of the council) V: 289

Latinos [people] See Hispanic Americans in this index

Latins [people]
Rome, Ancient (Beginnings) R: 444-445

Latinus [legendary figure]
Aeneid A: 84

Latitude [geography] L: 116 with pictures
Climate (Why climates vary) Ci: 676

Map (Geographic grids) M: 178; diagram on M: 180

Moon (Libration) M: 785 with diagram
Sextant S: 337

Weather (Planetary-scale systems) W: 158-159

Latitudinal migration
Migration (Types of migration) M: 538

Latium [former region] L: 117
Rome, Ancient (Beginnings) R: 444-445

La Tour, Charles de [French settler]
New Brunswick (French rivals) N: 196

- La Tour, Marie de** [wife of Charles de la Tour]
New Brunswick (French rivals) N: 196
- La Tour, Maurice Quentin de** [French artist]
Rousseau, Jean-Jacques *picture on* R: 492
Voltaire *picture on* V: 446
- Latrobe, Benjamin Henry** [American architect]
L: 117 *with picture*
Architecture (Neoclassical architecture)
A: 623-624
Jefferson, Thomas (Life in the White House)
J: 82-83
White House (The original building) W: 290
- Latter-Day Pamphlets**
Carlyle, Thomas (Later career) C: 240
- Latter-day Saints** *See* Mormons *in this index*
- Latter Day Saints, Reorganized Church of**
Jesus Christ of (religious group) *See*
Community of Christ *in this index*
- Latter Prophets** [books, Old Testament]
Bible (Books of the Hebrew Bible) B: 279-280
- Latticino**
Glass (Types of art glass) G: 220
- Latting, Patience S.** [American political leader]
Oklahoma City (Government) O: 736
- Lattner, Johnny** [American football player]
Football (table) F: 363
- Latvia** L: 118 *with pictures and map*
Flag F: 206
Union of Soviet Socialist Republics (World War II) U: 37; (Threats to unity) U: 40-41
World War II (The invasion of the Soviet Union) W: 477
- Latvian** [language]
Latvia (The people) L: 118
- Latvians** [people]
Latvia (The people) L: 118 *with picture*
- Latynina, Larissa** [Ukrainian gymnast]
Olympic Games (The postwar games) O: 751-752
- Lau v. Nichols** [1974]
Education (Education for whom?) E: 107
- Laubach Literacy International**
Literacy (Illiteracy in the United States) L: 351-352
- Laud, William** [English religious leader] L: 121
Long Parliament L: 448
- Lauda, Niki** [Austrian race driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Laudanum** [drug]
Opium (History) O: 811
- Lauderdale, William** [American military leader]
Fort Lauderdale F: 413
- Laudonnière, René de** [French settler]
Jacksonville (History) J: 19
- Lauds** [religion]
Hour H: 379
- Laue, Max Theodor Felix von** [German physicist]
Mineral (Determining the structure of crystals) M: 571
Nobel Prizes (Physics: 1914) N: 440
- Laugh**
Humor H: 435
- Laughing Boy** [book by La Farge]
La Farge, Oliver L: 27
- Laughing comedy**
Drama (England) D: 334-335
- Laughing gas**
Nitrous oxide N: 427
- Laughing gull**
Bird (Birds of the seacoasts) B: 342 *with picture; picture on* B: 330
Gull (Their homes) G: 439
- Laughing jackass** *See* Kookaburra *in this index*
- Laughlin, Robert B.** [American physicist]
Nobel Prizes (Physics: 1998) N: 442
- Laughter**
Humor H: 435
- Laughter on the 23rd Floor** [play by Simon]
Simon, Neil S: 467
- Laughton, Charles** [British actor] L: 121
Motion picture (Best performance by an actor: 1932-33) M: 862
- Lauha Bhasma** [medicine]
Iron (How iron is used in medicine) I: 435
- Lauiau**
Hawaii (Food) H: 94
- Launch pad**
Space exploration (Overcoming gravity)
So: 699-700
- Launch service**
Space exploration (Private launch services)
So: 728 *with picture*
- Launch vehicle**
Rocket (Launching probes and satellites)
R: 386; (Space travel) R: 386
Space exploration (Getting into space and back) So: 698
- Launch window**
Space exploration (table) So: 696
- Launching**
Guided missile (Launching equipment) G: 424
with pictures; pictures on G: 423
Rocket (Launching probes and satellites)
R: 386 *with pictures*
Rocket, Model (Building and flying model rockets) R: 392-393 *with pictures*
Ship (Launching and outfitting a ship) S: 425
- Laundry**
Washing machine W: 45
- Launfal, Sir** [legendary figure] L: 121
- Launoy** [French inventor]
Helicopter (Early designs and experiments)
H: 173
- Laura** [literary figure]
Petrarch P: 327
- Laura Ingalls Wilder Award** L: 121
- Laura Z.: A Life** [book by Hobson]
Hobson, Laura Zametkin H: 273
- Laurasia** [geology]
Earth (The shaping of the continents) E: 24; *map on* E: 31
Plate tectonics (Plate movement) P: 563; (The drifting continents) *map on* P: 564
- Laurel** [tree] L: 121 *with pictures*
Daphne D: 36
Greece, Ancient *picture on* G: 371
Medals, decorations, and orders (History) M: 359
- Laurel, José Paciano** [Filipino political leader]
Roxas y Acuña, Manuel R: 494
- Laurel, Stan** [American actor]
Laurel and Hardy L: 122 *with picture*
- Laurel and Hardy** [American actors] L: 122 *with picture*
- Lauren, Ralph** [American fashion designer]
L: 122
- Laurence, Friar** [literary figure]
Shakespeare, William (*Romeo and Juliet*) S: 358
- Laurence, Margaret** [Canadian author] L: 122
Canadian literature (Modern English-Canadian fiction) C: 160
- Laurentine, Marie** [French painter] L: 122 *with picture*
- Laurentian Library** [Florence, Italy]
Library (Renaissance collections) L: 260
Michelangelo (The Medici Chapel) M: 486
- Laurentian Mountains**
Quebec (Land regions) Q: 22
- Laurentian Plateau**
Canadian Shield C: 161
- Laurentides** [mountains]
Quebec (Land regions) Q: 22
- Laurentides Provincial Park**
Quebec (Land regions) Q: 22
- Laurier, Carolus** [father of]
Laurier, Sir Wilfrid (Boyhood and education) L: 123
- Laurier, Sir Wilfrid** [Canadian political leader]
L: 123 *with pictures and map*
Borden, Sir Robert Laird (Conservative leader) B: 484; (A new Conservative program) B: 485
Canada, History of (Progress under Laurier) C: 148; (Foreign relations) C: 148
Liberal Party (Canada) L: 227
Quebec (Politics) Q: 30; (Early years as a province) Q: 30; Q: 34
- Laurier House** [museum, Ottawa]
Canada (table: National historic sites) C: 114
King, William Lyon Mackenzie (Retirement and death) K: 327
Laurier, Sir Wilfrid (Death) L: 126; *picture on* L: 125
Ottawa (Museums) O: 872
- Laurium** [ancient city]
Themistocles T: 251
- Lausanne** [city, Switzerland] L: 127 *with picture*
- Lausanne, Treaty of** [1923]
Atatürk, Kemal A: 852
Bosporus B: 494
Dardanelles D: 36
Greece (World War I) G: 363
Yemen (History) Y: 563
- Lausche, Frank John** [American political leader]
Ohio (table) O: 699
- Laussedat, Aimé** [French military leader]
Photogrammetry P: 407
- Lautarite** [mineral]
Iodine (Sources of iodine) I: 370
- Lava** [geology] L: 127 *with pictures*
Basalt B: 123
Earthquake (Interplate earthquakes) E: 36
Igneous rock I: 48
Magnetism (The magnetism of the earth) M: 60c
Pumice P: 898
Rock (Extrusive rock) R: 371
Seamount S: 268
Silicon S: 458
Volcano (Lava) V: 439 *with diagram*
- Lava Beds National Monument** [California]
L: 128
Cave (table) C: 320
National Park System (table: National monuments) N: 51
- Lava cave**
Cave (How caves are formed) C: 319 *with picture*
- Lava flow front** [lunar feature]
Moon (Rilles) M: 790
- Lava forest**
Oregon (Interesting facts) O: 827
- Lava Hot Springs** [Idaho]
Idaho (Interesting facts about Idaho) I: 27
- Leva-lava** [clothing]
Samoa (People) S: 80a
Pacific Islands (Clothing) P: 6
- Lava tube**
Cave (How caves are formed) C: 319; *picture on* C: 321
Volcano (Lava) V: 439
- Laval** [Quebec] L: 128
- Laval, Pierre** [French political leader] L: 128 *with portrait*
- Laval de Montmorency, François Xavier de** [French religious leader] L: 128
Frontenac, Comte de F: 541
Quebec (Early days) Q: 36
- Laval University** L: 128
Quebec (Libraries) Q: 15 *with picture*
Universities and colleges (First universities in the Americas) U: 210
- Levalier microphone**
Microphone M: 516
Television (Putting a show on the air) T: 111-112
- Lavallée, Calixa** [Canadian composer]
"O Canada" O: 635
- Lavender** [color]
Lavender L: 129
- Lavender** [plant] L: 129 *with picture*
- Lavender, Harrison M.** [American businessman]
Lavender Pit L: 129
- Lavender Pit** [Bisbee, Arizona] L: 129
- La Venta** [Mexico]
Indian, American (Before European contact) I: 169
- Laver, Rod** [Australian tennis player] L: 129
Tennis (Tennis tournaments) T: 165; (table: U.S. Open) T: 167; (The mid-1900's) T: 166-167 *with picture*
- Laveran, Charles Louis Alphonse** [French doctor] L: 129
- La Vérendrye, François** [French-Canadian explorer]
Exploration (Crossing North America) E: 447
South Dakota (Exploration and fur trade) S: 681
- La Vérendrye, Louis-Joseph** [French-Canadian explorer]
Exploration (Crossing North America) E: 447
South Dakota (Exploration and fur trade) S: 681
- La Vérendrye, Sieur de** [French-Canadian explorer] L: 129
Canada, History of (The growing French-English rivalry) C: 143
Exploration (Crossing North America) E: 447
Manitoba (Exploration) M: 160
North Dakota (Exploration and early settlement) N: 513
Winnipeg (History) W: 341

La Vergne, Marie Madelaine Pioche de See La Fayette, Madame de *in this index*

La Villita [district]

Texas (Places to visit) T: 194

Lavinia [Greek mythology]

Aeneid A: 84

Lavinia [literary figure]

Shakespeare, William (*Titus Andronicus*)

S: 356

Lavoisier, Antoine Laurent [French chemist]

L: 129

Biology (Materialistic physiology and the cell theory) B: 319; *picture on* B: 320

Chemistry (Lavoisier's contributions) C: 401; *picture on* C: 402

Element, Chemical (Discovery of elements) E: 219

Oxygen (History) O: 890

Science (The Age of Reason) S: 199

Law L: 130 *with pictures*

American Bar Association A: 408

Blood (The significance of blood groups) B: 412

Careers (Law) C: 225

Civil disobedience Ci: 607

Civil law Ci: 607

Civil rights Ci: 608

Criminal justice system (The police) Ci: 1143

Draco D: 317

Economics (Laws) E: 62

Family (Home life) F: 21

Government (Law enforcement) G: 283

Gun control G: 440

Homosexuality (Attitudes toward homosexuality) H: 307

Intellectual property I: 317

Islam (Ethics and morals) I: 465

Lie detector L: 271

Martial law M: 234

Muslims (Colonialism) M: 964d-965

Pioneer life in America (Government) P: 484

Sex discrimination (Changes in laws) S: 335

Trial T: 437

See also the list of *Related articles in the Law article*

Law, Andrew Bonar [British political leader]

L: 140

New Brunswick N: 180

Law, Bernard Francis Cardinal [American religious leader] L: 140

Law, Due process of See *Due process of law in this index*

Law, John [Scottish public figure] L: 140

Arkansas (Exploration and settlement) A: 712

Illinois (French and English control) I: 72

Louisiana (Exploration and early settlement) L: 497-498

Mississippi (Exploration and early settlement) M: 641

Mississippi Scheme M: 649

Law, Rule of

Due process of law D: 378

Law, Scout See *Scout Law in this index*

Law, The See *Pentateuch; Torah in this index*

Law Day U.S.A. [custom] L: 141

Law enforcement L: 141

Ammunition (Riot control ammunition) A: 435

Colonial life in America (Government and law enforcement) Ci: 794

Criminal justice system (The police) Ci: 1143

Local government (Functions of local government) L: 407

Racial profiling R: 61

Radar (In controlling automobile speed and traffic) R: 67 *with pictures*

Vigilante V: 378

Law library

Library (State libraries) L: 249

Law lord [office]

Parliament (The House of Lords) P: 173

United Kingdom (National government) U: 49-50

Law of ...

Most laws appear under their key words, as in Return, Law of

Law of Civilization and Decay, The [book by Adams]

Adams, Brooks A: 33

Law of the Sea Convention [1982] L: 141

High seas H: 229

Ocean (Who owns the ocean?) O: 665

Territorial waters T: 176

United Nations (Peaceful uses of outer space and the seabed) U: 93

Law school [education]

Law (Law education) L: 138

Lawes, Henry [English composer]

Milton, John (His early life and works) M: 557

Lawford, Patricia Kennedy [sister of John F. Kennedy]

Kennedy, John Fitzgerald (Boyhood) K: 261

Kennedy, Joseph Patrick (His family) K: 269

Lawless, Luke [American lawyer]

Impeachment (History) I: 91-92

Lawless, Theodore Kenneth [American doctor] L: 142

Lawmaking

Canada, Government of (How a bill becomes law in Canada) C: 134 *with diagrams*

Congress of the United States (Congress's power to make laws) Ci: 943

Legislature L: 184

Lobbying L: 404

McCulloch v. Maryland M: 335

United States, Government of the (The law-making process) U: 140; (How a bill becomes law in the United States) U: 141

Lawn (grass) L: 142 *with pictures*

Grass G: 324

Lawn bowling L: 144 *with picture*

Lawn mower

Lawn (Mowing) L: 144

Safety (In the yard) S: 11 *with picture*

Lawn tennis

Tennis (The court) T: 161

Lawrence [antipope]

Pope (table) P: 666

Lawrence [Kansas]

Kansas (Statehood) K: 237 *with picture*

Lawrence [ship]

Perry, Oliver Hazard P: 294 *with picture*

Lawrence, D. H. [British author] L: 145 *with portrait*

English literature (Fiction between the wars)

E: 322

Novel (New directions in the novel) N: 573-574

Lawrence, David Leo [American political leader]

Pennsylvania (table) P: 263

Lawrence, Ernest Orlando [American physicist] L: 145

Lawrence Berkeley National Laboratory

L: 146

Lawrence Livermore National Laboratory

L: 147

Lawrencium L: 147

Lawrence, Jacob [American painter] L: 146 *with picture*

Literature for children *picture on* L: 359

Lawrence, James [American military leader] L: 146

Navy, United States N: 83

Lawrence, T. E. [British soldier] L: 146 *with portrait*

Allenby, Lord A: 372

Lawrence Berkeley National Laboratory L: 146

Dubnium D: 371

Mendelevium M: 398

Nobelium N: 450

Rutherfordium R: 569

Seaborgium S: 264

Transuranium element T: 401

Lawrence Livermore National Laboratory L: 147

Seaborgium S: 264

Lawrence of Arabia See *Lawrence, T. E. in this index*

Lawrence of Arabia [film]

Lean, David L: 162

Motion picture (Best picture: 1962) M: 861

Lawrence Radiation Laboratory See *Lawrence Berkeley National Laboratory in this index*

Lawrence's goldfinch [bird]

Goldfinch G: 257

Lawrencium [element] L: 147

Transuranium element T: 401

Laws, Doctor of

Degree, College (Honorary degrees) D: 92

Laws, The [book by Plato]

Plato (The dialogues) P: 567

Laws of ...

Laws appear under their key words, as in Motion, Laws of

Lawson, Ernest [American painter] L: 147 *with picture*

Ashcan School A: 768

Lawson, Henry [Australian poet]

Australia (Literature) A: 906

Lawson, Robert [American artist] L: 147

Lawsuit See *Suit in this index*

Lawyer L: 147

Address, Forms of (Other forms) A: 54

Careers (Law) C: 225 *with picture*

Escobedo v. Illinois E: 357

Gideon v. Wainwright G: 188

Inns of Court I: 276

Law (A career as a lawyer) L: 138

Law enforcement L: 141

Public defender P: 855

Trial T: 437

Laxalt, Paul [American political leader] Nevada (table) N: 173

Laxative [medication] L: 148

Constipation Ci: 994

Epsom salt E: 345

See also the list of *Related articles in the Laxative article*

Laxness, Halldór [Icelandic author]

Nobel Prizes (Literature: 1955) N: 446

Scandinavian literature (The modern period in Scandinavian literature) S: 171

Lay, Kenneth L. [American businessman]

Enron Corporation E: 327

Lay investiture [religion]

Gregory VII, Saint G: 387

Henry IV [of Germany] H: 187

Nicholas II [pope] N: 402

Pope (The peak of papal power) P: 663

Lay judge [office]

Cuba (Courts) Ci: 1169

Lay of Hildebrand [poem]

German literature (Early German literature) G: 139

"Lay of Igor's Campaign, The" [poem]

Russian literature (Nonreligious literature) R: 559

Lay of the Last Minstrel, The [poem by Scott]

Scott, Sir Walter (His life) S: 222

Lay people [religion] See *Laity in this index*

Lay-up shot

Basketball (Basketball terms) B: 145

Layamon [English poet]

Round Table (Origin) R: 490-491

Layard, Sir Austen [British archaeologist]

Archaeology (The 1800's) A: 599

Layari River [Pakistan]

Karachi (The city) K: 245

Layering [botany]

Plant (Layering) P: 535 *with picture*

Laying hen

Poultry (Raising poultry) P: 720

Laying house [poultry]

Chicken (Producing eggs) C: 443 *with picture*

Poultry (Raising poultry) P: 720

Layoff

Unemployment (Types of unemployment) U: 22

Layout [art]

Advertising (Creative work) A: 76b

Desktop publishing D: 158 *with picture*

Magazine (How magazines are produced) M: 43

Newspaper (Making up the pages) N: 383

Layout artist

Animation (Cel animation) A: 511

Encyclopedia (Basic steps in the preparation of a World Book article) E: 268 *with picture*

Lays of Ancient Rome [book by Macaulay]

Horatius H: 334

Macaulay, Thomas Babington M: 5

Laysan finch [bird]

Hawaiian honeycreeper *picture on* H: 110

Layton, Irving [Canadian poet] L: 148

Lazarillo de Tormes [book]

Novel (Early novels) N: 572

Spanish literature (The 1500's) So: 758-759

Lazarists [Roman Catholic order] See

Vincentians in this index

Lazarsfeld, Paul F. [American sociologist]

Communication (The effects of media) Ci: 887

Lazarus [Biblical figure] L: 148

Jesus Christ (The miracles) J: 106

Lazarus, Emma [American author] L: 148

Statue of Liberty (The statue as a symbol) So: 872-873, *picture on* So: 874

Lazeer, Jesse William [American doctor] L: 148
 Reed, Walter R: 194
Lazier, Buddy [American race driver]
 Automobile racing (table: Indianapolis 500 winners) A: 980
Lazuli bunting [bird]
 Bunting B: 700
Lazurite [gem]
 Lapis lazuli L: 74
Lazy eye [disorder]
 Eye (Strabismus) E: 466
Lazzeri, Tony [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Lb [abbreviation]
 Pound P: 721
LBJ Ranch [estate]
 Johnson, Lyndon Baines (The "Whirlwind President") J: 149
LBT [telescope] *See* Large Binocular Telescope *in this index*
LBW
 Cricket (Outs) Ci: 1132-1133 *with picture*
LCD [electronics] *See* Liquid crystal display *in this index*
L.D.C. [economics]
 Developing country D: 173
LDL [biochemistry] *See* Low-density lipoprotein *in this index*
LDP [political party] *See* Liberal Democratic Party *in this index*
La ...
Titles beginning with the article Le appear under their key words, as in Nozze di Figaro. Le. Names beginning Le are alphabetized as single words: Le Carré, John, appears after Lebanon
Le [dynasty]
 Vietnam (Independence) V: 370
La Duc Tho [Vietnamese diplomat]
 International relations *picture on* I: 344
 Nobel Prizes (Peace: 1973) N: 448
 Vietnam War (Invasion of the south) V: 376
La Loi [Vietnamese ruler]
 Vietnam (Independence) V: 370
Lea, Preston [American political leader]
 Delaware (table) D: 109
Lea, Tom [American painter]
 Reconstruction *picture on* R: 176
 Western frontier life in America *picture on* W: 237
Laa, Walter M. [Canadian political leader]
 Prince Edward Island (table) P: 791
Leach, Alexander Archibald [American actor]
See Grant, Cary *in this index*
Leaching [chemistry]
 Copper (Leaching) Ci: 1043
 Gold *diagram on* G: 250; (Leaching) G: 253
 Irrigation (Providing artificial drainage) I: 459
 Metallurgy (Leaching) M: 427
Leaching field
 Sewage (Rural sewerage systems) S: 330
Leachman, Cloris [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1971) M: 863
Leacock, Stephen Butler [Canadian author]
 L: 148
 Canadian literature (Other literature) C: 159
Lead [South Dakota] L: 150
Lead [element] L: 148 *with pictures*
 Brass B: 565
 Environmental pollution (Hazardous waste) E: 334-335
 Galena G: 10
 Lead poisoning L: 150
 Litharge L: 386
 Metallurgy (History) M: 427
 Paint (Household paints) P: 23-24
 Pewter P: 352
 Radiogeology R: 98
 Water pollution (Drinking water standards) W: 138
 X rays (Penetrating power) X: 541
Lead [ice]
 Arctic Ocean (Ice) A: 643; *picture on* A: 641
Lead [journalism]
 Newspaper (Writing and editing stories) N: 383
Lead [sports]
 Curling (The rink) Ci: 1196
 Lawn bowling L: 145
Lead-acid battery
 Battery (Secondary batteries) B: 170 *with picture*

Lead (Uses) L: 149 *with picture*
Lead arsenate [chemical]
 Insecticide (Inorganic insecticides) I: 302
Lead-chamber method
 Sulfuric acid (How sulfuric acid is made) So: 968
Lead chromate [pigment]
 Ink I: 272
Lead climber
 Climbing (Technical climbing) Ci: 680 *with picture*
Lead colic
 Painter's colic P: 27
Lead glass
 Glass (Soda-lead glass) G: 213; (The Middle Ages) G: 218-222
"Lead, Kindly Light" [hymn]
 Newman, John Henry N: 379
Lead monoxide [chemical]
 Litharge L: 386
Lead oxide [chemical]
 Glass (Soda-lead glass) G: 213
Lead pencil
 Pencil (Cased pencils) P: 236
Lead poisoning L: 150
 Lead L: 149
 Painter's colic P: 27
Leader [fishing]
 Fishing (Leaders) F: 177
Laader, George Michael [American political leader]
 Pennsylvania (table) P: 263
Leader of the government in the Senate
 Canada, Government of (The Cabinet) C: 132
Leadership
 Human relations (Leadership) H: 428
Leading tone
 Music (Tone) M: 950-951
Leading truck [wheels]
 Railroad (Developments in the United States) R: 115
Leadville [Colorado] L: 150
 Western frontier life in America (The search for gold and silver) W: 233-234
Leadwort [plant]
 Plumbago P: 577
Leaf [botany] L: 151 *with pictures*
 Bud B: 665 *with pictures*
 Deciduous tree D: 70
 Fern (Parts of a fern) F: 74 *with pictures*
 Grass (The grass plant) G: 324
 Leafminer L: 159
 Photosynthesis P: 430
 Plant (Leaves) P: 530 *with pictures*
 Tree T: 410; (Leaves) T: 417 *with diagrams*
 Vegetable (Leaves) V: 292 *with picture*
Leaf beetle [insect]
 Beetle (Leaf beetles) B: 217
Leaf butterfly
 Insect (Protection from enemies) I: 297
Leaf collecting
 Leaf (How to collect leaves) L: 157
Leaf curl [plant disease]
 Peach (Diseases) P: 211
Leaf-cutter ant
 Ant (Fungus growers) A: 527-528 *with picture; picture on* A: 520
Leaf grade
 Tea (Grades of tea) T: 63
Leaf insect L: 158 *with picture*
Leaf lettuce
 Lettuce (Kinds of lettuce) L: 214 *with picture*
Leaf-monkey
 Colobus Ci: 777
 Langur L: 67 *with picture*
Leaf pressing
 Leaf (How to preserve leaves) L: 158
Leaf print
 Leaf (How to make leaf rubbings and prints) L: 158
Leaf rubbing
 Leaf (How to make leaf rubbings and prints) L: 158
Leaf scar [botany]
 Leaf (The leaf dies) L: 153
Leaf spot disease
 Alfalfa (Diseases and pests) A: 347
 Banana (How bananas grow) B: 72-73
Leaf spot fungus
 Lawn (Controlling diseases, pests, and weeds) L: 144, *picture on* L: 143
 Pea (Diseases and pests) P: 205

Sugar beet (Raising sugar beets) So: 962
Leafcutting bee [Insect]
 Bee (Solitary bees) B: 205-206 *with picture*
Leaffish
 Fish *picture on* F: 157
Leafhopper [insect] L: 158 *with picture*
 Potato (Diseases and insect pests) P: 713
Leaflet [anatomy]
 Mitral valve prolapse M: 679
Leaflet [botany]
 Leaf (The blade) L: 153-154 *with pictures*
Leaflet bomb
 Bomb (Other conventional bombs) B: 450-451
Leafminer [insect] L: 158 *with picture*
 Moth M: 837 *with picture*
Leafroll [plant disease]
 Potato (Diseases and insect pests) P: 713
Leafroller [insect]
 Beetle *picture on* B: 215
Leafy spurge [plant]
 Spurge So: 810
League [unit of measure] L: 159
League Covenant, The [constitution]
 League of Nations (Powers and organization) L: 159
League of Augsburg, War of the [1689-1697]
 French and Indian wars (King William's War) F: 512
 Grand Alliance G: 305
League of Corinth [Greek history]
 Philip II [of Macedonia] P: 369
League of Nations [international organization]
 L: 159 *with picture*
 Democratic Party (Wilsonian democracy) D: 127
 Geneva G: 87
 Harding, Warren Gamaliel (The front porch campaign) H: 57
 International law (After World War I) I: 342
 International relations (Collective security) I: 345
 Law (Developments in international law) L: 137
 Lodge, Henry Cabot L: 419
 Mandated territory M: 136
 Peace (The 1800's and early 1900's) P: 206
 Smuts, Jan Christiaan S: 522
 UNESCO (History) U: 25
 United Nations U: 76
 United States, History of the (The peace conference and treaty) U: 185
 Versailles, Treaty of (Background of the treaty) V: 340
 War (Preventing war) W: 25
 Wilson, Woodrow (The peace settlement) W: 325-326; (Opposition to the League) W: 327; (Wilson's collapse) W: 327
 World War I (The Fourteen Points) W: 465
 World War II (Nationalism) W: 469; (Allies) W: 470-471
League of Red Cross Societies
 Nobel Prizes (Peace: 1963) N: 448
 Red Cross (The Red Cross in other lands) R: 187
League of Threa Cantons [Swiss history]
 Saint Gotthard Pass S: 34
League of United Latin American Citizens
 L: 161
 Hispanic Americans (The early 1900's) H: 252
League of Women Voters [organization] L: 161
 Catt, Carrie Chapman C: 305
 Women's movements (Decline after 1920) W: 385
League of Youth, The [play by Ibsen]
 Drama (Ibsen) D: 338
Leah [Biblical figure]
 Jacob J: 19
 Jews (Beginnings) J: 120
Leahy, Patrick Joseph [American political leader]
 Vermont (The late 1900's) V: 337
Leahy, William Daniel [American admiral]
 World War II (The Allies attack in Europe and Northern Africa) W: 478
Leake, Walter [American political leader]
 Mississippi (table) M: 640
Leakey, Jonathon [Kenyan anthropologist]
 Prehistoric people (table) P: 752
Leakey, Louis Seymour Bazett [British anthropologist] L: 161
Leakey, Mary Douglas [British archaeologist]
 L: 161

- Prehistoric people (table) P: 752
Leakey, Meave Gillian [British zoologist] L: 161
Leakey, Richard Erskine Frère [Kenyan scientist] L: 161
 Prehistoric people (table) P: 752
Lean, David [British director] L: 162
 Motion picture (Best achievement in directing: 1957, 1962) M: 862
Lean-to
 Roof R: 451 *with picture*
Leander [legendary figure]
 Hero and Leander H: 212
Leane, Lough [lake, Ireland]
 Lakes of Killarney L: 49 *with map*
Leaner
 Horseshoe pitching (Scoring) H: 369
Leaner [plant]
 Liana L: 226
Leaning Tower of Pisa [Italy] L: 162 *with picture*
 Campanile C: 90a
Leap second [measurement]
 Year (The calendar year) Y: 554
Leap year [calendar] L: 162
 Calendar (Some calendars today) C: 29
 Gregorian calendar G: 387
 Year (The calendar year) Y: 554
Leap-year day
 Calendar (Calendar reform) C: 32
Lear, Edward [British author] L: 162
 Limerick L: 307
Lear, King [literary figure]
 Shakespeare, William (*King Lear*) S: 363
Learjet Corporation
 Wichita (History) W: 298
Learner literacy
 Reading (The importance of reading) R: 155-156
Learner's permit
 Automobile (Learning to drive) A: 960-961
Learning L: 162
 Animal (Learning and play) A: 500
 Behavior (Learning) B: 220
 Biofeedback B: 311
 Comparative psychology Ci: 902a
 Culture (Learning) Ci: 1187
 Distance learning D: 238
 Early childhood education E: 15
 Education (How people learn) E: 96
 Educational psychology E: 111
 Habit (How we learn habits) H: 2
 Language L: 62
 Learning disabilities L: 165
 Memory M: 392
 Reading (The teaching of reading) R: 157;
 (Developing good readers) R: 159
 Socialization So: 562
 Study So: 933
 Teaching T: 65
 Television (Effects on learning) T: 117
See also the list of Related Articles in the Learning article
Learning by doing
 Vocational education (Vocational teaching methods) V: 434
Learning disabilities L: 165
 Dyslexia D: 398
 Occupational therapy (Helping people with physical disabilities) O: 648
 Reading (Reading problems) R: 161
 Special education (Children with learning disabilities) So: 770
Learning from Las Vegas [book by Venturi, Izenour, and Brown]
 Venturi, Robert V: 310
Learning resources center
 Library (School libraries) L: 244
Lease [law] L: 166
 Estate E: 360
 Tenant T: 132
 Tenant farming T: 132
Lease, Mary Elizabeth [American social reformer] L: 166 *with portrait*
Leasehold [law]
 Estate E: 360
Leash
 Dog (Social and moral responsibilities) D: 279
Least bittern
 Bittern B: 383
Least darter [fish]
 Darter D: 38
Least skipperling [insect]
 Butterfly (Skippers) B: 733-734
Least tern [bird]
 Tern T: 174
Least weasel [animal]
 Weasel W: 155
Leather L: 166 with pictures
 Buckskin B: 664
 Clothing (Clothing materials) Ci: 704
 Materials (Biological materials) M: 300d
Leather-Stocking Tales, The [books by Cooper]
 Cooper, James Fenimore Ci: 1034
Leatherback [turtle]
 Animal (How animals raise their young) A: 498
Leathercraft [handicraft] L: 169 *with picture*
Leathernecks
 Marine Corps, United States M: 206
Leave [military]
 Army, United States (Careers in the Army) A: 734
Leave of absence
 Teaching (Rewards of teaching) T: 69
Leaven [bread]
 Baking powder B: 32
 Bread (Kinds of bread) B: 588
 Flour (Types of flour) F: 268
Leavenworth [Kansas] L: 170
Leavenworth, Henry [American general]
 Kansas (Settlement) K: 235
 South Dakota (Exploration and fur trade) So: 681
Leavenworth Prison [Kansas] L: 170
Leaves *See Leaf in this index*
Leaves of Grass [poems by Whitman]
 Whitman, Walt W: 294
 American literature (Walt Whitman and Emily Dickinson) A: 419
Leavis, F. R. [English literary critic] L: 170
Leavis, Queenie Roth [English journalist]
 Leavis, F. R. L: 170
Leavitt, Henrietta Swan [American astronomer] L: 170
Leavitt, Michael O. [American political leader]
 Utah (table) U: 245
Lebanese Christians
 Lebanon (War and terrorism) L: 173
Lebanon L: 170 with pictures and maps
 Arab-Israeli conflict (The Israeli invasion of Lebanon) A: 582a
 Cold War (The Eisenhower Doctrine) Ci: 765
 Flag picture on F: 203
 Iran-contra affair (Administration actions) I: 407
 Israel (Invasion of Lebanon) I: 489
 Middle East picture on M: 530; (More conflict) M: 534
 Palestine Liberation Organization (History) P: 106
 Reagan, Ronald Wilson (Foreign affairs) R: 168
 Syria (Recent developments) So: 1076
 World War II (table: The Allies) W: 471
Lebanon Mountains
 Lebanon (Land and climate) L: 172
Lebanon oak [tree]
 Oak (Other oaks) O: 636
Le Bel, Louis [Canadian jurist]
 Supreme Court of Canada (table) So: 997 *with portrait*
Lebensraum [German history]
 Geopolitics G: 107
 Germany (Nazi Germany) G: 167-168
Lebkuchen
 Christmas (In Germany) C: 530
Leblanc, Nicolas [French chemist]
 Detergent and soap (Early soap) D: 165
LeBlanc, Roméo [Canadian political leader] L: 174
Lebombo Mountains
 Swaziland (Land) So: 1018
Le Bon, Gustave [French physician]
 Collective behavior Ci: 774
Lebor Gabala [stories]
 Irish literature (Heroic tales, romances, and sagas) I: 430
 Mythology (The Irish cycles) M: 983
Le Bourget Field [Paris]
 Lindbergh, Charles Augustus (His historic flight) L: 330
Le Breton, Emily Charlotte [British actress]
 Langtry, Lillie L: 61
Le Brun, Charles [French artist]
 Furniture (Louis XIV furniture) F: 575
 Versailles, Palace of V: 339
Lebrun, Jean Baptiste [French art dealer]
 Vigée-Lebrun, Elisabeth V: 378
Le Carré, John [British author] L: 174
Lech River, Battle of the [1955]
 Otto I, the Great O: 877
Leche, Richard W. [American political leader]
 Louisiana (table) L: 496
Lechuguilla Cave [New Mexico]
 Cave picture on C: 319
Lechwe [animal]
 Antelope A: 542
Lecithin [biochemistry]
 Food additive (Kinds of additives) F: 339
 Soybean (Soy oil) So: 691
LeClaire, Antoine [American pioneer]
 Davenport D: 44
Leclanché, Georges [French chemist]
 Battery (History) B: 171
Leclanché cell [electricity]
 Battery (Carbon-zinc battery) B: 169
Le Clézio, J. M. G. [French author]
 French literature (Recent French literature) F: 523
Lecompton Constitution [U.S. history]
 Buchanan, James (The struggle over slavery) B: 660
 Johnson, Andrew (U.S. senator) J: 138
Le Conte, Mount [North Carolina-Tennessee]
 Great Smoky Mountains G: 348
Lecoq de Boisboudran, Paul Émile [French chemist]
 Dysprosium D: 398
 Gallium G: 16
 Samarium S: 78
Le Corbusier [Swiss architect] L: 174
 Architecture (Le Corbusier) A: 631; *picture on* A: 632
Lectionary [book]
 Byzantine art (Other art forms) B: 751 *with picture*
LED [electronics] *See* Light-emitting device *in this index*
Led Zeppelin [musical group]
 Rock music (Rock goes pop) R: 379
Leda [Greek mythology]
 Helen of Troy H: 168
Lederberg, Joshua [American physiologist] L: 175
Lederer, Esther Pauline Friedman
 Landers, Ann L: 57 *with portrait*
Lederman, Leon Max [American physicist]
 Neutrino N: 154
 Nobel Prizes (Physics: 1988) N: 441
Ledger line
 Music (Indicating pitch) M: 953
Ledo Road
 Burma Road B: 708
Lee [navigation]
 Ship (Nautical terms) S: 416
Lee, Alice Hathaway [wife of]
 Roosevelt, Theodore (First marriage) R: 466 *with picture*
Lee, Andrew E. [American political leader]
 South Dakota (table) So: 680
Lee, Arthur [American government official]
 Adams, John (Diplomat) A: 36
 Deane, Silas D: 60
Lee, Charles [American general] L: 175
 Washington, George (The army) W: 99
Lee, Charles [American government official]
 Adams, John (table) A: 38
 Justice, Department of (table) J: 203
 Washington, George (table) W: 102
Lee, David Morris [American physicist]
 Nobel Prizes (Physics: 1996) N: 442
Lee, Dennis [Canadian poet]
 Canadian literature (Modern Canadian poets) C: 160
Lee, Dixie [American actress]
 Crosby, Bing C: 1155
Lee, Don L. [American author]
 African American literature (The 1900's) A: 136a
Lee, Doris Emrick [American painter] L: 175
 Thanksgiving Day picture on T: 230
Lee, Fitzhugh [American political leader]
 Virginia (table) V: 417
Lee, Francis Lightfoot [American patriot] L: 175
Lee, George Washington Custis [son of]
 Lee, Robert Edward (In the Corps of Engineers) L: 176-177
Lee, Harper [American author] L: 175
Lee, Henry [American military leader] L: 175 *with picture*

- Lee, Robert Edward L: 176
Virginia (table) V: 417
Washington, George W: 90
- Lee, J. Bracken** [American political leader]
Utah (table) U: 245
- Lee, James M.** [Canadian political leader]
Prince Edward Island (table) P: 791
- Lee, Jason** [Canadian missionary] L: 176
Oregon (Schools) O: 830
- Lee, Manfred B.** [American author]
Queen, Ellery Q: 39
- Lee, Mary Anna Randolph Custis** [wife of]
Lee, Robert Edward (In the Corps of Engineers) L: 176-177; (Other duties) L: 177
- Lee, Mother Ann** [British religious leader]
Shakers S: 343
- Lee, Richard Henry** [American patriot] L: 176
Adams, John (National politics) A: 36
Articles of Confederation A: 759
Declaration of Independence (The Continental Congress) D: 74
Jefferson, Thomas (The Declaration of Independence) J: 79
Revolutionary War in America (The Declaration of Independence) R: 276
- Lee, Robert Edward** [Confederate general]
L: 176 *with pictures*
Arlington National Cemetery A: 717
Autograph *picture on* A: 943
Civil War (Raid at Harpers Ferry) Ci: 616; (The commanding officers) Ci: 618-619 *with picture*; (The South surrenders) Ci: 633 *with picture*
Davis, Jefferson (Leader of the Confederacy) D: 48
Fort Monroe F: 415
Gettysburg, Battle of G: 176
Grant, Ulysses S. (Grant in command) G: 315
Jackson, Stonewall J: 16
Maryland (The Civil War) M: 258-259
- Lee, Sammy** [American diver]
Asian Americans (Individual achievements) A: 812c
- Lee, Shelton Jackson** [American director] *See* Lee, Spike *in this index*
- Lee, Spike** [American film director] L: 179 *with portrait*
Motion picture (A new generation of filmmakers) M: 872
- Lee, Stan** [American cartoonist]
Comics (Comic books) Ci: 870
- Lee, Thomas Sim** [American political leader]
Maryland (table) M: 255
- Lee, Tsung Dao** [Chinese-American physicist]
L: 179
Parity [physics] P: 167
Yang, Chen Ning Y: 551
- Lee, William** [English inventor]
Knitting machine K: 355
Textile (The Industrial Revolution) T: 219
- Lee, William H. Fitzhugh** [son of]
Lee, Robert Edward (In the Corps of Engineers) L: 176-177
- Lee, Yuan Tseh** [American chemist]
Nobel Prizes (Chemistry: 1986) N: 443
- Lee Kuan Yew** [Singapore political leader] L: 180 *with portrait*
Singapore (History) S: 471
- Lee Teng-hui** [Taiwanese political leader] L: 180 *with portrait*
Taiwan (History) T: 18
- Leeboard** [boat]
Sailing (Hull) S: 23; (Controlling direction) S: 25
- Leech** [animal] L: 180 *with picture*
Worm (Segmented worms) W: 501 *with picture*
- Leechee** [tree]
Litchi L: 350 *with picture*
- Leeds** [England] L: 180
- Leeds, University of** [England]
Leeds L: 180
- Leedy, John W.** [American political leader]
Kansas (table) K: 234
- Leek** [food] L: 180 *with picture*
- Leerdam glass**
Glass (Types of art glass) G: 220
- Lee's Legion** [U.S. history]
Lee, Henry L: 175
- Leeuwenhoek, Anton van** [Dutch biologist]
L: 181
Bacteria (History) B: 21
- Bacteriology (History) B: 22
Biology (Early discoveries with the microscope) B: 318
Medicine (The beginnings of modern research) M: 374
Microscope (History of the microscope) M: 520
- Leeward Islands** [islands, West Indies] L: 181
- Leeward Maroons** [people]
Maroons M: 217
- Leeward side**
Climate (The role of topography) Ci: 676a
Sailing (Why a boat sails) S: 25
- Le Fanu, Sheridan** [Irish author]
Ghost story G: 182
- LeFleur, Louis** [American pioneer]
Jackson (Government and history) J: 5
- LeFleur's Bluff**
Jackson [Mississippi] J: 4
- Left- and right-handedness**
Handwriting (Learning manuscript writing) H: 47; (Left-handedness) H: 49
- Left Bank** [district, Paris]
Paris (The city) P: 161-162 *with map*
- Left-handed shell** [biology]
Shell (Gastropods) S: 385
- Left-handed whelk**
Shell *picture on* S: 386
- Left hook**
Boxing *picture on* B: 528
- Left jab**
Boxing *picture on* B: 528
- Left-ventricular assist device** [medicine]
Heart (The first heart transplants and artificial hearts) H: 145
- Left wing** [political science] L: 181
- Leg** [anatomy] L: 181 *with diagram*
Animal (Legs and feet) A: 488 *with picture*
Butterfly (The thorax) B: 738-739 *with diagram*
Frog (Legs) F: 536 *with pictures*
Reproduction, Human (Development of organs and organ systems) R: 248
Rickets R: 335 *with picture*
Skeleton (The appendicular skeleton) S: 480 *with diagrams*
- Leg before wicket**
Cricket (Outs) Ci: 1132-1133 *with picture*
- Leg bye**
Cricket (Scoring) Ci: 1132
- Leg-hold trap**
Fur (Trapping) F: 562
- Leg ulcer**
Ulcer U: 15
- Legacy** [law] L: 182
Executor E: 436
Will W: 306
- Legal age**
Minor M: 608
- Legal aid** L: 182
Public defender P: 855
- Legal Aid and Defender Association, National**
Legal aid L: 182
- Legal assistance**
Law (The right to legal assistance) L: 137
- Legal blindness**
Blindness B: 401
- Legal clinic**
Law (The right to legal assistance) L: 137-138
- Legal holiday**
Holiday (In the United States) H: 290-291
- Legal monopoly**
Economics (Public utilities) E: 62
- Legal name**
Name (The legal name) N: 8
- Legal profession** *See* Lawyer *in this index*
- Legal separation** [law]
Alimony A: 369
Divorce D: 253
- Legal Services Corporation**
Legal aid L: 183
- Legal tender** L: 183
Money (The rebirth of paper money) M: 709 *with picture*
- Legal Tender Act** [1933]
Legal tender L: 183
- Legalism**
China (Beginnings of Chinese civilization) C: 500-501
- Legalization, Drug**
Drug abuse (The legalization debate) D: 365
- Legaré, Hugh S.** [American government official]
Justice, Department of (table) J: 203
- Tyler, John (table) T: 534
- Legate** [diplomat]
Vatican City (Diplomatic corps) V: 288
- Legatee** [law]
Heir H: 167
- Legation** [international relations] L: 183
Diplomacy (Diplomatic duties) D: 216
- Legato**
Music (table) M: 954; (Indicating expression) M: 955 *with diagram*
- Legend** [map]
Map (Reading a map) M: 178 *with picture*
- Legend** [story] L: 183
Fairy F: 10
Folklore (Legends) F: 324
Indian, American (Legends) I: 148
Mythology M: 973
See also the lists of Related Articles in the Folklore and Mythology articles
- Legend of Good Women, The** [poem by]
Chaucer]
Chaucer, Geoffrey (Poetry) C: 388
- "Legend of Sleepy Hollow, The"** [story by]
Irving]
Irving, Washington I: 460
- Legend of the Centuries, The** [poem by Hugo]
Hugo, Victor Marie (Exile and return) H: 410; (His works) H: 410
- Legend of the Invisible City of Kitezh and the Maiden Fevroniia, The** [opera by Rimsky-Korsakov]
Rimsky-Korsakov, Nikolai R: 341
- Legend of the True Cross, The** [painting by]
Piero della Francesca]
Piero della Francesca P: 457
- Legend of Ulenspiegel, The** [book by De Coster]
Belgium (The arts) B: 230
- Legendre, Adrien Marie** [French mathematician]
Mathematics (In the 1800's) M: 307
- Léger, Fernand** [French painter] L: 183 *with picture*
Cubism Ci: 1181
- Léger, Jules** [Canadian government official]
L: 184
- Léger, Paul-Émile Cardinal** [Canadian religious leader]
Cardinal (table: Canadian cardinals) C: 211
- Legerdemain** [magic]
Magician (Sleight of hand) M: 51 *with picture*
- Leghorn** [bird]
Chicken (Mediterranean class chickens) C: 441; (Commercially important breeds) C: 443 *with picture*
- Legion** [Roman Empire] L: 184
Army (Ancient armies) A: 726
- Legion, American** *See* American Legion *in this index*
- Legion, Foreign** [military]
Foreign Legion F: 385
- Légion étrangère**
Foreign Legion F: 385
- Legion of Honor**
Knighthood, Orders of (Honorary orders) K: 347
Medals, decorations, and orders (table) M: 359; (Europe) M: 358
- Legion of Merit**
Medals, decorations, and orders (table) M: 357 *with pictures*
- Legionary ant**
Ant (Army ants) A: 526
- Legionella micdadei** [bacteria]
Pneumonia (How pneumonia develops) P: 586-587
- Legionella pneumophila** [bacteria]
Legionnaires' disease L: 184
- Legionnaires' disease** L: 184
Pneumonia (How pneumonia develops) P: 586
- Legislative Assembly** [government]
French Revolution (The Legislative Assembly) F: 526
Quebec (Legislature) Q: 29
- Legislative calendar**
Congress of the United States (Passing a bill) Ci: 945
- Legislative Council** [government]
Quebec (Legislature) Q: 29
State government (Organization) So: 862-864
- Legislative Department of the United States Government** *See* Congress of the United States *in this index*

Legislative reference and research service

Library (State libraries) L: 249

Legislative voting machineVoting machine (Legislative voting machines)
V: 451**Legislature** [government] L: 184Colonial life in America (Colonial government)
C: 794 *with picture*Law (Civil law systems) L: 132; (How laws are
changed) L: 132

Proportional representation P: 828

State government (Legislative branch) So: 862

United States, Government of the (The legisla-
tive branch) U: 138*See also the list of Related Articles in the**Legislature article***Legitimacy** [political science]

Government (Elements of government) G: 282

Legitimist [French history]

Louis Philippe L: 477

Legnano, Battle of [1176]

Alexander III A: 341

Frederick I F: 497

Legree, Simon [literary figure]*Uncle Tom's Cabin* U: 20**Leguía, Augusto B.** [Peruvian political leader]

Peru (The growth of U.S. influence) P: 315

Le Guin, Ursula K. [American author] L: 185**Legume** [botany] L: 185Alfalfa (The alfalfa plant) A: 345 *with picture*

Fertilizer (Organic fertilizers) F: 79

Food supply (Other major food sources) F: 348

Manure M: 172

Nitrogen (Nitrogen and life) N: 425

Nutrition (Proteins) N: 625

Pea P: 205

Prairie (Life on the prairie) P: 731

Lehár, Franz [Hungarian composer] L: 185**Le Havre** [city, France] L: 185**Lehman, Herbert Henry** [American political

leader]

New York (table) N: 313

Lehman, Tom [American golfer]

Golf (British Open) G: 264

Lehman Caves National Monument

Great Basin National Park G: 336

Lehmann, Lotte [German singer] L: 186**Lehmbruck, Wilhelm** [German sculptor] L: 186**Lehn, Jean-Marie** [French chemist]

Nobel Prizes (Chemistry: 1987) N: 443

Lehr [manufacturing]

Annealing A: 517

LeiFlower (As decoration) F: 273 *with picture*

Hawaii (Clothing) H: 94

Leib, Mani [American author]

Yiddish literature Y: 566

Leibniz, Gottfried Wilhelm [German philoso-

pher] L: 186

Calculus (History) C: 25

Computer (History) C: 924a

Mathematics (Mathematics and the scientific
revolution) M: 306-307Numeration systems (The binary system)
N: 607

Philosophy (Modern philosophy) P: 387-388

Physics (Newton) P: 439

Leibowitz, Samuel S. [American lawyer]

Scottsboro Case S: 223

Leica [camera]Photography (The photographic revolution)
P: 427**Leicester** [England] L: 186**Leicester, Earl of** [English political leader]

Montfort, Simon de M: 765

Leicester, Earl of [English nobleman] L: 186Elizabeth I (Problems at home and abroad)
E: 238-239**Leicester sheep**

Sheep (Long-wooled sheep) S: 382

Agriculture (Advances in livestock breeding)
A: 157**Leiden** [The Netherlands] L: 186**Leiden, University of**

Netherlands (Education) N: 142

Leif Ericson [Norwegian explorer]

Ericson, Leif E: 350

Leigh, Augusta [sister of]

Byron, Lord (Byron's life) B: 748

Leigh, Vivien [British actress]Motion picture (Best performance by an
actress: 1939, 1951) M: 862**Leighton, Frederic** [British artist]

Painting (Later neoclassicism) P: 67-68

Leila Arboretum [Battle Creek]

Michigan (Places to visit) M: 498

Leinster House

Dublin (The city) D: 370-371

Leipzig [East Germany] L: 186 *with picture***Leipzig, Battle of** [1631]

Leipzig (History) L: 187

Leipzig, Battle of [1642]

Leipzig (History) L: 187

Leipzig, Battle of [1813]

Napoleon I (The enemy alliance) N: 18

Leipzig, University of

Leipzig (Cultural life) L: 187

Leipzig Gewandhaus Orchestra

Masur, Kurt M: 298

Leishmania [microorganism]

Kala-azar K: 210

Leister [spear]

Inuit (Hunting and fishing) I: 354d-354e

Leisure

Play P: 570

Recreation R: 182

Television (Effects of television) T: 117

Leitmotif [music]Opera (table) O: 791; (The orchestra) O: 793;
(Richard Wagner) O: 798-799**Lejeune, John A.** [American general]

Camp Lejeune C: 90

Lek [zoology]

Manakin M: 132

Leland, Henry M. [American businessman]Automobile (The birth of the automobile indus-
try) A: 963-964; (Changes at the top)
A: 966**Lelang** [former region]

Korea (Early years) K: 375-376

Lélia [book by Sand]

French literature (Romantic fiction) F: 521

Sand, George S: 106

Leloir, Luis Federico [Argentine chemist]

Nobel Prizes (Chemistry: 1970) N: 443

Lem, Stanislaw [Polish author]Science fiction (Growing popularity) S: 205-
206**Le Maire, Jacob** [Dutch explorer]

Admiralty Islands A: 59

Tonga (History) T: 329

Léman, Lac *See Lake Geneva in this index***Le Mans** [France] L: 187**Lemass, Sean** [Irish government official]

Ireland (table) I: 428

LeMay, Curtis Emerson [American general]

L: 187

Nixon, Richard Milhous (The 1968 election)
N: 432

World War II (Closing in on Japan) W: 490-491

Lemay, Léon-Pamphile [Canadian poet]Canadian literature (Poetry: 1850-1918)
C: 157-158**Lemberg** [former name] *See Lvov in this index***Lemberg, Battles of** [1914]

Russia (World War I) R: 552

Lemelin, Roger [Canadian author] L: 187**Lemieux, Mario** [Canadian hockey player] L: 188**Lemmer** [career]Whale (Processing whale products) W: 263-
264**Lemming** [animal] L: 188

Animal picture on A: 485

Arctic (Animal life) A: 638

Lemmon, Jack [American actor]Motion picture (Best performance by an actor:
1973) M: 862-863; (Best performance by
an actor in a supporting role: 1955)
M: 863**Lemnitzer, Lyman L.** [American military leader]

Joint Chiefs of Staff (table) J: 156

Lemon [food] L: 188 *with pictures*

Citric acid C: 573

Lemon, Bob [American baseball player]

Baseball (table: Hall of Fame) B: 135

Lemon balm *See Balm in this index***Lemon day lily** [plant]

Day lily picture on D: 53

Lemon shark

Fish picture on F: 168

Lemon Sky [play by Wilson]

Wilson, Lanford W: 317

LeMond, Greg [American cyclist]

Bicycle racing (Road races) B: 294

Le Moyne, Charles [Canadian colonist] L: 189*with portrait***Le Moyne, Jean Baptiste** *See Bienville, Sieur**de in this index***Le Moyne, Pierre** [French-Canadian explorer]*See Iberville, Sieur d' in this index***Lempa River** [El Salvador]

El Salvador (The Interior Highlands) E: 251

Lemur [animal] L: 189 *with picture*Madagascar (Animal and plant life) M: 28 *with*
picture

Mammal picture on M: 116

Potto P: 719

Primate (Kinds of primates) P: 777 *with*
*picture; diagram on P: 778b***Lemur, Flying** [animal]

Flying lemur F: 312

Lene River [Russia] L: 190

River (table) R: 352

Russia (Rivers and lakes) R: 541

Lena Trough [geography]Arctic Ocean (Depth and the ocean floor)
A: 642-643 *with map***Lenape** *See Delaware Indians in this index***Lenard, Philipp Eduard Anton** [German physi-

cist]

Nobel Prizes (Physics: 1905) N: 440

Lenau, Nikolaus [German poet]

German literature (Romanticism) G: 141

Lence Indians [American Indians]Indian, American (Indians of the Caribbean)
I: 172**Lenci doll**

Doll (After the war) D: 292

Lend-Lease [U.S. history] L: 190

Foreign aid (World War II aid) F: 383

Neutrality (World War II) N: 154

Roosevelt, Franklin Delano (The eve of war)
R: 460World War II (The arsenal of democracy)
W: 477**Lend-Lease Act** [1941]

Lend-Lease L: 190

Lender of last resort

Bank (Central banks) B: 91

Lendl, Ivan [Czechoslovakian tennis player]

L: 190

L'Enfant, Pierre Charles [French architect]

L'Enfant, Pierre Charles L: 190

Washington, D.C. (Building the city) W: 85
*with picture***L'Engle, Madeleine** [American author] L: 191

Regina Medal (table: 1984) R: 206

Lenglen, Suzanne [French tennis player]

Tennis (The spread of tennis) T: 165-166

Lengon [fruit]Lingonberry L: 335 *with picture***Length**Metric system (Space and time) M: 437; (The
metric system at a glance) M: 438 *with*
pictures; (Metric conversion table) M: 439
*with pictures*Weights and measures (table: Length and dis-
tance) W: 185**Lengthwise grain**

Sewing (Laying out the pattern) S: 332

Lenin, V. I. [Soviet dictator] L: 191 *with pictures*

Bolsheviks B: 449

Communism C: 889; (Lenin's contributions)
C: 890; (Before 1917) C: 892; (Under
Lenin) C: 892 *with picture*

Krupskaya, Nadezhda Konstantinovna K: 389

Marx, Karl (Marx's influence) M: 238

Plekhanov, Georgi Valentinovich P: 572

Propaganda (History) P: 824-825

Russia (Nicholas II) R: 551-552 *with picture*

Socialism (World Wars I and II) So: 561

Stalin, Joseph (Young revolutionist) So: 825

Trotsky, Leon T: 452

Union of Soviet Socialist Republics (History)
U: 35; picture on U: 28**Lenin State Library** [Moscow] *See Russian**State Library in this index***Leningrad** [former name] *See Saint Petersburg**[Russia] in this index***Leningrad, Siege of** [Soviet history] L: 195**Lenin's tomb** [Moscow]Lenin, V. I. (Death) L: 195 *with picture*

Russia picture on R: 525

Lennon, John [British musician] L: 195 *with por-**trait*

Beatles B: 189

- Lennox Island** [Malpeque Bay]
Prince Edward Island (Places to visit) P: 788
- Lenoir, Jean Joseph Étienne** [French inventor]
L: 196
Automobile (The gasoline car) A: 963
Gasoline engine (Development of the gasoline engine) G: 66
Invention (The late 1800's) I: 362
- Lenormand, Sébastien** [French physicist]
Parachute (History) P: 143
- Le Normant d'Étoiles, Charles-Guillaume**
[husband of]
Pompadour, Marquise de P: 653
- Le Nôtre, André** [French landscape designer]
L: 196
Versailles, Palace of V: 339
- Lens** [anatomy]
Cataract C: 299
Eye (The uveal tract) E: 460-461 *with picture*;
(Focusing) E: 462; (Cataract) E: 466
- Lens** [optics] L: 196 *with diagrams*
Aberration A: 10 *with diagrams*
Binoculars B: 309 *with diagram*
Camera (How a camera works) C: 80; *diagram*
on C: 82
Lighthouse (How lighthouses work) L: 294
Magnifying glass M: 62
Projector P: 816
Telescope (Optical telescopes) T: 103
- Lens, Contact** See Contact lens *in this index*
- Lens equation**
Lens (The lens equation) L: 196a
- Lenski, Lois** [American author]
Newbery Medal (table) N: 359
Regina Medal (table: 1969) R: 206
- Lent** [religion] L: 196b
Ash Wednesday A: 767
Carnival C: 243
Easter (Religious observances of Easter) E: 42
Holy Week H: 299
- Lent, Blair** [American artist]
Caldecott Medal (table: 1973) C: 26
- Lenticel** [botany] L: 196b
Bark (Outer bark) B: 110
- Lenticular screen**
Projection screen P: 816
- Lentil** [plant] L: 196b *with picture*
- Lenz, Heinrich F. E.** [German physicist]
Lenz's law L: 197
- Lenz's law** [physics] L: 197 *with diagram*
Inductance I: 239
- Leo** [astrology] L: 197 *with picture*
Zodiac (The zodiac in astrology) Z: 601 *with picture*
- Leo** [constellation]
Leonids L: 202
- Leo I, Saint** [pope] L: 197
Roman Catholic Church (The recognition of Christianity) R: 406
- Leo III, Saint** [pope] L: 197
Christianity (The Middle Ages) C: 526
- Leo II** [Byzantine emperor]
Iconoclast I: 25
- Leo VI** [Byzantine emperor]
Byzantine Empire (Invasion and conquest) B: 754
- Leo IX, Saint** [pope] L: 198
Eastern Orthodox Churches (History) E: 45-46
- Leo X** [pope] L: 198
Luther, Martin (The Ninety-Five Theses) L: 527
Raphael (His life) R: 142-143
Wolsey, Thomas Cardinal W: 379
- Leo XI** [pope]
Medici M: 362
- Leo XIII** [pope] L: 198
Rampolla, Mariano Cardinal R: 133
Roman Catholic Church (Leo XIII) R: 410
Vatican City (Vatican Palace) V: 287
- Leochares** [Greek sculptor]
Seven Wonders of the Ancient World (The Mausoleum at Halicarnassus) S: 325
- Leodegan, King** [legendary figure]
Round Table (Origin) R: 490-491
- León** [Nicaragua] L: 198
- León, Alonso de** [Spanish explorer]
Texas (French exploration) T: 204
- León, Luis de** [Spanish author]
Spanish literature (The 1500's) So: 758-759
- León, Ponce de** See Ponce de León, Juan *in this index*
- Leonard, Benny** [American boxer]
Boxing *picture* on B: 534
- Leonard, Buck** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Leonard, Elmore** [American author] L: 198
- Leonard, Helen Louise** [American actress] See Russell, Lillian *in this index*
- Leonard, Ray Charles** See Leonard, Sugar Ray *in this index*
- Leonard, Sugar Ray** [American boxer] L: 198
Boxing (Recent developments) B: 535 *with picture*
- Leonardo da Vinci** [Italian artist] L: 199 *with pictures*
Air conditioning (History) A: 180
Airplane (Early experiments and ideas) A: 229-230 *with picture*
Biology (The Renaissance) B: 318
Heart *picture* on H: 144
Helicopter (Early designs and experiments) H: 173 *with picture*
Jesus Christ *picture* on J: 104
John the Baptist, Saint *picture* on J: 135
Medicine (The Renaissance) M: 373-374
Michelangelo (Early life) M: 483
Painting (The 1400's) P: 52-53 *with picture*
Parachute *picture* on P: 143
Physics (The Renaissance) P: 438-439
Raphael (His life) R: 142
Renaissance (The fine arts) R: 235-236 *with picture*
- Leonardo da Vinci** [book by Freud]
Biography (Modern biography) B: 314
- Leonardo da Vinci International Airport**
[Rome]
Italy (Transportation) I: 512
- Leonardo of Pisa** See Fibonacci, Leonardo *in this index*
- Leoncavallo, Ruggiero** [Italian composer] L: 202
Opera (*Pagliacci*) O: 806; *picture* on O: 805
- Leone, Sergio** [Italian director]
Eastwood, Clint E: 47
- Leonidas I** [king of Sparta] L: 202
Themistocles T: 251
Thermopylae T: 256
- Leonides of Rhodes** [Greek runner]
Olympic Games (The ancient games) O: 750
- Leonids** [astronomy] L: 202
Meteor (Meteor showers) M: 431
- Léonin** [French composer]
Classical music (Church music) Ci: 645
- Leonora** [opera character]
Opera (*Travatore*, II) O: 808
- Leonov, Alexei A.** [Soviet cosmonaut]
Astronaut (Achievements in space) A: 829;
(table) A: 830; *picture* on A: 833
Space exploration (Voskhod and Gemini: The first multiperson space flights) So: 714 *with picture*; (The Apollo-Soyuz Test Project) So: 721 *with picture*
- Leonov, Leonid** [Russian author]
Russian literature (The period of rebirth) R: 564
- Leontes** [literary figure]
Shakespeare, William (*The Winter's Tale*) S: 365
- Leontief, Wassily** [American economist]
Input-output analysis I: 276
Nobel Prizes (Economics: 1973) N: 449
- Leopard** [ship]
Barron, James B: 119
Jefferson, Thomas (The struggle for neutrality) J: 86
War of 1812 (Impressment of seamen) W: 29
- Leopard** [wild cat] L: 202 *with pictures*
Animal *pictures* on A: 472, A: 475, A: 481
Endangered species (table) E: 270
- Leopard cat** See Ocelot *in this index*
- Leopard frog**
Frog (True frogs) F: 540; *picture* on F: 536
- Leopard lily**
Lily L: 304
- Leopard seal**
Seal (Birth) S: 266, (Food) S: 267
- Leopard-skin chief**
Nuer N: 602
- Leopard tortoise** [animal]
Turtle *picture* on T: 520
- Leopardi, Giacomo** [Italian poet] L: 203
Italian literature (Romanticism) I: 495
- Leopold I** [king of Belgium]
Belgium (Independence) B: 233
- Leopold I** [Austrian nobleman]
Austria (Early years) A: 937
- Leopold II** [Holy Roman emperor]
Marie Antoinette (The revolution) M: 200
- Leopold II** [king of Belgium]
Belgium (Independence) B: 233
Berlin Conference B: 267
Congo (Kinshasa) (Belgian rule) Ci: 940d
- Leopold III** [king of Belgium]
Belgium (The world wars) B: 234, (After World War II) B: 235
- Leopold V** [duke of Austria]
Flag F: 194
Richard I R: 328
- Leopold, Aldo** [American naturalist] L: 203
Conservation (The rise of the conservation movement) Ci: 985-986
- Leopold, Nathan F., Jr.** [American public figure]
Darrow, Clarence Seward D: 38
- Leopold, Order of**
Medals, decorations, and orders (table) M: 359
- Leopold of Anhalt-Cöthen** [German prince]
Bach, Johann Sébastien (His life) B: 15
- Leopold of Hohenzollern** [German prince]
Franco-Prussian War (Events leading up to the war) F: 483
- Leopold of Saxe-Coburg-Saalfeld** See Leopold I *in this index*
- Léopoldville** [former name] See Kinshasa *in this index*
- LEOSAT** [satellite] See Low earth orbit satellite *in this index*
- LEP2 synchrotron** [machine]
CERN C: 363
Particle accelerator (How accelerators work) P: 184-186
- Lepage, Robert** [Canadian dramatist]
Canadian literature (Modern Canadian drama) C: 161
- Lepanto, Battle of** [1571]
Cervantes, Miguel de (His early life) C: 363
Philip II [of Spain] P: 369
Navy *picture* on N: 80
Turkey (The Ottoman decline) T: 510
- Lepchas** [people]
Sikkim (People) S: 456
- Lepidolite**
Mica M: 482
- Lepidoptera** [entomology]
Butterfly B: 732 *with pictures*
Insect (table) I: 300; *pictures* on I: 282
Moth M: 837 *with pictures*
- Lepidus, Marcus Aemilius** [Roman general]
Antony, Mark A: 561
Augustus (Rise to power) A: 889
Rome, Ancient (Breakdown of the republic) R: 446
- Leporello** [opera character]
Opera (*Don Giovanni*) O: 803-804
- Leprecheun**
Fairy (What fairies look like) F: 10
- Leprohon, Rosanna** [Canadian author]
Canadian literature (Fiction: 1850-1918) C: 158
- Lepromatous leprosy**
Leprosy (Symptoms) L: 204 *with picture*
- Leprosarium** [medicine]
Leprosy (Treatment) L: 204
- Leprosy** [disease] L: 203 *with pictures*
Medicine (During the Middle Ages) M: 373
Thalidomide T: 229
- Lepta** [money]
Drachma D: 317
- Leptoceratops** [dinosaur]
Dinosaur (True dinosaurs) D: 206b-208
- Leptodactylid frog**
Frog (Other frogs) F: 540
- Lepton** [physics] L: 205
Fermion F: 74
Muon M: 928
Neutrino N: 154
Subatomic particle (Kinds of subatomic particles) So: 937
- Leptotyphlopidae** [zoology]
Snake (Thread blind snakes) S: 535
- Lermontov, Mikhail** [Russian author]
Russian literature (Late romanticism) R: 561
- Lernaean Hydra** [Greek mythology]
Hydra H: 461
- Lerner, Alan Jay** [American lyricist] L: 205
Musical comedy (The modern musical emerges) M: 960
- Lerner, Daniel** [American political analyst]
Communication (Communication and politics) Ci: 888

LeRoy, Pierre [French watchmaker]
Chronometer C: 539

Le Royer, Jérôme [French businessman]
Montreal (French settlement) M: 777

Les ...
Titles beginning Les appear under their key words, as in Sylphides, Les

Lesage, Alain René [French author] L: 205
French literature (The Age of Reason) F: 520

Lesage, Jean [Canadian political leader]
Canada, History of (The Quebec separatist movement) C: 152
Quebec (table) Q: 29; (The mid-1900's) Q: 32

Lesbia [literary figure]
Catullus, Gaius Valerius C: 316

Lesbian
Adolescent (Establishing a sexual identity) A: 63
Gay rights movement G: 73
Homosexuality H: 307

Lesbos [island, Aegean] L: 205
Aeolians A: 85

Lesch, Michael [American physician]
Lesch-Nyhan syndrome L: 205

Lesch-Nyhan syndrome [disease] L: 205
Uric acid U: 221

Leschetizky, Theodor [Polish musician]
Paderewski, Ignace Jan (Child prodigy) P: 19

Lescot, Pierre [French architect]
Louvre L: 507

Lesh, Phil [American musician]
Grateful Dead G: 330

Lesion [disorder]
Leprosy (Symptoms) L: 204 *with picture*
Yaws Y: 553

Leslie, Harry G. [American political leader]
Indiana (table) I: 214

Leslie, Preston H. [American political leader]
Kentucky (table) K: 290

Lesotho [country] L: 205 *with pictures and map*
Flag picture on F: 199

Lesotho Congress for Democracy [political party]
Lesotho (History) L: 207-208

Lespedeza [botany] L: 208 *with picture*

Less Deceived, The [poems by Larkin]
Larkin, Philip L: 77

Less developed country [economics]
Developing country D: 173

Less Than One [essays by Brodsky]
Brodsky, Joseph B: 635

Lessee [law]
Lease L: 166

Lesseps, Ferdinand Marie de *See De Lesseps, Ferdinand Marie in this index*

Lesser Antilles [islands, West Indies]
French West Indies F: 528
Leeward Islands L: 181
West Indies W: 201

Lesser ape [animal]
Primate (Anthropoids) P: 778

Lesser panda *See Red panda in this index*

Lesser prairie-chicken
Prairie-chicken P: 732

Lesser Sunda Islands [Indonesia]
Indonesia (The Lesser Sunda Islands) I: 234 *with map*

Lesser wives
Egypt, Ancient (Government) E: 139

Lessing, Doris [British author] L: 208
English literature (Literature after World War II) E: 322-323

Lessing, Gotthold Ephraim [German author] L: 208
Drama (Germany) D: 336
German literature (The enlightenment) G: 140

Lesson, The [play by Ionesco]
Ionesco, Eugène I: 372

Lesson plan
Teaching (Preparing to teach classes) T: 65-66

Lessor [law]
Lease L: 166

Lester, Jeeter [literary figure]
Caldwell, Erskine C: 27

Lester B. Pearson International Airport
Ontario (Transportation) O: 782
Toronto (Transportation and communication) T: 340

LeStrange, Dom Augustin de [French monk]
Trappists T: 404

Le Sueur, Pierre-Charles [French explorer] L: 209

Lesvos *See Lesbos in this index*

Leszczyńska, Maria [wife of]
Louis XV L: 476

Leszczyński, Stanislas [king of Poland]
Succession wars (The War of the Polish Succession) So: 950

Let
Tennis (The serve) T: 163

Let It Shine: Stories of Black Women Freedom Fighters [book by Pinkney]
Literature for children (Children's literature today) L: 365

"Let them eat cake" [quotation]
Marie Antoinette M: 200

"Let Us Beat Swords into Plowshares" [sculpture]
United Nations picture on U: 80

Let Us Now Praise Famous Men [book by Agee and Evans]
Evans, Walker E: 422

Letcher, John [American political leader]
Virginia (table) V: 417

Letcher, Robert P. [American political leader]
Kentucky (table) K: 290

Letchworth [England]
City picture on Ci: 587

Letchworth State Park
New York (Places to visit) N: 302

Lethal injection [law] L: 209
Capital punishment (table) C: 193

Lethal yellowing [tree disease]
Coconut palm (Growing coconut palms) Ci: 747

Lethbridge [Alberta] L: 209

Lethbridge, John [British inventor]
Diving, Underwater (History) D: 247

Lethbridge, University of L: 209

Lethe [mythology] L: 209

Leto [Greek mythology]
Niobe N: 424

Let's Get It On [recording]
Gaye, Marvin G: 73

Letsie III [king of Lesotho]
Lesotho (History) L: 207-208

Letter
Braille pictures on B: 550
Flag pictures on F: 196
Morse code pictures on M: 820
Semaphore pictures on S: 291
See also Alphabet in this index and articles on specific letters, such as A

Letter [correspondence] *See Letter writing in this index*

Letter carrier [occupation]
Postal Service, United States picture on P: 699
Postal services (How mail is delivered) P: 702-703; pictures on P: 704, P: 705

Letter Carriers of the United States of America, National Association of
Labor movement (table) L: 8

Letter of application *See Application, Letter of in this index*

Letter to Coroticus [letter by Saint Patrick]
Patrick, Saint (His writings) P: 197

Letter to Louis XIV [book by Fénelon]
Fénelon, François de Salignac de la Mothe-F: 71

Letter writing L: 209 *with pictures*
Address, Forms of A: 53
Etiquette (Invitation etiquette) E: 373

Letterhead [stationery]
Letter writing (The heading) L: 210

Lettering pen
Pen (Specialty pens) P: 234 *with picture*

Letterpress [printing]
Printing (Letterpress printing) P: 799

Letters [Bible] *See Epistles in this index*

Letters [book by Pliny the Younger]
Pliny the Younger P: 574

Letters, Doctor of
Degree, College (Honorary degrees) D: 92

Letters Concerning the English Nation [book by Voltaire]
Voltaire (Exile and return to France) V: 446

Letters from a Farmer in Pennsylvania [book by Dickinson]
Dickinson, John D: 191

Letters from an American Farmer [book by Crèvecoeur]
American literature (The revolutionary period [1765-1787]) A: 415
Crèvecoeur, Michel-Guillaume Jean de Ci: 1129

Letters of a Russian Traveler [book by Karamzin]
Russian literature (Sentimentalism) R: 560

Letters of marque and reprisal [warfare]
Privateer P: 808b

Letters of the alphabet *See Letter in this index*

Letters on Dancing and Ballet [book by Noverre]
Ballet (Ballet d'action) B: 51

Letters on the Equality of the Sexes and the Condition of Woman [book by Grimké]
Feminism F: 69

Letters patent [law]
Communication (The 1700's) Ci: 880-881
Nobility (The creation of peerages) N: 450
Title T: 302

Letters to Atticus [manuscript by Cicero]
Renaissance (Humanism) R: 233-234

Letters to Judy [book by Blume]
Blume, Judy B: 425

Letrice and Lovage [play by Shaffer]
Shaffer, Peter S: 342

Lettre à M. Dacier [pamphlet by Champollion]
Rosetta stone R: 482

"Lettre du voyant" [poem by Rimbaud]
Rimbaud, Arthur R: 341

Letts [people] *See Latvians in this index*

Lettuce L: 213 *with pictures*

Letzburgesch [language]
Luxembourg (People) L: 530-531

Leucas [island, Greece]
Ionian Islands I: 373 *with map*

Leucippus [Greek philosopher] L: 214
Atomism A: 877
Materialism M: 300a
Pre-Socratic philosophy (The teachings of Parmenides) P: 772-773

Leuctra, Battle of [371 B.C.]
Messenia M: 423
Pelopidas P: 232
Sparta (History) So: 766

Leukemia [disease] L: 215
Bone marrow transplant B: 457
Cancer (Classification by primary body site) C: 167-168; (Cancer in children) C: 169
Cat (Veterinary care) C: 295

Leukocyte *See White blood cell in this index*

Leukocyte pyrogen [physiology]
Fever F: 83

Leukopenia [disorder]
Blood (White-cell abnormalities) B: 414

Leukosis [disease]
Poultry (Raising poultry) P: 720-721

Leutnant Gustl [book by Schnitzler]
Schnitzler, Arthur S: 178

Leutze, Emanuel Gottlieb [American painter] L: 216 *with picture*
State, Department of picture on So: 861

Lev [Galician leader]
Lvov L: 532

LeVander, Harold E. [American political leader]
Minnesota (table) M: 602

Levant cotton
Cotton (Old World cotton) Ci: 1088

Le Vau, Louis [French architect]
Architecture (Baroque architecture) A: 622
Versailles, Palace of V: 339

Levee [engineering] L: 216
Flood (Flood control) F: 237 *with picture*
Irrigation (Surface irrigation) I: 457
Mississippi (Statehood) M: 642
Mississippi River (Floods and flood control) M: 647-648
New Orleans (The city) N: 278

Levee, Natural [geography]
River (Flood plains) R: 353 *with diagram*

Level [mining]
Mining (Mining terms) M: 577

Level [tool] L: 216 *with pictures*

Level culture [agriculture]
Potato (Planting and cultivating) P: 712-713

Level loop rug
Rugs and carpets (Kinds of rugs and carpets) R: 514 *with picture*

Levellers [English history] L: 217

Leven, River [England]
Windermere W: 333

Lever [machine] L: 217 *with diagrams*
Archimedes (His discoveries) A: 605
Machine (Efficiency) M: 14, (Lever) M: 14 *with pictures*
Wheel and axle W: 278

- Wheelbarrow W: 279
- Lever, Charles** [Irish author]
Irish literature (Prose and poetry) I: 431
- Lever-action rifle**
Rifle (Kinds of rifles) R: 338
- Lever House** [New York City]
Sunshaft, Gordon B: 699 *with picture*
New York City (Architecture) N: 336
- Lever lock**
Lock (Types of locks) L: 410
- Lever safety valve**
Safety valve *diagram on* S: 17
- Lever-tumbler lock**
Lock (Mechanical locks) L: 411-412
- Leveraged buyout** [business]
Merger M: 418
- Leveret** [animal]
Hare H: 60
- Leverrier, Urbain** [French astronomer]
Astronomy (Finding new planets) A: 848
Neptune (Discovery) N: 129-130
- Levertov, Denise** [American poet]
American literature (Poetry) A: 423
- Lévesque, René** [Canadian political leader]
L: 218
Canada, History of (The separatist threat) C: 153
Parti Québécois P: 183
Quebec (The mid-1900's) Q: 32; (Recent developments) Q: 32
- Levi** See Matthew, Saint *in this index*
- Levi** [son of Jacob]
Levites L: 219
- Levi-Montalcini, Rita** [Italian-American biologist]
Nobel Prizes (Physiology or medicine: 1986) N: 445
- Levi Strauss & Co.**
Strauss, Levi So: 922
- Lévi-Strauss, Claude** [French anthropologist]
L: 218
Mythology (Lévi-Strauss's theory) M: 988
- Leviathan** [book by Hobbes]
Hobbes, Thomas H: 272
- Levine, David** [American artist]
Caricature *picture on* C: 238
- Levine, Jack** [American painter] L: 218 *with picture*
- Levine, James** [American musician] L: 219
- Levine, Philip** [American physiologist]
Rh factor R: 289
- Levine, Sherrie** [American artist]
Painting (Post-modernism) P: 88
- Levinson, Barry** [American director] L: 219
Motion picture (Best achievement in directing: 1988) M: 862
- Levi's** [jeans]
Strauss, Levi So: 922
- Lévis, François de** [French general]
Quebec, Battle of (Bombardment of Quebec) Q: 37
- Levites** [Bible] L: 219
- Leviticus** [Old Testament] L: 219
Pentateuch P: 274
- Levitt, William Jairod** [American businessman]
L: 219
- Levittown** [New York] L: 219
Levitt, William Jairod L: 219
- Levittown** [Pennsylvania]
Levitt, William Jairod L: 219
- Levodopa** [drug] See L-dopa *in this index*
- Levulose** See Fructose *in this index*
- Levy, David H.** [Canadian-born American astronomer]
Shoemaker, Eugene Merle S: 433
- Levy, Louis** [American inventor]
Printing (Developments in platemaking) P: 803-804
- Levy, Max** [American inventor]
Printing (Developments in platemaking) P: 803-804
- Lewelling, Lorenzo D.** [American political leader]
Kansas (table) K: 234
- Lewes** [Delaware]
Delaware (Places to visit) D: 102
- Lewes, Battle of** [1264]
Montfort, Simon de M: 765
- Lewes, George Henry** [British author]
Eliot, George E: 237
- Lewin, Kurt** [German-American psychologist]
L: 219
Sensitivity training S: 302
- Social psychology So: 552
- Lewinsky, Monica** [American public figure]
Clinton, Bill (Domestic events) Ci: 682f
Starr, Kenneth Winston So: 857
United States, History of the (Impeachment) U: 195
- Lewis, Andrew L., Jr.** [American government official]
Reagan, Ronald Wilson (table) R: 169
Transportation, Department of (table) T: 400
- Lewis, Sir Arthur** [British economist] L: 220
- Lewis, C. S.** [British author] L: 220
- Lewis, Carl** [American athlete] L: 220 *with picture*
- Lewis, David Peter** [American political leader]
Alabama (table) A: 274
- Lewis, Edward B.** [American physiologist]
Nobel Prizes (Physiology or medicine: 1995) N: 445
- Lewis, Elizabeth Foreman** [American author]
Newbery Medal (table) N: 359
- Lewis, Francis** [American patriot] L: 220
- Lewis, Gilbert Newton** [American chemist]
Chemistry (Development of physical chemistry) C: 404-405
Deuterium (Discovery) D: 172
Heavy water H: 161
- Lewis, James T.** [American political leader]
Wisconsin (table) W: 365
- Lewis, Jerry Lee** [American musician]
Rock music (Artistic decline) R: 378
- Lewis, John Aaron** [American composer] L: 220
Jazz (New directions) J: 73
- Lewis, John L.** [American labor leader] L: 220
Coal (Labor unions) Ci: 728-729
Labor movement (Formation of the CIO) L: 12
United Mine Workers of America U: 75
- Lewis, Lennox** [British boxer]
Boxing (Recent developments) B: 535
- Lewis, Matthew G.** [British author]
Gothic novel G: 279
- Lewis, Meade Lux** [American musician]
Jazz (The swing era) J: 71
- Lewis, Meriwether** [American explorer] L: 221
Clark, William Ci: 642
Exploration (Crossing North America) E: 447 *with map*
Lewis and Clark expedition L: 221 *with portrait*
Rocky Mountains (History) R: 396
South Dakota (Exploration and fur trade) So: 681
Westward movement in America (Exploration) W: 248
- Lewis, Morgan** [American political leader]
New York (table) N: 313
- Lewis, Robert** [American author]
Method acting M: 434
- Lewis, Sinclair** [American author] L: 221 *with portrait*
American literature (Satirists) A: 422
Minnesota *picture on* M: 605
Nobel Prizes (Literature: 1930) N: 446 *with picture*
Novel (New directions in the novel) N: 573-574
- Lewis, Stephen** [Canadian diplomat]
United Nations (table) U: 86
- Lewis, William B.** [American government official]
Kitchen Cabinet K: 337
- Lewis and Clark Centennial Exposition**
[Portland]
Portland (Oregon) (History) P: 684
- Lewis and Clark expedition** [U.S. history]
L: 221 *with pictures and map*
Clark, William Ci: 642
Exploration (Crossing North America) E: 447 *with map*
Idaho (Exploration and early settlement) I: 42
Indian, American (After European contact) I: 166
Jefferson, Thomas (Western expansion) J: 85
Lewis, Meriwether L: 221
Missouri *picture on* M: 670
Montana (Exploration) M: 758
Sacagawea S: 4 *with picture*
South Dakota (Exploration and fur trade) So: 681
United States, History of the (The Louisiana Purchase) U: 163-164 *with picture*
Washington *picture on* W: 67
- Lewis and Clark Interpretive Center**
North Dakota (Places to visit) N: 504
- Lewis and Clark Interpretive Center**
Washington (Places to visit) W: 56
- Lewis and Clark Lake**
South Dakota (Rivers and lakes) So: 676
- Lewis and Clark National Historic Trail Interpretive Center** [Great Falls]
Montana (Places to visit) M: 750
- Lewis Hills**
Newfoundland and Labrador (Mountains) N: 370 *with map*
- Lewis Overthrust** [ridge]
Glacier National Park (Lewis Overthrust) G: 205
- Lewis with Harris** [islands, Scotland]
Hebrides H: 163
- Lewiston** [Idaho]
Idaho (Transportation) I: 41
- Lewiston** [Maine] L: 224
- Lex de imperio Vespasiani**
Vespasian V: 341
- Lexicology**
Semantics S: 290
- Lexicon** See Dictionary *in this index*
- Lexicon Technicumbook by Harris**
Encyclopedia (An age of experiment) E: 268a
- Lexington** [Kentucky] L: 224
- Lexington** [ship]
Barry, John B: 119
- Lexington, Battle of** [1775]
Revolutionary War in America (Lexington and Concord) R: 274 *with map*; (table) R: 276
United States, History of the (The Revolutionary War begins) U: 158 *with picture*
- Lexington and Ohio** [railroad]
Kentucky (Transportation) K: 289
- Leyden** [The Netherlands]
Leiden L: 186
- Leyden jar** [electricity] L: 224 *with picture*
- Leydig cell** [biology]
Testicle T: 181
- Leyster, Judith** [Dutch painter] L: 225
Painting (The Dutch masters) P: 62-63
- Leyte** [Island, Philippines]
Philippines (The main islands) P: 376-378 *with map*
World War II (The liberation of the Philippines) W: 489
- Leyte Gulf, Battle for** [1944]
Navy (World War II) N: 80
World War II (The liberation of the Philippines) W: 489
- Lezama Lima, José** [Cuban author]
Cuba (The arts) Ci: 1172
- LH** [hormone] See Luteinizing hormone *in this index*
- Lhasa** [city, Tibet] L: 225
Tibet (Cities) T: 277 *with picture*; *picture on* T: 278
- Lhasa apso** [dog] L: 225 *with picture*
Dog *picture on* D: 275
- L'Heureux-Dubé, Claire** [Canadian jurist]
Supreme Court of Canada (table) So: 997 *with portrait*
- Lhotse** [mountain, Nepal-Tibet]
Mount Everest M: 884
- Li** [philosophy]
Confucianism (Later Confucianism) Ci: 937
- Li**
Lithium L: 386
- Li Bai** [Chinese poet] See Li Bo *in this index*
- Li Bo** [Chinese poet] L: 225
Chinese literature (Poetry) C: 511-512
- Li Ning** [Chinese gymnast]
Olympic Games (Boycotts) O: 753
- Li Peng** [Chinese political leader] L: 225 *with portrait*
China (Recent developments) C: 507
- Li Po** [Chinese poet] See Li Bo *in this index*
- Li River** [river, China]
China *picture on* C: 494
- Li Shimin** [emperor of China]
Li Yuan L: 226
Tang dynasty (The rise of the dynasty) T: 25
- Li Tsung-jen** [Chinese political leader]
Chiang Kai-shek (Communist triumph) C: 419
- Li Yuan** [emperor of China] L: 225
Tang dynasty (The rise of the dynasty) T: 25
- Liability, Product**
Consumerism (The right to safety) Ci: 1018
Product liability suit P: 810

484 Liability account

Liability account

Bookkeeping (Accounts) B: 472

Liability coverage

Insurance (Automobile insurance) I: 313

Liability insurance

Insurance (Property and liability insurance)
I: 312; *diagram on* I: 310

Liana [plant] L: 226 *with picture*

Rain forest (Structure and growth) R: 126a

Liang Kai [Chinese artist]

Painting (Chinese painting) P: 44-46 *with picture*

Liao dynasty [Chinese history]

Beijing (History) B: 223

Liaodong Peninsula [region, China]

Russo-Japanese War (Underlying causes)
R: 566

Liard River

Yukon Territory (Location, size, and description) Y: 582

Libation Bearers, The [play by Aeschylus]

Aeschylus A: 90

Libbeus [apostle] See Jude, Saint *in this index*

Libbey, Edward Drummond [American engineer]

Fiberglass (History) F: 89

Toledo (Government and history) T: 321

Libbey Glass Company

Toledo (Government and history) T: 321

Libby, Willard Frank [American chemist]

Radiocarbon (Radiocarbon dating) R: 97

Libby Dam [Montana]

British Columbia (The mid-1900's) B: 630
Montana (Rivers and lakes) M: 752-754; (The mid-1900's) M: 760

Libel [law] L: 226

Damages D: 22

Freedom of speech (Limitations) F: 506

Journalism (Restrictions on freedom of the press) J: 173

Slander S: 499

Libel Abaci [book by Fibonacci]

Fibonacci, Leonardo F: 89

Liberal arts L: 226

Fine arts F: 104

Liberal constitutionalists [Russian history]

Russia (Nicholas II) R: 551-552

Liberal Democratic Party

Japan (Politics) J: 35; (Postwar boom) J: 58-59

Liberal Democratic Party

Russia (Politics) R: 531

Liberal Democrats [political party] L: 226

Ireland (The Easter Rising) I: 427

United Kingdom (Politics) U: 54; (Political confusion) U: 69

Liberal education

Education (General education) E: 88

Liberal Front Party [political party]

Brazil (Politics) B: 569

Liberal Party [Australia]

Australia (Political parties) A: 900; (History)
A: 922-925

Menzies, Sir Robert Gordon M: 411

Liberal Party [Canada] L: 227

Canada, Government of (Political parties)
C: 138

Canada, History of (Economic developments)
C: 153

Chr tien, Jean C: 522a; (The 1993 election)
C: 522c

Laurier, Sir Wilfrid (Early public career) L: 124

Mulroney, Brian (Election as party leader)
M: 917

Political party (Oldest parties) P: 636

Saint Laurent, Louis Stephen (Prime minister
[1948-1957]) S: 40

Liberal Party [Denmark]

Denmark (Politics) D: 133

Liberal Party [Japan]

Japan (Recent developments) J: 59

Liberal Party [New Zealand]

New Zealand (Depression and social reform)
N: 355

Liberal Party [South Africa]

Paton, Alan P: 196

Liberal Party [United Kingdom] See Liberal

Democrats *in this index*

Liberal Republican Party [U.S. history] L: 227

Grant, Ulysses S. (Election of 1872) G: 316

Liberal Unionists [British history]

United Kingdom (Gladstone and Disraeli) U: 69

Liberalism [political science] L: 227

Conservatism (History) Ci: 991-992

Political science (Liberalism) P: 639

Smith, Adam S: 515

United States, Government of the (Current
issues in U.S. government) U: 146

Liberation Day [Italy]

Holiday (In other countries) H: 291

Liberation theology [religion] L: 228

Roman Catholic Church (In Latin America)
R: 411

Liberation Tigers of Tamil Eelam [Sri Lankan
political group]

Gandhi, Rajiv G: 25

Liberator, The [newspaper]

Abolition movement (In the United States)
A: 12

Garrison, William Lloyd G: 45

Massachusetts (Progress as a state) M: 292

United States, History of the (The abolition
movement) U: 171

Liberator, The [nickname]

Bolivar, Sim n B: 441

Liberia L: 228 *with pictures and map*

African Americans (Free blacks) A: 136e-136f

Firestone, Harvey Samuel F: 135

Flag *picture on* F: 199

Ship (Merchant fleets of other countries)
S: 426

World War II (table: The Allies) W: 471

Liberius [pope]

Pope (table) P: 666

Libertador, El [nickname]

Bolivar, Sim n B: 441

Libertarian Party [political party] L: 232

Liberty See Freedom *in this index*

Liberty [airplane engine]

Aviation (World War I [1914-1918]) A: 987

Liberty [ship]

Hancock, John H: 39

Rhode Island (The Revolutionary War) R: 313;
picture on R: 314

Liberty, Age of [Swedish history]

Sweden (The Age of Liberty) So: 1034

Liberty, Personal See Personal liberty *in this
index*

Liberty, Statue of See Statue of Liberty *in this
index*

Liberty Bell [Philadelphia] L: 232 *with picture*

Allentown A: 373

Pennsylvania *picture on* P: 255

Philadelphia (Downtown Philadelphia) P: 359

Liberty Bond

Statue of Liberty (Growth as a symbol)
So: 878

United States, History of the (The United
States in the war) U: 184

Liberty Enlightening the World See Statue of
Liberty *in this index*

Liberty Island [island, New York City] L: 233

Statue of Liberty So: 872 *with picture*

Liberty Lake

Nevada (Rivers and lakes) N: 166-168

Liberty Leading the People [painting by

Delacroix]

Delacroix, Eug ne D: 95

Liberty League [U.S. history] L: 233

Liberty Memorial

Kansas City [Missouri] (Cultural life) K: 242

Liberty of contract [law]

Labor movement (The early 1900's) L: 11

Lochner v. New York L: 410

Liberty Party [U.S. history] L: 233

Abolition movement (In the United States)
A: 12-13

Liberty ship

Ship (General cargo ships) S: 417-418

Liberty State Park [New Jersey]

New Jersey (Places to visit) N: 240

Liberty Under Oath [poems by Paz]

Paz, Octavio P: 205

Libido [psychology] L: 233

Liblius Severus [Roman emperor]

Rome, Ancient (table) R: 447

Libre [astrology] L: 233 *with picture*

Zodiac (The zodiac in astrology) Z: 601 *with
picture*

Librarian [career]

Library L: 234 *with pictures*

Librarian of Congress [government official]

Library of Congress L: 263

**Libraries and Information Science, National
Commission on** [U.S.]

Library (Libraries in the United States) L: 261-
262

Library L: 234 *with pictures*

Dewey Decimal Classification D: 177

Franklin, Benjamin (Civic leader) F: 487-488
with picture

Information science I: 269

Literature for children (Librarians) L: 365

Newspaper (The editorial department) N: 381-
382

Reading *picture on* R: 160

United States (Libraries) U: 113

Universities and colleges (Libraries) U: 210

White House *picture on* W: 289

A Guide to Research Skills Research Guide: 26

See also the *Libraries Sections in specific
country, state, and province articles and
the list of Related Articles in the Library
article*

**Library and Information Center Committee,
Federal**

Library (United States government libraries)
L: 248-249

Library Association, American See American
Library Association *in this index*

Library Association, Canadian See Canadian
Library Association *in this index*

**Library Associations and Institutions,
International Federation of**

Library (International library programs) L: 254

Library board

Library (Administering a public library) L: 242

Library Company of Philadelphia

Library (Libraries in the United States) L: 261

Pennsylvania (Libraries) P: 248

Philadelphia (Libraries and museums) P: 364

Library Journal [magazine]

Dewey, Melvil D: 177

Library network

Library (The growth of information and tech-
nology) L: 238

Library of Congress [Washington, D.C.] L: 263
with picture

Copyright (How to obtain a copyright) Ci: 1048

Hayes, Rutherford Birchard (Congressman)

H: 119-120

Library (Research libraries) L: 247; (United
States government libraries) L: 248;

(Libraries in the United States) L: 261

Putnam, Herbert P: 913

Washington, D.C. (Library of Congress) W: 71;

map on W: 76

Library of Congress Classification L: 264

A Guide to Research Skills Research
Guide: 29, 38

Library of Congress James Madison

Memorial Building [Washington, D.C.]

Washington, D.C. *map on* W: 76

Library of Congress Thomas Jefferson

Building [Washington, D.C.]

Washington, D.C. *map on* W: 76

Library of Medicine, National [Bethesda,

Maryland]

Library (United States government libraries)
L: 248

Library of Parliament [Ottawa]

Library (Canadian government libraries) L: 249

Library of the Academy of Sciences of the

U.S.S.R. [St. Petersburg] See Library of the
Russian Academy of Sciences *in this index*

Library of the Russian Academy of Sciences

[St. Petersburg]

Library (Eastern Europe and Russia) L: 252

Library school

Library (table) L: 257

Library science [education]

Library (Educational requirements) L: 256

Library Services Act [1956] See Library

Services and Construction Act *in this index*

Library Services and Construction Act [1964]

Library (Supporting the public library) L: 243

Library system

Library (The growth of information and tech-
nology) L: 238

Libration [astronomy]

Moon (Libration) M: 785 *with diagrams*

Libretto [theater]

Ballet (Kinds of ballet) B: 48

Musical comedy (The book) M: 959

Opera (The libretto) O: 791

Libreville [Gabon] L: 264

Gabon G: 3; (History) G: 3

- Librium** [drug]
Benzodiazepine B: 256
- Libro de buen amor** [book by Ruiz]
Ruiz, Juan R: 519
- Libya** L: 264 *with pictures and map*
Barbary States B: 105 *with map*
Chad (History) C: 367-368
Flag *picture on* F: 199
- Libyan Desert** [region, Africa]
Egypt (The Western Desert) E: 125 *with picture and map*
Libya (Land and climate) L: 266
Sahara S: 20
- Lice** See Louse *in this index*
- License** [law] L: 268
Automobile (Learning to drive) A: 960
Medicine (A career as a doctor) M: 370-371
Sales (Regulation of selling) S: 64
- License tax**
Taxation (Taxes on transactions) T: 53
- Licensed pilot**
Airplane (Learning to fly) A: 226
- Licensed Practical Nurse**
Nursing (Practical nursing courses) N: 620
- Licensed Vocational Nurse**
Nursing (Practical nursing courses) N: 620
- Licensing Act** [1737]
Fielding, Henry (His life) F: 94
- Lichen** [plant] L: 269 *with pictures*
Antarctica (Plant life) A: 534
Earth *picture on* E: 22
Fungi (How a fungus lives) F: 559
Litmus L: 391
Plant (The tundra) P: 522
Symbiosis So: 1065
Tweed T: 530
- Licht, Frank** [American political leader]
Rhode Island (table) R: 311
- Lichtenstein, Roy** [American artist] L: 269
Painting (Pop art) P: 86 *with picture*
Pop art *picture on* P: 659
- Licinius** [East Roman emperor]
Constantine the Great Ci: 993
Rome, Ancient (table) R: 447; (Temporary recovery) R: 448
- Lick Observatory** [California] L: 270
- Licorice** [food]
Candy (Other candies) C: 176
- Licorice** [plant] L: 270
- Lictor** [ancient Rome]
Fasces F: 49
- Liddell, Alice** [British public figure]
Carroll, Lewis (The *Alice* books) C: 249
- Liddy, G. Gordon** [American public figure]
Watergate (The break-in and cover-up) W: 144
- Lidice** [Czechoslovakia] L: 270
Heydrich, Reinhard H: 220
- Lido**
Venice (The city) V: 306-307 *with map*
- Lidocaine** [drug] L: 270
- Lie**
Golf (table) G: 261
- Lie, Trygve** [Norwegian statesman] L: 270
United Nations (The secretary-general) U: 83 *with portrait*
- Lie detector** [instrument] L: 271 *with pictures*
Reflex action (How reflex action occurs) R: 195
- Lie Down in Darkness** [book by Styron]
Styron, William So: 936
- Liébeault, Ambroise Auguste** [French doctor]
Hypnotism (Scientific studies) H: 479
- Lieber, Francis** [German-American editor]
Encyclopedia (Today's encyclopedias) E: 268b
- Lieberman, Joseph Isadore** [American political leader] L: 271
Gore, Al (Political career) G: 274
- Liebig, Baron von** [German chemist]
Chemistry (Development of organic chemistry) C: 404
Telescope (Reflecting telescopes) T: 104-105
- Liechtenstein** [country] L: 272 *with picture and map*
Flag *picture on* F: 206
German language G: 137
- Liechtenstein, Johann-Adam** [prince of Liechtenstein]
Liechtenstein (History) L: 273
- Lied von der Erde, Das** [music by Mahler]
Mahler, Gustav M: 65
- Lieder** [music] L: 273
Classical music (The Romantic era) Ci: 648
Song So: 592
- Liège** [Belgium] L: 273
- Liège, University of**
Belgium (Education) B: 229-230
- Liek, Harry J.** [American mountain climber]
Mount McKinley M: 886
- Liele, George** [American religious leader]
African Americans (Free blacks) A: 136e-136f
- Lien** [law] L: 273, [law] J: 183
- Lieutenant**
Rank, Military (table) R: 140
- Lieutenant colonel**
Rank, Military (table) R: 140
- Lieutenant commander**
Rank, Military (table) R: 140
- Lieutenant general**
General G: 82
Rank, Military (table) R: 140
- Lieutenant governor** [office] L: 273
Canada, Government of (The ten provinces) C: 138
State government (Other officers) So: 862
- Life** L: 274 *with pictures*
Biochemistry B: 310
Biodiversity B: 311
Biology B: 316
Death D: 61
Earth (The biosphere) E: 20
Environment E: 329
Evolution E: 426
Exobiology E: 437
Gaia G: 6
Heredity H: 200
Island (How life develops on islands) I: 473
Life cycle L: 280
Mars (Possibility of life) M: 226c; (Observation by spacecraft) M: 226d *with picture*
Medical ethics M: 361
Nitrogen (Nitrogen and life) N: 425
Nitrogen cycle N: 426
Ocean (Life in the ocean) O: 655 *with pictures; picture on* O: 651
Protoplasm P: 836
Water (Water in living things) W: 118
- Life** [magazine]
Bourke-White, Margaret B: 517
Eisenstaedt, Alfred E: 155
Luce, Henry Robinson L: 514
- Life after death**
See also Reincarnation *in this index*
Egypt, Ancient (Painting and sculpture) E: 139; *pictures on* E: 140
Extrasensory perception (Continued belief in ESP) E: 458
Funeral customs (History) F: 558
Immortality I: 86
Religion (A doctrine of salvation) R: 216
Resurrection R: 264
Roman Catholic Church (Life after death) R: 404
Tutankhamen T: 526
- Life and Adventures of James P. Beckwourth** [book by Beckwourth]
Beckwourth, James Pierson B: 197
- Life and Adventures of Joaquín Murieta, The** [book by Ridge]
Murieta, Joaquín M: 930
- Life and Adventures of Nat Love, The** [book by Love]
Love, Nat L: 508
- Life and Extraordinary Adventures of Private Ivan Chonkin, The** [book by Voinovich]
Russian literature (Modern Soviet literature) R: 564-565
- Life and Flowers** [essay by Maeterlinck]
Maeterlinck, Maurice M: 41
- Life and Memorable Actions of George Washington, The** [book by Weems]
Biography (The 1800's) B: 313-314
Lincoln, Abraham (Education) L: 312-313
Weems, Mason Locke W: 180
- Life and Opinions of Tristram Shandy, Gentleman, The** See Tristram Shandy *in this index*
- Life and Work of Sigmund Freud, The** [book by Jones]
Jones, Ernest J: 158
- Life annuity**
Insurance (Annuities) I: 311
- Life cycle** [biology] L: 280
Butterfly (The life cycle of butterflies) B: 739-741 *with pictures*
Generation G: 83
- Metamorphosis M: 428 *with picture*
Reproduction R: 242
Rust R: 567
- Life estate** [law]
Estate E: 360
- Life expectancy** L: 280
Medicine M: 363
Old age O: 738
World (table) W: 411
- Life for the Tsar, A** [opera by Glinka]
Glinka, Mikhail Ivanovich G: 231
- Life history**
Life cycle L: 280
- Life in the Fields** [short story collection]
Verga, Giovanni V: 317
- Life insurance**
Insurance (Life insurance) I: 309 *with diagram*
Investment (Life insurance policies) I: 369
Trust fund (Kinds of trusts) T: 474
- Life Is a Dream** [play by Calderón de la Barca]
Calderón de la Barca, Pedro C: 27
Spanish literature (The 1600's) So: 759-760
- Life jacket** L: 281
- Life line** [palmistry]
Palmistry P: 111 *with diagram*
- "Life Line"** [radio program]
Hunt, H. L. H: 449
- Life of Dante** [book by Boccaccio]
Biography (The Middle Ages) B: 313
- Life of Emile Zola, The** [film]
Motion picture (Best picture: 1937) M: 861
- Life of George Washington** [book by Weems]
See Life and Memorable Actions of George Washington, The *in this index*
- Life of Marianne, The** [book by Marivaux]
Marivaux, Pierre M: 213
- Life of Mr. Jonathan Wild the Great, The** [book by Fielding]
Fielding, Henry (His novels) F: 94-95
- Life of Mr. Richard Savage, The** [book by Johnson]
Biography (The 1700's) B: 313
- Life of Samuel Johnson, The** [book by Boswell]
Biography (The 1700's) B: 313
English literature (The Johnson circle) E: 319
- Life of Sir William Osler, The** [book by Cushing]
Cushing, Harvey Ci: 1200
- Life of the Bees, The** [book by Maeterlinck]
Maeterlinck, Maurice M: 41
- Life of the Swindler** [book by Quevedo]
Quevedo, Francisco de Q: 41
Spanish literature (The 1600's) So: 759
- Life on the Mississippi** [book by Twain]
Mississippi River M: 646
Twain, Mark (Productive years in Hartford) T: 529
- Life peerage** [title]
Nobility (The creation of peerages) N: 450
Parliament (The House of Lords) P: 173
United Kingdom (National government) U: 49-50
- Life preserver**
Life jacket L: 281
Boating (Boating regulations) B: 429
- Life-Saving Service**
Coast Guard, United States (New duties) Ci: 737
- Life science**
Careers (Life, physical, and social sciences) C: 225
Science (The life sciences) S: 193
See also the list of Related articles in the Biology article
- Life Scout** [rank]
Boy Scouts (Boy Scouting) B: 537-539
- Life span**
Aging (Why people age) A: 141
Animal (table: Length of life of animals) A: 473
Dog (The life of a dog) D: 266-277
Life expectancy L: 280
- Life Studies** [poems by Lowell]
Lowell, Robert L: 511
- Life-support system**
Space exploration (Meeting basic needs in space) So: 703
- Life vest**
Life jacket L: 281
- Life with Father** [book by Day]
Day, Clarence D: 52
- Life with Father** [play by Lindsay and Crouse]

- Lindsay, Howard L: 333
Life with Mother [book by Day]
 Day, Clarence D: 52
- Lifeline**
 Diving, Underwater picture on D: 246
Life's Highway [poems by Guest]
 Guest, Edgar Albert G: 421
- Lifesaving**
 Drowning (Methods of rescue) D: 349
 Trauma center T: 405
- Lifesaving Medal**
 Medals, decorations, and orders (table) M: 357
- Lifestyle** [sociology]
 Social class (Class differences) So: 551
- Liffey** [river, Ireland]
 Dublin (The city) D: 370-371 with picture
 Joyce, James J: 177
- Lift** [machine] L: 281
 Elevator E: 234
- Lift** [physics]
 Aerodynamics (Principles of aerodynamics)
 A: 85 with diagrams
 Airplane (Principles of flight) A: 220 with diagrams
 Airship (Lift) A: 250
 Bernoulli's principle B: 271
 Bird (In the air) B: 352 with pictures
 Helicopter (Lift) H: 171 with diagram
 Kite (How kites fly) K: 339 with diagram
- Lift-and-thrust aircraft**
 V/STOL V: 452
- Lift bridge**
 Bridge (Moveable bridges) B: 602 with diagram
- "Lift Every Voice and Sing"** [song by Johnson]
 Johnson, James Weldon J: 143
- Lift-fan aircraft**
 V/STOL V: 452
- Lift pump**
 Pump (Reciprocating pumps) P: 900 with diagrams
- Lifting**
 Cloud (How clouds form) Ci: 711 with pictures
- Lifting** [safety]
 Safety (Safety on the job) S: 13 with picture
- Liftoff**
 Rocket picture on R: 387
- Ligament** [anatomy] L: 281
 Heart (Outer lining and muscle) H: 133
 Human body (The skeletal system) H: 418 with picture
 Joint J: 155
 Knee K: 345
 Shell diagram on S: 385
 Skeleton (The human skeleton) S: 479
 Spine So: 792
 Sprain So: 805
- Ligan** [law]
 Flotsam, jetsam, and lagan F: 267
- Ligase** [enzyme]
 Genetic engineering (How genes are reintroduced into cells) G: 84a with diagram
- Ligature** [medicine] L: 281
- "Ligeia"** [story by Poe]
 Poe, Edgar Allan (Fiction and theory of fiction) P: 590
- Liger** [animal]
 Lion (Cubs) L: 341
- Liggett Group** [company]
 Smoking (Smoking regulations) S: 521
 Tobacco (History) T: 307-308
- Light** [physics] L: 282 with pictures
 Aberration A: 10
 Astronomy (The electromagnetic spectrum)
 A: 839; (Optical astronomy) A: 838
 Black hole B: 388
 Camera (How a camera works) C: 80 with diagrams
 Candle C: 175
 Chlorophyll C: 517
 Color (The relation between color and light)
 Ci: 817; (The roles of the eyes and brain)
 Ci: 818; (Characteristics of color) Ci: 824
 Diffraction D: 201
 Electronics (Electronics and light) E: 213
 Eye (Adaptation to light and dark) E: 464
 Fiber optics F: 88
 Fire (Light) F: 122
 Fluorescence F: 304
 Foucault, Jean Bernard Léon F: 429
 Gem (Index of refraction) G: 77
 Gravitation (Einstein's theory of relativity)
 G: 332
 Huygens, Christiaan H: 459
 Interference I: 323
 Interferometer I: 324
 Interior design (Elements of design) I: 327;
 (Pattern and texture) I: 328
 Laser L: 81 with pictures
 Leaf (Obtaining the raw materials) L: 155 with diagram
 Maxwell, James Clerk M: 319
 Metric system (Light) M: 440
 Newton, Sir Isaac (Light and color) N: 389
 Painting (Light and shade) P: 35
 Phosphorescence P: 402
 Photochemistry P: 404
 Photon P: 430
 Photoperiodism P: 430
 Photosynthesis P: 430
 Physics (Light) P: 437; (Newton) P: 439;
 (Developments in the 1800's) P: 440;
 (Quantum theory) P: 441
 Prism P: 805 with picture
 Quantum mechanics (Quanta of energy) Q: 6
 Rainbow R: 127 with pictures
 Raman, Sir Chandrasekhara Venkata R: 132
 Redshift R: 191
 Refraction R: 199
 Relativity (The Michelson-Morley experiment)
 R: 210; (Distortions in space-time) R: 212
 Sculpture (Form and treatment) S: 230-231
 Spectrometer So: 771
 Spectrum So: 772 with diagram
 Sun So: 974; (Energy output) So: 976
 Telescope T: 102
 Waves W: 150
 Zeeman effect Z: 592
 See also the list of Related Articles in the Light article
- Light, Electric** See Electric light in this index
- Light, Invisible** See Ultraviolet rays in this index
- Light, Polarized** See Polarized light in this index
- Light, Speed of**
 Light (The speed of light) L: 291
 Foucault, Jean Bernard Léon F: 429
 Physics (Einstein and relativity) P: 441
 Radiation (Electromagnetic radiation) R: 75
 Redshift R: 192
 Relativity (The Michelson-Morley experiment)
 R: 210; (Special relativity) R: 210; (General relativity) R: 211
 Star (Converting mass to energy) So: 846
 Sun So: 974
 Tachyon T: 4
- Light, William** [British surveyor]
 Adelaide A: 55
 Barossa Valley B: 117
- Light amplification by stimulated emission of radiation** [laser] See Laser in this index
- Light beer** [beverage]
 Beer B: 211
- Light bulb**
 Edison, Thomas Alva (The Wizard of Menlo Park) E: 78-79
 Electric light E: 174; (The bulb) E: 174; picture on E: 176
 Environmental pollution (Individual efforts)
 E: 338
 Glass (Soda-lime glass) G: 213; (Etching)
 G: 217; (table) G: 218
 Lighting (Quantity of light) L: 297; (Lighting problems) L: 297-298
- Light cue**
 Theater (Lighting methods) T: 240-241
- Light echo** [physics]
 Supernova picture on So: 994
- Light-emitting device**
 Electronics (Light-emitting devices) E: 213
- Light-emitting diode**
 Clock (Electric clocks) Ci: 683
 Computer (Monitors) Ci: 916
 Electric light (Other sources of electric light)
 E: 175
 Electronics (Light-emitting devices) E: 213
- Light flyweight** [boxing]
 Boxing (table) B: 530
- Light heavyweight** [boxing]
 Boxing (table) B: 530
- Light horse**
 Horse (Kinds of horses) H: 343; (Light horses)
 H: 343 with pictures
- Light-Horse Harry Lee**
 Lee, Henry L: 175 with picture
- Light hydrogen**
 Isotope (Separating isotopes) I: 476
- Light in August** [book by Faulkner]
 Faulkner, William F: 55
- Light in the Attic, A** [book by Silverstein]
 Silverstein, Shel S: 466
- Light infantry division**
 Infantry (Divisions) I: 265
- Light Lists** [book]
 Lighthouse (Identifying lighthouses) L: 294
- Light meter** [instrument] L: 293
 Camera (Automatic controls) C: 80-81
 Photography (Exposure meters) P: 418
- Light middleweight class**
 Boxing (table) B: 530
- Light oil** [by-product]
 Coal (Coal as a raw material) Ci: 720
- Light pen** [electronic device]
 Computer (A light pen) Ci: 915
- Light plane**
 Airplane (General aviation planes) A: 211 with picture; picture on A: 209
 Aviation (General aviation activities) A: 984 with picture
- Light Princess, The** [book by MacDonald]
 Brooke, Leonard Leslie B: 639
- Light rail transit**
 Streetcar So: 925
 Transit T: 374
 Transportation (Public transportation) T: 392-393; (Improvements in public transportation) T: 398
- Light rain**
 Rain (Characteristics of rain) R: 122-123
- Light-sensing device** [electronics] See Electric eye in this index
- Light show**
 Laser (Scanning) L: 82; picture on L: 81
- Light switch**
 Electric switch E: 189 with diagram
- Light That Failed, The** [book by Kipling]
 Kipling, Rudyard (Early literary success) K: 334
- Light truck**
 Truck (Kinds of trucks) T: 457; pictures on T: 459
- Light water reactor**
 Nuclear energy (Power reactors) N: 584-586; (Advanced fission reactors) N: 594
- Light welterweight class**
 Boxing (table) B: 530
- Light-year** L: 293
 Astronomy (Units of distance) A: 837
 Galaxy G: 8
 Planet (Planets in other solar systems) P: 512
 Star So: 840
 Sun So: 974
 Weights and measures (Miscellaneous weights and measures) W: 184
- Lighter** [boat]
 Barge B: 110
 Ship (LASH ships) S: 419 with picture
- Lighthouse** L: 294 with pictures
 Beacon B: 179
- Lighthouse of Alexandria** See Pharos of Alexandria in this index
- Lighthouse Route**
 Nova Scotia (Places to visit) N: 560
- Lighthouse Service, Federal** See Federal Lighthouse Service in this index
- Lighting** L: 296 with pictures
 Fluorescent lamp F: 305 with diagram
 Invention pictures on I: 356
 Lamp L: 52 with pictures
 Motion picture (Preparing to shoot) M: 852 with picture
 Opera (Rehearsing a production) O: 796
 Photography (Light) P: 412; (Direction) P: 413 with pictures; (Setting the exposure) P: 416; (Lighting equipment) P: 418
 Road (Lighting) R: 359
 Television (Putting a show on the air) T: 111
 Theater (Lighting and sound) T: 240 with pictures
- Lighting control board**
 Theater picture on T: 241
- Lighting designer**
 Theater (Lighting methods) T: 240
- Lighting fixture**
 Lighting (Lighting devices) L: 298; (Lighting problems) L: 297-298
- Lighting ratio**
 Photography (Intensity) P: 413
- Lightness**

- Color (Characteristics of color) Ci: 824
- Lightning** [sailing]
Sailing (Catboats and sloops) S: 24
- Lightning** [weather] L: 299 *with pictures*
Camping (Safety) C: 96
Electricity (Static electricity) E: 192; (Electrical dangers outdoors) E: 196; (Experiments with electric charge) E: 196-197; *picture on E: 190*
Life (Modern theories) L: 278-279 *with picture*
Ozone O: 894
Plasma P: 552
Thunder T: 272 *with diagrams*
- Lightning, Tampa Bay**
Hockey (table: National Hockey League) H: 281
- Lightning bug** See *Firefly in this index*
- Lightning rod** L: 302
Franklin, Benjamin (Experiments with electricity) F: 488
Lightning (Protection from lightning) L: 301
- "Light's Golden Jubilee"** [celebration]
Edison, Thomas Alva (Honors) E: 82
- Lightweight**
Boxing (table) B: 530
- Lignin** [botany] L: 302
Forest products (Lignin products) F: 402
Wood (The composition of wood) W: 390
- Lignite** [coal] L: 302
Coal (How coal was formed) Ci: 717; (Location of U.S. and Canadian reserves) Ci: 718 *with map*; (The uses of coal) Ci: 719
Greece (Mining) G: 361
North Dakota (Interesting facts) N: 497 *with picture*
- Lignum-vitae** [tree] L: 302
- LIGO** [instrument] See *Laser Interferometer Gravitational-Wave Observatory in this index*
- Ligon, Thomas Watkins** [American political leader]
Maryland (table) M: 255
- Liguest, Pierre Laclède** See *Laclède Liguest, Pierre in this index*
- Ligule** [botany]
Grass (The grass plant) G: 324
- Liguori, Saint Alphonsus** [Italian religious leader]
Alphonsus Liguori, Saint A: 384
- Ligurian Sea** [Mediterranean] L: 302
- Liholiho** [king of Hawaii]
Hawaii (The kingdom of Hawaii) H: 106
- Lij Iyasu** [emperor of Ethiopia]
Ethiopia (Menelik II) E: 371
- Like a Virgin** [recording]
Madonna M: 37
- Likud** [Israeli political party]
Israel (Politics) I: 479; (Unity government) I: 489
Netanyahu, Benjamin N: 137
Peres, Shimon P: 285
Shamir, Yitzhak S: 371
Sharon, Ariel S: 377
- "Li'l Abner"** [comic strip]
Capp, Al C: 197
- Lilac** [color]
Lilac L: 303
- Lilac** [shrub] L: 302 *with pictures*
Flower (Garden perennials) F: 281 *with picture*
Leaf *pictures on L: 152*
- Lilienblum, Moshe Leib** [Hebrew author]
Hebrew literature (Modern Hebrew literature) H: 162
- Lilienthal, David Eli** [American government official] L: 303
- Lilienthal, Otto** [German engineer]
Airplane (First human flights) A: 230 *with picture*
Glider (Early days) G: 230 *with picture*
- Lilies of the Field** [film]
Portier, Sidney P: 603
- Liliom** [play by Molnár]
Molnár, Ferenc M: 696
- Liliuokalani, Lydia Kamekaha** [queen of Hawaii] L: 303
Harrison, Benjamin (Foreign affairs) H: 73
Hawaii (The Republic of Hawaii) H: 108
- Liljeczona's Home** [book by Lagerlöf]
Lagerlöf, Selma L: 30
- Lillard, Joseph** [American religious leader]
Illinois (French and British control) I: 72
- Lille** [France] L: 303
- Lillay, George L.** [American political leader]
Connecticut (table) Ci: 967
- Lilli doll**
Doll (Modern dolls) D: 292
- Lillie, Beatrice** [British actress] L: 303 *with portrait*
- Lillington, Alexander** [American patriot]
North Carolina (Revolution and independence) N: 492
- Lilliput** [fictional place]
Gulliver's Travels G: 439
- Lilliputians** [fictional people]
Gulliver's Travels G: 439
Swift, Jonathan (*Gulliver's Travels*) So: 1040 *with picture*
- Lillo, Baldomero** [Chilean author]
Latin-American literature (Realism) L: 112
- Lillo, George** [British dramatist]
Drama (England) D: 334-335
- Lilly Endowment** [foundation] L: 303
Foundations (table) F: 430
- Lilongwa** [Malawi] L: 303
- Lily** [plant] L: 303 *with picture*
Cell *picture on C: 331*
Easter (Easter lilies) E: 44
Easter lily E: 45
Flower (Garden perennials) F: 280 *with picture*; F: 301 *with picture*; *picture on F: 271*
See also *the list of Related Articles in the Lily article*
- Lily, Water** [plant] See *Water lily in this index*
- Lily of the valley** [plant] L: 304 *with picture*
Flower *picture on F: 278*
- Lily tree**
Tree (Palm, pandanus, and lily trees) T: 415
- Lim Fiord**
Denmark (Land regions) D: 137-138
- Lima** [city, Peru] L: 304 *with picture*
City *picture on Ci: 574*
Peru P: 306 *with picture*; (Housing) P: 309-310 *with pictures*
- Lima, University of** (Peru)
San Marcos, University of S: 103
- Lima bean** L: 305
Bean (Kinds of beans) B: 181 *with picture*
- Limb** [zoology]
Animal (Adaptations for moving about) A: 488
Arm A: 717 *with diagram*
Leg L: 181 *with diagram*
Mammal (Skeleton) M: 118-119
Vertebrate V: 340
- Limb-girdle muscular dystrophy** [disease]
Muscular dystrophy (Faciocapulohumeral and limb-girdle muscular dystrophies) M: 937
- Limber pine**
Pine (Western pines) P: 469
- Limbic system**
Brain (In producing emotions) B: 555
- Limbo** [dance]
Trinidad and Tobago (People) T: 446
- Limbo** [religion] L: 306
- Limbourg, Herman de** [French artist]
Painting (Gothic painting) P: 50-51
- Limbourg, Jean de** [French artist]
Painting (Gothic painting) P: 50-51
- Limbourg, Pol de** [French painter] L: 306
Europe *picture on E: 411*
Middle Ages *picture on M: 522*
Painting (Gothic painting) P: 50-51
World, History of the *picture on W: 432*
- Limburger**
Cheese (Semisoft cheese) C: 392 *with picture*
- Limbus infantum** [religion]
Limbo L: 306
- Limbus patrum** [religion]
Limbo L: 306
- Lime** [chemical] L: 306
Acid rain A: 27
Calcination C: 20
Calcite C: 20
Water (Purifying and treating water) W: 126
- Lime** [fruit] L: 306 *with pictures*
Tree *picture on T: 426*
- Lime chloride** [chemical]
Antiseptic (History) A: 559
- Lime saltpeter**
Saltpeter S: 76a
- Lime soap deposit** [chemical]
Detergent and soap D: 164
- Lime-soda process**
Water softening W: 140
- Lime tree** See *Linden in this index*
- Lime Twig, The** [book by Hawkes]
American literature (Experimental styles) A: 424-425
- Limerick** [Ireland] L: 307
- Limerick** [poetry] L: 307
Poetry (table) P: 594
- Limerick, Treaty of** [1691]
Boyne, Battle of the B: 541
- Limes** [fortification]
Germany (Ancient times) G: 162
- Limestone** [rock] L: 307 *with pictures*
Building stone B: 685 *with picture*
Cave (How caves are formed) C: 319
Chalk C: 370
Coral (Stony corals) Ci: 1048
Coral reef Ci: 1048a
Earth *picture on E: 21*
Iron and steel (Raw materials) I: 440
Lake (How lakes are formed) L: 32
Marble (Properties) M: 192
Protozoan (Importance) P: 837
Rock (Organic sediments) R: 372 *with picture*; (table) R: 373 *with picture*
Slovenia (Land and climate) S: 511
Travertine T: 406
- Limewater**
Lime L: 307
- Limit** [investment]
Auction A: 881
- Limit** [mathematics]
Calculus (Limits) C: 23; (Finding areas) C: 24; (The definite integral) C: 24-25
Series (Working with infinite series) S: 317
- Limitation of armaments** See *Arms control in this index*
- Limitations, Statute of**
Debt (Time limits on collection of debts) D: 66
Statute of limitations So: 879
- Limited animation**
Animation (Animation in the mid-1900's) A: 514a
- Limited company** [economics] L: 308
- Limited jurisdiction** [law]
Court (Types of courts) Ci: 1101; (State courts) Ci: 1102
- Limited liability** [law]
Corporation Ci: 1070
- Limited monarchy**
Monarchy M: 700
- Limited partnership**
Partnership (Rights and responsibilities of partners) P: 188
- Limited payment policy**
Insurance (Main kinds of life insurance) I: 309-310
- Limited presidency**
President (Types of presidential government) P: 756b
- Limited Test Ban Treaty** [1963]
Arms control (History of arms control) A: 721-722
- Limited veto**
Veto V: 346
- Limited war**
Air force (Air forces in limited wars) A: 186
Cold War (The Korean War) Ci: 764
- Limmer** [artist]
Folk art (Painting) F: 316-317 *with picture*
- Limnology** [ecology] L: 308
Biology (table) B: 317
- Limoges** [France]
Porcelain (French porcelain) P: 677
- Limón, José** [American choreographer] L: 308
- Limón Bay**
Panama Canal (Entering the canal) P: 122 *with map*
- Limonite** [mineral] L: 308
Iron and steel (Kinds of iron ore) I: 438
- Limousin**
Cattle (Limousin) C: 309 *with picture*; (table) C: 312
- Limousine** [vehicle]
Automobile *picture on A: 969*
- Limp** [airship]
Blimp B: 400
- Limpet** L: 308 *with picture*
Animal *picture on A: 486*
Mollusk (Gastropods) M: 695
Shell (Gastropods) S: 385; *picture on S: 386*
- Limpopo River** [river, Africa] L: 308
South Africa (Rivers) So: 615 *with map*
- Lin, Maya Ling** [American architect]

- Vietnam Veterans Memorial V: 372
- Lin Biao** [Chinese political leader] L: 309 *with portrait*
- Lin Piao** [Chinese political leader] See **Lin Biao** *in this index*
- Lin Yutang** [Chinese author] L: 309
- Linberry** [fruit]
- Lingonberry L: 335 *with picture*
- Lincoln** [automobile]
- Automobile (Changes at the top) A: 966 *with picture; picture on A: 969*
- Lincoln** [city, England] L: 309
- Lincoln** [city, Nebraska] L: 309 *with picture*
- Lincoln, Abraham** [grandfather of]
- Lincoln, Abraham (Family background) L: 311
- Lincoln, Abraham** [U.S. President] L: 310 *with pictures and maps*
- Autograph *picture on A: 943*
- Battleground National Cemetery B: 172
- Booth, John Wilkes B: 480
- Buchanan, James (Prelude to war) B: 661
- Civil War (Developments in the political party system) Ci: 616; (Cavalry maneuvers) Ci: 632; *picture on Ci: 618*
- Congress of the United States (Growth and conflict) Ci: 948
- Douglas, Stephen Arnold D: 312
- Emancipation Proclamation E: 253; *picture on E: 254*
- Executive order E: 436
- Frémont, John Charles F: 511
- Gettysburg Address G: 176
- Hampton Roads Conference H: 37
- Howells, William Dean H: 402
- Illinois (Places to visit) I: 62
- Johnson, Andrew (Vice-President) J: 139 *with picture*
- Kentucky *picture on K: 292*
- Lincoln, Mary Todd L: 327
- Lincoln, Robert Todd L: 327
- Lincoln Memorial *picture on L: 328*
- McClellan, George Brinton M: 332
- Mount Rushmore National Memorial *picture on M: 887*
- President of the United States *picture on P: 764*
- Presidents' Day P: 771
- Reconstruction (Lincoln's plan) R: 177
- Republican Party *picture on R: 256*
- Rutledge, Ann R: 569
- Seymour, Horatio S: 341
- Springfield [Illinois] So: 807
- United States, History of the (The election of 1860) U: 174
- Whitman, Walt (His work) W: 294
- Lincoln, Benjamin** [American general]
- Revolutionary War in America (Savannah and Charleston) R: 283
- Lincoln, Edward Baker** [son of]
- Lincoln, Abraham (Lincoln's family) L: 315
- Lincoln, Enoch** [American political leader]
- Maine (table) M: 87
- Lincoln, Levi** [American political leader]
- Jefferson, Thomas (table) J: 83
- Justice, Department of (table) J: 203
- Massachusetts (table) M: 288
- Lincoln, Mary Todd** [wife of Abraham Lincoln]
- L: 327
- Civil War (How the states lined up) Ci: 617-618
- Lincoln, Abraham (Lincoln's family) L: 315; *picture on L: 316*; (Life in the White House) L: 322-323 *with picture*
- Lincoln, Mordecai** [American pioneer]
- Lincoln, Abraham (Family background) L: 311-312
- Lincoln, Nancy Hanks** [mother of]
- Lincoln, Abraham (Family background) L: 311-312
- Lincoln, Robert Todd** [American government official] L: 327 *with portrait*
- Garfield, James Abram (table) G: 42
- Lincoln, Abraham (Lincoln's family) L: 315; (Life in the White House) L: 322-323 *with picture*
- Lincoln, Samuel** [American pioneer]
- Lincoln, Abraham (Family background) L: 311-312
- Lincoln, Tad**
- Lincoln, Abraham (Lincoln's family) L: 315
- "Lincoln, the Men of the People" [poem by Markham]
- Markham, Edwin M: 214
- Lincoln, Thomas** [father of]
- Lincoln, Abraham (Family background) L: 311
- Lincoln, Thomas** [son of]
- Lincoln, Abraham (Lincoln's family) L: 315; (Life in the White House) L: 322-323 *with picture*
- Lincoln, William Wallace** [son of]
- Lincoln, Abraham (Lincoln's family) L: 315; (Life in the White House) L: 322-323 *with picture*
- Lincoln Boyhood National Memorial** [Indiana]
- Indiana (Places to visit) I: 206
- National Park System (table: National memorials) N: 54
- Lincoln Center for the Performing Arts** [New York City] L: 327
- New York City (The arts) N: 336 *with picture*
- Rockefeller, John Davison, III R: 383
- Lincoln County War** [1878]
- New Mexico (Territorial days) N: 275
- Western frontier life in America (Crime) W: 238
- Lincoln-Douglas debates** [U.S. history]
- Douglas, Stephen Arnold D: 312
- Lincoln, Abraham (The debates with Douglas) L: 317-318 *with pictures*
- Lincoln Highway** [road] L: 327
- Lincoln Home National Historic Site** [Illinois]
- National Park System (table: National historic sites) N: 52-53
- Springfield So: 807
- Lincoln Memorial** [Washington, D.C.] L: 328 *with pictures*
- National Park System (table: National memorials) N: 54
- Washington, D.C. (Lincoln Memorial) W: 73; *map on W: 76*
- Lincoln Park** [city, Michigan] L: 329
- Lincoln Park** [park, Illinois]
- Chicago (The North Side) C: 423-424
- Lincoln Park** [park, San Francisco]
- San Francisco (Residential districts) S: 93-94 *with map*
- Lincoln Park Zoo**
- Chicago *picture on C: 430*
- Lincoln sheep**
- Sheep (Long-wooled sheep) S: 382
- Lincoln Tunnel** [New York-New Jersey] L: 329
- Hudson River tunnels (The Lincoln Tunnel) H: 407
- Lincoln University** [Missouri]
- Jefferson City J: 88
- Lincoln University** [Pennsylvania] L: 329 *with picture*
- Lincoln's Birthday** L: 329
- Lincoln's Inn** [London]
- Inns of Court I: 276
- Lincoln's New Salem State Historic Site**
- Illinois (Places to visit) I: 62 *with picture*
- Lincoln's Tomb** [Springfield, Illinois]
- Lincoln, Abraham *picture on L: 326*
- Lind, James** [Scottish doctor]
- Vitamin (History) V: 432
- Lind, Jenny** [Swedish singer] L: 329 *with picture*
- Andersen, Hans Christian A: 451
- Sweden (Music) So: 1027
- Lind, John** [American political leader]
- Minnesota (table) M: 602
- Linda Hall Library**
- Kansas City [Missouri] (Education) K: 242
- Lindbergh, Anne Morrow** [American author]
- L: 329 *with picture*
- Lindbergh, Charles Augustus (Good-will ambassador) L: 330
- Lindbergh, Charles Augustus** [American aviator] L: 330 *with pictures*
- Airplane (Fliers of the golden age) A: 237
- Lindbergh, Anne Morrow L: 329
- Saint Louis (The 1900's) S: 49
- United States, History of the *picture on U: 186*
- Lindbergh, Charles Augustus, Jr.** [son of]
- Lindbergh, Charles Augustus (The Lindbergh kidnapping) L: 331
- Lindbergh, Charles Augustus, Sr.** [father of]
- Lindbergh, Charles Augustus (Early life) L: 330
- Lindbergh law** [U.S. history]
- Kidnapping K: 311
- Lindbergh, Charles Augustus (The Lindbergh kidnapping) L: 331
- Linde, Carl von** [German chemist]
- Liquid air (Making liquid air) L: 347
- Refrigeration (Mechanical refrigeration) R: 201
- Linde process**
- Liquid air (Making liquid air) L: 347
- Linden** [tree] L: 332 *with picture*
- Tree *pictures on T: 422*
- Linden looper moth**
- Moth *picture on M: 841*
- Lindenmann, Jean** [Swiss microbiologist]
- Interferon I: 324
- Lindenwald** [estate]
- Van Buren, Martin (Later years) V: 273
- Linderhof Palace**
- Ludwig II L: 515
- Lindley, Alfred D.** [American mountain climber]
- Mount McKinley M: 886
- Lindner, Richard** [American artist] L: 332 *with picture*
- Painting (Mass) P: 35
- Lindneux, Robert** [American painter]
- Indian, American *picture on I: 178b*
- Lindsay, Howard** [American dramatist] L: 333
- Lindsay, John Vliet** [American political leader]
- L: 333
- Lindsay, Robert Burns** [American political leader]
- Alabama (table) A: 274
- Lindsay, Vachel** [American poet] L: 333 *with portrait*
- American literature (Realist poetry) A: 421
- Lindsay plaid**
- Tartan *picture on T: 47*
- Lindsey, Washington E.** [American political leader]
- New Mexico (table) N: 272
- Lindstrand, Per** [British balloonist]
- Balloon (Long-distance balloon flights) B: 62
- Lindstrom, Fred** [American baseball player]
- Baseball (table: Hall of Fame) B: 135
- Line** [art]
- Painting (The elements of painting) P: 34-35
- Photography (Composition) P: 412 *with pictures*
- Sculpture (Form and treatment) S: 230
- Line** [fiber]
- Linen (Preparing the fibers) L: 334-335
- Line** [fishing]
- Fishing (Lines) F: 177
- Line** [mathematics]
- Geometry (Terms) G: 102; (Non-Euclidean geometry) G: 104
- Line** [military]
- Army (The rise of modern armies) A: 727
- Line** [palmistry]
- Palmistry P: 111 *with diagram*
- Line** [unit of measure]
- Weights and measures (table: Miscellaneous weights and measures) W: 184
- Line art**
- Printing (Preparing illustrations for reproduction) P: 797
- Line camp**
- Cowboy (On the ranch) C: 1110
- Line copy**
- Printing (Flat color printing) P: 802
- Line graph**
- Graph (Line graphs) G: 322 *with picture*
- Line-haul railroad**
- Railroad (Railroad systems) R: 112-113
- Line Islands** [islands, Pacific] L: 333
- Kiribati K: 335
- Line-item veto** [law]
- Congress of the U.S. (Continued struggle for power) Ci: 948
- Constitution of the United States (Article I, Section 7) Ci: 1006
- Veto (Line-item veto) V: 346; (Presidents' use of the veto) V: 347
- Line judge**
- Football (The officials) F: 362
- Line level** [tool]
- Level L: 217 *with picture*
- Line of Demarcation** [Latin-American history]
- L: 333 *with map*
- Brazil *map on B: 584*
- Latin America (European discovery and exploration) L: 104 *with map*
- Spain (The Spanish Empire) So: 747
- Line of longitude**
- Longitude L: 451
- Line of position**
- Navigation (Piloting) N: 71

- Line-of-sight** [physics]
Radio (table) R: 84; (Transmitting radio waves) R: 87 *with diagram*
- Line officer** [rank]
Navy, United States (Training an officer) N: 83
- Line-out** [sports]
Baseball (Outs by batters) B: 128-129
Rugby football (Rugby Union) R: 510-511; *picture on R: 512*
- Line reproduction** [printing]
Printing (Preparing illustrations for reproduction) P: 797
- Line rider**
Cowboy (On the ranch) Ci: 1110
- Line segment** [mathematics]
Geometry (Terms) G: 102; (Bisecting a line segment) G: 103 *with diagrams*
- Lineage** [ancestry]
See also *Genealogy in this index*
Family (Non-Western families) F: 24
- Linear accelerator** [machine]
Cancer (Radiation therapy) C: 172
Particle accelerator (How accelerators work) P: 184 *with diagram*
- Linear alkylbenzene sulfonate** [chemical]
Detergent and soap (The development of detergents) D: 165-166
- Linear B** [writing]
Ventrìs, Michael George Francis V: 309
- Linear bearing** [machine]
Bearing B: 188
- Linear electric motor** L: 334 *with diagrams*
Air cushion vehicle (History) A: 181
- Linear equation**
Algebra (Solving linear equations in two variables) A: 357
- Linear function**
Algebra (Functions) A: 356-357
- Linear induction motor**
Linear electric motor L: 334 *with diagram*
- Linear low density polyethylene**
Polyethylene P: 649
- Linear measure**
Weights and measures (table: Length and distance) W: 185
- Linear motion** [physics]
Machine *diagram on M: 13*
- Linear perspective** [art]
Brunelleschi, Filippo B: 652
Leonardo da Vinci (Paintings) L: 200b
Painting (The Renaissance) P: 51-52
Perspective P: 304 *with picture*
Renaissance (The fine arts) R: 235-236
- Linear plan** [aviation]
Airport (Terminal designs) A: 248 *with diagram*
- Linear rhythm** [art]
Sculpture (Indus Valley) S: 235-236 *with pictures*
- Linear scleroderma**
Scleroderma S: 209
- Linear synchronous motor**
Linear electric motor L: 334 *with diagram*
- Linebacker**
Football (The defensive team) F: 357 *with diagrams*
- Linecaster** [machine]
Linotype L: 338
Printing (Hot-metal typesetting) P: 797
- Linen** [fabric] L: 334 *with picture*
Clothing (Clothing materials) Ci: 704
Colonial life in America (Clothing) Ci: 799
Flax F: 230
Textile (Natural fibers) T: 212
- Liner** [ship] See *Ocean liner in this index*
- Liner service** [shipping]
Ship (Classification of cargo ships) S: 417
- Linesman**
Hockey (The officials) H: 279
Soccer (The officials) So: 545 *with diagram*
- Lineup**
Baseball (The game) B: 128
- Linezolid** [drug]
Antibiotic (History) A: 552-553
- Ling** [plant]
Heath H: 157
- Ling-Ling** [panda]
Panda (Protecting pandas) P: 129
- Lingberry** [fruit]
Lingonberry L: 335 *with picture*
- Lingonberry** [fruit]
Lingonberry L: 335 *with picture*
- Lingerie**
Clothing (The 1900's) Ci: 703
- Lingonberry** [fruit] L: 335 *with pictures*
- Lingua franca** [language]
Papua New Guinea (People) P: 140
- Lingual tonsil**
Tonsil T: 330 *with diagram*
- Linguistic analysis** [philosophy]
Philosophy (Modern philosophy) P: 387-390
- Linguistic anthropology**
Anthropology (Linguistic anthropology) A: 547
Sapir, Edward S: 121
- Linguistic competence**
Linguistics (Descriptive linguistics) L: 335-336
- Linguistic Society of America**
Bloomfield, Leonard B: 418
- Linguistic typology**
Linguistics (Comparative and historical linguistics) L: 336
- Linguistics** [language] L: 335
Anthropology (Linguistic anthropology) A: 547
Communication (The study of communication) Ci: 887
Language (The science of language) L: 66
Philosophy (The philosophy of language) P: 385
- Lingvo Internacia** [book by Zamenhof]
Esperanto E: 358
- Liniment** [medication] L: 337
- Lining**
Sewing (Linings) S: 333
- Lining paper**
Paperwork (Lining papers) P: 138
- Link**
Chain C: 369
- Link** [computing] See *Hyperlink in this index*
- Link, Arthur A.** [American political leader]
North Dakota (table) N: 513
- Link, Edwin Albert** [American inventor] L: 337
- Link cent** [money]
Cent pictures on C: 350
- Link trainer** [machine]
Link, Edwin Albert L: 337
- Linkage** [international relations]
Cold War (The Cold War after 1980) Ci: 770
- Linked genes** [genetics]
Heredity (Sex-linked genes) H: 202
- Linking verb** [grammar]
Verb (Linking, or copulative, verbs) V: 315
- Linn** [tree] See *Linden in this index*
- Linnaea** [plant]
Twinflower T: 531
- Linnaeus, Carolus** [Swedish botanist] L: 337 *with portrait*
Biology (The origins of scientific classification) B: 318 *with picture*
Bird-of-paradise B: 373
Botany (The development of modern botany) B: 509
Classification, Scientific (Development of classification) Ci: 656
Museum (Museums of the 1700's) M: 939
Science (The Age of Reason) S: 199; *picture on S: 200*
Twinflower T: 531
Zoology (History) Z: 610-611
- Linné, Carl von** See *Linnaeus, Carolus in this index*
- Linnet** [bird] L: 338 *with picture*
- Linoleum** L: 338
Cork (Uses) Ci: 1055
- Linoleum-block printing**
Block printing B: 405 *with pictures*
- Linotype** [machine] L: 338 *with pictures*
Book (The 1800's) B: 467
Communication *picture on Ci: 884*
Mergenthaler, Ottmar M: 417
Printing (Hot-metal typesetting) P: 797
Type (History) T: 537
- Linseed oil** L: 339
Flax F: 230
Linoleum L: 338
Oil (Fixed oils) O: 707
- Linsey-woolsey** [fabric] L: 339
Colonial life in America (Clothing) Ci: 799
Pioneer life in America (Clothing) P: 482
- Lint** [fiber]
Cotton (Uses of cotton) Ci: 1086
- Lintel** [construction]
Building construction (Beams, girders, and columns) B: 682-683
House *diagram on H: 383*
- Linters**
Cotton (Uses of cotton) Ci: 1086
Textile (Manufactured fibers) T: 213
- Linton, Ralph** [American anthropologist] L: 339
- Linus, Saint** [popel]
Pope (table) P: 666
- Lion** [animal] L: 340 *with pictures and map*
Animal (Teeth and jaws) A: 491 *with picture; pictures on A: 472, A: 477*
Circus *picture on Ci: 562a*
Mammal *pictures on M: 124, M: 127*
- Lion** [astrology]
Leo L: 197
- Lion Country Safari** [West Palm Beach]
Florida (Places to visit) F: 252
- Lion Fighting a Bull** [sculpture]
Sculpture (Kinds of sculpture) S: 230; (Middle Eastern) S: 233 *with picture*
- Lion King, The** [musical]
Musical comedy (During the late 1900's) M: 960-961 *with picture*
- Lion of Lucerne** [sculpture]
Lucerne L: 514
Swiss Guard So: 1049
- Lion of the Punjab** [name for]
Ranjit Singh R: 139
- Lion tamarin** [animal]
Tamarin T: 22 *with picture*
- Lion taming**
Lion (Training lions) L: 343
- Lioness**
Lion (The body of a lion) L: 340 *with picture*
- Lionfish**
Fish *picture on F: 144*
- Lionhead** [fish]
Goldfish *picture on G: 258*
- Lions, British Columbia** See *British Columbia Lions in this index*
- Lions, Detroit** See *Detroit Lions in this index*
- Lions Clubs International** L: 344 *with picture*
- Lions Gate Bridge**
Vancouver (Transportation) V: 276
- Lions International**
Lions Clubs International L: 344 *with picture*
- Lip** [anatomy]
Mouth M: 902 *with diagram*
Races, Human (Alternatives to racial classification) R: 55
- Lip** [zoology]
Shell *diagram on S: 385*
- Lip reading** L: 344
Audiology A: 882
Deafness (Special language techniques) D: 58
- Lipase** [enzyme]
Digestive system (In the small intestine) D: 203
Enzyme E: 340 *with diagram*
Stomach (The stomach's work) So: 907
- Lipchitz, Jacques** [American sculptor] L: 344 *with picture*
Sculpture (Cubism and futurism) S: 257
- Lipica** [Slovenia]
Slovenia S: 510
- Lipid** [nutrition] L: 344
Cell (Inside a living cell) C: 328
Cholesterol C: 520
Ester E: 360
Fat substitute F: 53
Human body (Chemical elements and molecules) H: 417; (Cells and tissues) H: 417-418
Life (Lipids) L: 278; *diagram on L: 277*
Oil O: 707
- Lipizzaner** [horse]
Horse (Saddle horses) H: 343-345 *with picture*
Slovenia S: 510
- Lipmann, Fritz Albert** [American biochemist] L: 345
Nobel Prizes (Physiology or medicine: 1953) N: 444
- Lipoma** [disorder]
Skin (Tumors) S: 491
Tumor T: 484
- Lipoprotein** [biochemistry]
Cholesterol C: 520
Physical fitness (Cholesterol levels) P: 434
- Liposuction** [operation]
Plastic surgery (Methods of plastic surgery) P: 553
- Lippershey, Hans** [Dutch optician]
Telescope T: 102
- Lippi, Filippino** [Italian painter] L: 345
- Lippi, Filippo** [Italian painter] L: 345 *with picture*

Lippitt, Charles W. [American political leader]
Rhode Island (table) R: 311

Lippitt, Henry [American political leader]
Rhode Island (table) R: 311

Lippizener [horse] *See* Lippizener in this index

Lippmann, Gabriel [French physicist]
Nobel Prizes (Physics: 1908) N: 440

Lippmann, Walter [American journalist] L: 345

Lippold, Richard [American sculptor] L: 346

Lipschütz, Samuel [American chess player]
Chess (United States chess champions)
C: 414

Lipscomb, William Nunn, Jr. [American
chemist]
Nobel Prizes (Chemistry: 1976) N: 443

Lipstick
Cosmetics (Kinds of cosmetics) Ci: 1075

Lipton, Sir Thomas Johnstone [British busi-
nessman] L: 346

Liquefaction [geology]
Earthquake (Ground shaking) E: 35

Liquefaction [industrial process]

Coal (Coal research) Ci: 730-731

Gas [fuel] (Storing gas) G: 56

Synthetic fuel So: 1068

Liquefied gas extinguisher

Fire extinguisher (Liquefied gas extinguishers)
F: 130

Liquefied natural gas

Fuel (Natural gas) F: 551

Liquefied natural gas carrier [ship]

Tanker (Kinds of tankers) T: 28

Liquefied petroleum gas [fuel]

Butane and propane B: 728

Fuel (Natural gas) F: 551

Heating (Gas) H: 160

Petroleum (Petroleum as a fuel) P: 332

Liqueur

Alcoholic beverage (Liqueurs) A: 336

Liquid L: 346

Boiling point B: 439

Cohesion Ci: 756

Gas [physics] G: 48

Hydraulics H: 463

Liquid crystal L: 347

Matter (States of matter) M: 311

Melting point M: 389

Molecule (Molecules and matter) M: 693

Solution (Liquid solutions) So: 587

Superfluid So: 993

Liquid air L: 346 with diagram

Nitrogen (Uses of nitrogen) N: 425

Liquid asset

Bank (Bank services) B: 88

Liquid-CFC freezing

Food, Frozen (Commercial methods of quick-
freezing) F: 338

Liquid column chromatography

Chromatography (Liquid column chromatogra-
phy) C: 537

Liquid-cooled engine

Gasoline engine (Cooling) G: 64

Liquid crystal L: 347 with pictures

Electronics (Electronics today) E: 216-217

Liquid crystal display [electronics]

Audio-visual materials (Projectors) A: 882

Clock (Electric clocks) Ci: 683

Computer (Monitors) Ci: 916

Electronics (Liquid crystal displays) E: 213;

(Electronics today) E: 216-217

Television (Flat-panel, large-screen television)
T: 128

Thermometer (Liquid crystal thermometers)
T: 255 with picture

Watch (Electronic watches) W: 114-115

Liquid-crystal polymer [plastic]

Plastics (Recent developments) P: 560

Liquid fertilizer

Fertilizer (Production and sale) F: 80

Liquid fuel

Fuel (Liquid fuels) F: 550

Liquid gas

Gas [physics] (How gases behave) G: 48,
(History) G: 49

Liquid helium

Helium (Properties) H: 176

Liquid hydrogen

Cryogenics Ci: 1165

Liquid measure

Weights and measures (table: Volume and
capacity) W: 186

Liquid natural gas

Gas [fuel] (Storing gas) G: 56

Liquid nitrogen

Nitrogen (Uses of nitrogen) N: 425

Liquid oxygen

Liquid air L: 346

Oxygen (Chemical properties) O: 889, (Other
uses of oxygen) O: 889

Space exploration (Getting into space and
back) So: 698

Liquid propellant [fuel]

Guided missile (The engine) G: 424 with dia-
gram

Rocket (Liquid-propellant rockets) R: 388 with
diagram

Space exploration (Getting into space and
back) So: 698

Liquid thermometer

Thermometer (Thermal expansion thermome-
ters) T: 254 with diagram

Liquid waste

Energy supply (Solid and liquid wastes) E: 279

Waste disposal W: 112

Liquidating foundation

Foundations (How foundations are organized)
F: 429-430

Liquidation [economics]

Bankruptcy (In the United States) B: 97

Stock, Capital (Kinds of stock) So: 903

Liquidity [economics]

Investment (Direct investments) I: 367

Liquor *See* Alcoholic beverage in this index

Liquor laws

Local option L: 409

Prohibition P: 814

Lira [money] L: 348

Liripipe

Clothing (The Middle Ages) Ci: 698-699

Lisa, Manuel [Spanish-American trader]

Nebraska (American exploration and settle-
ment) N: 111

Lisboa *See* Lisbon in this index

Lisboa, Antônio Francisco [Brazilian sculptor]

Brazil (The arts) B: 576 with picture

Latin America (Sculpture) L: 102

Lisbon [Portugal] L: 348 with picture

Portugal (Population and ancestry) P: 687; pic-
ture on P: 689

Lisbon Disaster, The [poem by Voltaire]

Voltaire (Later years) V: 446-447

Lisbon Traviata, The [play by McNally]

McNally, Terrence M: 344

Lisbon University

Portugal (Education) P: 689

Lisgar, Baron [British statesman] L: 349

Lisner, Arthur [Canadian painter]

Group of Seven G: 402

Lisping [speech] L: 349

Lissouba, Pascal [Congolese political leader]

Congo (Brazzaville) (History) Ci: 939-940

List

Knights and knighthood (Tournaments) K: 350

List, Robert [American political leader]

Nevada (table) N: 173

List price

Discount (Trade discount) D: 224

List system [political science]

Proportional representation (The List System)
P: 828

Listed stock [economics]

Stock exchange (Listing stocks) So: 903

Lister, Ernest [American political leader]

Washington (table) W: 65

Lister, Sir Joseph [British doctor] L: 349

Antiseptic (History) A: 559

Ligature L: 281

Medicine (Antiseptic surgery) M: 375

Sterilization So: 894

Listeria [bacterial] L: 349

Listeriosis [disease]

Listeria L: 349

Liston, Sonny [American boxer]

Boxing (Recent developments) B: 535

Liszt, Franz [Hungarian composer] L: 349

Litani River

Lebanon (Land and climate) L: 172

Litchfield Law School

Connecticut (Schools) Ci: 956

Litchi [tree] L: 350 with picture

Litchi nut

Litchi L: 350

Liter [unit of measure] L: 350

Metric system (Non-SI metric units) M: 440;

(The metric system at a glance) M: 438
with picture

Weights and measures (table: Volume and
capacity) W: 186

Literacy [education] L: 350

See also Illiteracy in this index

Africa (Education) A: 109; (Education) A: 115

Education (Education around the world) E: 94;
(How can performance be improved?)

E: 105-106

Latin America (Education) L: 100

Reading (The importance of reading) R: 155-

156; (Developing good readers) R: 159-

160; (Reading and society) R: 162

See also the Education sections of specific
country articles, such as Argentina
(Education)

Literacy test

Voting (Restrictions on voting) V: 450

Literacy U.S., Project

Literacy (Illiteracy in the United States) L: 351-
352

Literacy Volunteers of America

Literacy (Illiteracy in the United States) L: 351-
352

Literary agent

Publishing (Acquiring the manuscript) P: 868

Writing (Free-lance markets) W: 511

Literary award

Caldecott Medal C: 26

Literature for children (Awards) L: 366

Newbery Medal N: 358

Pulitzer Prizes (Prizes in literature, drama, and
music) P: 888

Regina Medal R: 206

Literary biography

Biography (Forms of biography) B: 312

Literary character

Literature (Characters) L: 353

Literary Chinese [language]

Chinese language (Development) C: 511

Literary Club [British history]

Club Ci: 714

Johnson, Samuel J: 153

Literary criticism

Criticism Ci: 1146

French literature (Realism) F: 521-522

Greek literature (Philosophical literature)
G: 378

Literature (Judging literature) L: 352-353

Literary Digest [magazine]

Public opinion poll (History) P: 863

Literary Revolution [Chinese history]

Chinese language (Development) C: 511

Literature L: 352 with pictures

Copyright (Works protected) Ci: 1046

Criticism Ci: 1146

Impressionism (Music, literature, and sculp-
ture) I: 95

See also the list of Related articles in the
Literature article and the Arts or Literature
sections of specific country articles, such
as Denmark (Arts)

Literature for children L: 354 with pictures

Caldecott Medal C: 26

Newbery Medal N: 358

Regina Medal R: 206

Writing (Literature for children) W: 512

See also the list of Related articles in the
Literature for children article

Litharge [chemical] L: 386

Lithification [geology]

Rock (Clastic sediments) R: 372

Lithium [element] L: 386

Nuclear weapon (Thermonuclear weapons)
N: 597

Lithium battery [electricity]

Battery (Primary batteries) B: 168-169

Lithium carbonate [chemical]

Depression D: 151

Mental illness (Somatic therapy) M: 407

Lithium hydroxide [chemical]

Space exploration (Breathing) So: 703

Lithium-ion battery [electricity]

Battery (Secondary batteries) B: 170-171

Lithography [printing] L: 387 with pictures

Graphic arts G: 322

Magazine (Editing and assembling an issue)
M: 43

Offset O: 678

Photoengraving and photolithography picture
on P: 406

- Printing (Offset lithography) **P**: 798 *with picture*, (Printing in color) **P**: 801
- United States, History of the (Cultural change) **U**: 169
- Lithophile element**
Geochemistry **G**: 91
- Lithopone** [chemical]
Barium **B**: 110
- Lithosphere** [geology]
Earth (Earth's spheres) **E**: 18-20 *with picture*
Earthquake (Where and why earthquakes occur) **E**: 36
Geophysics **G**: 106
Mantle **M**: 168
Plate tectonics (Structure of tectonic plates) **P**: 561-562
- Lithotripter** [medical device]
Gallbladder **G**: 15
Kidney stone **K**: 313
Ultrasound (Ultrasound devices) **U**: 16
- Lithuania** [country] **L**: 388 *with pictures and map*
Belarus (History) **B**: 224b-224c
Flag *picture on F*: 206
Ukraine (Lithuanian and Polish rule) **U**: 12
Union of Soviet Socialist Republics (World War II) **U**: 37, (Threats to unity) **U**: 40-41
Vilnius **V**: 385
World War II (The invasion of the Soviet Union) **W**: 477
- Litmus** [chemistry] **L**: 391
Lichen (The importance of lichens) **L**: 269
- Litoral, National University of the**
Santa Fe **S**: 114
- Litre** *See Liter in this index*
- Litter**
Oregon (Interesting facts) **O**: 827
- Litter** [reproduction]
Dog (The life of a dog) **D**: 266
- Litter** [soil]
Forestry (Water) **F**: 406
- Litter box**
Cat (Training) **C**: 294 *with picture*
Pet (House training) **P**: 321
- Little, John Sebastian** [American political leader]
Arkansas (table) **A**: 712
- Little, Malcolm** [American social reformer] *See Malcolm X in this index*
- Little Abaco Island**
Bahamas (Land and climate) **B**: 29 *with map*
- Little America** [region, Antarctica]
Byrd, Richard Evelyn **B**: 746
Exploration (The exploration of Antarctica) **E**: 450
Ross Dependency **R**: 484
- Little Bear** [constellation]
Big and Little Dippers (The Little Dipper) **B**: 296
- Little Belt Mountains**
Montana (Land regions) **M**: 752
- Little Bighorn, Battle of** [1876]
Custer, George Armstrong **Ci**: 1200
Crazy Horse **Ci**: 1123
Gall **G**: 13
Indian wars (The Sioux wars) **I**: 194
Little Bighorn Battlefield National Monument **L**: 391
Montana (Indian fighting) **M**: 758 *with picture*
Reno, Marcus Albert **R**: 240
Sitting Bull **S**: 477
- Little Bighorn Battlefield National Monument** [Montana] **L**: 391
Montana (Places to visit) **M**: 750
National Park System (table: National monuments) **N**: 51
- Little Bookroom, The** [book by Farjeon]
Farjeon, Eleanor **F**: 28
- "Little Boy Blue"** [poem by Field]
Field, Eugene **F**: 92
- Little Brewster Island** [Boston]
Lighthouse (History) **L**: 295
- Little Caucasus Mountains** [mountains, Asia]
Azerbaijan (Land and climate) **A**: 997 *with map*
Georgia (Land and climate) **G**: 110 *with map*
- Little Cayman Island** [Caribbean]
Cayman Islands **C**: 323
- Little chief hare** [animal]
Pika **P**: 461 *with picture*
- Little Clay Cart, The** [play by Kalidasa]
Drama (India) **D**: 336
- Little Corporal**
Napoleon **I** **N**: 15
- Little Crow** [American Indian chief]
Indian wars (The Sioux wars) **I**: 194
- Little Diomed Island**
Alaska (Coastline) **A**: 294
- Little Dipper** [constellation]
Big and Little Dippers (The Little Dipper) **B**: 296
- Little Dorrit** [book by Dickens]
Dickens, Charles (Dickens' life) **D**: 187; (The second phase) **D**: 188
- Little Eva** [literary figure]
Uncle Tom's Cabin **U**: 20
- "Little Exercise"** [poem by Bishop]
Poetry (Imagery) **P**: 595
- Little Eyolf** [play by Ibsen]
Ibsen, Henrik (His plays) **I**: 4
- Little Fellow, The** [film role]
Chaplin, Charlie **C**: 376 *with picture*
- Little Foxes, The** [play by Hellman]
Hellman, Lillian **H**: 178
Blitzstein, Marc **B**: 404
- Little Friend, Little Friend** [book by Jarrell]
Jarrell, Randall **J**: 64
- Little Giant** [nickname]
Douglas, Stephen Arnold **D**: 312
- "Little Gidding"** [poem by Eliot]
Eliot, T. S. (His works) **E**: 237-238
- Little Girls' Christian Association**
Y-Teens **Y**: 548
- Little Havana** [Miami]
Hispanic Americans (Cuban immigration) **H**: 253-254
- Little House in the Big Woods** [book by Wilder]
Wilder, Laura Ingalls **W**: 302
- Little Hunting Creek Plantation**
Mount Vernon (The buildings) **M**: 888
- Little Ice Age** [climatology]
Climate (Activity on the sun's surface) **Ci**: 676d-677
- Little Island, The** [book by MacDonald]
Weisgard, Leonard **W**: 188
- Little Italy** [district]
New York City (Manhattan) **N**: 323-324
- Little League Baseball** **L**: 391
Baseball (Amateur leagues) **B**: 131
- Little League Baseball Series**
Little League Baseball **L**: 391
- Little Learning, A** [book by Waugh]
Waugh, Evelyn **W**: 149
- Little Lord Fauntleroy** [book by Burnett]
Burnett, Frances Hodgson **B**: 708
- Little Manitou Lake** [Saskatchewan]
Saskatchewan (Interesting facts) **S**: 129
- Little Master** [book by Natsume Soseki]
Natsume Soseki **N**: 63
- Little Mermaid, The** [sculpture]
Copenhagen (The city) **Ci**: 1038-1039
- Little metalmark** [insect]
Butterfly *picture on B*: 735
- Little Minister, The** [book by Barrie]
Barrie, J. M. **B**: 118
- Little Missouri River**
Theodore Roosevelt National Park **T**: 252
- Little Nell** [literary figure]
Dickens, Charles (The first phase) **D**: 188
- Little Nemo** [film]
Animation (Pioneers of American animation) **A**: 514
- "Little Nemo in Slumberland"** [comic strip]
Comics (Comic strips) **Ci**: 869
- Little penguin**
Penguin (The body of a penguin) **P**: 238
- Little Pretty Pocket-Book, A** [book]
Literature for children (The 1700's) **L**: 361
- Little Prince, The** [book by Saint-Exupéry]
Saint-Exupéry, Antoine de **S**: 33
- "Little Red Riding Hood"** [story]
Grimm's Fairy Tales **G**: 394
- Little Richard** [American singer]
Rock music (The emergence of rock 'n' roll) **R**: 377; (Artistic decline) **R**: 378
- Little River** [Alabama]
Alabama (Interesting facts) **A**: 257
- Little River Canyon National Preserve** [Alabama]
National Park System (table: National preserves) **N**: 58
- Little Rock** [Arkansas] **L**: 391
Arkansas **A**: 694; (Average monthly weather) **A**: 708; (Statehood and the Civil War) **A**: 714, *picture on A*: 695
- Eisenhower, Dwight David (Civil rights) **E**: 153-154
- Little Rock Central High School**
Eisenhower, Dwight David (Civil rights) **E**: 147-148
- Little Rock Central High School National Historic Site**
National Park System (table: National historic sites) **N**: 52-53
- Little Rocky Mountains**
Montana (Land regions) **M**: 752
- Little Sahara State Park** [Oklahoma]
Oklahoma *picture on O*: 723
- Little Saint Bernard Pass** [Switzerland]
Saint Bernard Passes (Little St. Bernard) **S**: 32
- Little Sisters of the Poor** [religious group]
L: 392
- Little skate** [fish]
Skate **S**: 479
- Little skipper** *See Schipperke in this index*
- Little Sure Shot** [nickname]
Oakley, Annie **O**: 638
- Little Traverse Bay** [bay, Michigan]
Lake Michigan (Surface features) **L**: 41
- Little Turtle** [American Indian chief] **L**: 392
Miami Indians **M**: 482
Ohio (Exploration and settlement) **O**: 700
- Little White Bird, The** [book by Barrie]
Peter Pan **P**: 325
- Little White House** [Warm Springs]
Georgia (Visitor's guide) **G**: 122 *with picture*
- Little Women** [book by Alcott]
Alcott, Louisa May **A**: 338
American literature (The sentimental novel) **A**: 415-418
Literature for children (Masterpieces of fiction) **L**: 362
- Littlefield, Alfred H.** [American political leader]
Rhode Island (table) **R**: 311
- Littlepage Manuscripts, The** [books by Cooper]
Cooper, James Fenimore **Ci**: 1035
- Liturgical drama**
Drama (Liturgical drama) **D**: 328
- Liturgy** [religion] **L**: 392
Protestantism (Worship and liturgy) **P**: 834
Roman Catholic Church (Worship) **R**: 404
Sculpture (Early medieval sculpture) **S**: 248-249
- Liu Bang** [emperor of China] **L**: 393
Han dynasty **H**: 38
- Liu Hui** [Chinese mathematician]
Mathematics (Chinese mathematics) **M**: 306
- Liu Pang** [emperor of China] *See Liu Bang in this index*
- Live Aid** [concert]
Rock music (Rock and society) **R**: 380
- Live-bearer** [zoology]
Aquarium, Home (Choosing fish and plants) **A**: 578a
Molly **M**: 696
Tropical fish **T**: 451
- Live donation** [surgery]
Organ donation **O**: 852
- Live-forever** [botany]
Houseleek **H**: 389 *with picture*
Sedum **S**: 280
- Live oak** **L**: 393 *with picture*
Oak (Red oaks) **O**: 635-636; (Other oaks) **O**: 636
Tree *pictures on T*: 423
- Live or Die** [poems by Sexton]
Sexton, Anne **S**: 337
- Live sound**
Radio (From sound waves to electric waves) **R**: 86
- Liver** [anatomy] **L**: 393 *with diagram*
Alcoholism (Effects of alcoholism) **A**: 337
Bile **B**: 300
Blood (Transporting nutrients and wastes) **B**: 408-410 *with diagram*; (Destruction of worn-out blood components) **B**: 411
Cancer *pictures on C*: 173
Cell (Death of a cell) **C**: 332
Circulatory system (In nutrition) **Ci**: 560
Cirrhosis **Ci**: 566
Frog *picture on F*: 537
Gallbladder **G**: 14 *with diagram*
Gland (table) **G**: 209
Hepatitis **H**: 192
Human body (The small intestine and large intestine) **H**: 420, *diagram on H*: 422
Laparoscopy **L**: 72 *with picture*

- Organ donation O: 853
Transplant (Organ transplants) T: 379
- Liver** [food]
Iron (How bodies use iron) I: 435
- Liver spots** See Age spots in *this index*
- Liverleaf** [plant]
Hepatica H: 192
- Liverpool** [city, England] L: 395 *with picture*
- Liverpool, Earl of** [British political leader]
United Kingdom (table: British prime ministers) U: 72
- Liverpool and Manchester Railway**
Railroad (Invention of the locomotive) R: 115
Stephenson, George So: 891
- Liverwort** [plant] L: 395 *with picture*
Bryophyte B: 656
Hepatica H: 192
Plant (Bryophytes) P: 522 *with pictures*; (Classification of plants) P: 546 *with picture*
- Lives of Famous Men** [book by Petrarch]
Biography (The Middle Ages) B: 313
- Lives of Girls and Women** [book by Munro]
Munro, Alice M: 928
- Lives of the Caesars** [book by Suetonius]
Biography (Early biographies) B: 312-313
Suetonius So: 957
- Lives of the English Poets, The** [book by Johnson]
Biography (The 1700's) B: 313
English literature (Samuel Johnson) E: 319
Johnson, Samuel (Later years) J: 153
- Lives of the Most Eminent Painters, Sculptors, and Architects** [book by Vasari]
Biography (The Renaissance) B: 313
- Livesay, Dorothy** [Canadian poet]
Canadian literature (Literature between the world wars) C: 159
- Livestock** [agriculture] L: 396 *with pictures*
Agriculture (Chief agricultural products) A: 147;
(Improved crop-growing methods) A: 157
Brucellosis B: 648
Farm and farming (Basic principles of livestock production) F: 39 *with pictures*
Grain (Uses) G: 301
Meat packing (Marketing of livestock) M: 350
- Living Bible Paraphrased, The** [book]
Bible (Modern English translations) B: 286-287
- Living Buddha** [king of Mongolia]
Mongolia (History) M: 723
- Living Desert, The** [film]
Disney, Walt (Full-length movies) D: 236-237 *with picture*
- Living Free** [book by Adamson]
Adamson, Joy A: 45
- Living History Farms**
Iowa (Places to visit) I: 384 *with picture*
- Living history museum**
Museum (History museums) M: 938
- Living room**
Interior design picture on I: 326
- Living Sea, The** [book by Cousteau]
Cousteau, Jacques-Yves Ci: 1106
- Living standard** See Standard of living in *this index*
- Living Theater** [organization]
Drama (Experimental theater) D: 340
- Living things** See Life in *this index*
- Living trust** [economics]
Trust fund (Kinds of trusts) T: 474
- Living will** [law] L: 398
Death (The right to die) D: 61
Euthanasia (Active and passive euthanasia) E: 421
- Livingston, Edward** [American government official]
Jackson, Andrew (table) J: 11
State, Department of (table) So: 860
- Livingston, H. Brockholst** [American jurist]
Supreme Court of the United States (table) So: 1000
- Livingston, Henry** [American land surveyor]
Santa Claus (Santa's appearance) S: 114
- Livingston, Philip** [American patriot] L: 399
- Livingston, Robert R.** [American political leader] L: 399
Declaration of Independence picture on D: 77
Jefferson, Thomas (The Louisiana Purchase) J: 85
Louisiana Purchase (Trouble begins) L: 502
State, Department of (Establishment) So: 860
Washington, George (Inauguration Day) W: 101
- Livingston, William** [American political leader] L: 399
New Jersey (table) N: 249
- Livingstone, David** [British explorer]
Stanley and Livingstone So: 837 *with picture and map*
Exploration (The exploration of Africa) E: 449 *with picture and map*
Malawi (History) M: 98
Missionary (History) M: 621
Victoria Falls V: 358
Zambia (History) Z: 589
- Livonia** [region]
Latvia (History) L: 119
- Livy** [Roman historian] L: 399
History (The ancient Greeks and Romans) H: 261-262
Latin literature (The Augustan Age) L: 116
- Liza** [fish]
Mullet M: 915
- Lizard** [reptile] L: 399 *with pictures*
Animal picture on A: 492
Brain diagram on B: 559
Dinosaur (How dinosaurs lived) D: 211
Iguana I: 50
Reptile (Lizards, amphisbaenians, and snakes) R: 250 *with pictures*
Skeleton diagram on S: 481
Skink S: 494
See also the list of Related Articles in the Lizard article
- Lizard Mounds** [Wisconsin]
Mound builders (Other mound builders) M: 883
- Lizardite** [mineral]
Serpentine S: 318
- Ljubljana** [Slovenia] L: 401
Slovenia S: 510
- Llama** [animal] L: 401 *with picture*
Alpaca A: 381
Bolivia picture on B: 442
Peru picture on P: 306
- Llanero**
Venezuela (The Llanos) V: 302 *with picture*
- Llanfairpwllgwyngyll** [Wales] L: 402
- Llano Estacado** [region, New Mexico-Texas]
New Mexico (Land regions) N: 266
Texas (Land regions) T: 196
- Llanos** [region, Colombia-Venezuela] L: 402
Colombia (The Eastern Plains) Ci: 782 *with picture*
South America So: 626
Venezuela (The Llanos) V: 302 *with picture*
- Lloyd, Chris Evert** [American tennis player] See Evert, Chris in *this index*
- Lloyd, Edward** [American political leader]
Maryland (table) M: 255
- Lloyd, Edward** [English businessman]
Insurance (The growth of insurance) I: 316
Lloyd's L: 403
- Lloyd, Frank** [Scottish-American director]
Motion picture (Best achievement in directing: 1928-29, 1932-33) M: 862
- Lloyd, Harold Clayton** [American actor] L: 402 *with portrait*
- Lloyd, Henry** [American political leader]
Maryland (table) M: 255
- Lloyd, Henry Demarest** [American author] L: 402
- Lloyd, Pop** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Lloyd, Woodrow S.** [Canadian political leader]
Saskatchewan (table) S: 144
- Lloyd D. Jackson Square**
Hamilton (History) H: 31-32
- Lloyd George, David** [British political leader] L: 402 *with portrait*
Law, Andrew Bonar L: 140
United Kingdom (World War I) U: 70
Versailles, Treaty of V: 340
World War I (The Paris Peace Conference) W: 465
- Lloyd-Webber, Andrew** [British composer] L: 403
Musical comedy (During the late 1900's) M: 960
- Lloyd's** [insurance company] L: 403
- Lloyd's List and Shipping Gazette** [newspaper]
Lloyd's L: 403
- Lloyd's of London** See Lloyd's in *this index*
- Lloyd's underwriter**
Lloyd's L: 403
- Llywelyn II** [Welsh political leader]
Wales (Revolts against England) W: 12
- Llywelyn the Great** [Welsh political leader]
Wales (Revolts against England) W: 12
- LM** [space exploration] See Lunar module in *this index*
- LNG**
Fuel (Natural gas) F: 551
Gas [fuel] (Storing gas) G: 56
- LNG carrier** [ship]
Tanker (Kinds of tankers) T: 28
- Lo Spagnoletto** [nickname]
Ribera, Josepe de R: 321
- Loa River** [river, Chile]
Chile (The Northern Desert) C: 464
- Loach** [fish] L: 403
Fish picture on F: 157
- Load** [geology]
River (River systems) R: 351
- Load** [investment]
Mutual fund M: 969
- Load** [physics]
Building construction (Parts of a building) B: 682
- Load** [unit of measure]
Weights and measures (table: Miscellaneous weights and measures) W: 184
- Load arm**
Lever L: 217
- Load Convention, International**
Ship (Safety at sea) S: 424
- Load dispatcher** [job]
Electric power (Providing reliable service) E: 185
- Load fund**
Mutual fund M: 969
- Load Line Act** [1929]
Plimsoll mark P: 573
- Load Line Convention** [1966]
Plimsoll mark P: 573
- Load ring**
Balloon (Gas balloons) B: 58
- Loading apron**
Airport (Loading aprons and taxiways) A: 245
- Loadstone** See Lodestone in *this index*
- Loafer**
Shoe (Kinds of shoes) S: 431 *with picture*
- Loafing barn**
Dairying (Housing) D: 6-7
- Loam** [earth] L: 404
Soil (Texture) So: 574
- Loan** [economics]
Bank (Making loans) B: 89
Bond B: 454
Consumerism (Early buyer-seller relationships) Ci: 1019
Credit Ci: 1124
Credit union Ci: 1125
Finance company F: 103
Interest I: 321
International Monetary Fund I: 343
Loan company L: 404
Mortgage M: 820
Pawnbroker P: 202
Savings and loan association S: 165
Usury U: 229
Veterans Affairs, Department of (Benefits and other services) V: 343
- Loan company** L: 404
- Loan contract** [economics]
Credit (Lending institutions) Ci: 1124
- Loan-sharking**
Crime (Organized crime) Ci: 1136
Loan company L: 404
- Loan word**
Language (Linguistic terms) L: 63
- Loaves and fishes** [New Testament]
Jesus Christ (The miracles) J: 106
- Lob**
Tennis (The ball in play) T: 163
- Lobachevskian geometry**
Geometry (Non-Euclidean geometry) G: 104
- Lobachevsky, Nikolai** [Russian mathematician]
Geometry (Rise of non-Euclidean geometry) G: 105
Mathematics (In the 1800's) M: 307
- Lobamba** [village, Swaziland]
Swaziland So: 1017 *with map*
- Lobbying** [government] L: 404
Congress of the United States (How Congress makes laws) Ci: 944
Propaganda (Organizations) P: 824
Public relations (Methods) P: 864

- Lobe** [anatomy]
Lung (Parts of the lungs) L: 523
Brain (The parts of the brain) B: 550b *with diagram*
Lung *diagrams* on L: 524
- Lobe-fin** [fish]
Amphibian (The history of amphibians) A: 441
Prehistoric animal (The first animals with backbones) P: 737
- Lobe pump**
Pump (Rotary pumps) P: 899
- Lobed leaf**
Leaf (The blade) L: 153 *with picture*
- Lobel, Arnold** [American author] L: 404
Literature for children *picture* on L: 364; *picture* on L: 370
- Lobelia** [botany] L: 404
- Lobengule** [African ruler]
Zimbabwe (History) Z: 597
- Lobi** [people]
Burkina Faso (People) B: 706
- Loblolly**
Pine (Southeastern pines) P: 468; *picture* on P: 470
Tree *pictures* on T: 425
- Lobster** [sea animal] L: 405 *with pictures*
Animal *picture* on A: 494
Crustacean *picture* on Ci: 1164
- Lobster Fishermen, Cora, Maine** [painting by Hartley]
Hartley, Marsden *picture* on H: 79
- Lobster pot** [fishing]
Lobster (Lobster fishing) L: 406 *with picture*
- Lobule** [anatomy]
Liver (Structure of the liver) L: 393; *picture* on L: 394
Lung (Parts of the lungs) L: 523
- Lobworm** [sea animal] See *Lugworm in this index*
- Local anesthesia** [medicine]
Anesthesia (Local anesthesia) A: 459
Benzocaine B: 255
Dentistry (Modern dentistry) D: 145
Drug (Anesthetics) D: 352
Procaine P: 809
Surgery (Anesthesia) So: 1004
- Local area network** [electronic device]
Computer (Computer networks) Ci: 920;
(Local area networks [LAN's]) Ci: 922
Computerized instruction (Resource programs) Ci: 924h-925
- Local color** [literature]
Cable, George Washington C: 7
Harte, Bret H: 78
- Local control** [education]
Education (Control and support of U.S. education) E: 91
- Local exchange carrier**
Telephone (How a telephone call travels) T: 96 *with diagram*
- Local government** L: 407
Colonial life in America (Local government) Ci: 794
Home rule H: 301
Income tax (State and local income taxes) I: 105
Metropolitan area (Government) M: 442
Property tax P: 827
Taxation (Taxation in the United States) T: 54
Town meeting T: 350
Township T: 351
- Local Government Act** [1985]
London (Dealing with problems) L: 442-443
- Local Group** [astronomy]
Universe U: 205
- Local heating device**
Heating (Local heating devices) H: 160
- Local migration**
Migration (Types of migration) M: 538
- Local option** [law] L: 409
Prohibition (The movement toward prohibition) P: 815
- Local race** [anthropology]
Races, Human (The geographical-race theory) R: 54-55 *with map*
- Local road**
Road (Local and secondary roads) R: 357
- Local Supercluster** [astronomy]
Universe U: 205
- Local time**
Time (Local and standard time) T: 288-289
- Local wind**
Wind (Local winds) W: 329
- Localization of function**
Nervous system (Disorders of the nervous system) N: 136
- Localized attack**
Corrosion Ci: 1072
- Locard, Edmond** [French doctor]
Crime laboratory (History) Ci: 1141
- Locarno Conference** [1925] L: 409
Germany (The Weimar Republic) G: 167
- Location**
Motion picture (Assembling the production team) M: 850; (Filming on location) M: 852 *with picture*
- Locator** [U.S. history]
Western frontier life in America (Homesteading on the Great Plains) W: 234-235
- Loch** [lake]
Scotland (Rivers and lakes) S: 217
- Loch Lomond** [lake, Scotland] L: 409 *with map*
United Kingdom (The land) U: 58-61 *with map*
- Loch Ness monster** L: 410 *with picture*
Folklore (Legends) F: 324
Scotland (Rivers and lakes) S: 217
Sea serpent S: 263
- Loch Tay** [Scotland]
Europe *picture* on E: 394
- "Lochinvar"** [poem by Scott]
Scott, Sir Walter (His life) S: 222
- Lochner v. New York** [U.S. history] L: 410
Fourteenth Amendment F: 438
Labor movement (The early 1900's) L: 11
Supreme Court of the United States (table) So: 1002
- Locī Communes** [book by Melanchthon]
Melanchthon, Philipp M: 388
- Lock L: 410** *with pictures*
Yale, Linus, Jr. Y: 549
- Lock** [engineering]
Canal (Canal locks) C: 162 *with diagram*
Panama Canal P: 122; *picture* on P: 124
Saint Lawrence Seaway *picture* on S: 44
- Lock stitch**
Sewing machine (History) S: 333-334
- Lock-up clutch** [engine]
Transmission (A torque converter) T: 377
- Locke, Alain LeRoy** [American educator] L: 412
American literature (The Harlem Renaissance) A: 422
- Locke, David Ross** [American author] See Nasby, Petroleum Vesuvius *in this index*
- Locke, Gary** [American political leader]
Washington (table) W: 65; (Recent developments) W: 68-69
- Locke, John** [English philosopher] L: 413
Age of Reason A: 138
Civil rights (Natural rights) Ci: 610
Declaration of Independence (The importance of the Declaration) D: 76
Democracy (Democracy in England) D: 123
Freedom (During the Age of Reason) F: 503
Philosophy (Modern philosophy) P: 387-388
Political science (Constitutionalism) P: 639
Psychology (Beginnings) P: 849
Sterne, Laurence So: 894
- Locke, Joseph** [American designer]
Glass (Types of art glass) G: 220
- Locke, Sylvanus D.** [American inventor]
Reaper R: 173
- Lockhart, Frank** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Lockheed Martin Corporation**
Aviation (Aircraft manufacturing) A: 984;
(World War I [1914-1918]) A: 987-988
- Lockheed Martin Global Telecommunications**
Communications Satellite Corporation Ci: 889
- Locking**
Motion picture (Computer editing) M: 856
- Lockjaw**
Tetanus T: 182
- Lockout** L: 413
Labor movement (Handling labor disputes) L: 6-7
Strike (Kinds of strikes) So: 928
- Lockwood, Belva Ann Bennett** [American social reformer] L: 413 *with portrait*
- Lockwood, Lorne** [American jurist]
Arizona (The mid-1900's) A: 691
- Lockyear, Norman** [British astronomer]
Sun (History of modern solar study) So: 986
- Lockyer, Sir Joseph** [British astronomer]
Helium H: 176
- Locofocos** [U.S. history] L: 413
- Locomotion** [zoology]
Ameba A: 406
Insect (Wings) I: 288
- Locomotive** [train] L: 414 *with pictures*
Baldwin, Matthias William B: 39 *with picture*
Civil War (Raids) Ci: 629
Cooper, Peter Ci: 1035 *with picture*
Industrial Revolution (Railroads) I: 251
Railroad (Rolling stock) R: 107 *with pictures*;
(Invention of the locomotive) R: 115
Railroad, Model (Locomotives) R: 120
Stephenson, George So: 891
Transportation (The steam age) T: 390; *pictures* on F: 387, F: 388
Trevithick, Richard T: 437
Western frontier life in America *picture* on W: 234
- Locomotive, The** [drawing by Hopper]
Drawing *picture* on D: 344
- Locomotive Engineers, Brotherhood of**
Railway brotherhoods R: 122
- Locomotive Firemen and Enginemen, Brotherhood of**
Railway brotherhoods R: 122
- Locoweed** [plant] L: 418
- Locus** [genetics]
Genetic testing (How genes carry information) G: 85
- Locust** [insect] L: 418 *with pictures*
See also Cicada *in this index*
Grasshopper (Short-horned grasshoppers) G: 328
Insect *picture* on I: 281; (Wings) I: 288;
(Hibernation and migration) I: 296 *with picture*
Plant *picture* on P: 544
- Locust** [tree] L: 418 *with pictures*
Honey locust H: 315 *with picture*
Tree *pictures* on T: 422
- Locust bird**
Coursier Ci: 1101
- Locusts, Plague of**
Locust L: 419
- Lode deposit** [earth]
Gold (Types of deposits) G: 252
- Loder's gazelle** [animal]
Gazelle G: 74
- Lodestone** [mineral] L: 419
Electricity (Early discoveries) E: 196
Magnetism (Permanent magnets) M: 60
Taconite T: 5
- Lodge** [animal home]
Beaver (Building lodges) B: 195 *with diagram*
- Lodge** [dwelling]
Indian, American *pictures* on I: 138, I: 159
- Lodge, David** [British author]
Novel (The novel today) N: 575
- Lodge, Henry Cabot** [American political leader] L: 419
United Nations (table) U: 86
Wilson, Woodrow (Opposition to the League) W: 327
- Lodge, Henry Cabot, Jr.** [American political leader] L: 419
Kennedy, John Fitzgerald (Campaign for the Senate) K: 262; (Steps to the White House) K: 263
- Lodge, John** [American political leader]
Connecticut (table) Ci: 967
- Lodge, Sir Oliver Joseph** [British physicist] L: 420
- Lodge Federal Elections Bill** [1890]
Force bill F: 371
- Lodgepole pine**
Pine (Western pines) P: 469
- Lodger, The** [film]
Hitchcock, Alfred H: 263
- Lodi, Ibrahim** [sultan of Delhi]
India (The Mughal Empire) I: 129
- Łódź** [Poland] L: 420
- Loe, Thomas** [English religious leader]
Penn, William (Youthful rebel) P: 241-242
- Loeb, Jacques** [American physiologist] L: 420
- Loeb, Richard A.** [American public figure]
Darrow, Clarence Seward D: 38
- Loess** [earth] L: 420
Dust (Dust deposits) D: 390

- Ice age (Evidence of ice ages and their climates) I: 6-7
 Minnesota (Natural resources) M: 599
Loesser, Frank [American composer] L: 420
Loewe, Frederick [American composer]
 Lerner, Alan Jay L: 205
 Musical comedy (The modern musical emerges) M: 960
Loewi, Otto [Austrian physiologist]
 Nobel Prizes (Physiology or medicine: 1936) N: 444
Löffler, Friedrich August Johannes [German bacteriologist] L: 420
Lofoten Islands [Norway]
 Norway (Coast and islands) N: 542 *with map*
Loft [sports]
 Bowling (table) B: 521
Lofting, Hugh [British author] L: 420 *with picture*
Log [book]
 Logbook L: 425
Log [instrument] L: 421 *with pictures*
 Knot K: 355
Log cabin [dwelling] L: 422 *with picture*
 Colonial life in America (Houses) Ci: 796
 Lincoln, Abraham *picture on* L: 311
 Pioneer life in America (A pioneer settlement) P: 479 *with picture*
 Westward movement in America (The Old West) W: 245
Log Cabin, The [newspaper]
 Greeley, Horace (His publications) G: 379
Log-cabin and hard-cider campaign [U.S. history]
 Harrison, William Henry (Elections of 1836 and 1840) H: 75-76
Log carrier truck
 Truck *picture on* T: 459
Log chip and line [navigation]
 Knot K: 355
Log College [Pennsylvania]
 Tennent, William T: 133
Log debarker [machine]
 Lumber (Sawing logs) L: 519
Log rule [logging]
 Lumber (table) L: 518
Logan [American Indian chief] L: 422
Logan [Utah]
 Utah *picture on* U: 239
Logan, George [American political leader]
 Logan Act L: 423
Logan, John Alexander [Union general] L: 423
 Memorial Day (History) M: 392
Logan, Joshua [American director] L: 423
Logan, Mount *See* Mount Logan *in this index*
Logan, Rayford W. [American educator]
 Spingarn Medal (table: 1980) So: 793
Logan, Stephen Trigg [American lawyer]
 Lincoln, Abraham (Early practice) L: 315
Logan, Sir William Edmond [Canadian geologist] L: 423
 Mount Logan M: 885
 Museum (Early Canadian museums) M: 940
Logan Act [1799] L: 423
Logan International Airport
 Aviation *picture on* A: 985
 Boston (Transportation) B: 502
Loganberry [fruit] L: 423 *with pictures*
 Dewberry D: 176
Logarithms [mathematics] L: 423
 Mathematics (Mathematics and the scientific revolution) M: 306-307
 Napier, John N: 13
Logbook [navigation] L: 425
Logger *See* Lumberjack *in this index*
Loggerhead shrike [bird]
 Bird (Birds of brushy areas) B: 338 *with picture*
 Shrike S: 440
Loggerhead turtle
 Ocean *picture on* O: 656
Logging [industry]
 Canada (Forestry) C: 124 *with picture*
 Elephant *picture on* E: 227
 Lumber (From forest to sawmill) L: 518
 Spotted owl So: 804
Logging camp
 Lumber (The life of a logger) L: 518
Logging on
 Computer (Mainframes and supercomputers) Ci: 910
 Internet (How the Internet works) I: 350c
- Logic** L: 425
 Aristotle (Logic) A: 663
 Deductive method D: 81
 Fallacy F: 16
 Geometry (Geometry as a logical system) G: 101
 Inductive method I: 240
 Liberal arts L: 226
 Mathematics (Branches of mathematics) M: 303
 Philosophy (Logic) P: 384; (The philosophy of language) P: 385
 Scholasticism (History) S: 179
 Science (Mathematics and logic) S: 192; (Using logic) S: 194
 Set theory (In logic) S: 322
 Truth table T: 474
Logic circuit
 Electronics (Digital circuits) E: 213-214
Logic of Scientific Discovery, The [book by Popper]
 Popper, Karl Raimund P: 668
Logical positivism [philosophy]
 Empiricism E: 263
 Metaphysics (Opinions about metaphysics) M: 430
 Philosophy (Modern philosophy) P: 387-390
 Positivism (Logical positivism) P: 697
Logicism [philosophy]
 Mathematics (Philosophies of mathematics) M: 307
Logistics [warfare] L: 426
 Army (Armies in the two world wars) A: 728
 Army, United States (Logistic units) A: 735
Logogram [word sign]
 Writing (Phonetization) W: 513
Logography [communications]
 Alphabet (The earliest writing) A: 381
 Writing (Logographs) W: 513
Logone River
 Chad (Land and climate) C: 366-367
Logopedics, Institute of
 Wichita (Education and cultural life) W: 298
Logos [philosophy]
 Heraclitus H: 194
Loggerch [fish]
 Darter D: 38
Logrolling [politics] L: 426
 Congress of the United States (Legislative bargaining) Ci: 944-945
Logrolling [sport]
 Birling B: 375 *with picture*
Logwood [wood] L: 426
Lohengrin [opera by Wagner]
 Wagner, Richard W: 4
 Germany *picture on* G: 154
Lohit [river, Asia]
 Brahmaputra River B: 548
Loihi [seamount]
 Seamount S: 269
Loincloth
 Clothing (Ancient times) Ci: 696
 India (Clothing) I: 117-118
Loire River [France] L: 426
Lok Sabha [government]
 India (Central government) I: 109
 Vajpayee, Atal Bihari V: 260
Loki [Norse mythology] L: 426
 Balder B: 38
 Mythology (The construction of the world) M: 984-985; (The end of the world) M: 985
Lola [opera character]
 Opera (*Cavalleria Rusticana*) O: 803
Lolita [book by Nabokov]
 Nabokov, Vladimir N: 2
 Novel (After World War II) N: 574
Lollards [European history] L: 426
 Wycliffe, John W: 515
Loman, Willy [literary figure]
 Miller, Arthur M: 553
Lomax, Alan [American folklorist]
 Morton, Jelly Roll M: 821
Lombard, Peter [Italian theologian] L: 427
 Scholasticism (The scholastic method) S: 179
Lombard League [Italian history]
 Alexander III A: 341
 Frederick I F: 497
Lombard Street
 San Francisco (Downtown San Francisco) S: 92-93; *picture on* S: 96
Lombardi, Ernie [American baseball player]
- Baseball (table: Hall of Fame) B: 135
Lombardi, I [opera by Verdi]
 Verdi, Giuseppe V: 316
Lombardi, Vince [American football coach] L: 427
Lombards [people] L: 427
 Italy (The Middle Ages) I: 513
Lombardy [region, Italy] L: 427
 Lombards L: 427
Lombardy poplar [tree]
 Poplar P: 668
Lombroso, Cesare [Italian criminologist]
 Criminology (History) Ci: 1145-1146
Lomé [Togo] L: 427
 Togo *picture on* T: 310
Lomond, Loch *See* Loch Lomond *in this index*
Lomonosov, Mikhail [Russian poet]
 Russian literature (Western influences) R: 559
Lomonosov Ridge [Arctic Ocean]
 Arctic Ocean (Depth and the ocean floor) A: 642-643 *with map*
Lon Nol [Cambodian political leader] L: 427
 Cambodia (History) C: 72-73
Lon Po Po [book by Young]
 Literature for children *picture on* L: 357
Londinium
 England (The Roman conquest) E: 303-304
 London (History) L: 439
London [England] L: 428 *with pictures and maps*
 Architecture *picture on* A: 624
 Big Ben B: 297 *with picture*
 Christmas *picture on* C: 530
 City (The people) Ci: 582; *picture on* Ci: 586
 Cockney Ci: 745
 Coffee house Ci: 755
 England E: 292 *with picture*; (Population) E: 294
 Europe *picture on* E: 389
 Map (Development of thematic and inventory mapping) M: 185
 Marx, Karl (Move to London) M: 237
 Old Bailey O: 739
 Shakespeare, William (Early career in London) S: 347; (Shakespeare's London) S: 350; *picture on* S: 352
 Subway So: 949
 Thames River T: 229
 United Kingdom U: 48 *with picture*; (Population) U: 54 *with picture*; (table: Average monthly weather) U: 62
See also the list of Related articles in the London article
London [Ontario] L: 444
London [poem by Johnson]
 Johnson, Samuel (Early years) J: 153
London, Convention of [1818]
 Lake of the Woods L: 43
London, Declaration of [1909]
 Blockade B: 406
 Right of search R: 340
London, Jack [American author] L: 444 *with portrait*
London, Port of
 London (Trade) L: 438
London, Tower of *See* Tower of London *in this index*
London, Treaties of L: 444
London, Treaty of [1839]
 London, Treaties of (The Treaty of 1839) L: 444
London, Treaty of [1913]
 London, Treaties of (The Treaty of 1913) L: 444
 Balkans (The First Balkan War) B: 42
London, Treaty of [1915]
 Benedict XV B: 247
 London, Treaties of (The Treaty of 1915) L: 445
London, Treaty of [1930] *See* London Naval Treaty *in this index*
London, Treaty of [1936]
 London, Treaties of (The Treaty of 1936) L: 445
London, University of L: 445
 London (Education) L: 433
London Blitz *See* Blitz, The *in this index*
London Bridge L: 445 *with picture*
 Arizona (Places to visit) A: 678
 London (The Middle Ages) L: 439-440 *with picture*
London Bridge [painting by Derain]

Fauves *picture on* F: 57
London Company [U.S. history] L: 445
 Colonial life in America (Early English settlements) Ci: 788
 Smith, John (Life in the colonies) S: 517
 United States, History of the (Virginia and Maryland) U: 152-153
 Virginia (The Jamestown settlement) V: 418
London Conference [1909]
 Right of search R: 340
London Fire [1666]
 Fire department (History) F: 128
 London (War, plague, and fire) L: 441
 Urban renewal (History) U: 220
 Wren, Sir Christopher W: 504
London Government Act [1963]
 London (Rebuilding) L: 442
London Marathon [sports]
 London (Recreation) L: 434
London Metropolitan Police
 Scotland Yard S: 221
London Naval Treaty [1930]
 London, Treaties of (The Treaty of 1930) L: 445
 Arms control (History of arms control) A: 721-722
 Hoover, Herbert Clark (Foreign policy) H: 330
London Penny Post
 Postal services (The creation of the Penny Post) P: 706
London plane [tree]
 Tree *picture on* T: 427
London Prize Ring Rules
 Boxing (The beginning of modern boxing) B: 533
London Protocol [1830]
 Greece (Independence) G: 362
London Shrinking [industrial process]
 Wool (Making fabric) W: 401
London Stock Exchange
 London (Finance and business) L: 438
London Suite [play by Simon]
 Simon, Neil S: 467
London Symphonies [music by Haydn]
 Haydn, Joseph H: 117
London-type smog
 Smog (London-type smog) S: 519
Londonderry [Northern Ireland] L: 445
Lone Eagle
 Lindbergh, Charles Augustus L: 330 *with picture*
Lone Scout
 Boy Scouts (Boy Scouts of America) B: 536
 Girl Scouts (Lones) G: 199
Lone wolf
 Wolf (The life of a wolf) W: 375
"Loneliness of the Long Distance Runner"
 [story by Sillitoe]
 Sillitoe, Alan S: 463
Lonely Crusade [book by Himes]
 Himes, Chester H: 234
"Lonely Land, The" [poem by Smith]
 Canadian literature (Literature between the world wars) C: 159-160
Lonesome Dove [book by McMurtry]
 McMurtry, Larry M: 343
Long, Crawford Williamson [American doctor]
 L: 446
 Anesthesia A: 459
 Ether E: 365
 Hospital (The 1800's) H: 373
 Medicine (The first anesthetic) M: 375
 Morton, William Thomas Green M: 821
Long, Earl Kemp [American political leader]
 L: 446
 Louisiana (table) L: 496
Long, George Shannon [American political leader] L: 446
Long, Huey Pierce [American political leader]
 L: 445
 Baton Rouge (Description) B: 166
 Louisiana (table) L: 496; (Huey P. Long) L: 500 *with picture*
Long, James [husband of]
 Long, Jane L: 446
Long, Jane [American pioneer] L: 446
Long, John D. [American political leader]
 Massachusetts (table) M: 288
 McKinley, William (table) M: 342
 Roosevelt, Theodore (table) R: 470
Long, John Luther [American author]
 Opera (*Madama Butterfly*) O: 804

Long, Rose McConnell [wife of]
 Long, Huey Pierce L: 446
Long, Russell Billiu [American political leader]
 L: 446
Long, Stephen Harriman [American explorer]
 L: 446
 Minnesota (The Louisiana Purchase) M: 603-604
 Nebraska (American exploration and settlement) N: 111-112
 Pikes Peak P: 462
 Westward movement in America (Exploration) W: 248
Long Beach [California] L: 447
Long-billed curlew [bird]
 Curlew Ci: 1195 *with picture*
Long Bridge [New Orleans]
 Louisiana (Transportation) L: 495
"Long count" [boxing]
 Dempsey, Jack D: 129
Long dam [engineering]
 Tennessee Valley Authority (The dams) T: 158-159
Long Dash skipper [insect]
 Butterfly *picture on* B: 734
Long-day plant
 Plant (Factors affecting plant growth) P: 538-539
Long Day's Journey into Night [play by O'Neill]
 American literature (Drama) A: 422-423
 Drama (United States drama) D: 339
 O'Neill, Eugene Gladstone O: 762
Long distance carrier
 Telephone *diagram on* T: 96
Long division [mathematics]
 Division (Long division) D: 249
Long-eared owl
 Owl (Important owls) O: 884-886
Long grain rice
 Rice (Kinds of rice) R: 323-324
Long-haired cat
 Cat (Long-haired breeds) C: 292; *pictures on* C: 289
Long-haired chimpanzee
 Chimpanzee C: 471
Long-horned beetle
 Antennae *picture on* A: 544
Long house
 Indian, American (Shelter) I: 136d; (Before European contact) I: 154-155 *with picture*
 Cayuga Indians C: 323
 Dayaks D: 53
 Mahican Indians M: 65
 Malaysia (Rural life) M: 98c
 Seneca Indians S: 297
Long House religion
 Indian, American (Prophets) I: 148
Long Island [island, New York] L: 447 *with map*
 Levittown L: 219
Long Island, Battle of [1776]
 Long Island (History) L: 447
 Revolutionary War in America (table) R: 276;
 (The campaign in New York) R: 280 *with map*
Long Island City [district]
 New York City (Queens) N: 329
Long Island Sound [waterway, Connecticut-New York] L: 448
Long John Silver [literary figure]
 Stevenson, Robert Louis (Novels) So: 898
Long jump [track and field] L: 448
 Track and field (Jumping events) T: 355 *with picture*; (World track and field records) T: 358
Long-lining [fishing]
 Fishing industry (Hooks) F: 185 *with picture*
Long March [Chinese history]
 China (Nationalist rule) C: 504; *map on* C: 503
 Mao Zedong (His life) M: 174-175
Long March 2 [spacecraft]
 Space exploration *picture on* So: 699
Long Measure [poetry]
 Poetry (Rhythm and meter) P: 591-592
Long-nosed bat [animal]
 Bat *picture on* B: 160
Long Parliament [English history] L: 448
 Charles I [of England] C: 380
 England (table) E: 308
 Parliament (Parliament gains strength) P: 174
 Rump Parliament R: 519
Long-period comet [astronomy]

Oort cloud O: 788
Long-playing record *See* LP record *in this index*
Long-range forecast [meteorology]
 Weather (Mathematical models) W: 166
Long Range Mountains
 Newfoundland and Labrador (Mountains) N: 370 *with map*
Long range navigation *See* Loran *in this index*
Long-range radar
 Radar *picture on* R: 66
Long ship
 Ship (Viking ships) S: 406 *with picture*
 Vikings (The Vikings as shipbuilders) V: 381
 Warship (Early warships) W: 41; *picture on* W: 42
Long shot
 Horse racing (Betting) H: 365
Long-staple cotton
 Egypt (Agriculture) E: 128-129 *with picture*
Long swings [economics] *See* Kuznets cycles *in this index*
Long sword
 Sword So: 1062
Long-tailed weasel
 Weasel W: 155 *with pictures*
Long-term credit
 Credit (Types of credit) Ci: 1124
Long-term loan
 Interest (Length of a loan) I: 322
Long-term memory [psychology]
 Memory (The memory system) M: 392
Long Tom Coffin [literary figure]
 Cooper, James Fenimore Ci: 1035
Long ton [unit of measure]
 Ton T: 327
Long-track skating
 Ice skating (Long-track skating) I: 14
Long View of London [engraving by Visscher]
 Shakespeare, William *picture on* S: 352
"Long Walk" [American history]
 Navajo Indians N: 70
Long-wooled sheep
 Sheep (Long-wooled sheep) S: 382
 Wool (Sources of wool) W: 399
Longbow [weapon]
 Archery (Bows) A: 601-602
 Crossbow Ci: 1156
Longevity *See* Life expectancy *in this index*
Longevity pay
 Rank, Military (Rank and pay) R: 140
Longfellow, Frances Appleton [wife of]
 Longfellow, Henry Wadsworth (Professor and family man) L: 448-449 *with portrait*
Longfellow, Henry Wadsworth [American poet] L: 448 *with pictures*
 American literature (Poetry) A: 418 *with portrait*
 Hiawatha H: 221
 Maine (Places to visit) M: 78 *with picture*
 Minneapolis (Parks) M: 582
 Nova Scotia N: 555
 Poe, Edgar Allan (Poe's life) P: 589
 September (Quotations) S: 309
Longfellow, Mary Potter [wife of]
 Longfellow, Henry Wadsworth (Professor and family man) L: 448-449
Longfellow National Historic Site [Massachusetts]
 Longfellow, Henry Wadsworth (Professor and family man) *picture on* L: 449-450
 National Park System (table: National historic sites) N: 52-53
Longhi, Alessandro [Italian artist]
 Casanova, Giacomo *picture on* C: 271
Longhorn
 Cattle (Beginning of breeding) C: 315
 Texas (Agriculture) T: 202; *picture on* T: 205
 Western frontier life in America *picture on* W: 237
Longino, Andrew H. [American political leader]
 Mississippi (table) M: 640
Longinus [Greek author] L: 451
 Criticism (History of literary criticism) Ci: 1146
Longitude L: 451 *with pictures*
 Map (Geographic grids) M: 178-179; *diagram on* M: 180
 Moon (Libration) M: 785 *with diagram*
Longitudinal chromatic aberration [optics]
 Aberration (Chromatic aberration) A: 11
Longitudinal fissure [anatomy]
 Brain (The parts of the brain) B: 550b *with diagram*

Longitudinal wave [physics]

Waves (Types of waves) W: 152; *diagram on* W: 150

Longleaf pine

Pine (Southeastern pines) P: 468; *picture on* P: 470

Turpentine T: 519

Longley, James B. [American political leader]

Maine (table) M: 87

Longnose gar [fish]

Fish *picture on* F: 158

Gar G: 28 *with picture*

Longo, Robert [American artist]

Painting (Post-modernism) P: 88

Longs Peak [mountain, Colorado]

Long, Stephen Harriman L: 446

Rocky Mountain National Park R: 394

Longshan culture [Chinese history]

China (Beginnings of Chinese civilization) C: 500

Longships Lighthouse [England]

Land's End L: 58

Longshoremen's Association, International

Bridges, Harry B: 607

Labor movement (table) L: 8

Longsightedness *See* Farsightedness *in this index*

Longspine squirrelfish

Fish *picture on* F: 154

Longspur [bird]

Bird *picture on* B: 337

Longstreet, James [Confederate general]

L: 452

Civil War (Second Battle of Bull Run) Ci: 627

Longueuil, Sieur de *See* Le Moyne, Charles *in this index*

Longus [Greek author]

Greek literature (The Greco-Roman Age)

G: 378

Novel (Ancient Greek and Roman narratives)

N: 572

Longwall mine

Coal (The longwall system) Ci: 725 *with picture*

Mining (Underground mining methods) M: 576

Longway Planetarium [Michigan]

Flint *picture on* F: 235

Longworth, Alice Roosevelt [daughter of]

Roosevelt, Theodore (Life in the White House) R: 469-470

Longworth, Nicholas [American political leader]

Roosevelt, Theodore (Life in the White House) R: 470

Longworth House Office Building

[Washington, D.C.]

Washington, D.C. *map on* W: 76

Longyi [clothing]

Myanmar (Way of life) M: 970a

Lonigan, Studs [literary figure]

Farrell, James T. F: 48

Lönnrot, Elias [Finnish doctor]

Finland (The arts) F: 112

Loofah [plant]

Gourd G: 281

Look-and-say instruction

Reading (Sight words and look-and-say instruction) R: 159

Look Back in Anger [play by Osborne]

Drama (Later British drama) D: 340

English literature (Literature after World War II) E: 322-323

Osborne, John O: 861

Looker, Othneil [American political leader]

Ohio (table) O: 699

Looking Backward [book by Bellamy]

Bellamy, Edward B: 242

Looking Glass War, The [book by Le Carré]

Le Carré, John L: 174

Lookout Mountain [mountain, Tennessee]

Tennessee (Places to visit) T: 144 *with picture*

Lookout Mountain, Battle of [1863]

Civil War (Battle of Chattanooga) Ci: 630

Loom [weaving]

Weaving (Weaving on a loom) W: 174 *with picture*

Cartwright, Edmund C: 268

Clothing *picture on* Ci: 691

Indian, American *picture on* I: 176

Invention (Economic needs) I: 355

Jacquard, Joseph Marie J: 20

Wool *picture on* W: 401

Loon [bird] L: 452

Animal *picture on* A: 485

Bird (How birds move) B: 350-352; *picture on* B: 340

Loop, The [district, Chicago]

Chicago (Downtown Chicago) C: 420-421

Loop antenna [communication]

Antenna (Receiving antennas) A: 544

Loop pattern

Fingerprinting (How fingerprints are classified) F: 106-107 *with picture*

Looped stitch

Crochet Ci: 1148d

Embroidery (Embroidery stitches) E: 257 *with picture*

Looper [insect] *See* Measuring worm *in this index*

Loos, Adolf [Austrian architect]

Architecture (Early modern architecture in Europe) A: 627-629 *with picture*

Austria (The arts) A: 932-933

Loose-fill insulation

Insulation (In buildings) I: 306 *with picture*

Loose leaf auction

Tobacco (Marketing tobacco) T: 307 *with picture*

Loose money policy

Interest (Government policy) I: 322

Loose packing [slavery]

African Americans (Beginning of the slave trade) A: 136c-136d

Loose pattern [manufacturing]

Cast and casting (Patterns for casting) C: 278

Loosestrife [plant] L: 453

Looting

Riot (Expressive riots) R: 348

Lop [rabbit]

Rabbit (Domestic rabbits) R: 46 *with picture*

Lope de Vega *See* Vega, Lope de *in this index*

Lopez, Al [American baseball manager]

Baseball (table: Hall of Fame) B: 135

López, Carlos Antonio [Paraguayan political leader]

Paraguay (Independence) P: 149

López, Francisco Solano [Paraguayan political leader]

Paraguay (Military ruin) P: 149

Lopez, Nancy [American golfer] L: 453

López Arellano, Osvaldo [Honduran political leader]

Honduras (Revolutions and reforms) H: 313

López de Legazpi, Miguel [Spanish general]

Manila (History) M: 143

Philippines (Spanish settlement and rule)

P: 379

López de Mendoza, Íñigo *See* Santillana,

Marquis of *in this index*

López de Santa Anna, Antonio *See* Santa

Anna, Antonio López de *in this index*

López de Ubeda, Francisco [Spanish author]

Spanish literature (The 1600's) So: 759

López Portillo, José [Mexican political leader]

L: 453

Mexico (The 1970's) M: 474

López Tijerina, Reies [American social reformer]

Hispanic Americans (Political developments) H: 255-256

López y Fuentes, Gregorio [Mexican author]

Latin-American literature (The early 1900's) L: 113

Lophophore [biology]

Bryozoan B: 657

Loquat [fruit] L: 453 *with picture*

Loran [navigation] L: 453

Airplane (Navigating across oceans) A: 227

Log (Electronic navigation devices) L: 421

Navigation (Electronic navigation) N: 71-73 *with picture*

Ship (Navigating a ship) S: 423

Shipwreck S: 429

Lorandite [mineral]

Thallium T: 229

Lorazepam [drug]

Benzodiazepine B: 256

Tranquilizer T: 370

Lord [title] L: 454

Baron B: 116

Feudalism F: 81

Freedom (The Middle Ages) F: 502

Middle Ages (Barbarian Europe) M: 523; (The Carolingian Empire) M: 524; (Feudalism)

M: 524; (Life of the people) M: 526

Nobility (Privileges of the peerage) N: 450

Lord, Bernard [Canadian political leader]

New Brunswick (table) N: 196

Lord, Betty Bao [American author]

Novel (The novel today) N: 575

Lord, William Paine [American political leader]

Oregon (table) O: 845

Lord chamberlain [title]

Royal Household of the United Kingdom R: 498

Lord Chamberlain's Men [theater group]

Shakespeare, William (His work in theater companies) S: 347; (Acting companies) S: 353-354

Lord Dunmore's War [1774]

Indian wars (Lord Dunmore's War) I: 192 *with map*

Cornstalk Ci: 1066

Virginia (Westward expansion) V: 418-420

Lord Durham's Report [document]

Canada, History of (Lord Durham's report) C: 146

Confederation of Canada (Lord Durham's Report) Ci: 933

Durham, Earl of D: 389

Lord God Made Them All, The [book by

Herriot]

Herriot, James H: 216

Lord Haw-Haw [stage name]

Old Bailey O: 740

Lord High Admiral [rank]

Admiralty A: 59

Lord Jim [book by Conrad]

Conrad, Joseph Ci: 973

Lord Mayor [title]

London (The Middle Ages) L: 439-440

Lord Mayor's Show

London (Ceremonies) L: 437

Lord of appeals [office]

Parliament (The House of Lords) P: 173

Lord of the Flies [book by Golding]

Golding, William G: 258

Lord of the Rings, The [books by Tolkien]

Tolkien, J. R. R. T: 322

Lord proprietor [title]

South Carolina (Exploration and settlement) So: 659

Lord Protector [title]

Cromwell, Oliver (The Protectorate) Ci: 1152

England (The Civil War) E: 308-309

Lord Spiritual [title]

Lord L: 454

Parliament (The House of Lords) P: 173

Lord steward [title]

Royal Household of the United Kingdom R: 498

Lord Temporal [title]

Lord L: 454

Lord Weary's Castle [poem by Lowell]

Lowell, Robert L: 511

Lordosis [disorder]

Spine So: 792

Lords, House of *See* House of Lords *in this index*

Lords Chamber [London]

Parliament *picture on* P: 173

Lord's Cricket Ground

London (Recreation) L: 434

Lord's Day

Sunday So: 989

Lord's Prayer L: 454

Lord's Supper *See* Communion *in this index*

Lorelei [legendary figure]

Rhine River (The course of the Rhine) R: 292

Lorelei [mountain, Germany] L: 454

Rhine River (The course of the Rhine) R: 292 *with picture*

"Lorelei, The" [poem by Heine]

Heine, Heinrich H: 167

Loren, Sophia [Italian actress]

Motion picture (Best performance by an actress: 1961) M: 862

Lorentz, Hendrik Antoon [Dutch physicist]

L: 454

Physics (Einstein and relativity) P: 441

Relativity (Lorentz transformations) R: 211

Lorentz-Fitzgerald contraction [physics]

Relativity (Lorentz-Fitzgerald contraction) R: 211

Lorentz transformation [physics]

Lorentz, Hendrik Antoon L: 454

Relativity (Lorentz transformations) R: 211

- Lorenz, Konrad Zacharias** [Austrian naturalist]
L: 454 *with portrait*
- Lorenzini, Carlo** [Italian author] *See* Collodi, Carlo *in this index*
- Lorenzo the Magnificent** *See* Medici, Lorenzo de' *in this index*
- Lorikeet** [bird]
Parrot (Kinds of parrots) P: 179; *picture on* P: 180
- Loris** [animal] L: 455 *with picture*
Potto P: 719
Primate (Galagos and lorises) P: 778; *diagram on* P: 778b
- L'Orme, Philibert de** [French architect]
Tuileries T: 481
- Lorne, Marquess of** [Canadian statesman]
L: 455
- Lorrain, Claude** *See* Claude *in this index*
- Lorraine** *See* Alsace-Lorraine *in this index*
- Lorris, Guillaume de** [French poet]
French literature (Narrative poetry) F: 518-519
- Lorry** [truck]
Truck T: 456
- Lorsban** [insecticide]
Insecticide (Dangers of insecticides) I: 303
- Lorum**
Clothing (The Middle Ages) Ci: 698
- Lory** [bird]
Parrot (Kinds of parrots) P: 179
- Los ...**
Titles beginning Los appear under their key words, as in Pazos de Ulloa, Los. Place names appear below
- Los Alamos Bradbury Science Museum**
New Mexico (Places to visit) N: 264 *with picture*
- Los Alamos National Laboratory** [New Mexico] L: 455
- Los Angeles** [California] L: 456 *with pictures and maps*
California C: 36; (Population) C: 40; (table: Average monthly weather) C: 51; (The mid-1900's) C: 62-63
City *picture on* Ci: 589
Hollywood H: 293
Olympic Games (Between the wars) O: 751; (Boycotts) O: 753
Riot (During the 1900's) R: 349
- Los Angeles** [airship]
Airship *picture on* A: 250
- Los Angeles Clippers**
Basketball (table) B: 150
- Los Angeles County**
Los Angeles L: 456; *map on* L: 458
- Los Angeles County Museum of Art**
Los Angeles (Museums) L: 466
- Los Angeles Dodgers**
Baseball (table) B: 130
- Los Angeles earthquake** [1994]
California (The late 1900's) C: 63-64
- Los Angeles International Airport**
Airport (table) A: 245; *picture on* A: 242
- Los Angeles Kings**
Hockey (table: National Hockey League) H: 281
- Los Angeles Lakers**
Basketball (table) B: 150
Bryant, Kobe B: 655
- Los Angeles Ranges**
California (Land regions) C: 48-50
- Los Angeles Zoo**
Los Angeles (Recreation) L: 467 *with picture*
- Los Chorros** [park, El Salvador]
El Salvador (Recreation) E: 250
- Los Glaciares National Park** [Argentina]
National park (Argentina) N: 42b; (table) N: 42g
- Losantiville**
Cincinnati Ci: 554; (Early days) Ci: 556
- Losses** [book by Jarrell]
Jarrell, Randall J: 64
- Lost City Museum** [Overton]
Nevada (Museums) N: 161
- Lost Colony** [U.S. history] L: 472
Colonial life in America (Early English settlements) Ci: 788
Lumbee Indians L: 516
North Carolina N: 473; (Visitor's guide) N: 482 *with picture*; (Exploration and settlement) N: 490 *with picture*
Raleigh, Sir Walter (His expeditions) R: 131
- Lost Colony, The** [play by Green]
Green, Paul Eliot G: 379
- Lost Dauphin** [king of France] *See* Louis XVII *in this index*
- Lost Empires** [book by Priestley]
Priestley, John Boynton P: 776
- Lost Generation** [literature] L: 472
American literature (The Lost Generation) A: 421
- Lost Horizon** [book by Hilton]
Hilton, James H: 233
- Lost in the Funhouse** [stories by Barth]
Barth, John B: 120
- Lost in Yonkers** [play by Simon]
Simon, Neil S: 466
- Lost River Range** [mountains, Idaho]
Idaho (Mountains) I: 36-38
- Lost Steps, The** [book by Carpentier]
Latin-American literature (The mid-1900's) L: 113
- Lost wax process** [manufacturing]
Cast and casting (Other types of casting) C: 278-279
- Lost Weekend, The** [film]
Motion picture (Best picture: 1945) M: 861
- Lost World, The** [book by Jarrell]
Jarrell, Randall J: 64
- Lost years** [English literature]
Shakespeare, William (The lost years) S: 347
- Lot** [Biblical figure] L: 472
Abraham A: 17
Dead Sea D: 56
- Lot** [real estate]
House (Building a house) H: 380
- Lothair I** [Holy Roman emperor]
Germany (The breakup of Charlemagne's empire) G: 162
Verdun, Treaty of V: 316
- Lothar of Segni** *See* Innocent III *in this index*
- Lotharingia** [European history]
Verdun, Treaty of V: 317
- Lotophagi** [Greek mythology]
Lotus-eaters L: 473
- "Lotos-Eaters, The"** [poem by Tennyson]
Lotus-eaters L: 473
Tennyson, Lord (His poems) T: 169-170
- Lot's wife** [Biblical figure]
Lot L: 472
- Lott, Trent** [American political leader] L: 472
- Lottery** L: 473
- "Lottery, The"** [story by Jackson]
Jackson, Shirley J: 16
- Lotus** [plant] L: 473 *with picture*
Flower *picture on* F: 292
- Lotus-eaters** [Greek mythology] L: 473
Odyssey (Odysseus describes his wanderings) O: 675
- Lotus position** [yoga]
Yoga Y: 567 *with picture*
- Lotze, Rudolf Hermann** [German philosopher]
L: 473
- Lou Gehrig's disease** *See* Amyotrophic lateral sclerosis *in this index*
- Louangphrabang** [city, Laos]
Indochina (A new kingdom) I: 225; (French influence) I: 225
- Loubet, Émile** [French political leader]
Dreyfus, Alfred (Efforts to clear Dreyfus's name) D: 347-348
- Loud, John H.** [American inventor]
Pen (History) P: 234
- Louderback, Harold** [American jurist]
Impeachment (History) I: 91-92
- Loudness** [sound]
Sound (table) So: 599; (Intensity and loudness) So: 600-601
- Loudspeaker**
Radio (The speaker) R: 89 *with picture*
Speaker So: 768
- Lough** [lake]
Northern Ireland (Lakes, rivers, and bays) N: 523
- Lough Leane** [lake, Ireland]
Lakes of Killarney L: 49 *with map*
- Lough Neagh** [lake, Northern Ireland] L: 474
United Kingdom (The land) U: 58-61 *with map*
- Loughead, Allan** [American businessman]
Aviation (World War I [1914-1918]) A: 987-988
- Loughead, Malcolm** [American businessman]
Invention (The early and middle 1900's) : 363
- Lougheed, James** [Canadian political leader]
Bennett, Richard Bedford (Entry into politics) B: 252
- Lougheed, Peter** [Canadian political leader]
Clark, Joe (Political worker and student) Ci: 640-641
Alberta (table) A: 328
- Louhi, Witch of North Farm** [book by De Gerez]
Literature for children *picture on* L: 374
- Louis I** [king of the Franks] L: 474
- Louis I** [king of Hungary]
Hungary (The Kingdom of Hungary) H: 445
- Louis I** [king of Spain]
Philip V P: 370
- Louis II** [prince of Monaco]
Monaco (History) M: 700
- Louis II, the German** [king of Germany]
Germany (The breakup of Charlemagne's empire) G: 162
Verdun, Treaty of V: 316
- Louis VI** [king of France]
France (table) F: 471
- Louis VII** [king of France]
Crusades (The Second Crusade) Ci: 1160
 Eleanor of Aquitaine E: 158
France (table) F: 471
- Louis VIII** [king of France]
France (table) F: 471
- Louis IX** [king of France] L: 474
Clothing *picture on* Ci: 700
Crusades (Other Crusades) Ci: 1161
- Louis X** [king of France]
France (table) F: 471
- Louis XI** [king of France] L: 474
Charles VIII C: 381
France (A period of wars) F: 473
Postal services (The growth of public mail systems) P: 703
- Louis XII** [king of France] L: 474
- Louis XIII** [king of France] L: 474
Estates-General E: 360
France (The age of absolutism) F: 473
Hairdressing (The 1600's) H: 12
Marie de Médicis M: 200
Orchestra (Beginnings) O: 822
Richelieu, Cardinal R: 331
Swiss Guard So: 1049
- Louis XIV** [king of France] L: 474 *with portrait*
Anne of Austria A: 517
Ballet (The rise of professional ballet) B: 51
Canada, History of (The royal province) C: 142
Colbert, Jean Baptiste Ci: 760
Dance (Social dances) D: 29
Etiquette (The origins of etiquette) E: 374
Exploration (The French and English in North America) E: 446-447
France (The age of absolutism) F: 473
Maintenon, Marquise de M: 93
Nantes, Edict of N: 12
Roman Catholic Church (Gallicanism) R: 409
Succession wars (The War of the Spanish Succession) So: 950
Versailles, Palace of V: 339
William III W: 308
- Louis XIV style**
Furniture (Louis XIV furniture) F: 575 *with picture*
Interior design (Style) I: 327
- Louis XV** [king of France] L: 475 *with portrait*
Du Barry, Madame D: 370
Pompadour, Marquise de P: 653
- Louis XV style**
Furniture (The Rococo style) F: 576-577 *with picture*
- Louis XVI** [king of France] L: 476 *with portrait*
Estates-General E: 360
France (The French Revolution) F: 474
French Revolution (Background) F: 524-525; (The revolution begins) F: 525; (The Legislative Assembly) F: 526; (The National Convention) F: 526
Marie Antoinette M: 200
- Louis XVI style**
Furniture (The neoclassical style) F: 577
- Louis XVII** [king of France] L: 476
- Louis XVIII** [king of France] L: 476 *with portrait*
Bourbon (In France) B: 516
Napoleon I (Exile to Elba) N: 18
Ney, Michel N: 391
- Louis, Joe** [American boxer] L: 477
Boxing (The golden age of U.S. boxing) B: 533-534 *with picture*

- Braddock, James J. B: 544 *with picture*
 Marciano, Rocky M: 196
- Louis, Morris** [American artist]
 Painting (Color-field painting) P: 86
- Louis, Saint** See Louis IX [king of France] *in this index*
- Louis Alexander of Battenberg** [prince of Bulgaria]
 Battenberg B: 167
- Louis Napoleon** See Napoleon III *in this index*
- Louis Philippe** [king of France] L: 477
 Charles X [of France] C: 382
 Foreign Legion F: 386
 France (The revolutions of 1830 and 1848) F: 474
 July Revolution J: 190
 Lafayette, Marquis de (Last years) L: 28
- Louis S. St. Laurent** [Quebec]
 Canada (table: National historic sites) C: 114
- Louis the Great** See Louis XIV *in this index*
- Louis the Pious** [king of the Franks] See Louis I *in this index*
- Louisbourg** [Nova Scotia] L: 477
 Nova Scotia (The struggle in Acadia) N: 568
- Louisbourg, Battle of** [1745]
 Louisbourg L: 477
- Louisbourg, Battle of** [1758]
 Louisbourg L: 477
 Quebec, Battle of Q: 37
- Louisbourg, Fortress of** [Nova Scotia]
 Louisbourg L: 477
 Nova Scotia (Museums) N: 558; (Places to visit) N: 560; (The struggle in Acadia) N: 568 *with picture*
- Louise, Lake** See Lake Louise *in this index*
- Louise de Marillac, Saint** [French religious leader]
 Nun N: 608
 Roman Catholic Church (Catholic revival in France) R: 409
- Louise of Mecklenburg-Strelitz** [queen of Prussia] L: 477
- Louisiana** L: 478 *with pictures and maps*
 Cajuns C: 19
 Creationism (The 1900's) Ci: 1123-1124
 Exploration (The French and English in North America) E: 446-447
 Mississippi Scheme M: 649
 New France (The British conquest) N: 205
 See also the list of Related Articles in the Louisiana article
- Louisiana Education Trust Fund**
 Louisiana (Recent developments) L: 501
- Louisiana heron**
 Heron (American herons) H: 214
- Louisiana moss** [plant] See Spanish moss *in this index*
- Louisiana Pearl** [vegetable]
 Shallot S: 370
- Louisiana Purchase** [U.S. history] L: 502 *with maps*
 Iowa (Territorial days) I: 393
 Jefferson, Thomas *picture on* J: 83
 Livingston, Robert R. L: 399
 Louisiana (Territorial days) L: 498; *picture on* L: 499
 Missouri (Exploration and settlement) M: 669
 Nebraska (The Louisiana Purchase) N: 111
 Oklahoma (American ownership) O: 731
 Texas (The mission period) T: 206
 United States, History of the (The Louisiana Purchase) U: 163-164 *with map*
 Westward movement in America (The Louisiana Purchase) W: 248
- Louisiana Purchase Exposition** [Saint Louis]
 Missouri (Interesting facts) M: 651; (Progress as a state) M: 671; *picture on* M: 672
 World's fair W: 500
- Louisiana State Museum**
 Louisiana (Museums) L: 483
- Louisiana State University** L: 503
 Louisiana (The mid-1900's) L: 500; *picture on* L: 483
- Louisiana Story** [film]
 Flaherty, Robert Joseph F: 225
 Thomson, Virgil T: 265
- Louisiana Superdome**
 New Orleans (Downtown New Orleans) N: 279 *with picture*
- Louisiana tanager** [bird]
 Tanager T: 24
- Louisiana Territory** [U.S. history]
- Lewis and Clark expedition (Jefferson's plans) L: 222
- Louisiana Purchase (Boundary disputes) L: 503
- Westward movement in America (The Louisiana Purchase) W: 248
- "Louisiana Trilogy"** [music by Gottschalk]
 Gottschalk, Louis Moreau G: 280
- Louisiana waterthrush** [bird]
 Bird (Birds of inland waters and marshes) B: 340 *with picture*
- Louisianian, The** [newspaper]
 Pinchback, P. B. S. P: 467
- Louisville** [Kentucky] L: 504 *with pictures and map*
 Kentucky *picture on* K: 273
- Louisville, University of**
 Louisville (Cultural life) L: 505
- Louisville and Nashville Railroad**
 Kentucky (Transportation) K: 289
- Louisville Gardens**
 Louisville (The city) L: 504
- Louisville Jockey Club** [organization]
 Louisville (History) L: 506
- Loulé** [Portugal]
 Portugal *picture on* P: 689
- Lounsbury, George E.** [American political leader]
 Connecticut (table) Ci: 967
- Lounsbury, Phineas C.** [American political leader]
 Connecticut (table) Ci: 967
- Lourdes** [France] L: 507
- Laurenço Marques**
 Maputo M: 189
- Louse** [insect] L: 507 *with picture*
 Relapsing fever R: 209
 Skin (Infections) S: 490
- Louse, Plant** [insect] See Plant louse *in this index*
- Lousewort** [plant]
 Figwort family F: 97
 Flower (Flowers of the Arctic tundra) F: 283 *with picture*
- L'Ouverture, Toussaint** See Toussaint
 L'Ouverture *in this index*
- Louvre** [museum, Paris] L: 507
 Paris (Famous buildings) P: 163 *with picture and map*, (Museums and art galleries) P: 164 *with picture*
- Lovastatin** [drug]
 Heart (Treatment) H: 138
 Cholesterol (Treatment of high blood cholesterol) C: 520
- Love**
 Cupid Ci: 1193
 Emotion (Early theories about emotions) E: 261
 Empedocles E: 261
 Sexuality (Love and sex) S: 338b
- Love** [tennis]
 Tennis (Scoring) T: 162-163
- Love, Augustus E. H.** [British physicist]
 Earthquake (Surface waves) E: 34
- Love, Courtney** [American singer]
 Rock music (Rock music today) R: 380-381
- Love, John A.** [American political leader]
 Colorado (table) Ci: 844
- Love, Mike** [American musician]
 Beach Boys B: 179
- Love, Nat** [American frontiersman] L: 508 *with portrait*
 Western frontier life in America (The people) W: 235
- Love apple**
 Tomato (History) T: 326
- Love Canal** [New York]
 Environmental pollution (Hazardous waste) E: 334-335
 New York (The late 1900's) N: 319-320
- Love for Love** [play by Congreve]
 Congreve, William Ci: 949
- Love for Three Oranges, The** [opera by Prokofiev]
 Prokofiev, Sergei Sergeyevich P: 817
- Love-lies-bleeding** [plant]
 Amaranth A: 400 *with picture*
- Love of Zion** [book by Mapu]
 Hebrew literature (Modern Hebrew literature) H: 162
- Love Parade, The** [film]
 Lubitsch, Ernst L: 513
- Love potion**
 Mandrake M: 137
- "Love Song of J. Alfred Prufrock, The"** [poem by Eliot]
 Eliot, T. S. (His works) E: 237
- Love! Valour! Compassion!** [play by McNally]
 Drama (Later United States drama) D: 340-341
 McNally, Terrence M: 344
- Love wave** [physics]
 Earthquake (Surface waves) E: 34 *with diagram*
- Lovebird** [bird] L: 508 *with picture*
 Parakeet P: 151
 Parrot (Kinds of parrots) P: 179
- Lovebug** [insect] L: 508
- Lovecraft, H. P.** [American author] L: 508
 Derleth, August D: 152
- Loved and the Lost, The** [book by Callaghan]
 Callaghan, Morley C: 67
- Loveira, Carlos** [Cuban author]
 Cuba (The arts) Ci: 1172
- Lovejoy, Asa L.** [American settler]
 Portland [Oregon] P: 683
- Lovejoy, Elijah Parish** [American social reformer] L: 508
 Abolition movement (In the United States) A: 12
 Phillips, Wendell P: 382
- Lovelace, Ada** [British mathematician]
 Computer (Early punched-card computing devices) Ci: 924a-924b
- Lovelace, Richard** [English poet] L: 509
- Loveless, Herschel C.** [American political leader]
 Iowa (table) I: 391
- Lovell, Sir Bernard** [British astronomer] L: 509
- Lovell, James Arthur, Jr.** [American astronaut] L: 509
 Astronaut (Achievements in space) A: 829-830
 Space exploration (Voskhod and Gemini: The first multiperson space flights) So: 714; (Orbiting the moon) So: 715; (The flight of Apollo 13) So: 718
- Lovell, Robert**
 Southey, Robert So: 688b
- Lovell House** [Los Angeles]
 Neutra, Richard Joseph N: 153 *with picture*
- Lovelock**
 Hairdressing (The 1600's) H: 12
- Lovelock, James E.** [British chemist]
 Gaia G: 6
- Lovelock Cave**
 Nevada (Indian days) N: 173
- Lover, The** [novel by Yehoshua]
 Hebrew literature (A new generation of Hebrew writers) H: 163
- Lovers with Two Attendants** [painting]
 Painting *picture on* P: 45
- Love's Labour's Lost** [play by Shakespeare]
 Shakespeare, William (Love's Labour's Lost) S: 358
- Love's Martyr** [book]
 Shakespeare, William ("The Phoenix and the Turtle") S: 366
- Loves of a Blonde** [film]
 Motion picture (Movies in the 1960's) M: 871
- Lovett, Robert A.** [American government official]
 Defense, Department of (table) D: 87
 Truman, Harry S. (table) T: 469
- Low** [meteorology]
 Hurricane (The life of a hurricane) H: 453
 Weather (Air pressure) W: 157; (table: Weather terms) W: 157; (Synoptic-scale systems) W: 159-161
 Wind (Synoptic-scale circulations) W: 329
- Low, Frank J.** [American physicist]
 Telescope (Infrared telescopes) T: 108
- Low, Frederick F.** [American political leader]
 California (table) C: 59
- Low, Juliette Gordon** [American public figure] L: 509
 Girl Scouts (History) G: 200
 Savannah S: 165
- Low altitude orbit**
 Satellite, Artificial (Satellite orbits) S: 150d-150e *with picture*
- Low Church** [religion]
 Anglicans (Episcopalians) A: 463-464
- Low-compression engine**
 Gasoline engine (High and low compression) G: 63
- Low Countries** [region, Europe] L: 509

- Belgium (Habsburg rule) B: 233
Netherlands (Early days) N: 148
- Low Country** [region]
South Carolina So: 640
- Low-density lipoprotein**
Cholesterol C: 520
Physical fitness (Cholesterol levels) P: 434
- Low density polyethylene**
Polyethylene P: 649
- Low earth orbit satellite**
Communications satellite (Types of satellites)
Ci: 888a
- Low explosive**
Ammunition (The propellant) A: 435
Explosive (Low explosives) E: 454
- Low-fat food**
Nutrition (Evaluate claims about foods and dietary supplements carefully) N: 630
- Low gear**
Transmission (How a manual transmission works) T: 378 *with diagram*
- Low German** [language]
German language (Low German) G: 138
Germany (Language) G: 150
- Low-income housing**
Housing (Low-income and assisted housing)
H: 391
- Low islands** [geography]
Pacific Islands (The low islands) P: 7 *with picture*
- Low-level language** [computer] *See* Machine language *in this index*
- Low-pressure tire**
Tire (History) T: 298
- Low profile tire**
Tire (Low profile tires) T: 297 *with diagrams*
- Low-sulfur coal**
Coal (Coal as a fuel) Ci: 719
- Low tide**
Tide T: 280 *with diagram*
- Low Veld**
Zimbabwe (Land) Z: 596
- Lowboy** [furniture]
Colonial life in America (Furnishings) Ci: 797-798
- Löwchen** [dog] L: 509 *with picture*
- Lowden, Frank O.** [American political leader]
Harding, Warren Gamaliel (The smoke-filled room) H: 57
Illinois (table) I: 71
- Lowe, Enoch Louis** [American political leader]
Maryland (table) M: 255
- Lowe, Ralph P.** [American political leader]
Iowa (table) I: 391
- Lowe, Thaddeus Sobieski Coulinecourt** [American balloonist]
Balloon (Balloons in war) B: 61
- Lowell** [Massachusetts] L: 509
- Lowell, Abbott Lawrence** [American educator]
Harvard University (History) H: 80-81
- Lowell, Amy** [American poet] L: 510
- Lowell, Francis Cabot** [American businessman]
L: 510
Industrial Revolution (Spread of the Industrial Revolution) I: 252-253
Massachusetts (Progress as a state) M: 292
- Lowell, James Russell** [American poet]
L: 510
American literature (Poetry) A: 418
Holmes, Oliver Wendell (His life) H: 294
June (Quotations) J: 193
Launfal, Sir L: 121
Magazine (History) M: 43-45
May (Quotations) M: 321
- Lowell, Percival** [American astronomer] L: 511
Mars (Observation from Earth) M: 226c
Pluto S: 581
- Lowell, Robert** [American poet] L: 511
American literature ("Confessional" poetry)
A: 423 *with portrait*
- Lowell National Historical Park** [Massachusetts]
National Park System (table: National historical parks) N: 56-57
- Lowell Observatory** [Arizona]
Flagstaff *picture on* F: 224
Lowell, Percival L: 511
- Lower, Louis** [American founder]
DeMolay, Order of D: 129
- Lower animal** *See* Invertebrate *in this index*
- Lower Aulahi** [sultanate]
South Arabia, Federation of So: 639
- Lower California** [region, Mexico]
Mexico (The Pacific Northwest) M: 460
- Lower Canada** [Canadian history]
Canada, History of (The United Empire Loyalists) C: 144 *with map*; (The struggle for responsible government) C: 145-147
Confederation of Canada (Early colonies of Canada) Ci: 933
Ontario (Political unrest) O: 786
Papineau, Louis Joseph P: 139
Quebec (The 1700's) Q: 36-37
Rebellions of 1837 (In Lower Canada) R: 173
Union, Act of U: 277
- Lower class** [sociology]
City (The people) Ci: 578-580
Colonial life in America (The structure of colonial society) Ci: 793
Social class So: 550
- Lower Creek Indians**
Creek Indians Ci: 1126
- Lower Depths, The** [play by Gorki]
Gorki, Maxim G: 277
Russian literature (Late realism) R: 562-563 *with picture*
- Lower East Side** [district]
New York City (Manhattan) N: 323-324
- Lower Egypt** [Egyptian history]
Egypt, Ancient (Beginnings) E: 142; *map on*
E: 136
World, History of the (The Nile Valley) W: 424
- Lower Fort Garry National Historic Site** [Manitoba]
Canada (table: National historic sites) C: 114
Manitoba (Places to visit) M: 152
- Lower Geyser Basin**
Yellowstone National Park (The Lower Loop)
Y: 558 *with map*
- Lower House** [government]
Parliament (The House of Commons) P: 172
- Lower Klamath National Wildlife Refuge** [California]
Conservation *picture on* Ci: 975
- Lower Loop** [road]
Yellowstone National Park (Touring Yellowstone) Y: 558 *with map*
- Lower middle class** [sociology]
City (The people) Ci: 589-590
- Lower Palatinate** [German history]
Palatinate P: 101
- Lower risk species** *See* Rare species *in this index*
- Lower Usuma Dam** [Nigeria]
Dam (table) D: 18
- Lower Yafa** [sultanate]
South Arabia, Federation of So: 639
- Lowery, Samuel** [American educator]
African Americans (During the late 1800's)
A: 1361-136j
- Lowfat milk**
Milk (table) M: 547
- Löwig, Carl J.** [German chemist]
Bromine B: 636
- Lowlands**
Scotland (Land regions) S: 217
- Lowndes, Lloyd** [American political leader]
Maryland (table) M: 255
- Lowndes, Rawlins** [American political leader]
South Carolina (table) So: 658
- Lowry, Lois** [American author] L: 511
Newbery Medal (table) N: 359
Regina Medal (table: 1994) R: 206
- Lowry, Malcolm** [British author] L: 511
- Lowry, Mike** [American political leader]
Washington (table) W: 65
- Lowry, Robert** [American political leader]
Mississippi (table) M: 640
- LOX** *See* Liquid oxygen *in this index*
- Loxocemidae** [zoology]
Snake (The Mexican burrowing snake)
S: 535
- Loya jirga** [council]
Afghanistan (Government) A: 92a; (Recent developments) A: 97
- Loyal opposition** [political science]
Democracy (Political parties) D: 121
- Loyal Order of Moose** [organization]
Moose International, Inc. M: 799
- Loyalist House** [Saint John]
New Brunswick (Places to visit) N: 188
Saint John (Description) S: 35
- Loyalist Province** [New Brunswick]
New Brunswick N: 181
- Loyalists** [Spanish history] *See* Republicans *in this index*
- Loyalists** [U.S. history]
See also United Empire Loyalists; (British settlement) N: 196
Revolutionary War in America (Conduct of the war) R: 278; (Patriot governments) R: 279
Washington, George (Symbol of independence) W: 98
- Loyalties** [play by Galsworthy]
Galsworthy, John G: 17
- Loyalty board** [U.S. history]
McCarthyism M: 332
- Loyalty Islands** [Pacific]
New Caledonia N: 200
- Loyalty oath**
Johnson, Andrew (Plans for Reconstruction)
J: 139-140
Naturalization N: 66; (The final hearing) N: 66-67
Un-American Activities Committee U: 19
- Loyola, Saint Ignatius** [Spanish religious leader]
L: 511
Canisius, Saint Peter C: 177
Jesuits (History) J: 103
Xavier, Saint Francis X: 543
- Lozeau, Albert** [Canadian poet]
Canadian literature (Poetry: 1850-1918)
C: 157-158
- Lozenge**
Heraldry *picture on* H: 195
- LP record**
Phonograph (How phonographs work) P: 400; (History) P: 401-402
Recording industry (History) R: 182
- LPG** *See* Liquefied petroleum gas *in this index*
- LPGA** [organization]
Golf (Tournaments) G: 264; (Women's golf)
G: 266
- L.P.N.**
Nursing (Practical nursing courses) N: 620
- Lr**
Lawrencium L: 147
- LSD** [drug] L: 512
Brain (How drugs affect brain chemistry)
B: 556
Drug abuse (Hallucinogenic drugs) D: 362; (table: Some commonly abused drugs)
D: 363
Hallucinogenic drug H: 26
- Ltd.**
Limited company L: 308
- LTTE** [terrorist group] *See* Liberation Tigers of Tamil Eelam *in this index*
- Lu**
Lutetium L: 527
- Lu Xun** [Chinese author]
Chinese literature (Modern Chinese literature)
C: 512
- Lualaba River** [Congo (Kinshasa)]
Congo River Ci: 940f
- Luanda** [Angola] L: 512
Angola *picture on* A: 466
Stanley and Livingstone (Livingstone's discoveries) So: 837 *with map*
- Luapula River** [Zambia]
Lake Bangweulu L: 36
- Luau** [custom]
Hawaii (Food) H: 94
- Luba** [former kingdom]
Africa (Eastern, central, and southern kingdoms) A: 132-133
Congo (Kinshasa) (Early days) Ci: 940d
- Luba** [people] L: 512
- Lubber grasshopper** [insect]
Grasshopper (Short-horned grasshoppers)
G: 328; *pictures on* G: 327
- Lubbock** [Texas] L: 513
- Lubbock, Francis R.** [American political leader]
Texas (table) T: 203
- Lube distillate** [petroleum]
Gas oil G: 60
- Lübeck** [Germany] L: 513
City (The people) Ci: 582
- Lübeck, Treaty of** [1629]
Thirty Years' War (The Danish period) T: 260
- Lubitsch, Ernst** [German-American director]
L: 513
- Lubricant**
Bearing (Plain bearings) B: 188
Petroleum (Other uses of petroleum)
P: 332

Lubrication system

Automobile (The lubrication system) A: 952
 Gasoline engine (Lubrication system) G: 66
 Invention picture on I: 361

Lubricator cup [device]
 McCoy, Elijah M: 334

Lucan [Roman poet]
 Latin literature (The Imperial Period) L: 116

Lucas, Frank E. [American political leader]
 Wyoming (table) W: 532

Lucas, George [American director] L: 513
 Motion picture (A new generation of filmmakers) M: 872

Lucas, Louis [French chemist]
 Glass (table) G: 218

Lucas, Robert [American political leader]
 Iowa (Territorial days) I: 393-395; (Statehood) I: 395
 Ohio (table) O: 699

Lucas, Robert Emerson, Jr. [American economist]
 Nobel Prizes (Economics: 1995) N: 449

LucasArts Entertainment Company
 Lucas, George L: 513

Lucayo Indians
 Bahamas (History) B: 29

Lucca Madonna [painting by Van Eyck]
 Van Eyck, Jan picture on V: 282

Luce, Clare Boothe [American diplomat]
 L: 513

Luce, Cyrus G. [American political leader]
 Michigan (table) M: 507

Luce, Henry Robinson [American publisher]
 L: 514
 Journalism (The age of sensationalism) J: 174-175

Luce, Stephen B. [American military leader]
 Naval War College N: 70

Lucent Technologies [company]
 AT&T Corp. A: 852
 Manufacturing (table) M: 170

Lucerne [city, Switzerland] L: 514

Lucerne [plant]
 Alfalfa A: 345 with pictures

Lucerne, Lake of [Switzerland]
 Lake of Lucerne L: 42

Lucerne, Lion of [sculpture by Thorvaldsen]
 Lucerne L: 514
 Swiss Guard So: 1049

Lucey, Patrick J. [American political leader]
 Wisconsin (table) W: 365

Lucia di Lammermoor [opera by Donizetti]
 Donizetti, Gaetano D: 307
 Opera (*Lucia di Lammermoor*) O: 804

Lucian of Samosata [Greek author]
 Greek literature (The Greco-Roman Age) G: 378

Luciani, Albino See John Paul I in this index

Lucid, Shannon Wells [American astronaut]
 L: 514 with portrait
 Astronaut (table) A: 830
 Exploration (Space exploration) E: 452
 Space exploration (Docking with Mir) So: 726

Lucid dream
 Dream (What dreams consist of) D: 344

Lucier, Etienne [American settler]
 Portland (Oregon) (History) P: 684

Lucifer [Biblical figure] L: 514

Lucilius, Gaius [Roman author]
 Latin literature (Early Latin literature) L: 115

Lucius [literary figure]
 Apuleius, Lucius A: 578

Lucius I, Saint [pope]
 Pope (table) P: 666

Lucius II [pope]
 Pope (table) P: 666

Lucius III [pope]
 Pope (table) P: 666

Lucius Verus [Roman emperor]
 Marcus Aurelius M: 197
 Rome, Ancient (table) R: 447

Luck
 Superstition So: 995

"Luck of Roaring Camp, The" [story by Hartel]
 Harte, Bret H: 78

Lucknow [city, India] L: 514

Lucky Jim [book by Amis]
 Amis, Kingsley A: 432

Lucky Lindy [nickname]
 Lindbergh, Charles Augustus L: 330

Lucretius [Roman philosopher] L: 514
 Atomism A: 877

Latin literature (The age of Cicero) L: 115

Materialism M: 300a

Lucy [hominid]
Australopithecus A: 927
 Johanson, Donald Carl J: 131
 Prehistoric people (Types of australopithecines) P: 744 with picture; (table) P: 752

Lucy Stoner
 Stone, Lucy So: 908

Luddites [British history]
 Industrial Revolution (The working class) I: 251-252
 Riot (Causes of riots) R: 348

Ludendorff, Erich Friedrich Wilhelm [German general] L: 515
 Hindenburg, Paul von H: 235
 World War I (The Eastern Front) W: 456; (The Battle of Verdun) W: 458; (The last campaigns) W: 463

Ludington, Harrison [American political leader]
 Wisconsin (table) W: 365

Ludington, Henry [American military leader]
 Ludington, Sybil L: 515

Ludington, Sybil [American patriot] L: 515

Ludlow, George C. [American political leader]
 New Jersey (table) N: 249

Ludus [teacher]
 Education (Ancient Roman education) E: 98

Ludwig II [king of Bavaria] L: 515

Ludwig, Emil [German-Swiss author]
 Biography (Modern biography) B: 314

Luffa [plant]
 Gourd G: 281

Luffing
 Sailing (Basic sailing maneuvers) S: 26

Luftwaffe [German Air Force] L: 515
 Air force (World War II) A: 185
 World War II (The Battle of Britain) W: 475

Luganda [language]
 Ganda G: 24

Lugano [city, Switzerland]
 Lake Lugano L: 40

Lugano, Lake [Switzerland]
 Lake Lugano L: 40

Lugbait [sea animal] See Lugworm in this index

Luge [sport] L: 515 with picture
 Olympic Games (Winter Olympic Games) O: 746d

Luger
 Handgun picture on H: 44

Luger, George [Austrian-born inventor]
 Handgun (Rapid-fire handguns) H: 45

Lugh [Celtic god]
 Cuchulainn Ci: 1182

Lugnesadh [holiday]
 Witchcraft (Witchcraft as a religion) W: 371-372

Lugones, Leopoldo [Argentine author]
 Latin-American literature (Modernism) L: 112

Lugworm [sea animal] L: 516

Luis, Juan F. [American political leader]
 Virgin Islands (Progress under the United States) V: 397

Luisetti, Henk [American basketball player]
 L: 516
 Basketball (Changes in the game) B: 151-152

Lujack, Johnny [American football player]
 Football (table) F: 363

Lujan, Manuel, Jr. [American government official] L: 516
 Hispanic Americans (Political developments) H: 255-256
 Interior, Department of the (table) I: 325

Lukas, Paul [Hungarian actor]
 Motion picture (Best performance by an actor: 1943) M: 862

Lukashenko, Aleksandr [Belarusian political leader]
 Belarus (Recent developments) B: 224b-224c

Luke, Gospel of [New Testament]
 Bible (Books of the New Testament) B: 282-283
 Gospels G: 277
 New Testament (Books) N: 287

Luke, Saint [early Christian] L: 516
 Acts of the Apostles A: 31
 Gospels G: 277
 Jesus Christ (Ministry) J: 106

Lukeman, Henry A. [American sculptor]
 Stone Mountain So: 909

Luks, George Benjamin [American artist] L: 516
 Ashcan School A: 768

Lukuga River [Congo]
 Lake Tanganyika L: 46 with map

LULAC See League of United Latin American Citizens in this index

Lulach [king of Scotland]
 Macbeth M: 5

Lullaby [music]
 Nursery rhyme (Lullabies) N: 614

Lully, Jean-Baptiste [French composer]
 L: 516
 Overture O: 881

Lulu [opera by Berg]
 Berg, Alban B: 257

Lumbago [disorder]
 Spine So: 793

Lumbar puncture See Spinal tap in this index

Lumbar vertebra
 Skeleton (The axial skeleton) S: 479-480 with diagram
 Spine So: 792 with diagram

Lumbee Indians [American Indians] L: 516
 Lost Colony L: 472

Lumber L: 517 with pictures
 See also Wood in this index
 Forest (Economic value) F: 391
 Forest products F: 400 with pictures
 Colonial life in America (Lumbering and shipbuilding) Ci: 810 with picture
 House (Building materials) H: 380
 Weyerhaeuser, Frederick W: 253

Lumberjack
 Lumber (From forest to sawmill) L: 518
 Birling B: 375 with picture
 Sweden picture on So: 1031

Lumen [unit of measure]
 Candela C: 175
 Electric light (Incandescent lamps) E: 174
 Light (The brightness of light) L: 291 with diagram
 Lighting (Quantity of light) L: 297
 Metric system (Light) M: 440

Lumière, Auguste [French inventor]
 Lumière brothers L: 522

Lumière, Louis Jean [French inventor]
 Lumière brothers L: 522

Lumière brothers [French inventors] L: 522
 Motion picture (The invention of motion pictures) M: 864

Luminal [drug]
 Anticonvulsant A: 553

Luminance signal [electronics]
 Television (The television camera) T: 121-122

Luminescence [light] L: 522
 Bioluminescence B: 322
 Phosphorescence P: 402

Luminosity [astronomy]
 Star (Characteristics of stars) So: 842; diagram on So: 844; (Evolution of stars) So: 848 with diagram

Luminous flux
 Light (The brightness of light) L: 291
 Metric system (Light) M: 440

Luminous intensity [physics]
 Foot-candle F: 353
 Metric system (Light) M: 440

Lummus, John N. [American businessman]
 Miami Beach M: 482

Lumpectomy [surgery]
 Breast cancer B: 591
 Cancer (Surgery) C: 172
 Mastectomy M: 297

Lumpfish [fish] L: 522 with picture

Lumpkin, Wilson [American political leader]
 Georgia (table) G: 130

Lumpy jaw [disease]
 Actinomyces A: 30

Lumumba, Patrice [Congolese political leader]
 Cold War (Africa) Ci: 766
 Congo (Kinshasa) (Independence) Ci: 940d-940e

Lun Dayeh [people]
 Rain forest (Asia) R: 126b

Luna [mythology] L: 523
 See also Selene in this index

Luna [space probes]
 Space exploration (Lunar probes) So: 709
 Moon (Apollo missions) M: 795

Luna 2
 Satellite (History of satellite study) S: 150c
 Solar wind So: 582

- Luna 3**
Moon M: 783
- Luna, Count di** [opera character]
Opera (*Trovatore, II*) O: 808
- Luna, Tristán** [Spanish frontiersman]
Alabama (Exploration and settlement) A: 275
Pensacola P: 272
- Luna moth**
Insect *picture on I*: 291
Moth *picture on M*: 840
- Lunar caustic** [chemical]
Silver nitrate S: 465
- Lunar day**
Moon (Rotation and orbit) M: 783
- Lunar eclipse**
Eclipse E: 51 *with diagram*
Moon (Eclipses) M: 784
- Lunar module** [spacecraft]
Space exploration (Apollo: Mission to the moon) So: 714-715 *with pictures*
- Lunar month**
Calendar C: 28
- Lunar orbit rendezvous**
Space exploration (Apollo: Mission to the moon) So: 714-715
- Lunar Orbiter** [space probes]
Space exploration (Lunar probes) So: 709
- Lunar probe**
Rocket (Launching probes and satellites) R: 386
Space exploration (Lunar probes) So: 709 *with picture*
- Lunar Prospector** [space probe]
Astronomy (Space probes) A: 849
Moon (Recent exploration) M: 795
Space exploration (Lunar probes) So: 709-710
- Lunar roving vehicle**
Moon *picture on M*: 791
Space exploration (Other moon landings) So: 719; *picture on So*: 720
- Lunar year**
Calendar C: 28
Year (The calendar year) Y: 554
- Lunate bone**
Hand (Parts of the hand) H: 40
Wrist *diagram on W*: 510
- Luncheon of the Boating Party, The** [painting by Renoir]
Painting (Edouard Manet and the impressionists) P: 71-72
Renoir, Pierre Auguste *picture on R*: 241
- Luncheon on the Grass** [painting by Manet]
Manet, Edouard M: 138
- Lunda** [former kingdom]
Congo (Kinshasa) (Early days) Ci: 940d
Lunda L: 523
- Lunda** [people] L: 523
- Lundstrom, John** [Swedish manufacturer]
Match (The first safety matches) M: 300a
- Lundy, Benjamin** [American social reformer]
L: 523
Garrison, William Lloyd G: 45
- Lundy's Lane, Battle of** [1814]
War of 1812 (Lundy's Lane) W: 32
- Lunéville, Treaty of** [1801]
Napoleon I (Peacemaking) N: 16
- Lung** [anatomy] L: 523 *with diagrams*
Amphibian (Breathing) A: 440
Animal (Adaptations for breathing) A: 491-492 *with picture*
Asthma A: 824
Blood (Carrying oxygen and carbon dioxide) B: 408 *with diagram*
Bronchodilator B: 636
Cough Ci: 1095
Death (Defining death) D: 61
Emphysema (How emphysema affects breathing) E: 262 *with diagrams*
Frog *picture on F*: 537
Hantavirus H: 54
Heart (The work of the heart) H: 135 *with diagrams*
Human body *diagram on H*: 422
Hyperventilation H: 476
Lung cancer L: 525
Pneumonia P: 586
Silicosis S: 458
Tuberculosis T: 477 *with pictures*
- Lung Association, American**
American Lung Association A: 428
- Lung cancer** [disease] L: 525
- Cancer (Classification by primary body site) C: 167-168 *with diagrams*; (table) C: 170
- Cigarette Ci: 553
Smoking S: 520
- Lung capacity**
Spirometer So: 796
- Lungfish** [fish] L: 525
Coelacanth Ci: 752
Fish (Flashy-finned fish) F: 148 *with picture*; (How fish rest) F: 166-167
- Lungi** [clothing]
Bangladesh (Way of life) B: 80-81
Pakistan (Clothing) P: 96
- Lungwort** [botany] L: 525
- Lunokhod** [space vehicle]
Space exploration (Lunar probes) So: 709
- Lunt, Alfred** [American actor] L: 526
Fontanne, Lynn F: 327
- Lunula** [anatomy]
Nail N: 4
- Lunule** [zoology]
Shell *diagram on S*: 385
- Luoyang** [city, China]
Han dynasty H: 38 *with map*
- Lupercalia** [history of Rome]
Valentine's Day (Beginnings) V: 261
- Lupescu, Magda** [Romanian public figure]
Carol II C: 244
- Lupine** [plant] L: 526
Flower F: 278; *pictures on L*: 278, L: 283
Prince Edward Island *picture on P*: 790a
- Lupus** [disease] L: 526
Dermatology D: 153
Immune system (Systemic autoimmune diseases) I: 88c
- Lupus erythematosus** [disease]
Lupus L: 526
- Lupus vulgaris** [disease]
Lupus L: 526
- Luray Caverns** [Virginia] L: 526
Cave (table) C: 320
Stalactite So: 824 *with picture*
- Lurçat, Jean** [French artist]
Tapestry (History) T: 40
- Lure** [fishing]
Fishing *pictures on F*: 177
- Luria, Alexander R.** [Soviet psychologist]
Graphology G: 323
- Luria, Isaac** [Jerusalem-born religious leader]
Kabbalah K: 208
- Luria, Salvador Edward** [Italian-American biologist]
Nobel Prizes (Physiology or medicine: 1969) N: 445
- Lurton, Horace H.** [American jurist]
Supreme Court of the United States (table) So: 1000
- Lusaka** [city, Zambia] L: 526
Zambia Z: 588; *picture on Z*: 590
- Lüshun** [district, China] L: 526
Russo-Japanese War R: 566
- Lusiadas, Os** [poem by Camões]
Portugal (The arts) P: 689-690
- Lusignan, Guy de** [French nobleman]
Cyprus (History) Ci: 1207
- Lusitania** [former country]
Portugal (Roman rule) P: 692
- Lusitania** [ship] L: 526
Submarine (World Wars I and II) So: 943
United States, History of the (The United States in the war) U: 184
Wilson, Woodrow (World War I begins) W: 324
World War I (The war at sea) W: 460; (The United States enters the war) W: 462
- Lussac, Joseph Louis Gay-**
Gay-Lussac, Joseph Louis G: 71
- Luster** [physical property]
Mineral (Luster) M: 566-567
Wood (Wood figure) W: 390
- Luster painting** [art]
Islamic art (Pottery) I: 470
- Lute** [musical instrument] L: 527 *with picture*
Dowland, John D: 316
Music (Stringed instruments) M: 948-949 *with picture*
- lutefisk** [food]
Christmas (Christmas feasting) C: 534-535
- Luteinizing hormone**
Hormone (Growth and sex hormones) H: 336
Menstruation (Ovulation) *diagram on M*: 403
- Lutetia**
- Lutetium L: 527
Paris (Early years) P: 166
- Lutetium** [element] L: 527
- Luther** [play by Osborne]
Osborne, John O: 861
- Luther, Martin** [German religious leader] L: 527 *with picture*
Augsburg Confession A: 885
Bible (Early English translations) B: 286
Christianity (The Reformation) C: 526
Classical music (The Reformation) Ci: 646
Eck, Johann E: 50
Germany (The Reformation) G: 164 *with picture*
Holocaust (Before the Holocaust) H: 296
Hymn (History) H: 474
Leo X L: 198
Lutherans L: 529
Melancthon, Philipp M: 388
Peasants' War P: 224
Predestination P: 734
Protestantism (History) P: 834
Reformation (Martin Luther) R: 197
Roman Catholic Church (The Reformation) R: 408
Worms W: 501
Worms, Edict of W: 501
Zwingli, Huldreich (His ideas) Z: 614
- Lutheran church** See Lutherans *in this index*
- Lutheran Church in America** [religious group]
Evangelical Lutheran Church in America E: 422
- Lutheran Church—Missouri Synod** [religious group] L: 529
- Lutherans** [religious group] L: 529
Augsburg Confession A: 885
Catechism C: 299
Luther, Martin (Building and defending the church) L: 528
Muhlenberg, Henry Melchior M: 911
Norway (Religion) N: 541
Protestantism (The conservative reform movements [the 1500's]) P: 834
Reformation (Martin Luther) R: 197
Religious life (Religious life in the 1700's and 1800's) R: 227
Sweden (Religion) So: 1024; (The beginnings of modern Sweden) So: 1033; (Recent developments) So: 1035
- Luthuli, Albert John** [South African social reformer] L: 529
- Lutyens, Sir Edwin Landseer** [British architect] L: 530
New Delhi (History) N: 203
- Lützen, Battles of** [German history]
Thirty Years' War (The Swedish period) T: 260
- Luu, Jane** [Vietnamese-born astronomer]
Kuiper belt K: 392
- Lux** [unit of measure]
Foot-candle F: 353
Light (The brightness of light) L: 291
- Lux Mundi** [book by Gore]
Oxford Movement O: 887
- Luxembourg** [country] L: 530 *with picture and map*
Benelux B: 248
Christmas (In The Netherlands, Belgium, and Luxembourg) C: 531
Euro E: 378
Flag *picture on F*: 206
World War II (table: The Allies) W: 471; (The invasion of the Low Countries) W: 473
- Luxembourg** [city] L: 532, L: 530 *with picture*
- Luxembourg Gardens**
Paris (Gardens, squares, and parks) P: 162 *with picture and map*
- Luxembourg Palace**
Paris (Famous buildings) P: 163 *with picture and map*
- Luxemburg, Rosa** [German social reformer] L: 532
- Luxor** [Egypt]
Thebes T: 251
- Luxor, Obelisk of**
Paris (Gardens, squares, and parks) P: 162 *with picture*
- Luyendyk, Arie** [Dutch race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Luzán, Ignacio** [Spanish author]
Spanish literature (The 1700's) So: 760-761
- Luzern** [Switzerland]
Lucerne L: 514

Luzhniki Stadium

Moscow (Entertainment and recreation)
M: 825

Luzon [island, Philippines]

Philippines (The main islands) P: 376 *with pictures and map*

LVAD [medicine] *See* Left-ventricular assist device *in this index***Lviv** [city, Ukraine] *See* Lvov *in this index***L.V.N.**

Nursing (Practical nursing courses) N: 620

Lvov [city, Ukraine] L: 532

Ukraine (Climate) U: 10

Lvov, George [Russian political leader]

Lenin, V. I. (The February Revolution) L: 193

Lvov State University

Lvov L: 532

Lwoff, André [French microbiologist]

Monod, Jacques Lucien M: 731
Nobel Prizes (Physiology or medicine: 1965)
N: 445

Ly [dynasty]

Vietnam (Independence) V: 370

Lycabettus [hill]

Athens (Landmarks) A: 854-855 *with map*

Lycæna orus [insect]

Butterfly picture on B: 734

Lycanthropy [psychology]

Werewolf W: 196

Lycaon [Greek mythology]

Werewolf W: 196

Lycée

France (Education) F: 460-461

Lyceum [ancient Greece] L: 532

Aristotle (Aristotle's life) A: 663

Education (Ancient Greek education) E: 97-98

Library (Ancient libraries of papyrus) L: 258

Lyceum [organization] L: 532

Adult education (During the 1800's) A: 69

Lychee [tree]

Litchi L: 350 *with picture*

"Lycidas" [poem by Milton]

Milton, John (His early life and works) M: 557
Idyl I: 47

Lycopodium *See* Club moss *in this index***Lycopsid** [plant]

Plant (Lycopside) P: 520 *with pictures*

Lycurgus [Greek political leader] L: 532**Lycus, King** [Greek mythology]

Farnese Bull F: 46

Lydia [ancient country] L: 532 *with map*

Croesus C: 1150

Money (The first coins) M: 705-706 *with picture*

Lye [chemical] L: 533

Detergent and soap (How soap is made)
D: 164

Olive (Harvesting and preparation for market)
O: 743-744

Lyell, Sir Charles [British geologist] L: 533

Evolution (Darwin's theory) E: 432

Geology (Experimental geology) G: 99

Science (Scientific advances of the 1800's)
S: 200

Lyly, John [English author] L: 533

Drama (Elizabethan playwrights) D: 331-332

English literature (Elizabethan fiction) E: 317

Novel (Early novels) N: 572

Lyme disease L: 533

Deer tick D: 86

Tick T: 279

Lymph [physiology]

Lymphatic system L: 533

Cancer (How damaged genes cause cancer)
C: 169

Human body (The lymphatic system) H: 424

Lymph node [anatomy]

Lymphatic system (Lymph nodes) L: 534 *with diagram*; (Fighting infection) L: 535

Biopsy B: 326

Blood (Formation of new blood components)
B: 411-412

Breast cancer B: 591

Cancer (table) C: 170; (Surgery) C: 172

Gland (Glandlike structures) G: 209

Hodgkin's disease H: 283

Human body (The lymphatic system) H: 424

Immune system (Parts of the immune system) I: 87-88 *with diagram*

Lung cancer L: 525

Toxoplasmosis T: 351

Lymphatic system [physiology] L: 533 *with diagrams*

Cancer (Classification by primary body site)

C: 167-168

Edema E: 75

Human body (The lymphatic system) H: 424

Immune system (Parts of the immune system) I: 87-88

Lymphatic vessel [anatomy]

Human body (The lymphatic system) H: 424

Immune system (Parts of the immune system) I: 87-88 *with diagram*

Lymphatic system (Lymphatic vessels) L: 534;

(Return of interstitial fluid) L: 534-535

with diagram

Lymphedema [disorder]

Edema E: 75

Lymphocyte [physiology]

Blood (Protecting against disease) B: 410;

(Formation of new blood components)

B: 411

Immune system (Parts of the immune system) I: 87; (The immune response) I: 88

Interferon I: 324

Lymphatic system (Lymphocytes) L: 534;

(Fighting infection) L: 535

Thymus T: 274

Tonsil T: 330

Virus (Virus diseases in human beings) V: 426

Lymphoid cell [physiology]

Leukemia L: 215

Lymphoid organ [physiology]

Immune system (Lymphocytes) I: 87-88

Lymphoid tissue

Lymphatic system (Lymphoid tissue) L: 534

Lymphokine [chemical]

Immune system (The cell-mediated immune response) I: 88a-88b

Lymphoma [disease]

Cancer (Classification by primary body site)

C: 167-168

Tumor T: 484

Lynch, Charles [American military leader]

Lynching L: 535

Lynch, Charles [American political leader]

Mississippi (table) M: 640

Lynch, John M. [Irish government official]

Ireland (table) I: 428

Lynch, Thomas, Jr. [American patriot] L: 535**Lynch v. Donnelly** [U.S. history]

Supreme Court of the United States (table)
So: 1002

Lynching [crime] L: 535

Wells-Barnett, Ida Bell W: 195

Lyndon B. Johnson National Historical Park

[Texas]

National Park System (table: National historical parks) N: 56-57

Lyndon B. Johnson Space Center *See*

Johnson Space Center *in this index*

Lyndon Baines Johnson Library [Austin]

Austin (Description) A: 892-893 *with picture*

Texas (Libraries) T: 189 *with picture*

Lyndon Baines Johnson Memorial Grove on the Potomac

National Park System (table: National memorials) N: 54

Lynen, Feodor [German chemist] L: 535**Lynn, Richard E.** [American government official]

Agriculture, Department of (table) A: 161

Reagan, Ronald Wilson (table) R: 169

Lynn, James Thomas [American government official] L: 535**Lynn, Loretta** [American singer]

Country music (Modern country music)

Ci: 1098c

Lynx L: 536 *with picture*

Animal picture on A: 472

Caracal C: 200 *with picture*

Fur (table) F: 561

Wildcat W: 301

Lyon [France] L: 536 *with picture*

France picture on F: 459

Lyon, John [English educator]

Harrow School H: 77

Lyon, Mary [American educator] L: 537**Lyon, Nathaniel** [American general]

Missouri (The Civil War) M: 671

Lyon, Richard [American educator]

Bay Psalm Book B: 176

Lyon, Sterling R. [Canadian political leader]

Manitoba (table) M: 159

Lyons, Joseph A. [Australian political leader]

Australia (table) A: 925

Manzies, Sir Robert Gordon M: 411

Lyons, Ted [American baseball player]

Baseball (table: Hall of Fame) B: 135

Lyophilization

Freeze-drying F: 510

Lyra [constellation] L: 537**Lyre** [musical instrument] L: 537 *with picture*

Lyre of Orpheus, The [book by Davies]

Davies, Robertson D: 46

Lyrebird L: 537 *with picture*

Bird (Birds of Australia and the Pacific Islands)

B: 349 *with picture*; picture on B: 356

Lyric Opera Company [Chicago]

See also illustrations in the Opera article

Chicago (The arts) C: 428

Lyric Pieces [music by Grieg]

Grieg, Edvard G: 392

Lyric poetry

English literature (Elizabethan poetry) E: 316

Greek literature (Lyric poetry) G: 377

Poetry (Lyric poetry) P: 591

Lyric soprano

Opera (The singers) O: 792

Lyric Suite [music by Berg]

Berg, Alban B: 257

Lyric tenor

Opera (The singers) O: 792

Lyrical Ballads [poems by Coleridge and

Wordsworth]

Coleridge, Samuel Taylor (His life) Ci: 771

English literature (Romantic poetry) E: 320

Poetry (Romantic poetry) P: 597

Wordsworth, William W: 404

Lyrics [music]

Musical comedy (Elements of musical comedy) M: 959

Lyrics of Earth [poems by Lampman]

Lampman, Archibald L: 54

Lysander [Spartan general] L: 538**Lysander** [literary figure]

Shakespeare, William (A *Midsummer Night's Dream*) S: 357

Lysenko, Trofim Denisovich [Soviet biologist]

L: 538

Lysergic acid diethylamide *See* LSD *in this index***Lysias** [Greek orator] L: 538**Lysippus** [Greek sculptor] L: 538

Sculpture (Classical sculpture) S: 245-246

Lysistrata [play by Aristophanes]

Aristophanes A: 663

Lysosome

Cell (The cytoplasm) C: 329 *with diagram*

Lysozyme

Computer graphics picture on Ci: 924g

Fleming, Sir Alexander F: 233

Lyte, Henry Francis [British clergyman] L: 538**Lytton, Baron** [British author] *See* Bulwer-Lytton,

Edward George Earle Lytton *in this index*

LZ-1

Airship (The zeppelins) A: 252

LZ-127

Airship (Between world wars) A: 252

M

M [letter] M: 1 *with pictures***M** [film]

Motion picture (The movies talk) M: 867

M1 rifle

Garand rifle G: 28

M1 tank

Army, United States (Armor) A: 734

M1A1 tank

Tank diagram on T: 27

M-2 Bradley Infantry Fighting Vehicle

Army, United States picture on A: 736

M3 submachine gun

Machine gun (Ground weapons) picture on M: 16

M16 rifle

Garand rifle G: 28

M16A2 rifle

Rifle (Automatic and semiautomatic rifles)
R: 339 *with picture*

M31 [galaxy] *See* Andromeda Galaxy *in this index*

M33 [galaxy]
Universe **U**: 205
M60 machine gun
Machine gun (Ground weapons) **M**: 16 *with picture*
M-60 tank
Army, United States (Armor) **A**: 734
M-551 Armored Reconnaissance Airborne Assault Vehicle
Army, United States (Armor) **A**: 734
Ma, Yo-Yo [Chinese-born cellist] **M**: 2
Ma Duanlin [Chinese scholar]
Encyclopedia (From the 1200's to the 1600's) **E**: 268a
Ma huang [herb] *See Ephedra in this index*
Ma Rainey's Black Bottom [play by Wilson]
Wilson, August **W**: 316
Ma Yuan [Chinese painter] **M**: 2
Maarri, al-, Ab al Ala- [Arab poet]
Syria (The arts) **So**: 1072
Maas River [river, Europe] *See Meuse River in this index*
Maasai [people] **M**: 2
Cattle (Nomadic cattle raising) **C**: 315
Kenya (Way of life) **K**: 299; *picture on* **K**: 301
Africa *picture on* **A**: 99
Clothing *picture on* **Ci**: 686
Maasai [people] *See Masai in this index*
Maasai Mara Game Reserve [Tanzania]
National park (Kenya) **N**: 42c; (table) **N**: 42f
Maastricht Treaty [1992] *See European Union, Treaty on in this index*
Maazel, Lorin [American conductor] **M**: 2
Mab, Queen [legendary figure]
Faery (Where fairies live) **F**: 10-11
Mabey, Charles R. [American political leader]
Utah (table) **U**: 245
Mabillon, Jean [French monk]
Paleography **P**: 103
Mabinogion [stories]
Mythology (Celtic mythology) **M**: 983
Wales (The arts) **W**: 11
Mabo v. Queensland [court case]
Australia (Recent developments) **A**: 925-926
Mabovitz, Golda *See Meir, Golda in this index*
Mabry, Thomas J. [American political leader]
New Mexico (table) **N**: 272
Mabus, Ray [American political leader]
Mississippi (table) **M**: 640
Mac...
Names beginning Mac are alphabetized as single words: MacArthur, Charles, appears after Macaroni. Names beginning Mc appear after headings beginning Mb
Mac [dynasty]
Vietnam (Independence) **V**: 370
Macadam [building material]
McAdam, John Loudon **M**: 330
Road (Paving) **R**: 359; (From the 500's to the 1800's) **R**: 361
Macadamia nut **M**: 2
Nut (Kinds of nuts) **N**: 621 *with picture*
MacAlpin, Kenneth [king of the Scots]
Scotland (Beginning of the Scottish kingdom) **S**: 219
Macao [region, China] **M**: 2
China (Recent developments) **C**: 507
Portugal **P**: 686; (End of the empire) **P**: 695
Macapagal-Arroyo, Gloria [Filipino political leader]
Philippines (Recent developments) **P**: 381
Macaque [animal] **M**: 3 *with picture*
Barbary ape **B**: 105
Primate (Old World monkeys) **P**: 778a *with picture*
Macaroni [food]
Pasta **P**: 192
Macaroni wheat
Grass (Cereals) **G**: 326
MacArthur, Arthur [American political leader]
Wisconsin (table) **W**: 365
MacArthur, Arthur [American general]
MacArthur, Douglas (Early career) **M**: 3
MacArthur, Catherine T. [American philanthropist]
MacArthur Foundation **M**: 4
MacArthur, Charles [American dramatist]
Hayes, Helen **H**: 117
Hecht, Ben **H**: 164
MacArthur, Douglas [American general] **M**: 3 *with picture*

Arkansas *picture on* **A**: 713
Autograph *picture on* **A**: 943
Bataan Peninsula **B**: 162
Japan (Allied military occupation) **J**: 58
Korean War (The Inchon landing) **K**: 381 *with picture*; (The Allies move north) **K**: 381; (The "Battle for the Hills") **K**: 382
Philippines (Japanese control) **P**: 380
Truman, Harry S. (The Korean War) **T**: 471
World War II (The South Pacific) **W**: 487-488
Macarthur, John [Australian settler]
Sydney (History) **So**: 1064
MacArthur, John D. [American philanthropist]
MacArthur Foundation **M**: 4
MacArthur Fellows Program
MacArthur Foundation **M**: 4
MacArthur Foundation **M**: 4
Foundations (table) **F**: 430
MacArthur lock
Soo Canals (The American canals) **So**: 595 *with map*
MacArthur Park [Arkansas]
Arkansas (Places to visit) **A**: 704
Macassar oil
Hairdressing (The 1800's) **H**: 12
Macao *See Macao in this index*
Macaulay, David [American author]
Caldecott Medal (table: 1991) **C**: 26
Literature for children *picture on* **L**: 384
Macaulay, Thomas Babington [British historian] **M**: 5
Biography (The 1800's) **B**: 313
Fourth estate **F**: 438
Macaw [bird] **M**: 5
Animal *picture on* **A**: 480
Parrot (Kinds of parrots) **P**: 179; *picture on* **P**: 180
Macay, Spruce [American lawyer]
Jackson, Andrew (Lawyer) **J**: 8
Macbeth [king of Scotland] **M**: 5
Duncan I **D**: 383
Macbeth [play by Shakespeare]
Macbeth **M**: 5
Shakespeare, William (*Macbeth*) **S**: 363; (Imagery) **S**: 367; *pictures on* **S**: 349, **S**: 368
Theater *picture on* **T**: 232
Macbeth, Lady [literary figure]
Shakespeare, William (*Macbeth*) **S**: 363
MacBride, Sean [Irish statesman]
Nobel Prizes (Peace: 1974) **N**: 448
Maccabee, Judah *See Judah Maccabee in this index*
Maccabees [Bible]
Bible (Development of the Christian Old Testament) **B**: 282
Maccabees [Jewish rulers]
Palestine (Invasions and conquests) **P**: 104
MacCauley, Clay [American artist]
Indian, American *picture on* **I**: 158
MacCool, Finn [legendary figure] *See Finn MacCool in this index*
MacCorkle, William A. [American political leader]
West Virginia (table) **W**: 225
MacDiarmid, Alan Graham [American chemist]
Nobel Prizes (Chemistry: 2000) **N**: 444
Macdonald, Andrew Archibald [Canadian political leader]
Confederation of Canada (Fathers of Confederation) **Ci**: 935 *with picture*
Macdonald, Angus L. [Canadian political leader]
Nova Scotia (table) **N**: 567
Macdonald, Brian [Canadian choreographer]
Ballet (Ballet in Canada) **B**: 54
Macdonald, Hugh [father of]
Macdonald, Sir John Alexander (Boyhood and education) **M**: 6
Macdonald, Hugh John [Canadian political leader]
Macdonald, Sir John Alexander (Marriages) **M**: 7
Manitoba (table) **M**: 159
Macdonald, Isabella [wife of]
Macdonald, Sir John Alexander (Marriages) **M**: 7
MacDonald, J. E. H. [Canadian painter]
Group of Seven **G**: 402 *with picture*
Painting (Composition) **P**: 35
MacDonald, James Ramsay [British political leader] **M**: 5

Labour Party (History) **L**: 16
United Kingdom (The rise of the Labour Party) **U**: 70
Macdonald, Sir John Alexander [Canadian political leader] **M**: 6 *with pictures*
Abbott, Sir John Joseph Caldwell (The Pacific Scandal) **A**: 6
Canada, History of (Confederation) **C**: 146; (New provinces) **C**: 147; (The Pacific Scandal) **C**: 147; (The return of Macdonald) **C**: 147; *picture on* **C**: 141
Confederation of Canada (Fathers of Confederation) **Ci**: 935 *with picture*; (Moves toward confederation) **Ci**: 933
Laurier, Sir Wilfrid (The execution of Louis Riel) **L**: 124-125
Mackenzie, Alexander (Leader of the Opposition) **M**: 22; (Economic difficulties and defeat) **M**: 22
Prime minister of Canada (History) **P**: 779-780 *with picture*
Progressive Conservative Party **P**: 812
Thompson, Sir John Sparrow David **T**: 263
MacDonald, John D. [American author] **M**: 10
Macdonald, John Sandfield [Canadian political leader] **M**: 10 *with portrait*
Ontario (table) **O**: 783; (Confederation) **O**: 786; *picture on* **O**: 785
MacDonald, Ross [American author]
Macdonald, Ross **M**: 11
MacDonnell Ranges [mountains, Australia]
Australia (Mountains) **A**: 909-910 *with map*
Macdonough, Thomas [American military leader] **M**: 11
War of 1812 (The war at sea) **W**: 31; (Lake Champlain) **W**: 32
MacDowell, Edward Alexander [American composer] **M**: 11
Macduff [literary figure]
Shakespeare, William (*Macbeth*) **S**: 363
Mace [spice] **M**: 11
Nutmeg **N**: 623 *with picture*
Mace [symbol] **M**: 11
Sergeant at arms **S**: 316
Mace [tear gas] **M**: 11
Macedonia [historical region, Europe] **M**: 11 *with map*
Alexander the Great **A**: 342 *with map*
Europe (Ancient Greece) **E**: 408
Exploration (The Greeks) **E**: 441
Greece (Macedonia) **G**: 357
Macedonia [country] (History) **M**: 12a
Rome, Ancient (Expansion overseas) **R**: 445-446
Skopje **S**: 495
Yugoslavia **Y**: 576; (History) **Y**: 579
Macedonia [country, Europe] **M**: 12 *with picture and map*
Flag *picture on* **F**: 206
North Atlantic Treaty Organization (History) **N**: 471
Macedonian [language]
Macedonia [country] (People) **M**: 12
MacFlecknoe [poem by Dryden]
Dryden, John **D**: 370
MacGillivray, William [Scottish naturalist]
Audubon, John James (His works) **A**: 884
MacGregor, Robert [Scottish bandit] *See Rob Roy in this index*
MacGregor plaid
Tartan *picture on* **T**: 47
Mach, Ernst [Austrian physicist] **M**: 12b
Mach number [unit of measure]
Aerodynamics (Supersonic aerodynamics) **A**: 88
Airplane (Supersonic airplanes) **A**: 238
Mach, Ernst **M**: 12b
Machado, Antonio [Spanish poet]
Spanish literature (The Generation of 1898) **So**: 762
Machado, Gerardo [Cuban political leader]
Cuba (The Platt Amendment) **Ci**: 1177
Machado, Manuel [Spanish poet]
Spanish literature (Modernism) **So**: 762
Machado de Assis, Joaquim Maria [Brazilian author] **M**: 12b
Brazil (The arts) **B**: 576-577
Latin-American literature (Realism) **L**: 112
Machaut, Guillaume de [French composer] **M**: 12b
Classical music (Secular music) **Ci**: 646

Machel, Graca [Mozambican political leader]
Mandela, Nelson (End of white rule) **M: 137**

Machiavelli, Niccolò [Italian philosopher]

M: 12b with portrait

Borgia, Cesare **B: 487**

Italian literature (Humanism and the Renaissance) **I: 494**

Political science (Secularism) **P: 639**

Machigonne [former name]

Portland [Maine] **P: 683**

Machine **M: 13 with pictures**

Automation **A: 944**

Cybernetics **Ci: 1203**

Efficiency **E: 115**

Ergonomics **E: 349**

Treadmill **T: 406**

See also the list of Related Articles in the Machine article

Machine [politics]

City government (Influencing city government)
Ci: 597

Machine age See Industrial Revolution in this index

Machine bolt

Bolt **B: 449 with pictures**

Machine gun **M: 15 with pictures**

Air force (World War I) **A: 185**

Air Force, United States (World War I)
A: 194

Gatling, Richard Jordan **G: 68**

Gun control (Approaches to gun control)
G: 440-441

World War I (A build-up of military might)
W: 453-454; picture on W: 457

Machine Hall [Paris]

Architecture *picture on A: 625*

Machine language

Computer (Compiling or assembling a program) **Ci: 923**

Machine screw

Screw (Uses) **S: 225 with pictures**

Machine tool **M: 17 with pictures**

Die and diemaking **D: 195**

Mass production **M: 269**

Nasmyth, James **N: 24**

Toolmaking **T: 331**

Machining [manufacturing]

Automobile (Manufacturing) **A: 957**

Machine tool **M: 17**

Machinist

Careers (Production) **C: 229**

Machine tool **M: 17**

Machinists and Aerospace Workers,

International Association of [labor union]
M: 20

Labor movement (table) **L: 8**

Machinist's hammer

Hammer **H: 34 with picture**

MACHO [physics] See Massive astrophysical compact halo object in this index

Machpelah, Cave of

Abraham **A: 17**

Hebron **H: 164**

Machu Picchu [Peru] **M: 20**

Architecture (Pre-Columbian architecture)
A: 614

Indian, American *picture on I: 174*

Peru *picture on P: 314*

Macias Nguema, Francisco [Equatorial Guinea political leader]

Equatorial Guinea (History) **E: 347**

Macintosh [personal computer]

Advertising *picture on A: 78*

Computer (Personal computers) **Ci: 909-910;**
(The personal computer) **Ci: 924c-924d**

Desktop publishing **D: 158**

Macintosh, Charles [British inventor] **M: 20**

Rubber (The rubber industry begins) **R: 501**

Waterproofing **W: 146**

Mack, Alexander [German religious leader]

Brethren, Church of the **B: 594**

Mack, Connie [American baseball manager] **M: 20**

Baseball (table: Hall of Fame) **B: 135**

"Mack the Knife" [song]

Weill, Kurt **W: 188**

Mackay, Buddy [American political leader]

Florida (table) **F: 260**

Mackay, John William [American businessman] **M: 20**

Mackay, R. A. [Canadian diplomat]

United Nations (table) **U: 86**

Mackenzie, Sir Alexander [Canadian explorer] **M: 22**

Alberta (The fur trade) **A: 328-329; picture on A: 330**

Canada, History of (Exploration of the West) **C: 145**

Exploration (Crossing North America) **E: 447 with map**

Fraser River **F: 495**

North West Company **N: 519**

Northwest Territories (History) **N: 533**

Mackenzie, Alexander [Canadian political leader] **M: 21 with portrait**

Macdonald, Sir John Alexander (The Pacific Scandal) **M: 9**

Mackenzie, George [Canadian lawyer]

Macdonald, Sir John Alexander (Boyhood and education) **M: 6**

Mackenzie, George H. [American chess player] **Chess** (United States chess champions) **C: 414**

Mackenzie, Helen Neil [wife of]

Mackenzie, Alexander (Emigration to Canada) **M: 21**

Mackenzie, Jane Sym [wife of]

Mackenzie, Alexander (Emigration to Canada) **M: 21**

MacKenzie, K. R. [American physicist]

Astatine **A: 823**

Mackenzie, Roderick [Canadian frontiersman] **M: 23**

Alberta (The fur trade) **A: 328-329**

Mackenzie, William Lyon [Canadian political leader] **M: 23 with portrait**

Canada, History of (The uprisings of 1837) **C: 146**

King, William Lyon Mackenzie (Boyhood) **K: 324-325**

Macdonald, Sir John Alexander (Lawyer) **M: 6**

Ontario (Political unrest) **O: 786; picture on O: 785**

Rebellions of 1837 **R: 173**

Toronto (The 1800's) **T: 340a**

Mackenzie Inuit [people] See Inuvialuit in this index

Mackenzie King Square [Kitchener]

Kitchener **K: 338**

Mackenzie Mountains [Canada]

Northwest Territories (The land) **N: 530 with map**

Rocky Mountains (Chief ranges of the Rockies) **R: 395**

Mackenzie River [Canada] **M: 23 with map**

British Columbia (Rivers, waterfalls, and lakes) **B: 624**

Canada (Rivers, waterfalls, and lakes) **C: 118-119**

River (table) **R: 352**

Mackenzie Valley [region, Northwest Territories]

Northwest Territories (The land) **N: 530**

Mackerel [fish] **M: 23 with picture**

Fish *picture on F: 153*

Kingfish **K: 329 with picture**

Mackerel tabby

Cat (Coat) **C: 287**

Mackinac, Straits of [strait, Michigan] **M: 24**

Lake Huron **L: 39 with map**

Mackinac Bridge [Michigan]

Bridge (table: Suspension) **B: 603**

Mackinac, Straits of **M: 24**

Michigan (Interesting facts) **M: 489**

Mackinac Island [island, Michigan] **M: 24**

Lake Huron **L: 39 with map**

Mackinder, Sir Halford [British geographer]

Geopolitics **G: 106**

Mackintosh [clothing]

Macintosh, Charles **M: 20**

Rubber (The rubber industry begins) **R: 501**

Waterproofing **W: 146**

MacLachlan, Patricia [author]

Newbery Medal (table) **N: 359**

MacLaine, Shirley [American actress]

Motion picture (Best performance by an actress: 1983) **M: 862**

MacLean, J. Angus [Canadian political leader] **Prince Edward Island** (table) **P: 791**

MacLean, John D. [Canadian political leader] **British Columbia** (table) **B: 627**

MacLeish, Archibald [American poet] **M: 24**

MacLellan, Russell [Canadian political leader] **Nova Scotia** (table) **N: 567**

MacLennan, Hugh [Canadian author] **M: 25**
Canadian literature (Modern English-Canadian fiction) **C: 160**

Macleod, John James Rickard [Scottish physiologist]

Banting, Sir Frederick Grant **B: 99**

Insulin (History) **I: 308**

MacLeod of Lewis plaid

Tartan *picture on T: 47*

MacIure, William [American geologist]

New Harmony **N: 228**

MacMahon, Marie Edme Patrice Maurice de [French general]

Franco-Prussian War (Progress of the war) **F: 483**

MacMillan, A. Stirling [Canadian political leader]

Nova Scotia (table) **N: 567**

MacMillan, Donald Baxter [American explorer] **M: 25**

Macmillan, Harold [British political leader] **M: 25**

United Kingdom (Economic recovery—and collapse) **U: 72**

Macmillan, Kirkpatrick [Scottish blacksmith]

Bicycle (Early bicycles) **B: 292**

MacMillan, W. J. P. [Canadian political leader]

Prince Edward Island (table) **P: 791**

Macmillan plaid

Tartan *picture on T: 47*

MacMillan Space Centre

Vancouver (Museums) **V: 276**

MacMonnies, Frederick William [American sculptor]

Sculpture (American sculpture) **S: 255-256**

MacMurrough, Dermot [Irish king]

Ireland (The Norman invaders) **I: 425**

MacNab, Sir Allan [Canadian political leader]

Hamilton (Cultural life) **H: 31**

MacNelly, Jeff [American cartoonist]

Cartoon *picture on C: 264*

Macon [Georgia] **M: 25**

Macon [airship]

Airship (Between world wars) **A: 252**

Macon, Nathaniel [American political leader]

Macon **M: 25**

Macon Act [1810]

War of 1812 (American reaction) **W: 29-30**

Macoun, John [Canadian botanist]

Regina (History) **R: 206**

MacPhail, Agnes Campbell [Canadian political leader]

Macphail, Agnes Campbell **M: 25**

MacPhail, Larry [American baseball executive]

Baseball (table: Hall of Fame) **B: 135**

MacPhail, Lee [American baseball executive]

Baseball (table: Hall of Fame) **B: 135**

Macpherson dress plaid

Tartan *picture on T: 47*

Macquarie Island [Pacific]

Tasmania (Location, size, and description) **T: 49**

Macramé [handicraft] **M: 26 with picture**

Macready, William Charles [English actor] **M: 26**

Macrinus [Roman emperor]

Rome, Ancient (table) **R: 447**

Macro-Algonquian [language group]

Indian, American (Language groups) **I: 149-150**

Macro-Chibchan [language group]

Indian, American (Language groups) **I: 149-150**

Macro lens

Camera (Single-lens reflex (SLR) cameras) **C: 82-83**

Photography (Single-lens reflex cameras) **P: 417**

Macro-Otomanguean [language group]

Indian, American (Language groups) **I: 149-150**

Macro-Siouan [language group]

Indian, American (Language groups) **I: 149-150**

Macroeconomics

Economics (table) **E: 58**

Keynes, John Maynard **K: 308**

Macromolecule

Human body (Chemical elements and molecules) **H: 417**

Life (The chemical basis of life) **L: 277**

Molecular biology (The beginning of molecular biology) **M: 691-692**

- Macron**
Diacritical mark D: 180
- Macronutrients**
Nutrition (Kinds of nutrients) N: 625
- Macrophage** [physiology]
AIDS (Cause) A: 163
Blood (Protecting against disease) B: 410 *with pictures*
Disease *diagram* on D: 232
Gaucher's disease G: 68
Immune system (Antigen-presenting cells) I: 88
Lung (Other jobs of the lungs) L: 524
Lymphatic system (Lymph nodes) L: 534;
(Fighting infection) L: 535
Spleen So: 797
- Macropod** [mammal]
Kangaroo K: 213
Marsupial (Kinds of marsupials) M: 232
Kangaroo (Other macropods) K: 215
- Macroscelidea** [zoology]
Mammal (table) M: 129 *with picture*
- Macrostructure**
Materials M: 300b
- Mactan** [island, Philippines]
Magellan, Ferdinand *picture* on M: 48
- Maetquaac** [park]
New Brunswick *picture* on N: 184
- MacTavish plaid**
Tartan *picture* on T: 47
- Macuahuitl** [weapon]
Aztec (Warfare) A: 1002
- Macula** [anatomy]
Eye (The retina) E: 462; (Diseases of the retina) E: 467; *picture* on E: 461
- Macular degeneration** [disorder]
Blindness (Diseases) B: 401
Eye (Diseases of the retina) E: 467
- Macumba** [religion]
Brazil (Religion) B: 575
Rio de Janeiro (People) R: 345-346
- MacVeagh, Franklin** [American government official]
Garfield, James Abram (table) G: 42
Taft, William Howard (table) T: 11
Treasury, Department of the (table) T: 407
- MacVeagh, I. Wayne** [American government official]
Justice, Department of (table) J: 203
- Macy, John A.** [husband of Anne Sullivan]
Sullivan, Anne Mansfield So: 969
- Mad Anthony Wayne** See Wayne, Anthony in *this index*
- Mad cow disease** M: 26
Cattle (Diseases) C: 312-314
Prion P: 804
- Mad Ludwig** [nickname]
Ludwig II L: 515
- "Mad Scene"**
Opera (*Lucia di Lammermoor*) O: 804
- Madagascar** [country] M: 26 *with pictures and map*
Flag *picture* on F: 199
- Madagascar, University of**
Madagascar (People) M: 26-27
- Madagascar palm**
Palm (Products of palms) P: 109
- Madam**
Prostitution P: 830
- Madam C. J. Walker Manufacturing Company**
Walker, Madam C. J. W: 14
- Madama Butterfly** [opera by Puccini]
Opera (*Madama Butterfly*) O: 804 *with picture*
Puccini, Giacomo P: 869
- Madama Palace**
Rome (Churches, palaces, and fountains) R: 429
- Madame Bovary** [book by Flaubert]
Flaubert, Gustave F: 230
French literature (Realism) F: 521
Novel (France) N: 573
- Madame Roland** See Roland de la Platière, Marie Jeanne in *this index*
- Madame Tussaud's Exhibition** [London]
Tussaud, Marie Gresholtz T: 525
- Madden Dam**
Panama Canal (The canal since 1920) P: 126
- Madden Lake**
Panama Canal (The canal since 1920) P: 126
- Madder** [plant] M: 29
Dye (Natural dyes) D: 396
- Gardenia G: 29
Lake L: 35
- Maddock, Walter** [American political leader]
North Dakota (table) N: 513
- Maddox** [destroyer]
Vietnam War (The Gulf of Tonkin incident) V: 375
- Maddox, Lester G.** [American political leader]
Georgia (table) G: 130; (The mid-1900's) G: 134
- Maddox, Richard L.** [British doctor]
Photography (The beginnings of modern photography) P: 426
- Maddux, Greg** [American baseball player] M: 29
- Madeira Islands** [Atlantic] M: 29 *with picture*
Henry the Navigator H: 191
Portugal P: 686
- Madeira River** [Brazil] M: 30
Amazon River (The course of the Amazon) A: 403
- Madeira wine**
Portugal (Agriculture and fishing) P: 691-692
- Madeline's Rescue** [book by Bemelmans]
Bemelmans, Ludwig B: 246 *with picture*
- Mademoiselle de Scudéry** [book by Hoffmann]
Hoffmann, Ernst Theodor Amadeus H: 284
- Mademoiselle Modiste** [oparetta by Herbert]
Herbert, Victor H: 197
- Maderno, Carlo** [Italian architect]
Saint Peter's Basilica (History) S: 53-54
- Madero, Francisco Indalecio** [Mexican political leader] M: 30
Mexico (The Revolution of 1910) M: 472
Mexico City (Revolution and growth) M: 478
Obregón, Álvaro O: 643
Zapata, Emiliano Z: 590
- Madhubuti, Haki** [American author]
African American literature (The 1900's) A: 136a
- Madhya Pradesh** [state, India]
Asia (Languages) A: 773
- Madigan, Edward R.** [American government official]
Agriculture, Department of (table) A: 161
- Madison** [Wisconsin] M: 30 *with picture*
Wisconsin *pictures* on W: 350, W: 352
- Madison, Dolley Payne** [wife of James Madison] M: 31
First ladies F: 143
Jefferson, Thomas (Life in the White House) J: 82-83
Madison, James (Congressman) M: 34 *with portrait*; (Life in the White House) M: 36
White House hostesses W: 291
- Madison, George** [American political leader]
Kentucky (table) K: 290
- Madison, James** [father of U.S. president]
Madison, James M: 32
- Madison, James** [U.S. President] M: 32 *with pictures*
Bill of rights (The United States Constitution) B: 301
Constitution of the United States (The Constitutional Convention) Ci: 999-1000; (The Bill of Rights) Ci: 1001; (The development of the Constitution) Ci: 1001
Federalist, *The* F: 67
Hamilton, Alexander (Secretary of the treasury) H: 32
Jefferson, Thomas (National statesman) J: 80-81; (Commercial retaliation) J: 86
Kentucky and Virginia Resolutions K: 295
Louisiana Purchase (Trouble begins) L: 502
Madison, Dolley Payne M: 31
Marbury v. Madison M: 193
United States, History of the (The War of 1812) U: 164
Virginia (*The Mother of Presidents*) V: 421
- Madison, Mount**
New Hampshire (Mountains) N: 220
- Madison, Nelly Conway** [mother of]
Madison, James (Early life) M: 32
- Madison Mountains**
Montana (Land regions) M: 752
- Madison Square Garden** [New York City]
New York City (Sports) N: 338
- Madjapahit** [former kingdom]
Indonesia (Hindu and Buddhist kingdoms) I: 236; (The spread of Islam) I: 237
- Madl, Ferenc** [Hungarian political leader]
Hungary (Recent developments) H: 448
- Madonna** [American singer] M: 37
Rock music (Rock videos) R: 380 *with picture*
- Madonna** [painting by Baldovinetti]
Madonna and Child (Types of Madonna paintings) M: 38
- Madonna** [painting by Massys]
Madonna and Child (Types of Madonna paintings) M: 38
- Madonna and Child** [art] M: 37 *with picture*
Lippi, Filippo *picture* on L: 345
Painting (Medieval painting) P: 48-49 *with picture*; (The Renaissance) P: 51 *with pictures*
Raphael R: 142
Renaissance (The fine arts) R: 235-236 *with pictures*
- Madonna and Child** [engraving by Mantegna]
Engraving *picture* on E: 326
- Madonna and Child** [painting by Fra Filippo Lippi]
Lippi, Filippo L: 345 *with picture*
- Madonna and Child** [sculpture by Stoss]
Stoss, Veit *picture* on So: 916
- Madonna and Child Enthroned** [painting by Giotto]
Giotto *picture* on G: 193
- Madonna and Child Jesus** [sculpture by Della Robbia]
Della Robbia, Luca *picture* on D: 117
- Madonna and Child with Chancellor Rolin, The** [painting by van Eyck]
Madonna and Child (Types of Madonna paintings) M: 38
Painting (Religious subjects) P: 32
- Madonna della Guardia** [religious festival]
Genoa (The people) G: 89
- Madonna Enthroned with Angels, The** [painting by Cimabue]
Painting (The 1300's) P: 51
Renaissance *picture* on R: 234
- Madonna Enthroned with Saints** [painting by Giotto]
Giotto (Giotto's works) G: 193
- Madonna lily** [plant]
Easter lily E: 45
Flower (Garden perennials) F: 280 *with picture*
Lily L: 304
- Madonna of Chancellor Rolin** [painting by Van Eyck]
Renaissance *picture* on R: 238
- Madonna of the Goldfinch** [painting by Raphael]
Classicism (The qualities of classicism) Ci: 653
Madonna and Child (Types of Madonna paintings) M: 38
Painting (The High Renaissance) P: 54-55 *with picture*
- Madonna of the Meadow** [painting by Raphael]
Europe *picture* on E: 393
- Madonna of the Rocks** [painting by Leonardo]
Leonardo da Vinci (Years in Milan) L: 199
Painting (The 1400's) P: 52-53 *with picture*
- Madonna of the Stars** [painting by Fra Angelico]
Madonna and Child (Types of Madonna paintings) M: 38
- Madras** [city, India] See Chennai in *this index*
- Madras House, The** [play by Granville-Barker]
Granville-Barker, Harley G: 319
- Madrasah** [religious school]
Architecture (Islamic architecture) A: 613-614
Islamic art (Madrasahs) I: 468; *picture* on I: 467
Pakistan (Education) P: 96 *with picture*
- Madraspatam** [former name]
Chennai C: 408
- Madrid** [Spain] M: 38 *with pictures*
Spain *picture* on So: 737
Spanish Civil War (Progress of the war) So: 756a
- Madrid, Treaty of** [1750]
Brazil (Portuguese rule) B: 583-584
- Madrid, University of**
Madrid (Education and cultural life) M: 39
- Madrid Hurtado, Miguel de la** See De la Madrid Hurtado, Miguel in *this index*
- Madrid Protocol** [1991]
Antarctica (Recent activities) A: 538-539
- Madrid Zoo** [Spain]
Zoo (The first modern zoos) Z: 608
- Madrigal** [song] M: 40

Classical music (The Renaissance) Ci: 646
 Morley, Thomas M: 805
 Poetry (Renaissance poetry) P: 596
 Song So: 592

Madrileños [people]

Madrid (The people) M: 38

Madroña [tree] M: 40

Madrone [tree] See *Madroña in this index*

Madurese [people]

Indonesia (People) I: 227

Maduro Joest, Ricardo [Honduran political leader]
 Honduras (Recent developments) H: 313

Maecenas [Roman patron]

Horace H: 334

Virgil (His life) V: 391

Maelstrom [current, Arctic] M: 40

Norway (Coast and islands) N: 542

Whirlpool W: 281

Maenad [Greek mythology]

Dionysus D: 215

Maestà, The [painting by Duccio Di

Buoninsegna]

Duccio di Buoninsegna D: 373

Pilate, Pontius *picture on* P: 462

Maestoso

Music (table) M: 954

Maeterlinck, Maurice [Belgian author] M: 40

Belgium (The arts) B: 230

Drama (Symbolism) D: 339

Maevae, Queen [legendary figure] M: 41

Irish literature (Heroic tales, romances, and

sagas) I: 430-431

Mythology (The Irish cycles) M: 983-984

Maeztu, Ramiro de [Spanish author]

Spanish literature (The Generation of 1898)

So: 762

Maffei, Paolo [Italian astronomer]

Maffei galaxies M: 41

Maffei galaxies [astronomy] M: 41

Mafia [organization] M: 41

Italy (Social problems) I: 518

Sicily (The people) S: 447

Magalhães, Fernão de See *Magellan, Ferdinand in this index*

Magarac, Joe [legendary figure] M: 41

Magazine [journalism] M: 42 *with pictures*

Advertising (Magazines) A: 75 *with picture*

Journalism (Magazines) J: 171

Literature for children (Children's magazines)

L: 364

Television (Effects on society) T: 117-118

Trade publication T: 364

Writing W: 511

Magazine [munitions] M: 46

Handgun (Types of handguns) H: 43

Machine gun M: 15

Magazine [photography]

Motion picture (The camera) M: 857 *with picture*

Magazine [printing]

Linotype (How the linotype works) L: 338

Magazine Mountain

Arkansas (Land regions) A: 706

Magdalena River [river, Colombia]

Colombia (The Andes Mountains) Ci: 782

South America (Rivers) So: 628

Magdalene, Mary [Biblical figure]

Mary Magdalene M: 239

Jesus Christ (The Resurrection) J: 109

Magdeburg [Germany]

Thirty Years' War (The Swedish period) T: 260

Magellan [space probe]

Space exploration (Probes to Venus) So: 710; *picture on* So: 709

Venus (Flights to Venus) V: 313-314

Magellan, Ferdinand [Portuguese navigator]

M: 46 *with pictures and map*

Exploration *map on* E: 443; (Magellan's globe-circling expedition) E: 445

Latin America (European discovery and exploration) L: 104-106 *with map*

Mariana Islands M: 199

Pacific Ocean P: 14

Patagonia P: 194

Philippines (Spanish settlement and rule)

P: 379

Magellan, Strait of [South America] M: 48 *with maps*

Magellan, Ferdinand (The voyage begins)

M: 46-47

Magellanic Clouds [astronomy] M: 48

Galaxy G: 8a; (Shapes of galaxies) G: 8a-8b

Leavitt, Henrietta Swan L: 170

Supernova So: 994

Magenta [color]

Photography (How color film works) P: 423

with pictures

Printing (Process color printing) P: 802 *with picture*

Magerit [ancient fortress]

Madrid (History) M: 40

Maggie: A Girl of the Streets [book by Crane]

Crane, Stephen Ci: 1120

Novel (The United States) N: 573

Maggie L. Walker National Historic Site

[Virginia]

National Park System (table: National historic sites) N: 52-53

Maggiore, Lake [Italy-Switzerland]

Lake Maggiore L: 40

Maggot [insect] M: 48

Apple (Pests and diseases) A: 571

Bot fly B: 507

Fly (table) F: 310; (Larva) F: 310 *with picture*

Fruit fly F: 549

Insect (Complete metamorphosis) I: 293

Magi [religion] M: 48

Christmas C: 528

Epiphany E: 344

Magic [belief] M: 49 *with pictures*

Alchemy A: 333

Fetish F: 80

Indian, American (Shamans) I: 147

Mask M: 263

Occultism O: 647

Suggestion So: 963

Superstition (Kinds of superstitions) So: 995

Witchcraft W: 371

Magic [illusion]

Magic M: 49

Magician M: 51 *with pictures*

Magic, Orlando

Basketball (table) B: 150

Magic Barrel, The [book by Malamud]

Malamud, Bernard M: 95

Magic City

Birmingham (History) B: 376

Magic Flute, The [opera by Mozart]

Mozart, Wolfgang Amadeus (Operas) M: 906-

907; (His style) M: 907-908

Opera (*Magic Flute, The*) O: 805 *with picture*

Magic Kingdom [theme park]

Walt Disney Company W: 20

Magic Mountain, The [book by Mann]

Mann, Thomas M: 164

Magic realism [arts]

Cuba (The arts) Ci: 1172

Ellison, Harlan E: 244

Latin-American literature (Recent develop-

ments) L: 113

Magritte, René M: 63

Novel (The novel today) N: 575

Rushdie, Salman R: 522

Magician [entertainer] M: 51 *with pictures*

Magic (The magician) M: 49

Maginot Line [French history] M: 53

France (Between World Wars) F: 475

World War II (The Phony War) W: 473; (The

fall of France) W: 474

Magistrate [office]

Court (How courts work) Ci: 1101

Magistrate, The [play by Pinerol]

Pinerol, Arthur Wing P: 473

Maglev train See *Magnetic levitation train in this index*

Magloire, Paul E. [Haitian political leader]

Haiti (History) H: 15-16

Magma

Hot spot H: 374a

Igneous rock I: 48

Granite G: 311

Metamorphic rock M: 428

Moon (Origin and evolution of the moon)

M: 788; (Mantle) M: 791

Rock (Igneous rock) R: 371

Seamount S: 268

Volcano (How a volcano is formed) V: 438 *with diagram*

Magma chamber

Volcano (The beginning of a volcano) V: 438

with diagram

Magmatic water

Mineral water M: 572

Magna Carta [English history] M: 53

Civil rights (Natural law) Ci: 610

Democracy (Democracy in England) D: 123

Due process of law D: 378

England (Magna Carta) E: 306

Freedom (The Middle Ages) F: 502

Human rights (The development of human

rights) H: 428

John J: 131

Runnymede R: 521

Magna Charta See *Magna Carta in this index*

Magna cum laude

Degree, College (The bachelor's degree) D: 91

Magna Graecia

Greece, Ancient (The development of the

Greek city-state) G: 372

Magnalia Christi Americana [book by Mather]

American literature (New England) A: 414

Mather, Cotton M: 309

Magnani, Anna [Italian actress]

Motion picture (Best performance by an

actress: 1955) M: 862

Magnesia [ancient country]

Lodestone L: 419

Magnesia [chemical] M: 54

Magnesium [element] M: 54

Alloy (Alloys for strength and lightness) A: 378

Aluminum (Properties of aluminum alloys)

A: 391-392

Anodizing A: 518

Dolomite D: 296

Nutrition (Minerals) N: 625-626

Magnesium diboride [chemical]

Superconductivity So: 993

Magnesium hydroxide [chemical]

Magnesia M: 54

Magnesium oxide [chemical] See *Magnesia in this index*

Magnesium sulfate [chemical]

Epsom salt E: 345

Magnet [physics] See *Magnetism in this index*

Magnet school

Alternative school A: 389

Education (Who should choose a child's

school?) E: 106

School (Alternative schools) S: 185

Magnetic amplifier M: 55

Magnetic arc-suppression circuit breaker

Circuit breaker Ci: 558

Magnetic compass [instrument]

Compass Ci: 902b *with picture*

Gyrocompass G: 452

Invention (China) I: 359 *with picture*; (The

Middle Ages) I: 359

Magnetic confinement [physics]

Nuclear energy (Research on new types of

reactors) N: 592-593

Magnetic domain [physics]

Magnetism (Magnetism of materials) M: 60b-

60c

Magnetic equator [geography] M: 55

Equator (The magnetic equator) E: 346

Magnetic field [physics]

See also *Field* [physics] in *this index*

Magnetism (Magnetic fields) M: 59 *with dia-*

gram; (Magnetism and electricity) M: 60a

with diagrams; (Modern research in mag-

netism) M: 61; (Experimenting with mag-

netism) *diagram on* M: 60d

Cosmic rays (Primary cosmic rays) Ci: 1076

with diagram

Electric generator (A simple generator) E: 170

Electric motor (Basic principles) E: 179 *with*

diagram

Electricity (Electric and magnetic fields) E: 196

Electromagnetism E: 203

Force (The magnetic force) F: 371

Heliosphere (Magnetic field) H: 175

Jupiter (Magnetic field) J: 199 *with diagram*

Lenz's law L: 197 *with diagram*

Magnetic storm M: 57

Magnetohydrodynamics M: 62

Magnetometer M: 62

Magnetic resonance imaging M: 57

Mars (Core) M: 225

Moon (Core) M: 791

- Quantum field theory **Q**: 5
Radiation (Electromagnetic radiation) **R**: 75
Relativity (The Michelson-Morley experiment) **R**: 210
Seismograph **S**: 288
Space exploration (The beginning of space) **So**: 696
Sun **So**: 975; (Sun terms) **So**: 976; (Magnetic field) **So**: 977 *with pictures*
Sunspot (How sunspots form) **So**: 992
Tape recorder (Erasing and recording) **T**: 37
Uranus (Magnetic field) **U**: 219
Van Allen belts **V**: 269
Voyager **V**: 451
Weber **W**: 176
Zeeman effect **Z**: 593
- Magnetic flow meter**
Water meter **W**: 135
- Magnetic flux** [physics]
Weber **W**: 176
- Magnetic force** [physics]
Force (The magnetic force) **F**: 371
Quantum field theory **Q**: 5
- Magnetic forming** [industry]
Machine tool (High-energy rate forming) **M**: 19
- Magnetic Hill Complex**
New Brunswick (Places to visit) **N**: 188
- Magnetic lens**
Electron microscope (Transmission electron microscopes) **E**: 204 *with diagram*
- Magnetic levitation train** **M**: 55 *with picture*
Air cushion vehicle (History) **A**: 181
Electric railroad **E**: 187
Linear electric motor **L**: 334
Magnetism (In transportation) **M**: 60a
Transportation (Improvements in public transportation) **T**: 398-399 *with picture*
- Magnetic mine**
Mine warfare (Naval mines) **M**: 565
- Magnetic pole**
Magnetism (Magnetic poles) **M**: 59 *with diagrams*; (The magnetism of the earth) **M**: 60c
Boothia Peninsula **B**: 481
Compass (Variation) **Ci**: 902b
Magnetic equator **M**: 55
North Pole **N**: 517
Pole **P**: 618
South Pole **So**: 686
- Magnetic properties**
Materials (Magnetic properties) **M**: 300c
- Magnetic resonance imaging** **M**: 56 *with pictures*
Alzheimer's disease (Diagnosis) **A**: 398
Brain (The work of the brain) **B**: 552-553; (Disorders of the brain) **B**: 556-557; *picture on B*: 550a
Cancer (Preliminary diagnosis) **C**: 171
Computer (Medical visualization software) **Ci**: 920 *with picture*
Cryogenics **Ci**: 1165
Magnetism (In science and medicine) **M**: 60a
Medicine (Diagnosis) **M**: 364
Mental illness (Recent developments) **M**: 409
Multiple sclerosis **M**: 920
Science (Recent developments) **S**: 203
- Magnetic storm** [astronomy] **M**: 57
Van Allen belts **V**: 269
- Magnetic-stripe card**
Smart card **S**: 513
- Magnetic susceptibility** [engineering]
Materials (Magnetic properties) **M**: 300c
- Magnetic tape** [electronics]
See also Tape drive *in this index*
Camcorder (How a camcorder works) **C**: 75
Motion picture (The sound track) **M**: 858 *with diagram*
Phonograph (How phonograph records are made) **P**: 401
Tape recorder **T**: 36; (How tape recorders work) **T**: 37-38 *with picture*
- Magnetic Telegraph Company**
Telegraph (Construction and growth) **T**: 90-91
- Magnetism** [physics] **M**: 58 *with pictures*
See also Electromagnet; Electromagnetism *in this index*
Armature **A**: 718
Electricity (Electric and magnetic fields) **E**: 195; (Electricity and magnetism) **E**: 196
Electromagnetic waves **E**: 202
Lodestone **L**: 419
Permalloy **P**: 289
Physics (Electricity and magnetism) **P**: 437; (Developments in the 1800's) **P**: 440
Sun (Magnetic field) **So**: 977
Zeeman effect **Z**: 592
- Magnetite** [mineral]
Electricity (Early discoveries) **E**: 196
Iron and steel (Kinds of iron ore) **I**: 438
Lodestone **L**: 419
Magnetism **M**: 59; (Permanent magnets) **M**: 60 *with picture*
Mars (Possibility of life) **M**: 226c
Mineral *picture on M*: 568
Taconite **T**: 5
- Magnetization** [physics]
Magnetism (Magnetization) **M**: 59
- Magneto** [machine] **M**: 62
Electric generator (Parts of a generator) **E**: 171
Ignition **I**: 49
- Magneto-optical recording**
Compact disc (Minidiscs) **Ci**: 902a
- Magnetohydrodynamics** [physics] **M**: 62
Alfvén, Hannes Olof Gösta **A**: 349
Energy supply (Magnetohydrodynamic [MHD] generators) **E**: 279
- Magnetometer** [measuring device] **M**: 62
Petroleum (Geophysical studies) **P**: 336
Prospecting **P**: 829
- Magnetophon**
Tape recorder (History) **T**: 38-39
- Magnetosphere** [physics]
Cassini **C**: 276
Jupiter (Magnetic field) **J**: 199
Magnetism (The magnetism of the earth) **M**: 60c
Saturn (Flights to Saturn) **S**: 153
Solar wind **So**: 582
Space exploration (The beginning of space) **So**: 696
- Magnetostriction**
Transducer **T**: 371
- Magnetron**
Electronics (The vacuum tube era) **E**: 215
Microwave oven **M**: 520
Radar (Advances during World War II) **R**: 72
Vacuum tube (Kinds of vacuum tubes) **V**: 258-259
- Magnificat** [music by Johann Sebastian Bach]
Bach, Johann Sebastian (His works) **B**: 16-17
- Magnification**
See also Magnifying glass *in this index*
Electron microscope (Magnification) **E**: 204
Microscope **M**: 517
Telescope **T**: 102; (Producing detailed images) **T**: 103
- Magnificent Ambersons, The** [film]
Welles, Orson **W**: 194
- Magnificent Mile**
Chicago (Downtown Chicago) **C**: 420-421
- Magnifying glass** **M**: 62
See also Magnification *in this index*
Rock (Collecting rocks) **R**: 373
- Magnifying power** [optics] See Magnification *in this index*
- Magnitogorsk** [city, Russia] **M**: 62
- Magnitude** [astronomy] **M**: 62
Star (Characteristics of stars) **So**: 842
- Magnolia** [tree] **M**: 63 *with picture*
- Magnolia Gardens** [Charleston]
South Carolina (Places to visit) **So**: 650
- Magnolia State**
Mississippi **M**: 622
- Magnus I** [king of Denmark and Norway]
Harold III **H**: 64
- Magnuson Clinical Center**
National Institutes of Health **N**: 39
- Magnuson-Moss Warranty Act** [1975]
Consumerism (The right to quality) **Ci**: 1018
- Magoffin, Beriah** [American political leader]
Kentucky (table) **K**: 290
- Magoon, Charles E.** [American government official]
Cuba (The Platt Amendment) **Ci**: 1177
- Magpie** [bird] **M**: 63 *with picture*
- Magpie** [ship]
Korean War (Naval warfare) **K**: 382
- Magrath, Andrew G.** [American political leader]
South Carolina (table) **So**: 658
- Magritte, René** [Belgian painter] **M**: 63
Surrealism **So**: 1010
- Maguari** [bird]
Stork **So**: 911
- Maguey** [plant] **M**: 64
- Maguire, Matthew** [American labor leader]
Labor Day **L**: 2
- Magyar** [language]
Hungary (Language) **H**: 439
- Magyars** [people] **M**: 64
Hungary (Ancestry) **H**: 439; (History) **H**: 445
Transylvania **T**: 402
- Mah-jongg** [Chinese game] **M**: 64 *with picture*
Game (Tile games) **G**: 22
- Mahabharata** [Hindu poem] **M**: 64
Bhagavad-Gita **B**: 276
Dance (Asian theatrical dance) **D**: 30
Hinduism (Sacred writings) **H**: 236
India (Literature) **I**: 120
Krishna **K**: 388
Sanskrit literature (The Epic period) **S**: 112
Vishnu **V**: 429
- Mahakam River**
Borneo (The land and its resources) **B**: 489
- Mahan, Alfred Thayer** [American historian]
M: 65
- Maharajah** [title]
Rajah **R**: 130
- Maharashtra** [state, India]
Mumbai (History) **M**: 925
- Maharishi Mahesh Yogi** [Indian religious leader]
Transcendental Meditation **T**: 370
- Mahathir bin Mohamad** [Malaysian political leader] **M**: 65
Putrajaya **P**: 913
- Mahatma** [title]
Gandhi, Mohandas Karamchand (Gandhi's beliefs) **G**: 24
- Mahavira** [Indian religious leader]
India (Jainism) **I**: 117
Jainism **J**: 22
- Mahayana** [religion]
Bodhisattva **B**: 434
Buddhism (The Mahayana) **B**: 669
Religion (Buddhism) **R**: 220
- Mahé** [island]
Seychelles **S**: 339
- Mahendra** [king of Nepal]
Nepal (History) **N**: 126-127
- Mahendra-Mala, Order of** [Nepal]
Medals, decorations, and orders (table) **M**: 359
- Mahfouz, Naguib** [Egyptian author] **M**: 65
Arabic literature (Fiction) **A**: 583-584
Egypt (The arts) **E**: 125
Nobel Prizes (Literature: 1988) **N**: 446
- Mahi mahi** [fish] See Dolphin [fish] *in this index*
- Mahican Indians** [American Indians] **M**: 65
- Mahler, Gustav** [Bohemian-born Austrian composer] **M**: 65
Austria (The arts) **A**: 932-933
Walter, Bruno **W**: 21
- Mehmud Ghazni** [Turkish ruler]
India (Period of invasions) **I**: 129
Pakistan (The Islamic impact) **P**: 99
- Mahogany** [wood] **M**: 66
Belize *picture on B*: 238
Wood *picture on W*: 389
- Mahomet** See Muhammad *in this index*
- Mahony, Roger Michael Cardinal** [American religious leader] **M**: 66
- Mahuad, Jamil** [Ecuadorean political leader]
Ecuador (The 1900's) **E**: 73-74
- Mai Idris Aloom** [king of Kanem]
Kanem **K**: 213
- Maid of Orléans** See Joan of Arc, Saint *in this index*
- Maid of Orléans, The** [play by Schiller]
Joan of Arc, Saint (The memory of Joan of Arc) **J**: 129
- Maid of the Mist, The** [ship]
Niagara Falls (Tourism) **N**: 392 *with picture*
- Meida, Adam J. Cardinal** [American religious leader]
Cardinal (table: American cardinals) **C**: 211
- Maidan** [park, Kolkata]
Kolkata (The city) **K**: 362
- Maiden of Kossovo** [sculpture by Meštrović]
Meštrović, Ivan **M**: 424
- Maiden race**
Horse racing (Maiden races) **H**: 365
- Maidenhair fern** [plant]
Tree (Ginkgo trees) **T**: 415
- Maidenhair tree** [tree]
Ginkgo **G**: 191 *with picture*
Tree (Ginkgo trees) **T**: 415

Maiden's Consent, The [play by Moratin]
Spanish literature (The 1800's) So: 761

Maid of Honor, The [painting by Velázquez]
See *Meninas, Las in this index*

Maidu Indians [American Indians] M: 66
California (Early days) C: 60

Maier, Hermann [Austrian skier]
Skiing (Skiing today) S: 488

Maigret, Inspector Jules [literary figure]
Detective story (The pattern) D: 162-163
Simenon, Georges S: 466

Maigret and the Enigmatic Latt [book by
Simenon]
Simenon, Georges S: 466

Mail See E-mail; Post office in *this index*

Mail [armor]
Armor (During the Middle Ages) A: 720
Knights and knighthood (Armor) K: 350

Mail carrier See Letter carrier in *this index*

Mail handler [occupation]
Postal services (Sorting) P: 703

Mail-order business M: 66
Advertising (Direct mail) A: 74
United States, History of the (Distribution,
sales, and communication) U: 178

Mail services See Postal services in *this index*

Mailbox
Postal services (Collection) P: 702; *pictures on*
P: 704

Mailer, Norman [American author] M: 66
American literature (Experimental styles)
A: 424-425
Novel (The novel today) N: 575

Mailing list
Advertising (Direct mail) A: 74

Maillol, Aristide [French sculptor] M: 67

Maiman, Theodore H. [American physicist]
Invention (Recent developments) I: 364
Laser (History) L: 86
Physics *picture on* P: 442

Maimed of Lepanto [nickname]
Cervantes, Miguel de (His early life) C: 363

Maimon, Solomon ben See Maimonides,
Moses in *this index*

Maimonides, Moses [Jewish philosopher]
M: 67
Hebrew literature (Medieval works) H: 162
Jews (The Jews under Islam) J: 122

Main [plumbing]
Gas [fuel] (Transmitting and distributing gas)
G: 53-56

Pipeline (Gas pipelines) P: 490
Plumbing (The water supply system) P: 577
Water (Distributing water) W: 127

Main battle tank
Tank T: 27 *with diagram*

Main clause [grammar]
Clause C: 657

Main-Danube Canal
Danube River D: 35

Main deck
Ship (The chief parts of a ship) S: 424

Main event
Boxing (Financing) B: 530

Main Line
Philadelphia (The metropolitan area) P: 361-
362

Main line [tackle]
Fishing industry (Hooks) F: 185 *with picture*

Main-line track
Railroad (Tracks) R: 108

Main memory [computer] See Random-access
memory in *this index*

Main River [Germany]
Rhine River (The course of the Rhine) R: 292-
293

Main sequence [astronomy]
Star (Intermediate-mass stars) So: 848

Main Street [book by Lewis]
Lewis, Sinclair L: 221
Roaring Twenties (Cultural trends) R: 364

Main-Travalled Roads [stories by Garland]
Garland, Hamlin G: 43

Mainassara, Ibrihim Bare [Niger political leader]
Niger (History) N: 409

Maine [state] M: 68 *with pictures and maps*
United States, History of the (The abolition
movement) U: 171

See also the list of *Related Articles in the*
Maine article

Maine [ship] M: 67 *with picture*

Cuba (Struggle against Spain) Ci: 1176 *with*
picture

McKinley, William (The Spanish-American War
[1898]) M: 340-341

Roosevelt, Theodore (The Rough Riders)
R: 467

Spanish-American War (American intervention)
So: 753

Maine, University of M: 93

Maine *picture on* M: 73

Maine coon [cat]
Cat (Long-haired breeds) C: 292; *picture on*
C: 289

Maine Farmers' Almanac [magazine]
Blue moon B: 420

Maine Historical Society
Maine *picture on* M: 73

Maine Indian Claims Settlement Act
Maine *picture on* M: 92

Maine Islands [painting by Marin]
Marin, John *picture on* M: 203

Mainframe computer
Computer (Mainframes and supercomputers)
Ci: 910 *with picture*

Computerized instruction (Early teaching
machines) Ci: 925

Mainichi Shimbun [newspaper]
Newspaper (In Asia) N: 386

Mainland [island, Orkney Islands]
Orkney Islands O: 856

Mainland [island, Shetland Islands]
Shetland Islands S: 398

Mainlining [island]
Heroin H: 213

Mainmast
Galleon G: 15

Sailing (Spars) S: 23
Ship (The full-rigged ship) S: 408

Maino, Sonia [Indian political leader] See
Gandhi, Sonia in *this index*

Mainsail
Sailing (Sails) S: 24 *with diagram*

Mainspring
Clock (Mechanical clocks) Ci: 683
Watch (Mechanical watches) W: 114 *with picture*

Mainstream jazz
Jazz (Recent developments) J: 74

Mainstreaming [education]
Deafness (Education) D: 59
Disabled (Special education) D: 220
Education (Education for whom?) E: 107
Special education So: 770

Maintain the Right
Royal Canadian Mounted Police R: 495

Maintenance dose [medicine]
Allergy (Diagnosis and treatment) A: 374

Maintenance-of-membership clause [labor]
Right-to-work law R: 340

Maintenance worker
Careers (Construction, maintenance, and
repair) C: 221

Maintenon, Marquise de [wife of Louis XIV]
M: 93

Louis XIV L: 475

Mainz [city, Germany] M: 93

Mouse Tower M: 902

Meio [island]
Cape Verde C: 189 *with map*

Maiolica See Majolica in *this index*

Mair, Charles [Canadian author] M: 93

Maison de l'Art Nouveau [Paris]
Art nouveau A: 749

Maisonneuve, Sieur de [French explorer]
Montreal M: 768; (French settlement) M: 777

Maitland, Frederic William [British historian]
M: 94

Maitland, L. J. [American military leader]
Hawaii (The Territory of Hawaii) H: 108

Maius [month]
Calendar (The Romans) C: 30

Maize [food] See Corn in *this index*

**Meize and Wheat, International Center for
the Improvement of**
Food supply (Research programs) F: 351

Mezière, Lothar de [German political leader]
Germany (East Germany) G: 170-171

Majardeh River
Tunisia (Land) T: 488 *with map*

Majas [paintings by Goya]
Goya, Francisco G: 295

Majdanek [concentration camp]
Concentration camp (Nazi concentration
camps) Ci: 927

Majestic Theatre
Dallas (Cultural life) D: 14

Majlis [government]
Iran (National government) I: 399; (The Qajar
dynasty) I: 406

Maldives (Government) M: 104

Turkmenistan (Government) T: 514

Majluta, Jacobo [Dominican Republic political
leader]
Dominican Republic (History) D: 304-305

Majolica [pottery] M: 94 *with picture*
Pottery (Early pottery) P: 718; *picture on*
P: 717

Major [education]
Curriculum (Curriculum content) Ci: 1197
Teaching (Teacher-training programs) T: 67-68

Major [rank]
Rank, Military (table) R: 140

Major, Elliott W. [American political leader]
Missouri (table) M: 668

Major, Jack [Canadian jurist]
Supreme Court of Canada (table) So: 997 *with*
portrait

Major, John [British political leader] M: 94

Heseltine, Michael Ray Dibdin H: 218

United Kingdom (Thatcher resigned) U: 73

Major airline
Airport (Commercial service airports) A: 243

Major axis [geometry]
Ellipse E: 243 *with diagram*

Major Barbara [play by Shaw]
Shaw, George Bernard (Mature period) S: 378

Major general
General G: 82

Rank, Military (table) R: 140

Major histocompatibility complex protein
[genes]
Immune system (The cell-mediated immune
response) I: 88a; *diagram on* I: 88b

Major interval [music]
Music (Harmony) M: 951

Major League Baseball Players Association
Labor movement (table) L: 8

Major League Soccer, Division I
Soccer (In North America) So: 548

Major leagues
Baseball (Major leagues) B: 130; (The early
1900's) B: 135-136

Major medical insurance
Insurance (Basic types of health insurance) I: 312

Major planet [astronomy]
Planet P: 507

Major scale
Music (Tone) M: 950 *with diagram*

Major tone
Tone T: 327

Majorca [island, Mediterranean] M: 94

Balearic Islands B: 40

Majorette
Baton twirling B: 167

Majorian [Roman emperor]
Rome, Ancient (table) R: 447

Majority, Age of
Minor M: 608

Majority leader [government]
Congress of the United States (The Senate)
Ci: 942

Majority party [government]
Prime minister P: 778c

United States, Government of the (Party lead-
ership) U: 138

Majority rule M: 94
Democracy (Features of democracy) D: 121

Parliamentary procedure (Electing officers)
P: 175

Mak yong [drama]
Malaysia (The arts) M: 99

Makah
Nootka Indians N: 453

Makalu, Mount See Mount Makalu in *this index*

Makanin, Vladimir [Russian author]
Russian literature (Modern Russian literature)
R: 565

Makara Sankranti [custom]
January J: 30

Makarezos, Nicholas [Greek political leader]
Greece (The revolt of 1967) G: 364; (The
restoration of democracy) G: 365

- Makarios III** [Cypriot political leader] **M**: 95 *with portrait*
Cyprus (History) **Ci**: 1207
- Makarova, Natalia** [Soviet-born dancer]
Ballet (Ballet in Russia) **B**: 52-53
- Makarska Riviera** [region]
Croatia *picture on Ci*: 1148b
- Makassar** [city, Indonesia]
Indonesia **I**: 233
- Makeba, Miriam** [South African singer]
Masekela, Hugh **M**: 263
- Maker** [banking]
Bill of exchange **B**: 301
- Makeready**
Printing (Offset presses) **P**: 798-799
- Makerere University**
Uganda (People) **U**: 2-3
- Makers and Finders** [book by Brooks]
Brooks, Van Wyck **B**: 641
- Makeup**
See also Cosmetics *in this index*
Motion picture *picture on M*: 850
Television (Putting a show on the air) **T**: 111-112
Theater (Makeup techniques) **T**: 243 *with pictures*
Thespiis **T**: 257
- Makhna** [Indian elephant]
Elephant (Indian elephants) **E**: 227
- Makhosetiva** [prince of Swaziland]
Swaziland (History) **So**: 1019
- Mako disease**
Banana (How bananas grow) **B**: 72-73
- Mako shark** [fish]
Shark (Kinds of sharks) **S**: 375 *with picture*
- Makoko** [Batéké king]
Congo (Brazzaville) (History) **Ci**: 939
- Makonde** [people]
Tanzania (Population and ancestry) **T**: 31; (The arts) **T**: 32
- Makropoulos Secret, The** [play by Čapek]
Čapek, Karel **C**: 191
- Malabar** [region, India]
Cardamom **C**: 209
- Malabo** [Equatorial Guinea] **M**: 95
- Malacca** *See* Melaka *in this index*
- Malacca, Strait of** [Indonesia-Malaysia] **M**: 95
- Malachi, Book of** [Bible] **M**: 95
- Malachite** [mineral] **M**: 95
Mineral *picture on M*: 569
- Malagens** [New Guinea]
Sculpture (Pacific Islands sculpture) **S**: 241-242 *with picture*
- Malagasy** [language]
Madagascar (People) **M**: 26
- Malagasy Republic** [former name]
Madagascar **M**: 26; (History) **M**: 28-29
- Malagueta pepper**
Liberia (Early days) **L**: 231
- Malaita Eagle Force** [political group]
Solomon Islands (History) **So**: 586
- Malaita Island**
Solomon Islands (History) **So**: 586
- Malakula** [island, Vanuatu]
Vanuatu **V**: 284
- Malamud, Bernard** [American author] **M**: 95
Novel (After World War II) **N**: 574
- Malamute** *See* Alaskan malamute *in this index*
- Malan, Daniel François** [South African political leader]
South Africa (Apartheid) **So**: 619
- Malanga** *See* Taro *in this index*
- Malaria** [disease] **M**: 95 *with pictures*
Colonial life in America (Health and medicine) **Ci**: 809
Disease *picture on D*: 229
Evolution (Balancing or diversifying selection) **E**: 429
Laveran, Charles Louis Alphonse **L**: 129
Quinine **Q**: 42
Races, Human (Susceptibility to genetic diseases) **R**: 58
- Malariae, P.** [protozoan]
Malaria (Symptoms) **M**: 96
- Malas, Spiro** [American singer]
Opera *picture on O*: 792
- Malaspina Glacier**
Alaska (Glaciers) **A**: 295
Glacier (Famous glaciers) **G**: 205
- Malathion** [insecticide]
Insecticide (Organic insecticides) **I**: 302
- Malawi** [country] **M**: 97 *with picture and map*
Flag *picture on F*: 199
Rhodesia and Nyasaland, Federation of **R**: 318
- Malawi, Lake**
Malawi **M**: 97 *with picture and map*
- Malay** [language]
Malays **M**: 98
Malaysia (People) **M**: 98b-98c
- Malaya** [former region, Malaysia] **M**: 98
Guerrilla warfare (History) **G**: 420-421
Malaysia **M**: 98a
- Malaya, Federation of**
Malaysia (Independence) **M**: 102
- Malayalam** [language]
Dravidians **D**: 342
- Malayan bear** *See* Sun bear *in this index*
- Malayan tapir**
Tapir **T**: 41
- Malayo-Polynesian languages**
Language (Other language families) **L**: 65 *with map*
- Malays** [people] **M**: 98
Indonesia (People) **I**: 227
Malaysia (People) **M**: 98b-98c; *picture on M*: 98d
Sri Lanka (People) **So**: 817-818
- Malaysia** [country] **M**: 98a *with pictures and map*
Asia (The arts) **A**: 785
Borneo **B**: 489 *with map*
Dayaks **D**: 53
Flag *picture on F*: 203
Forest *picture on F*: 399
Indonesia (Indonesia under Sukarno) **I**: 238
Kuala Lumpur **K**: 390
Raffles, Sir Thomas Stamford **R**: 101
Rain forest *picture on R*: 126
Singapore (History) **S**: 471
Straits Settlements **So**: 918
- Malaysia, Federation of** [Malaysian history]
Malaysia (Building national unity) **M**: 102
- Malaysian short python** [snake]
Snake *picture on S*: 526
- Malcolm** [literary figure]
Shakespeare, William (*Macbeth*) **S**: 363
- Malcolm II** [king of Scotland]
Duncan I **D**: 383
Scotland (Beginning of the Scottish kingdom) **S**: 219
- Malcolm III** [king of Scotland]
David I **D**: 45
Henry I [king of England] **H**: 185
Macbeth **M**: 5
Scotland (Beginning of the Scottish kingdom) **S**: 219
- Malcolm X** [American social reformer] **M**: 103 *with portrait*
African Americans (Black militancy) **A**: 136a *with picture*
Black Muslims **B**: 390
Farrakhan, Louis **F**: 48
Muhammad, Elijah **M**: 911
- Malcolm X** [film by Lee]
Lee, Spike **L**: 179
- "Malcolm's Katie"** [poem by Crawford]
Canadian literature (Poetry: 1850-1918) **C**: 157-158
- Malcontent, The** [play by Marston]
Marston, John **M**: 231
- Malden, Karl** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1951) **M**: 863
- Maldives** **M**: 103 *with picture and map*
Flag *picture on F*: 203
- Maldonado, Diego** [Spanish explorer]
Pensacola **P**: 272
- Male** [Maldives] **M**: 105
- Male** [entomology]
Ant (Life in an ant colony) **A**: 523; (The bodies of ants) **A**: 521 *with picture*
- Male** [sex]
See also Boy; Man *in this index*
Animal (Sexual reproduction) **A**: 496
Growth (Growth rate) **G**: 405
Heredity (Chromosomes and sexual determination) **H**: 202; (Sex-linked genes) **H**: 202
Penis **P**: 241
Reproduction, Human (The human reproductive system) **R**: 244-245 *with diagram*
Sexuality (Biological factors) **S**: 337
Sex ratio **S**: 336
- Steroid (The sex steroids) **So**: 894
- Male pattern baldness**
Baldness **B**: 38
- Malecón** [road]
Havana (The city) **H**: 86
- Malemiuts** [people]
Alaskan malamute **A**: 305
- Malemute** *See* Alaskan malamute *in this index*
- Malenkov, Georgi Maximilianovich** [Soviet political leader] **M**: 105
Cold War (The death of Stalin) **Ci**: 764
Union of Soviet Socialist Republics (The rise of Khrushchev) **U**: 38
- Malevich, Kasimir** [Russian artist] **M**: 105 *with picture*
Painting (Nonobjective painting in Russia) **P**: 79 *with picture*
- Malherbe, François de** [French poet] **M**: 106
French literature (Classical poetry) **F**: 520
- Mali** [country] **M**: 106 *with pictures and map*
Exploration (The exploration of Africa) **E**: 448
Flag *picture on F*: 199
French West Africa **F**: 528 *with map*
Standard of living (table) **So**: 834
- Mali, Federation of** [African history]
French West Africa (History) **F**: 528
Mali (History) **M**: 109
Senegal (History) **S**: 299-300
- Mali Empire** [African history] **M**: 109 *with map*
Africa (Kingdoms in western Africa) **A**: 132
African Americans (The cultural heritage) **A**: 136c
Exploration (Muslim exploration) **E**: 442
Guinea (History) **G**: 432
Mandingo **M**: 137
Sundiata Keita **So**: 990
World, History of the (African civilizations) **W**: 437 *with picture*
- Malice** [law]
Libel **L**: 226
- Malietoa Tanumafili II** [Samoa government official]
Samoa (Government) **S**: 80
- Malignancy** [medicine] **M**: 110
Tumor **T**: 484
- Malignant melanoma** [disease] *See* Melanoma *in this index*
- Malignant tumor** [disorder]
See also Cancer *in this index*
Malignancy **M**: 110
Biopsy **B**: 326
Skin (Tumors) **S**: 491
Tumor **T**: 484
- Malinche** [American Indian]
Cortés, Hernando (Arrival in Mexico) **Ci**: 1073
Exploration (Spain's conquests in the New World) **E**: 445
- Malinke** [people] *See* Mandingo *in this index*
- Malinowski, Bronislaw** [British anthropologist] **M**: 110
Anthropology (The early 1900's) **A**: 548
Mythology (Malinowski's theory) **M**: 987
- Malintzin** [American Indian] *See* Malinche *in this index*
- Maliseet Indians** [American Indians]
Indian, American (In the United States) **I**: 179
Maine (Recent developments) **M**: 92 *with picture*
Saint John (Government and history) **S**: 35
- Mall** [parkway]
Washington, D.C. (The Mall) **W**: 71
Winnipeg (The city) **W**: 340
- Mall** [shopping]
Shopping center **S**: 434
- Mall of America** [shopping and recreation center]
Minneapolis (Recreation) **M**: 582
Minnesota (Places to visit) **M**: 594
- Mallard** **M**: 110 *with picture*
Duck (Dabbling ducks) **D**: 376; *picture on D*: 375
- Mallarmé, Stéphane** [French poet] **M**: 110
American literature (Poetry) **A**: 418-419
French literature (Symbolism) **F**: 522
Symbolism **So**: 1066
- Mallaa, Eduardo** [Argentine author]
Latin-American literature (The mid-1900's) **L**: 113
- Malleability** [physical property] **M**: 110
Copper (Malleability) **Ci**: 1041
Ductility **D**: 377

- Gold (Physical properties) G: 249
Metal (What metal is) M: 425
- Mallein test** [medicine]
Glanders G: 210
- Mallet** [instrument]
Cymbal Ci: 1205
- Mallet, Paul** [French explorer]
Nebraska (Exploration) N: 111
- Mallet, Pierre** [French explorer]
Nebraska (Exploration) N: 111
- Mallet, Robert** [Irish engineer]
Geology (Experimental geology) G: 99
- Malleus** [anatomy]
Ear (The middle ear) E: 7-8 *with diagram, diagram on E: 10*
- Mallock, Douglas** [American poet]
June (Quotations) J: 193
- Mallon, Mary** *See* Typhoid Mary *in this index*
- Mallon, Meg** [American golfer]
Golf (U.S. Women's Open) G: 265
- Mallophaga** [entomology]
Insect (table) I: 300
- Malorca** [island, Mediterranean] *See* Majorca *in this index*
- Mallory, Stephen Russell** [American political leader] M: 111
- Malloum, Félix** [Chadian political leader]
Chad (History) C: 367-368
- Mallow** [botany] M: 111
Flower F: 300 *with picture*
- Malmaison** [estate]
Josephine (Her marriage) J: 168-169
- Malmö** [Sweden] M: 111
- Malmöhus Castle**
Malmö M: 111
- Malnutrition** [disorder] M: 111
Food (How the body uses food) F: 330
Food supply (Basic human food needs) F: 346
Nutrition (Deficiency diseases) N: 630
- Malocclusion** [disorder]
Dentistry (Orthodontics) D: 143-144
Orthodontics O: 859
Teeth (Malocclusion) T: 84 *with pictures*
- Malodor**
Deodorizer D: 148
- Malone, Dorothy** [American actress]
Motion picture (Best performance by an actress in a supporting role: 1956) M: 863
- Malone, Edmund** [British scholar]
Boswell, James B: 506
- Malone, Karl** [American basketball player]
M: 111
Chamberlain, Wilt C: 371
- Malone Dies** [book by Beckett]
Novel (After World War II) N: 574
- Malooof, Sam** [American designer]
Furniture (Post-modern design) F: 585-586
- Malory, Sir Thomas** [English author] M: 111
Arthur, King A: 757
English literature (The development of English romances) E: 315
Knights and knighthood (Knighthood in literature) K: 351
- Maloti Mountains**
Lesotho (Land) L: 207
- Malotte, Albert H.** [American composer]
Lord's Prayer L: 454
- Malpeque Bay**
Prince Edward Island (Land and climate) P: 790
- Malpighi, Marcello** [Italian anatomist] M: 112
Biology (Early discoveries with the microscope) B: 318
- Malpighian tube** [entomology]
Insect (Digestive system) I: 269 *with diagram*
- Malpractice insurance**
Insurance (Other kinds of property and liability insurance) I: 313-314
Malpractice suit M: 112
Medicine (Financing advanced medical care) M: 377-378
- Malpractice suit** [law] M: 112
Consumerism (The right to safety) Ci: 1018
Medicine (Treatment) M: 364-365
- Malraux, André** [French author] M: 112
- Malt** [food] M: 112
Alcoholic beverage (Beer) A: 336
Barley (Uses of barley) B: 113
Brewing (Malting) B: 595
Grain (Other uses) G: 301
- Malt liquor** [beverage]
Beer B: 211
- Malt sugar** [carbohydrate] *See* Maltose *in this index*
- Malta** [country] M: 113 *with picture and map*
Flag picture on F: 206
Knights Hospitallers K: 351
- Malta** [island, Mediterranean]
Malta M: 113 *with map*
- Malta, Knights of** *See* Knights Hospitallers *in this index*
- Malta fever** *See* Brucellosis *in this index*
- Maltese** [dog] M: 115
Dog picture on D: 274
- Maltese** [language]
Malta (People) M: 113
- Maltese cross** [symbol]
Cross picture on Ci: 1155
Medals, decorations, and orders (Orders) M: 355
- Maltese Falcon, The** [book by Hammett]
Hammett, Dashiell H: 35
- Maltese Falcon, The** [film]
Bogart, Humphrey B: 436
Huston, John H: 457
- Maltese Labor Party** [political party]
Malta (History) M: 113-114
- Maltese Nationalist Party** [political party]
Malta (History) M: 113-114
- Malthus, Thomas Robert** [British economist] M: 115
Birth control (The birth control movement) B: 378
Economics (The classical economists) E: 65
Evolution (Darwin's theory) E: 432
Food supply F: 345
Population (Effects) P: 674
- Malting** [industrial process]
Vinegar (Making vinegar) V: 386
Yeast (How yeast is used) Y: 554-555
- Maltose** [sugar] M: 115
Carbohydrate (Kinds of carbohydrates) C: 203 *with diagram*
Saliva S: 67
Starch (Use in foods) So: 855
Sugar (Kinds of sugar) So: 959
- Malvinas, Islas** *See* Falkland Islands *in this index*
- Malvolio** [literary figure]
Shakespeare, William (*Twelfth Night*) S: 360
- Maly Theatre** [Russia]
Theater (Russia) T: 248-249 *with picture*
- Mälzel, Johann N.** [German inventor]
Doll (Inventions) D: 291
Metronome M: 442
- Mama doll**
Doll (Inventions) D: 291
- Mamba** [snake] M: 115 *with picture*
- Mambo** [dance]
Ballroom dancing B: 63
- Mamelukes** [people] M: 115
Cairo (History) C: 17-18
Egypt (Muslim rule) E: 130; (Ottoman and French control) E: 130
Palestine (Arab control) P: 105
Syria (The Mamelukes and Ottomans) So: 1075
- Mamet, David** [American playwright] M: 115
American literature (Drama) A: 425-426
Drama (Later United States drama) D: 340
- Mamikonian, Vartan** [Armenian military leader]
Armenia (History) A: 718b
- Mammal** [zoology] M: 116 *with pictures*
Animal (table: Length of life of animals) A: 473; (How animals raise their young) A: 498
Brain (In vertebrates) B: 559 *with diagram*
Circulatory system (Vertebrates) Ci: 561
Earth (The Mesozoic Era) E: 27
Estrous cycle E: 364
Evolution (The fossil record) E: 430; *picture on E: 429*
Hair H: 9
Heart (Birds and mammals) H: 146
Lactation L: 25
Molting M: 697
Prehistoric animal (Mammals) P: 739; (The Age of Mammals) P: 740 *with pictures*
Reproduction (Mammals) R: 243
Skin (Animal skin) S: 491
Teeth (Teeth of animals) T: 86 *with picture*
- See also the list of Related Articles in the Mammal article*
- Mammabilia: Poems and Paintings** [book by Florian]
Literature for children (Children's literature today) L: 365; *picture on L: 369*
- Mammalogy**
Zoology (What zoologists study) Z: 610
- Mammals, Age of** *See* Cenozoic Era *in this index*
- Mammary glands** [anatomy] M: 129
Breast B: 590
Gland (table) G: 209
Lactation L: 25
Mammal (Care of the young) M: 124
- Mammatus cloud**
Cloud picture on Ci: 708
- Mammogram** [medicine]
Cancer (Cancer checkups) C: 171 *with picture*
Mammography M: 130
- Mammography** [medicine] M: 130
Breast B: 590
Breast cancer B: 591
Cancer (Cancer checkups) C: 171 *with picture*
Medicine picture on M: 364
- Mammoplasty** [operation]
Plastic surgery (Methods of plastic surgery) P: 553
- Mammoth** [extinct animal] M: 130
Fossil (Other processes) F: 425-426 *with picture*
Nebraska (Interesting facts) N: 95
- Mammoth Cave National Park** [Kentucky] M: 130
Kentucky (Places to visit) K: 282 *with picture*
National Park System (table: National parks) N: 48
- Mammoth-Flint Ridge Cave System** [Kentucky]
Cave (table) C: 320
Kentucky (Interesting facts about Kentucky) K: 273
- Mammoth Hot Springs**
Yellowstone National Park (The Upper Loop) Y: 559 *with map*
- Mammoth Spring**
Arkansas A: 694; (Springs) A: 708
- Man**
See also Male; Human being *in this index*
Marriage M: 219
- Man, Isle of** [island, Irish Sea] M: 130
- "Man Against the Sky, The"** [poem by Robinson]
Robinson, Edwin Arlington R: 368
- Man and Superman** [play by Shaw]
Shaw, George Bernard (Mature period) S: 378
- Man and the Biosphere Program**
National park (International concern for national parks) N: 42j
- Man Called White, A** [book by White]
White, Walter Francis W: 285
- Man Died, The** [book by Soyinka]
Soyinka, Wole So: 693
- Man for All Seasons, A** [film]
Motion picture (Best picture: 1966) M: 861
Zinnemann, Fred Z: 598
- Man Friday** [literary figure]
Robinson Crusoe R: 369
- Man from Glengarry, The** [book by Gordon]
Canadian literature (Fiction: 1850-1918) C: 158-159
- Man in a Red Cap** [painting by Titian]
Titian picture on T: 301
- Man in the High Castle, The** [book by Dick]
Dick, Philip K. D: 186
- Man Lay Dead, A** [book by Marsh]
Marsh, Ngao M: 228
- Man Nobody Knows, The** [book by Barton]
Roaring Twenties (Rising prosperity) R: 363
- Man o' War** [horse]
Horse racing (History) H: 366
- Man of Aran** [film]
Flaherty, Robert Joseph F: 225
- Man of Honor, A** [book by Fontane]
Fontane, Theodor F: 327
- Man of Property, The** [book by Galsworthy]
Galsworthy, John G: 16
- Man of war bird** *See* Frigatebird *in this index*
- Man Outside, The** [play by Borchert]
German literature (German literature after 1945) G: 142

"Man That Corrupted Hadleyburg, The" [story by Twain]
Twain, Mark (Later works) T: 529-530

Man-to-man defense [sports]
Basketball (Defensive strategies) B: 147
Football (The defensive team) F: 357-358

Man Who Came to Dinner, The [play by Kaufman and Hart]
Hart, Moss H: 77

Man Who Died Twice, The [poems by Robinson]
Robinson, Edwin Arlington R: 368

Man with a Guitar [painting by Braque]
Braque, Georges B: 564
Cubism *picture on* Ci: 1181

Man With the Golden Arm, The [book by Algren]
Algren, Nelson A: 366

"Man with the Hoe, The" [poem by Markham]
Markham, Edwin M: 214

"Man Without a Country, The" [story by Hale]
Hale, Edward Everett H: 18

Man Without Qualities, The [book by Musil]
Musil, Robert M: 961

Mana [religion]
Mythology (Mana and taboo) M: 982

Manacles
Handcuffs H: 42

Managed care plans M: 131
Insurance (How private health insurance is provided) I: 311
Medicine (The United States) M: 367-368, (Financing advanced medical care) M: 377-378

Managed floating [economics]
Balance of payments (Balance of payments and exchange rates) B: 36
Exchange rate E: 435

Management [business]
Business (Top management) B: 725
Careers (Management) C: 227
Farm and farming (Farm management) F: 41
Industry (Management) I: 258
Management information systems M: 131
Personnel management P: 304

Management accounting
Accounting (Fields of accounting) A: 23

Management analyst [career]
Careers (Management) C: 227-228

Management and Budget, Office of [U.S.] M: 131
Budget (Government budgets) B: 671
Budget, Bureau of the B: 672
National budget N: 30
President of the United States (The executive branch) P: 764

Management consultant [career]
Careers (Management) C: 227-228

Management consulting service
Accounting (Fields of accounting) A: 23

Management information systems M: 131

Management sectional center
Postal services (Sorting) P: 703

Manager [career]
Airport (Airline passenger services) A: 246
Automobile (Servicing) A: 960
Baseball (Players) B: 125
Boxing (Financing) B: 530
Careers (Management) C: 227 *with picture*

Managing editor [occupation]
Newspaper (The editorial department) N: 381-382

Managua [city, Nicaragua] M: 132
Nicaragua N: 396 *with picture*; (Manufacturing) N: 398

Managua, Lake
Lake Nicaragua L: 42

Manahoac Indians [American Indians]
Virginia (Early days) V: 418

Manakin [bird] M: 132 *with picture*

Manama [Bahrain] M: 132
Bahrain B: 29 *with map*

Manas [poem]
Kyrgyzstan (People) K: 398-399

Manas National Park [India]
National park (table) N: 42f

Manasarovar, Lake [Tibet]
Himalaya (Peaks) H: 233

Manassa Mauler [nickname]
Dempsey, Jack D: 130

Manassas, Battles of See Bull Run, Battle of *in this index*

Manassas National Battlefield Park [Virginia]
National Park System (table: National battlefields) N: 55

Manasseh [son of Joseph]
Joseph (Settling his family in Egypt) J: 168

Manasseh, Prayer of [Bible]
Bible (Development of the Christian Old Testament) B: 282

Manatee [sea animal] M: 133
Animal *picture on* A: 486
Mammal (table) M: 128 *with picture*

Manaus [city, Brazil]
Brazil (The Amazon Region) B: 577

Manbo [priestess]
Voodoo V: 449

Mancala [board game]
Game (Board games) G: 21-22

Manchester [England] M: 133
City (The people) Ci: 586

Manchester [New Hampshire] M: 133
New Hampshire (Population) N: 212

Manchester Ship Canal [England]
Canal (table) C: 164
Manchester M: 133

Manchester terrier M: 133
Dog *picture on* D: 272

Manchester Unity [organization]
Odd Fellows, Independent Order of O: 673

Manchester Valley [painting by Pickett]
Pickett, Joseph P: 451

Manchild in the Promised Land [book by Claude Brown]
American literature (Works by minority writers) A: 425

Manchukuo [Chinese history]
China (Nationalist rule) C: 504
Manchuria (History) M: 134
Pu Yi P: 855
World War II (Aggression on the march) W: 470

Manchuria [region, China] M: 134 *with maps*
China (The land) C: 491; (The Eastern Lowlands) C: 492
Japan (Imperialism) J: 57
Russo-Japanese War (Underlying causes) R: 566
World War II (Aggression on the march) W: 470

Manchurian Incident [Chinese history]
Tojo, Hideki T: 311

Manchurian wapiti [animal]
Elk (The European elk) E: 242

Manchus [people] M: 135
Boxer Rebellion B: 526
China (The early rule of the Manchus) C: 502 *with map*; (The fall of the Manchus) C: 503 *with map*
Korea (The Choson dynasty) K: 376
Mongolia (History) M: 723
Nanjing (History) N: 11
Painting (Chinese painting) P: 44-46

Mandala [religion]
Meditation M: 380

Mandelay [city, Myanmar] M: 135

Mandamus [law] M: 135

Mandan Indians [American Indians] M: 135 *with picture*
Exploration (Crossing North America) E: 447
Indian, American *pictures on* I: 159, I: 161
North Dakota (Exploration and early settlement) N: 513; *picture on* N: 514

Mandarin [Chinese history] M: 135

Mandarin [fruit] M: 136
Tangerine T: 26

Mandarin dialect [language]
China (Languages) C: 481
Chinese language (Spoken Chinese) C: 510
Mandarin M: 135

Mandarin duck
Duck *picture on* D: 375

Mandate [program]
City government (Sources of revenue) Ci: 597

Mandated territory [political unit] M: 136
Middle East (World War I) M: 533
Palestine (World War I and the Balfour Declaration) P: 105 *with map*

Mandatory eight-count
Boxing (Fight rules) B: 529-530

Mandatory injunction [law]
Injunction I: 272

Mande [language]
Mandingo M: 137

Mande [people]
Burkina Faso (People) B: 706

Mandel, Eli [Canadian poet]
Canadian literature (Modern Canadian poets) C: 160

Mandel, Marvin [American political leader]
Maryland (table) M: 255

Mandela, Nelson [South African political leader]
M: 136 *with portrait*
African National Congress A: 136t
De Klerk, Frederik Willem D: 94
Nobel Prizes (Peace: 1993) N: 449
South Africa (The dismantling of apartheid) So: 620 *with picture*

Mandela, Winnie [South African political figure]
Mandela, Nelson (Imprisonment) M: 136

Mandelbaum Gate, The [book by Spark]
Spark, Muriel So: 764

Mandelbrot, Benoit [American mathematician]
Fractal F: 443

Mandelbrot set [geometry]
Fractal F: 443

Mandible [anatomy]
Face F: 3
Head *diagram on* H: 123
Human body *diagram on* H: 422
Skull S: 495 *with pictures*

Mandible [entomology]
Ant (The head) A: 521 *with picture*
Beetle (The bodies of beetles) B: 215 *with picture*
Insect (Mouthparts) I: 286 *with diagrams*

Mandingo [people] M: 137
Gambia (People) G: 18
Liberia (Recent developments) L: 232
Mali (People) M: 106
Senegal (People) S: 297

Mandioca [shrub] See Cassava *in this index*

Mandolin [musical instrument] M: 137 *with picture*

Mandrake [plant] M: 137 *with picture*
Mayapple M: 326

Mandrake [sculpture by Roszak]
Roszak, Theodore *picture on* R: 485

Mandrel [machine]
Glass (Drawing) G: 215-216

Mandrill [animal] M: 137 *with picture*

Mandyllion [cloth]
Shroud of Turin S: 442

Mane [zoology]
Lion (The body of a lion) L: 340 *with picture*

Maned wolf [animal]
Fox (South American "foxes") F: 441

Manesse Song Manuscript
Folklore *picture on* F: 323

Manet, Edouard [French painter] M: 138 *with pictures*
Alabama picture on A: 255
Impressionism (French impressionism) I: 94-95
Morisot, Berthe M: 805
Painting (Edouard Manet and the impressionists) P: 71 *with picture*

Manfred Symphony [music by Tchaikovsky]
Tchaikovsky, Peter Ilich (His music) T: 61

Mangabey [animal]
Monkey *picture on* M: 727

Mangaia [island, Pacific]
Cook Islands Ci: 1026

Mangan, James Clarence [Irish poet]
Irish literature (Prose and poetry) I: 431

Manganese [element] M: 139
Aluminum (Properties of aluminum alloys) A: 391-392
Trace elements T: 353

Manganese dioxide [chemical]
Manganese (Industrial uses) M: 139

Manganese nodule
Pacific Ocean (Resources) P: 15

Manganese ore
Manganese (Sources) M: 139

Manganese steel [metal]
Manganese (Industrial uses) M: 139

Manganese sulfate [chemical]
Manganese (Industrial uses) M: 139

Mange [disease] M: 139
Hog (Diseases) H: 287

512 Mangel-wurzel

Mangel-wurzel [plant]

Beet 8: 12

Manger [barn]

Horse (Food) H: 355

Mango [tree] M: 140 *with picture*

Mangosteen [tree] M: 140 *with picture*

Mangrove [tree] M: 140 *with picture*

Mangrove forest

Cuba (The land) Ci: 1172

Swamp So: 1015

Mangu Khan [Mongol political leader]

Kublai Khan K: 391

Manhattan [U.S. ship]

Northwest Passage M: 530

Manhattan Bridge

New York City (Brooklyn) N: 326

Manhattan Island [New York City] M: 141

New York City (The city) N: 323 *with picture*

and map; (Industry) N: 333;

(Transportation) N: 334

Minuit, Peter M: 613

New York (Exploration and settlement) N: 314

with picture, picture on N: 317

Manhattan Project [U.S. history] M: 141

Nuclear energy (The development of nuclear

weapons) N: 590-591

Nuclear weapon (World War II) N: 601

World War II (The atomic bomb) W: 492

Manhattan Transfer [book by Dos Passos]

Dos Passos, John D: 311

Mani [Persian religious leader]

Manichaeism M: 141

Mani-Kongo [title]

Kongo K: 364

Mania [psychology]

Bipolar disorder B: 326

Depression D: 151

Mental illness (Mood disorders) M: 405

Maniakis [ornament]

Clothing (The Middle Ages) Ci: 698

Manic-depressive illness See Bipolar disorder
in this index

Manichaeism [religion] M: 141

Manifest [shipping]

Bill (In transportation) B: 301

Manifest destiny [U.S. history] M: 141

Mexican War (Background of the war) M: 445-

446

Nationalism (Different forms of nationalism)

N: 62

Polk, James Knox P: 640

United States, History of the (Manifest des-

tiny) U: 167

Westward movement in America (The

Southwest) W: 249

Manifesto of Futurism, The [book by Marinetti]

Italian literature (The 1900's) I: 495

Manifesto of Surrealism [book by Breton]

Breton, André B: 594

Manifesto of the Communist Party See

Communist Manifesto *in this index*

Manifold, intake [engine]

Carburetor C: 208

Manihot [tree]

Rubber (The rubber tree) R: 502

Manila [Philippines] M: 141 *with picture and*

map

Philippines *pictures on P: 372, P: 373, P: 374,*

P: 379

Quezon City Q: 41

Spanish-American War (Land battles) So: 754

Manila Bay [bay, Philippines] M: 143 *with pic-*

ture

China Sea C: 508 *with map*

Manila Bay, Battle of [1898]

Dewey, George D: 176

Spanish-American War (Manila Bay) So: 753

United States, History of the *picture on U: 183*

Manila hemp [fiber]

Abacá A: 3

Philippines *picture on P: 379*

Rope (Natural-fiber rope) R: 476 *with picture*

Manioc [plant] See Cassava *in this index*

Maniple [Roman Empire]

Army (Ancient armies) A: 726

Legion L: 184

Manipulator

Diving, Underwater (Diving in vehicles) D: 246

Manipuri [dance]

Dance (Asian theatrical dance) D: 30

Manistee National Forest

Michigan (Places to visit) M: 498

Manito [spirit]

Indian, American (Indians of the Northeast)

I: 154-155

Manitoba M: 145

Manitoba [province, Canada] M: 144 *with pic-*

tures and maps

Canada, Government of *picture on C: 133*

Lake Agassiz L: 35

Métis M: 435

Prairie Provinces P: 733

See also the list of Related Articles in the

Manitoba article

Manitoba, Lake

Lake Manitoba L: 40 *with map*

Manitoba (Rivers and lakes) M: 154

Manitoba, University of M: 163

Manitoba Act [1870]

Macdonald, Sir John Alexander (Completing

the Dominion) M: 8

Manitoba (The Red River Rebellion) M: 160

Manitoba Centennial Centre

Winnipeg (Cultural life) W: 341

Manitoba lowland

Manitoba (Land regions) M: 154

Manitoba school issue [Canadian history]

Abbott, Sir John Joseph Caldwell (Prime min-

ister) A: 6

Bowell, Sir Mackenzie (The Manitoba school

dispute) B: 518

Laurier, Sir Wilfrid (The Manitoba school issue)

L: 125; (Prime minister) L: 125

Manitou Island

Michigan (Islands) M: 500

Manitoulin Island [Lake Huron] M: 164

Lake Huron L: 39

Ontario (Shoreline and coastline) O: 778

Mankiewicz, Joseph L. [American director]

Motion picture (Best achievement in directing:

1949, 1950) M: 862

Manley, Charles [American political leader]

North Carolina (table) N: 490

Manley, Michael Norman [Jamaican political

leader]

Jamaica (History) J: 24-25

Mann, Delbert [American director]

Motion picture (Best achievement in directing:

1955) M: 862

Mann, Horace [American educator] M: 164

Lip reading L: 344

School (The growth of the public school sys-

tem) S: 184

United States, History of the (Education

reform) U: 171

Mann, Thomas [German author] M: 164

German literature (Impressionism) G: 142

Novel (New directions in the novel) N: 573-

574

Mann, William Hodges [American political

leader]

Virginia (table) V: 417

Mann Act [1913]

Johnson, Jack J: 143

Manna [religion] M: 164

Manned Spacecraft Center See Johnson Space

Center *in this index*

Manned underwater station

Diving, Underwater (History) D: 247

Mannerheim, Carl Gustaf Emil von [Finnish

general]

Finland (The new republic) F: 117; (World War

II) F: 117; (Postwar developments) F: 118

Mannerism [art] M: 165 *with picture*

Cellini, Benvenuto C: 339

Greco, El G: 351

Italian literature (Humanism and the

Renaissance) I: 494

Lippi, Filippo L: 345

Painting (Mannerism) P: 56 *with picture*

Sculpture (Michelangelo) S: 252-253 *with pic-*

ture

Manners See Etiquette *in this index*

Manners, Comedy of See Comedy of manners

in this index

Manners, Roger [English nobleman]

Shakespeare, William (The anti-Stratfordians)

S: 349

Mannheim [city, Germany] M: 165

Manning, Daniel [American government official]

Cleveland, Grover (table) Ci: 671

Treasury, Department of the (table) T: 407

Manning, Ernest Charles [Canadian political

leader]

Manning, Preston M: 165

Alberta (table) A: 328

Manning, Helen Herron Taft [daughter of]

Taft, William Howard (Taft's family) T: 9

Manning, John L. [American political leader]

South Carolina (table) So: 658

Manning, Preston [Canadian political leader]

M: 165

Campbell, Kim (The 1993 election) C: 90d

Chrétien, Jean (The 1993 election) C: 522c

Reform Party R: 195

Manning, Richard I. [American political leader]

South Carolina (table) So: 658

Manning, Timothy Cardinal [American religious

leader]

Cardinal (table: American cardinals) C: 211

Mannock, Edward [British aviator]

Ace A: 24

Mannogalactan [chemical]

Guar G: 411

Mano [people]

Liberia (Recent developments) L: 232

Manometer [measuring device] M: 165

Hydraulics (Use of hydrostatic principles)

H: 463

Manon [opera by Massenet]

Massenet, Jules M: 296

Opera *picture on O: 794*

Manon Lescaut [book by Prévost]

French literature (The Age of Reason) F: 520-

521

Manon Lescaut [opera by Puccini]

Puccini, Giacomo P: 870

Manor

Manorialism M: 166

Serf S: 316

Manorialism [European history] M: 166

City (Economy) Ci: 584

Feudalism F: 81

Food (The Middle Ages) F: 336 *with picture*

Middle Ages (Barbarian Europe) M: 523

Revolution of 1848 R: 269

Serf S: 316

Manouches [people]

Gypsies G: 451

Manpower Development and Training Act

[1962]

Adult education (In the 1900's) A: 69

Unemployment (Fighting unemployment)

U: 23

Vocational education (The 1900's) V: 435

Manrico [opera character]

Opera (*Trovatore, II*) O: 808

Manrique, Jorge [Spanish author]

Spanish literature (The 1400's) So: 758

Man's magazine

Magazine (Consumer magazines) M: 42

Mansa Magha I [Mali ruler]

Mansa Musa M: 166

Mansa Musa [Mali ruler] M: 166

African Americans (The cultural heritage)

A: 136c

Mali (History) M: 109

Mali Empire M: 110

Mansard roof

Roof R: 451 *with picture*

Mansef [food]

Jordan (Food and drink) J: 163

Mansell, Nigel [British race car driver]

Automobile racing (table: Grand Prix world

champions) A: 980

Mansfield, Arabella Babb [American educator]

M:

- Faulkner, William F: 55
Manslaughter [crime] **M**: 167
 Homicide **H**: 305
 Murder **M**: 930
 Negligence **N**: 119
Manson, Sir Patrick [Scottish doctor] **M**: 167
Manta ray [fish]
 Animal picture on **A**: 507
 Fish picture on **F**: 152
Mentegna, Andrea [Italian painter] **M**: 167 *with picture*
 Engraving picture on **E**: 326
 Fresco picture on **F**: 529
 Jesus Christ picture on **J**: 107
 Painting (The 1400's) **P**: 52-53 *with picture*
 Renaissance picture on **R**: 232
Mantell, Gideon [British physician]
 Dinosaur (Dinosaur discoveries) **D**: 213
Iguanodon **I**: 50
Mantell, Mary Ann [British naturalist]
 Dinosaur (Dinosaur discoveries) **D**: 213
Iguanodon **I**: 50
Manticore, The [book by Davies]
 Davies, Robertson **D**: 46
Mantid [insect] **M**: 167
 Animal picture on **A**: 495
 Insect picture on **I**: 280
Mantis [insect] See *Mantid in this index*
Mantissa [mathematics]
 Logarithms (Common logarithms) **L**: 424
Mantle [geology] **M**: 168
 Earth diagram on **E**: 20; (Earth's interior) **E**: 23
 Hot spot **H**: 374a
 Ocean (How the sea floor was formed) **O**: 662
 Plate tectonics (Structure of tectonic plates) **P**: 561
Mantle [lamp]
 Lamp (Gas lamps) **L**: 53
Mantle [Mars]
 Mars (Physical features of Mars) **M**: 225
Mantle [moon]
 Moon (The interior of the moon) **M**: 790
Mantle [zoology]
 Clam (The body of a clam) **Ci**: 637
 Mollusk **M**: 694
 Octopus (The body of an octopus) **O**: 672 *with diagram*
 Oyster (Shell) **O**: 890 *with diagram*
 Pearl (How pearls are formed) **P**: 216 *with diagram*
 Shell (How shells are formed) **S**: 385
Mantle [zoology] **M**: 168
Mantle, Mickey [American baseball player]
M: 168
 Baseball (table: Hall of Fame) **B**: 135
Mantle plume [geology]
 Plate tectonics (Plate movement) **P**: 563
 Volcano (Why volcanoes occur in certain places) **V**: 442
Mantle scallop [sea animal]
 Shell picture on **S**: 387
Mantling
 Heraldry (Elements of a coat of arms) **H**: 194-196 *with picture*
Mantodea [entomology]
 Insect (table) **I**: 299
Mantra [religion]
 Buddhism (The Mantrayana) **B**: 669
 Meditation **M**: 380
 Transcendental Meditation **T**: 370
Mantrayana [religion]
 Buddhism (The Mantrayana) **B**: 669
Mantua, Duke of [opera character]
 Opera (*Rigoletto*) **O**: 806
Menu [religion] **M**: 168
Manu, Code of [Hinduism]
 Manu **M**: 168
 Hinduism (Sacred writings) **H**: 236
Manu National Park [Peru]
 National park (table) **N**: 42g
Manu Smriti [Hinduism]
 Hinduism (Sacred writings) **H**: 236
 Manu **M**: 168
Manua Islands
 American Samoa **A**: 429 *with map*
Manual [keyboard]
 Harpsichord **H**: 66 *with picture*
 Organ (Pipe organs) **O**: 851-852 *with picture*
Manual alphabet, American
 Sign language **S**: 453 *with picture*
Manual arts
 Industrial arts (Beginnings) **I**: 243
Manual communication [sign language]
 Deafness (Special language techniques) **D**: 58
Manual for Citizenship [book]
 Daughters of the American Revolution **D**: 43
Manual of Botany [book by Gray]
 Gray, Asa **G**: 333
Manual of Discipline
 Dead Sea Scrolls **D**: 56
Manual of Parliamentary Practice [book by Jefferson]
 Jefferson, Thomas (Vice President) **J**: 81-82 *with picture*
Manual Training School [U.S. history]
 Vocational education (Early vocational education in schools) **V**: 435
Manual transmission
 Transmission (How a manual transmission works) **T**: 378 *with diagram*
Manual typewriter
 Typewriter (Kinds of typewriters) **T**: 538
Manual valve [mechanics]
 Valve **V**: 267 *with diagram*
Manuel I, the Fortunate [king of Portugal]
 Da Gama, Vasco (Early life) **D**: 3-4
 Magellan, Ferdinand (Planning the expedition) **M**: 46
 Portugal (The arts) **P**: 689; (The age of exploration) **P**: 693
Manuel II [king of Portugal]
 Portugal (The first Portuguese republic) **P**: 694
Manuel, Don Juan [Spanish author]
 Spanish literature (Early medieval literature) **S**: 757-758
Manuel M. Torres Dam [Mexico]
 Dam (table) **D**: 18
Manueline style [art]
 Portugal (The arts) **P**: 689
Manuelito [American Indian chief] **M**: 168 *with portrait*
Manufactured fertilizer
 Fertilizer (Production and sale) **F**: 80
Manufactured fibers
 Textile (Sources of textile fibers) **T**: 212-213
 Thread **T**: 269 *with diagram*
Manufactured gas
 Gas [fuel] **G**: 50; (How gas is manufactured) **G**: 57; (First uses of manufactured gas) **G**: 58
 Coke oven gas **Ci**: 759
 Fuel (Manufactured gas) **F**: 551
Manufactured house
 House (Building materials) **H**: 380
 Mobile home **M**: 682
Manufacturers, National Association of
 National Association of Manufacturers **N**: 29
Manufacturing [industry] **M**: 169 *with pictures*
 Automation (Uses of automation) **A**: 944
 Careers (Production) **C**: 229
 Clothing (Ready-to-wear clothes) **Ci**: 705
 Factory **F**: 5 *with picture*
 Mass production **M**: 269
 Safety (In manufacturing plants) **S**: 13
 Sales (Selling by manufacturers) **S**: 62
 Space exploration (Expanding space activities) **S**: 728
 United States, History of the (Expansion and the economy) **U**: 168; (Improved production methods) **U**: 176; (The economy—boom and bust) **U**: 187
 Value added by manufacture **V**: 267
 World picture on **W**: 415
Manufacturing grade
 Milk (At a dairy farm) **M**: 546-547
Manufacturing Heartland of Canada
 Ontario **O**: 764
Manuka [tree] See *Teatree in this index*
Manumission [slavery]
 Slavery (Ancient times) **S**: 501
Manure [agriculture] **M**: 172
 Dairying (Housing) **D**: 6-7
 Farm and farming (Special crop-growing methods) **F**: 37-38 *with picture*
 Gardening (Planning the garden) **G**: 31-34
Manus Island [New Guinea]
 Admiralty Islands **A**: 59 *with picture*
 Bismarck Archipelago **B**: 382
Manuscript **M**: 172 *with pictures*
 Biology picture on **B**: 318
 Book (The Middle Ages) **B**: 466
 Cortés, Hernando picture on **Ci**: 1074
 Illuminated manuscript **I**: 78
 Library (Medieval collections) **L**: 259 *with picture*
 Publishing (Acquiring the manuscript) **P**: 868; (Editing the manuscript) **P**: 868
 Writing (Preparing and submitting a manuscript) **W**: 512
Manuscript writing
 Handwriting (Kinds of handwriting) **H**: 47; (Learning to write) **H**: 47 *with picture*
Manush, Heinie [American baseball player]
 Baseball (table: Hall of Fame) **B**: 135
Manutius, Aldus [Italian printer]
 Book (The spread of printed books) **B**: 467 *with picture*
 Italics **I**: 495
 Punctuation **P**: 902
 Type (Classes of type) **T**: 537
Manx [cat]
 Cat (Short-haired breeds) **C**: 290-291; *picture on C*: 288
Manx [language]
 Man, Isle of **M**: 131
Manx shearwater [bird]
 Shearwater **S**: 379
Manyatta [African homestead]
 Maasai **M**: 2
Man'yōshū [poems]
 Japanese literature (Beginnings) **J**: 61
Manzanar National Historic Site [California]
 National Park System (table: National historic sites) **N**: 52-53
Manzanita [shrub] **M**: 174 *with picture*
Manzikert, Battle of [1071]
 Turkey (The Seljuk Turks) **T**: 509
Manzoni, Alessandro [Italian author] **M**: 174
 Italian literature (Romanticism) **I**: 495
 Verdi, Giuseppe **V**: 316
Manzù, Giacomo [Italian sculptor]
 Sculpture (Kinds of sculpture) **S**: 230
Mao Tse-tung See *Mao Zedong in this index*
Mao Zedong [Chinese political leader] **M**: 174 *with portrait*
 Beijing (History) **B**: 223-224
 China (Nationalist rule) **C**: 504; (The beginning of Communist rule) **C**: 505 *with picture*
 Chinese literature (Modern Chinese literature) **C**: 512
 Cold War (Communist expansion in Asia) **Ci**: 764
 Communism (World War II) **Ci**: 893-894 *with picture*; (China after Mao) **Ci**: 896
 Deng Xiaoping (His life) **D**: 131
 Guerrilla warfare (Modern guerrilla techniques) **G**: 420
 Jiang Qing **J**: 125
MAOI [drug] See *Monamine oxidase inhibitor in this index*
Maori [language]
 New Zealand (People) **N**: 348
Maori [people] **M**: 175 *with picture*
 Auckland **A**: 880
 Mythology (Comparing myths) **M**: 975; (Creation myths) **M**: 982
 National park (New Zealand) **N**: 42d; (The rights of original inhabitants) **N**: 42i
 New Zealand **N**: 346; (People) **N**: 348 *with picture*; (History) **N**: 354 *with picture*
 Sculpture (Pacific Islands sculpture) **S**: 241-242 *with picture*
Map **M**: 176 *with pictures and maps*
 Archaeology (Surveying sites) **A**: 596
 Atlas **A**: 868
 City planning picture on **Ci**: 600
 Exploration picture on **E**: 439
 Geography (Location) **G**: 92
 Globe **G**: 233
 Great-circle route **G**: 338
 Isobar **I**: 474 *with map*
 Isotherm **I**: 475 *with map*
 Latitude **L**: 116
 Longitude **L**: 451; *diagrams on L*: 452
 Moon (Early observations with telescopes) **M**: 792 *with picture*
 Photogrammetry **P**: 407 *with picture*
 Races, Human (The clinal approach) **R**: 55-56 *with map*
 Radar (Pulse radar) **R**: 68-69 *with picture*
 Telescope (Adaptive optical systems) **T**: 106
 Weather (Weather maps) **W**: 164 *with picture*
 World, History of the picture on **W**: 441

See also the list of *Related Articles in the Map article*

Map [island, Pacific]
Yap Islands Y: 553

Map of the British and French Dominions in America
Map (Mapping the Americas) M: 184-185

Map projection
Map M: 176; (Map projections) M: 179; (Map projections) M: 182 *with diagrams*

Mapai [political party]
Ben-Gurion, David B: 246
Eshkol, Levi E: 358

Maple [tree] M: 186 *with pictures*
Leaf picture on L: 151
Plant (Seed dispersal) P: 541-542 *with picture*;
picture on P: 517
Tree pictures on T: 420, T: 422
Wood picture on W: 389

Maple, Flowering [shrubs]
Flowering maple F: 303 *with picture*

Maple leaf [symbol]
Canada, History of (The return of the Liberals)
C: 152 *with picture*

"Maple Leaf Rag" [song]
Joplin, Scott J: 160

Maple Leafs, Toronto
Hockey (table: National Hockey League)
H: 281; (Famous players and All-Star
teams) H: 281
Toronto (Sports) T: 339

Maple sugar
Maple syrup (Production) M: 188; (History)
M: 188
Sugar (Maple syrup) So: 960

Maple syrup M: 188 *with pictures*
Vermont (Interesting facts) V: 319 *with picture*

Mapother, Thomas Cruise, IV [American actor]
See Cruise, Tom *in this index*

Mapp v. Ohio [U.S. history]
Supreme Court of the United States (Criminal
law) So: 1001; (table) So: 1002

Mapping program
Map (Production and reproduction) M: 180-
181

Mapping radar
Radar (In the military) R: 65-66

Mapu, Abraham [Hebrew author]
Hebrew literature (Modern Hebrew literature)
H: 162

Mapuche Indians [American Indians]
Araucanian Indians A: 592
Chile (Ancestry) C: 460

Maputo [Mozambique] M: 189 *with picture*
Mozambique M: 904 *with picture*

Maqamah [literature]
Arabic literature (Fiction) A: 583

Maquette [art]
Animation (Computer animation) A: 512
Sculpture (The sculptor at work) S: 232

Maquiladora [factory]
Mexico (Manufacturing) M: 464-465

Maquis [organization] M: 189
France (World War II) F: 475

Maquoketa River
Iowa (Rivers and lakes) I: 386

Mar del Plata [city, Argentina] M: 189 *with pic-
ture*

Mara [animal]
Cavy C: 322

Mara, Ratu Sir Kamisese [Fijian political leader]
Fiji (History) F: 98

Marable, Fate [American musician]
Jazz (Early jazz) J: 70

Marabou [bird] M: 190 *with picture*
Stork So: 911

Marabout [title]
Senegal (People) S: 297-298

Maracaibo [Venezuela] M: 190 *with picture*
Morgan, Sir Henry (Early career) M: 803

Maracaibo, Lake See Lake Maracaibo *in this
index*

Maracã Stadium
Brazil (Recreation) B: 575
Rio de Janeiro (People) R: 345-346

Marecanda [former city]
Samargand S: 78

Marecas [musical instrument]
Venezuela (Recreation) V: 301

Maree [meeting places]
Maori M: 175

Marajó [island, Brazil] M: 190

Marañón River [river, Peru]
Amazon River (The course of the Amazon)
A: 403

Maranville, Rabbit [American baseball player]
Baseball (table: Hall of Fame) B: 135

Maras, Roger Eugene [American baseball play-
er] See Maris, Roger *in this index*

Maraschino cherry M: 190

Marasmus [disorder]
Famine (Death and disease) F: 26
Malnutrition M: 111
Nutrition (Deficiency diseases) N: 630

Marat, Jean-Paul [French political leader]
M: 190 *with portrait*
Corday, Charlotte C: 1051
French Revolution (The National Convention)
F: 526 *with picture*

Marat/Sade [play by Weiss]
Drama (Later German-language drama) D: 340
German literature (German literature after
1945) G: 142

Maratha War [1803-1805]
Wellington, Duke of (Young soldier) W: 194

Marathas [people]
India (The Mughal Empire) I: 129-130
Mughal Empire M: 910

Marathi [language]
India (Languages) I: 114
Mumbai (People) M: 924

Marathon [battle, 490 B.C.] M: 191
Darius I D: 37
Miltiades M: 557

Marathon [sports]
Marathon (The battle) M: 191
Canoeing (Marathon racing) C: 181
Running R: 521
United States picture on U: 115

Marathon Oil Company
United States Steel Corporation U: 204

Maravich, Pete [American basketball player]
M: 191

Marble [rock] M: 191 *with pictures*
Rock (table) R: 373 *with picture*; (Metamorphic
rock) R: 372-373
Vermont (Places to visit) V: 326

Marble [toy]
Marbles M: 192 *with pictures*
West Virginia (Interesting facts) W: 207 *with
picture*

Marble, S. S. [American political leader]
Maine (table) M: 87

Marble bones
Osteosclerosis O: 868

Marble Faun, The [book by Hawthorne]
Hawthorne, Nathaniel (His novels) H: 115

Marble House [estate]
Rhode Island (Places to visit) R: 304

Marbled paper
Paperwork (End papers) P: 138

Marbled polecat [mammal]
Polecat P: 619

Marbled spider
Spider (table) So: 790; *picture on* So: 789

Marbles [game] M: 192 *with pictures*

Marbling [fat]
Beef B: 209

Marbois, François de Barbé [French govern-
ment official]
Louisiana Purchase (Napoleon's decision)
L: 503

Marbury, William [American government offi-
cial]
Jefferson, Thomas (The courts) J: 84
Marbury v. Madison M: 193

Marbury v. Madison [U.S. history] M: 193
Jefferson, Thomas (The courts) J: 84
Judicial review J: 183
Law (Beginnings of U.S. law) L: 136
Marshall, John (Chief justice) M: 230
Nullification N: 603
Supreme Court of the United States
(Landmark decisions) So: 1000, (table)
So: 1002
United States, Government of the (Authority
of the courts) U: 141-144
United States, History of the (The Supreme
Court) U: 164

Marc, Franz [German artist]
Germany picture on G: 155
Kandinsky, Wassily K: 213

Painting (Expressionism) P: 78-79

Marceau, Marcel [French mime] M: 193
Pantomime picture on P: 132

Marcel, Gabriel [French philosopher] M: 193

Marcel wave
Hairdressing (The 1800's) H: 12

Marcellinus, Ammianus [Roman historian]
Latin literature (Later periods) L: 116
Library (Libraries of the Middle Ages and the
Renaissance) L: 259

Marcellinus, Saint [pope]
Pope (table) P: 666

Marcello [opera character]
Opera (*Bohème, La*) O: 801

Marcellus [pen name]
Adams, John Quincy (Lawyer and writer)
A: 40-41

Marcellus I, Saint [pope]
Pope (table) P: 666

Marcellus II [pope]
Pope (table) P: 666

March [month] M: 194 *with pictures*

March [music] M: 193

March, Fredric [American actor]
Motion picture (Best performance by an actor:
1931-32) M: 862

March, Jo [literary figure]
Alcott, Louisa May A: 338

March, Peyton Conway [American military
leader] M: 196

March equinox
Equinox E: 348 *with diagram*

March Hare [literary figure]
Hare H: 60

March of Dimes Birth Defects Foundation
M: 196
Disabled (table) D: 222
Salk, Jonas Edward (The Salk vaccine) S: 68

March on Washington [1963]
African Americans (The growing movement)
A: 136m *with picture*
King, Martin Luther, Jr. (The growing move-
ment) K: 321 *with picture*
United States, History of the (The civil rights
movement) U: 192 *with picture*

March Sand [painting by Kiefer] See Märkscher
Sand *in this index*

Marchand, F.-Gabriel [Canadian political leader]
Quebec (table) Q: 29

Marchegiano, Rocco [American boxer] See
Marciano, Rocky *in this index*

Marcher lords [English history]
Wales (Revolts against England) W: 12

Marches [former region]
Wales (Revolts against England) W: 12

Marching Along [book by Sousa]
Sousa, John Philip So: 607

Marching band [music]
Band (Marching bands) B: 74 *with picture*
Baton twirling B: 167
Drum and bugle corps D: 368
Music picture on M: 947

Marching bugle tuba
Tuba T: 477

Marchioness [title]
Lady L: 25
Nobility (In the United Kingdom) N: 450

Marciano, Rocky [American boxer] M: 196
Boxing (The golden age of U.S. boxing)
B: 533-534; (The mid-1900's) B: 534

Marco Polo See Polo, Marco *in this index*

Marco Polo [ship]
New Brunswick (Interesting facts) N: 181 *with
picture*

Marco Polo sheep
Animal picture on A: 475
Sheep (Wild sheep) S: 380

Marconi, Guglielmo [Italian inventor] M: 196
with picture
Communication (The development of electron-
ics) C: 883 *with picture*
Radio (Early development) R: 91 *with picture*;
R: 83
Radio, Amateur (History) R: 96
Tesla, Nikola (Other inventions) T: 180
Wireless communication (History) W: 345

Marconi National Historic Site [Nova Scotia]
Canada (table: National historic sites) C: 114

Marcos, Ferdinand Edralin [Filipino political
leader] M: 197
Aquino, Corazon A: 581

- Philippines (The Marcos era) P: 380
Marcos, Imelda [Filipino political figure]
 Marcos, Ferdinand Edralin M: 197
Marcos, Subcomandante [Mexican political leader]
 Zapatista Army of National Liberation Z: 590
Marcos de Obregón [book by Espinel]
 Spanish literature (The 1600's) So: 759
Marcus, Rudolph Arthur [American chemist]
 Nobel Prizes (Chemistry: 1992) N: 443
Marcus, Saint [pope]
 Pope (table) P: 666
Marcus Agrippa [Roman general] *See* Agrippa, Marcus *in this index*
Marcus Aurelius [Roman emperor] M: 197
Marcuse, Herbert [American philosopher]
 Socialism (The New Left) So: 561
Marcy, Geoffrey [American astronomer]
 Planet (The first discoveries) P: 512
Marcy, Mount
 Adirondack Mountains A: 56
 New York (Land regions) N: 304
Marcy, William L. [American political leader]
 New York (table) N: 313
 Pierce, Franklin (table) P: 456
 Polk, James Knox (table) P: 643
 Spoils system So: 798
 State, Department of (table) So: 860
Mardalsfossen Falls [waterfalls, Norway]
 Waterfall (table: Famous waterfalls of the world) W: 143
Mardi [book by Melville]
 Melville, Herman (His literary career) M: 390
Mardi Gras [custom] M: 197
 New Orleans N: 278 *with picture*; (Annual events) N: 282
 Easter (Carnivals) E: 44
 Louisiana L: 478; (Visitor's guide) L: 488; *picture on L*: 489
 Shrove Tuesday S: 442
Marduk [Babylonian god] M: 197
 Assyria (Religion) A: 821
Marduk, Temple of [Babylon]
 Babylon (The New Babylonian Empire) B: 12
Mare
 Horse (Life history) H: 351
 Horse racing (Thoroughbred horses) H: 363-364
 Mule M: 913
Mare Imbrium [lunar feature]
 Moon (Determining the origin of craters) M: 793-794
Mare Nostrum
 Mediterranean Sea (History of the Mediterranean) M: 382
Mare Tirreno *See* Tyrrhenian Sea *in this index*
Marechal, Leopoldo [Argentine author]
 Latin-American literature (The mid-1900's) L: 113
Marek's disease
 Poultry (Raising poultry) P: 720-721
Marengo [horse]
 Horse (table: Famous horses in history and legend) H: 361
Maresha [plow]
 Ethiopia (Way of life) E: 369
Margan syndrome [disorder] M: 198
Margai, Sir Milton [Sierra Leone political leader]
 Sierra Leone (History) S: 452
Margaret [queen of Denmark]
 Denmark (A great power) D: 139; *picture on D*: 140
 Norway (Union with Denmark) N: 545
 Sweden (Union with Norway and Denmark) So: 1032-1033
Margaret [queen of Scotland, 1283-1290]
 Scotland (Fight for independence) S: 219
Margaret [daughter of Henry VIII]
 Henry VII (of England) H: 188
 Scotland (The House of Stuart) S: 219
Margaret [wife of Henry VI]
 Warwick, Earl of [English political leader] W: 44
Margaret, Princess [sister of]
 Elizabeth II (Early life) E: 239-240
Margaret Fleming [play by Herne]
 Herne, James A. H: 212
Margaret Island [former city, Hungary]
 Budapest B: 666
Margaretta [ship]
 Maine (Places to visit) M: 78; (The Revolutionary War) M: 89
Margarine [food] M: 198
Margarita [island]
 Venezuela (European exploration and settlement) V: 304
Margay [wildcat] M: 198 *with picture*
Marggraf, Andreas Sigismund [German chemist]
 Sugar (Sugar from sugar beets) So: 961
 Zinc Z: 598
Marghera [Italy]
 Venice (The people) V: 307; (Economy) V: 307-308
Margherita Peak [mountain]
 Congo (Kinshasa) (The highland) Ci: 940c *with map*
 Uganda (Land) U: 3
Margin [botany]
 Plant (Leaves) P: 530
Margin [economics] M: 198
 Commodity exchange (Forward and futures contracts) Ci: 873
 Federal Reserve System (Other FRS activities) F: 66
 Securities Exchange Act S: 279
Marginal sea
 Atlantic Ocean (Boundaries and size) A: 864
 Gulf G: 436
 Pacific Ocean (Boundaries) P: 14
Margrethe II [queen of Denmark] M: 198
 Denmark (Postwar years) D: 141
 Frederik IX F: 498
Marguerite [opera character]
 Opera (*Faust*) O: 804
Marguerite of Navarre [French author]
 French literature (The Renaissance) F: 519
Margulis, Lynn Alexander [American microbiologist]
 Gaia G: 6
Mari-Diata [Malian king] *See* Sundiata Keitam *in this index*
Maria [grand duchess of Russia]
 Nicholas II (czar) *picture on N*: 403
Maria [astronomy]
 Moon M: 783; (Maria) M: 789; (Describing lunar evolution) M: 794
Maria [book by Isaac]
 Colombia (The arts) Ci: 781
 Latin-American literature (Romanticism) L: 112
Maria [literary figure]
 Shakespeare, William (*Twelfth Night*) S: 360
Maria Chaptelaine [book by Hémon]
 Canadian literature (Literature between the world wars) C: 159
 Hémon, Louis H: 182
Maria Cristina [mother of Alfonso XIII]
 Alfonso XIII A: 348
 Spain (The reign of Alfonso XIII) So: 749
Maria Island [Australia]
 Tasmania (Location, size, and description) T: 49
Maria Laach Abbey Church [Germany]
 Architecture *picture on A*: 619
Maria Theresa [wife of Louis XIV]
 Louis XIV L: 475
Maria Theresa [Holy Roman Empress] M: 199 *with portrait*
 Austria (Wars in the 1700's and 1800's) A: 938
 Germany (The rise of Prussia) G: 164
 Habsburg, House of H: 3
 Pragmatic sanction P: 729
 Seven Years' War (In Europe) S: 328
 Succession wars (The War of the Austrian Succession) So: 950
Mariachi band [music]
 Music *picture on M*: 947
 Hispanic Americans (Entertainment and arts) H: 248
 Mexico (Music) M: 459-460
Marian Exiles [European history]
 Knox, John (Later career) K: 358
"Mariana" [poem by Tennyson]
 Tennyson, Lord (His poems) T: 169-170
Mariana Islands [Pacific] M: 199
See also Northern Mariana Islands, Commonwealth of the *in this index*
 Pacific Islands, Trust Territory of the P: 13
 Plebiscite P: 572
Mariana Trench [oceanography]
 Deep D: 81
 Deep sea (The deep-sea floor) D: 82a
 Exploration (Deep-sea exploration) E: 451
 Ocean (Depth) O: 651-652
 Pacific Ocean (The ocean floor) P: 14; (Scientific research) P: 15
Mariánské Lázně [Czech Republic]
 Czech Republic (The Bohemian Mountains) Ci: 1211
Marias River [Montana]
 Lewis and Clark expedition (West to the Rockies) L: 223
Maric, Maria [wife of] *See* Einstein, Mileva *in this index*
Marichal, Juan [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Maricopa County [Arizona]
 Phoenix (Layout of Phoenix) P: 396
Maricopa Indians
 Indian, American *picture on I*: 167 *See* Peregrinus, Petrus *in this index*
Mariculture *See* Aquaculture *in this index*
Marie [opera character]
 Opera (*Wozzeck*) O: 808
Marie Adélaïde [grand duchess of Luxembourg]
 Luxembourg (History) L: 531
Marie Antoinette [wife of Louis XVI] M: 199 *with portrait*
 Lafayette, Marquis de (The revolution at home) L: 28
Marie Antoinette and Her Children [painting by Wertmüller]
 Marie Antoinette *picture on M*: 200
Marie Calumet [book by Girard]
 Canadian literature (Fiction: 1850-1918) C: 158
Marie de Médicis [wife of Henry IV] M: 200
 Henry IV (king of France) H: 186
 Louis XIII L: 474
 Medici M: 362
 Richelieu, Cardinal (Strengthening the monarchy) R: 331
 Rubens, Peter Paul (His art) R: 507
Marie Louise [wife of Napoleon I] M: 200
 Josephine (Her last years) J: 169
 Napoleon I (Divorce and remarriage) N: 17
 Napoleon II N: 19
Marie Thérèse of Spain [painting by Mignard]
 Clothing *picture on Ci*: 701
Mariel boat lift [Cuban history]
 Cuba (Foreign relations) Ci: 1179
Marielitos [people]
 Hispanic Americans (Cuban immigration) H: 253-254
Marietta [Ohio]
 Northwest Territory (Settlement) N: 535 *with picture*
 Ohio Company (The second Ohio Company) O: 705
Marignac, Jean de [Swiss chemist]
 Gadolinium G: 4
 Ytterbium Y: 574
Marignano, Battle of [1515]
 Francis I F: 480
Marigold [plant] M: 201 *with picture*
 Flower (Garden annuals) F: 276 *with picture*
Marigold [ship]
 Drake, Sir Francis (Voyage around the world) D: 321
Marihuana [drug] *See* Marijuana *in this index*
Marijuana [drug] M: 201 *with picture*
 Drug abuse (Abuse of illegal drugs) D: 362; (table: Some commonly abused drugs) D: 363; (History) D: 365
 Rastafarians R: 145
Marijuana Tax Act [1937]
 Drug abuse (History) D: 365-366
Mariña de Dirceu [poems by Gonzaga]
 Latin-American literature (Colonial literature) L: 111-112
Marilyn Monroe Diptych [painting by Warhol]
 Painting (Pop art) P: 86
 Warhol, Andy *picture on W*: 36
Marimba [musical instrument] M: 202 *with picture*
 Mexico (Music) M: 459-460
Marin, Don Francisco de Paula [Spanish settler]
 Hawaii (The kingdom of Hawaii) H: 106
Marin, John [American painter] M: 202 *with picture*
 Painting *picture on P*: 41
Marin County Civic Center
 Wright, Frank Lloyd (Later career) W: 507 *with picture*

Marina

Boating (The growth of boating) B: 432

Marina [literary figure]

Shakespeare, William (*Pericles*) S: 364

Marinate

Cooking (table) Ci: 1029

Marine [military] M: 203 *with picture*

See also Marine Corps, United States in this index

Navy N: 76

Marine animal [zoology]

Aquarium, Public A: 578b *with picture*

Animal (Animals of the oceans) A: 486 *with pictures*

Marine biology M: 204

Ocean (Life in the ocean) O: 655 *with pictures*

Marine Band, United States

Marine Corps, United States M: 206

Marine biology M: 204 *with pictures*

Biology (What biologists study) B: 316-317

Ocean (Careers in oceanography) O: 666; *picture on O: 665*

Marine chronometer [instrument]

Chronometer C: 539

Clock *picture on Ci: 682*

Marine Corps, United States M: 206 *with pictures*

Flag *pictures on F: 194, F: 211*

Infantry (Divisions) I: 265

Navy, Department of the N: 81

Navy, United States (The Marine Corps) N: 85

Sandino, Augusto César S: 109

United States Naval Academy U: 203

Marine Corps Band

Marine Corps, United States M: 206

Marine Corps War Memorial [Arlington, Virginia]

Marine Corps, United States *picture on*

M: 206

Washington, D.C. (Marine Corps War

Memorial) W: 78 *with picture*

Marine dolphin [sea animal]

Dolphin D: 297 *with pictures*

Marine Drive

Nova Scotia (Places to visit) N: 560

Marine eelgrass

Eelgrass E: 115

Marine fish

Fish (Saltwater environments) F: 150 *with pictures*; (How fish adjust to change) F: 168

Marine geology

Ocean (Careers in oceanography) O: 666 *with picture*

Marine geophysics

Ocean (Careers in oceanography) O: 666

Marine Highway

Alaska (Places to visit) A: 290

Marine Historical Association

Mystic Seaport M: 972

Marine Hospital Service

Public Health Service P: 857

Marine iguana [reptile]

Galapagos Islands G: 8 *with picture*

Iguana I: 50

Lizard (Food) L: 401

Marine insurance

Insurance (Other kinds of property and liability insurance) I: 313-314

Marine Museum of Upper Canada

Toronto (Museums and libraries) T: 339

Marine park

National park (Canada) N: 42c

Marine plant

Ocean (The importance of the ocean) O: 654; (Life in the ocean) O: 655 *with pictures*

Marine propeller

Propeller (Marine propellers) P: 826 *with picture*

Marine Science Institute

Texas, University of (University of Texas at Austin) T: 210

Marine screw propeller

Screw (Uses) S: 225-226

Marine snow [biology]

Deep sea (The deep-sea environment) D: 82

Marine toad See Cane toad in this index**Marine World Africa USA** [Vallejo]

California (Places to visit) C: 46

Marineland of Florida

Aquarium, Public (History) A: 580

Florida (Places to visit) F: 252

Mariner 2 [space probe]

Space exploration (Probes to Venus) So: 710
Venus (Flights to Venus) V: 313

Mariner 4 [space probe]

Mars (Observation by spacecraft) M: 226d

Space exploration (Probes to Mars) So: 710

Mariner 5 [space probe]

Venus (Flights to Venus) V: 313

Mariner 6 [space probe]

Mars (Observation by spacecraft) M: 226d

Mariner 7 [space probe]

Mars (Observation by spacecraft) M: 226d

Mariner 9 [space probe]

Mars (Observation by spacecraft) M: 226d

Space exploration (Probes to Mars) So: 710;

picture on So: 709

Mariner 10 [space probe]

Mercury (Flights to Mercury) M: 416 *with picture*

Space exploration (Probes to Venus) So: 710

Venus (Flights to Venus) V: 313

Mariners, Seattle See Seattle Mariners in this index**Mariner's compass**

Compass Ci: 902b

Mariners Harbor [district]

New York City (Staten Island) N: 330

"Marines' Hymn, The" [song]

Marine Corps, United States M: 206

Marinetti, Filippo Tommaso [Italian poet]

Futurism F: 589

Italian literature (The 1900's) I: 495

Marino, Dan [American football player] M: 211**Marino, Eugene Antonio** [American religious leader] M: 211**Marino, Giambattista** [Italian poet]

Italian literature (The baroque period and the

Age of Reason) I: 494

Marinol [drug]

Marijuana (History) M: 201-202

Marinsky, J. A. [American chemist]

Promethium P: 818

Marinus [founder of]

San Marino (History) S: 104

Marinus I [pope]

Pope (table) P: 666

Marinus II [pope]

Pope (table) P: 666

Mario [opera character]

Opera (*Tosca*) O: 807

Marion, Francis [American general] M: 211

Guerrilla warfare (History) G: 420

Revolutionary War in America (Savannah and

Charleston) R: 283-284

South Carolina (The Revolutionary War)

So: 659-660; *picture on So: 661*

Marion, Lake [U.S.]

South Carolina (Rivers, waterfalls, and lakes)

So: 652-654

Marion Democratic Mirror [newspaper]

Harding, Warren Gamaliel (Newspaper career)

H: 56

Marion Koogler McNay Art Institute

San Antonio (Cultural life) S: 85

Marion Star [newspaper]

Harding, Warren Gamaliel (Newspaper career)

H: 56

Marionette [toy]

Puppet (Marionettes) P: 905 *with picture*

Mariotte, Edme [French chemist]

Gas [physics] (Gas laws) G: 48

Mariotte's Law [chemistry]

Gas [physics] (Gas laws) G: 48 *with pictures*

Mariposa Grove

Yosemite National Park Y: 569

Mariposa lily [flower] M: 212 *with picture*

Flower *picture on F: 290*

Maris, Roger [American baseball player] M: 212

with portrait

Baseball (Recent developments) B: 137

Marisol [American sculptor] M: 212

Sculpture S: 260 *with picture*

Maritain, Jacques [French philosopher] M: 212**Maritime academy**

United States Merchant Marine Academy

U: 200

Maritime Administration [U.S.] M: 212

Ship (The United States merchant marine)

S: 425-426

Transportation, Department of (Agencies)

T: 400

Maritime Center [Norwalk]

Connecticut (Places to visit) Ci: 960

Maritime Command

Canada, Armed Forces of (Organization)

C: 128

Maritime Commission, Federal [U.S.] See

Federal Maritime Commission in this index

Maritime law [international law] M: 213

Admiralty A: 59

Flotsam, jetsam, and lagan F: 267

Maritime Provinces

See also Atlantic Provinces in this index

Canada (The Atlantic Provinces) C: 101

Marius, Gaius [Roman general] M: 213

Caesar, Julius (Early life) C: 12

Legion L: 184

Pompey the Great P: 655

Marius Hills complex [lunar feature]

Moon (Rilles) M: 790

Marius the Epicurean [book by Pater]

Pater, Walter Horatio P: 195

Marivaux, Pierre [French author] M: 213

Drama (France) D: 335

French literature (The Age of Reason) F: 520-

521

Marjoram [plant] M: 213 *with picture*

Oregano O: 825

Mark [money] M: 213

Money (The value of money) M: 714

Mark I [computer]

Computer (The first electronic computers)

Ci: 924b

Mark, Gospel of [New Testament]

Bible (Books of the New Testament) B: 282-

283

Gospels G: 277

New Testament (Books) N: 287

Mark, Saint [apostle] M: 213

Gospels G: 277

Jesus Christ (Ministry) J: 106

Mark Antony [Roman military leader] See

Antony, Mark in this index

Mark Clark Expressway Bridge [South Carolina]

Bridge (table: Continuous truss) B: 603

Mark of cadency

Heraldry (Elements of a coat of arms) H: 194-

196 *with pictures*

Mark Taper Forum

Theater *picture on T: 245*

Mark Twain [American author] See Twain, Mark

in this index

Mark twain [navigation]

Twain, Mark (Newspaper work in the West)

T: 528

Mark Twain Cave [Hannibal]

Missouri (Places to visit) M: 660

Mark Twain home [Hannibal]

Missouri (Places to visit) M: 660 *with picture*

Mark Twain House [Hartford]

Connecticut (Places to visit) Ci: 960 *with picture*

picture

Mark Twain National Forest

Missouri (Places to visit) M: 660

Marka [people]

Burkina Faso (People) B: 706

Marker

Clothing (Ready-to-wear clothes) Ci: 704-705

Market [economics]

Capitalism (Capitalism in its ideal form) C: 194

Cartel C: 251

Commodity exchange Ci: 873

Economics (Markets, prices, and competition)

E: 60

Market research M: 213

Marketing (Market research) M: 214

Price P: 774

Trade (The use of markets) T: 362

Market [shopping]

Trade (The use of markets) T: 362 *with pictures*

Africa *picture on A: 110*

Chile *picture on C: 460*

Hong Kong *picture on H: 319*

India *picture on I: 116*

La Paz *picture on L: 73*

London (Recreation) L: 434 *with picture*

Mexico (Rural life) M: 454-455

Russia *picture on R: 534*

Trading post T: 366

Market, Stock See Stock exchange in this index

- Market Church in Halle, The** [painting by Feininger]
Feininger, Lyonel *picture on F*: 67
- Market economy** See *Capitalism in this index*
- Market extension merger** [economics]
Merger M: 418
- Market Hall** [Belgium]
Bruges B: 649
- Market intervention** [economics]
Price (Government intervention) P: 775
- Market maker** [investment]
Nasdaq N: 21
- Market Place, The** [book by Frederic]
Frederic, Harold F: 497
- Market price**
Economics (Markets, prices, and competition) E: 60
Investment (table) I: 366
Price (How price is determined) P: 774
- Market research M**: 213
Advertising (Research) A: 76a
Automobile (Market research) A: 955
Marketing (Market research) M: 214
Public opinion poll (Business companies) P: 862
Sociology *picture on So*: 565; (Careers) So: 567
- Market value**
Appraisal A: 575
- Marketing M**: 214
Business (Specialized departments) B: 725-726
Farm and farming (Marketing farm products) F: 42
Food (Marketing) F: 335
Livestock (Marketing livestock) L: 398
Market research M: 213
Packaging P: 18
Sales S: 62
- Marketing channel**
Marketing (Distribution) M: 214
- Marketing cooperative**
Cooperative (Marketing cooperatives) Ci: 1036
Farm and farming (Marketing farm products) F: 42
Fishing industry (Marketing) F: 187
Food (Marketing) F: 335
- Markets of Trajan** [ruins]
Rome (Forums) R: 433
- Markham, Sir Clements R.** [British author]
Baffin, William B: 25
- Markham, Edwin** [American poet] M: 214
- Markham, Henry H.** [American political leader]
California (table) C: 59
- Markham, Robert** [author] See *Amis, Kingsley in this index*
- Markham, William** [American colonial leader]
Pennsylvania (Colonial days) P: 264
- Marking**
Horse (Coat and skin) H: 348-349
- Märkischer Sand** [painting by Kiefer]
Painting (Neexpressionism) P: 87 *with picture*
- Markova, Alicia** [British dancer] M: 215
Dolin, Anton D: 285
- Markowitz, Harry Max** [American economist]
Nobel Prizes (Economics: 1990) N: 449
- Marks, Albert S.** [American political leader]
Tennessee (table) T: 152
- Marks, Lillian Alicia** See *Markova, Alicia in this index*
- Marks and marking** [education]
Grading G: 297
- Markup** [economics]
Marketing (Pricing) M: 214
- Markup session** [government]
Congress of the United States (Working in committees) Ci: 944
- Marland, Ernest W.** [American political leader]
Oklahoma (table) O: 730
- Marland, William C.** [American political leader]
West Virginia (table) W: 225
- Marlborough** [book by Churchill]
Churchill, Sir Winston Leonard Spencer (Between wars) C: 547
- Marlborough, Duke of** [English general] M: 215
Blenheim, Battle of B: 400
Churchill River C: 550
England (War with France) E: 309
- Marley, Bob** [Jamaican musician] M: 215
Reggae R: 204
- Rock music (Rock goes pop) R: 379-380
- Marley, David "Ziggy"** [Jamaican musician]
Marley, Bob M: 215
- Marlin** [fish] M: 215 *with picture*
Fish *pictures on F*: 152
- Marlins, Florida** [baseball team] See *Florida Marlins in this index*
- Marlowe, Christopher** [English author] M: 216
Blank verse B: 398
Drama (Elizabethan playwrights) D: 331-332
English literature (Elizabethan drama) E: 317
Poetry (Renaissance poetry) P: 596-597
Shakespeare, William (The anti-Stratfordians) S: 349
- Marlowe, Philip** [literary figure]
Chandler, Raymond C: 374
- Marmaduke, John S.** [American political leader]
Missouri (table) M: 668
- Marmaduke, Meredith M.** [American political leader]
Missouri (table) M: 668
- Marmara, Sea of** [Turkey] M: 216
- Marmion** [poem by Scott]
Scott, Sir Walter (His life) S: 222
- Mármol, José** [Argentine author]
Latin-American literature (Romanticism) L: 112
- Marmoset** [animal] M: 216 *with picture*
Animal *picture on A*: 480
Primate (New World monkeys) P: 778-778a
- Marmot** [animal] M: 216
- Marne, Battle of the** [1914]
Joffre, Joseph Jacques Césaire J: 130
Paris (Paris in wartime) P: 166
World War I (The Western Front) *map on W*: 455-456
- Marne, Second Battle of The** [1918]
World War I (The last campaigns) W: 463
- Marne River** [France] M: 216
- Marner, Silas** [literary figure]
Eliot, George E: 237
- Maroni River**
French Guiana (The land and climate) F: 515
- Maronite Church** [religious group]
Eastern Catholic Churches E: 45
Lebanon (Ethnic groups and religion) L: 171
- Maroons** [people] M: 217
Jamaica (History) J: 24
- Marot, Clement** [French poet] M: 217
- Marot, Daniel** [French cabinetmaker]
Furniture (The French influence spreads) F: 575 *with picture*
- Marotte**
Puppet (Rod puppets) P: 905
- Marouflage**
Mural M: 929
- Marple, Miss** [literary figure]
Christie, Agatha C: 527
- Marquand, John Phillips** [American author]
M: 217
- Marquard, Rube** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Marque and reprisal** [warfare]
Privateer P: 808b
- Marqueses Islands** [islands, Pacific] M: 217 *with picture*
Tattooing T: 51
- Marquess** [title]
Duke D: 380
Nobility (In the United Kingdom) N: 450
- Marquetry** [decoration]
Inlay I: 274
- Marquette, Jacques** [French explorer] M: 217 *with map*
Arkansas A: 713
Chicago (Exploration and early settlement) C: 434
Exploration (The French and English in North America) E: 446-447 *with map*
Illinois (French and British control) I: 72
Joliet, Louis J: 156
Michigan (French exploration and settlement) M: 508
Missouri (Exploration and settlement) M: 669
Missouri River (History) M: 675-676
Peoria P: 277
- Marquette University M**: 218
- Márquez, Gabriel García** See *García Márquez, Gabriel José in this index*
- Marquina, Eduardo** [Spanish dramatist]
Spanish literature (Drama) So: 763
- Marquis, Don** [American author] M: 218
- Marquis de Lafayette** [painting by Morse]
Morse, Samuel Finley Breese (Morse as artist) M: 818 *with picture*
- Marquis of Queensberry rules** [boxing]
Boxing (From bare knuckles to gloves) B: 533
- Marquise** [cut]
Gem (Types of gem cuts) *picture on G*: 79
- Marr, Wilhelm** [German author]
Anti-Semitism A: 559
- Marrakech** [Morocco] M: 218
- Marranos** [people]
Jews (Jews in Christian Europe) J: 122-123
- Marriage M**: 219 *with pictures*
Africa (Marriage and the family) A: 108 *with picture*; (Marriage and the family) A: 113
Annulment A: 518
Anthropology A: 546
Bigamy B: 298
Breach of promise B: 587
Desertion D: 157
Divorce D: 253
Domestic violence D: 301
Dower D: 316
Eastern Orthodox Churches (Sacraments) E: 46-47
Family (Development of the family) F: 21-22
Gay rights movement G: 73
Indian, American (Marriage) I: 136c
Mormons (Church doctrines) M: 806-807
Oneida Community O: 762
Polygamy P: 650
Ring R: 342 *with picture*
Roman Catholic Church (Worship) R: 404-405
Suttee S: 1013
Women's movements (From the Renaissance to the 1800's) W: 384
- Marriage à la Mode** [paintings by Hogarth]
Hogarth, William H: 288 *with picture*
- Marriage à la Mode** [play by Dryden]
Dryden, John D: 370
- Marriage and Family Counselors, American Association of**
Marriage (Marriage problems) M: 221
- Marriage by proxy**
Marriage (Laws concerning marriage) M: 220
- Marriage counselor**
Divorce (No-fault divorce) D: 253-254
Marriage (Marriage problems) M: 221
- Marriage license**
Marriage (Laws concerning marriage) M: 220
Vital statistics (Collecting and publishing vital statistics) V: 429
- Marriage of Figaro, The** [opera by Mozart]
Beaumarchais, Pierre Augustin Caron de B: 191
Mozart, Wolfgang Amadeus (Operas) M: 906-907
Opera (*Marriage of Figaro, The*) O: 805
- Marriage of Figaro, The** [play by Beaumarchais]
French literature (The Age of Reason) F: 520-521
- Marriage of the Virgin** [painting by Raphael]
Raphael (His works) R: 143 *with picture*
- Marric, J. J.** See *Creasey, John in this index*
- Married** [story by Strindberg]
Strindberg, August So: 929
- "Married...with Children"** [television program]
Television (The 1980's and 1990's) T: 120
- Marrow** [anatomy] See *Bone marrow in this index*
- Marryat, Frederick** [British author] M: 222
- Mars** [astrology]
Astrology (History) A: 827
- Mars** [planet] M: 223 *with pictures and map*
Astronomy (How the planets move) A: 835
Exobiology E: 438
Life (The search for life on other planets) L: 279
Mars Pathfinder M: 226d *with picture*
National Aeronautics and Space Administration N: 28
Planet P: 507 *with pictures*
Satellite (table: Satellites of the solar system) S: 150b
Space exploration (Probes to Mars) So: 710 *with picture*; *picture on So*: 709
- Mars** [Roman mythology] M: 222
Mythology (table) M: 980; (Roman divinities) M: 981; (Romulus and Remus) M: 981
Romulus and Remus R: 450
Tuesday T: 481

- Mars 3** [space probe]
Space exploration (Probes to Mars) **So**: 710
- Mars, Field of** [Rome]
Mars **M**: 222
- Mars Climate Orbiter** [space probe]
National Aeronautics and Space Administration **N**: 28
- Mars Global Surveyor** [space probe]
Astronomy (Space probes) **A**: 849
Mars pictures on **M**: 226A, **M**: 226C;
(Observation by spacecraft) **M**: 226d
Space exploration (Probes to Mars) **So**: 710
- Mars Observer** [space probe]
Space exploration (Probes to Mars) **So**: 710
- Mars Odyssey** [space probe]
Astronomy picture on **A**: 834
Mars (Observation by spacecraft) **M**: 226d
Space exploration (Probes to Mars) **So**: 710
- Mars Pathfinder** [space probe] **M**: 226d with picture
Mars (Observation by spacecraft) **M**: 226d
Space exploration (Probes to Mars) **So**: 710
- Mars Polar Lander** [space probe]
National Aeronautics and Space Administration **N**: 28
- Marsalis, Branford** [American musician]
Jazz (Recent developments) **J**: 74
- Marsalis, Wynton** [American musician] **M**: 227
Jazz (Recent developments) **J**: 74
- Marschallin** [opera character]
Opera (*Rosenkavalier*, *Der*) **O**: 807
- "Marseillaise"** [song] **M**: 227
- Marseille** [city, France] **M**: 227
- Marsh** [fruit]
Grapefruit **G**: 321
- Marsh** [geography] **M**: 227
Bird (Birds of inland waters and marshes)
B: 340 with pictures
Wetland **W**: 253
- Marsh, George Perkins** [American naturalist]
Conservation (Early conservation problems)
Ci: 985
- Marsh, Henry L., III** [American political leader]
Richmond (History) **R**: 333
- Marsh, Ngaio** [New Zealand author] **M**: 227
- Marsh, Othniel C.** [American paleontologist]
Apatosaurus **A**: 563
- Marsh, Reginald** [American artist] **M**: 228
Realism picture on **R**: 172
- Marsh-Billings National Historical Park**
[Vermont]
National Park System (table: National historical parks) **N**: 56-57
- Marsh bird's-foot** [plant]
Trefoil **T**: 435
- Marsh calla** [plant]
Calla **C**: 66
- Marsh deer**
Deer (table) **D**: 85; (Central and South American deer) **D**: 85-86
- Marsh gas**
Methane **M**: 434
- Marsh hawk** [bird] See Northern harrier in this index
- Marsh hen** [bird] See Coot in this index
- Marsh mallow** [plant] **M**: 228
- Marsh marigold** [plant]
Cowslip **Ci**: 1113
Flower picture on **F**: 285
- Marsh wren** [bird]
Wren **W**: 504
- Marshall** [office] **M**: 228
- Marshall, United States** [office]
Marshall **M**: 228
- Marshaling**
Heraldry picture on **H**: 195
- Marshaling yard** [railroad] See Classification yard in this index
- Marshall, Alfred** [British economist] **M**: 228
- Marshall, E. G.** [American actor]
Drama picture on **D**: 340
- Marshall, F. Ray** [American government official]
Labor, Department of (table) **L**: 2
- Marshall, Frank J.** [American chess player]
Chess (United States chess champions) **C**: 414
- Marshall, George Catlett** [American statesman]
M: 228
See also Marshall Plan in this index
Truman, Harry S. (table) **T**: 469
World War II (The Allies attack in Europe and Northern Africa) **W**: 478
- Marshall, James Wilson** [American settler]
M: 229
California (The gold rush) **C**: 62
- Marshall, John** [American jurist] **M**: 229 with portrait
Adams, John (table) **A**: 38; (Election of 1800)
A: 39
Judicial review **J**: 183
Marbury v. Madison **M**: 193
Supreme Court of the United States
(Landmark decisions) **So**: 1000
United States, History of the (The Supreme Court) **U**: 164
- Marshall, John** [British explorer]
Marshall Islands (History) **M**: 231
- Marshall, Ray** [American government official]
Carter, Jimmy (table) **C**: 257
- Marshall, Thomas Riley** [American political leader] **M**: 230
Indiana (table) **I**: 214
Vice President of the United States **V**: 349 with portrait; (table) **V**: 351; (President of the Senate) **V**: 352
- Marshall, Thurgood** [American jurist] **M**: 230 with portrait
African Americans (Political gains) **A**: 136n with picture
Brown v. Board of Education of Topeka **B**: 645
Johnson, Lyndon Baines (Other developments) **J**: 151
National Association for the Advancement of Colored People **N**: 29
- Marshall, William R.** [American political leader]
Minnesota (table) **M**: 602
- Marshall Field and Company**
Field, Marshall, I **F**: 91
Palmer, Potter **P**: 110
- Marshall Field and Company Wholesale Warehouse** [Chicago]
Architecture (Early modern architecture in America) **A**: 629
- Marshall Field Wholesale Store** [building]
Richardson, Henry Hobson **R**: 330
- Marshall Islands** [islands, Pacific] **M**: 230 with map
Flag picture on **F**: 203
Pacific Islands, Trust Territory of the **P**: 13
World War II (Island hopping in the Central Pacific) **W**: 488-489
- Marshall Plan** [U.S. history] **M**: 231
Acheson, Dean Gooderham **A**: 26
Cold War (The Containment Policy) **Ci**: 763
Europe (Postwar Europe) **E**: 415
Marshall, George Catlett (Statesman) **M**: 229
Organization for Economic Cooperation and Development **O**: 853
Truman, Harry S. (The Marshall Plan) **T**: 470
World War II (New power struggles) **W**: 496-497
- Marshall Research Library** [Lexington, Virginia]
Marshall, George Catlett (Statesman) **M**: 229
- Marshall scholarship**
Oxford University (Educational program)
O: 888
- Marshall Space Flight Center** [Alabama]
Alabama (Population) **A**: 260; (The mid-1900's)
A: 278
- Marshall University**
West Virginia picture on **W**: 211
- "Marshes of Glynn, The"** [poem by Lanier]
Lanier, Sidney **L**: 68
- Marshmallow** [food]
Candy (Whipped candies) **C**: 176
- Marston, John** [English dramatist] **M**: 231
- Marsupial** [zoology] **M**: 232 with picture
Australia (Native animals) **A**: 914
Bandicoot **B**: 75
Conservation (Australia) **Ci**: 989
Cuscus **Ci**: 1199
Glider [animal] **G**: 231
Kangaroo **K**: 213
Koala **K**: 359 with picture
Mammal (Reproduction) **M**: 123-124 with picture; (table) **M**: 128 with picture
Prehistoric animal (Mammals) **P**: 739; (The distribution of mammals) **P**: 741
Quoll **Q**: 43
Reproduction (Mammals) **R**: 243
Tasmanian devil **T**: 49
- Marsupial mole** [animal]
Mammal (table) **M**: 128 with picture
- Marsupial (Kinds of marsupials) **M**: 232
- Marsupial mouse** [animal] **M**: 232 with picture
- Marta and Maria** [book by Palacio Valdés]
Spanish literature (The 1800's) **So**: 761-762
- Martel, Charles** [Frankish ruler] See Charles
Martel in this index
- Martello Tower**
Saint John (Description) **S**: 35
- Marten** [animal] **M**: 233 with picture
Fur (table) **F**: 561
- Martenot, Maurice** [French inventor]
Electronic music **E**: 204
- Martha Stewart Living** [magazine]
Magazine (table) **M**: 45
- Martha's Vineyard** [island, Massachusetts]
M: 233
Massachusetts (Places to visit) **M**: 280
- Marthasville**
Atlanta (Early days) **A**: 861
- Martí, José Julián** [Cuban patriot] **M**: 233
Cuba (The arts) **Ci**: 1172; (Struggle against Spain) **Ci**: 1176
Latin-American literature (Modernism) **L**: 112
- Martial** [Roman poet]
Epigram **E**: 343
Latin literature (The Imperial Period) **L**: 116
- Martial** [Roman poet] **M**: 233
- Martial arts** [sport] **M**: 233
Karate **K**: 246 with picture
Kickboxing **K**: 310 with picture
Tae kwon do **T**: 6
T'ai chi chuan **T**: 14
- Martial eagle**
Eagle (Other kinds of eagles) **E**: 5
- Martial law** **M**: 234
- Martialis, Marcus Valerius** See Martial in this index
- Martin** [bird] **M**: 234 with pictures
- Martin** [Tennessee]
Tennessee, University of **T**: 158
- Martin I, Saint** [pope]
Pope (table) **P**: 666
- Martin IV** [pope]
Pope (table) **P**: 666
- Martin V** [pope] **M**: 235
Pope (The troubles of the papacy) **P**: 664; (table) **P**: 666
Roman Catholic Church (The Great Schism)
R: 408
Sigismund **S**: 453
- Martin, Alexander** [American political leader]
North Carolina (table) **N**: 490
- Martin, Archer John Porter** [British biochemist]
Nobel Prizes (Chemistry: 1952) **N**: 443
- Martin, Charles H.** [American political leader]
Oregon (table) **O**: 845
- Martin, Clarence D.** [American political leader]
Washington (table) **W**: 65
- Martin, Daniel** [American political leader]
Maryland (table) **M**: 255
- Martin, Edward** [American political leader]
Pennsylvania (table) **P**: 263
- Martin, Émile** [French inventor]
Iron and steel (The birth of modern steelmaking) **I**: 451
- Martin, Glenn Luther** [American engineer]
Aviation (Beginnings) **A**: 986-987
- Martin, James G.** [American political leader]
North Carolina (table) **N**: 490
- Martin, John** [American political leader]
Georgia (table) **G**: 130
- Martin, John Alexander** [American political leader]
Kansas (table) **K**: 234
- Martin, John W.** [American political leader]
Florida (table) **F**: 260
- Martin, Joseph** [Canadian political leader]
British Columbia (table) **B**: 627
- Martin, Joseph William, Jr.** [American political leader]
MacArthur, Douglas (The Korean War) **M**: 4
- Martin, Joshua Lanier** [American political leader]
Alabama (table) **A**: 274
- Martin, Josiah** [British colonial official]
Revolutionary War in America (Fighting in the Southern Colonies) **R**: 275
- Martin, Lynn** [American government official]
Labor, Department of (table) **L**: 2
- Martin, Noah** [American political leader]
New Hampshire (table) **N**: 223

- Martin, Pierre** [French inventor]
Iron and steel (The birth of modern steelmaking) I: 451
- Martin, T. Mower** [Canadian painter]
Indian, American *picture on I*: 163
- Martin, William M.** [Canadian political leader]
Saskatchewan (table) S: 144
- Martin Chuzzlewit** [book by Dickens]
Dickens, Charles (The first phase) D: 188
- Martin Eden** [book by London]
London, Jack L: 444
- Martin Fierro** [poem by Hernández]
Argentina (The arts) A: 651
Latin-American literature (Romanticism) L: 112
- Martin House**
Buffalo (Other interesting places to visit) B: 678
- Martin Luther King, Jr., Community Center**
Dallas (Commercial growth) D: 15
- Martin Luther King, Jr., Day** [U.S. holiday]
M: 235
- Martin Luther King, Jr., National Historic Site** [Georgia] M: 235
National Park System (table: National historic sites) N: 52-53
- Martin Luther King Memorial Library**
[Washington, D.C.]
Washington, D.C. *map on W*: 76
- Martin Marprelate controversy** [English history]
Nashe, Thomas N: 22
- Martin of Tours, Saint** [French religious leader]
M: 235
- Martin Van Buren National Historic Site** [New York]
National Park System (table: National historic sites) N: 52-53
Van Buren, Martin (Later years) V: 273
- Martineau, John Ellis** [American political leader]
Arkansas (table) A: 712
- Martinaz, Bob** [American political leader]
Florida (table) F: 260
Hispanic Americans (Political developments) H: 255-256
- Martinez, Conchita** [Spanish tennis player]
Tennis (table: Wimbledon) T: 166
- Martinez, Maria** [American artist]
Indian, American (Achievements in the arts) I: 181
- Martinez, Maximiliano Hernández** [Salvadoran political leader]
El Salvador (The 1900's) E: 252
- Martinez, Melquiades R.** [American government official]
Bush, George Walker (table) B: 723
Hispanic Americans (Political developments) H: 255-256
Housing and Urban Development, Department of (table) H: 393
- Martinez Ruiz, José** [Spanish author]
Spanish literature (The Generation of 1898) So: 762
- Martinez Sierra, Gregorio** [Spanish poet]
Spanish literature (Modernism) So: 762
- Martini, Simona** [Italian painter] *See* Simone Martini *in this index*
- Martinique** [island, West Indies] M: 235
- Martins, Peter** [Danish-born dancer] M: 236
- Martin's Head** [mountain]
Maryland *picture on M*: 241
- Martinson, Harry Edmund** [Swedish author]
Nobel Prizes (Literature: 1974) N: 446
Sweden (Literature) So: 1026-1027
- Martius** [month]
Calendar (The Romans) C: 30
- Martlet**
Heraldry *picture on H*: 195
- Martorell, Joanot** [Spanish author]
Spanish literature (The 1400's) So: 758
- Marty** [film]
Motion picture (Best picture: 1955) M: 861
- Martyr**
Saint S: 29
- Martyrdom of Saint Maurice** [painting by El Greco]
Greco, El G: 351
- Martyrdom of Savonarola** [painting]
Perspective *picture on P*: 305
- Martyrology, The** [book by Nichol]
Canadian literature (Modern Canadian poets) C: 160
- Martz, Judy** [American political leader]
Montana (table) M: 757; (Recent developments) M: 761
- Maruki, Toshi** [Japanese author]
Literature for children *picture on L*: 355
- Marunouchi** [district]
Tokyo (The city) T: 313
- Marvel Cave**
Missouri (Springs and caves) M: 664
- Marvel-of-Peru** [plant] *See* Four-o'clock *in this index*
- Marvell, Andrew** [English poet] M: 236
- Marver**
Glass (Glass terms) G: 222
- Marvil, Joshua** [American political leader]
Delaware (table) D: 109
- Marvin, Lee** [American actor]
Motion picture (Best performance by an actor: 1965) M: 862-863
- Marvin, William** [American political leader]
Florida (table) F: 260
- Marwan** [Muslim ruler]
Muslims (The Muslim Empire) M: 964c
- Marx, Arthur** [American comedian]
Marx brothers M: 238
- Marx, Chico** [American comedian]
Marx brothers M: 238 *with picture*
- Marx, Groucho** [American comedian]
Marx brothers M: 238 *with picture*
- Marx, Gummo** [American comedian]
Marx brothers M: 238
- Marx, Harpo** [American comedian]
Marx brothers M: 238 *with picture*
- Marx, Heinrich** [father of Karl Marx]
Marx, Karl (Childhood) M: 236
- Marx, Henrietta** [mother of Karl Marx]
Marx, Karl (Childhood) M: 236
- Marx, Herbert** [American comedian]
Marx brothers M: 238
- Marx, Julius** [American comedian]
Marx brothers M: 238
- Marx, Karl** [German philosopher] M: 236 *with portrait*
See also Marxism *in this index*
Age of Reason (Criticism of the Age of Reason) A: 139-140
Capitalism (Changing attitudes toward capitalism) C: 195
Caricature *picture on C*: 238
Communism (The ideas of Marx) Ci: 890; (The centrally planned economy) Ci: 891
Economic determinism E: 57
Engels, Friedrich E: 283
Germany (Literature and philosophy) G: 153
Government (Modern times) G: 290-291
Lenin, V. I. L: 191
Materialism M: 300b
Middle class M: 529
Philosophy (Modern philosophy) P: 387-389
Political science (Democracy and socialism) P: 639
Ricardo, David R: 321
Russia (Nicholas II) R: 551-552
Socialism (Karl Marx) So: 560
Stalin, Joseph (Early life) So: 825
Union of Soviet Socialist Republics (Privileged classes) U: 32
- Marx, Leonard**
Marx brothers M: 238
- Marx, Milton**
Marx brothers M: 238
- Marx, Robert S.** [founder of]
Disabled American Veterans D: 223
- Marx, Zepo** [American comedian]
Marx brothers M: 238
- Marx brothers** [American comedians] M: 238 *with picture*
- Marxism** [philosophy]
See also Marx, Karl *in this index*
Allende Gossens, Salvador A: 372
Communism Ci: 889; (The ideas of Marx) Ci: 890
Economic determinism E: 57
Economics (Karl Marx and Communism) E: 65
Marx, Karl (Marx's ideas) M: 237
Plekhanov, Georgi Valentinovich P: 572
Political science (Democracy and socialism) P: 639
Russia (Nicholas II) R: 551-552
Social change So: 550
Sociology (History) So: 566
- Union of Soviet Socialist Republics (History) U: 35
- Marxism-Leninism** [philosophy]
Communism (Communism in theory) Ci: 890; (Communist influence in other areas) Ci: 894
Marx, Karl (Marx's influence) M: 238
Political science (Democracy and socialism) P: 639
- Mary** [mother of Jesus] M: 238
Annunciation A: 518
Assumption A: 820
Fátima, Our Lady of F: 55
Immaculate Conception I: 79
Jesus Christ (The Nativity) J: 104 *with picture*
Joseph J: 167
Juan Diego, Saint J: 177
Madonna and Child M: 37 *with picture*
May Day M: 322
Murillo, Bartolomé Esteban *picture on M*: 931
Sculpture (Later medieval sculpture) S: 250-251 *with picture*
- Mary I** [queen of England] M: 238 *with portrait*
Elizabeth I (Early years) E: 238
Grey, Lady Jane G: 391
Henry VIII (king of England) H: 188
Ireland (The conquest of Ireland) I: 426
Tudor, House of T: 481
- Mary II** [queen of England] M: 239
Pennsylvania (Colonial days) P: 264
William III W: 309
- Mary, Queen of Scots** [queen of Scotland] M: 239 *with portrait*
Bothwell, Earl of B: 510
Elizabeth I (Mary, Queen of Scots) E: 239
Scotland (History) S: 218-219
- Mary, Queen of Scots** [book by Fraser]
Biography (Biography today) B: 314
- Mary, Queen of the World, Basilica of**
Montreal (Churches) M: 773
- Mary, Virgin** *See* Mary *in this index*
- Mary Barton** [book by Gaskell]
Gaskell, Elizabeth G: 61
- "Mary Had a Little Lamb"** [poem by Hale]
Hale, Sarah Josepha H: 19
- Mary Magdalene** [Biblical figure] M: 239
Jesus Christ (The Resurrection) J: 109
- Mary McLeod Bethune Council House National Historic Site** [Washington, D.C.]
National Park System (table: National historic sites) N: 52-53
- Mary of Burgundy** [wife of Maximilian I]
Maximilian I M: 319
- Mary of Guise** [mother of Mary, Queen of Scots]
Mary, Queen of Scots M: 239
Knox, John (Early years) K: 358
- Mary Poppins** [book by Travers]
Travers, P. L. T: 406
- Mary Poppins** [film]
Disney, Walt (Full-length movies) D: 236
- Mary's Heights** [hills, Virginia]
Civil War (Battle of Fredericksburg) Ci: 627-628
- Maryhill Museum**
Washington (Places to visit) W: 56
- Maryknoll** [religious group]
Missionary (Organization) M: 621
- Maryland** M: 240 *with pictures and maps*
Colonial life in America (Development of the Thirteen Colonies) Ci: 789 *with map*
United States, History of the (Virginia and Maryland) U: 152-153; *picture on U*: 154
See also the list of Related Articles in the Maryland article
- Maryland Gazette** [newspaper]
Maryland (Communication) M: 255
- Maryland Historical Society**
Maryland (Museums) M: 244
- Maryland Institute for Emergency Medical Services** [Baltimore]
Trauma center T: 405
- Maryland Journal, The** [newspaper]
Goddard, Mary Katherine G: 244
Goddard, William G: 245
- Maryland System, University of** M: 261 *with picture*
Baltimore (Education) B: 68
- Marylebone Cricket Club**
Cricket (History) Ci: 1134-1135
- Marys Peak**
Oregon (Land regions) O: 838

Mary's Well

Nazareth N: 91

Marzipan [food]Candy (Other candies) C: 176 *with picture***Masaccio** [Italian painter] M: 261 *with picture*Painting (The 1400's) P: 52-53 *with picture*

Renaissance (The fine arts) R: 235-236

Masada [Jewish history] M: 262 *with picture*

Jews (Roman rule) J: 122

Masai [people] *See Masai in this index***Masai steppe**Tanzania (The plateaus) T: 33 *with map***Masanobu, Kano** [Japanese artist]

Painting (Japanese painting) P: 47

Masaryk, Jan Garrigue [Czech political leader]

M: 262

Masaryk, Tomáš Garrigue [Czech political

leader] M: 262

Czech Republic (The creation of

Czechoslovakia) Ci: 1213

Czechoslovakia (The formation of

Czechoslovakia) Ci: 1215

Masbata [island, Philippines]Philippines (The main islands) P: 376-378 *with**map***Mascagni, Pietro** [Italian composer] M: 262Opera (*Cavalleria Rusticana*) O: 803**Mascons** [astronomy]

Space exploration (Lunar probes) So: 709

Masculine gender

Gender G: 80

Noun (Gender) N: 553

Masculinity

Sexuality (Sex and gender) S: 338; (Gender

roles) S: 338a

Masefield, John [British author] M: 263**Masekela, Hugh** [South African trumpeter] M: 263**Maser** [electronics] M: 263

Laser (History) L: 86

Prokhorov, Alexander Mikhailovich P: 817

Maseru [city, Lesotho] M: 263Lesotho L: 206 *with picture***Mash**

Alcoholic beverage (Beer) A: 336

Brewing (Mashing) B: 595

Corn (The fermentation and distilling industry)

Ci: 1062

Distilling D: 239

Whiskey W: 282

Mashantucket Pequot Museum and Research

Center [Mashantucket]

Connecticut (Places to visit) Ci: 960 *with pic-**ture***Mashona** [people] *See Shona in this index***Masire, Quett Ketumile Joni** [Botswana political

leader]

Botswana (History) B: 512

Masjid-e-Imam [mosque, Isfahan]

Isfahan I: 462

Mask [disguise] M: 263 *with pictures*Africa (Sculpture) A: 116 *with picture*

Drama picture on D: 327

Egypt, Ancient picture on E: 141

Indian, American pictures on I: 138, I: 151,

I: 156, I: 162, I: 167, I: 172

Sculpture (Royal and public sculpture) S: 240

with picture; (The European impact)S: 244-245 *with picture*

Tutankhamen picture on T: 526

Mask [manufacturing]

Photoengraving and photolithography

(Nonprinting applications) P: 407

Mask, Catcher'sBaseball (Equipment) B: 125 *with picture***Mask, The** [film]

Computer graphics picture on Ci: 924g

Masked palm civet [animal]

Civet Ci: 604

Masked shrew

Shrew S: 440

Masks, Props, and Mobiles [dance]

Nikolais, Alwin N: 422

Masks of God, The [book by Campbell]

Campbell, Joseph C: 90a

Maslow, Abraham Harold [American psycholo-

gist] M: 265

Psychology (Modern psychology) P: 850

Mason [construction] *See Bricklayer in this**index***Mason** [organization] *See Masonry [organization]**in this index***Mason, C. H.** [American religious leader]

Church of God in Christ, The C: 543

Mason, Charles [British astronomer]

Mason and Dixon's Line M: 266

Mason, George [American patriot] M: 265 *with**portrait*

Constitution of the United States (The

Constitutional Convention) Ci: 999-1000;

(The Bill of Rights) Ci: 1001

Virginia (Independence and statehood) V: 420

Washington, George (The coming revolution)

W: 96

Mason, James [American chess player]

Chess (United States chess champions)

C: 414

Mason, James Murray [Confederate political

leader] M: 266

Lincoln, Abraham (Foreign relations) L: 322

Slidell, James S: 508

Trent Affair T: 435

Wilkes, Charles W: 306

Mason, John [American settler]

Maine (Ownership disputes) M: 89

Mason, John [English colonist]

Connecticut (The Pequot War) Ci: 968

New Hampshire (Settlement) N: 224

Mason, John Young [American government

official]

Justice, Department of (table) J: 203

Ostend Manifesto O: 866

Polk, James Knox (table) P: 643

Tyler, John (table) T: 534

Mason, Lowell [American composer] M: 266**Mason, Perry** [literary figure]

Gardner, Erle Stanley G: 39

Mason, Stevens T. [American political leader]

Madison (Government and history) M: 31

Michigan (table) M: 507; (Territorial period)

M: 509

Mason & Dixon [book by Pynchon]

Pynchon, Thomas P: 915

Mason and Dixon's Line [U.S. history] M: 266*with map*

Maryland (Colonial days) M: 256-258

Mason beeBee (Solitary bees) B: 205-206 *with picture***Mason Island**

Connecticut (Coastline) Ci: 962

Mason jar

Glass (Early American glass) G: 219-222

Masonic Temple [Chicago]

Root, John Wellborn R: 475

Masonry [construction]

Cement and concrete (Concrete masonry)

C: 343

Masonry [organization] M: 266 *with pictures*

Eastern Star E: 47

Hall, Prince H: 22

Magic (During the Middle Ages) M: 50

Mozart, Wolfgang Amadeus (His style) M: 907

Rainbow for Girls R: 129

Shrine, The S: 442

Masonry damDam (Masonry dams) D: 17 *with picture***Mason's level** [tool]

Level L: 217

Masorettes [religious group]

Bible picture on B: 284

Masoretic text [religious book]

Bible picture on B: 284

Maspeth [district]

New York City (Queens) N: 329

Masqat [Oman] *See Muscat in this index***Masque** [drama] M: 268

Ballet (The birth of ballet) B: 50-51

Drama (Elizabethan playwrights) D: 331-332

with picture

Mask (Theatrical masks) M: 265

Masque of Judgment, The [play by Moody]

Moody, William Vaughn M: 781

Masr [city] *See Cairo in this index***Mass** [art]

Painting (The elements of painting) P: 34-35

Sculpture (Form and treatment) S: 230

Mass [music]

Classical music (The Middle Ages) Ci: 645-646

Machaut, Guillaume de M: 12b

Mass [music by Bernstein]

Bernstein, Leonard B: 271

Mass [physics] M: 268

Atom (The parts of an atom) A: 870-871

Density D: 142

E=mc² E: 2

Einstein, Albert (Famous theories) E: 146-

146b

Energy (Weight and mass) E: 275

Falling bodies, Law of F: 16

Force (Acceleration) F: 369-370

Gravitation G: 331; (Newton's theory of gravi-

tation) G: 331

Higgs, Peter Ware H: 227

Higgs boson H: 227

Inertia I: 262

Kilogram K: 316

Matter M: 310

Metric system (Structure of the metric sys-

tem) M: 437; (Mechanics) M: 437; (The

metric system at a glance) M: 438-439

with picture

Planet (How planets move) P: 508-509

Relativity (Mass-energy relationship) R: 211;

(General relativity) R: 211-212

Star (Mass) So: 845; (Converting mass to

energy) So: 846; (Evolution of stars)

So: 848

Sun (Sun terms) So: 976

Weight W: 181

Mass [religion] M: 268

Holy Grail (The search for the Grail) H: 298

Liturgy L: 392

Religion picture on R: 214

Roman Catholic Church (The Eucharist or

Mass) R: 404 *with picture*

Transubstantiation T: 401

Mass, Center of [physics]

Gravity, Center of G: 333

Mass communication

Advertising (Ways of advertising) A: 72

United States, History of the (Cultural change)

U: 169

Mass extinction [zoology]

Biodiversity (Protecting biodiversity) B: 311

Extinct animal (Types of extinction) E: 457

Prehistoric animal (Evolution and extinction)

P: 742

Mass in B Minor [music by Bach]

Bach, Johann Sebastian (His works) B: 16

Mass media *See Media in this index***Mass noun**

Noun (Mass nouns and count nouns) N: 552

Mass number [physics]

Atom (The mass number) A: 871

Element, Chemical (The periodic table of the

elements) E: 219

Isotope I: 476

Nuclear energy (Isotopes) N: 581

Mass of Life, A [music by Delius]

Delius, Frederick D: 117

Mass production [manufacturing] M: 269

Automobile (The birth of the automobile indus-

try) A: 963-964; (Henry Ford) A: 965

City (Economy) Ci: 588

Edison, Thomas Alva (Philosophy) E: 81

Technology (The Industrial Revolution) T: 75

Trade (Trade and specialization) T: 361-362

United States, History of the (Development of

new products) U: 177

Whitney, Eli (Arms manufacturer) W: 295

Mass spectrograph [instrument]

Dempster, Arthur Jeffrey D: 130

Mass spectrometer [instrument]Mass spectroscopy M: 269 *with diagram*

Molecule (Individual molecules) M: 692

Mass spectroscopy [physics] M: 269 *with dia-**gram*

Isotope (Separating isotopes) I: 476-477

Mass spectrum [physics]

Mass spectroscopy M: 269

Mass transfer [physics]Star (Binary stars) So: 852 *with picture***Mass transportation** *See Public transportation**in this index***Massachusetts** M: 270 *with pictures and maps*

Colonial life in America (Development of the

Thirteen Colonies) Ci: 789 *with map*;

(Education) Ci: 803; (Money) Ci: 811

Education (Development of U.S. education)

E: 102

Juvenile court (In the United States) J: 205

*See also the list of Related Articles in the**Massachusetts article***Massachusetts, University of** M: 294

- Massachusetts Agricultural College**
Massachusetts, University of M: 295
- Massachusetts Bay Colony** [U.S. history]
M: 295
Colonial life in America (English expansion)
Ci: 789
Endecott, John E: 272
Massachusetts (Massachusetts Bay Colony)
M: 289; (Colonial days) M: 291
Money (History of United States currency)
M: 707 *with picture*
Pine-tree shilling P: 471 *with pictures*
Post office (Postal service in the United States) P: 706
Salem witchcraft trials S: 61
School (Colonial schools) S: 183
United States, History of the (New England)
U: 153
Winthrop, John W: 343
- Massachusetts Bay Transportation Authority**
Boston (Transportation) B: 502
- Massachusetts Constitution** [1780]
Adams, John (Diplomat) A: 36
- Massachusetts game**
Baseball (From rounders to baseball) B: 132
- Massachusetts Government Act** [law]
Intolerable Acts I: 353
- Massachusetts Institute of Technology**
M: 295
- Massachusetts Provincial Congress** [U.S. history]
Hancock, John H: 39
- Massachusetts Spy** [newspaper]
Thomas, Isaiah T: 261
Worcester W: 403
- "Massachusetts to Virginia"** [poem by Whittier]
Whittier, John Greenleaf W: 295
- Massacre at Haun's Mill** [1838]
Mormons (Mormons in the Middle West)
M: 808
- Massacre in Korea** [painting by Picasso]
Picasso, Pablo (Later career) P: 449
- Massacre of Saint Bartholomew's Day** *See*
Saint Bartholomew's Day, Massacre of *in this index*
- Massacre of the Innocents, The** [sculpture by Pisano]
Sculpture (Italian Renaissance sculpture)
S: 251 *with picture*
- Massage** M: 295
- Massalia** [ancient colony]
Marseille (History) M: 227
- Massanutten**
Shenandoah Valley S: 395
Virginia (Land regions) V: 410
- Massasauga** [snake]
Snake *picture on* S: 533
- Massasoit** [American Indian chief] M: 295 *with picture*
Massachusetts (King Philip's War) M: 291
Plymouth Colony (The first year) P: 583
Samoset S: 81
Squanto So: 811
- Massecuite** [by-product]
Molasses M: 689
- Massell, Sam, Jr.** [American political leader]
Atlanta (The mid-1900's) A: 861
- Massenet, Jules** [French composer] M: 296
- Massey, Vincent** [Canadian statesman] M: 296
Canada, Government of (The governor general) C: 131
Saint Laurent, Louis Stephen (Prime minister [1948-1957]) S: 40
- Massey Foundation**
Pearson, Lester Bowles (Education and war service) P: 220-221
- Massey-Harris Company**
Massey, Vincent M: 296
- Massina, Léonide** [Russian choreographer]
M: 296
- Massinger, Philip** [English dramatist] M: 296
- Massinissa** [king of Numidia]
Numidia N: 608
- Massinissa** [Berber chieftain]
Algeria (History) A: 364
- Massive astrophysical compact halo object** [physics]
Dark matter D: 37
- Massive retaliation** [warfare]
Cold War (The death of Stalin) Ci: 764
- Nuclear weapon (Nuclear weapons in military planning) N: 599-600
- Masson, André** [French artist] M: 296
Painting (Surrealism) P: 81; (Europeans in America) P: 84
Surrealism So: 1010
- Mast** [device]
Crane Ci: 1120 *with picture*
Sailing (Spars) S: 23 *with diagram*
- Mast cell** [biology]
Immune system (Allergies) I: 88c
- Mastaba** [pyramid]
Pyramids (Egyptian pyramids) P: 916
- Mastai-Ferretti, Count Giovanni Maria**
Pius IX P: 503
- Mastectomy** [surgery] M: 296
Breast cancer B: 591
Surgery (Some common surgical operations)
So: 1006
- Master** [labor]
Apprentice A: 575
Guild (Craft guilds) G: 428
Labor movement (Craft guilds) L: 9
- Master** [rank]
Ship (Officers and crew) S: 423
- Master Builder, The** [play by Ibsen]
Drama (Ibsen) D: 338
Ibsen, Henrik (His plays) I: 4
- Master Class** [play by McNally]
McNally, Terrence M: 344
- Master contract**
Teaching (Employment practices) T: 68
- Master control**
Television (Putting a show on the air) T: 111-113
- Master cylinder**
Brake (Hydraulic brakes) B: 560
- "Master Harold"...and the Boys** [book by Fugard]
Fugard, Athol F: 553
- Master Mason**
Masonry (The lodges and degrees of Masonry) M: 267
- Master of Ballantrae, The** [book by Stevenson]
Stevenson, Robert Louis (Novels) So: 898
- Master of Flémalle**
Campin, Robert C: 91
- Master of foxhounds**
Fox hunting F: 442
- Master of the horse** [title]
Royal Household of the United Kingdom
R: 498
- Master plan** [city planning]
City planning Ci: 598; (The master plan)
Ci: 599
- Master-planned community** [city planning]
Houston (The city) H: 394-395
- Master sergeant**
Rank, Military (table) R: 140
- Master station** [navigation]
Loran L: 453
- Master tape** [recording]
Phonograph (How phonograph records are made) P: 401
- Master-teacher program**
Education (Who should teach?) E: 107
- Mastering**
Recording industry (Mastering) R: 182
- Masterpiece**
Guild (Craft guilds) G: 428
- Masters, Edgar Lee** [American author] M: 297
American literature (Realist poetry) A: 421
- Masters, William Howell** [American doctor]
Masters and Johnson M: 297
- Masters and Johnson** M: 297
- Masters degree**
Caps and gowns (Master's degree) C: 199 *with picture*
Degree, College (The master's degree) D: 91
Universities and colleges (Degrees) U: 209
- Masters of the fishing spear**
Dinka D: 205
- Masters Tournament** [contest]
Georgia (Visitor's guide) G: 122 *with picture*
Golf (Tournaments) G: 264-265
- Mastersinger** [German history] *See*
Meistersinger *in this index*
- Masterson, Bartholomew** [American frontiersman] *See* Masterson, Bat *in this index*
- Masterson, Bat** [American frontiersman] M: 297
- Masterson, William Barclay** [American frontiersman] *See* Masterson, Bat *in this index*
- Masthead** [journalism]
Newspaper (table) N: 383
- Mastic** M: 297
- Mastication** [digestion] M: 298
Ruminant R: 519
Saliva S: 68 *with diagram*
- Mastiche**
Chewing gum (History) C: 416
- Mastiff** [dog] M: 298
Dog *picture on* D: 267
- Mastitis**
Cattle (Diseases) C: 312-313
- Mastodon** [extinct animal] M: 298 *with picture*
- Mastoid** [anatomy] M: 298
- Mastoid process** [anatomy]
Mastoid M: 298
- Mastoid tumor** [disorder]
Tumor T: 484
- Mastoiditis** [disorder]
Mastoid M: 298
- Mastro Don Gesualdo** [book by Verga]
Verga, Giovanni V: 317
- Masturbation**
Adolescent (Dating and sex) A: 62
Homosexuality H: 307
- Masu salmon** *See* Cherry salmon *in this index*
- Masur, Kurt** [German conductor] M: 298
- Masurian lakes, Battle of** [1914]
World War I (The Eastern Front) W: 456
- Masurium** [former name]
Technetium T: 73
- Masvingo** [city, Zimbabwe]
Zimbabwe (History) Z: 597
- Mat**
Linotype (How the linotype works) L: 338
Stereotyping So: 893
- Mat foundation** [engineering]
Building construction (Foundations) B: 682
- Mat lodge** [dwelling]
British Columbia (Early days) B: 628
- Mata Hari** [German spy] M: 298 *with picture*
- Matabele** [people] *See* Ndebele *in this index*
- Matador**
Bullfighting (Types of bullfights) B: 695 *with pictures*
- Matagorda Bay** [Texas]
La Salle, Sieur de (Expeditions to the Gulf of Mexico) L: 80 *with map*
- Matai** [family]
Samoa (Government) S: 80; (People) S: 80a
- Matanuska Valley** [region, Alaska] M: 299
Alaska *picture on* A: 292
- Mataram** [former kingdom]
Indonesia (Hindu and Buddhist kingdoms)
I: 236; (The spread of Islam) I: 237
- Match** [fire] M: 299 *with pictures*
Fire (Methods of starting fires) F: 121
Ohio (Interesting facts) O: 681
- Match** [sports]
Tennis (Scoring) T: 162-163
- Match penalty** [hockey]
Hockey (Violations and penalties) H: 278
- Match-plate pattern** [manufacturing]
Cast and casting (Patterns for casting) C: 278
- Match play**
Golf (Match play) G: 262
- Match sprint**
Bicycle racing (Track races) B: 293
- Matchbook cover**
Match (Collecting matchbook covers) M: 299-300 *with pictures*
- Matchlock** [gun]
Handgun (Early handguns) H: 45
Harquebus H: 67
Musket M: 962
- Matchlock Gun, The** [book by Edmonds]
Edmonds, Walter Dumaux E: 83
- Matchmaker, The** [play by Wilder]
Wilder, Thornton Niven W: 303
- Maté** [drink] M: 300a *with picture*
Argentina (Food and drink) A: 651
Uruguay (Food and drink) U: 225
- Mate** [rank] M: 300a
Ship (Officers and crew) S: 423
- Matejko, Jan** [Polish painter]
Poland (The arts) P: 607
- "Mateo Falcone"** [story by Mérimée]
Mérimée, Prosper M: 418
- Mater et Magistra** [encyclical, 1963]
John XXIII [pope] J: 132
- Material cause** [philosophy]

522 Material culture

Aristotle (Philosophy of nature) A: 664

Material culture

Culture (Forming patterns) Ci: 1187

Materialism [art]

Abstract art A: 18

Materialism [philosophy] M: 300a

Hobbes, Thomas H: 272

Idealism I: 46

Marx, Karl (Marx's ideas) M: 237

Philosophy (Metaphysics) P: 383; (Terms used in philosophy) P: 384

Materialistic physiology

Biology (Materialistic physiology and the cell theory) B: 319

Materializing medium

Spiritualism (The medium) So: 796

Materials [physics] M: 300b with pictures

See also *Strength of materials in this index*

Composite materials Ci: 904

Magnetism (Kinds of magnets) M: 59;
(Magnetism of materials) M: 60b with diagrams

Metallurgy (Careers in metallurgy) M: 427

See also the list of *Related articles in the Materials article*

Materials engineering

Materials M: 300b

Engineering (Materials engineering) E: 287

Materials purchasing

Automobile (Materials purchasing) A: 957

Maternity [play by Brieux]

Brieux, Eugène B: 608

Maternity unit

Hospital (Hospital units) H: 372

Matewan Massacre [1921]

West Virginia (Labor developments) W: 229

Math co-processor [electronics]

Computer (Personal computers) Ci: 909

Mathematical Composition [book by Ptolemy]

Ptolemy P: 854

Mathematical Foundations of Quantum

Mechanics, The [book by Von Neumann]

Von Neumann, John V: 448

Mathematical model

See also *Computer modeling in this index*

Greenhouse effect (Studying the greenhouse effect) G: 383

Science (Modeling with computers) S: 195

Systems analysis So: 1077

Tornado (Studying tornadoes) T: 335

Weather (Mathematical models) W: 166

Mathematical symbol

Algebra (Symbols in algebra) A: 354

Set theory (History) S: 322

Mathematics M: 302 with pictures

Algebra A: 350

Algorithm A: 366

Careers (Technical and mathematical occupations) C: 232

Egypt, Ancient (Sciences) E: 139

Geometry G: 101

Infinity I: 266

New mathematics N: 255

Philosophy (Modern philosophy) P: 387-388

Science (Mathematics and logic) S: 192;

(Expressing findings mathematically)

S: 195; (Ancient Greece) S: 196

See also the list of *Related Articles in the Mathematics article*

Mathematike Syntaxis [book by Ptolemy]

Ptolemy P: 854

Mather, Cotton [American religious leader]

M: 309

American literature (New England) A: 414

Indian wars (The Pequot War) I: 191

Mather, Increase [American religious leader]

M: 309

Mather, Richard [American religious leader]

M: 309

Mather, Stephen T. [American government official]

National Park System (History) N: 58

Matheson, Alexander W. [Canadian political leader]

Prince Edward Island (table) P: 791

Matheson, Scott M. [American political leader]

Utah (table) U: 245

Mathews, Eddie [American baseball player]

Baseball (table: Hall of Fame) B: 135

Mathews, F. David [American government official]

Ford, Gerald Rudolph (table) F: 378

Mathews, Forrest David [American government official]

Health and Human Services, Department of

(table) H: 128

Mathews, George [American political leader]

Georgia (table) G: 130

Mathews, Henry M. [American political leader]

West Virginia (table) W: 225

Mathews, John [American political leader]

South Carolina (table) So: 658

Mathews, William T. [American painter]

Garfield, James Abram *picture on* G: 40

McKinley, William *picture on* M: 338

Mathewson, Christy [American baseball player]

M: 309

Baseball (The early 1900's) B: 135-136 with

picture; (table: Hall of Fame) B: 135; *pic-*

ture on B: 136

Mathieson, John A. [Canadian political leader]

Prince Edward Island (table) P: 791

Mathieu, Albert [French engineer]

English Channel E: 311

Mathews, Franklin K. [American author]

Book Week B: 470

Mathilde [asteroid]

Asteroid (Measuring asteroids) A: 824

Space exploration (Probes to asteroids)

So: 711

Mathis, Sharon Bell [American author]

Literature for children *picture on* L: 375

Mathis der Maler [opera by Hindemith]

Hindemith, Paul H: 235

Matilda [wife of Henry I]

Henry I [king of England] H: 185

Matilda [daughter of Henry I]

David I D: 45

Plantagenet P: 550

Stephen So: 890

Matill Makejoye [English minstrel]

Storytelling (The Middle Ages) So: 914

Mating

Animal (Sexual reproduction) A: 496

Frog (Mating) F: 538

Mammal (Mating) M: 122

Mating flight

Ant (Reproduction) A: 524

Bee (Mating flight) B: 203

Matins [religion]

Hour H: 379

Matisse, Henri [French artist] M: 309 with picture

Fauves F: 56

Painting (The Fauves) P: 77 with *picture*;

(Expressionism) P: 78

Stein, Gertrude So: 884

Matlin, Marlee [American actress]

Motion picture (Best performance by an

actress: 1986) M: 862

Matos, Gregório de [Brazilian author]

Latin-American literature (Colonial literature)

L: 111-112

Matreshka [dolls]

Doll (Traditional dolls) D: 287 with *picture*

Matriarch [title]

Jews (Beginnings) J: 120

Matriarch [zoology]

Elephant (Intelligence) E: 229; *picture on*

E: 226

Matrilineage

Africa (Marriage and the family) A: 113-114

Family (Non-Western families) F: 24

Matrimonial offense [law]

Divorce (Grounds for divorce) D: 253

Matrix [anatomy]

Nail N: 4

Matrix [chemistry]

Composite materials Ci: 904

Materials M: 300b; (Composite materials)

M: 300d

Matrix [electronics] See Decoder in this index

Matrix [printing]

Linotype (How the linotype works) L: 338

Monotype (How the Monotype works) M: 733

Stereotyping So: 893

Matrix mechanics [physics]

Heisenberg, Werner H: 167

Matron [Roman history]

Women's movements (In ancient societies)

W: 384

Matsu [islands, Formosa Strait]

Cold War (The death of Stalin) Ci: 764-765;

(The Far East) Ci: 766

Taiwan (History) T: 18

Matsuo Basho [Japanese poet]

Japanese literature (The Tokugawa period)

J: 62

Matsuri [religion]

Shinto S: 401

Matsushita Electric Industrial

Manufacturing (table) M: 170

Mattamuskeet, Lake

North Carolina (Rivers, waterfalls, and lakes)

N: 484

Mattapan [district, Boston]

Boston (The south side) B: 500

Mattathias [Biblical figure]

Judah Maccabee J: 178

Matte [by-product]

Smelting S: 515

Matte screen

Projection screen P: 816

Matter [physics] M: 310

Anaxagoras A: 448b

Atom A: 870

Berkeley, George B: 259

Dark matter D: 37

Interstellar medium I: 352

Mass M: 268

Materialism M: 300a

Mechanist philosophy M: 355

Mind M: 562

Molecule M: 692

Nuclear energy (The composition of matter)

N: 581

Quantum mechanics Q: 6

Relativity (General relativity) R: 211-212

Subatomic particle So: 936

Universe (Changing views of the universe)

U: 205-206

See also the list of *Related Articles in the*

Matter article

Matter of fact [philosophy]

Hume, David (Hume's thought) H: 432

Matter wave [physics]

Born, Max B: 489

Radiation (Particle radiation) R: 76; (The quan-

tum theory) R: 81

Matterhorn [mountain, Italy-Switzerland] M: 312

Mountain (table) M: 894 with *diagram*

Seven Natural Wonders of the World (The

Matterhorn) S: 324b with *picture*

Matteson, Joel Aldrich [American political leader]

Illinois (table) I: 71

Matthau, Walter [American actor]

Motion picture (Best performance by an actor

in a supporting role: 1966) M: 863

Matthew [ship]

Cabot, John C: 7

Matthew, Gospel of [New Testament]

Bible (Books of the New Testament) B: 282-

283

Gospels G: 277

New Testament (Books) N: 287

Talent T: 20

Matthew, Saint [apostle] M: 312

Gospels G: 277

Jesus Christ (Ministry) J: 106

Painting (Early medieval painting in the West)

P: 49-50 with *picture*

Matthew Maule [literary figure]

Hawthorne, Nathaniel (His novels) H: 115

Matthews, Brander [American critic]

Short story S: 434

Matthews, Claude [American political leader]

Indiana (table) I: 214

Matthews, Joseph W. [American political leader]

Mississippi (table) M: 640

Matthews, Stanley [American jurist]

Supreme Court of the United States (table)

So: 1000

Matthias, Saint [apostle] M: 312

Matthias Corvinus (king of Hungary)

Hungary (The Kingdom of Hungary) H: 445

Matthieu, Pierre [French biographer]

Biography (The Renaissance) B: 313

Matting

Television (Putting a show on the air) T: 111-

113

Metto de Turner, Clorinda [Peruvian author]

- Latin-American literature (Realism) L: 112
- Mattock**
Colonial life in America (Farming) Ci: 809
- Mattocks, John** [American political leader]
Vermont (table) V: 333
- Mattress**
Bed B: 197
- Maturation** [biology]
Adolescent (The timing of puberty) A: 61
Sexuality (Biological factors) S: 337
- Maturational theory**
Developmental psychology (Maturational theory) D: 174
- Maturin, Charles** [Irish author]
Gothic novel G: 279
- Maturity** [economics]
Bond B: 454
Credit (Lending institutions) Ci: 1124
- Matzeliger, Jan Ernst** [American inventor] M: 312
Shoe (History) S: 431-432
- Matzo** [food]
Bread *picture on* B: 588
Passover P: 192
- Mau** [Samoan history]
Samoa (History) S: 80a-80b
- Mau Mau** [Kenyan history] M: 312
Kenya (Opposition to the British) K: 303
- Maua, Our Boatman** [painting by La Farge]
La Farge, John *picture on* L: 26
- Mauborgne, Joseph O.** [American inventor]
Codes and ciphers (History) Ci: 751
- Mauchly, John William** [American engineer] M: 312
Computer (The first electronic computers) Ci: 924b *with picture*
Eckert, J. Presper, Jr. E: 50
Electronics (The vacuum tube era) E: 215
- Maud** [poem by Tennyson]
Tennyson, Lord (His poems) T: 169
- Maududi, Abu al-Ala** [Islamic leader]
Muslims (Reform and renewal) M: 965
- Maugham, W. Somerset** [British author] M: 312
- Maui** [island, Hawaii]
Haleakala National Park H: 19 *with picture*
Hawaii (Maui) H: 100
- Maui** [legendary figure]
Mythology (Pacific Islands divinities) M: 982
- Mauke** [island, Pacific]
Cook Islands Ci: 1026
- Maul** [sports]
Rugby football (Rugby Union) R: 510-511
- Mauldin, Bill** [American cartoonist] M: 313 *with picture*
Kennedy, John Fitzgerald *picture on* K: 268
- Maule, Matthew** [literary figure]
Hawthorne, Nathaniel (His novels) H: 115
- Maul, Joseph** [American political leader]
Delaware (table) D: 109
- Mauna Kea** [volcano, Hawaii] M: 313
Hawaii (Places to visit) H: 98; (Hawaii) H: 100
Mountain M: 891; (table) M: 894 *with diagram*
Observatory (Ground-based observatories) O: 644-645 *with picture*
- Mauna Loa** [volcano, Hawaii] M: 313
Hawaii (Hawaii) H: 100
Hawaii Volcanoes National Park H: 110
Kilauea K: 315
Mountain (table) M: 894 *with diagram*
Volcano (Shield volcanoes) V: 440 *with picture*; (table) V: 441 *with map*
- Maunder, E. Walter** [British astronomer]
Sunspot (Other findings) So: 992
- Maunder minimum**
Sunspot (Other findings) So: 992
- Maunder Thursday** [religion] M: 313
Easter (Holy Week) E: 42
Holy Week H: 299
- Maupassant, Guy de** [French author] See De Maupassant, Guy in *this index*
- Mauretania** [ancient region]
Moors M: 797
- Mauretania** [ship]
Ship (Increasing power and speed) S: 413 *with picture*
- Mauri** [people]
Moors M: 797
- Mauriac, Claude** [French author]
Mauriac, François M: 314
- Mauriac, François** [French author] M: 313
- Maurin, Peter** [French-born philosopher]
Day, Dorothy D: 52
- Mauritania** [country] M: 314 *with picture and map*
Flag *picture on* F: 199
French West Africa F: 528 *with map*
Morocco (Dispute over Western Sahara) M: 815
Western Sahara W: 241
- Mauritius** [country] M: 316 *with picture and map*
Dodo D: 261
Flag *picture on* F: 199
- Mauritshuis** [museum]
Hague, The H: 6
- Maurois, André** [French author] M: 317
Biography (Modern biography) B: 314
- Maury, James** [American educator]
Jefferson, Thomas (Education) J: 77
- Maury, Matthew Fontaine** [American meteorologist] M: 318
- Mauryan Empire** [history of India] M: 318
Ashoka A: 769
Chandragupta Maurya C: 374
India (The Mauryan Empire) I: 128 *with map*
Pakistan (Invasions and conquests) P: 98
World, History of the (The Mauryan Empire in India) W: 430
- Maus** [books by Spiegelman]
Comics (The new comics) Ci: 870
- Mausier** [gun]
Rifle *picture on* R: 339
- Mäuseturm, Der** See Mouse Tower in *this index*
- Mausoleum** [architecture]
Tomb T: 326
- Mausoleum at Halicarnassus** [Turkey]
Seven Wonders of the Ancient World (The Mausoleum at Halicarnassus) S: 325; *picture on* S: 327
- Mausoleum of Augustus** [Italy]
Rome (Other remains) R: 433
- Mausoleum of Galla Placidia** [Italy]
Ravenna R: 151
- Mausolus** [Persian government official]
Seven Wonders of the Ancient World (The Mausoleum at Halicarnassus) S: 325
- Mauve** [dye] M: 318
- Mauvoisin Dam** [Switzerland]
Dam (table) D: 18
- Mave, Queen** [legendary figure] See Maave, Queen in *this index*
- Maverick** [cattle]
Maverick, Samuel Augustus M: 318
- Maverick, Samuel Augustus** [American pioneer] M: 318
- Mavericks, Dallas** [basketball team] See Dallas Mavericks in *this index*
- Mavis** [bird]
Thrush T: 271
- Maw, Herbert B.** [American political leader]
Utah (table) U: 245
- Mawensi** [mountain summit]
Kilimanjaro K: 315
- Max Planck Society for the Advancement of Science** M: 318
- Maxentius** [West Roman emperor]
Constantine the Great Ci: 993
- Maxillae** [anatomy]
Ant (The head) A: 521
Face F: 3
Insect (Mouthparts) I: 286 *with diagrams*
- Maxillary bone** [anatomy]
Head *diagram on* H: 123
Human body *diagram on* H: 422
- Maxillary sinus** [anatomy]
Sinus S: 474 *with diagram*
- Maxim, Sir Hiram Stevens** [American-British inventor] M: 318
Airplane (Powered flight) A: 230-231
Machine gun (History) M: 17
- Maxim, Hudson** [American inventor] M: 318
- Maxim gun**
Machine gun (History) M: 16 *with picture*
Maxim, Sir Hiram Stevens M: 318
- Maxim Gun Company**
Maxim, Sir Hiram Stevens M: 318
- Maximian** [Roman emperor]
Diocletian D: 214
Rome, Ancient (Temporary recovery) R: 448
- Maximilian** [emperor of Mexico] M: 319
Mexico (The French invasion) M: 472
Mexico City (Independence) M: 478
- Maximilian I** [Holy Roman emperor] M: 319
Austria (The Habsburgs) A: 937-938
Habsburg, House of H: 3
- Maximilian armor**
Armor (During the Middle Ages) A: 720
- Maximilian Joseph** [elector of Bavaria]
Succession wars (The War of the Bavarian Succession) So: 950
- Maximinus** [Roman emperor]
Rome, Ancient (table) R: 447
- Maximinus Thrax** [Roman emperor]
Rome, Ancient (table) R: 447
- Maximite** [explosive]
Maxim, Hudson M: 318
- Maxims** [book by La Rochefoucauld]
La Rochefoucauld, Duc de L: 77
- Maxims of the Saints** [book by Fénelon]
Fénelon, François de Salignac de la Mothe-F: 71
- Maximum family benefit** [insurance]
Social security (Old-age, survivors, and disability insurance) So: 553-555
- Maximum security prison**
Prison (Types of correctional institutions) P: 805 *with picture*
San Quentin S: 105
- Maximum speed** [aviation]
Airplane (Measuring flying speed) A: 225-226
- Maximus Poems, The** [work by Olson]
American literature (Poetry) A: 423
Olson, Charles O: 745
- Maxiskirt**
Clothing (The 1900's) Ci: 703
- Maxwell** [Venus mountain range]
Venus (Surface and atmosphere) V: 311-312
- Maxwell, James Clerk** [British physicist] M: 319
Communication (The development of electronics) Ci: 883
Electricity (Electricity and magnetism) E: 197
Electromagnetic waves (History) E: 203
Electromagnetism E: 203
Light (The electromagnetic theory) L: 292
Magnetism (Electricity and magnetism) M: 61
Physics (Developments in the 1800's) P: 440
Quantum mechanics Q: 6
Radar (The development of radar) R: 71
Radiation (Early theories and discoveries) R: 80
Radio (Early development) R: 91
Relativity (The Michelson-Morley experiment) R: 210
Science (Scientific advances of the 1800's) S: 200
- Maxwell Motor Corporation**
Chrysler, Walter Percy C: 540
- Maxwell Museum of Anthropology** [Albuquerque]
New Mexico, University of N: 277
- May** [month] M: 320 *with pictures*
Cinco de Mayo Ci: 557
- May, Elaine** [American actress]
Nichols, Mike N: 404
- May beetle** See Junebug in *this index*
- May ball** [plant]
Lily of the valley L: 304 *with picture*
- May Day** [custom] M: 322
May M: 320
Union of Soviet Socialist Republics *picture on* U: 31
- May-Day** [poems by Emerson]
Emerson, Ralph Waldo (His poetry) E: 259
- May fly** See Mayfly in *this index*
- May Fourth Movement** [Chinese history]
Beijing (History) B: 223-224
China (The war lord period) C: 504
- May-pole of Merry Mount, The** [story by Hawthorne]
Hawthorne, Nathaniel (His stories and sketches) H: 114
- Maya** [American Indians] M: 322 *with pictures and maps*
Architecture (Pre-Columbian architecture) A: 614 *with picture*
Belize (History) B: 238
Central America (Early history) C: 355
Chichén Itzá C: 439
Copán Ci: 1038
Decimal system (Invention of the decimal system) D: 73
Exploration (Spain's conquests in the New World) E: 445

524 Maya Mountains

- Guatemala (Indian period) **G**: 416
 Hieroglyphics (Other hieroglyphic writing)
H: 226 *with picture*
 Honduras *picture on* **H**: 313
 Indian, American **I**: 136; (Empires and states)
I: 144; (Ceremonies) **I**: 148; (Writing) **I**: 150
with picture; (Indians of Middle America)
I: 169 *with pictures*; *picture on* **I**: 146
 Latin America (The first inhabitants) **L**: 104
with picture
 Mexico *picture on* **M**: 449; (The Classic
 Period) **M**: 468
 Numeration systems (The Maya numeral sys-
 tem) **N**: 607
 Rain forest (The Americas) **R**: 126b
 Sculpture (Later Indian sculpture) **S**: 243 *with
 picture*
 Stephens, John Lloyd **So**: 890
 Tikal **T**: 286
 Zapatista Army of National Liberation **Z**: 590
- Maya Mountains** [mountains, Belize]
 Belize (Land and climate) **B**: 237 *with map*
Maya numeral system [mathematics]
 Numeration systems (The Maya numeral sys-
 tem) **N**: 607
- Mayagüez** [Puerto Rico]
 Puerto Rico (Trade) **P**: 882-883
- Mayagüez** [ship]
 Ford, Gerald Rudolph (Foreign affairs) **F**: 378
- Mayakovsky, Vladimir** [Russian poet]
 Russian literature (Post-symbolism) **R**: 563
- Mayakovsky Theater** [Russia]
 Theater (Russia) **T**: 248-249
- Mayapán** [ancient city]
 Maya (The Postclassic Period) **M**: 326
- Mayapple** [plant] **M**: 326
 Flower *picture on* **F**: 285
- Maybach, Wilhelm** [German engineer] **M**: 326
 Daimler, Gottlieb **D**: 5
- Maybank, Burnet R.** [American political leader]
 South Carolina (table) **So**: 658
 "Maybellene" [song by Barry]
 Rock music (The emergence of rock 'n' roll)
R: 377
- Mayday** [signal]
 Signaling (Distress signals) **S**: 455
- Mayer, Julius Robert von** [German physicist]
M: 327
 Heat (Heat and energy) **H**: 155
- Mayer, Maria Goeppert** [American physicist]
M: 327
 Jensen, J. Hans **J**: 92
- Mayflower** [plant]
 Arbutus **A**: 592
- Mayflower** [ship] **M**: 327 *with picture*
See also Mayflower Compact in this index
 Massachusetts (The Pilgrims) **M**: 289
 Pilgrims *picture on* **P**: 463
 Plymouth Colony (The honored ones) **P**: 584
 Plymouth Rock **P**: 585
- Mayflower II** [ship]
 Mayflower **M**: 327 *with picture*
 Plymouth **P**: 582
- Mayflower Compact** [U.S. history] **M**: 327
See also Mayflower [ship] in this index
 Democracy (American democracy) **D**: 123
 Massachusetts (The Pilgrims) **M**: 289
 Plymouth Colony (The founding of Plymouth
 Colony) **P**: 582
 United States, History of the (New England)
U: 152-154
- Mayflower in Plymouth Harbor, The** [painting
 by Halsall]
 Pilgrims *picture on* **P**: 463
- Mayfly** [insect] **M**: 327 *with picture*
 Animal *picture on* **A**: 469
 Insect (The life cycle of insects) **I**: 292, *picture
 on* **I**: 279
- Mayhem** [law] **M**: 328
- Maykov, Vasilii Ivanovich** [Russian author]
 Russian literature (The classical movement)
R: 559-560
- Maynor, Dorothy** [American singer] **M**: 328
- Mayo, Charles Horace** [American surgeon]
M: 328
- Mayo, Plaza de**
 Buenos Aires (The city) **B**: 672
- Mayo, William James** [American physician]
M: 328
- Mayo, William Worrall** [American physician]
M: 328
- Mayo Clinic** [Minnesota] **M**: 328
 Mayo, William Worrall **M**: 328
 Minnesota (Industrial development) **M**: 604;
picture on **M**: 605
- Mayo Foundation**
 Mayo, William James **M**: 328
- Mayombé Escarpment** [region]
 Congo (Brazzaville) (Land) **Ci**: 939
- Mayon** [volcano, Philippines]
 Philippines *picture on* **P**: 378
 Volcano (Composite volcanoes) **V**: 440 *with
 picture*
- Mayor** [office] **M**: 329
 Address, Forms of (Officials of the United
 States) **A**: 53; (Officials of the
 Commonwealth of Nations) **A**: 53-54
 City government (The mayor-council form)
Ci: 595 *with diagrams*
- Mayor, Michel** [Swiss astronomer]
 Planet (The first discoveries) **P**: 512
- Mayor-council government**
 City government (The mayor-council form)
Ci: 595 *with diagrams*
- Mayor of Casterbridge, The** [book by Hardy]
 Hardy, Thomas **H**: 59
- Mayor of the palace** [title]
 Charles Martel **C**: 383
- Mayotte** [island, Comoros]
 Comoros **Ci**: 899
- Maypole** [custom]
 Dance (Folk dances) **D**: 27-28
 May Day **M**: 322
 New Brunswick *picture on* **N**: 184
- Maypop** [plant] *See Passion-flower in this
 index*
- May procession** [custom]
 May Day **M**: 322
- Mayr, Ernst Walter** [German-born American
 biologist]
 Evolution (The synthetic theory) **E**: 432
- Mays, Benjamin Elijah** [American educator]
M: 329
 King, Martin Luther, Jr. (Early life) **K**: 320
- Mays, Willie** [American baseball player] **M**: 329
with portrait
 Baseball (table: Hall of Fame) **B**: 135; (Recent
 developments) **B**: 137-138 *with picture*
- Mazama, Mount** [Oregon]
 Crater Lake **Ci**: 1121 *with picture*
- Mazar-e Sharif** [Afghanistan]
 Afghanistan *picture on* **A**: 93
- Mazarin, Jules Cardinal** [French statesman]
M: 329
 École des Beaux-Arts **E**: 52
 Library (Libraries of the 1600's and 1700's)
L: 260-261
 Louis XIV **L**: 475
- Mazarin Bible**
 Gutenberg, Johannes **G**: 444
- Mazarine Library** [Paris]
 Library (Libraries of the 1600's and 1700's)
L: 260-261
- Mazda** [automobile]
 Automobile *picture on* **A**: 971
- Maze** [puzzle]
 Labyrinth **L**: 20 *with picture*
 Learning (Multiple-response learning) **L**: 163
- Mazeroski, Bill** [American baseball player]
 Baseball (table: Hall of Fame) **B**: 135
- Mazhlis**
 Kazakhstan (Government) **K**: 250a
- Mazovia** [Polish history]
 Warsaw (History) **W**: 38
- Mazowiecki, Tadeusz** [Polish political leader]
 Poland (Free elections) **P**: 614
- Mazzei, Philip** [Italian merchant] **M**: 329
- Mazzini, Giuseppe** [Italian patriot] **M**: 330
 Italy (The French Revolution and Napoleon)
I: 514-515
- Mazzoli, Romano L.** [American political leader]
 Simpson, Alan Kooi **S**: 467
- Mazzuoli, Dionisio** [Italian sculptor]
 Adonis *picture on* **A**: 65
- Mba, Leon** [Gabonese political leader]
 Gabon (History) **G**: 3-4
- Mbebane** [city, Swaziland] **M**: 330
 Swaziland **So**: 1017 *with picture and map*
- Mberi** [people]
 Kikuyu **K**: 314
 Sculpture (Royal and public sculpture) **S**: 240
with picture
- Mbasogo, Teodoro Obiang Nguema**
 [Equatorial Guinea political leader]
 Equatorial Guinea (History) **E**: 347
- Mbege** [beer]
 Tanzania (Food and drink) **T**: 32
- Mbeki, Thabo** [South African political leader]
M: 330 *with portrait*
 African National Congress **A**: 136t
 South Africa (Recent developments) **So**: 621
- Mbemba, Nzinga** [king of Kongo]
 Kongo **K**: 365
- Mbira** [musical instrument]
 Music (African music) **M**: 956
- M'Bochi** [people]
 Congo (Brazzaville) (People) **Ci**: 939
- McAdam, John Loudon** [Scottish engineer]
M: 330
 Industrial Revolution (Roads) **I**: 251
 Road (From the 500's to the 1800's) **R**: 361
- McAdoo, William Gibbs** [American political
 leader]
 Hudson River tunnels (The PATH tunnels)
H: 406-407
 Treasury, Department of the (table) **T**: 407
- McAfee, Mildred Helen** [American educator]
M: 330
 Navy, United States (Women in the Navy) **N**: 85
- McAlister, Hill** [American political leader]
 Tennessee (table) **T**: 152
- McArdle, H. A.** [American painter]
 Alamo *picture on* **A**: 281
- McArthur, Duncan** [American political leader]
 Ohio (table) **O**: 699
- McAuliffe, Christa** [American educator] **M**: 330
 Astronaut (Accidents in space) **A**: 830
 New Hampshire (Recent developments)
N: 227
 Space exploration (The Challenger disaster)
So: 725
- McBain, Ed** [American author] **M**: 330
- McBride, Henry** [American political leader]
 Washington (table) **W**: 65
- McBride, Richard** [Canadian political leader]
 British Columbia (table) **B**: 627; (Progress as a
 province) **B**: 630
- McCahon, Colin** [New Zealand painter]
 New Zealand (The arts) **N**: 349
- McCain, John Sidney, III** [American political
 leader] **M**: 331
 Bush, George Walker (Election as president)
B: 722e-722f
- McCall, Jack** [American public figure]
 Hickok, Wild Bill **H**: 223
- McCall, Samuel W.** [American political leader]
 Massachusetts (table) **M**: 288
- McCall, Tom** [American political leader]
 Oregon (table) **O**: 845
- McCall's Magazine**
 Magazine (table) **M**: 45
- McCallum, Scott** [American political leader]
 Wisconsin (table) **W**: 365
- McCambridge, Mercedes** [American actress]
 Motion picture (Best performance by an
 actress in a supporting role: 1949) **M**: 863
- McCardle, Eliza** [wife of Andrew Johnson] *See
 Johnson, Eliza McCardle in this index*
- McCarey, Leo** [American director]
 Motion picture (Best achievement in directing:
 1937, 1944) **M**: 862
- McCarran International Airport** [Las Vegas]
 Airport (table) **A**: 245
 Las Vegas (Economy) **L**: 89
- McCarran-Walter Act** [1952] *See Immigration
 and Nationality Act in this index*
- McCarthy, Charlie** [dummy]
 Ventriloquism *picture on* **V**: 309
- McCarthy, Eugene Joseph** [American political
 leader] **M**: 331
 Johnson, Lyndon Baines (The widening
 Vietnam War) **J**: 150-151
- McCarthy, Joe** [American baseball manager]
 Baseball (table: Hall of Fame) **B**: 135
- McCarthy, John** [American educator]
 Artificial intelligence **A**: 760
- McCarthy, Joseph Raymond** [American politi-
 cal leader] **M**: 331
 Blacklist **B**: 393
 Eisenhower, Dwight David (Challenges from
 the Old Guard) **E**: 152
 Kennedy, John Fitzgerald (Senator Kennedy)
K: 262

- McCarthyism **M**: 332
Patriotism (Abuses of patriotism) **P**: 198
Television (Early programs) **T**: 119 *with picture*
Wisconsin (Decline of La Follette
Progressivism) **W**: 368
- McCarthy, Mary** [American author] **M**: 331
- McCarthy, Tommy** [American baseball player]
Baseball (table: Hall of Fame) **B**: 135
- McCarthyism** [U.S. history] **M**: 332
Communism (The Cold War) **Ci**: 895
McCarthy, Joseph Raymond **M**: 331
- McCartney, Paul** [British musician] **M**: 332
Beatles **B**: 189
- McCarty, Dan** [American political leader]
Florida (table) **F**: 260
- McCarty, Henry** See Billy the Kid *in this index*
- McCauly, George** [husband of]
Pitcher, Molly **P**: 499
- McCauly, Mary** [American patriot]
Pitcher, Molly **P**: 499
- McCausland, John** [Confederate general]
Pennsylvania (The Civil War) **P**: 267
- McCay, Winsor** [American cartoonist]
Animation (Pioneers of American animation)
A: 514 *with picture*
Comics (Comic strips) **Ci**: 869
- McClellan, George Brinton** [Union general]
M: 332
Civil War (The drive to take Richmond) **Ci**: 626
Lee, Robert Edward (Opening campaigns)
L: 178
Lincoln, Abraham (Building the army) **L**: 321
with picture
New Jersey (table) **N**: 249
President of the United States *picture on*
P: 764
- McClellan-Kerr Arkansas River Navigation
System**
Arkansas (Rivers and lakes) **A**: 706-708; (The
late 1900's) **A**: 715
Oklahoma (Recent developments) **O**: 734
Tulsa (History) **T**: 483-484
- McClelland, Robert** [American government official]
Interior, Department of the (table) **I**: 325
Michigan (table) **M**: 507
Pierce, Franklin (table) **P**: 456
- McClintock, Barbara** [American geneticist]
M: 333
Botany (Later developments) **B**: 509
- McCloskey, John Cardinal** [American religious
leader] **M**: 333
- McCloskey, Robert** [American author]
Regina Medal (table: 1974) **R**: 206
- McCloy, John J.** [American government official]
Warren Report **W**: 37
- McClung, Nellie** [Canadian social reformer]
M: 333
- McClure, Sir Robert John Le Mesurier** [British
admiral] **M**: 333
Exploration (Arctic exploration) **E**: 449-450
with map
Northwest Passage **N**: 529 *with picture*
- McClure, Samuel Sidney** [American publisher]
M: 333
- McClure Syndicate**
McClure, Samuel Sidney **M**: 333
- McClure's Magazine**
Cather, Willa **C**: 302
Magazine (History) **M**: 43-45
McClure, Samuel Sidney **M**: 333
- McClurg, Joseph W.** [American political leader]
Missouri (table) **M**: 668
- McCollum, Elmer Verner** [American bio-
chemist]
Vitamin (History) **V**: 432
- McConaughy, James L.** [American political
leader]
Connecticut (table) **Ci**: 967
- McCone, Sharon** [literary character]
Muller, Marcia **M**: 915
- McConnell, John Wilson** [Canadian financier]
McConnell Family Foundation **M**: 334
- McConnell, William J.** [American political
leader]
Idaho (table) **I**: 42
- McConnell Family Foundation** [organization]
M: 333
Foundations (table) **F**: 430; (Canadian founda-
tions) **F**: 431
- McCord, David** [American author] **M**: 334
- Literature for children (The middle and late
1900's) **L**: 364
- McCord, Jim** [American political leader]
Tennessee (table) **T**: 152
- McCormack, John** [American singer] **M**: 334
Ireland (The arts) **I**: 421-422
- McCormack, John William** [American political
leader] **M**: 334
- McCormick, Cyrus Hall** [American inventor]
M: 334
Agriculture (The invention of new farm equip-
ment) **A**: 157-158 *with picture*
Reaper **R**: 173
Wheat (The mechanization of wheat farming)
W: 276
- McCormick, John** [American settler]
Indianapolis (History) **I**: 222
- McCormick, Robert Rutherford** [American pub-
lisher] **M**: 334
- McCormick Place**
Chicago (The South Side) **C**: 424-425
- McCorvey, Norma** [American public figure]
Roe v. Wade **R**: 399
- McCovey, Willie** [American baseball player]
Baseball (table: Hall of Fame) **B**: 135
- McCown, Theodore D.** [American anthropolo-
gist]
Prehistoric people (table) **P**: 752
- McCoy** [American family]
Feud **F**: 81
- McCoy, Elijah** [American inventor] **M**: 334
Invention *picture on* **I**: 361
- McCrae, John** [Canadian poet] **M**: 334
- McCrary, George W.** [American government
official]
Hayes, Rutherford Birchard (table) **H**: 121
- McCray, Warren T.** [American political leader]
Indiana (table) **I**: 214
- McCreary, James B.** [American political leader]
Kentucky (table) **K**: 290
- McCreery, Joseph** [American inventor]
Air conditioning (History) **A**: 180
- McCreight, John Foster** [Canadian political
leader]
British Columbia (table) **B**: 627; (The colonial
period) **B**: 630
- McCuish, John** [American political leader]
Kansas (table) **K**: 234
- McCullers, Carson** [American author] **M**: 335
American literature (Southern fiction) **A**: 424
- McCulloch, Hugh** [American government official]
Arthur, Chester Alan (table) **A**: 756
Lincoln, Abraham (table) **L**: 323
Treasury, Department of the (table) **T**: 407
- McCulloch, James** [American public figure]
McCulloch v. Maryland **M**: 335
- McCulloch v. Maryland** [U.S. history] **M**: 335
Marshall, John (Chief justice) **M**: 230
Supreme Court of the United States
(Federalism) **So**: 1000; (table) **So**: 1002
- McCullough, John G.** [American political leader]
Vermont (table) **V**: 333
- McCully, Emily Arnold** [American author]
Caldecott Medal (table: 1993) **C**: 26
- McCully, Jonathan** [Canadian political leader]
Confederation of Canada (Fathers of
Confederation) **Ci**: 935 *with picture*
- McCurdy, John A. D.** [Canadian aviator]
Airplane (Other pioneer planes and fliers)
A: 233
- McDaniel, Hattie** [American actress]
Motion picture (Best performance by an
actress in a supporting role: 1939) **M**: 863
- McDaniel, Henry D.** [American political leader]
Georgia (table) **G**: 130
- McDermott, Gerald** [American artist]
Caldecott Medal (table: 1975) **C**: 26
- McDonald, Charles J.** [American political leader]
Georgia (table) **G**: 130
- McDonald, Jesse F.** [American political leader]
Colorado (Interesting facts) **Ci**: 829; (table)
Ci: 844
- McDonald, John D.** [American general]
Whiskey Ring **W**: 282
- McDonald, Lake** [Montana]
Glacier National Park (Lakes) **G**: 205-206
- McDonald, Ronald** [corporate symbol]
McDonald's Corporation **M**: 335
- McDonald, William C.** [American political
leader]
- New Mexico (table) **N**: 272; (Early statehood)
N: 275
- McDonald Observatory** [Mount Locke, Texas]
Texas, University of (University of Texas at
Austin) **T**: 210
- McDonald's Corporation** [company] **M**: 335
- McDonnell Douglas Corporation**
Aviation (Aviation progress) **A**: 988
- McDormand, Frances** [American actress]
Motion picture (Best performance by an
actress: 1996) **M**: 862
- McDougal, John** [American political leader]
California (table) **C**: 59
- McDougall, George** [Canadian religious leader]
Alberta (The missionaries) **A**: 329
- McDougall, John** [Canadian religious leader]
Alberta (The missionaries) **A**: 329
- McDougall, William** [Canadian patriot]
Confederation of Canada (Fathers of
Confederation) **Ci**: 935 *with picture*
Red River Rebellion (The revolt) **R**: 189
- McDowell, Ephraim** [American doctor]
Surgery (History) **So**: 1007
- McDowell, Irvin** [Union general]
Civil War (First Battle of Bull Run) **Ci**: 626
Lincoln, Abraham (Building the army) **L**: 321
- McDowell, James** [American political leader]
Virginia (table) **V**: 417
- McDowell, Jane** [wife of]
Foster, Stephen Collins **F**: 428
- McDuffie, George** [American political leader]
South Carolina (table) **So**: 658
- McElroy, Mary Arthur** [sister of]
Arthur, Chester Alan (Life in the White House)
A: 756 *with portrait*
White House hostesses **W**: 291
- McElroy, Neil H.** [American government official]
Defense, Department of (table) **D**: 87
Eisenhower, Dwight David (table) **E**: 152
- McEnery, John** [American political leader]
Louisiana (table) **L**: 496
- McEnery, Samuel D.** [American political leader]
Louisiana (table) **L**: 496
- McEnroe, John** [American tennis player] **M**: 335
with portrait
Tennis (Tennis today) **T**: 168-169 *with picture*
- McEntire, Reba** [American singer]
Country music (Modern country music)
Ci: 1098c-1098d *with picture*
- McEwen, John** [Australian political leader]
Australia (table) **A**: 925
- McFadden, Daniel Little** [American economist]
Nobel Prizes (Economics: 2000) **N**: 449
- McFarland, David Ford** [American scientist]
Kansas (Interesting facts) **K**: 217
- McFarland, Ernest W.** [American political
leader]
Arizona (table) **A**: 687
Goldwater, Barry Morris (Political career) **G**: 259
- McFarlane, Robert C.** [American government
official]
Iran-contra affair (Charges and court actions)
I: 407
- McGahern, John** [Irish author]
Irish literature (Fiction and poetry) **I**: 432-433
- McGee, Thomas D'Arcy** [Canadian political
leader]
Confederation of Canada (Fathers of
Confederation) **Ci**: 935 *with picture*
- McGill, Andrew R.** [American political leader]
Minnesota (table) **M**: 602
- McGill, James** [Canadian businessman] **M**: 335
- McGill University** **M**: 335
Football (The history of football) **F**: 365
Hockey (Beginnings) **H**: 281
McGill, James **M**: 335
Quebec (Libraries) **Q**: 15 *with picture*
- McGillicuddy, Cornelius** See Mack, Connie *in
this index*
- McGillivray, Alexander** [American Indian chief]
M: 336
- McGillivray, James** [American journalist]
Bunyan, Paul **B**: 701
- McGillivray, William** [Canadian businessman]
M: 336
- McGinley, Phyllis** [American poet] **M**: 336
- McGinnity, Joe** [American baseball player]
Baseball (table: Hall of Fame) **B**: 135; *picture*
on B: 136
- McGivney, Michael J.** [American religious
leader]

- Knights of Columbus K: 352
McGovern, Francis E. [American political leader]
 Wisconsin (table) W: 365
McGovern, George Stanley [American political leader] M: 336 *with portrait*
 Democratic Party (Times of trouble) D: 128
 Eagleton, Thomas Francis E: 6
 Nixon, Richard Milhous (The 1972 election) N: 435
McGowan, Bill [American baseball umpire]
 Baseball (table: Hall of Fame) B: 135
McGranery, James P. [American government official]
 Justice, Department of (table) J: 203
 Truman, Harry S. (table) T: 469
McGrath, J. Howard [American government official]
 Justice, Department of (table) J: 203
 Rhode Island (table) R: 311
 Truman, Harry S. (table) T: 469
McGrav, John [American baseball player]
 Baseball (table: Hall of Fame) B: 135; *picture on* B: 136
McGrav, John [American political leader]
 Washington (table) W: 65
McGuffey, William Holmes [American educator] M: 336 *with picture*
 Ohio (Schools) O: 684-685
McGuffey's Reader [book]
 McGuffey, William Holmes M: 336 *with picture*
McGuigan, James Charles Cardinal [Canadian religious leader]
 Cardinal (table: Canadian cardinals) C: 211
McGuire, Peter J. [American labor leader]
 Labor Day L: 2
McGuire Act [1952]
 Fair-trade laws F: 8
McGwire, Mark [American baseball player] M: 337
 Baseball (table: Modern major league records) B: 137; (Recent developments) B: 137
McHenry, Donald F. [American government official]
 United Nations (table) U: 86
McHenry, Fort See Fort McHenry National Monument and Historic Shrine *in this index*
McHenry, James [American patriot] M: 337
 Adams, John (table) A: 38
 Washington, George (table) W: 102
McIntire, Albert W. [American political leader]
 Colorado (table) C: 844
McIntire-Stennis Act [1962]
 Agricultural experiment station A: 145
McIntosh, Caroline Carmichael [wife of]
 Fillmore, Millard (Later years) F: 102
McIntosh, Lachlan [American general]
 Gwynnett, Button G: 447
McIntosh apple
 Apple (table) A: 571 *with picture*
McIntyre, James Francis Cardinal [American religious leader]
 Cardinal (table: American cardinals) C: 211
McKay, Claude [American author] M: 337
 American literature (The Harlem Renaissance) A: 422
McKay, David S. [American geochemist]
 Mars (Possibility of life) M: 226c
McKay, Donald [Canadian engineer] M: 337
 Clipper ship C: 682i
 Ship (Clipper ships) S: 410-411
McKay, Douglas [American government official]
 Eisenhower, Dwight David (table) E: 152
 Interior, Department of (table) I: 325
 Oregon (table) O: 845
McKay, Thomas [Canadian lumberman]
 Ottawa (Rideau Hall) O: 872
McKean, Thomas [American patriot] M: 337
 Delaware (table) D: 109
 Pennsylvania (table) P: 263
McKechnie, Bill [American baseball manager]
 Baseball (table: Hall of Fame) B: 135
McKeithen, John J. [American political leader]
 Louisiana (table) L: 496
McKeldin, Theodore R. [American political leader]
 Maryland (table) M: 255
McKelvie, Samuel R. [American political leader]
 Nebraska (table) N: 110
McKenna, Frank [Canadian political leader]
 New Brunswick (table) N: 196
McKenna, Joseph [American jurist]
 Justice, Department of (table) J: 203
 McKinley, William (table) M: 342
 Supreme Court of the United States (table) So: 1000
McKernan, Thomas M. T. [American government official]
 Fillmore, Millard (table) F: 102
 Interior, Department of (table) I: 325
McKenzie, D. P. [British geologist]
 Plate tectonics (History of tectonic theory) P: 564-565
McKernan, John R., Jr. [American political leader]
 Maine (table) M: 87
McKernan, Ron "Pigpen" [American singer]
 Grateful Dead G: 330
McKiernan, John S. [American political leader]
 Rhode Island (table) R: 311
McKinley, Ida Saxton [wife of William McKinley]
 First ladies (table) F: 142
 McKinley, William (McKinley's family) M: 339; *picture on* M: 340
McKinley, John [American jurist]
 Supreme Court of the United States (table) So: 1000
McKinley, Mount See Mount McKinley *in this index*
McKinley, Robin [author]
 Newbery Medal (table) N: 359
McKinley, William [U.S. President] M: 338 *with pictures*
 Bryan, William Jennings (Democratic Party leader) B: 654
 Buffalo (The city) B: 676
 Cuba (Struggle against Spain) C: 1176
 Hanna, Mark H: 51
 Hawaii (The Territory of Hawaii) H: 108
 Hobart, Garret Augustus H: 272
 New York N: 317
 Ohio (table) O: 699
 Roosevelt, Theodore (Vice President) R: 467
 Spanish-American War (American intervention) So: 753
 United States, History of the (The Spanish-American War) U: 183
McKinley Monument [Buffalo, New York]
 Buffalo (Other interesting places to visit) B: 678
McKinley National Memorial [Ohio]
 Canton C: 184
McKinley Tariff Act [1890]
 Harrison, Benjamin (Domestic affairs) H: 72
McKinly, John [American political leader]
 Delaware (table) D: 109; (The Revolutionary War) D: 110
McKinney, Philip W. [American political leader]
 Virginia (table) V: 417
McKissack, Fredrick L. [American author]
 Regina Medal (table: 1998) R: 206
McKissack, Patricia C. [American author]
 Regina Medal (table: 1998) R: 206
McKissick, Floyd Bixler [American social reformer] M: 342
McKuen, Rod [American poet] M: 342
McLachlan, Sarah [Canadian singer]
 Rock music (Rock music today) R: 380-381
McLachlin, Beverley Marian [Canadian jurist] M: 43
 Supreme Court of Canada (table) So: 997 *with portrait*
McLaglen, Victor [British actor]
 Motion picture (Best performance by an actor: 1935) M: 862
McLane, John [American political leader]
 New Hampshire (table) N: 223
McLane, Louis [American government official]
 Jackson, Andrew (table) J: 11; (Jackson's second Administration) J: 12
 State, Department of (table) So: 860
 Treasury, Department of (table) T: 407
McLane, Robert M. [American political leader]
 Maryland (table) M: 255
McLaren, Norman [American animator]
 Animation (Animation in the mid-1900's) A: 514a
McLaughlin, Ann Dore [American government official]
 Labor, Department of (table) L: 2
McLaughlin, Audrey Marlene [Canadian political leader] M: 343
 Campbell, Kim (The 1993 election) C: 90d
McLaurin, Anselm J. [American political leader]
 Mississippi (table) M: 640
McLean, Angus Wilton [American political leader]
 North Carolina (table) N: 490
McLean, George P. [American political leader]
 Connecticut (table) C: 967
McLean, John [American jurist]
 Jackson, Andrew (table) J: 11
 Supreme Court of the United States (table) So: 1000
McLean House [Virginia]
 Appomattox Court House A: 574
McLeod, Neil [Canadian political leader]
 Prince Edward Island (table) P: 791
McLeod, Thomas G. [American political leader]
 South Carolina (table) So: 658
McLoughlin, John [Canadian pioneer] M: 343
 Oregon (Exploration and settlement) O: 846
 Washington (Settlement) W: 66
McLoughlin, Mount
 Oregon (Land regions) O: 838
McLoughlin House National Historic Site [Oregon]
 Oregon (Places to visit) O: 836
McLuhan, Marshall [Canadian author] M: 343
McClure, Sir Robert John le Mesurier [British admiral] See McClure, Sir Robert *in this index*
McMahon, Sir William [Australian political leader]
 Australia (table) A: 925
McMaster, W. H. [American political leader]
 South Dakota (table) So: 680
McMaster University
 Hamilton (Education) H: 31 *with map*
McMath, Sidney Sanders [American political leader]
 Arkansas (table) A: 712
McMath, Virginia Katherine [American actress] See Rogers, Ginger *in this index*
McMath-Pierce telescope
 Sun pictures on So: 978
 National Optical Astronomy Observatories N: 42
McMenamin, Hugh L. [American religious leader]
 Brotherhood/Sisterhood Week B: 642
McMichael Canadian Art Collection
 Toronto (The arts) T: 339
McMillan, Edwin Mattison [American chemist]
 Neptunium N: 130
 Nobel Prizes (Chemistry: 1951) N: 443
 Plutonium P: 581
McMillan, Margaret [British educator]
 Nursery school (History) N: 616
McMillan, Rachel [British educator]
 Nursery school (History) N: 616
McMillin, Benton [American political leader]
 Tennessee (table) T: 152
McMinn, Joseph [American political leader]
 Tennessee (table) T: 152
McMullen, Adam [American political leader]
 Nebraska (table) N: 110
McMullen, Richard C. [American political leader]
 Delaware (table) D: 109; (The early 1900's) D: 112
McMurdo Station
 Antarctica (Recent activities) A: 538-539 *with picture*
McMurtry, Larry [American novelist] M: 343
McNab, Sir Allan [Canadian political leader]
 Macdonald, Sir John Alexander (Early public career) M: 7
McNair, Alexander [American political leader]
 Missouri (table) M: 668
McNair, John B. [Canadian political leader]
 New Brunswick (table) N: 196
McNair, Lesley James [American general]
 Army, United States (World War II) A: 739
McNair, Robert E. [American political leader]
 South Carolina (table) So: 658
McNair, Ronald E. [American astronaut]
 Space exploration (The Challenger disaster) So: 725
McNairy, John [American jurist]
 Jackson, Andrew (Lawyer) J: 8

- McNally, Terrence** [American playwright]
M: 343
Drama (Later United States drama) D: 340-341
- McNamar, John** [American settler]
Rutledge, Ann R: 569
- McNamara, James B.** [American labor leader]
Darrow, Clarence Seward D: 38
- McNamara, John J.** [American labor leader]
Darrow, Clarence Seward D: 38
- McNamara, Robert Strange** [American government official] M: 344
Kennedy, John Fitzgerald (table) K: 266
- McNary, Charles Linza** [American political leader] M: 344
- McNaughton, Andrew George Latta** [Canadian military leader] M: 344
United Nations (table) U: 86
- McNay Art Institute**
San Antonio (Cultural life) S: 85
- McNeer, May** [American author]
Regina Medal (table: 1975) R: 206
- McNichols, Stephen L. R.** [American political leader]
Colorado (table) Ci: 844
- McNutt, Alexander G.** [American political leader]
Mississippi (table) M: 640
- McNutt, Paul V.** [American political leader]
Indiana (table) I: 214
- McPartland, Jimmy** [American trumpet player]
Jazz (The 1920's) J: 70
- McPhee, Bid** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- McPherson, Aimee Semple** [American religious leader] M: 344
Faith healing F: 12
- McPherson, James B.** [Union general]
Fort McPherson F: 414
- McQuigg, Esther** [American social reformer]
Morris, Esther Hobart M: 816
- McRae, John J.** [American political leader]
Mississippi (table) M: 640
- McRae, Thomas Chipman** [American political leader]
Arkansas (table) A: 712
- McReynolds, James Clark** [American jurist]
Justice, Department of (table) J: 203
Supreme Court of the United States (table) So: 1000
- McSweeney, Miles B.** [American political leader]
South Carolina (table) So: 658
- McTeer, Maureen** [wife of]
Clark, Joe (Member of Parliament) Ci: 641
with picture
- McVay, Hugh** [American political leader]
Alabama (table) A: 274
- McVeigh, Timothy J.** [American public figure]
Oklahoma City (History) O: 736-737
- McWane Center** [Birmingham]
Alabama (Places to visit) A: 266
- McWherter, Ned Ray** [American political leader]
Tennessee (table) T: 152
- McWillie, William** [American political leader]
Mississippi (table) M: 640
- M.D.** [degree]
Medicine (A career as a doctor) M: 370
- MD** [recording] See Minidisc in *this index*
- md** [symbol]
Mendelevium M: 398
- MDMA** See Ecstasy in *this index*
- Me-163 Komet** [airplane]
Airplane (During World War II [1939-1945]) A: 238; picture on A: 235
- Me-262** [airplane]
Airplane (During World War II [1939-1945]) A: 238
- Mee Shearim** [area]
Jerusalem (West Jerusalem) J: 95 with map;
(Muslim rule) J: 101; picture on J: 99
- Meed, Albert E.** [American political leader]
Washington (table) W: 65
- Mead, George Herbert** [American psychologist]
Social psychology So: 552
- Mead, John A.** [American political leader]
Vermont (table) V: 333
- Mead, Lake** See Lake Mead in *this index*
- Mead, Larkin G.** [American architect]
Springfield [Illinois] So: 807
- Mead, Margaret** [American anthropologist]
M: 344
Anthropology (Development of field research) A: 548 with picture
Sexuality (Cultural influences) S: 338a
- Meade, George Gordon** [Union general] M: 344
Civil War (Battle of Gettysburg) Ci: 628
Gettysburg, Battle of G: 176
Lee, Robert Edward (Later battles) L: 178
Lincoln, Abraham (The Gettysburg Address) L: 323
- Meade, James Edward** [British economist]
Nobel Prizes (Economics: 1977) N: 449
- Meades Ranch Triangulation Station** [Kansas]
Geodetic center of North America G: 91
- Meadow**
Forest (Forest succession) F: 397 with picture
- Meadow lily** [plant]
Lily L: 303
- Meadow mushroom** See Field mushroom in *this index*
- Meadow saffron** [plant]
Colchicum Ci: 760 with picture
- Meadow-stream pond**
Pond (Kinds of ponds) P: 656-657
- Meadow vole** [animal]
Vole V: 443 with picture
- Meadowlark** [bird] M: 345 with picture
Bird (Birds of grasslands) B: 336 with picture
- Meadows, Clarence W.** [American political leader]
West Virginia (table) W: 225
- Meadowsweet** [plant]
Spiraea So: 795
- Meal** [agriculture]
Alfalfa (As livestock feed) A: 346 with picture
Soybean (Soy meal) So: 690
- Meal** [food]
Cooking (Planning meals) Ci: 1027
Corn (The dry-milling industry) Ci: 1061-1062
Food (Customs) F: 332-333
Nutrition N: 624
- Mealy Mountains**
Newfoundland and Labrador (Mountains) N: 370 with map
- Mean** [mathematics] M: 345
Average A: 982
Median M: 361
Statistics (Probability) So: 868-869
- Mean** [philosophy]
Aristotle (Ethics and politics) A: 664
- Mean solar day**
Time (Measuring time by the sun) T: 288
- Mean solar noon**
Time (Measuring time by the sun) T: 288
- Mean Streets** [film by Scorsese]
Scorsese, Martin S: 210
- Meander** [geography]
River (Flood plains) R: 353 with diagram
- Meaning** [aesthetics]
Art and the arts (The reasons for art) A: 745
- Meaning of Meaning, The** [book by Richards]
Richards, I. A. R: 329
- Meaning of Treason, The** [book by West]
West, Rebecca W: 199
- Meaning of Witchcraft, The** [book by Gardner]
Witchcraft (Witchcraft in modern times) W: 373
- Means, Abby Kent** [American public figure]
Pierce, Franklin (Life in the White House) P: 456
White House hostesses W: 291
- Means, John H.** [American political leader]
South Carolina (table) So: 658
- Means of production** [economics]
Collectivism Ci: 775
Communism Ci: 889
Protestant ethic P: 833
Socialism So: 560
- Meany, George** [American labor leader] M: 345
Labor movement (Reunification of the AFL and the CIO) L: 13 with picture
- Mears, Rick** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Measles** [disease] M: 345
Colonial life in America (Health and medicine) Ci: 809
Disease (table) D: 226
Enders, John Franklin E: 272
Rubella R: 506
- Measure** [music]
Music (Indicating time values) M: 953-954
- Measure for Measure** [play by Shakespeare]
Shakespeare, William (*Measure for Measure*) S: 362
- Measurement** See Weights and measures in *this index*
- Measurement standard**
Weights and measures W: 184
- Measurement system**
Weights and measures (Measurement systems) W: 184
- Measurement unit**
Weights and measures W: 184
- Measuring worm** [insect] M: 346 with picture
Animal picture on A: 490
Insect picture on I: 297
Moth (Measuringworm moths) M: 841 with picture
- Measuringworm moth**
Moth (Kinds of moths) M: 840-841 with pictures
- Meat** [food] M: 346 with pictures
Cooking (Methods of cooking) Ci: 1028
Food (Food from animals) F: 330
Food, Frozen (Preparing foods for freezing) F: 338-339 with picture
Food supply (Livestock and fish) F: 347;
(Reducing the demand for feed grain) F: 350
Meat packing M: 350 with pictures
Nutrition (Kinds of nutrients) N: 625; (Nutrition guidelines) N: 626
Pemmican P: 233
Pioneer life in America (Food) P: 481
Vegetarianism V: 294
See also the list of Related Articles in the Meat article
- Meat carving**
Meat pictures on M: 348
- Meat cut**
Meat (How to select meat) M: 347
Pork P: 679
- Meat extract** [food] M: 350
- Meat grades**
Beef (Grades of beef) B: 209
- Meat Inspection Act** [1906]
Pure food and drug laws (History) P: 909
Roosevelt, Theodore (Domestic problems) R: 470
- Meat packing** [industry] M: 350 with pictures
Colorado picture on Ci: 843
Food (Processing) F: 334
Muckrakers M: 908
Saskatchewan (Manufacturing) S: 143 with picture
South Dakota picture on So: 678
Swift, Gustavus Franklin So: 1039
United States, History of the (The Progressive Era) U: 181-182
See also the list of Related Articles in the Meat packing article
- Meat-type hog**
Hog (Kinds of hogs) H: 285
- Mecca** [city, Saudi Arabia] M: 352 with picture
Islam I: 463; (The Five Pillars of Islam) I: 463 with picture
Jidda J: 126
Malcolm X M: 103
Muhammad (The Hijra) M: 911
Muslims (Muhammad) M: 964
Religion (Islam) R: 222
Saudi Arabia S: 155 with picture
- MECCA** [Milwaukee]
Milwaukee (The city) M: 558-559
- Mecham, Evan** [American political leader]
Arizona (table) A: 687; (The late 1900's) A: 691-692
- Mechanic**
Automobile (Servicing) A: 960
Careers (Construction, maintenance, and repair) C: 221-222
- Mechanic, The** [painting by Léger]
Léger, Fernand picture on L: 183
- Mechanical advantage** [physics]
Machine (Mechanical advantage) M: 14 with picture
Block and tackle (Mechanical advantage) B: 405
Lever (Law of equilibrium) L: 217-218
Wheel and axle W: 278
- Mechanical arts**

- Vocational education (Early vocational education in schools) V: 435
- Mechanical calculator**
Calculator C: 22
- Mechanical cherry picker**
Fruit picture on F: 546
- Mechanical clock**
Clock (Mechanical clocks) Ci: 682j *with diagram*; (History) Ci: 683 *with picture*
- Mechanical drawing** M: 353 *with pictures*
Blueprint B: 424
- Mechanical efficiency**
Machine (Efficiency) M: 14
- Mechanical engineering**
Engineering (Mechanical engineering) E: 287; *picture on E: 288*
- Mechanical equivalent of heat**
Heat (Heat and energy) H: 155
- Mechanical lock**
Lock (Mechanical locks) L: 411
- Mechanical pencil**
Pencil (Mechanical pencils) P: 236
- Mechanical properties**
Materials (Properties of materials) M: 300b
- Mechanical reasoning aptitude**
Careers (Aptitudes) C: 215
- Mechanical solidarity** [sociology]
Durkheim, Émile D: 389
- Mechanical top**
Top (Kinds of tops) T: 331
- Mechanical watch**
Watch (Mechanical watches) W: 114 *with pictures*
- Mechanics** [physics] M: 354
Biomedical engineering (Biomechanics) B: 324
Leonardo da Vinci (Drawings and scientific studies) L: 200-200a
Physics (Mechanics) P: 437
- Mechanic's lien** [law]
Lien L: 273
- "Mechanism in Thought and Morals"** [lecture by Holmes]
Holmes, Oliver Wendell (His writings) H: 294-295
- Mechanist philosophy** M: 355
Philosophy (Metaphysics) P: 383; (Modern philosophy) P: 387-388
- Mechanistic materialistic physiology**
Biology (Materialistic physiology and the cell theory) B: 319
- Mechanization**
Automation (How automation works) A: 945
Coal (Mineworkers) Ci: 728
Technology (Challenges of technology) T: 76-77
- Mechanized infantry division**
Infantry (Divisions) I: 265
- Mechem, Edwin L.** [American political leader]
New Mexico (table) N: 272
- Mechem, Merritt C.** [American political leader]
New Mexico (table) N: 272
- Mečiar, Vladimír** [Slovak political leader]
Slovakia (The breakup of Czechoslovakia) S: 509
- Meck, Nadezhda von** [friend of]
Tchaikovsky, Peter Ilich (His life) T: 61
- Mecoptera** [entomology]
Insect (table) I: 300 *with picture*
- Medal** See Medals, decorations, and orders in this index
- Medal, The** [poem by Dryden]
Dryden, John D: 370
- Medal of Freedom** See Presidential Medal of Freedom in this index
- Medal of Honor**
Medals, decorations, and orders (Military awards) M: 355 *with pictures*
MacArthur, Douglas (World War II) M: 3-4
Walker, Mary Edwards W: 14
- Medals, decorations, and orders** M: 355 *with pictures*
Olympic Games (Medals) O: 746c *with picture*
- Medan Merdeka**
Jakarta (The city) J: 22
- Medevar, Sir Peter Brian** [British zoologist]
Burnet, Sir Macfarlane B: 708
Nobel Prizes (Physiology or medicine: 1960) N: 445
- Medeae** [Greek mythology] M: 360
Theseus T: 257
- Medea** [play by Euripides]
Drama (Tragedy) D: 326-327
Medea [play by Jeffers]
Jeffers, Robinson J: 75
- Médecins sans Frontières** [organization] See Doctors Without Borders in this index
- Medeiros, Humberto S. Cardinal** [American religious leader] M: 360
- Medellín** [city, Colombia] M: 360
Colombia (Recent developments) Ci: 784
- Medes** [ancient people]
Media M: 360
Persia, Ancient (Early civilization) P: 298
World, History of the (Civilizations of southwest Asia) W: 426
- Medfly** [insect] See Mediterranean fruit fly in this index
- Medford** [Oregon]
Oregon (table: Average monthly weather) O: 841
- Media** [ancient country] M: 360 *with map*
- Media** [communications]
See also Communication; Magazine; Newspaper; Radio; Television in this index
Advertising (Ways of advertising) A: 72
Communication pictures on Ci: 878
Election campaign (Developing support) E: 160
Journalism (Fields of journalism) J: 170
Multimedia M: 919
Sexuality (Cultural influences) S: 338a
- Media center**
Library (School libraries) L: 244
A Guide to Research Skills Research Guide: 26
- Media event** [television]
Journalism (Criticism of the press) J: 173
- Media research**
Advertising (Research) A: 76a-76b
- Media specialist**
Library (School libraries) L: 244
- Medial moraine** [geology]
Glacier (How glaciers shape the land) G: 204-205 *with diagram*
Moraine M: 799
- Median** [mathematics] M: 360
Average A: 982
- Median nerve** [anatomy]
Carpal tunnel syndrome C: 245 *with diagram*
Human body diagram on H: 422
- Median strip**
Road (Primary highways) R: 358
- Mediastinal septum** [anatomy]
Chest C: 415
- Mediastinum** [anatomy]
Chest C: 415
- Mediation** [labor]
Federal Mediation and Conciliation Service F: 64
Labor movement (Handling labor disputes) L: 6
National Mediation Board N: 40
Strike (Strike settlements) So: 928
- Mediation Board, National** [U.S.]
Labor movement (Handling labor disputes) L: 6
Railway Labor Act R: 122
- Mediator Dei** [encyclical, 1947]
Pius XII P: 503
- Medic Alert** M: 361
- Medicaid** [federal program] M: 361
Abortion (Abortion in the United States) A: 15-16
Health insurance, National H: 129
Medicine (The United States) M: 367
Welfare (Medicaid) W: 190
- Medical anthropology**
Anthropology (Cultural anthropology) A: 547
- Medical Association, American** See American Medical Association in this index
- Medical botany**
Botany (Uses of plants) B: 508
- Medical College of Louisiana**
Tulane University T: 482
- Medical Command**
Army, United States (Organization of the Army) A: 736-737
- Medical costs**
Medicine (Providing medical care) M: 366; (Expenditures for health care in the United States) diagrams on M: 371
- Medical ethics** M: 361
Abortion (Abortion methods) A: 14-15
- Birth control (Opposition to birth control) B: 379
Clone Ci: 685
Hippocrates H: 240
Medicine (The challenge of genetics) M: 378
World Medical Association W: 451
- Medical examiner** [public official] M: 361
- Medical genetics**
Genetic counseling (Techniques of genetic counseling) G: 84
Medicine (table) M: 369
- Medical insurance** See Health insurance in this index
- Medical intensive care unit** [medicine]
Intensive care unit I: 320
- Medical International Cooperation Organization**
Dooley, Thomas Anthony, III D: 309
- Medical Literature Analysis and Retrieval System**
Library (United States government libraries) L: 248
- Medical payments coverage**
Insurance (Automobile insurance) I: 313
- Medical records**
Hospital (Professional services departments) H: 371-372
- Medical school**
Medicine (A career as a doctor) M: 370; (During the Middle Ages) M: 373
- Medical service plan**
Insurance (How private health insurance is provided) I: 311
- Medical social worker**
Medicine (Other careers in medicine) M: 371
- Medical tag**
First aid (Examine the victim) F: 136
- Medical technician**
Medicine picture on M: 366
- Medical technologist**
Medicine (Other careers in medicine) M: 371
- Medical visualization software**
Computer (Medical visualization software) Ci: 920 *with picture*
Computer graphics (In medicine) Ci: 924g
- Medical waste**
Incinerator I: 100
- Medicare** [insurance, Canada]
Medicine (Canada) M: 367
- Medicare** [insurance, U.S.] M: 362
Health insurance, National H: 129
Insurance (Social insurance) I: 314
Medicine (The United States) M: 367
Old age (Health care) O: 739
Social security (OASDHI) So: 553; (Medicare) So: 555
- Medication** See Drug in this index
- Medici** [Italian history] M: 362
Florence (History) F: 241
Pawnbroker P: 203
Renaissance (The Italian Renaissance) R: 233 *with picture*
- Medici, Catherine de'** See Catherine de Médicis in this index
- Medici, Cosimo de'** [Florentine ruler] M: 362
- Medici, Cosimo de'** [Italian nobleman]
Galileo (Mature scientific career) G: 11
- Medici, Giovanni Angelo de'**
Pius IV P: 502
- Medici, Giuliano de'** [brother of Lorenzo de' Medici]
Sculpture (Michelangelo) S: 252-253
Sixtus IV S: 478
- Medici, Giulio de'** See Clement VII in this index
- Medici, Lorenzo de'** [Florentine ruler] M: 362
Italian literature (Humanism and the Renaissance) I: 494
Italy picture on I: 514
Michelangelo (Early life) M: 483
Renaissance picture on R: 232
Sixtus IV S: 478
- Medici, Marie de'** See Marie de Médicis in this index
- Medici, Piero de'** [Florentine ruler]
Medici, Lorenzo de' M: 362
- Medici Chapel** [Florence, Italy]
Michelangelo (The Medici Chapel) M: 486 *with picture*
Sculpture picture on S: 253
- Medici Madonna** [sculpture by Michelangelo]
Madonna and Child M: 37

Medicinal flowers and plants

Drug (Plants and molds) D: 355

Herbal medicine H: 196

Plant (Medicines) P: 518

Medicine See *Drug in this index*

Medicine [profession] M: 363 *with pictures*

Alternative medicine A: 388

Aerospace medicine A: 89

Blood (The significance of blood groups)

B: 412; (Medical uses of blood) B: 413

Disease (Medical treatment) D: 232

Electricity (In medicine and science) E: 191

Electronics (Medicine and research) E: 207

First aid F: 136 *with pictures*

Health (Medical and dental care) H: 126

Incubator I: 106

Internal medicine I: 336

Living will L: 398

Marijuana (History) M: 201-202

Neonatology N: 124

New Age movement N: 178

Obstetrics and gynecology O: 646

Occupational medicine O: 647

Palliative care P: 108

Pediatrics P: 227

Plastics (To provide new characteristics)

P: 555

Psychosomatic medicine P: 851

Sports medicine So: 803

Diagnosis and treatment

Acupuncture A: 31 *with picture*

Computer graphics (In medicine) Ci: 924g

Chemistry (Alchemy) C: 400-401

Fiber optics (Uses of optical fibers) F: 88-89

Isotope (Uses of radioisotopes) I: 477

Magnetic resonance imaging M: 56

Photography (Scientific photography) P: 429

Positron emission tomography P: 697

Radiation (Uses of radiation) R: 74 *with picture*

Radiology R: 98

Ultrasound (Ultrasound devices) U: 16 *with picture*

X rays (In medicine) X: 540 *with picture*

History

Colonial life in America (Health and medicine) Ci: 809

Egypt, Ancient (Sciences) E: 139

Galen G: 9

Hippocrates H: 239

Pioneer life in America (Health) P: 483

Sydenham, Thomas So: 1063

Medicine and society

Suicide (Physician-assisted suicide) So: 964

Health insurance, National H: 129

Malpractice suit M: 112

Medical ethics M: 361

Public health P: 855 *with pictures*

Pure food and drug laws (Drugs and devices) P: 908

See also the list of Related articles in the

Medicine article

Medicine, Doctor of

Degree, College (The doctor's degree) D: 92

Medicine (A career as a doctor) M: 370

Medicine, Institute of

National Academy of Sciences N: 27

Medicine, National Library of [Bethesda,

Maryland]

Library (United States government libraries)

L: 248

Medicine ball cabinet [U.S. history]

Hoover, Herbert Clark (Life in the White

House) H: 330

Medicine bundle

Indian, American (Indians of the Northeast)

I: 154-156

Medicine Lake

South Dakota (Rivers and lakes) So: 676

Medicine man

Indian, American (Shamans) I: 147

Inuit (Religion) I: 354e

Magic (The magician) M: 49

Medicine pipe

Indian, American *picture on* I: 138

Medicine Rocks

Montana (Places to visit) M: 750

Medicine woman

Indian, American (Shamans) I: 147

Médicis, Catherine de See Catherine de

Médicis *in this index*

Médicis, Marie de See Marie de Médicis *in this index*

MEDICO [organization]

Dooley, Thomas Anthony, III D: 309

Medieval drama

Drama (Medieval drama) D: 328

Medieval period See Middle Ages *in this index*

Medill, Joseph [American publisher] M: 380

Medill, William [American political leader]

Ohio (table) O: 699

Medina [original settlement]

Morocco (Way of life) M: 811

Medina [city, Saudi Arabia] M: 380

Islam I: 463

Muhammad (His teachings) M: 911; (The Hijra)

M: 911

Muslims (Muhammad) M: 964-964a

Religion (Islam) R: 222

Saudi Arabia S: 155

Medina, Harold Raymond [American jurist]

M: 380

Medina Sidonia, Duke of [Spanish military

leader]

Spanish Armada (The two fleets) So: 755;

(The battle) So: 756

Mediolanum

Milan (History) M: 540

Meditation M: 380

Mysticism M: 972

New Age movement N: 178

Religion (Religious rituals) R: 217

Transcendental Meditation T: 370

Meditations [book by Marcus Aurelius]

Marcus Aurelius M: 197

Meditations on Ecclesiastes [music by Dello

Joio]

Dello Joio, Norman D: 117

Meditations on First Philosophy [book by

Descartes]

Descartes, René (His philosophy) D: 154

Meditations on Quixote [book by Ortega y

Gasset]

Ortega y Gasset, José O: 859

Mediterranean class [breeds]

Chicken (Kinds of chickens) C: 441; (table)

C: 443

Mediterranean climate See Subtropical dry

summer climate *in this index*

Mediterranean fruit fly M: 380 *with picture*

Fruit fly F: 549

Mediterranean pine [tree]

Plant *picture on* P: 520

Mediterranean Sea M: 380 *with map*

France (The land) F: 464-466 *with picture*

See also the list of Related Articles in the

Mediterranean Sea article

Medium [biology]

Culture Ci: 1190

Medium [physics]

Waves W: 152

Medium [spiritualism]

Ghost G: 182

Mythology (African mythology) M: 982-983

Spiritualism (The medium) So: 796

Medium density fiberboard

Forest products (Fiber products) F: 402

Medium grain rice

Rice (Kinds of rice) R: 323-324

Medium of exchange

Money M: 704

Medium-range ballistic missile [weapon]

Guided missile (Ballistic missiles) G: 425

Medium red salmon See Coho *in this index*

Medium security prison

Prison (Types of correctional institutions)

P: 805

Medium truck

Truck (Kinds of trucks) T: 457; *pictures on*

T: 459

Medium-wooled sheep

Wool (Sources of wool) W: 399

MEDLARS [database]

Library (United States government libraries)

L: 248

MEDLINE [database]

Library (United States government libraries)

L: 248

Medny Island [Bering Sea]

Commander Islands Ci: 870

Medulla [anatomy]

Adrenal gland A: 67 *with diagram*

Hair (The root and shaft) H: 9 *with diagram*

Kidney (How the kidneys produce urine)

K: 311 *with diagrams*

Medulla oblongata [anatomy]

Brain (The brain stem) B: 551; *diagram on*

B: 553

Medullary cavity [anatomy]

Bone (Structure of the bones) B: 456 *with dia-*

gram

Medium [Egypt]

Pyramids (The first pyramids) P: 916

Medusa [Greek mythology] M: 383

Cameo *picture on* C: 80

Gorgons G: 275

Pegasus P: 229

Perseus P: 295

Medusa [sea animal] See Jellyfish *in this index*

Medwick, Joe [American baseball player]

Baseball (table: Hall of Fame) B: 135

Meeber, Carrie [literary figure]

Dreiser, Theodore D: 346

Meech Lake accord [Canadian history]

Bloc Québécois B: 404

Campbell, Kim (The 1993 election) C: 90d

Canada, History of (The constitutional crisis)

C: 154

Chrétien, Jean (Election as party leader)

C: 522c

Mulroney, Brian (Prime minister) M: 917

Quebec (Recent developments) Q: 32-33

Trudeau, Pierre Elliott (Later years) T: 465

Meeker, Ezra [American author] M: 383

Meeker, Jotham [American settler]

Kansas (Interesting facts) K: 217

Meeker, Nathan C. [American government offi-

cial]

Colorado (Territorial days) Ci: 845

Indian wars (The Southern Plains) I: 194

Meeker Massacre [1879]

Colorado (Territorial days) Ci: 845

Indian wars (The Southern Plains) I: 194

Meerkat [animal] M: 383 *with picture*

Animal *picture on* A: 502

Meerschau [earth] M: 383

Pipe P: 489 *with picture*

Meece, Edwin P., III [American government offi-

cial]

Justice, Department of (table) J: 203

Reagan, Ronald Wilson (table) R: 169

Meet John Doe [film]

Cooper, Gary Ci: 1034

Meet Me in the Green Glen [book by Warren]

Warren, Robert Penn W: 37

"Meet the Press" [television program]

Journalism (Television journalism) J: 175

Meeting

Parliamentary procedure P: 175; (Holding

meetings) P: 176

Meeting of the School Trustees, The [painting

by Harris]

Harris, Robert *picture on* H: 69

Meeting of the Waters [sculpture by Milles]

Saint Louis (Places to visit) S: 49

Mefistofele [opera by Boito]

Boito, Arrigo B: 440

Mefloquine [medication]

Quinine Q: 42

Mega [prefix]

Metric system (Metric prefixes) M: 439

Megabyte [unit of measure]

Computer (Computer code) Ci: 911

Megadose

Vitamin V: 430

Megaera [Greek mythology]

Furies F: 566

Megagametophyte [botany]

Seed (The parts of a seed) S: 281 *with dia-*

gram; (Seed development in

angiosperms) S: 281-282

Plant (Seeds) P: 531-532 *with picture*

Megahertz [unit of measure]</

Prehistoric animal (The move onto land) P: 737
Mégantic, Lake [lake, Quebec]
 Quebec (Rivers, waterfalls, and lakes) Q: 24
Megara [ancient city]
 Greece, Ancient (Manufacturing) G: 368 *with map*
Megarion
 Architecture (Mycenaean architecture) A: 615
Megasporangia [botany]
 Plant (In flowering plants) P: 532
Megaspore [botany]
 Spore (Plant spores) So: 801 *with diagram*
Megaton [unit of measure]
 Nuclear weapon (Effects of nuclear weapons) N: 597
Megawati Sukarnoputri [Indonesian political leader]
 Indonesia (Recent developments) I: 239
Mege-Mouries, Hippolyte [French chemist]
 Margarine (History) M: 198
Megiddo [ancient city]
 Armageddon A: 717
Megiddo, Battle of [1918]
 Allenby, Lord A: 372
Mehitabel [fictional character]
 Marquis, Don M: 218
Mehmed II [sultan of the Ottoman Empire] See Mehmet II *in this index*
Mehmet II [sultan of the Ottoman Empire]
 M: 384
 Ottoman Empire (Expansion and decline) O: 878
Mehmet V [Turkish ruler]
 Turkey (The Young Turks) T: 510
Mehta, Zubin [Indian conductor] M: 384 *with portrait*
Meidan-e-Imam [square]
 Isfahan I: 462
Meidani, Rexhep [Albanian political leader]
 Albania (End of Communist rule) A: 308-309
Meier, Julius L. [American political leader]
 Oregon (table) O: 845
Meier, Richard [American architect] M: 384 *with picture*
 Getty Center G: 176
Meier Helmbrecht [poem by Wernher the Gardener]
 German literature (Popular literature) G: 139
Meighen, Arthur [Canadian political leader]
 M: 385 *with portrait*
 King, William Lyon Mackenzie (First term as prime minister) K: 325
Meigs, Cornelia Lynde [American author]
 Newbery Medal (table) N: 359
Meigs, Return, Jr. [American political leader]
 Ohio (table) O: 699
Meigs Field [airport]
 Chicago (Transportation) C: 433
Meiji, Emperor [Japanese history] M: 386
 Japan (Meiji era) J: 56
 Tokyo (Western influence) T: 319
Meiji era [Japanese history]
 Japan (Meiji era) J: 56
 Meiji, Emperor M: 386
Meiji Restoration [Japanese history]
 Japan (Meiji era) J: 56
Meiji Shrine [Tokyo]
 Religion *picture on* R: 222
 Tokyo (Shrines and temples) T: 316
Meikle, Andrew [Scottish inventor]
 Threshing machine T: 270
Meiko Central Bridge [Japan]
 Bridge (table: Cable-stayed) B: 603
Meilhac, Henri [French librettist]
 Opera (*Carmen*) O: 802
Mein Kampf [book by Hitler] M: 386
 Hitler, Adolf (Mein Kampf) H: 266
Meiosis [biology]
 Cell (Meiosis) C: 331 *with pictures*
 Heredity (Sex cells and reproduction) H: 201
 Plant (Sexual reproduction) P: 532
 Reproduction (Through sexual reproduction) R: 242
 Reproduction, Human (How sex is determined) R: 246
Meir, Golde [Israeli political leader] M: 387 *with portrait*
 Israel (The Yom Kippur War) I: 488
Meissen china
 Dresden china D: 347
 Germany *picture on* G: 154

Porcelain (German porcelain) P: 677 *with picture*
Meister, Joseph [patient of]
 Pasteur, Louis (His work in medicine) P: 193
Meistersinger [German history] M: 387
 German literature (Popular literature) G: 139
Meistersinger, Die [opera by Wagner]
 Opera (The stage director) O: 794
 Wagner, Richard (Later career) W: 4
Meitner, Lise [Austrian physicist] M: 387
 Fermi, Enrico F: 74
 Hahn, Otto H: 7
 Meitnerium M: 387
 Nuclear energy (Artificial fission) N: 590
 Protactinium P: 831
 Strassmann, Fritz So: 918
Meitnerium [element] M: 387
 Transuranium element T: 401
Mejía Domínguez, Hipólito [Dominican political leader]
 Dominican Republic (History) D: 304-305
Mekong River [Asia] M: 387
 Cambodia (Land) C: 72
 Laos (Land and climate) L: 71
 River (table) R: 352
 Vietnam (Southern Vietnam) V: 368
Mekong River Delta
 Vietnam (Southern Vietnam) V: 368
Melaka [Malaysia] M: 388
 Indonesia (The spread of Islam) I: 237; (The coming of the Europeans) I: 237
 Magellan, Ferdinand (Early life) M: 46
 Malays M: 98
 Malaysia (History) M: 101
Melamine- and urea-formaldehyde
 Plastics (table) P: 556
Melancholic humor
 Personality (Personality types) P: 302
Melanchthon, Philipp [German religious leader]
 M: 388
 Augsburg Confession A: 885
 Luther, Martin (Building and defending the church) L: 528
 Reformation (Martin Luther) R: 197
Melanesia [islands, Pacific]
 Pacific Islands (Melanesia) P: 3; (People) P: 4 *with picture*; (Languages) P: 5; (Climate) P: 8; (The first settlers) P: 11
 Sculpture (Pacific Islands sculpture) S: 241-242 *with pictures*
Melanesian race [theory]
 Races, Human (The geographical-race theory) R: 54
Melanesians [people]
 Bismarck Archipelago B: 382
 New Britain N: 179
 New Guinea (People) N: 206
 New Caledonia N: 200
 Pacific Islands (People) P: 4
 Papua New Guinea (People) P: 140
 Vanuatu (People) V: 284
Melanin [pigment]
 Eye (The uveal tract) E: 460
 Hair (Color and texture) H: 10
 Mole M: 691
 Races, Human (Alternatives to racial classification) R: 55; (Climatic adaptations) R: 58
 Skin (Epidermis) S: 489; (Skin color) S: 490 *with picture*
 Sunburn So: 989
 Vitiligo V: 432
Melanocyte [biology]
 Skin (Epidermis) S: 489; (Skin color) S: 490 *with picture*
 Skin cancer (Melanoma) S: 491
 Vitiligo V: 432
Melanocyte-stimulating hormone
 Hormone (Other hormones) H: 336
Melenome [disease]
 Cancer (Classification by primary body site) C: 167-168; *picture on* C: 173
 Eye (Diseases of the uveal tract) E: 467
 Mole M: 691
 Skin cancer S: 491 *with pictures*
Melanose [plant disease]
 Orange (Pests and diseases) O: 815
Melatonin [hormone]
 Pineal gland P: 471
Melba, Nellie [Australian singer] M: 388
Melbourne [Australia] M: 388 *with picture*
 Olympic Games (The postwar games) O: 751-752

Melbourne, Viscount [British political leader]
 United Kingdom (table: British prime ministers) U: 72
Melbourne-Cooper, Arthur [British inventor]
 Animation (Early animation) A: 514
Melbourne Cup [horse race]
 Horse racing (Types of horse races) H: 364-365
 Melbourne (The city) M: 388
Melcher, Frederic Gershom [American publisher] M: 389
 Book Week B: 470
 Caldecott Medal C: 26
 Literature for children (Awards) L: 366
 Regina Medal (table: 1962) R: 206
Melchizedek, Saint [pope]
 Pope (table) P: 666
Melchior [Biblical figure]
 Magi M: 49
Melchizedek order
 Mormons (Church organization) M: 807
Meld [cards]
 Pinochle P: 474
Melgar Castro, Juan Alberto [Honduran political leader]
 Honduras (Revolutions and reforms) H: 313
Méliador [book by Froissart]
 Froissart, Jean F: 541
Melibea [literary figure]
 Spanish literature (The 1400's) So: 758
Melic poetry
 Greek literature (Lyric poetry) G: 377
Melkite Catholic Church [religious group]
 Eastern Catholic Churches E: 45
Mellette, Arthur Calvin [American political leader]
 South Dakota (table) So: 680; (Statehood) So: 683
Mellon [ship]
 Coast Guard, United States *picture on* Ci: 734
Mellon, Andrew William [American financier]
 M: 389
 Foundations (Arts and humanities) F: 431
 National Gallery of Art N: 36
Mellon, Paul [American philanthropist]
 Mellon Foundation M: 389
Mellon Foundation M: 389
 Foundations (table) F: 430
Mellophone [musical instrument]
 Kenton, Stan K: 271
Melmouth the Wanderer [book by Maturin]
 Gothic novel G: 279
Melodic minor scale [music]
 Music (Tone) M: 950
Melodrama
 Drama (Melodrama) D: 325; (Romanticism) D: 337-338
 Soap opera So: 543
Melody [music]
 Counterpoint Ci: 1097
 Music (Melody) M: 951
 Variation V: 286
Melon [plant] M: 389
Melon [zoology]
 Dolphin (The bodies of dolphins) D: 297-298 *with pictures*
Melon aphid [insect]
 Cucumber Ci: 1183
Melos [island, Greece] See Milos *in this index*
Melpomene [Greek mythology]
 Muses M: 937
 Mythology *picture on* M: 980
Melqart [Phoenician god]
 Phoenicia (Religion) P: 394
Meltdown
 Nuclear energy (Hazards and safeguards) N: 587-588
Melting point [physics] M: 389
 Freezing point F: 510
 Heat (Changes in state) H: 153 *with diagram*
Melting pot
 Ethnic group E: 372
 Multiculturalism M: 918
 United States (Ancestry) U: 109-110
Meltzer, Milton [American author]
 Laura Ingalls Wilder Award (table) L: 121
 Regina Medal (table: 2000) R: 206
Melville, Herman [American author] M: 390 *with portrait*
 American literature (The romance) A: 418 *with portrait*; *picture on* A: 416

- Marquesas Islands M: 217
 Novel (The United States) N: 573
- Melville, Lake**
 Newfoundland and Labrador (Rivers and lakes)
 N: 370 *with map*
- Melville Island** [Arctic Ocean] M: 391
- Mem** [letter]
 M M: 1
- Member of the equation** [mathematics]
 Algebra (Statements and equations) A: 351
- Member of the Wedding, The** [book by McCullers]
 McCullers, Carson M: 335
- Membrane** [anatomy] M: 391
 Blood (Red blood cells) B: 408
 Cell (The cytoplasm) C: 329 *with diagrams*
 Mucus M: 909
 Pleura P: 573
- Membrane** [chemistry]
 Osmosis O: 865 *with diagrams*
- Membrane roof** [building construction]
 House (The roof) H: 382
- Membrane theory of nerve conduction** [physiology]
 Nervous system (How neurons carry impulses) N: 134-135
- Membranous croup** [disorder]
 Croup Ci: 1157
- Membranous labyrinth** [anatomy]
 Ear (The inner ear) E: 8
- Memal** [former name] See *Klaipeda in this index*
- Memel River** [Belarus] See *Neman River in this index*
- Memling** See *Memling, Hans in this index*
- Memling, Hans** [Flemish painter] M: 391
 Clothing *picture on* Ci: 700
- Memnon** [Greek mythology]
 Trojan War (The siege of Troy) T: 449
- Memoirs, 1925-1950** [book by Kennan]
 Kennan, George Frost K: 259
- Memoirs from Beyond the Grave** [book by Chateaubriand]
 Chateaubriand, François-René de C: 387
- Memoirs of a Dutiful Daughter** [book by Beauvoir]
 Beauvoir, Simone de B: 191
- Memoirs of a Midget** [book by De la Mare]
 De la Mare, Walter D: 95
- Memorial** [architecture] M: 391
 Sculpture (As monuments and memorials)
 S: 229
- Memorial Day** [holiday] M: 391
 Grand Army of the Republic G: 305
 Logan, John Alexander L: 423
 May M: 320
- Memorial Library**
 Notre Dame, University of (The campus)
 N: 551; *picture on* N: 552
- Memorial University of Newfoundland**
 Newfoundland and Labrador (Schools) N: 364
with picture
- Memory** [computer]
 See also *Memory chip in this index*
 Calculator C: 20
 Electronics (Digital circuits) E: 213
 Typewriter (Kinds of typewriters) T: 538
- Memory** [psychology] M: 392
 Alzheimer's disease A: 398
 Brain (In thinking and remembering) B: 555
 Learning disabilities (Types) L: 165
 Senility S: 300
- Memory B lymphocyte** [physiology]
 Disease (Immune responses) D: 231-232
 Immune system (The humoral immune response) I: 88-88a
- Memory card** [electronic device]
 Camera (Digital cameras) C: 83-84
- Memory chip** [electronic device]
 Computer (Parts of computers) Ci: 911
 Computer chip Ci: 924e
 Digital technology D: 203
- Memory T cell** [biology]
 Disease (Immune responses) D: 231-232
- Memphis** [ancient city] M: 394
 Cairo (History) C: 17
 Cleopatra's Needles Ci: 662b
 Egypt, Ancient (The land) E: 135-136 *with map*
- Memphis** [designers]
 Furniture (Postmodern design) F: 585; *picture on* F: 586
- Memphis** [Tennessee] M: 394 *with pictures and map*
 Tennessee (Reconstruction) T: 154 *with picture*
- Memphis Brooks Museum of Art**
 Memphis (Cultural life) M: 396
- Memphis Grizzlies** [team]
 Basketball (table) B: 150
- Memphis in May International Festival**
 Memphis (Recreation) M: 396
 Tennessee (Visitor's guide) T: 144
- Memphis Pink Palace Museum**
 Memphis (Cultural life) M: 396
- Man and Women** [book by Browning]
 Browning, Robert (Browning's poems) B: 646
- Men-at-arms** [army]
 Army (Armies in the Middle Ages) A: 727
- Men at Arms** [book by Waugh]
 Waugh, Evelyn W: 149
- Man in White** [play by Kingsley]
 Kingsley, Sidney K: 331
- Mena, Juan de** [Spanish author]
 Spanish literature (The 1400's) So: 758
- Menaechni** [play by Plautus]
 Plautus P: 570
- Menagerie**
 Circus (History) Ci: 562b-563
 Zoo (History) Z: 608
- Menai Strait**
 Telford, Thomas T: 129
- Menander** [Greek dramatist] M: 397
 Drama (New Comedy) D: 327 *with picture*
 Greek literature (Drama) G: 377
- Menaphon** [book by Greene]
 Greene, Robert G: 382
- Ménard, René** [French explorer]
 Michigan (French exploration and settlement)
 M: 508
 Wisconsin (Exploration and settlement)
 W: 365
- Menasci, Guido** [Italian librettist]
 Opera (*Cavalleria Rusticana*) O: 803
- Menchú, Rigoberta** [Guatemalan political leader] M: 397
 Nobel Prizes (Peace: 1992) N: 449
- Mencius** [Chinese philosopher] M: 397
 Confucianism (Early Confucianism) Ci: 936
- Mencken, H. L.** [American author] M: 397
 American literature (Satirists) A: 422
 Essay (Personal essays) E: 359
 Roaring Twenties (Cultural trends) R: 364
- Mendaña, Álvaro de** [Spanish explorer]
 Marquesas Islands M: 217
 Solomon Islands (History) So: 586
- Mende** [people]
 Sierra Leone (People) S: 451
- Mendel, Gregor Johann** [Austrian botanist]
 M: 398
 Botany (Later developments) B: 509
 Cell (Before 1900) C: 337
 Evolution (The synthetic theory) E: 432-433
 Genetics (Transmission genetics) G: 87
 Heredity H: 200; (Mendel's laws) H: 208
 Plant (How people have changed plants)
 P: 542
 Science (Scientific advances of the 1800's)
 S: 200-201; *picture on* S: 202
- Mendel Art Gallery and Civic Conservatory**
 [Saskatoon]
 Saskatchewan (Places to visit) S: 136
- Mendele the Bookseller** [Hebrew author] See *Abramovich, Shalom Jacob in this index*
- Mendeleev, Dmitri Ivanovich** [Russian chemist]
 M: 398
 Chemistry (Formation of the periodic table)
 C: 402
 Mendeleevium M: 398
 Scandium S: 171
 Science (Scientific advances of the 1800's)
 S: 200
- Mendeleevium** [element] M: 398
 Transuranium element T: 401
- Mendelian disease**
 Genetic testing (Genes associated with disease) G: 85-86
- Mendel's laws** [genetics]
 Heredity (Mendel's laws) H: 208
 Mendel, Gregor Johann (His work) M: 398
- Mendelsohn, Eric** [German architect] M: 399
with picture
- Mendelssohn, Felix** [German composer] M: 399
- Bach, Johann Sebastian (His works) B: 16
 Germany (Music) G: 153
 Hymn (Words and music) H: 474
 Overture O: 882
- Mendelssohn, Moses** [German philosopher]
 M: 400
 Jews (Emergence into freedom) J: 123
- Mendenhall Glacier**
 Alaska (Places to visit) A: 290; (Glaciers)
 A: 295 *with picture*
- Menderes, Adnan** [Turkish political leader]
 Turkey (After World War II) T: 511
- Mendes, Sam** [American director]
 Motion picture (Best achievement in directing: 1999) M: 862
- Mendes, Sergio** [Brazilian composer]
 Brazil (The arts) B: 576-577
- Mendez, Antonio** [American businessman]
 Sugar (Sugar from sugar cane) So: 961
- Mendez, Aparicio** [Uruguayan government official]
 Uruguay (Military government) U: 228
- Mendez, Diego** [Spanish explorer]
 Columbus, Christopher (The hard journey home) Ci: 863
- Méndez Montenegro, Julio César** [Guatemalan political leader]
 Guatemala (The mid-1900's) G: 417
- Mendicant orders** [religion]
 Friar F: 531
 Monasticism (Non-Christian monasticism)
 M: 701
- "Mending Wall"** [poem by Frost]
 Frost, Robert Lee (His poems) F: 543
- Mendota, Lake** [Wisconsin]
 Madison M: 30
- Mendoza, Alonso de** [Spanish explorer]
 La Paz L: 73
- Mendoza, Antonio de** [Spanish colonial official]
 Cabrillo, Juan Rodríguez C: 8
 Coronado, Francisco Vázquez de Ci: 1067
- Menephune**
 Fairy F: 10
 Mythology (Pacific Islands divinities) M: 982
- Menephune Fishpond** [Hawaii]
 Hawaii (Places to visit) H: 98
- Menelaus** [legendary figure] M: 400
 Helen of Troy H: 168
 Messenia M: 423
 Trojan War (The beginning of the war) T: 449
 Troy (The legendary Troy) T: 454
- Menelik I** [emperor of Ethiopia]
 Ethiopia E: 368
- Menelik II** [emperor of Ethiopia] M: 400
 Djibouti (History) D: 257
 Eritrea (History) E: 353
 Ethiopia (Menelik II) E: 371
- Menem, Carlos Saúl** [Argentine political leader]
 Argentina (Recent developments) A: 659
- Menéndez de Avilés, Pedro** [Spanish military leader] M: 400
 Florida (Exploration and Spanish settlement)
 F: 261
 Georgia (Exploration) G: 131
 Hispanic Americans (Exploration and settlement) H: 250
 Saint Augustine S: 30
- Menéndez y Pelayo, Marcelino** [Spanish author]
 Spanish literature (The Generation of 1898)
 So: 762
- Menes** [king of ancient Egypt]
 Egypt, Ancient (Beginnings) E: 142 *with picture*
 Memphis M: 394
 World, History of the (The Nile Valley) W: 424
- Meneses, Jorge de** [Portuguese colonial official]
 New Guinea (History) N: 207
- Meng Ke** [Chinese philosopher]
 Mencius M: 397
- Mengele, Josef** [Nazi war criminal] M: 400
- Mengistu Haile-Mariam** [Ethiopian political leader]
 Ethiopia (Military take-over) E: 371
- Meng-tzu** [book by Mencius]
 Mencius M: 397
- Mengzi** [book by Mencius]
 Mencius M: 397
- Menhaden** [fish] M: 400
 Fish *picture on* F: 153

- Menhir** [archaeology]
Megalithic monuments **M**: 383
- Ménière's disease**
Deafness (Diseases) **D**: 57
Ear (Diseases) **E**: 12
- Menilek II** [emperor of Ethiopia] See Menelik II
in this index
- Meninas, Las** [painting by Velázquez]
Painting (Composition) **P**: 35; (The Spanish masters) **P**: 64-65 *with picture*
Velázquez, Diego **V**: 295
- Meninges** [anatomy]
Brain (How the brain is protected) **B**: 552
Meningitis **M**: 401
- Meningitis** [disease] **M**: 401
Brain (Infectious diseases) **B**: 557
Deafness (Diseases) **D**: 57
Encephalitis **E**: 265
Headache (Secondary headache) **H**: 124-125
Nervous system (Disorders of the nervous system) **N**: 136
- Meningoencephalitis** [disease]
Encephalitis **E**: 265
- Meningomyelocele**
Spina bifida **S**: 792
- Meniscus cartilage** [anatomy]
Cartilage **C**: 263
- Menkaure** [king of ancient Egypt]
Pyramids (The pyramids of Giza) **P**: 917
- Menlo Park** [New Jersey]
Edison, Thomas Alva (The Wizard of Menlo Park) **E**: 78 *with picture*; (Honors) **E**: 82
- Menninger, Charles Frederick** [American psychiatrist]
Menninger Clinic **M**: 401
- Menninger, Karl Augustus** [American psychiatrist] **M**: 401
- Menninger, William Claire** [American psychiatrist] **M**: 401
- Menninger Clinic** **M**: 401
Topeka **T**: 332
- Menninger Management Institute**
Menninger Clinic **M**: 401
- Menninger School of Psychiatry and Mental Health Sciences**
Menninger Clinic **M**: 401
- Mennonite Heritage Village** [Manitoba]
Manitoba (Places to visit) **M**: 152 *with picture*
- Mennonites** [religious group] **M**: 402
Amish **A**: 433
Anabaptists **A**: 447
Kansas (The nation's breadbasket) **K**: 237; *picture on* **K**: 220
Pennsylvania Dutch **P**: 270
- Meno** [book by Plato]
Plato (The dialogues) **P**: 567; (Immortality of the soul) **P**: 568-569
- Menocal, Armando** [Cuban painter]
Cuba (The arts) **C**: 1172
- Menominee Indians** [American Indians] **M**: 402
Indian, American *picture on* **I**: 155
- Menopause** [physiology] **M**: 402
DES **D**: 153
Estrogen **E**: 364
Hormone replacement therapy **H**: 338
Menstruation **M**: 404
Osteoporosis (Causes) **O**: 867-868
Ovary **O**: 881
Reproduction, Human (The human reproductive system) **R**: 244-245
- Menorah** [symbol]
Hanukkah **H**: 55
- Menorca** [island, Mediterranean] See Minorca *in this index*
- Menotti, Gian Carlo** [Italian-American composer] **M**: 402
Opera (American opera) **O**: 800
- Men's movement**
Bly, Robert **B**: 426
- Menses**
Menstruation **M**: 404 *with diagram*
- Mensheviks** [Russian history] **M**: 403
Bolsheviks **B**: 449
Communism (Before 1917) **Ci**: 892
Lenin, V. I. (Beginnings of revolution) **L**: 192
Russia (Nicholas II) **R**: 551-552
- Menstrual cycle** See Menstruation *in this index*
- Menstrual period**
Menstruation **M**: 404 *with diagram*
Pregnancy (Confirming pregnancy) **P**: 734a
Premenstrual syndrome **P**: 755
- Menstruation** [physiology] **M**: 403 *with diagrams*
Breast **B**: 590
Endometriosis **E**: 272
Estrogen **E**: 364
Estrous cycle **E**: 364
Menopause **M**: 402
Pregnancy (Confirming pregnancy) **P**: 734a
Premenstrual syndrome **P**: 755
Reproduction, Human (The human reproductive system) **R**: 244-245
Sexuality (Biological factors) **S**: 337-338
Toxic shock syndrome **T**: 351
- Mental ability test**
Testing (Kinds of tests) **T**: 181
- Mental age**
Intelligence quotient (Calculating IQ) **I**: 319
- Mental development** See Developmental psychology *in this index*
- Mental healing** [religion]
New Thought **N**: 288
- Mental health**
Beers, Clifford Whittingham **B**: 212
Health (Elements of mental health) **H**: 126
Social work (Mental health) **S**: 558
- Mental hygiene, American Foundation for**
Beers, Clifford Whittingham **B**: 212
- Mental illness** **M**: 404 *with pictures*
Abnormal psychology **A**: 11
Brain (Brain chemistry and mental illness) **B**: 556; (Genetic disorders) **B**: 557-558
Clinical psychology (Psychotherapy and consultation) **Ci**: 681
Disabled **D**: 218
Dix, Dorothea Lynde **D**: 255
Homelessness (Current causes and conditions) **H**: 302
Huntington's disease **H**: 451
Hypnotism (Hypnotic phenomena) **H**: 478; (Uses of hypnotism) **H**: 478
Insanity **I**: 277
Introvert **I**: 353
Occupational therapy (Helping people with mental illness) **O**: 649
Psychiatry **P**: 845
Psychoanalysis **P**: 846
Senility **S**: 300
Special education (Children with emotional disturbances) **S**: 771
See also the list of *Related articles in the Mental Illness article*
- Mental imagery**
Imagination **I**: 79
- Mental retardation** **M**: 410
Autism (Causes) **A**: 942
Disabled **D**: 218
Down syndrome **D**: 316
Gaucher's disease **G**: 68
Intelligence quotient **I**: 319
Lesch-Nyhan syndrome **L**: 205
Phenylketonuria **P**: 357
Special education (Children with mental retardation) **S**: 770
Special Olympics **S**: 771
- Mental telepathy** See Telepathy *in this index*
- Mentalist**
Magician (Mentalist magic) **M**: 52
- Menteng** [district]
Jakarta (The city) **J**: 22
- Menthol** [chemical] **M**: 411
- Menthyl acetate**
Ester **E**: 360
- Mentor** [Greek mythology] **M**: 411
- Menuhin, Yehudi** [American violinist] **M**: 411
- Menzel, Jiri** [Czechoslovak director]
Motion picture (Movies in the 1960's) **M**: 871
- Menzies, Sir Robert Gordon** [Australian political leader] **M**: 411 *with portrait*
Australia (table) **A**: 925
- Menzies plaid**
Tartan *picture on* **T**: 47
- Meperidine** [medication]
Analgesic **A**: 448
- Mephistopheles** [literary figure] **M**: 411
Opera (Faust) **O**: 804
- Meprobamate** [drug]
Tranquilizer **T**: 370
- Mer de Glace** [glacier, France]
Glacier (Famous glaciers) **G**: 205
Mont Blanc **M**: 741
- Mera, Juan León** [Ecuadorian author]
Latin-American literature (Romanticism) **L**: 112
- Merak** [star]
North Star *picture on* **N**: 519
- Meramec Caverns** [Sullivan]
Missouri (Places to visit) **M**: 660 *with picture*
- Mercado Común del Sur** [organization] See Mercosur *in this index*
- Mercantile bill**
Bill of exchange **B**: 301
- Mercantilism** [economics] **M**: 411
Capitalism (History of capitalism) **C**: 195
Colonial life in America (Trade) **Ci**: 811
Colonialism (Colonial economic policies) **Ci**: 814
Economics (Early theories) **E**: 64
Physiocrats **P**: 444
Tariff (The first tariffs) **T**: 44
- Mercaptopurine** [drug]
Elion, Gertrude Belle **E**: 236
- Mercator, Gerardus** [Flemish geographer] **M**: 412
Atlas (History) **A**: 868
Map (Advances in European cartography) **M**: 183-184
- Mercator projection** [cartography]
Map **M**: 176; (Map projections) **M**: 182 *with diagram*; (Advances in European cartography) **M**: 183-184
Mercator, Gerardus **M**: 412
- Merced Canyon** [region, California]
Yosemite National Park (Yosemite Valley) **Y**: 570
- Merced River** [California]
Ribbon Falls **R**: 321
Yosemite National Park (Yosemite Valley) **Y**: 570
- Mercedes** [automobile]
Daimler, Gottlieb **D**: 5
Maybach, Wilhelm **M**: 327
- Mercedes-Benz** [automobile]
Automobile *pictures on* **A**: 967, **A**: 969
Daimler, Gottlieb **D**: 5
- Mercedinus** [month]
Calendar (The Romans) **C**: 30
- Mercenary** [soldier] **M**: 412
Army (Armies in the Middle Ages) **A**: 727
- Mercer, George** [American colonist]
Washington, George (Washington the man) **W**: 90
- Mercer, John Francis** [American political leader]
Maryland (table) **M**: 255
- Mercer, Johnny** [American lyricist] **M**: 412
- Mercerization** [industrial process]
Cellulose (Industrial uses) **C**: 341
Cotton (Finishing) **Ci**: 1091-1092
Sewing (Choosing the equipment, fabric, and pattern) **S**: 332
Textile (Finishing the fabric) **T**: 217
Thread **T**: 269
- Mercês** [church]
Belém **B**: 224d
- Merchandise Mart** [Chicago]
Air rights **A**: 200
Chicago (Downtown Chicago) **C**: 420-421
- Merchandising** [economics]
Clothing (Merchandising) **Ci**: 706
Retailing **R**: 264
- Merchant** [economics]
City (Economy) **Ci**: 580-581; (Economy) **Ci**: 584-585 *with picture*
Trade (Early trade) **T**: 363
- Merchant, Paul** [American author] See Ellison, Harlan *in this index*
- Merchant bank** See Investment bank *in this index*
- Merchant flag**
Flag (Flags of the sea) **F**: 208
- Merchant guild** [European history]
Guild (Merchant guilds) **G**: 428
- Merchant marine** **M**: 412
Maritime Administration **M**: 212
Ship **S**: 402; (Merchant fleets of other countries) **S**: 426
- Merchant Marine Academy, United States**
See United States Merchant Marine Academy *in this index*
- Merchant Marine Act** [1936]
Ship (The United States merchant marine) **S**: 425-426

Merchant of Venice, The [play by Shakespeare]
Shakespeare, William (*The Merchant of Venice*) S: 358

Merchiston, Laird of *See* Napier, John *in this index*

Mercia [ancient kingdom]
Egbert E: 115
Wales (Struggles against the Anglo-Saxons) W: 12

Mercier, Désiré Joseph Cardinal [Belgian religious leader] M: 413

Mercier, Honoré [Canadian political leader]
Quebec (table) Q: 29

Merck [company]
Manufacturing (table) M: 170

Mercosur [organization] M: 413
Common market Ci: 875
South America (International trade) So: 637

Mercuric fulminate [explosive]
Mercury (Compounds) M: 414

Mercurous sulfate [chemical]
Mercury (Compounds) M: 414

Mercury [element] M: 413 *with picture*
Cinnabar Ci: 557
Environmental pollution (Hazardous waste) E: 334-335
Thermometer (Thermal expansion thermometers) T: 254

Mercury [planet] M: 414 *with pictures*
Astronomy (How the planets move) A: 835
Evening star E: 423
Planet P: 507 *with pictures*
Transit T: 374

Mercury [Roman mythology] M: 416 *with picture*
See also Hermes *in this index*
Mythology (table) M: 980
Sculpture (European sculpture) S: 253-254 *with picture*

Mercury [sculpture by Giambologna]
Mercury picture on M: 417

Mercury [sculpture by Coysevox]
Sculpture (Form and treatment) S: 230-231

Mercury barometer
Barometer (Kinds of barometers) B: 115 *with diagram*
Torricelli, Evangelista T: 341

Mercury glass
Glass (Types of art glass) G: 221

Mercury program [space travel]
Cooper, Leroy Gordon, Jr. Ci: 1035
Glenn, John Herschel, Jr. (Early life) G: 226
Grissom, Virgil Ivan G: 396
Space exploration (Vostok and Mercury: The first human beings in space) So: 711 *with pictures*

Mercury-Redstone [rocket]
Space exploration picture on So: 698

Mercury Theater on the Air
Radio (The Golden Age of Broadcasting) R: 92-93

Mercury vapor lamp
Electric light (High-pressure gaseous-discharge lamps) E: 175

Mercutio [literary figure]
Shakespeare, William (*Romeo and Juliet*) S: 358

Mercy killing *See* Euthanasia *in this index*

Meredith, Edwin T. [American government official]
Agriculture, Department of (table) A: 161

Meredith, George [British author] M: 417
English literature (Later Victorian literature) E: 321

Meredith, James Howard [American social reformer] M: 417 *with portrait*
Kennedy, John Fitzgerald (Civil rights) K: 264-265
Mississippi (The mid-1900's) M: 644

Meredith, William M. [American government official]
Taylor, Zachary (table) T: 60
Treasury, Department of the (table) T: 407

Mer-en-re [king of ancient Egypt]
Embalming (Ancient embalming) E: 255

Meres, Francis [English author]
Shakespeare, William (The years of fame) S: 348

Merganser [bird] M: 417 *with picture*
Duck (Food) D: 375 *with picture*; (Sea ducks) D: 376

Mergenthaler, Ottmar [German-American inventor] M: 417
Linotype (History) L: 339
Type (History) T: 537

Merger [economics] M: 418
Antitrust laws A: 560
Bank (Diversification and mergers) B: 95
Business (Recent developments) B: 726
Conglomerate Ci: 938
United States, History of the (Monopolies) U: 178

Meriam Report [U.S. history]
Indian, American (In the United States) I: 179

Mérida [Mexico]
Yucatán Peninsula Y: 575 *with map*

Meridian [geography]
Greenwich Meridian G: 386
International Date Line I: 339 *with map*
Longitude L: 451; *diagrams on* L: 452
Map (Geographic grids) M: 178; *diagram on* M: 180
Time (Local and standard time) T: 288-289

Meridian [philosophy]
Acupuncture A: 31

Mérimée, Prosper [French author] M: 418
Opera (*Carmen*) O: 802

Merina [kingdom]
Madagascar M: 26; (History) M: 28-29

Mering, Joseph von [German physician]
Insulin (History) I: 308

Merino [animal]
Sheep (Fine-wooled sheep) S: 381
Wool (Sources of wool) W: 399; (History) W: 401

Merisi, Michelangelo *See* Caravaggio, Michelangelo Merisi da *in this index*

Meristem [botany]
Root (The root tip) R: 474 *with diagram*

Meristematic cell [botany]
Plant (Germination) P: 536

Meristematic tissue [botany]
Tissue (Plant tissues) T: 299

Merit badge
Boy Scouts (Boy Scouting) B: 537-539

Merit-pay
Education (Who should teach?) E: 107
Teaching (Rewards of teaching) T: 69

Merit system
Civil service Ci: 612

Merit Systems Protection Board
Civil service (Federal civil service) Ci: 612-613

Meritor Savings Bank v. Vinson [U.S. history]
Supreme Court of the United States (table) So: 1002

Merleau-Ponty, Maurice [French psychologist]
Phenomenology P: 357

Merlin [bird]
Falcon (Other North American falcons) F: 14; *picture on* F: 13

Merlin [legendary figure] M: 418
Arthur, King A: 757
Round Table (Origin) R: 490-491

Merlin [book by Boron]
Excalibur E: 435

Merlin [poem by Robinson]
Robinson, Edwin Arlington R: 368

MERLIN [telescope]
Jodrell Bank Observatory J: 130

Merlin, Joseph [Belgian inventor]
Roller skating R: 402

"Merlin and the Gleam" [poem by Tennyson]
Tennyson, Lord (His poems) T: 169-170

Merlon [architecture]
Castle (Structure) C: 280

Mermaid [legendary creature] M: 418

Mermaid [ship]
Brig picture on B: 608

Mermaid Tavern [English history]
Club Ci: 714
Jonson, Ben J: 160

Mermaids' purse [zoology]
Skate S: 479

Merman [legendary creature]
Mermaid M: 418

Merodach-Baladan I [king of Babylonia]
Sennacherib S: 300

Meroc [kingdom] *See* Kush *in this index*

Meron, Mount
Israel (The Judeo-Galilean Highlands) I: 482

Merope [Greek mythology]

Orion O: 856
Sisyphus S: 477

Meroplankton
Plankton P: 515

Merovingian dynasty [French history] M: 418
France (Victory of the Franks) F: 471
Franks F: 494

Merriam, Eve [American author]
Literature for children (The middle and late 1900's) L: 364

Merriam, Frank F. [American political leader]
California (table) C: 59

Merriam, William R. [American political leader]
Minnesota (table) M: 602

Merrick, Joseph [British public figure]
Neurofibromatosis N: 152

Merrifield, Robert Bruce [American chemist]
Nobel Prizes (Chemistry: 1984) N: 443

Merrill, Frank [American general]
Merrill's Marauders M: 419

Merrill, James [American poet] M: 418
American literature (Literature since 1945) A: 423

Merrill, Robert [American singer] M: 419

Merrill, Samuel [American political leader]
Iowa (table) I: 391

Merrill, Steve [American political leader]
New Hampshire (table) N: 223

Merrill's Marauders [U.S. history] M: 419

Merrimack *See* Monitor and Merrimack *in this index*

Merrimack River [New Hampshire-Massachusetts] M: 419
Massachusetts (Rivers and lakes) M: 284
New Hampshire (Rivers and lakes) N: 220

Merrimack Valley [region, New England]
New Hampshire (Visitor's guide) N: 216; (Land regions) N: 218

Merriman, Brian [Irish poet]
Irish literature (Modern works in Gaelic) I: 431

Merritt, Ezekiel [American frontiersman]
California (The Mexican War) C: 60

Merritt, Lake [lake, California]
Oakland (Description) O: 637 *with picture*

Merritt, Leonidas [American businessman]
Mesabi Range M: 421
Minnesota (Industrial development) M: 604

Merritt Island [Florida]
Kennedy Space Center K: 271 *with map*

Merry-go-round M: 419

Merry Monarch [nickname, Kalakaua]
Hawaii (Growth of constitutional government) H: 106-108

Merry Widow, The [film]
Lubitsch, Ernst L: 513

Merry Widow, The [opera by Lehár]
Lehár, Franz L: 185

Merry Wives of Windsor, The [play by Shakespeare]
Shakespeare, William (*The Merry Wives of Windsor*) S: 361

Mersenne, Marin [French mathematician]
Sound (The study of waves) So: 605

Mersey, River [England] M: 419
Liverpool L: 395

Mersey River [Nova Scotia]
Nova Scotia (Rivers and lakes) N: 562

Merten, Lauri [American golfer]
Golf (U.S. Women's Open) G: 265

Merton, Robert Cox [American economist]
Nobel Prizes (Economics: 1997) N: 449

Merton, Robert King [American sociologist]
M: 419
Communication (The effects of media) Ci: 887

Merton, Thomas [Roman Catholic monk]
M: 419

Merv [region, Turkmenistan] M: 420

Merwin, John D. [American government official]
Virgin Islands (Progress under the United States) V: 397

Merwin, W. S. [American poet] M: 420

Merychippus [extinct animal]
Horse (Origins of the horse) H: 360 *with picture*
Prehistoric animal picture on P: 740

Merz [art]
Schwitters, Kurt S: 190

Merz Drawing [collage by Schwitters]

- Collage *picture on* Ci: 773
 Painting (Dadaism) P: 80-81
- Merzbauten** [art]
 Schwitters, Kurt S: 190
- Mesa** [geography] M: 420 *with picture*
 Desert (Desert land and climate) D: 156
 Oklahoma *picture on* O: 724
 South Dakota *picture on* So: 665
 United States, History of the *picture on* U: 151
- Mesa** [city, Arizona] M: 420
- Mesa Central** [region of Mexico]
 Mexico (The Plateau of Mexico) M: 460 *with picture*
- Mesa del Norte**
 Mexico (The Plateau of Mexico) M: 460-461
- Mesa Falls**
 Idaho (Rivers, waterfalls, springs, and lakes) I: 38
- Mesa Verde National Park** [Colorado] M: 420
 Anasazi (History) A: 448a
 Colorado (Places to visit) Ci: 836 *with picture*
 National Park System (table: National parks) N: 48
- Mesabi Range** [hills, Minnesota] M: 420
 Hibbing H: 221
 Minnesota (Industrial development) M: 604
 Taconite T: 5
- Mescal** [drink]
 Century plant C: 359
- Mescaline** [drug] M: 421
 Brain (How drugs affect brain chemistry) B: 556
 Drug abuse (Hallucinogenic drugs) D: 362; (table: Some commonly abused drugs) D: 363
 Hallucinogenic drug H: 26
- Meselson, Matthew S.** [American geneticist]
 Heredity (The chemistry of genes) H: 209
- Mesencephalon** [anatomy]
 Yawning Y: 553
- Meseta** [region, Portugal-Spain]
 Portugal (Land regions) P: 690
 Spain (The Meseta) So: 740 *with picture; picture on* So: 743
- Meseta Central** [region]
 Costa Rica (The Central Highlands) Ci: 1082 *with picture*
- Mesha** [king of the Moabites]
 Moabite stone M: 681
 Jordan (Early days) J: 164
- Meshach** [Biblical figure]
 Daniel, Book of D: 33
- Meshed** [city, Iran] M: 421
- Meskill, Thomas J.** [American political leader]
 Connecticut (table) Ci: 967
- Mesmer, Franz Anton** [Austrian physician]
 M: 421
 Hypnotism (Mesmerism) H: 479
- Mesmerism**
 Hypnotism (Mesmerism) H: 479
 Mesmer, Franz Anton M: 421
- Mesocarp** [botany]
 Fruit (How botanists classify fruits) F: 546-548
- Mesocyclone**
 Tornado (The story of a tornado) T: 333-334; (Forecasting tornadoes) T: 334
- Mesoderm**
 Coelom Ci: 753
- Mesohippus** [extinct animal]
 Horse (Origins of the horse) H: 360 *with picture*
- Mesolithic Period** [anthropology]
 Prehistoric people (The first human beings) P: 745
 Stone Age So: 909
- Meson** [atomic particle] M: 421
 Hadron H: 4
 Physics (Uncovering the secrets of the atom) P: 442
 Quark Q: 7
 Subatomic particle (Composite particles) So: 937
 Yukawa, Hideki Y: 581
- Mesonero Romanos, Ramón de** [Spanish author]
 Spanish literature (The 1800's) So: 761-762
- Mesopause** [atmosphere]
 Air (The mesosphere) A: 173 *with diagram*
 Mesosphere M: 422
- Mesopotamia** [ancient region] M: 421 *with map*
 Agriculture (The Middle East) A: 155 *with picture*
 Architecture (Mesopotamian architecture) A: 611
 Babylon (The Old Babylonian Empire) B: 11
 Biology *picture on* B: 318
 Clothing (Ancient times) Ci: 696-697 *with pictures*
 Glass (Early times) G: 217-218
 Invention (The first civilizations) I: 358
 Iraq (Early days) I: 413
 Jews (Beginnings) J: 120
 Library (Ancient libraries of clay) L: 257
 Sculpture (Middle Eastern) S: 233
 Slavery (Ancient times) S: 501
 Transportation (The first great civilizations) T: 386
 Water (Water and civilization) W: 132
- Mesopotamia** [region]
 Argentina (Northern Argentina) A: 652-653 *with map; Agriculture* A: 655
- Mesoscale systems** [weather]
 Weather (Weather systems) W: 158; (Mesoscale and microscale systems) W: 162
- Mesosphere** [atmosphere] M: 422
 Air (The mesosphere) A: 173 *with diagram*
- Mesothelioma** [disease]
 Asbestos (Hazards of asbestos) A: 765-766
- Mesozoic Era** [geology]
 Earth (The Mesozoic Era) E: 27 *with pictures; (table)* E: 30; *pictures on* E: 29
 Dinosaur D: 206a
 Forest (Later forests) F: 398
 Plant (Early plants) P: 540-541
 Prehistoric animal (The world of prehistoric animals) P: 736; (The Age of Reptiles) P: 737 *with picture; (The Age of Mammals)* P: 740
 Reptile (The evolution of reptiles) R: 252
- Mesplet, Fleury** [French printer]
 Quebec (Communication) Q: 28
- Mesquite** [shrub] M: 422 *with picture*
 Tree *pictures on* T: 422
- "Message to Garcia, A"** [essay by Hubbard]
 García Inguéz, Calixto G: 29
- Messaggero, Il** [newspaper]
 Rome (Economy) R: 430
- Messenger** [horse]
 Harness racing (Harness horses) H: 63
- Messenger** [occupation]
 Mercury M: 416
 Office work (Distributing information) O: 677
 Postal services (Ancient times) P: 703
- Messenger RNA** [genetics]
 Cell (Producing proteins) C: 333-334 *with diagram*
 Heredity (How proteins are made) H: 206-208
 RNA R: 357
- Messenia** [department, Greece] M: 423 *with maps*
- Messerschmitt** [airplane]
 Aircraft, Military (World War II [1939-1945]) A: 205 *with picture*
 Airplane (During World War II [1939-1945]) A: 238; *picture on* A: 235
 Aviation (World War II [1939-1945]) A: 990
- Messiaen, Olivier** [French composer] M: 423
 Classical music (Atonal music) Ci: 649-650
- Messiah** [music by Handel]
 Handel, George Frideric (His work) H: 42
 Classical music (Oratorios) Ci: 644
 Oratorio O: 818
- Messiah** [religion] M: 423
 Christianity (Beliefs) C: 524
 David D: 45
 Jesus Christ J: 104; (The early Christians) J: 109
 Judaism (The Messiah) J: 179
 Malachi, Book of M: 95
- Messiah, The** [poem by Klopstock]
 German literature (The Storm and Stress movement) G: 140
- Messianic Age** [Judaism]
 Messiah M: 423
- Messier, Charles** [French astronomer] M: 423
 Astronomy (Discovering other galaxies) A: 848
- Messier Catalog** [book]
 Astronomy (Discovering other galaxies) A: 848
- Messina** [Italy] M: 424
- Messini** [Greece]
 Messenia M: 423
- Messmer, Otto** [American cartoonist]
 Animation (Pioneers of American animation) A: 514
- Mestizo** [people] M: 424
 Argentina (Ancestry) A: 648 *with picture*
 Bolivia (Population and ancestry) B: 443; (Colonial rule) B: 446
 Chile (Ancestry) C: 460
 Colombia (Ancestry) Ci: 779
 El Salvador (Ancestry) E: 249
 Hispanic Americans (Who are the Hispanic Americans?) H: 245
 Indian, American (In Latin America) I: 178
 Latin America (Ancestry) L: 94-95 *with picture; (The beginnings of colonial unrest)* L: 106-107
 Mexico M: 448; (Ancestry) M: 451; (Spanish rule) M: 470
 Mexico City (People) M: 476b
 Peru (Ancestry) P: 307; (Ways of life) P: 309
 Uruguay (People) U: 223
- Mestizo music**
 Latin America (Music) L: 102
- Mestral, Georges de** [Swiss engineer]
 Velcro V: 296
- Mestre** [Italy]
 Venice (The people) V: 307; (Economy) V: 307-308
- Meštrović, Ivan** [Croatian sculptor] M: 424
- Metabolism** [physiology] M: 424
 Biochemistry (Biochemical research) B: 310
 Cell (Metabolic diseases) C: 336
 Disease (Metabolic diseases) D: 229
 Fast F: 52
 Goiter G: 248
 Hormone (Metabolic hormones) H: 335
 Life (Metabolism) L: 275
 Potassium P: 710
- Metacarpal bone** [anatomy]
 Frog *picture on* F: 537
 Hand (Parts of the hand) H: 40 *with diagram*
 Human body *diagram on* H: 422
 Wrist *diagram on* W: 510
- Metacomet** [American Indian chief] See Philip, King in this index
- Metadihydroxybenzene** [chemical]
 Resorcinol R: 259
- Metagenes** [Greek architect]
 Seven Wonders of the Ancient World (The Temple of Artemis at Ephesus) S: 325
- Metal** M: 425
 See also Alloy; Scrap metal in this index
 Bonderizing B: 455
 Composite materials Ci: 904
 Ductility D: 377
 Electricity (Conductors and insulators) E: 193 *with diagram*
 Element, Chemical *diagram on* E: 221
 Malleability M: 110
 Materials (Metals and alloys) M: 300d
 Metal fatigue M: 426
 Metallurgy M: 426
 Plastics (To replace metals) P: 555
 Prehistoric people (The end of prehistoric times) P: 753
 Rare earth R: 144
 See also the list of Related Articles in the Metal article
- Metal deactivator**
 Gasoline (Gasoline blends and additives) G: 61-62
- Metal del Diablo** [novel by Céspedes]
 Bolivia (The arts) B: 445
- Metal detector** M: 425 *with picture*
- Metal drill**
 Drill (Metal drills) D: 348
- Metal extrusion**
 Extrusion E: 459
- Metal fatigue** M: 426
- Metal forming operations**
 Machine tool M: 19
- Metal halide lamp**
 Electric light (High-pressure gaseous-discharge lamps) E: 175 *with picture*
- Metal hydride battery** [electricity]
 Battery (Secondary batteries) B: 170-171
- Metal master** [recording]
 Phonograph (How phonograph records are made) P: 401
- Metal oxide semiconductor field effect transistor**
 Transistor (How transistors work) T: 373 *with diagram*
- Metal stamping** [manufacturing]
 Automobile (Manufacturing) A: 957
- Metal type** [printing]
 Type T: 536 *with picture*
- Metallic bond**
 Materials (Physical bonds) M: 301
- Metallic fiber**

- Fiber (Synthetic fibers) F: 87-88
 Textile (Manufactured fibers) T: 213-214
- Metallic luster** [physical property]
 Mineral (Luster) M: 566-567
- Metallography** [metallurgy] M: 426
- Metallurgical coke**
 Coke Ci: 759
- Metallurgical engineering**
 Metallurgy (Careers in metallurgy) M: 427
 Mining (The mining industry) M: 577-578
- Metallurgy** M: 426
 Geology (The Renaissance) G: 98
 Metallography M: 426
See also the list of Related Articles in the Metallurgy article
- Metalmark** [entomology]
 Butterfly (Metalmarks) B: 736 *with pictures*
- Metalworking**
 Antique (Metalwork) A: 558
 Brass (Making brass) B: 565-566
 Forging F: 409
 Indian, American (Metalwork) I: 145 *with picture*
 Industrial arts (Industrial arts courses) I: 242-243
 Islamic art (Metalware) I: 470
 Machine tool M: 17 *with pictures*
 Sculpture (China) S: 238
 Tool (Metalworking tools) T: 331
- Metamorphic rock** [geology] M: 428
 Asbestos (Sources of asbestos) A: 765
 Earth (Earth's rocks) E: 20-21 *with picture*
 Gem (Sources of gems) G: 77-79
 Gneiss G: 238
 Marble M: 191
 Mountain (Volcanic mountains) M: 892
 Rock R: 372 *with pictures*
 Serpentine S: 318
- Metamorphism** [geology] M: 428
See also Metamorphic rock in this index
- Metamorphoses** [book by Apuleius]
 Apuleius, Lucius A: 578
 Latin literature (The Imperial Period) L: 116
 Novel (Ancient Greek and Roman narratives) N: 572
- Metamorphoses** [book by Ovid]
 Ovid O: 882
 Arethusa A: 645
 Latin literature (The Augustan Age) L: 116
 Narcissus N: 20
 Pygmalion P: 914
- Metamorphosis** [biology] M: 428 *with pictures*
 Amphibian (Reproduction) A: 440 *with pictures*
 Bee B: 203 *with pictures*
 Beetle (The life cycle of beetles) B: 216 *with picture*
 Butterfly (The pupa) B: 741; *pictures on* B: 740
 Chrysalis C: 539
 Cocoon Ci: 747
 Fly (The life of a fly) F: 310 *with pictures*
 Frog (Tadpoles) F: 539 *with picture*
 Insect (Incomplete metamorphosis) I: 293 *with pictures*; (Complete metamorphosis) I: 293 *with pictures*
 Larva L: 78
 Moth (The life cycle of moths) M: 838-839 *with pictures*
 Pupa P: 903
 Salamander (The life of a salamander) S: 60
 Tadpole T: 6
 Toad (The life of a toad) T: 303-304
- Metamorphosis** [sculpture by Noguchi]
 Noguchi, Isamu *picture on* N: 451
- Metaphase** [biology]
 Cell (Mitosis) C: 330
- Metaphor** [language] M: 429
 Poetry (Imagery) P: 595
 Shakespeare, William (Rhetoric) S: 367
 Slang (Figures of speech) S: 500
- Metaphysical Journals** [book by Marcell]
 Marcell, Gabriel M: 193
- Metaphysical poets** [English literature] M: 429
 Cowley, Abraham Ci: 1113
 Donne, John D: 308
 English literature (Metaphysical and Cavalier poets) E: 317
 Herbert, George H: 197
 Marvell, Andrew M: 236
 Poetry (Renaissance poetry) P: 596
- Metaphysics** [book by Aristotle]
 Aristotle (Metaphysics) A: 664
- Metaphysics** [philosophy] M: 430
 Aristotle (Metaphysics) A: 664
- Idealism I: 46
 Materialism M: 300b
 Philosophy (Metaphysics) P: 383; (Ancient philosophy) P: 386-387
- Metaphysis** [anatomy]
 Bone (Structure of the bones) B: 456 *with diagram*
- Metaprotrenol** [drug]
 Bronchodilator B: 636
- Metasoma**
 Ant (The metasoma) A: 522 *with picture*
- Metastasio, Pietro** [Italian author]
 Italian literature (The baroque period and the Age of Reason) I: 494-495
- Metastasis** [biology]
 Cancer (How damaged genes cause cancer) C: 169 *with picture*
- Metatarsal** [anatomy]
 Foot (The bones) F: 352 *with diagram*
 Frog *picture on* F: 537
- Metatarsal arch** [anatomy]
 Foot (The arches) F: 352
- Metate** [sculpture]
 Sculpture (Later Indian sculpture) S: 243 *with picture*
- Metaxas, Joannes** [Greek political leader]
 Greece (Between world wars) G: 363
- Metcalf, Ralph** [American political leader]
 New Hampshire (table) N: 223
- Metcalf, Victor H.** [American government official]
 Commerce, Department of (table) Ci: 871
 Roosevelt, Theodore (table) R: 470
- Metcalfe, Charles Theophilus** [British statesman] M: 430
- Metcalf, Thomas** [American political leader]
 Kentucky (table) K: 290
- Metchnikoff, Élie** [Russian biologist] M: 431
 Immune system (Early discoveries) I: 88d
- Meteor** [astronomy] M: 431 *with pictures*
 Fireball F: 133
 Solar system (Meteoroids) So: 581
- Meteor** [sculpture by Giorgi]
 Latin America *picture on* L: 102
- Meteor** [ship]
 Atlantic Ocean (The beginnings of scientific oceanography) A: 867
- Meteor Crater** [Arizona] M: 432
 Arizona (Places to visit) A: 678
 Meteor *picture on* M: 431
 Seven Natural Wonders of the World (Meteor Crater) S: 324b *with picture*
- Meteor shower**
 Meteor (Meteor showers) M: 431
- Meteorite** [astronomy]
 Meteor (Meteorites) M: 431 *with picture*
 Asteroid (Asteroid collisions) A: 824
 Astronomy (Direct sampling) A: 846
 Earth (Earth's interior) E: 23
 Exobiology E: 438
 Iron and steel (The Iron Age) I: 450
 Life (The search for life on other planets) L: 279-280
 Mars (Possibility of life) M: 226c
 Seven Natural Wonders of the World (Meteor Crater) S: 324b
 Tektite T: 88
- Meteoroid** [astronomy]
 Meteor M: 431 *with picture*
 Mars (Craters and impact basins) M: 226
 Solar system (Meteoroids) So: 581
- Meteorologica** [book by Aristotle]
 Meteorology M: 432
- Meteorological Organization, International**
 World Meteorological Organization W: 451
- Meteorological rocket**
 Rocket (Atmospheric research) R: 386 *with picture*
- Meteorologist**
 Meteorology M: 432
 Careers (Life, physical, and social sciences) C: 225-226
 Computer *picture on* Ci: 919
 Tornado (Forecasting tornadoes) T: 334; (Studying tornadoes) T: 335
 Weather W: 156; (Mathematical models) W: 166; (Careers in weather) W: 170
- Meteorology** [weather] M: 432
See also Weather in this index
 Balloon (Scientific uses) B: 59
 Chaos C: 376
 Geophysics G: 106
 Lamarck, Chevalier de L: 50
 Radiosonde R: 99
- Rain gauge R: 127
 Weather W: 156; (Measuring the weather) W: 162; (Weather forecasting) W: 164
 Weather vane W: 172
- Meter** [music]
 Music (table) M: 954
- Meter** [poetry] M: 433
 Poetry (Rhythm and meter) P: 591-592; (table) P: 594
- Meter** [unit of length] M: 433
 Metric system (Advantages of the metric system) M: 436-437; (Structure of the metric system) M: 437; (The metric system at a glance) M: 438 *with pictures*
 Weights and measures (Measurement systems) W: 184; (Comparison of measurement systems) W: 185
- Meter, Electric**
 Electric meter E: 176 *with pictures*
- Meter, Gas** *See* Gas meter *in this index*
- Meter, Treaty of the** [1875]
 Metric system (Evolution of the metric system) M: 441
 Weights and measures (The metric system) W: 187
- Metered-dose inhaler** [medicine]
 Bronchodilator B: 636
- Metered postage**
 Postal Service, United States (Other services) P: 700
- Metering pattern** [photography]
 Camera (Automatic controls) C: 80-81
- Methadone** [drug] M: 433
 Drug abuse (Heroin) D: 362
- Methamphetamine** [drug] M: 433
 Amphetamine A: 439
 Drug abuse (Abuse of illegal drugs) D: 362
 Ecstasy E: 66
- Methane** [gas] M: 434
 Coal (Mine safety) Ci: 729
 Gas [fuel] (The composition of natural gas) G: 57
 Greenhouse effect (The natural greenhouse effect) G: 382-383
- Methane hydrate** *See* Gas hydrate *in this index*
- Methanol** [chemical] M: 434
 Alcohol (Methanol) A: 335
 Hydrogen (Hydrogen compounds) H: 469
- Methedrine** [drug] *See* Methamphetamine *in this index*
- Methemoglobin** [physiology]
 Hemoglobin H: 182
- Methionine** [amino acid]
 Sulfur So: 966
- Method acting** M: 434
See also Stanislavski method in this index
 Brando, Marlon B: 563
 Moscow Art Theater M: 828
- "Method of Reaching Extreme Altitudes, A"** [paper by Goddard]
 Goddard, Robert Hutchings G: 244
- Methodist Episcopal Church** [religious group]
 Asbury, Francis A: 766
 Methodists (Early history) M: 434-435
 Wesley, John (Formation of the Methodist Church) W: 198
- Methodist New Connexion** [religious group]
 Methodists (Social change and division) M: 435
- Methodist Protestant Church** [religious group]
 Methodists (Social change and division) M: 435
- Methodists** [religious group] M: 434
 Arminius, Jacobus A: 719
 Asbury, Francis A: 766
 Protestantism (The Methodist movement [the 1700's]) P: 835
 United Methodist Church U: 75
 Wesley, Charles W: 197
 Wesley, John (Early years) W: 197
- Methodius, Saint** [Greek missionary]
 Alphabet (The Cyrillic alphabet) A: 383
- "Methought I Saw My Late Espoused Saint"** [poem by Milton]
 Milton, John (Middle years) M: 557
- Methuen Treaty** [1703]
 Portugal (A brief revival) P: 694
- Methuselah** [Biblical figure] M: 435
- Methuselah** [tree]
 Bristlecone pine B: 610 *with picture*
- Methyl alcohol** *See* Methanol *in this index*
- Methyl mercury** [chemical]
 Mercury (Mercury in the environment) M: 414
- Methyl salicylate** [chemical]

- Salicylic acid S: 66
Methyl-tert-amyl ether [chemical]
 Gasoline (Gasoline blends and additives)
 G: 61-62
Methyl-tert-butyl ether [chemical]
 Gasoline (Gasoline octane ratings) G: 61
Methylbenzene
 Toluene T: 324
Methylmorphine [drug] See Codeine in this index
Methylphenidate [drug] See Ritalin in this index
Metis [Greek mythology]
 Athena A: 853
Métis [people] M: 435
 Alberta picture on A: 330
 Canada, History of (New provinces) C: 147,
 (The North West Rebellion) C: 148
 Dumont, Gabriel D: 383
 Indian, American (In Canada) I: 178
 Macdonald, Sir John Alexander (Threats to
 Canadian unity) M: 10
 North West Rebellion N: 519
 Northwest Territories (People) N: 532,
 (Government) N: 533
 Red River Rebellion R: 189
 Saskatchewan (Population) S: 132; (Métis and
 Indian troubles) S: 146
Metis [satellite]
 Jupiter (Satellites) J: 198
Métis National Council
 Indian, American (In Canada) I: 178b
Metonymy [language] M: 435
 Slang (Figures of speech) S: 500
Metoprolol [drug]
 Beta-blocker B: 274
Metre See Meter [unit of length] in this index
Metric Conversion Act [1975]
 Weights and measures (The metric system)
 W: 187
Metric system [measurement] M: 436 with pic-
 tures
 International Bureau of Weights and Measures
 I: 338
 Weights and measures (Measurement sys-
 tems) W: 184; (Comparison of measure-
 ment systems) W: 185; (The metric sys-
 tem) W: 187
 See also the list of Related Articles in the
 Metric System article
Metric ton [unit of measure]
 Metric system (Non-SI metric units) M: 440;
 (The metric system at a glance) M: 438-
 439 with picture
 Ton T: 327
Metrical modulations [music]
 Carter, Elliott C: 251
Metro [transportation]
 Moscow (Transportation) M: 826 with picture
 Washington, D.C. (Transportation) W: 84
Méto [transportation]
 Montreal (Transportation) M: 775-776; map on
 M: 771; picture on M: 770
 Paris (Economy) P: 165
Metrodome [sports stadium]
 Minneapolis picture on M: 580
Metro-Goldwyn-Mayer [company]
 Goldwyn, Samuel G: 259
 Motion picture (Movies become big business)
 M: 866
Metroliner
 Railroad (Intercity trains) R: 105-106
 Transportation (Improvements in public trans-
 portation) T: 398
Metronome [instrument] M: 442 with picture
Metronome mark
 Music (Indicating time values) M: 953-955
Metropolis [film by Lang]
 Lang, Fritz L: 60
 Germany picture on G: 154
Metropolitan [title] M: 442
Metropolitan area M: 442 with map
 City (The 100 largest urban centers in the
 world) Ci: 576; (Metropolitan cities)
 Ci: 588; (Governmental problems) Ci: 592
 Latin America (City life) L: 96
 Local government (Conflicts in authority)
 L: 408
 Megalopolis M: 383
Metropolitan Area Church Board
 Columbus (People) Ci: 854-855
Metropolitan Assembly [government]
 Tokyo (Government) T: 318
Metropolitan city
 City (Metropolitan cities) Ci: 588

- Metropolitan correctional center**
 Prison (Types of correctional institutions)
 P: 805
Metropolitan Council
 Toronto (Growth and federation) T: 340a
Metropolitan District Commission
 Boston (Government) B: 502-503
Metropolitan Life Insurance Company
 Insurance (table) I: 315
Metropolitan Museum of Art [New York City]
 M: 444
 New York (Museums) N: 297
 New York City (Museums) N: 338 with picture
Metropolitan Opera [New York City]
 Levine, James L: 219
 Lincoln Center for the Performing Arts L: 327
 New York picture on N: 302
 Opera O: 791 with picture
Metropolitan Statistical Area
 Metropolitan area M: 442 with map
**Metropolitan Water Reclamation District of
 Greater Chicago**
 Chicago Sanitary and Ship Canal C: 438
Metropolitan Waterfront Plan
 Toronto (Urban renewal) T: 340a
Metropolitana [subway]
 Rome (Economy) R: 430
Metrozoo [Miami]
 Florida (Places to visit) F: 252
Mets, New York See New York Mets in this
 index
Metternich [Austrian statesman] M: 444
 Aix-la-Chapelle, Congress of A: 253
 Austria (Metternich and revolution) A: 938
Metz, Battle of [1870]
 Franco-Prussian War (Progress of the war)
 F: 483
Metz, Christian [German religious leader]
 Amanites A: 400
Metzinger, Jean [French painter]
 Cubism Ci: 1181
Meung, Jean de [French poet]
 French literature (Narrative poetry) F: 518-519
Meuse River [Europe] M: 445
 Netherlands (The land) N: 144 with map
MeV [unit of measure]
 Particle accelerator (How accelerators work)
 P: 184
Mevacor [drug] See Lovastatin in this index
Mexica [people]
 Aztec A: 999
Mexicali [Mexico] M: 445
 Mexico (The Pacific Northwest) M: 460
**Mexican American Cultural Exchange
 Institute**
 San Antonio (Cultural life) S: 85
Mexican American Political Association
 Hispanic Americans (Effects of World War II)
 H: 252
Mexican Americans [people]
 See also Hispanic Americans in this index
 American GI Forum of the United States
 A: 411
 Cinco de Mayo Ci: 557
 Cortina, Juan Nepomuceno Ci: 1074
 Día de los muertos D: 178
 Hispanic Americans H: 244 with pictures; (The
 early 1900's) H: 252; (Mexican immigra-
 tion) H: 253
 Los Angeles (Ethnic groups) L: 463 with pic-
 ture
 Minority group (Hispanic Americans) M: 610
 Sánchez, George Isidore S: 106
 Texas (Population) T: 188
Mexican bean beetle See Bean beetle in this
 index
Mexican burrowing snake
 Snake (The Mexican burrowing snake) S: 535
Mexican Cession [1848]
 Mexican War (The peace treaty) M: 447 with
 map
 United States, History of the (Manifest des-
 tiny) U: 167 with map
Mexican dipper [bird]
 Dipper D: 217 with picture
Mexican eagle [bird]
 Caracas C: 201
Mexican fruit fly
 Fruit fly F: 549
Mexican hairless [dog] M: 445
Mexican hat dance
 Mexico (Music) M: 459-460 with picture
Mexican onyx
 Onyx O: 788

- Mexican Revolution** [1910-1920]
 Mexico (The Revolution of 1910) M: 472 with
 picture; picture on M: 459
 Carranza, Venustiano C: 248
 Hispanic Americans (The early 1900's) H: 252
 Madero, Francisco Indalecio M: 30
 Mexico City (Revolution and growth) M: 478
 Wilson, Woodrow (Crisis in Mexico) W: 323
Mexican territory [U.S. history]
 United States, History of the (Manifest des-
 tiny) U: 167 with map
Mexican turnip See Jicama in this index
Mexican War [1846-1848] M: 445 with picture
 and map
 Arizona (Spanish exploration) A: 688
 Army, United States (The Mexican War)
 A: 738
 California (The Mexican War) C: 60
 Carson, Kit (Rise to prominence) C: 250
 Frémont, John Charles F: 511
 Guadalupe Hidalgo, Treaty of G: 408
 Hispanic Americans (Conflict) H: 251
 Marine Corps, United States (The 1800's)
 M: 208-209
 Mexico (War with Texas and the United
 States) M: 471 with picture
 New Mexico (The Mexican War) N: 275
 Polk, James Knox (The Mexican War) P: 643
 Slidell, James S: 508
 Taylor, Zachary (Mexican War) T: 58-59 with
 picture
 Texas (Statehood and early progress) T: 207
 Texas Rangers (Early days) T: 211
 United States, History of the (Manifest des-
 tiny) U: 167
 War (table) W: 25
Mexico [country] M: 448 with pictures and
 maps
 Adobe A: 59
 Hispanic Americans (In Mexico) H: 247;
 (Stricter immigration laws) H: 254-255
 North America picture on N: 458
 Police picture on P: 623
 Texas (The Texas revolution) T: 206
Agriculture
 Mexico picture on M: 455
Art and architecture
 Mexico (Arts) M: 458-460 with pictures
 Dance picture on D: 26
 Music picture on M: 947
 Painting (Modern Mexican painting) P: 83
 with picture
Climate
 Mexico (Climate) M: 463-464 with picture
Communications and mass media
 Mexico (Communication) M: 467
Education
 Mexico (Education) M: 458
Government
 Mexico (Government) M: 449
 North American Free Trade Agreement
 N: 470
Health and welfare
 Standard of living (table) So: 834
History
 Mexico (History) M: 468 with pictures and
 maps
 Black Seminole B: 391
 California (Mexican rule) C: 60
 Cortés, Hernando Ci: 1073
 Golden Age G: 255
 Latin America (The wars of independence)
 L: 107
 Mexican War M: 445 with map
 San Antonio (History) S: 86-87
 Tenochtitlán T: 170
 Teotihuacán T: 172
 United States, History of the (Manifest des-
 tiny) U: 167
 World War II (table. The Allies) W: 471
 See also the Biographies section of the
 Related Articles in the Mexico article
Language and literature
 Mexico (Language) M: 451; (Literature)
 M: 459
Manufacturing
 Mexico (Manufacturing) M: 464
Mining
 Mexico (Mining) M: 466
 Silver (Leading silver-mining countries)
 S: 463
People
 Mexico (People) M: 451
 Aztec A: 999 with pictures

Hispanic Americans (In the Southwest) **H**: 251; (Conflict) **H**: 251
 Indian, American (Indians of the Southwest) **I**: 166; (Indians of Middle America) **I**: 169; (In Latin America) **I**: 178
 Maya **M**: 322
 Olmec Indians **O**: 745
 Toltec Indians **T**: 323
 Zapotec Indians **Z**: 590
See also Mexican Americans in this index
Religion
 Mexico (Religion) **M**: 458 *with picture*
Social and cultural life
 Mexico (Way of life) **M**: 451-458 *with pictures*
 Christmas (In Latin America) **C**: 532 *with picture*
 Cinco de Mayo **Ci**: 557
Transportation
 Railroad (In other countries) **R**: 113
See also the list of Related Articles in the Mexico article
Mexico, Gulf of
 Gulf of Mexico **G**: 437
Mexico, National Autonomous University of
M: 475
 Latin America *picture on* **L**: 102
 Mexico (Education) **M**: 458; (Architecture) **M**: 459
Mexico City [Mexico] **M**: 476 *with pictures and map*
 Environmental pollution *picture on* **E**: 330
 Hispanic Americans *picture on* **H**: 255
 Latin America *picture on* **L**: 91
 Mexico *picture on* **M**: 449; (City life) **M**: 451-454; (The Plateau of Mexico) **M**: 460-461; (table: Average monthly weather) **M**: 464
 Olympic Games (The 1968 games) **O**: 752
 Tenochtitlan **T**: 170
 Teotihuacán **T**: 172
Mey, Cornelius [Dutch explorer]
 New Jersey (Exploration) **N**: 250
Meyer, Adolf [German architect]
 Gropius, Walter **G**: 397
Meyer, Albert Gregory Cardinal [American religious leader]
 Cardinal (table: American cardinals) **C**: 211
Meyer, Christian Erich Hermann von [German scientist]
 Plateosaurus **P**: 565
Meyer, Eugene [American businessman]
 Graham, Katharine **G**: 300
Meyer, George von Lengerke [American government official]
 Roosevelt, Theodore (table) **R**: 470
 Taft, William Howard (table) **T**: 11
Meyer, Josef [German publisher]
 Encyclopedia (Today's encyclopedias) **E**: 268b
Meyer, Julius Lothar [German chemist] **M**: 479
 Chemistry (Formation of the periodic table) **C**: 402
Meyer, Louis [American race driver]
 Automobile racing (table: Indianapolis 500 winners) **A**: 980
Meyerbeer, Giacomo [German composer]
M: 479
 Opera (Grand opera) **O**: 798
Meyrhof, Otto Fritz [German physiologist]
 Nobel Prizes (Physiology or medicine: 1922) **N**: 444
Meyner, Robert B. [American political leader]
 New Jersey (table) **N**: 249
Mezzo
 Music (table) **M**: 954
Mezzo-rilievo [art]
 Relief **R**: 213
Mezzo-soprano
 Opera (The singers) **O**: 792
 Singing (Voice classification) **S**: 472
Mezzrow, Mezz [American clarinetist]
 Jazz (The 1920's) **J**: 70
Mfecane [African history]
 South Africa (The Zulu and the Mfecane) **So**: 618
Mfengu [people]
 Doll (Doll festivals and customs) **D**: 287-288
Mfume, Kweisi [American political leader]
M: 479 *with portrait*
MG [automobile]
 Sports car (History) **So**: 803
Mg [symbol]
 Magnesium (Properties) **M**: 54
MGM Grand Hotel/Casino [Las Vegas]
 Las Vegas (The city) **L**: 87-88

MHC protein [biochemistry] *See* Major histocompatibility complex protein *in this index*
MHD
 Alfvén, Hannes Olof Gösta **A**: 349;
 [Magnetohydrodynamics] **M**: 62
 Energy supply (Magnetohydrodynamic [MHD] generators) **E**: 279
MIA *See* Missing in action *in this index*
Miacis [extinct animal]
 Cat (History) **C**: 296
 Dog (History) **D**: 281
 Prehistoric animal (The development of placentals) **P**: 741
Miami [book by Didion]
 Didion, Joan **D**: 195
Miami [Florida] **M**: 479 *with picture and map*
 Metropolitan area (County government) **M**: 444
Miami and Erie Canal [waterway]
 Cincinnati (The 1800's) **Ci**: 556
 Ohio **O**: 702
 Toledo (Government and history) **T**: 321
Miami Beach [city, Florida] **M**: 481
 Florida *picture on* **F**: 251
Miami Confederacy
 Miami Indians **M**: 482
Miami-Dade County [Florida]
 Election of 2000 (Court challenges) **E**: 161
 Metropolitan area (County government) **M**: 444
 Miami (The city) **M**: 479
Miami Dolphins
 Football (National Football League) **F**: 364
Miami Heat
 Basketball (table) **B**: 150
Miami Indians [American Indians] **M**: 482
Miami International Airport
 Airport (table) **A**: 245
Miami Metrozoo
 Florida (Places to visit) **F**: 252
Miami River [river, Ohio]
 Ohio (The early 1900's) **O**: 702 *with picture*
Miantonomo [American Indian chief]
 Rhode Island (Settlement) **R**: 312
Miata [automobile]
 Automobile *picture on* **A**: 971
Mica [mineral] **M**: 482
 Mineral *picture on* **M**: 566
 Rock (Metamorphic rock) **R**: 372-373
Mica Dam [Canada]
 British Columbia (The mid-1900's) **B**: 630
 Dam (table) **D**: 18
Micah, Book of [Biblical figure] **M**: 482
Micawber, Wilkins [literary figure]
 Dickens, Charles (Dickens' life) **D**: 187
Mice *See* Mouse *in this index*
Micelle [chemistry]
 Colloid **C**: 777
Michael [czar of Russia]
 Romanov **R**: 426
Michael [king of Romania]
 Carol II **C**: 244
 Romania (World War II) **R**: 424-425;
 (Communist control) **R**: 425
Michael, George [musician]
 Rock music (Rock videos) **R**: 380
Michael, Saint [Biblical figure] **M**: 482
 Michaelmas **M**: 482
Michael Cerularius [Byzantine religious leader]
 Roman Catholic Church (Split with the East) **R**: 407
Michael Kohlhaas [book by Kleist]
 Kleist, Heinrich von **K**: 344
Michaelmas [custom] **M**: 482
Michaelmas daisy [plant]
 Aster **A**: 823
Michel, Hartmut [German chemist]
 Nobel Prizes (Chemistry: 1988) **N**: 443
Michel, Jean-Louis [French oceanographer]
 Exploration (Deep-sea exploration) **E**: 451-452
 Titanic **T**: 300
Michelangelo [Italian artist] **M**: 483 *with pictures*
 Architecture (Later Renaissance architecture) **A**: 621
 David *pictures on* **D**: 45
 Isaiah, Book of *picture on* **I**: 461
 Italy *picture on* **I**: 505
 Jeremiah, Book of *picture on* **J**: 92
 Madonna and Child **M**: 37
 New Testament *picture on* **N**: 287
 Painting (Religious subjects) **P**: 32; (The High Renaissance) **P**: 54 *with picture*
 Religion *picture on* **R**: 216

Renaissance (The fine arts) **R**: 235-236
 Saint Peter's Basilica **S**: 53; (History) **S**: 53-54
 Sculpture (Michelangelo) **S**: 252 *with picture*
 Sistine Chapel **S**: 476 *with picture*
Michelet, Jules [French historian]
 History (History in the universities) **H**: 262-263
Michelin [company]
 Automobile (The gasoline car) **A**: 963
Michelson, Albert Abraham [American physicist] **M**: 487
 Ether **E**: 365
 Interferometer **I**: 324
 Light (The speed of light) **L**: 291-292
 Physics (Einstein and relativity) **P**: 441
 Relativity (The Michelson-Morley experiment) **R**: 210
Michelson-Morley experiment
 Physics (Einstein and relativity) **P**: 441
 Relativity (The Michelson-Morley experiment) **R**: 210
Michener, James Albert [American author]
M: 487
Michener, Roland [Canadian statesman] **M**: 487
Michigan **M**: 488 *with pictures and maps*
See also the list of Related Articles in the Michigan article
Michigan, Lake *See* Lake Michigan *in this index*
Michigan, University of **M**: 512
 Michigan (Libraries) **M**: 493
Michigan Agricultural College
 Michigan State University **M**: 513
Michigan Avenue [shopping area]
 Chicago *picture on* **C**: 427
Michigan State University **M**: 513
 Michigan (Interesting facts) **M**: 489
Michilimackinac
 Mackinac Island **M**: 24
Michipicoten [island, Ontario]
 Lake Superior (Description) **L**: 45 *with map*
Michoud Assembly Facility [New Orleans]
 Louisiana (The mid-1900's) **L**: 500
 New Orleans (Industry) **N**: 283
Mickelson, George S. [American political leader]
 South Dakota (table) **So**: 680
Mickelson, George T. [American political leader]
 South Dakota (table) **So**: 680
Mickelson, Phil [American golfer]
 Golf *picture on* **G**: 266
Mickey, John H. [American political leader]
 Nebraska (table) **N**: 110
Mickey Mouse [cartoon character]
 Animation (Walt Disney) **A**: 514
 Disney, Walt (The first Disney cartoons) **D**: 235-236 *with pictures*
Mickiewicz, Adam [Polish poet]
 Poland (The arts) **P**: 607
Micmac Indians **M**: 513
 Indian, American *picture on* **I**: 145
 New Brunswick (Interesting facts) **N**: 181
 Newfoundland and Labrador (Early European exploration) **N**: 375
 Nova Scotia (Indian days) **N**: 568
 Prince Edward Island **P**: 783
Micombero, Michel [African political leader]
 Burundi (History) **B**: 713-714
Micrathena
 Spider *picture on* **So**: 789
Micro [prefix]
 Metric system (Metric prefixes) **M**: 439
Microampere
 Ampere **A**: 438
Microbe
 Microbiology **M**: 513
 Algae **A**: 349
 Medicine (The beginnings of modern research) **M**: 374; (Scientific study of the effects of disease) **M**: 375 *with picture*
 Protozoan **P**: 836
 Virus **V**: 426
Microbiology **M**: 513
 Bacteriology **B**: 22
 Biology (What biologists study) **B**: 316-317
 Careers (Life, physical, and social sciences) **C**: 225
Microbiotherie [zoology]
 Mammal (table) **M**: 128 *with picture*
Microburst [weather hazard]
 Wind shear **W**: 332
Microchip [electronics] *See* Computer chip *in this index*
Microcline [mineral]
 Feldspar **F**: 68
Microcomputer

538 Microcrystalline wax

See also *Personal computer in this index*
 Remote control (The parts of a remote control system) R: 230
Microcrystalline wax [by-product] M: 514
 Paraffin P: 143
 Wax (Mineral wax) W: 153
Microeconomics
 Economics (table) E: 58
Microelectronics
 Electronics E: 207
Microencapsulation [industrial process] M: 514
Microfarad [unit of measure]
 Capacitor (Capacitance) C: 186
 Farad F: 28
Microfiche [photography]
 See also *Microfilm in this index*
 Book (Modern books) B: 468
 Library (The growth of information and technology) L: 238
 Office work (Storing information) O: 677
Microfilm [lacquer]
 Airplane, Model (Indoor models) A: 241
Microfilm [photography] M: 514
 Book (Modern books) B: 468
 Office work (Storing information) O: 677
Microform See *Microfilm in this index*
Microgametophyte [botany]
 Seed (Seed development in angiosperms) S: 281-282
Micrographia [book by Hooke]
 Biology (Early discoveries with the microscope) B: 318 with picture
Micrographics [data processing]
 Office work (Storing information) O: 677
Microgravity
 Space exploration (Living in space) So: 701 with pictures
Microlight
 Airplane (General aviation planes) A: 211-212
Micromégas [book by Voltaire]
 Voltaire (Exile and return to France) V: 446
 Science fiction (Forerunners of science fiction) S: 205
Micrometeoroid [astronomy]
 Moon (Origin and evolution of the moon) M: 788
Micrometer [measuring device] M: 514 with picture
Micrometer [unit of measure] M: 514
 Weights and measures (Miscellaneous weights and measures) W: 184
Micron [metric unit] See *Micrometer [metric unit] in this index*
Micronesia [islands, Pacific]
 Mariana Islands M: 199
 Nauru N: 68
 Northern Mariana Islands, Commonwealth of the N: 525
 Pacific Islands (Micronesia) P: 3; (People) P: 4 with picture; (Climate) P: 8; (The first settlers) P: 11
 Palau P: 101
 Sculpture (Pacific Islands sculpture) S: 241
Micronesia, Federated States of [country]
 M: 514 with picture and map
 Flag picture on F: 204
 Pacific Islands, Trust Territory of the P: 13
Micronesian race [theory]
 Races, Human (The geographical-race theory) R: 54
Micronutrients [biochemistry]
 Fertilizer (The importance of fertilizer) F: 78
 Nutrition (Kinds of nutrients) N: 625
Microorganism
 Antibiotic A: 550
 Deep sea (Life in the deep sea) D: 82a
 Food poisoning F: 340
 Food preservation (How food spoils) F: 341
 Microbiology (Microorganisms) M: 513
Microphone M: 516 with pictures
 Computer (A microphone) Ci: 915
 Radio (From sound waves to electric waves) R: 86
 Telephone (The transmitter) T: 95 with picture
 Television (Putting a show on the air) T: 111-112
 Wiretapping W: 345
Microphotography [photography]
 Microfilm M: 514
Microprocessor [electronics]
 See also *Computer chip in this index*
 Camera (Automatic controls) C: 80
 Computer (Parts of computers) Ci: 911 with picture, Ci: 909

Computer chip Ci: 924e with picture
 Digital technology D: 203
 Electronics (Electronic circuits) E: 208-210 with picture; (The solid-state revolution) E: 215-216 with picture
 Ignition (The direct fire ignition system) I: 49
 Invention (Recent developments) I: 364
 Machine tool (Numerical control of machine tools) M: 19
 Remote control (The parts of a remote control system) R: 230
 Scale, Weighing (Electronic scales) S: 169
 Technology (The computer age) T: 75
 Typewriter (Kinds of typewriters) T: 538
 Video game V: 359
Microphyte [botany]
 Plant (Sexual reproduction) P: 532-534
Microrace [anthropology]
 Races, Human (The geographical-race theory) R: 55
Microreproduction [photography]
 Library (The growth of information and technology) L: 238
Microscale systems [weather]
 Weather (Weather systems) W: 158; (Mesoscale and microscale systems) W: 162
Microscope [instrument] M: 517 with pictures
 Cell (Looking at a cell) C: 327; picture on C: 338
 Crime laboratory (Analyzing the evidence) Ci: 1141 with pictures
 Electron microscope E: 204 with pictures
 Eye picture on E: 467
 Ion microscope I: 372
 Leeuwenhoek, Anton van L: 181
 Nanotechnology (The challenge of nanotechnology) N: 11
 Ultramicroscope U: 16
 World, History of the picture on W: 442
Microscopic anatomy
 Anatomy A: 448b
Microsecond [unit of measure]
 Metric system (Space and time) M: 437
Microsoft Corporation
 Antitrust laws A: 560
 Computer (Manufacturing) Ci: 924; (The personal computer) Ci: 924c-924d
 Gates, Bill G: 67
 Gates Foundation G: 67
 Monopoly and competition (History) M: 732
Microsoft Disk Operating System [computer software] See *MS-DOS in this index*
Microsoft Encarta [software]
 Encyclopedia (Today's encyclopedias) E: 268b-269
Microsporangium [botany]
 Plant (In flowering plants) P: 532
Microspore [botany]
 Spore (Plant spores) So: 801-802 with diagram
Microstructure
 Materials M: 300b
Microsurgery
 Medicine (The medical revolution) M: 376-377
 Surgery (Technique) So: 1005
Microtome [instrument] M: 520 with picture
Microtomy [microscope] M: 520
 Microscope (Using an optical microscope) M: 519
Microtone [music]
 Music (Asian music) M: 955-956
Microwave [electronics] M: 520
 Burglar alarm B: 704
 Light (Electromagnetic waves) L: 285
 Marconi, Guglielmo (Short-wave radio) M: 196
 Maser M: 263
 Microwave oven M: 520
 Prokhorov, Alexander Mikhailovich P: 817
 Radar (Advances during World War II) R: 72
 Radiation (Electromagnetic radiation) R: 75-76 with picture
 Radio (From electric waves to radio waves) R: 86
 Telecommunications T: 89
 Telephone (Transmitting the telephone signals) T: 96
 Television (Microwaves) T: 123
Microwave Landing System
 Airport (Air traffic control) A: 246-247
Microwave oven M: 520 with diagram
 Cooking (Other methods) Ci: 1029
Microwave tube
 Vacuum tube (Kinds of vacuum tubes) V: 258-259

Microzoan See *Protozoan in this index*
Mictlan [legendary place]
 Mythology (American Indian mythology) M: 985-986
Mictlanicahuatl [Aztec goddess]
 Mythology (American Indian mythology) M: 985-986
Mictlantecuhitli [Aztec god]
 Aztec (Religion) A: 1000
 Mythology (American Indian mythology) M: 985-986
Midas [Greek mythology] M: 521
Mid-Atlantic Ridge
 Atlantic Ocean (The Atlantic seafloor) A: 864 with map
 Mountain M: 891; (Volcanic mountains) M: 892
 Ocean (Deep-sea peaks, valleys, and plains) O: 662 with map
 Plate tectonics (Plate interactions) P: 562
Mid-Autumn Festival
 September S: 308
Midbrain
 Brain (The brain stem) B: 551; (In vertebrates) B: 559; diagram on B: 553
Middle age M: 521
Middle Age of Mrs. Eliot, The [book by Wilson]
 Wilson, Angus W: 316
Middle Ages [European history] M: 522 with pictures and map
 Aristotle (Aristotle's place in Western thought) A: 664
 Cat (History) C: 296
 City (Medieval cities) Ci: 581 with pictures
 Communication (During the Middle Ages) Ci: 879 with picture
 Dark Ages D: 37
 Doll (The history of dolls) D: 288
 Map (Maps in the Middle Ages) M: 182
 Navy (Navies in the Middle Ages) N: 79
 Unicorn U: 26
Agriculture
 Agriculture (The Middle Ages) A: 155 with picture
 Manorialism M: 166
Art and architecture
 Middle Ages (Learning and the arts) M: 527
 Architecture (Medieval architecture) A: 617
 Carolingian art C: 244
 Castle C: 280 with pictures
 Cathedral (Historical importance of cathedrals) C: 302
 Classical music (The Middle Ages) Ci: 645
 Furniture (The Middle Ages) F: 571 with picture
 Gargoyle G: 43
 Glass (The Middle Ages) G: 218
 Gothic art G: 278
 Illuminated manuscript I: 78
 Norman architecture N: 455
 Painting (Medieval painting) P: 48 with pictures
 Sculpture (The importance of sculpture) S: 228; (Medieval sculpture) S: 248 with pictures
 Shelter (The Middle Ages) S: 393
 Stained glass (Early stained-glass windows) So: 822 with picture
 Tapestry (History) T: 40
Defense
 Armor (During the Middle Ages) A: 720 with pictures
 Army (Armies in the Middle Ages) A: 727
 Sword So: 1062
Government
 Middle Ages (Feudal government) M: 524
 City-state Ci: 603
 Curia regis Ci: 1194
 Democracy (The Middle Ages) D: 122
 Domesday Book D: 300
 Estates-General E: 360
 Feudalism F: 81
 Free city F: 498
 Freedom (The Middle Ages) F: 502
 Law (The Middle Ages) L: 134
 Magna Carta (Reasons for the charter) M: 53
 Nationalism (The rise of nationalism) N: 62
 Parliament (History) P: 174
Health and welfare
 Bath (History) B: 164
 Medicine (During the Middle Ages) M: 373 with picture
 Mental illness (Early attitudes) M: 408

History

- Middle Ages (The fall of Rome) **M**: 522
- Belgium (The Middle Ages) **B**: 232
- Europe (The Middle Ages) **E**: 409-410 *with picture*
- Exploration (Medieval exploration) **E**: 441
- France (History) **F**: 471 *with map*
- Government (The Middle Ages) **G**: 290
- Harun al-Rashid **H**: 80
- History (The Bible and post-Roman history) **H**: 262
- Holy Roman Empire **H**: 298
- Hundred Years' War **H**: 437
- Italy (The Middle Ages) **I**: 513
- Normans **N**: 456
- Philosophy (Medieval philosophy) **P**: 387
- Renaissance **R**: 232
- Slavery (The Middle Ages) **S**: 501
- Switzerland (The struggle for freedom) **So**: 1059
- Vikings **V**: 378
- World, History of the (The world from 500 to 1500) **W**: 432 *with pictures and map*

Labor

- Guild **G**: 428
- Labor movement (Origins of the labor movement) **L**: 9

Language and literature

- Biography (The Middle Ages) **B**: 313
- Book (The Middle Ages) **B**: 466
- Drama (Medieval drama) **D**: 328 *with pictures*
- Greek literature (Medieval literature) **G**: 378
- Hebrew literature (Medieval works) **H**: 162
- Holy Grail **H**: 298
- Japanese literature (The medieval period) **J**: 62
- Library (Libraries of the Middle Ages and the Renaissance) **L**: 259
- Manuscript (European manuscripts of the Middle Ages) **M**: 173
- Novel (Medieval narratives) **N**: 572
- Poetry (Medieval poetry) **P**: 596
- Storytelling (The Middle Ages) **So**: 914

People

- Family (Development of the Western family) **F**: 22
- Herald **H**: 194
- Serf **S**: 316
- Villein **V**: 384
- Yeoman **Y**: 564

Religion

- Middle Ages (The Christian church) **M**: 523; (The power of the church) **M**: 525; (Troubles in the church) **M**: 528
- Anti-Semitism **A**: 559
- Christianity (The Middle Ages) **C**: 526
- Freedom of religion (History) **F**: 506
- Jews (The Talmudic period and the Middle Ages) **J**: 122
- Pope (The early Middle Ages) **P**: 663; (The peak of papal power) **P**: 663
- Reformation (Causes of the Reformation) **R**: 196
- Religion (Christianity) **R**: 222
- Roman Catholic Church (The early Middle Ages) **R**: 407

Social and cultural life

- Middle Ages (Life of the people) **M**: 526
- Bed (History) **B**: 197-198
- Circus (History) **Ci**: 562b
- City (The people) **Ci**: 582 *with picture*
- Clothing (The Middle Ages) **Ci**: 698
- Food (The Middle Ages) **F**: 336 *with picture*
- Hairdressing (The Middle Ages) **H**: 11
- Homage **H**: 299
- Knights and knighthood **K**: 348
- Textile (During the Middle Ages) **T**: 218
- Women's movements (During the Middle Ages) **W**: 384

Technology and science

- Drug (Drugs in the Middle Ages) **D**: 358
- Invention (The Middle Ages) **I**: 359
- Iron and steel (The Iron Age) **I**: 450-451
- Physics (The Middle Ages) **P**: 438
- Science (The Middle Ages) **S**: 197

Trade

- Middle Ages (Economic recovery) **M**: 526
- Hanseatic League **H**: 54
- Trade (The expansion of trade) **T**: 363

Transportation

- Transportation (The Middle Ages) **T**: 388

Middle America **M**: 529North America **N**: 458

Middle Assyrian Laws

- Assyria (Language and literature) **A**: 821

Middle Atlantic States (region, United States) **M**: 529

- United States (Regions) **U**: 99-101 *with map*

Middle class (sociology) **M**: 529

- City (Economy) **Ci**: 584-585
- Colonial life in America (The structure of colonial society) **Ci**: 793
- Communism (European reality in the early 1900's) **Ci**: 890
- French Revolution (Background) **F**: 524; (The revolution ends) **F**: 527
- Gay Nineties (Middle-class prosperity) **G**: 72
- Industrial Revolution (The middle and upper classes) **I**: 252
- Social class **So**: 550
- United States, History of the (The middle class) **U**: 179
- World, History of the (The Industrial Revolution) **W**: 444

Middle Colonies (U.S. history)

- Colonial life in America (Development of the Thirteen Colonies) **Ci**: 789 *with map; picture on Ci*: 792
- United States, History of the (The Middle Colonies) **U**: 154

Middle Congo

- Congo (Brazzaville) (History) **Ci**: 939

Middle ear (anatomy)

- Deafness (Types of hearing loss) **D**: 57

- Ear (The middle ear) **E**: 7-8 *with diagrams*

- Mastoid **M**: 298

Middle East **M**: 530 *with pictures and maps*

- Agriculture (The Middle East) **A**: 155
- Air force (Air forces in limited wars) **A**: 186-187
- Arab-Israeli conflict **A**: 582 *with map*
- Arabs (Land of the Arabs) **A**: 585
- Bank (Banks throughout the world) **B**: 91-92
- Civilization (How civilizations develop) **Ci**: 636
- Clothing *pictures on Ci*: 692
- Cold War (Trouble at Suez) **Ci**: 765; (The Eisenhower Doctrine) **Ci**: 765; (The battle for the neutral nations) **Ci**: 769
- Conservation (Asia) **Ci**: 989
- Eisenhower, Dwight David (Crises in the Middle East and Asia) **E**: 154
- Exploration (Muslim exploration) **E**: 442
- Library (The Middle East) **L**: 252
- Nationalization **N**: 63
- Newspaper (In Africa and the middle East) **N**: 386
- Nuclear weapon **N**: 596
- Petroleum (The Middle East) **P**: 332 *with picture*
- United States, History of the (The Persian Gulf War) **U**: 195
- See also the list of Related Articles in the Middle East article*

Middle East Force

- Navy, United States (The Operating Forces) **N**: 85

Middle English (language)

- English language (Middle English) **E**: 313
- English literature (Middle English literature) **E**: 315

Middle Ground, The (book by Drabble)

- Drabble, Margaret **D**: 317

Middle guard

- Football (The defensive team) **F**: 357 *with diagrams*

Middle Island (New Brunswick)

- New Brunswick (Interesting facts) **N**: 181 *with picture*

Middle Kingdom (Egyptian history)

- Egypt, Ancient (The Middle Kingdom) **E**: 143
- Painting (Egyptian painting) **P**: 40-41

Middle latitudes (geography)

- Cyclone **Ci**: 1203

Middle linebacker

- Football (The defensive team) **F**: 357 *with diagrams*

Middle name

- Name (Given names) **N**: 5

Middle Rockies (U.S.)

- Rocky Mountains (Chief ranges of the Rockies) **R**: 395

Middle school **M**: 535

- Careers (Teaching) **C**: 231
- Education (The organization of U.S. education) **E**: 89-90
- Junior high school **J**: 196

- Library (Middle school and junior high school libraries) **L**: 244-245

- School (Middle schools) **S**: 181

Middle Stone Age *See Mesolithic Period in this index*

Middle Temple (London)

- Inns of Court **I**: 276

Middle Veld

- Zimbabwe (Land) **Z**: 596

Middle Way (religion)

- Buddhism (The dharma) **B**: 668
- Dharma **D**: 178
- Religion (Buddhism) **R**: 220

Middleman (economics)

- Trade (The use of markets) **T**: 362
- United States, History of the (The farmers) **U**: 180

Middlemarch (book by Eliot)

- Eliot, George **E**: 237
- English literature (Later Victorian literature) **E**: 321-322

Middlesboro Basin

- Kentucky (Land regions) **K**: 285

Middlesex Standard (newspaper)

- Liberty Party **L**: 233

Middleton, Arthur (American patriot) **M**: 535

Middleton, Henry (American political leader)

- South Carolina (table) **So**: 658

Middleton, Thomas (English dramatist)

- Massinger, Philip **M**: 296

Middleton Place Gardens (Charleston, South Carolina)

- South Carolina (Places to visit) **So**: 650

Middleveld (region)

- South Africa (The Plateau) **So**: 614 *with map*

Middleweight (boxing)

- Boxing (table) **B**: 530

Middlings (food)

- Bran **B**: 563
- Rye (Uses) **R**: 573

Midewiwin Society

- Chippewa Indians **C**: 514
- Indian, American (Shamans) **I**: 147-148; (Before European contact) **I**: 154-155
- Pontiac **P**: 657

Midfielder (sports)

- Soccer (The midfielders) **So**: 545 *with diagram*

Midgard Serpent (Norse mythology)

- Thor **T**: 265

Midge (insect) **M**: 535 *with picture*

- Antarctica (Animal life) **A**: 534
- Fly **F**: 308
- Insect (Wings) **I**: 288
- Sand fly **S**: 107

Midget

- Dwarf **D**: 394
- Stratton, Charles Sherwood **So**: 921

Midget car

- Automobile racing (Other kinds of racing) **A**: 979

Midgut

- Insect (Digestive system) **I**: 289 *with diagram*

Mid-Indian Ridge (ocean ridge)

- Ocean (Deep-sea peaks, valleys, and plains) **O**: 662 *with map*

Midland Empire (region, Montana)

- Billings **B**: 307

Midlands

- England (The English Lowlands) **E**: 300 *with map*

- United Kingdom (The English Lowlands) **U**: 59

Midnight Court, The (poem by Merriman)

- Irish literature (Modern works in Gaelic) **I**: 431

Midnight Cowboy (film)

- Motion picture (Best picture: 1969) **M**: 861

Midnight Express (film)

- Stone, Oliver **S**: 908

Midnight judges (U.S. history)

- Jefferson, Thomas (The courts) **J**: 84

Midnight Ride of Paul Revere, The (painting by Wood)

- Wood, Grant **W**: 390

Midnight sun (geography) **M**: 535 *with diagrams*

- Arctic Circle **A**: 641
- Finland **F**: 108; (Climate) **F**: 114
- Iceland **I**: 20
- Inuit (The land of the Inuit) **I**: 354a
- Norway **N**: 536 *with picture*; (Climate) **N**: 542-543
- Sweden **So**: 1020

Midnight's Children (book by Rushdie)

- Rushdie, Salman **R**: 522

Mid-ocean ridge (geology)

Atlantic Ocean (The Mid-Atlantic Ridge) A: 864
 Deep sea (The deep-sea floor) D: 82a
 Earthquake (Interplate earthquakes) E: 36
 Mountain (Volcanic mountains) M: 892
 Ocean (Deep-sea peaks, valleys, plains) O: 662
 Ocean Drilling Program O: 667
 Plate tectonics (Plate interactions) P: 562

Midrib [botany]

Leaf (The blade) L: 153-154 *with diagram*

Midshipman [fish]

Toadfish T: 304

Midshipman [rank]

United States Naval Academy U: 203 *with picture*

Midsummer Dance [painting by Zorn]

Sweden *picture on* So: 1027

Midsummer Day [holiday]

June J: 192

Midsummer Night's Dream, A [music by Mendelssohn]

Mendelssohn, Felix (His life) M: 399

Midsummer Night's Dream, A [play by Shakespeare]

Shakespeare, William (A *Midsummer Night's Dream*) S: 357 *with picture*

Canada *picture on* C: 111

Fairy (Fairies in literature) F: 11 *with picture*

Puck P: 870

Midsummer's Eve [custom]

Sweden (Holidays) So: 1026

Midway, Battle of [1942]

Air force (World War II) A: 185-186

Midway Island M: 536

Spruance, Raymond Ames So: 809

World War II (The tide turns) *map on* W: 486-487

Midway Airport

Chicago (Transportation) C: 433

Midway Geyser Basin

Yellowstone National Park (The Lower Loop) Y: 558 *with map*

Midway Island [Pacific] M: 536

See also Midway, Battle of *in this index*

Midwest [region, United States] See

Midwestern States *in this index*

Midwest Stock Exchange See Chicago Stock Exchange *in this index***Midwestern States** [region, U.S.] M: 536

New York City (The growing city) N: 341

United States (Regions) U: 99-104 *with map; picture on* U: 98

Midwife M: 536

Nursing (The history of nursing) N: 620

Pregnancy (Planning for pregnancy) P: 734a

Midwife toad M: 536 *with picture***Midwife's Apprentice, The** [book by Cushman]

Literature for children (Fiction) L: 358

Mielot, Jean [French artist]

World, History of the *picture on* W: 434

Mies van der Rohe, Ludwig [German-American architect] M: 536 *with picture*

Architecture (Early modern architecture in Europe) A: 627-629; (Ludwig Mies van der Rohe) A: 631; *picture on* A: 632

Bauhaus *picture on* B: 174

Behrens, Peter B: 221

Chicago (Architecture) C: 428

Furniture (The Bauhaus) F: 582-583 *with picture*; (Recent developments) F: 584

Miescher, Friedrich [Swiss biochemist]

Cell (The 1900's) C: 337-338

Miaszko I [Polish prince]

Poland (The early Polish state) P: 611

Mifepristone [drug]

Abortion (Abortion methods) A: 14; (Abortion in the United States) A: 16

Birth control (Methods of birth control) B: 378-379

Mifflin, Thomas [American political leader]

M: 537

Pennsylvania (table) P: 263

United States *picture on* U: 116

MiG Alley

Korean War (The air war) K: 382

MiG-15 [airplane]

Korean War (The air war) K: 382

MiG-21 fighter

Aircraft, Military *picture on* A: 205

MiG-29 Fulcrum [aircraft]

Aircraft, Military (Fighters) A: 203

MiG-29K [aircraft]

Air force *picture on* A: 183

Mighty Casey, The [opera by Schuman]

Schuman, William S: 188

Mighty Ducks, Anaheim

Hockey (table: National Hockey League) H: 281

"Mighty Fortress Is Our God, A" [hymn]

Hymn (History) H: 474

Mignard, Pierre [French painter]

Clothing *picture on* Ci: 701

Mignonette [plant] M: 537 *with picture*

Henna H: 185

Migraine [disorder] M: 537**Migrant labor** [agriculture] M: 538

Farm and farming (Farm organizations) F: 44
 Hispanic Americans (Effects of World War II) H: 252

Migration [biology] M: 538

Animal (Animal migration) A: 502 *with picture*

Bird (Bird migration) B: 360 *with pictures*

Butterfly (Migration) B: 742

Comparative psychology Ci: 902a

Fish (Fish migrations) F: 151

Goose (The life of a wild goose) G: 271

Gray whale G: 335

Insect (Hibernation and migration) I: 296

Instinct (How instinctive behavior works) I: 305

Mammal (Migration) M: 125

Moth (Migration) M: 839

Photoperiodism P: 430

Radar (In scientific research) R: 67-68

Seal (Seal rookeries) S: 266

Tree (How forests spread) T: 429

Whale (Migrations) W: 261

Migration [sociology]

See also Immigration *in this index*

Germany (East Germany) G: 170

Indian, American (In the United States) I: 178-178a *with picture*

Migrant labor M: 538

Minority group (How a group becomes a minority) M: 609

Population (Urban and rural population) P: 673
 Prehistoric people (Three species) P: 745; (The spread of settlement) P: 751

Races, Human (Migration and gene flow) R: 59 *with picture*

Migration of the Negro, The [painting by Lawrence]

Literature for children *picture on* L: 359

Migratory Bird Treaty [1916]

Bird (Protective laws and treaties) B: 368

Migratory locust [insect]

Grasshopper (Short-horned grasshoppers) G: 328

Mihajlović, Draža [Yugoslav military leader]

Tito, Josip Broz (Early life) T: 302

Yugoslavia (World War II) Y: 579-580

Mihrab [architecture]

Islam *picture on* I: 465

Islamic art (Mosques) I: 468

Mosque M: 831 *with picture*

Mihura, Miguel [Spanish dramatist]

Spanish literature (Spanish literature today) So: 763

Mikado [Japanese history] M: 539

Chrysanthemum C: 540

Mikado, The [operetta by Gilbert and Sullivan]

Gilbert and Sullivan G: 189

Mikan, George [American basketball player]

M: 539

Basketball *picture on* B: 153

Mike See Microphone *in this index***Mikimoto, Kokichi** [Japanese businessman]

Pearl (Cultured pearls) P: 217

Mikonos [island, Greece]

Greece *picture on* G: 361

Mikrokosmos [music by Bartók]

Bartók, Béla B: 121

Milam, Benjamin [American military leader]

Texas (The Texas revolution) T: 206

Milan [city, Italy] M: 540 *with picture*

Leonardo da Vinci (Years in Milan) L: 199
 Renaissance (The Italian Renaissance) R: 233 *with map*

Milan [city, Ohio]

Edison, Thomas Alva (Honors) E: 82; *picture on* E: 78

Milan Cathedral [Italy] M: 541 *with picture***Milen Decree** [1807] M: 541

Continental System Ci: 1022

Napoleon I (Fall from power) N: 17

Milankovitch, Milutin [Serbian mathematician]

Climate (Changes in the earth's orbit) Ci: 677 *with diagram*

Milano See Milan *in this index*

Milbanke, Anne Isabella [wife of]

Byron, Lord (Byron's life) B: 748

Mild porcelain

Porcelain (Hard-paste porcelain) P: 675-676

Mildew [fungus] M: 541 *with picture*

Barley (Diseases and insect pests) B: 113

Book (Caring for books) B: 464-465

Fungal disease (In plants) F: 558

Mile [unit of measure] M: 542 *with diagram***Mile High City** [nickname]

Denver D: 146

Mile Square

Indianapolis (The city) I: 220

Miles, John E. [American political leader]

New Mexico (table) N: 272

Miles, Nelson Appleton [American general]

M: 542

Indian wars I: 191; (The Sioux wars) I: 194;

(The Nez Percé War) I: 194-195

Montana (Indian fighting) M: 758-760

Spanish-American War (Land battles) So: 754

Milesians [legendary people]

Mythology (The Irish cycles) M: 983

Milestone, Lewis [American director]

Motion picture (Best achievement in directing, 1927-28, 1929-30) M: 862

Miletus [ancient city]

City planning (Ancient times) Ci: 602 *with diagram*

Milford Lake

Kansas (Rivers and lakes) K: 228-230

Milhaud, Darius [French composer] M: 543**Milhaus, Katherine** [American author] M: 543**Militarists** [Japanese history]

Tojo, Hideki T: 311

Military Academy, United States See United States Military Academy *in this index***Military aircraft** See Aircraft, Military *in this index***Military Appeals, Court of** [law] See Court of Military Appeals, United States *in this index***Military Armistice Commission**

Korean War (The truce talks) K: 382-383

Military attaché [diplomat]

Attaché A: 878

Military band

Band (Military bands) B: 74

Military Committee

North Atlantic Treaty Organization (Organization) N: 471

Military court

Court-martial Ci: 1104

Military discharge M: 543**Military District of Washington**

Army, United States (Organization of the Army) A: 736-738

Military draft See Draft, Military *in this index***Military field cipher** [cryptology]

Codes and ciphers (History) Ci: 751

Military flags

Flag (Military flags) F: 195 *with pictures*

Military fold

Flag (Caring for the flag) F: 222

Military induction

Draft, Military D: 318

Military insignia [emblem]

Insignia I: 303

Air Force, United States *pictures on* A: 189

Army, United States *pictures on* A: 732

Marine Corps, United States *pictures on* M: 207
 Navy, United States *pictures on* N: 86

Military Justice, Uniform Code of See Uniform Code of Military Justice *in this index***Military law**

Martial law M: 234

Military League [organization]

Greece (George I) G: 362

Military march

March M: 193

Military Oath [law]

Oath (Military oaths) O: 639

Military operations other than war

Marine Corps, United States (Recent Marine operations) M: 210

Military pension

Pension (Federal pension plans) P: 272-273

Military plane See Aircraft, Military *in this index***Military police** M: 543**Military revolver**

Handgun (Types of handguns) H: 43 *with picture*

Military rocket

Rocket (Military use) R: 386 *with picture*;
 (Solid-propellant rockets) R: 388

Military satellite

Satellite, Artificial (Types of artificial satellites)
S: 150f-150g *with picture*

Military school M: 543

See also the list of Related Articles in the
Military School article

Military science [warfare] M: 544

Military training M: 544

Military Sealift Command

Navy, United States (The Operating Forces)
N: 85

Military service, Compulsory *See* Draft,
*Military in this index***Military Service Act [1917]**

Borden, Sir Robert Laird (Conscription crisis)
B: 486

Military Staff Committee [United Nations]

United Nations (Meetings and committees)
U: 82

Military tank *See* Tank *in this index***Military Traffic Management Command**

Army, United States (Organization of the
Army) A: 736-737

Military training M: 544

Air Force, United States (Recruit training)
A: 188; (Officer training) A: 190
Army, United States (Training a soldier) A: 731
Marine Corps, United States (Training a
Marine) M: 206; (Training an officer)
M: 208

Military school M: 543

National Guard N: 37

Navy, United States (Life in the Navy) N: 83

Reserve Officers Training Corps R: 258

**Military Tribunal, International [international
law]**

Nuremberg Trials (The trials) N: 612-613

Military tribune [ancient Rome]

Legion L: 184

Tribune T: 440

Military uniform

Civil War *pictures on* Ci: 621

Military unit

Brigade B: 608

Corps Ci: 1070

Division D: 247

Militia [military] M: 544

Army A: 724; (Armies in the Middle Ages)
A: 727

Army, United States (The Continental Army)
A: 738

Draft, Military (Military drafts throughout histo-
ry) D: 318

Lebanon (Recent developments) L: 174

Pioneer life in America (Government) P: 484

Revolutionary War in America (The beginning
of the war) R: 274; (The fighting forces)
R: 278

Second Amendment S: 278

Switzerland (Defense) So: 1051

Militia Act [1792]

Militia M: 544

Militia Act [1903]

Militia M: 544

Milk [food] M: 545 *with pictures*

See also Dairying *in this index*

Baby (The first month) B: 6

Breast B: 590

Cattle (Udder) C: 308; (Dairy cattle) C: 309;
(Dual-purpose cattle) C: 311

Coagulant C: 715

Fallout (The fallout hazard) F: 19

Food (Food from animals) F: 330

Goat G: 239; (Products) G: 240

Hormone (Agricultural uses) H: 337-338

Lactation L: 25

Mammal (Care of the young) M: 124

Mammary glands M: 129

Nutrition (Proteins) N: 625

Pasteurization P: 193

Sheep (Other types) S: 382

Vegetarianism V: 294

Yogurt Y: 567

See also the list of Related Articles in the Milk
article

Milk, Harvey [American political leader]

San Francisco (Political leaders murdered)
S: 98

Milk chocolate

Chocolate (Chocolate products) C: 518 *with
picture*

Hershey, Milton Snavely H: 216

Milk for Babies [book by Cotton]

Cotton, John Ci: 1094

Milk glass

Glass (Types of art glass) G: 221

Milk Maid, The [painting by Vermeer]

Vermeer, Jan V: 317

Milk of lime

Lime L: 307

Milk of magnesia [medication]

Magnesia M: 54

Milk snake M: 550

Snake *picture on* S: 532

Milk suger *See* Lactose *in this index***Milk teeth**

Teeth (Deciduous teeth) T: 79 *with picture*

Milking

Cattle (Udder) C: 307-308

Dairying (Milking) D: 6 *with picture*

Farm and farming *picture on* F: 32

Milking machine [agriculture] M: 550

Cattle (Udder) C: 308

Farm and farming *picture on* F: 32

Milk (At a dairy farm) M: 546; *picture on*
M: 545

Milking parlor [dairying]

Barn B: 113

Cattle *picture on* C: 307

Milking Shorthorn [cattle]

Cattle (Other beef cattle) C: 309; (Milking

Shorthorn) C: 311 *with picture*

Dairying (Dairy cattle) D: 6

Milko-tester [machine]

Milk (Separation or standardization) M: 548
with picture

Milkweed [plant] M: 550**Milkweed butterfly**

Butterfly (Milkweed butterflies) B: 737-738
with pictures; (The thorax) B: 738

Plant (How plants protect themselves) P: 544

Milkweed floss [botany]

Milkweed M: 551

Milky lactarius [fungus]

Mushroom (Nonpoisonous mushrooms)
M: 943-945

Milky spore [disease]

Japanese beetle J: 60

Milky Way [astronomy] M: 550 *with picture*

Andromeda Galaxy A: 457

Astronomy (Observing the sky) A: 835

Black hole (Galactic black holes) B: 388;
(Supermassive black holes) B: 388

Cosmology (Movement of galaxies) Ci: 1078

Earth (How Earth moves) E: 17

Galaxy G: 8

Hubble, Edwin Powell H: 403

Interstellar medium I: 352

Shapley, Harlow S: 373

Mill [tool]

Paint (Grinding) P: 24 *with diagram*

Pioneer life in America (Tools) P: 483

Uranium (Refining and processing uranium
ore) U: 215

Mill, Harriet Taylor [British author] M: 552**Mill, James [British author] M: 552**

Utilitarianism U: 251

Mill, John Stuart [British philosopher] M: 552

English literature (Early Victorian literature)
E: 321

Ethics (Bentham and Mill) E: 367

Mill, Harriet Taylor M: 552

Philosophy (Modern philosophy) P: 387-390

Ricardo, David R: 321

Utilitarianism U: 251

Mill, The [painting by Beckmann]

Beckmann, Max *picture on* B: 197

Mill at Wijk, The [painting by Ruisdael]

Painting (The Dutch masters) P: 62-63

Ruisdael, Jacob van *picture on* R: 518

Mill City [Minnesota]

Minnesota (Industrial development) M: 604

Minneapolis (Industrial development) M: 583

Mill Ends Park

Oregon (Interesting facts) O: 827 *with picture*

Mill on the Floss, The [book by Eliot]

Eliot, George E: 237

Mill paste [chemical]

Paint (Grinding) P: 24

Mill Springs, Battle of [1862]

Kentucky (The Civil War) K: 293

Millais, Sir John Everett [British painter] M: 552

Carlyle, Thomas *picture on* C: 240

Painting (The Pre-Raphaelite Brotherhood)
P: 71 *with picture*

Pizarro, Francisco *picture on* P: 504

Pre-Raphaelite Brotherhood P: 756

Milland, Ray [American actor]

Motion picture (Best performance by an actor:
1945) M: 862

Millar, Kenneth [American author]

Macdonald, Ross M: 11

Millar, Margaret [American author]

Macdonald, Ross M: 11

Millay, Edna St. Vincent [American poet] M: 552**Mille Lacs National Wildlife Refuge**

[Minnesota]

National Wildlife Refuge System N: 61

Milled soap

Detergent and soap (Bar soaps) D: 164

Milledge, John [American political leader]

Georgia (table) G: 130

Millefiori glass

Glass (Types of art glass) G: 221

Millefleurs design

Tapestry (History) T: 40 *with picture*

Millennium [time] M: 553**Millennium [religion] M: 553****Millennium Assembly**

United Nations (Important dates in UN history)
U: 94

Millennium Democratic Party

Korea (Politics) K: 367

Millepede *See* Millipede *in this index***Miller, Agatha Mary Clarissa [British author]**

See Christie, Agatha *in this index*

Miller, Alfred Jacob [American artist]

Indian, American *picture on* I: 165

United States, History of the *picture on* U: 166

Miller, Arthur [American dramatist] M: 553

American literature (Drama) A: 425

Drama (Later United States drama) D: 340

United States *picture on* U: 119

**Miller, Benjamin Meek [American political
leader]**

Alabama (table) A: 274

Miller, Bertha Mehony [American editor]

Regina Medal (table: 1967) R: 206

Miller, Bob [American political leader]

Nevada (table) N: 173

Miller, Charles R. [American political leader]

Delaware (table) D: 109

**Miller, Cincinnatus H. *See* Miller, Joaquin *in
this index*****Miller, Dan [Canadian political leader]**

British Columbia (table) B: 627

Miller, Delvin [American harness driver]

Harness racing (History) H: 64

**Miller, Dorie [American sailor] M: 553 *with por-
trait*****Miller, Frank S. [Canadian political leader]**

Ontario (table) O: 783

**Miller, G. William [American government offi-
cial]**

Carter, Jimmy (table) C: 257

Treasury, Department of the (table) T: 407

Miller, Glenn [American musician] M: 553**Miller, Henry [American author] M: 554****Miller, Joaquin [American poet] M: 554****Miller, John [American political leader]**

Missouri (table) M: 668

Miller, John [American political leader]

North Dakota (table) N: 513

Miller, Joseph [American astronomer]

Lick Observatory L: 270

Miller, Keith [American political leader]

Alaska (table) A: 300

Miller, Leslie A. [American political leader]

Wyoming (table) W: 532

Miller, Lewis [American businessman]

Adult education (During the 1800's) A: 69
Chautauqua (The Chautauqua Institution)
C: 389

Miller, Merton Howard [American economist]

Nobel Prizes (Economics: 1990) N: 449

Miller, Mina [wife of]

Edison, Thomas Alva (Family and friends)
E: 81

Miller, Perry [American author]

American literature (The study of American lit-
erature) A: 426

Miller, Phineas [American businessman]

Whitney, Eli (The cotton gin) W: 295

Miller, Samuel Freeman [American jurist] M: 554**Miller, Stanley L. [American chemist]**

Life (Modern theories) L: 278-279

Miller, Stephen [American political leader]

Minnesota (table) M: 602

Miller, Stephen D. [American political leader]

- South Carolina (table) **So**: 658
Miller, Walter Dale [American political leader]
 South Dakota (table) **So**: 680
Miller, William [American political leader]
 North Carolina (table) **N**: 490
Miller, William [American religious leader]
 Adventists **A**: 70
Miller, William Edward [American political leader] **M**: 554
 Goldwater, Barry Morris **G**: 259
 Johnson, Lyndon Baines **J**: 144; (Full-term President) **J**: 149-150
Miller, William H. H. [American government official]
 Justice, Department of (table) **J**: 203
Miller, William R. [American political leader]
 Arkansas (table) **A**: 712
Miller, Zell Bryan [American political leader]
 Georgia (table) **G**: 130
Miller-Tydings Act [1937]
 Fair-trade laws **F**: 8
Miller v. California [U.S. history]
 Obscenity and pornography (In the United States) **O**: 643-644
 Supreme Court of the United States (table)
So: 1002
Millerites [religious group]
 Adventists **A**: 70
 Eggleston, Edward **E**: 118
Milles, Carl [Swedish-American sculptor] **M**: 554
 Sweden (Fine arts) **So**: 1027
Millesgården [park, Stockholm]
 Milles, Carl **M**: 554
Millet [plant] **M**: 554 *with picture*
 Grain (Kinds) **G**: 301
Millet [political group]
 Ottoman Empire (People) **O**: 877
Millet, Jean François [French painter] **M**: 555
 Barbizon School **B**: 108
 Markham, Edwin **M**: 214
Millhone, Kinsey [literary character]
 Grafton, Sue **G**: 299
Milli [prefix]
 Metric system (Use of standard prefixes)
M: 437; (Metric prefixes) **M**: 439
Milli Majlis [parliament]
 Azerbaijan (Government) **A**: 996
Millibar [unit of measure]
 Air (Weight and pressure) **A**: 168
 Barometer **B**: 115
 Isobar **I**: 474 *with map*
Milligan, Ex parte [U.S. history] *See* Ex parte
 Milligan in *this index*
Milligan, Keith [Canadian political leader]
 Prince Edward Island (table) **P**: 791; (Recent developments) **P**: 793
Milligen, Lambdin [American public figure]
 Ex parte Milligan **E**: 435
Millikan, Robert Andrews [American physicist]
M: 555
 Electron **E**: 204
 Physics (Uncovering the secrets of the atom)
P: 442
Milliken, Carl E. [American political leader]
 Maine (table) **M**: 87
Milliken, William G. [American political leader]
 Michigan (table) **M**: 507
Millimeter [unit of measure]
 Metric system (Kinds of metric units) **M**: 436;
 (The metric system at a glance) **M**: 438
with picture
Millimeter of mercury [measurement]
 Metric system (Non-SI metric units) **M**: 440
Milling [food processing]
 Bran **B**: 562
 Bread (History) **B**: 589
 Flour (How white flour is milled) **F**: 268 *with diagram*
 Rice (Food) **R**: 323; (Removing the bran layers)
R: 327
Milling [industrial process]
 Copper (Milling) **Ci**: 1042; (How copper metal
 is produced) **Ci**: 1041 *with diagrams*
 Gold (Exposing the gold) **G**: 253; *diagram on*
G: 250
 Leather *picture on* **L**: 168
 Machine tool (Milling) **M**: 18 *with picture*
 Money (United States currency today) **M**: 709-
 711
Million Acre Farm [nickname]
 Prince Edward Island **P**: 783
Million Family March [U. S. history]
 African Americans (Black politics today)
A: 136q-136r
- Million Man March** [U.S. history]
 African Americans (Black politics today)
A: 136q-136r
 Farrakhan, Louis **F**: 48
Million Woman March [U.S. history]
 African Americans (Black politics today)
A: 136q-136r
Millipede [animal] **M**: 555 *with picture*
 Arthropod **A**: 752 *with picture*
Mills, Enos [American naturalist]
 Rocky Mountain National Park **R**: 394
Mills, John [British actor]
 Motion picture (Best performance by an actor
 in a supporting role: 1970) **M**: 863
Mills, Ogden L. [American government official]
 Hoover, Herbert Clark (table) **H**: 330
 Treasury, Department of the (table) **T**: 407
Mills, Robert [American architect] **M**: 555
 Baltimore (Other interesting places to visit)
B: 69
 Washington Monument **W**: 110
Mills bill [1888]
 Tariff (The 1800's) **T**: 44-45
Mills of the Kavanaughs, The [book by Lowell]
 Lowell, Robert **L**: 511
Millwork [building material]
 Lumber (table) **L**: 518
Milne, A. A. [British author] **M**: 556
 Literature for children (Poetry) **L**: 357; *picture on* **L**: 363
 Shepard, Ernest Howard **S**: 395
Milne, David Brown [Canadian painter] **M**: 556
with picture
Milnes, Sherrill [American singer] **M**: 556
Milo [plant]
 Sorghum (Grain sorghums) **So**: 596
Milo of Kroton [Greek wrestler]
 Olympic Games (The ancient games) **O**: 750
Milonga [dance]
 Tango **T**: 27
Milos [island, Greece] **M**: 556
 Venus de Milo **V**: 314
Milošević, Slobodan [Serbian political leader]
M: 556
 Croatia (History) **Ci**: 1148b
 Serbia (History) **S**: 314-315
 War crime (The United Nations and war
 crimes) **W**: 27
 Yugoslavia (Government) **Y**: 576; (Ethnic ten-
 sions) **Y**: 580; (Recent developments)
Y: 581
Miłosz, Czesław [Polish author]
 Nobel Prizes (Literature: 1980) **N**: 446
Milstein, César [Argentine physiologist]
 Immune system (Further breakthroughs)
I: 88d
 Nobel Prizes (Physiology or medicine: 1984)
N: 445
Milstein, Nathan [American violinist] **M**: 557
Milt [zoology]
 Fish (Reproductive system) **F**: 163
Miltiades [Greek general] **M**: 557
 Marathon (The battle) **M**: 191
Miltiades, Saint [pope]
 Pope (table) **P**: 666
Milton, Elizabeth Minshull [wife of]
 Milton, John (Retirement) **M**: 557
Milton, John [American political leader]
 Florida (table) **F**: 260
Milton, John [English poet] **M**: 556
 Angel **A**: 460
 Doré, Gustave **D**: 310
 English literature (John Milton) **E**: 318
 Essay (Formal essays) **E**: 359
 Figure of speech **F**: 97
 Freedom of the press (History) **F**: 508
 Journalism (The first newspapers) **J**: 174
Milton, Katherine Woodcock [wife of]
 Milton, John (Middle years) **M**: 557
Milton, Mary Powell [wife of]
 Milton, John (Middle years) **M**: 557
Milton, Tommy [American race driver]
 Automobile racing (table: Indianapolis 500 win-
 ners) **A**: 980
Milton Hershey School
 Hershey, Milton Snively **H**: 216
Miltown [drug]
 Tranquilizer **T**: 370
Milvian Bridge [Italy]
 Constantine the Great **Ci**: 993
Milwaukee [Wisconsin] **M**: 558 *with pictures*
and map
 Wisconsin *pictures on* **W**: 349, **W**: 351
Milwaukee Art Center
- Milwaukee (Museums) **M**: 560
Milwaukee Avenue
 Chicago (The North Side) **C**: 424
Milwaukee Brewers
 Baseball (table) **B**: 130
Milwaukee Bucks
 Basketball (table) **B**: 150
Milwaukee County Zoo [Wisconsin]
 Zoo *picture on* **Z**: 604
**Milwaukee Exposition Convention Center
 and Arena**
 Milwaukee (The city) **M**: 558-559
Milwaukee Public Museum
 Wisconsin (Museums) **W**: 351 *with picture*
Milwaukee River [river, Wisconsin]
 Milwaukee *picture on* **M**: 558
Mimas [satellite]
 Saturn (table) **S**: 152 *with picture*; (Satellites)
S: 153 *with picture*
Mime [drama]
 Drama (Minor forms) **D**: 328
Mimeograph [copier]
 Duplicator (Stencil duplicators) **D**: 387
Mimetic criticism
 Criticism (Kinds of literary criticism) **Ci**: 1146
Mimi [opera character]
 Opera (*Bohème, La*) **O**: 801; *picture on*
O: 802
Mimicry [humor]
 Humor (The types of humor) **H**: 435-436
Mimicry [zoology] **M**: 561
 Animal (Camouflage) **A**: 493-496 *with pictures*
 Bates, Henry Walter **B**: 162
 Bird (Calls and songs) **B**: 354
 Butterfly (How butterflies protect themselves)
B: 742
 Fish (Shape) **F**: 160
 Insect (Protection from enemies) **I**: 297 *with picture*
 Leaf insect **L**: 158 *with picture*
 Protective coloration **P**: 831
 Walkingstick **W**: 15
Mimosa [tree] **M**: 562 *with picture*
See also Acacia in *this index*
Mimosa pudica [plant]
 Plant (Factors affecting plant growth) **P**: 538-
 539
Minami Bisan-seto Bridge [Marugame, Japan]
 Bridge (table: Suspension) **B**: 603
Minamoto [Japanese clan]
 Japan (Rise of the shogun) **J**: 54 *with picture*
 Shogun **S**: 433
 World, History of the (The rise of Japanese
 civilization) **W**: 435-436 *with picture*
Minamoto Yoritomo [Japanese political leader]
M: 562
 Japan (Rise of the shogun) **J**: 54
 Samurai **S**: 82
Minaret [architecture] **M**: 562 *with picture*
 Cairo (The city) **C**: 15-16 *with picture*
 Islam (The Five Pillars of Islam) **I**: 463
 Islamic art (Mosques) **I**: 468; *picture on* **I**: 467
 Mosque **M**: 831
Minas Basin
 Bay of Fundy **B**: 176
 Nova Scotia (Land regions) **N**: 562
Minbar [religion]
 Islam *picture on* **I**: 465
 Mosque **M**: 831 *with picture*
Minch, The [strait, Scotland] **M**: 562
Mind [psychology] **M**: 562
 Anaxagoras **A**: 448b
 Locke, John (His philosophy) **L**: 413
 Metaphysics (Mind and body) **M**: 430
 Mind reading **M**: 563
See also the list of Related Articles in the
Mind article
Mind-body problem [philosophy]
 Mind (The mind-body problem) **M**: 563
Mind reading **M**: 563
 Clairvoyance **Ci**: 637
 Extrasensory perception **E**: 458
 Telepathy **T**: 93
Mind That Found Itself, A [book by Beers]
 Beers, Clifford Whittingham **B**: 212
Mindanao (island, Philippines)
 Philippines (The main islands) **P**: 376 *with map*
Mindaugas [Lithuanian ruler]
 Lithuania (History) **L**: 389
Mindel ice age [geology]
 Ice age (Evidence of ice ages and their cli-
 mates) **I**: 6-7
Mindelo [city, Cape Verde]
 Cape Verde *picture on* **C**: 191

Mindoro [island, Philippines]
Philippines (The main islands) P: 376 *with map*

Mindoro, Sea of [Borneo-Philippines]
Sulu Sea So: 971

Mindszenty, Joseph Cardinal [Hungarian religious leader] M: 563 *with portrait*
Hungary (Unsuccessful revolution) H: 447

Mine See Mining; Open-pit mine *in this index*

Mine detector
Mine warfare (Detecting land mines) M: 564

Mine field
Mine warfare (Land mines) M: 564

Mine safety [industry]
Coal (Mine safety) Ci: 729 *with picture*
Damp D: 24
Helmet *picture on* H: 178
Safety (In mines) S: 14
Safety lamp S: 16

Mine Safety and Health Administration
Coal (Government regulation) Ci: 729-730
Safety (In mines) S: 14

Mine warfare M: 563 *with pictures*
Navy (Wartime roles) N: 77
Navy, United States (World War I [1914-1918]) N: 88

Mine Workers of America, United See United Mine Workers of America *in this index*

Minehunter [ship]
Mine warfare (Detecting naval mines) M: 565

Miner
See also Mining *in this index*
Coal Ci: 716; (How coal is mined) Ci: 721;
(Mineworkers) Ci: 728 *with pictures; picture on* Ci: 731

Miner, Jack [Canadian conservationist] M: 565

Miner, John Thomas
Miner, Jack M: 565

Mineral [geology] M: 566 *with pictures*
Berzelius, Jöns Jakob B: 273
Conservation (Mineral conservation) Ci: 982
Drug (Minerals) D: 355
Earth (The lithosphere) E: 20
Gem G: 77; (Sources of gems) G: 77
Hardness H: 59
Mining M: 574
Natural resources (Uses and importance) N: 64
Ocean (Sediments) O: 654
Prospecting P: 829
Soil (Minerals) So: 573
See also *the list of Related Articles in the Mineral article*

Mineral [nutrition]
Dietary supplement D: 200
Food (Regulating body processes) F: 331
Food additive (Kinds of additives) F: 339
Milk (Minerals) M: 546
Nutrition (Kinds of nutrients) N: 625;
(Deficiency diseases) N: 630-631
Plant (Factors affecting plant growth) P: 538;
(Insect-eating plants) P: 542

Mineral block
Rabbit (Food) R: 48-49

Mineral conservation
Conservation (Mineral conservation) Ci: 982

Mineral deficiency [disorder]
Malnutrition M: 111
Nutrition (Deficiency diseases) N: 630-631

Mineral dressing [industrial process]
Metallurgy (Mineral dressing) M: 426

Mineral fertilizer
Gardening (Planning the garden) G: 31-34,
(Caring for the garden) G: 38

Mineral lease
Petroleum (table) P: 331; (Preparatory measures) P: 337

Mineral oil M: 572
Laxative L: 148

Mineral spring [geology]
Mineral water M: 572
Spring So: 806

Mineral tanning [industrial process]
Leather (Tanning) L: 167

Mineral water M: 572

Mineral well
Well (Water wells) W: 193

Mineralization [process]
Water pollution (Disruption of natural processes) W: 138

Mineralocorticoid [hormone]
Adrenal gland A: 67
Hormone (Blood composition hormones) H: 336

Mineralogy

Mineral M: 566

Miner's lamp
Helmet *picture on* H: 178

Miner's nystagmus [disorder]
Nystagmus N: 633

Minerva [Roman mythology] M: 572
See also Athena *in this index*
Mythology (table) M: 980; (Roman divinities) M: 981
Venus V: 310

Minerva Club [organization]
New Harmony N: 229

Minerva Terrace
Yellowstone National Park (The Upper Loop) Y: 559 *with picture*

Mines, Bureau of [U.S.]
Coal (Government regulation) Ci: 729-730

Minesweeper [ship]
Mine warfare (Detecting naval mines) M: 565
Warship (Small combatants) W: 41; *picture on* W: 43

Mineta, Norman Yoshio [American political leader] M: 572
Asian Americans (Japanese internment) A: 812e-812f
Transportation, Department of (table) T: 400

Ming dynasty [Chinese history] M: 573
Asia (Nomadic invasions) A: 805-806
Beijing (History) B: 223-224
China (The arts) C: 488; (The Ming dynasty) C: 502; *picture on* C: 490
Great Wall of China (History) G: 350
Jade J: 20
Nanjing (History) N: 11
Porcelain (Oriental porcelain) P: 676; *picture on* P: 675

Ming Huang [emperor of China]
Tang dynasty (The middle years) T: 26

Mingan Archipelago National Park [Quebec]
Canada (table: National parks and national park reserves) C: 113

Minghella, Anthony [British director]
Motion picture (Best achievement in directing: 1996) M: 862

Mingus, Charles [American musician] M: 573
Jazz (New directions) J: 73

Miniature [art]
Byzantine art (Other art forms) B: 751
France *picture on* F: 463
Illuminated manuscript I: 78
Manuscript (Illustrated manuscripts) M: 174

Miniature bull terrier [dog] M: 573

Miniature pinscher M: 573
Dog *picture on* D: 274

Miniature poodle [dog]
Poodle P: 658

Miniature rose [plant]
Rose R: 477

Miniature schnauzer M: 573
Dog *picture on* D: 273

Minibike
Motorcycle (Kinds of motorcycles) M: 878

Minicam
Journalism (Television journalism) J: 175
Television (Other production methods) T: 113

Minicomputer
Computer (Mainframes and supercomputers) C: 910

Minicycle
Motorcycle (Kinds of motorcycles) M: 878

Minidisc [recording medium]
Compact disc (Other formats) Ci: 902-902a
Recording industry (History) R: 182

Minié bullet
Rifle (History) R: 339-340

Minimal art M: 573
Newman, Barnett N: 378
Sculpture (Varieties of abstraction) S: 258
Stella, Frank So: 887 *with picture*

Minimalism [music]
Classical music (Minimalism) Ci: 651
Glass, Philip G: 224
Opera (American opera) O: 800

Minimalist fiction [literature]
Carver, Raymond C: 269
French literature (Recent French literature) F: 523

Minimum competency [education]
Literacy (Illiteracy in the United States) L: 351-352

Minimum dialect
Pidgin English P: 452

Minimum security prison
Prison (Minimum security prisons) P: 805

Minimum tillage [agriculture] See Conservation tillage *in this index*

Minimum wage M: 573
Economics (Distribution of incomes) E: 61-62
Poverty (Measures to improve job opportunities) P: 725
Sweatshop So: 1019

Minimumweight class [boxing]
Boxing (table) B: 530

Mining [industry] M: 574 *with pictures*
See also Mine safety *in this index*
Careers (Production) C: 229
Coal Ci: 716; (Where coal is found) Ci: 718;
(How coal is mined) Ci: 721 *with picture*
Conservation (Mineral conservation) Ci: 982
Copper (Sources of copper) Ci: 1042
Gas [fuel] (Producing gas) G: 53
Gold (Mining) G: 252
Gold rush (Gold rushes in the United States) G: 254 *with picture*
Iron and steel (Mining and processing iron ore) I: 438
Law of the Sea Convention L: 141
Ocean (Sediments) O: 654
Quarrying Q: 7
Russia *picture on* R: 543
Safety (In mines) S: 14
Salt (Salt from the ground) S: 73-74 *with picture*;
(History of salt) S: 74-75 *with picture*
South Africa (Mining) So: 616 *with picture*
Uranium (Mining uranium) U: 215
Well W: 193
West Virginia (History) W: 226-229 *with picture*
Western frontier life in America (The search for gold and silver) W: 233 *with picture*
Westward movement in America (California) W: 249 *with picture*

Mining bee
Bee (Solitary bees) B: 205-206 *with picture*

Mining engineering
Engineering (Other specialized fields) E: 287
Mining (The mining industry) M: 577-578

Mining geologist
Geology (Areas of specialization) G: 100-101

Minion [ship]
Drake, Sir Francis (Early life) D: 321

Miniseries
Television (The 1970's) T: 119-120

Miniskirt
Clothing (The 1900's) Ci: 703

Minister [diplomat] M: 578
Extraterritoriality E: 459
Foreign Service (Beginnings) F: 389

Minister [government official]
Minister M: 578
Parliament P: 172
Prime minister P: 778c
United Kingdom (National government) U: 49

Minister [religion] M: 578
Address, Forms of (Members of the clergy) A: 54

Minister-counselor [diplomat]
Diplomacy (Diplomatic representatives) D: 216

Minister of ...
Ministers appear under their key words, as in
Foreign affairs, Minister of

Minister plenipotentiary [diplomat]
Diplomacy (Diplomatic representatives) D: 216

Minister president [office]
Germany (State government) G: 147

Minister resident [diplomat]
Diplomacy (Diplomatic representatives) D: 216

Ministers, Council of
European Union (Governing institutions) E: 419
Hungary (National government) H: 439
Russia (National government) R: 531
Union of Soviet Socialist Republics (National government) U: 29

"Minister's Black Veil, The" [story by Hawthorne]
Hawthorne, Nathaniel (His stories and sketches) H: 114

Minister's Wooing, The [book by Stowe]
Stowe, Harriet Beecher (Other works) So: 916

Ministry [government] M: 578

Minivan [vehicle]
Automobile *picture on* A: 971

"Miniver Cheevy" [poem by Robinson]
Robinson, Edwin Arlington R: 368

Mink [animal] M: 579 *with pictures*
Fur (table) F: 561, *picture on* F: 562

Mink, Patsy Takemoto [American political leader]

544 Mink ranch

Asian Americans (Individual achievements) A: 812c

Mink ranch
Mink M: 579

Minke whale M: 579
Whale (Rorquals) W: 255-258 *with picture*

Minkowski, Hermann (German mathematician)
Fourth dimension F: 438

Minkowski, Oscar (German physician)
Insulin (History) I: 308

Minne von Bernhelm [play by Lessing]
Lessing, Gotthold Ephraim L: 208

Minneapolis (Minnesota) M: 580 *with pictures and maps*
Architecture *picture on* A: 606
Minnesota M: 584; (Population) M: 588; (table: Average monthly weather) M: 598

Minneapolis-St. Paul International Airport
Airport (table) A: 245

Minneapolis-Saint Paul metropolitan area
Metropolitan area (Tax sharing) M: 444

Minnehaha [literary figure]
Longfellow, Henry Wadsworth (Narrative poems) L: 450

Minnehaha Falls (Minnesota) M: 583
Minneapolis (Parks) M: 582
Minnesota (Lakes, rivers, and waterfalls) M: 598; *picture on* M: 593

Minnehaha Park
Minneapolis (Parks) M: 582

Minnelli, Liza (American actress)
Garland, Judy G: 44
Motion picture (Best performance by an actress: 1972) M: 862

Minnelli, Vincente (American director)
Motion picture (Best achievement in directing: 1958) M: 862

Minner, Ruth Ann (American political leader)
Delaware (table) D: 109

Minnesinger (German history) M: 583
Classical music (Secular music) Ci: 646
German literature (The first golden age [1150-1250]) G: 139; (The minnesingers) G: 139
Minstrel M: 611 *with picture*
Walther von der Vogelweide W: 21

Minnesota M: 584 *with pictures and maps*
See also the list of Related Articles in the Minnesota article

Minnesota, University of M: 607
Minnesota (Libraries) M: 589 *with picture*

Minnesota Department of Children, Families, and Learning
Minnesota (Schools) M: 588-589

Minnesota Pioneer [newspaper]
Minnesota (Communication) M: 601

Minnesota Point [sandbar]
Duluth D: 381

Minnesota River (Minnesota-South Dakota) M: 607

Minnesota Territory (U.S. history)
Saint Paul (History) S: 52

Minnesota Timberwolves
Basketball (table) B: 150

Minnesota Twins
Baseball (table) B: 130
Minnesota *picture on* M: 588

Minnesota Vikings
Football (National Football League) F: 364

Minnesota Wild [team]
Hockey (table: National Hockey League) H: 281

Minnesota Zoo
Minnesota (Places to visit) M: 594 *with picture*

Minnetonka Cave
Idaho (Places to visit) I: 34

Minnow [fish] M: 607 *with picture*

Minoan civilization [ancient Greece]
Aegean civilization (The Minoan culture) A: 83 *with picture*
Architecture (Minoan architecture) A: 615 *with picture*
Atlantis A: 868
Crete (History) Ci: 1128
Galley G: 15
Greece, Ancient (History) G: 372 *with picture*
Painting (Aegean painting) P: 41
Sculpture (Aegean) S: 234 *with picture*
Ship (Minoan and Mycenaean ships) S: 404
World, History of the (The Greeks) W: 428

Minoletta Company
Planetarium (Modern planetariums) P: 514a-514b

Minor [law] M: 608
Incompetence I: 105

Minor [mathematics]
Determinant (Using higher order determinants) D: 166-167

Minor, William T. (American political leader)
Connecticut (table) Ci: 967

Minor arts
Decorative arts D: 80

Minor axis [geometry]
Ellipse E: 243 *with diagram*

Minor interval [music]
Music (Harmony) M: 951

Minor leagues
Baseball (Minor leagues) B: 130

Minor planet *See Asteroid in this index*

Minor scale
Music (Tone) M: 950 *with diagram*

Minor tone
Tone T: 327

Minorca [bird]
Chicken (Mediterranean class chickens) C: 441; (table) C: 443

Minorca [island, Mediterranean] M: 608 *with picture*

Minority group [sociology] M: 608
Affirmative action A: 91
African Americans A: 136b
Asian Americans A: 812b
Assimilation A: 818
Census (Controversy over census results) C: 349
Civil rights (Protecting the rights of minorities) Ci: 609
Culture (Culture and society) Ci: 1188
Democracy (Majority rule and minority rights) D: 121
Ghetto G: 181
Hispanic Americans H: 244
Indian, American I: 136
National Medical Association N: 40
Poverty (The distribution and rate of U.S. poverty) P: 723; (The causes of poverty) P: 724
Prejudice P: 755
Riot (Causes of riots) R: 348
Segregation S: 285
United States, History of the (The spreading drive for equality) U: 193

Minority leader [government]
Congress of the United States (How Congress is organized) Ci: 942

Minos (Greek mythology) M: 611
Aegean civilization (The Minoan culture) A: 83
Daedalus D: 3
Hades H: 4
Hercules (The twelve labors) H: 198-199
Labyrinth L: 19

Minos, Palace of (Crete)
Architecture (Minoan architecture) A: 615 *with picture*
Crete *picture on* Ci: 1128
Evans, Sir Arthur John E: 422
World, History of the (The Greeks) W: 428

Minotaur (Greek mythology) M: 611 *with picture*
Daedalus D: 3
Labyrinth L: 19
Theseus T: 257

Minoxidil [drug]
Baldness B: 39

Minshull, Elizabeth (wife of)
Milton, John (Retirement) M: 557

Minsi, Mount [Pennsylvania]
Delaware Water Gap D: 114

Minsk [city, Belarus] M: 611
Belarus B: 224a *with picture*

Minsky, Billy (American showman)
Burlesque B: 707

Minstrel (European history) M: 611 *with picture*
Ballad B: 43

Minstrel show (U.S. history) M: 611 *with picture*
Foster, Stephen Collins F: 428
Popular music (1840's to the Civil War) P: 669

Minstrelsy of the Scottish Border [book by Scott]
Scott, Sir Walter (His life) S: 222

Mint [money] M: 612
Assaying (Vet assaying) A: 817
Coin collecting (Collecting United States coins) Ci: 757
Money (The first United States currency) M: 708; (United States currency today) M: 709-711; (Minting coins) M: 713 *with pictures*

Mint [plant] M: 612 *with picture*

Mint mark [symbol]
Coin collecting (Collecting United States coins) Ci: 757

Minthorn, Henry J. [uncle of]
Hoover, Herbert Clark (Education) H: 326

Minto, Earl of (British statesman) M: 612

Mintoff, Dom (Maltese political leader)
Malta (History) M: 113-114

Minton, Sherman (American jurist)
Supreme Court of the United States (table) So: 1000

Minuend [mathematics]
Subtraction (Subtraction Terms) So: 944

Minuet [dance] M: 613

Minuit, Peter (Dutch colonial leader) M: 613
Manhattan Island M: 141
New York (Exploration and settlement) N: 314; *picture on* N: 317

Minute [geography]
Inertial guidance I: 263
Latitude L: 116

Minute [religion]
Quakers (Worship) Q: 5

Minute [time] M: 613

Minute Man, The [sculpture by French]
French, Daniel Chester F: 511

Minute Man National Historical Park
Massachusetts (Places to visit) M: 280
National Park System (table: National historical parks) N: 56-57

Minuteman [weapon]
Air Force, United States (Missiles) A: 191
Guided missile *picture on* G: 423

Minuteman Missile National Historic Site (South Dakota)
National Park System (table: National historic sites) N: 52-53

Minutemen (U.S. history) M: 613
Flag *picture on* F: 209
Revolutionary War in America (Lexington and Concord) R: 274

Minutes
Parliamentary procedure (Minutes) P: 176

Minyan [religion]
Judaism (Worship) J: 181

Miocene Epoch [geology]
Earth (The Cenozoic Era) E: 28-29; (table) E: 30
Prehistoric animal (table) P: 740 *with picture*

Miohippus
Horse (Origins of the horse) H: 360

Miquelon [island, Atlantic] *See Saint-Pierre and Miquelon in this index*

Mir [space station] M: 613 *with picture*
Astronaut (Achievements in space) A: 829-830
Exploration (Space exploration) E: 452
International Space Station (History) I: 346b
Lucid, Shannon Wells L: 514
Space exploration (Mir) So: 722 *with picture*; (Docking with Mir) So: 726; *picture on* So: 704

Mir [title]
Hunza H: 452

Mir 2 [proposed space station]
International Space Station (History) I: 346b

Mirabeau, Comte de (French political leader) M: 614
Franklin, Benjamin F: 487
Lafayette, Marquis de (The revolution at home) L: 28
Marie Antoinette (The revolution) M: 200

Miracle [religion] M: 615
Bible (Historical accuracy of the bible) B: 284
Faith healing F: 12
Jesus Christ (The miracles) J: 106 *with picture*
Saint S: 29

Miracle, The [play by Reinhardt]
Reinhardt, Max R: 209

Miracle of Morgan's Creek, The [film]
Sturges, Preston So: 934

Miracle play (European history) M: 615
Drama (Miracle plays and morality plays) D: 329
English literature (Early English drama) E: 316

Miracle Worker, The [film]
Keller, Helen Adams (She helps others) K: 255
Sullivan, Anne Mansfield So: 969

Miracles of Our Lady [book by Berceo]
Spanish literature (Early medieval literature) So: 757-758

Miredor Nacional [mountain, Uruguay]
Uruguay (The interior lowlands) U: 226

Mirefiores Lake [Panama]

- Panama Canal (The Pedro Miguel and Miraflores locks) **P: 124**
- Miraflores Locks**
Panama Canal (The Pedro Miguel and Miraflores locks) **P: 124** *with diagram; map on P: 123*
- Miraflores Palace**
Caracas (The city) **C: 201**
- Mirage M: 615** *with pictures*
- Mirage** [airplane]
Aircraft, Military (Fighters) **A: 203** *with picture*
- Miramax Films** [company]
Walt Disney Company **W: 20**
- Miramichi River** (New Brunswick) **M: 615**
- Miramichi Salmon Museum** (New Brunswick)
New Brunswick (Places to visit) **N: 188**
- Miranda** [literary figure]
Shakespeare, William (*The Tempest*) **S: 365** *with picture*
- Miranda** [satellite]
Satellite (The middle-sized icy satellites) **S: 150a**; *picture on S: 150*
Uranus (Satellites) **U: 218-219**
- Miranda, Ernesto A.** [American public figure]
Miranda v. Arizona **M: 616**
- Miranda, Francisco de** (Venezuelan patriot) **M: 616**
Latin America (The wars of independence) **L: 107**
- Miranda v. Arizona** [U.S. history] **M: 616**
Confession **Ci: 936**
Criminal justice system (The police) **Ci: 1143**
Supreme Court of the United States (Criminal law) **So: 1001**; (table) **So: 1002**
- Mirëio** [poem by Mistral]
Mistral, Frédéric **M: 676**
- Miró, Gabriel** [Spanish author]
Spanish literature (The Generation of 1898) **So: 762**
- Miró, Joan** [Spanish painter] **M: 616**
Painting (Surrealism) **P: 81** *with picture*
- Miron, Gaston** [Canadian poet]
Canadian literature (Modern Canadian poets) **C: 160**
- Mirrlees, James Alexander** [British economist]
Nobel Prizes (Economics: 1996) **N: 449**
- Mirror M: 616** *with diagrams*
Aberration **A: 10**
Heliograph **H: 174**
Solar energy (Solar heating) **So: 579**
Telescope (Optical telescopes) **T: 103**; *pictures on T: 108, T: 109*
- Mirror for Magistrates, A** [biography]
Biography (The Renaissance) **B: 313**
- Mirror of the World, The** [book]
Encyclopedia (From the 1200's to the 1600's) **E: 268a**
- Mirror Shadow VIII** [sculpture by Nevelson]
Sculpture (As artistic expression) **S: 229**; (Assemblages) **S: 257-258** *with picture*
- Mirrors** [music by Ravel]
Ravel, Maurice **R: 150**
- MIRV** [warhead] *See* Multiple Independently Targetable Reentry Vehicle *in this index*
- Misas de Gallo** [masses]
Christmas (In Asia) **C: 533**
- Miscarriage M: 617**
Abortion **A: 14**
DES **D: 153**
Infertility **I: 265**
Pregnancy (Miscarriage) **P: 735**
Smoking (Why smoking is dangerous) **S: 520**
- Misch metal**
Rare earth **R: 144**
- Mischief Night** [custom]
Halloween (Mischief Night) **H: 24b**
- Mischling** [German history]
Holocaust (Before the Holocaust) **H: 296**
- Misconduct penalty** [hockey]
Hockey (Violations and penalties) **H: 278** *with picture*
- Misdemeanor** [law] **M: 617**
Crime (Felonies and misdemeanors) **Ci: 1136**
Felony **F: 69**
Fine **F: 104**
Prison (Medium security prisons) **P: 805**
- Miserables, Les** [book by Hugo]
Hugo, Victor Marie (His works) **H: 410**
- Miserere** [prints by Rouault]
Rouault, Georges **R: 489**
- Miseries and Misfortunes of War, The** [etchings by Callot]
Callot, Jacques **C: 69**
- Mishima, Yukio** [Japanese author]
Japanese literature (The modern period) **J: 62**
- Mishnah** [Jewish law]
Talmud **T: 21**
Akiva ben Joseph **A: 254**
Galilee **G: 10**
Hebrew literature (Early works) **H: 162**
Jews (The Talmudic period) **J: 122**
Judaism (The Talmud) **J: 180**
Maimonides, Moses **M: 67**
Rabbi **R: 46**
- Misskolc** [Hungary] **M: 618**
- Miss America Pageant** [contest]
New Jersey (Visitor's guide) **N: 240**
- Miss Julie** [play by Strindberg]
Strindberg, August **So: 929**
Sweden *picture on So: 1027*
- Miss Lonelyhearts** [book by West]
West, Nathanael **W: 198**
- Miss Ravenel's Conversion** [book by De Forest]
De Forest, John William **D: 89**
- Missa brevis** [music by Kodály]
Kodály, Zoltán **K: 361**
- Missa Pro Defunctis** [music by Thomson]
Thomson, Virgil **T: 265**
- Missa solemnis** [music by Beethoven]
Beethoven, Ludwig van (The third period) **B: 214**
- Missence mutation** [genetics]
Heredity (Mutation) **H: 203**
- Missile, Guided** *See* Guided missile *in this index*
- Missile boat M: 618** *with diagram*
Warship (Small combatants) **W: 41**; *picture on W: 43*
- Missile defense**
Radar (In the military) **R: 65**
- Missile gap**
Cold War (The missile gap) **Ci: 765**
- Missile silo** *See* Silo *in this index*
- Missing in action**
Unknown soldier **U: 212**
- Missing link** [biology]
Dubois, Eugène **D: 372**
- Mission**
United Nations (Delegations) **U: 86**
- Mission ...**
Missions appear under their key words, as in San Xavier del Bac Mission
- Mission, Congregation of the** [religious order]
Vincent de Paul, Saint **V: 386**
- Mission Bay Park**
San Diego (Recreation) **S: 90a**
- Mission control**
Space exploration (Communicating with the earth) **So: 704** *with picture*
- Mission Control Center**
Johnson Space Center **J: 154**
- Mission Indians** [U.S. history]
Indian, American (After European contact) **I: 164**
- Mission life in America M: 618** *with pictures*
Hispanic Americans (In Mexico) **H: 247**; (In the Southwest) **H: 250-251**
Indian, American (After European contact) **I: 164**
- Mission Mountains**
Montana (Land regions) **M: 752**
- Mission Reservoir** [lake, Mexico-U.S.]
Rio Grande (Lower course) **R: 347**
- Mission specialist**
Astronaut **A: 828**; (Selecting the astronauts) **A: 831**
Space exploration (The shuttle era begins) **So: 723-724**
- Missionaries of Charity** [religious group]
Teresa, Mother **T: 172**
- Missionary** [religion] **M: 620**
Baptists (Early history) **B: 101**
Judson, Adoniram **J: 185**
Roman Catholic Church (The nature of the church) **R: 404**
Treaty (Ecclesiastical treaties) **T: 409**
Women's movements (The beginnings of women's movements) **W: 385**
See also the list of Related articles in the Missionary article
- Missionary Ridge, Battle of** [1863]
Civil War (Battle of Chattanooga) **Ci: 630**
- Missionary Sisters of the Sacred Heart** [religious group]
Cabrini, Saint Frances Xavier **C: 9**
- Mississauga** [Ontario] **M: 621**
- Mississauga Indians** [American Indians]
Indian, American *picture on I: 156*
- Toronto (Early settlement) **T: 340-340a**
- Mississippi M: 622** *with pictures and maps*
See also the list of Related Articles in the Mississippi article
- Mississippi, University of M: 646** *with picture*
- Mississippi Alluvial Plain** [region, U.S.]
Louisiana (Land regions) **L: 490**
Mississippi (Land regions) **M: 634**
Missouri (Land regions) **M: 662**
- Mississippi Bubble** [U.S. history]
Mississippi Scheme **M: 649**
- Mississippi Company** [U.S. history]
Mississippi Scheme **M: 649**
- Mississippi Delta** [geography]
Louisiana *picture on L: 492*
- Mississippi Emergency Relief Fund**
National Association for the Advancement of Colored People (Activities) **N: 29**
- Mississippi Flyway** [route]
Bird (Where birds migrate) **B: 360-361**
- Mississippi Freedom Democratic Party**
Harner, Fannie Lou **H: 29**
- Mississippi kite** [bird]
Kite **K: 338**
- Mississippi National River and Recreation Area** [Minnesota]
National Park System (table: National parkways and other national parklands) **N: 56**
- Mississippi Plateau** [region, Kentucky]
Kentucky (Land regions) **K: 285**
- Mississippi Project** [1964]
Student Nonviolent Coordinating Committee **So: 932**
- Mississippi River** [U.S.] **M: 646** *with pictures and maps*
Delta **D: 118** *with map*
De Soto, Hernando **D: 160** *with picture and map*
Earthquake (Recording, measuring, and locating earthquakes) **E: 37-38**
Exploration (The French and English in North America) **E: 446-447**
Flood (River floods) **F: 236-237**; (Flood control) **F: 237**
Inland waterway (Mississippi River System) **I: 274**
Joliet, Louis **J: 156**
La Salle, Sieur de (Expeditions to the Gulf of Mexico) **L: 80** *with map*
Levee **L: 216**
Louisiana **L: 478**; (Rivers, bayous, and lakes) **L: 490**
Marquette, Jacques **M: 217**
Minnesota (Lakes, rivers, and waterfalls) **M: 598**; *picture on M: 605*
New Orleans (The city) **N: 278**
River (table) **R: 352**
See also the list of Related Articles in the Mississippi River article
- Mississippi River-Gulf Outlet** [waterway]
Louisiana (Transportation) **L: 495**; (The mid-1900's) **L: 500**
- Mississippi River Logging Company**
Weyerhaeuser, Frederick **W: 253**
- Mississippi Scheme** [U.S. history] **M: 649**
Law, John **L: 141**
- Mississippi State Historical Museum** [Jackson]
Mississippi *picture on M: 627*
- Mississippi State University M: 649**
- Mississippi University for Women M: 649**
- Mississippian Indians** [American Indians]
Mound builders (The Mississippian culture) **M: 882** *with pictures*
- Mississippian Period** [geology] **M: 649**
Earth (table) **E: 30**; *map on E: 31*
- Missoula** [Montana] **M: 649**
- Missouri** [state] **M: 650** *with pictures and maps*
United States, History of the (The abolition movement) **U: 171**
See also the list of Related Articles in the Missouri article
- Missouri** [ship]
Battleship (The modern battleship) **B: 172-173** *with picture, picture on B: 173*
Pearl Harbor (The war memorials) **P: 219** *with picture*
World War II (Victory in the Pacific) **W: 492**
- Missouri, University of M: 673**
Missouri (Interesting facts) **M: 651**
- Missouri Botanical Garden**
Botanical garden **B: 507** *with picture*
Saint Louis (Parks) **S: 48**
- Missouri Breaks** [North Dakota]
North Dakota (Land regions) **N: 506**

Missouri Compromise [1820] M: 673

Clay, Henry (The Missouri Compromise)
Ci: 658

Dred Scott Decision (The background of the case) D: 345

Kansas-Nebraska Act K: 243

Maine (Statehood) M: 89

Missouri (Statehood and expansion) M: 669;
picture on M: 670

Monroe, James (Beginnings of sectionalism)
M: 737

Randolph, John R: 137

United States, History of the (The abolition movement) U: 171

Missouri Coteau

Saskatchewan (Land regions) S: 138

Missouri Escarpment

Saskatchewan (Land regions) S: 138

Missouri Hills (region)

South Dakota (Land regions) So: 674

Missouri National Recreational River

[Nebraska-South Dakota]

National Park System (table: National parkways and other national parklands) N: 56

Missouri River [U.S.] M: 674 with picture and map

Dam picture on D: 18

Kansas (Rivers and lakes) K: 228-230

Kansas City [Missouri] (The city) K: 241

North Dakota (Rivers and lakes) N: 508

River (table) R: 352

South Dakota (Rivers and lakes) So: 676;
(Transportation) So: 679

Missouri River Basin Project [conservation]

Nebraska (The mid-1900's) N: 114

South Dakota (The mid-1900's) So: 684

Missouri Territory [U.S. history]

Missouri (Territorial days) M: 669

Missouri Compromise M: 673

Mist [weather]

Fog F: 314

Mistassini, Lake

Quebec (Rivers, waterfalls, and lakes) Q: 24

Mister

See Mr. ... in *this index*

Mistle thrush [bird]

Thrush T: 271

Mistletoe [plant] M: 676 with picture

Christmas (Christmas decorations) C: 535

Parasite (Parasites that feed on plants) P: 155
with picture

Plant (Photosynthesis) P: 538 with picture

Poisonous plant (Some poisonous plants)
P: 602

Mistral, Frédéric [French poet] M: 676**Mistral, Gabriela** [Chilean poet] M: 676

Latin-American literature (The early 1900's)
L: 113

Mistress of the Inn, The [play by Goldoni]

Italian literature (The baroque period and the Age of Reason) I: 494-495

Mistress of the robes [title]

Royal Household of the United Kingdom
R: 498

Mistrial [law]

Trial (Presenting evidence) T: 437

MIT See Massachusetts Institute of Technology in *this index***Mitanni** [ancient country] M: 676**Mitchel, John Purroy** [American political leader] M: 676**Mitchell, Arthur** [American choreographer]

M: 677

Ballet (Ballet in the United States) B: 53-54

Mitchell, Billy [American general] M: 677

Air force (History) A: 184-185

Air Force, United States (Between world wars)
A: 195

Airplane (table) A: 232

United States Air Force Academy (History)
U: 198

Mitchell, Clarence M., Jr. [American social reformer]

Spingarn Medal (table: 1969) So: 793

Mitchell, David B. [American political leader]

Georgia (table) G: 130

Mitchell, Edgar Dean [American astronaut]

Space exploration (Other moon landings)
So: 719

Mitchell, George [American Indian leader]

American Indian Movement A: 412

Mitchell, George John [American political leader] M: 677**Mitchell, Helen Porter**

Melba, Nellie M: 388

Mitchell, Henry L. [American political leader]

Florida (table) F: 260

Mitchell, James [Canadian political leader]

New Brunswick (table) N: 196

Mitchell, James Paul [American government official]

Eisenhower, Dwight David (table) E: 152

Labor, Department of (table) L: 2

Mitchell, Joan [American artist] M: 677**Mitchell, John** [British botanist]

Map (Mapping the Americas) M: 184-185

Mitchell, John Newton [American government official] M: 677

Watergate W: 144

Mitchell, Joni [Canadian singer]

Rock music (Rock goes pop) R: 379

Mitchell, Margaret [American author] M: 678 with portrait**Mitchell, Maria** [American astronomer] M: 678**Mitchell, Mount** See Mount Mitchell in *this index***Mitchell, Nathaniel** [American political leader]

Delaware (table) D: 109

Mitchell, Peter [Canadian political leader]

Confederation of Canada (Fathers of Confederation) Ci: 935

Mitchell, Peter Dennis [British chemist]

Nobel Prizes (Chemistry: 1978) N: 443

Mitchell, Thomas [Irish-American actor]

Motion picture (Best performance by an actor in a supporting role: 1939) M: 863

Mitchell, Wesley Clair [American economist] M: 678

Economics (New solutions for old problems)
E: 65

Mitchell, William D. [American government official]

Hoover, Herbert Clark (table) H: 330

Justice, Department of (table) J: 203

Mitchell Park

Milwaukee (Parks) M: 560 with picture

Mite [animal] M: 678 with picture

Apple (Pests and diseases) A: 571

Bee (Enemies) B: 205

Cat (Veterinary care) C: 295

Chigger C: 447

Hog (Diseases) H: 287

Parasite (Parasites that feed on people and animals) P: 154 with picture

Tick T: 279

Miter box [tool]

Saw (Handsaws) S: 166

Mithra [Persian god] M: 679

Mysteries M: 972

Persia, Ancient (Religion) P: 297

Mithraism [religion]

Mithra M: 679

Mysteries M: 972

Mithridates VI [king of Pontus] M: 679

Sulla, Lucius Cornelius So: 968

Mitolini [city]

Lesbos L: 205

Mitolini [island] See Lesbos in *this index***Mitneggdim** [religion]

Jews (Eastern European religious movements)
J: 123

Mitochondria [biology] M: 679

Cell (The cytoplasm) C: 329 with diagrams;
(Producing energy) C: 332 with diagram

Mitosis [biology]

Cell (Mitosis) C: 330 with pictures

Evolution (Mutation) E: 427-428

Heredity (Sex cells and reproduction) H: 201

Mitra [Hindu god]

Mithra M: 679

Mitral valve [anatomy]

Heart (Chambers, valves, and inner lining)
H: 133-135 with pictures; (The work of the heart) H: 135; (Valve disease) H: 141

Mitral valve prolapse M: 679

Mitral valve prolapse [disorder] M: 679

Heart (Valve disease) H: 141

Mitre, Bartolomé [Argentine political leader]

Argentina (The Constitution of 1853) A: 657-658

Mitridate Eupatore, II [opera by Scarlatti]

Scarlatti, Alessandro S: 173

Mitropoulos, Dimitri [Greek-American conductor] M: 679**Mitsotakis, Constantine** [Greek political leader]

Greece (The restoration of democracy) G: 365

Mitsubishi Electric [company]

Manufacturing (table) M: 170

Mitsubishi Heavy Industries [company]

Aviation (World War II [1939-1945]) A: 990

Mitte [district]

Berlin (The downtown areas) B: 260

Mitterrand, François Maurice [French political leader] M: 679

France (Socialists win power) F: 478

Mitty, Walter [literary figure]

Thurber, James T: 273

Miwok Indians [American Indians] M: 680**Mix, Tom** [American actor] M: 680**Mixdown** [recording]

Phonograph (How phonograph records are made) P: 401

Recording industry (The mixdown) R: 181

Mixed art

Theater T: 232

Mixed breed See Mongrel in *this index***Mixed economy**

Socialism (The New Left) So: 561-562

World (Economic systems) W: 408-413

Mixed farming

Farm and farming (Mixed farms) F: 32

United Kingdom (Agriculture) U: 65

Mixed-feed industry

Corn (Corn in industry) Ci: 1061

Mixed forest

Tree (Broadleaf forests) T: 428-429

Mixed member proportional system [government]

New Zealand (Political changes) N: 356

Mixed-motive game

Game theory G: 22

Mixed numbers [mathematics]

Fraction (Improper fractions) F: 449-450

Mixed tide

Tide (Tidal patterns) T: 282

Mixed-use development

City planning (Proposals of the plan) Ci: 599

Mixer [job]

Motion picture (Mixing the sound) M: 856
with picture

Mixing [sound recording]

Motion picture (Mixing the sound) M: 856
with picture

Recording industry (The mixdown) R: 181

Mixon, Wayne [American political leader]

Florida (table) F: 260

Mixtec Indians [Indian, American] M: 680

Indian, American picture on I: 172

Oaxaca O: 642

Mixture

Compound Ci: 906

Melting point M: 389

Mixture of Frailties, A [book by Davies]

Davies, Robertson D: 46

Miyako

Kyoto K: 398

Miyako Islands [islands, Pacific]

Ryukyu Islands R: 574

Mize, Johnny [American baseball player]

Baseball (table: Hall of Fame) B: 135

Mizzenmast

Sailing (Spars) S: 23

Ship (The full-rigged ship) S: 408

Mjollnir [Norse mythology]

Thor T: 265

MK luminosity classification system

Star (The Hertzsprung-Russell diagram)
So: 845-846

Mkapa, Benjamin [Tanzanian political leader]

Tanzania (Recent developments) T: 35

Mladenov, Petar [Bulgarian political leader]

Bulgaria (Political changes) B: 693

Mlle.

See Mademoiselle ... in *this index*

MLS

Airport (Air traffic control) A: 246-247

M-Maybe [painting by Lichtenstein]

Pop art picture on P: 659

Mme.

See Madame ... in *this index*

Mn [symbol]

Manganese (Properties) M: 139

M'Naghten's Case [1843]

Insanity I: 277

MNC

Multinational corporation M: 919

Mnemonics

Memory (Mnemonic devices) M: 393

Mnemosyne [Greek mythology]

Muses M: 937

Mo [symbol]

Molybdenum M: 697

- Moa** [extinct bird] M: 680 *with picture*
Bird picture on B: 369
- Moabite stone** [archaeology] M: 681
- Moabites** [people]
Moabite stone M: 681
Jordan (Early days) J: 164
- Moei** [statues]
Easter Island E: 45 *with picture*
- Moana** [film]
Flaherty, Robert Joseph F: 225
- Moat** [defense]
Castle (Structure) C: 280 *with picture*
Zoo (Displaying animals) Z: 605; *picture on*
Z: 604
- Mob** [zoology]
Kangaroo (The life of a kangaroo) K: 214
- Mob action**
Lynching L: 535
Riot R: 347
- Mobil Corporation**
Exxon Mobil Corporation E: 459
- "Mobil Masterpiece Theater"** [television program]
Television T: 110a
- Mobile** [Alabama] M: 681 *with picture*
Alabama (Average monthly weather) A: 270;
(Territorial days) A: 275; *picture on* A: 257
- Mobile** [sculpture] M: 682
Calder, Alexander C: 26 *with picture*
Sculpture (Form and treatment) S: 230-231
with picture
- Mobile Bay**
Alabama *picture on* A: 257
- Mobile Bay, Battle of** [1864]
Alabama (The Civil War and Reconstruction)
A: 276; *picture on* A: 277
Civil War (table) Ci: 624; (Battle of Mobile Bay)
Ci: 632
Farragut, David Glasgow F: 47
Mobile (History) M: 681-682
- Mobile crane** [machine]
Building construction (Constructing a skyscraper) B: 683-684
- Mobile Delta**
Alabama (Land regions) A: 268
- Mobile genetic element**
McClintock, Barbara M: 333
- Mobile home** M: 682
Trailer T: 368
- Mobile Intensive Care Unit**
Paramedic (Duties) P: 153
- Mobile Register, The**
Alabama (Communication) A: 273
- Mobile River** [Alabama] M: 683
Alabama (Rivers and lakes) A: 270
- Mobile starting gate** [harness racing]
Harness racing (The race) H: 63 *with picture*
- Mobility map** See Navigation map *in this index*
- Möbius, August Ferdinand** [German mathematician]
Mathematics (In the 1800's) M: 307
- Möbius strip** [mathematics] M: 683 *with diagram*
- Mobutu, Joseph Désiré** [Zairian political leader]
See Mobutu Sese Seko *in this index*
- Mobutu Sese Seko** [Zairian political leader]
M: 683
Congo (Kinshasa) (National government)
Ci: 940; (Civil disorder) Ci: 940e
- Moby-Dick** [book by Melville]
American literature (The romance) A: 418; *picture on* A: 416
Melville, Herman M: 390
Novel (The United States) N: 573
- Mocambo** [settlement]
Palmares P: 110
- Moccasins** [clothing] M: 683
Indian, American *picture on* I: 156
Shoe (Kinds of shoes) S: 431 *with picture*
- Moccasin flower**
Lady's-slipper L: 26
- Moccasin snake**
Water moccasin W: 135 *with picture*
- Moche** [coffee]
Coffee (Kinds of coffee) Ci: 754-755
- Moche** [American Indians] M: 683 *with picture*
Indian, American (Indians of the Andes) I: 173
with picture
Pyramids (American pyramids) P: 917 See
Moche *in this index*
- Mock orange** [shrub] M: 684
- Mock-up**
Airplane (Design and testing) A: 228
Astronaut (Advanced mission training) A: 832
- Mockernut hickory** [tree]
Hickory H: 224
- Mockingbird** M: 684 *with picture*
Bird (Birds of urban areas) B: 333 *with picture*
- Moco** [animal]
Cavy C: 322
- Moctezuma** See Montezuma II *in this index*
- Modal auxiliary** [grammar]
Mood (Verb phrases) M: 781
- Mode** [grammar]
Mood M: 780
- Mode** [mathematics] M: 684
Average A: 982
- Mode** [music]
Classical music (Early music) Ci: 645
- Modekngei** [religion]
Palau (People) P: 102
- Model** [economics]
Econometrics E: 57
- Model** [geyser]
Geyser (How geysers form) G: 177-178
- Model** [occupation] See Modeling *in this index*
- Model, Mathematical** See Computer modeling;
Mathematical model *in this index*
- Model A**
Automobile (Changes at the top) A: 966
Ford, Henry (Industrial accomplishments)
F: 379-380
- Model Aeronautics, Academy of**
Airplane, Model A: 240
- Model agency**
Modeling (Model agencies) M: 685
- Model airplane** See Airplane, Model *in this index*
- Model car** See Automobile, Model *in this index*
- Model making**
Airplane, Model A: 240 *with pictures*
Automobile (Development of the concept)
A: 955 *with picture*
Automobile, Model A: 974 *with pictures*
Cell *picture on* C: 338
City planning *picture on* Ci: 598
Hobby (Handicrafts) H: 272
Railroad, Model R: 119 *with pictures*
Rocket, Model R: 391 *with pictures*
Science projects (Kinds of science projects)
S: 206
Theater *picture on* T: 239
- Model Parliament** [English history] M: 684
England (The beginnings of Parliament) E: 306
Parliament (History) P: 174
- Model railroad** See Railroad, Model *in this index*
- Model Railroad Association, National**
Railroad, Model (History) R: 121
- Model rocket** See Rocket, Model *in this index*
- Model ship** See Ship, Model *in this index*
- Model T**
Automobile (Henry Ford) A: 965 *with picture*;
(Changes at the top) A: 966
Ford, Henry (Industrial accomplishments)
F: 379 *with picture*
Ford Motor Company F: 382
- Modeling** [art]
Sculpture (The sculptor at work) S: 232 *with picture*
- Modeling** [career] M: 684 *with picture*
Careers (Sales) C: 229-230
- Modem** [electronic device] M: 686
Computer (A modem or network interface card) Ci: 915
Computerized instruction (Resource programs)
Ci: 924h-925
Internet I: 350
Multimedia M: 919
Telecommunications T: 89
Telephone (Modems) T: 97
- Moderate rain**
Rain (Characteristics of rain) R: 122-123
- Moderate Republican** [U.S. history]
Reconstruction (The Radicals and the Moderates) R: 178
- Moderato**
Music (table) M: 954
- Moderator**
Nuclear energy (Nuclear fission) N: 582-583;
(Power reactors) N: 584-585
- Modern Comedy, A** [book by Galsworthy]
Galsworthy, John G: 16
- Modern dance**
Dance (European and American theatrical dance) D: 31 *with picture*; *picture on*
D: 30
Graham, Martha G: 300
- Modern Instance, A** [book by Howells]
Howells, William Dean H: 402
- Modern Jazz Quartet**
Jazz *picture on* J: 68
Lewis, John Aaron L: 220
- Modern Love** [poems by Meredith]
Meredith, George M: 417
- Modern Maturity** [magazine]
AARP A: 3
Magazine (Other magazines) M: 42
- Modern Painters** [book by Ruskin]
Ruskin, John R: 523
- Modern pentathlon** [sports] See Pentathlon,
Modern *in this index*
- Modern Republicanism** [U.S. history]
Eisenhower, Dwight David ("Modern Republicanism") E: 152
- Modern Standard Arabic** [language]
Arabs (Language) A: 586
- Modernism** [arts]
American literature (The world wars and depression [1914-1945]) A: 420
Latin-American literature (Modernism) L: 112
Postmodernism P: 709
Rodó, José Enrique R: 399
Spanish literature (Modernism) So: 762
- Modernism** [religion]
Roman Catholic Church (Pius X) R: 410
- "Modest Proposal, A"** [essay by Swift]
Swift, Jonathan (Swift's other works)
So: 1040
- Modiano, Patrick** [French author]
French literature (Recent French literature)
F: 523
- Modified atmosphere package**
Packaging P: 18
- Modified free enterprise system** [economics]
Capitalism (How capitalism differs from central planning) C: 193
- Modifier** [grammar]
Adjective A: 56
Adverb (Sentence modifiers) A: 70
A Guide to Writing Skills Research Guide: 9
- Modigliani, Amedeo** [Italian artist] M: 686 *with picture*
- Modigliani, Franco** [American economist]
Nobel Prizes (Economics: 1985) N: 449
- Modoc Indians** [American Indians] M: 686
Captain Jack C: 199
Klamath Indians K: 343
Oregon (Indian wars) O: 846-848
- Modoc War** [1872-1873]
Captain Jack C: 199
Indian, American (After European contact)
I: 166
Indian wars (The Modoc War) I: 194
Oregon (Indian wars) O: 846-848
- Modred, Sir** [legendary figure]
Arthur, King A: 757
Lancelot, Sir L: 56
Round Table (The decline of the Round Table)
R: 491
- Modrow, Hans** [German political leader]
Germany (East Germany) G: 170-171
- Modular construction**
Building construction (Prefabricated construction) B: 684
- Modular unit**
Furniture (The 1900's to the present) F: 582;
(The retro style) F: 584
- Modulation** [electronics]
Television (Broadcasting) T: 122
- Modulation** [music]
Harmony H: 63
Music (Harmony) M: 951-952
- Modulator** [electronics]
Radar (The modulator) R: 70 *with diagram*
- Module** [agriculture]
Cotton (Harvesting) Ci: 1090
- Module** [architecture]
Architecture (table) A: 608-609, (Classical Greek architecture) A: 615-616
- Module** [construction]
Building construction (Prefabricated construction) B: 684
- Module** [engineering]
Solar energy (Using photovoltaic cells) So: 578
- Module** [spacecraft]
International Space Station I: 346a
Space exploration (Space stations) So: 721
- Modyford, Thomas** [English colonial official]
Morgan, Sir Henry (Early career) M: 803
- Moe, Jørgen** [Norwegian author]
Asbjørnsen, Peter Christen A: 766

- Storytelling (The 1800's) **So**: 914
Moebius strip See Möbius strip in this index
Moeur, Benjamin B. [American political leader]
 Arizona (table) **A**: 687
Moffat, David Halliday [American businessman]
 Moffat Tunnel **M**: 686
Moffat Tunnel [Colorado] **M**: 686
 Colorado (The 1910's and 1920's) **Ci**: 847
 Rocky Mountains (History) **R**: 396
Moffatt, James [Scottish theologian]
 Bible (Modern English translations) **B**: 286
Mofford, Rose [American political leader]
 Arizona (table) **A**: 687; (The late 1900's)
A: 691-692
Mogadishu [city, Somalia] **M**: 687
 Somalia **So**: 588 with picture and map
Mogae, Festus [Botswana political leader]
 Botswana (History) **B**: 512
Mogollon [American Indians] **M**: 687
 Indian, American (Indians of the Southwest)
I: 166
 New Mexico (Indian days) **N**: 272
Mogollon Rim
 Arizona (Land regions) **A**: 680-682
Mogul [skiing]
 Skiing (Freestyle skiing) **S**: 483
Mogul Empire [history of India] See Mughal
 Empire in this index
Mohács, Battle of [1526]
 Hungary (Ottoman Empire) **H**: 445
 Slovakia (Hungarian rule) **S**: 509
 Turkey (The rise of the Ottoman Empire)
T: 510
Mohair [fabric] **M**: 687
 Angora **A**: 467
 Goat (Domestic goats) **G**: 239
Mohammad See Muhammad in this index
Mohammad Reza Pahlavi [shah of Iran] **M**: 687
 Carter, Jimmy (The Iranian crisis) **C**: 258
 Iran **I**: 398; (Economy) **I**: 404; (The nationalist
 movement) **I**: 406a; (Reforms and grow-
 ing unrest) **I**: 406a; (Revolution and the
 Islamic Republic) **I**: 406a
 Khomeini, Ali **K**: 308a
 Khomeini, Ruhollah **K**: 308b
Mohammed See Muhammad in this index
Mohammed, Murtala Ramat [Nigerian political
 leader]
 Nigeria (Oil wealth) **N**: 418
Mohammed, Warith Deen [American religious
 leader]
 Black Muslims **B**: 390
 Farrakhan, Louis **F**: 48
 Nation of Islam **N**: 27
Mohave Desert [California] See Mojave Desert
 in this index
Mohave Indians [American Indians] **M**: 687
Mohawk Indians **M**: 688
 Indian, American (Indians of the Northeast)
I: 154; (Current issues) **I**: 182
 Iroquois Indians **I**: 455
 Johnson, Sir William **J**: 154
 Mahican Indians **M**: 65
Mohawk River [New York] **M**: 688
 Hudson River **H**: 406
 New York (Rivers) **N**: 306
Mohawk Trail [U.S. history] **M**: 688
 Pioneer life in America (Crossing the
 Appalachians) **P**: 477-478 with map
Mohegan Bluffs
 Rhode Island (Places to visit) **R**: 304 with pic-
 ture
Mohegan Indians **M**: 688
 Connecticut (Early days) **Ci**: 968
Mohéli [island, Comoros]
 Comoros **Ci**: 899
Mohenjo-Daro [ancient city]
 Indus Valley civilization **I**: 241 with pictures
 Sculpture (Indus Valley) **S**: 235 with picture
 World, History of the (The Indus Valley)
W: 425 with picture
Moher, Cliffs of [County Clare]
 Ireland picture on **I**: 423
Mohican Indians [fictional tribe]
 Mahican Indians **M**: 65
 Mohegan Indians **M**: 688
Moholy-Nagy, László [Hungarian-American
 artist]
 Photography (The photographic revolution)
P: 427
Mohs, Friedrich [German mineralogist]
 Mineral (Hardness) **M**: 567
Mohs scale [mineralogy]
 Mineral (Hardness) **M**: 567 with diagram
 Gem (Hardness) **G**: 77
Moi, Daniel Toroitich arap [Kenyan political
 leader] **M**: 688 with portrait
 Kenya (Building the new nation) **K**: 304
Moisty [group]
 Indian, American (Family groups) **I**: 136c
Moil
 Glass (Glass terms) **G**: 222
Moirai [Greek mythology]
 Fates **F**: 54
Moiré pattern [design] **M**: 689 with picture
Moissan, Henri [French chemist]
 Fluorine **F**: 306
 Nobel Prizes (Chemistry: 1906) **N**: 442
Moist gangrene [disease]
 Gangrene **G**: 27
Moisture
 Humidity **H**: 433
 Weather (Humidity) **W**: 158
Moisture barrier [building construction]
 House (The foundation) **H**: 380
Mojave Desert [California] **M**: 689
 California (The Basin and Range Region) **C**: 50
 with picture
Mojave desert star
 Flower picture on **F**: 290
Mojave National Preserve [California]
 National Park System (table: National pre-
 serves) **N**: 58
Mojave Point
 Grand Canyon picture on **G**: 306
Mojmir [Moravian political leader]
 Slovakia (Early days) **S**: 508d
Moke-ta-ra-to [American Indian chief]
 Black Kettle **B**: 389
Moksha [religion]
 Hinduism (Reincarnation and karma) **H**: 237
 Manu **M**: 168
 Religion (A doctrine of salvation) **R**: 216
 Yoga **Y**: 567
Mokuawewewo [crater]
 Mauna Loa **M**: 313
Mola, Emilio [Spanish military leader]
 Fifth column **F**: 96
Molar [anatomy]
 Dog (Body structure) **D**: 264-265
 Elephant (Tusks and teeth) **E**: 228
 Teeth (Deciduous teeth) **T**: 79; (Permanent
 teeth) **T**: 79-80 with pictures
Molasses [food] **M**: 689
 Sugar (Molasses) **So**: 960
Molasses Act [1733] **M**: 689
Molay, Jacques de See De Molay, Jacques in
 this index
Mold [form]
 Cast and casting **C**: 277 with pictures
 Fossil (How fossils form) **F**: 425 with picture
 Pottery (Shaping the clay) **P**: 716-717; picture
 on **P**: 718
Mold [fungus] **M**: 689
 Cancer (Genes damaged by substances in the
 environment) **C**: 170
 Fermentation **F**: 73
 Food poisoning **F**: 340
 Food preservation (How food spoils) **F**: 341
 Fungi (The importance of fungi) **F**: 559-560
 Hay fever (Causes and prevention) **H**: 116
 Penicillin (Forms of penicillin) **P**: 240 with pic-
 ture
Mold casting [industrial process]
 Iron and steel (Shaping and finishing steel)
I: 445
Moldavia [region, Europe]
 See also Moldova in this index
 Bessarabia **B**: 273
 Moldova **M**: 690
 Romania (Land regions) **R**: 420 with map;
 (Unification movement) **R**: 423; (Ottoman
 rule) **R**: 423
Moldavian Soviet Socialist Republic
 Moldova **M**: 690
Moldavians [people] See Moldovans in this
 index
Moldboard
 Farm and farming (Preparing the soil) **F**: 35
 with picture
 Deere, John **D**: 87
 Plow (The moldboard plow bottom) **P**: 575
 with picture
Moldboard bottom
 Plow (The moldboard plow bottom) **P**: 575
 with picture
Molding [industrial process]
 Bottle **B**: 513
 Plastics (Making plastic products) **P**: 557
 Pottery (Shaping the clay) **P**: 716-717
 Rubber (Shaping) **R**: 505
Moldova [European country] **M**: 690 with pic-
 ture and map
 Bessarabia **B**: 273
 Flag picture on **F**: 207
Moldovan Communist Party
 Moldova (Government) **M**: 690
Moldovans [people]
 Moldova (People) **M**: 690
 Union of Soviet Socialist Republics (People)
U: 31
Moldoveanu, Mount
 Romania (Surface features) **R**: 419 with map
Mole [animal] **M**: 690b with picture
 Fur (table) **F**: 561
 Hand (Animal hands) **H**: 40
 Mammal (Underground) **M**: 122; picture on
M: 116
Mole [chemistry] **M**: 690b
 Metric system (Structure of the metric sys-
 tem) **M**: 437; (Chemistry) **M**: 440
 pH **P**: 353
Mole [dermatology] **M**: 691
 Birthmark **B**: 380
 Skin (Tumors) **S**: 491
 Skin cancer (Melanoma) **S**: 491
Mole [food]
 Mexico (Food and drink) **M**: 455-456
Mole cricket **M**: 691 with picture
Mole-rat [animal] **M**: 691 with picture
Mole trap
 Trapping picture on **T**: 404
Molecular biology **M**: 691
 Biology (table) **B**: 317
 Botany (How plants function) **B**: 508
 Evolution (Contributions from other scientific
 fields) **E**: 433
 Prehistoric people (Analysis of the genetic
 materials) **P**: 754
 Zoology (What zoologists study) **Z**: 610;
 (History) **Z**: 610-611
Molecular engineering See Nanotechnology in
 this index
Molecular genetics
 Genetics (Molecular genetics) **G**: 86
 Heredity **H**: 201
Molecular manufacturing See Nanotechnology
 in this index
Molecular mass
 Molecule (Individual molecules) **M**: 692
 See also Molecular weight in this index
Molecular medicine
 Cancer (Molecular medicine) **C**: 173
Molecular-orbital theory
 Mulliken, Robert Sanderson **M**: 915
Molecular physics
 Herzberg, Gerhard **H**: 217
 Physics (Atomic, molecular, and electron
 physics) **P**: 437
Molecular weight
 Density **D**: 142
 See also Molecular mass in this index
Molecule [chemistry] **M**: 692 with pictures
 Boiling point (Why boiling points differ) **B**: 440
 Bond **B**: 454
 Chemistry (Fundamental ideas of chemistry)
C: 398-399
 Diffusion **D**: 201
 Electricity (Molecules) **E**: 192
 Evaporation (How evaporation occurs) **E**: 422
 with diagram
 Expansion **E**: 438
 Human body (Chemical elements and mole-
 cules) **H**: 417
 Materials (The role of bonds) **M**: 301
 Nanotechnology **N**: 11
 Physics (Atomic, molecular, and electron
 physics) **P**: 437
 See also the list of Related Articles in the
 Molecule article
Moleskin [fur]
 Mole **M**: 690b
Molière [French dramatist] **M**: 694 with
 portrait
 Drama (Neoclassical playwrights) **D**: 333-334
 French literature (Classical drama) **F**: 520
Molina, Arturo Armando [Salvadoran political
 leader]
 El Salvador (Recent developments) **E**: 252
Molina, Mario José [American chemist]
 Nobel Prizes (Chemistry: 1995) **N**: 443

- Molina, Tirso de** See Tirso de Molina *in this index*
- Molino del Rey, Battle of** [1847]
Mexican War (Scott's campaign) **M: 446-447**
- Moll Flanders** [book by Defoe]
Defoe, Daniel (His writings) **D: 89**
English literature (The rise of the novel)
E: 318-319
Novel (The first English novelists) **N: 572**
- Mollisol** [soil]
Indiana (Natural resources) **I: 211**
Soil (How soils are classified) **So: 575-576**
with map
- Molloy** [book by Beckett]
Beckett, Samuel Barclay **B: 196**
- Mollusk** [zoology] **M: 694** *with pictures*
Animal (A classification of the animal kingdom)
A: 507 *with picture*
Aquaculture **A: 578**
Clam **Ci: 637** *with pictures*
Heart (Hearts of animals) **H: 146**
Invertebrate **I: 366**
Larva **L: 78**
Ocean (The nekton) **O: 655**; *picture on O: 651*
Pearl (How pearls are formed) **P: 216**
Prehistoric animal (Invertebrates) **P: 737**
Seafod **S: 264**
Shell **S: 384** *with picture*
See also the list of Related Articles in the Mollusk article
- Mollweide projection** [cartography]
Map (Map projections) **M: 182** *with diagram*
- Molly** [fish] **M: 696**
Fish *picture on F: 157*
- Molly Maguires** [organization] **M: 696**
- Molly on the Shore** [song]
Grainger, Percy Aldridge **G: 302**
- Molnár, Ferenc** [Hungarian dramatist] **M: 696**
Hungary (The arts) **H: 442**
- Molokai** [island, Hawaii]
Damien de Veuster, Joseph **D: 23**
Hawaii (Molokai) **H: 100** *with picture*
- Molotov, Vyacheslav Mikhailovich** [Soviet political leader] **M: 696**
Stalin, Joseph *picture on So: 827*
- Molting** [zoology] **M: 696** *with picture*
Beetle (The life cycle of beetles) **B: 216**
Bird (Feathers) **B: 362**
Butterfly (The larva) **B: 740-741**
Duck (Habits) **D: 376**
Camel (The body of a camel) **C: 77**
Crustacean (Growth and development)
Ci: 1164 *with picture*
Insect (Skeleton) **I: 286**; *picture on I: 292*
Lobster (Growth) **L: 406**
Rabbit (Health) **R: 49**
Reptile (Skin) **R: 251** *with picture*
Snake (Scales and color) **S: 526** *with picture*
- Moltke, Helmuth Karl von** [Prussian general] **M: 697**
Franco-Prussian War (Progress of the war) **F: 483**
Seven Weeks' War **S: 325**
World War I (The Western Front) **W: 455-456**
- Molto**
Music (table) **M: 954**
- Moluccans** [people]
Indonesia (The Molucca Islands) **I: 234**
Netherlands (Diversity) **N: 150**
- Moluccas** [islands, Indonesia]
Indonesia (The Molucca Islands) **I: 234**
Netherlands (Diversity) **N: 150**
- Molybdenite** [mineral]
Molybdenum **M: 697**
Rhenium **R: 290**
- Molybdenum** [element] **M: 697**
Alloy (Alloys of iron) **A: 377-378**
Colorado (Mining) **Ci: 843**
Leadville **L: 150**
Technetium **T: 73**
- Momaday, N. Scott** [American author]
American literature (Works by minority writers) **A: 425**
Indian, American (Achievements in the arts)
I: 181
- Mombasa** [city, Kenya] **M: 697**
Kenya (The coastal area) **K: 301**
- Moment** [physics]
Gravity, Center of **G: 333**
Lever (Law of equilibrium) **L: 217-218**
- Moment in Peking** [book by Lin Yutang]
Lin Yutang **L: 309**
- Moment magnitude** [seismology] **M: 697**
Earthquake (Recording, measuring, and locating earthquakes) **E: 37-38**
Richter magnitude **R: 334**
- Momentum** [physics] **M: 698** *with diagram*
Motion (Momentum and kinetic energy)
M: 844
Quantum mechanics (Wave-particle duality)
Q: 6
- Mommsen, Theodor** [German historian]
Nobel Prizes (Literature: 1902) **N: 445**
Rome, Ancient (Learning about ancient Rome)
R: 448
- Momoh, Joseph** [Sierra Leone political leader]
Sierra Leone (History) **S: 452**
- MON**
Gasoline (Gasoline octane ratings) **G: 61**
- Mon** [people]
Myanmar (Early days) **M: 970d**
Thailand (History) **T: 226**
- Mon-Khmer** [language]
Laos (People) **L: 70**
- Mon-Khmer languages**
Language (Other language families) **L: 65-66**
with map
India (Languages) **I: 114**
- Mona Lisa** [painting by Leonardo da Vinci]
Leonardo da Vinci (Paintings) **L: 200b-201**;
L: 199 *with picture*
- Monacan Indians** [American Indians]
Virginia (Early days) **V: 418**
- Monaco** [country] **M: 698** *with picture and map*
Flag *picture on F: 207*
Kelly, Grace **K: 256**
Monte Carlo **M: 762**
Rainier III **R: 129**
- Monaco** [city, Monaco]
Monaco (Land) **M: 699**
- Monaco Grand Prix** [race]
Monaco **M: 698**
- Monad** [philosophy]
Leibniz, Gottfried Wilhelm **L: 186**
- Monadnock** [geography]
New Hampshire (Visitor's guide) **N: 216**;
(Mountains) **N: 220**
- Monadnock, Mount**
New Hampshire (Mountains) **N: 220**
- Monadnock Building** [Chicago]
Burnham, Daniel Hudson **B: 709**
- Monal**
Bird (Birds of Europe and Asia) **B: 346** *with picture*
- Monarch butterfly** [insect]
Animal (Animal migration) **A: 502-503**
Butterfly (Milkweed butterflies) **B: 737-738**
with picture; (How butterflies protect themselves) **B: 742**; (Migration) **B: 742**
with picture
Insect (Hibernation and migration) **I: 296**
Mimicry **M: 561**
- Monarchia, The** [essay by Dante]
Dante Alighieri (His works) **D: 34-35**
- Monarchy** [political science] **M: 700**
Divine right of kings **D: 242**
Government (Aristotle's categories) **G: 285**
Petition of Right **P: 327**
United Kingdom (National government) **U: 49**
- Monastery** [religion]
Architecture (Carolingian architecture) **A: 618**
Bhutan *picture on B: 277*
Book (The Middle Ages) **B: 466**
Cloister **Ci: 683**
Hermit **H: 211**
Library (Medieval collections) **L: 259** *with picture*
Middle Ages (The Christian church) **M: 523-524**
Monasticism **M: 700**
Painting (Early medieval painting in the West)
P: 48-49
- Monastery of Kildare** [Ireland]
Bridget, Saint **B: 607**
- Monastery of the Caves** [building]
Kiev **K: 314**
- Monastic Brotherhood** [religious group]
Religious life (table) **R: 227**
- Monasticism** [religion] **M: 700** *with picture*
Abbot **A: 4**
Anthony of Thebes, Saint **A: 545**
Athanasius, Saint **A: 853**
Benedict of Nursia, Saint **B: 247**
Benedictines **B: 248**
Christianity (The early church) **C: 525**
Copts **Ci: 1045**
Dunstan, Saint **D: 386**
Monk **M: 725**
Pachomius, Saint **P: 2**
- Roman Catholic Church (The recognition of Christianity) **R: 406**
Trappists **T: 404**
- Monastiraki Square**
Athens (Landmarks) **A: 854** *with map*
- Monaural recording** See Monophonic recording *in this index*
- Monazite** [mineral] **M: 701**
Holmium **H: 296**
Ytterbium **Y: 574**
Yttrium **Y: 575**
- Mönch** [mountain, Switzerland]
Alps *picture on A: 385*
- Moncion, Francisco** [American dancer]
Tallchief, Maria *picture on T: 20*
- Monck, Charles Stanley**
Monck, Viscount **M: 702**
- Monck, George** [English general] **M: 701**
England (The Restoration) **E: 309**
Restoration **R: 263**
- Monck, Viscount** [British political leader] **M: 702**
Ottawa (Rideau Hall) **O: 872**
- Mönckeberg's arteriosclerosis** [disease]
Arteriosclerosis **A: 750**
- Moncton** [city, New Brunswick] **M: 702**
- Mondale, Walter Frederick** [American political leader] **M: 702** *with portrait*
Carter, Jimmy (Rise to prominence) **C: 255-256** *with picture*
Democratic Party (Mixed results) **D: 128** *with picture*
Ferraro, Geraldine Anne **F: 76**
Minnesota (Politics) **M: 602-603**
Reagan, Ronald Wilson *picture on R: 169*
Vice President of the United States (Growth of the vice presidency) **V: 353-354**
- Monday** [day] **M: 702**
- Mondrian, Piet** [Dutch painter] **M: 702**
Painting (Line) **P: 35**; (De Stijl) **P: 80** *with picture*; (Europeans in America) **P: 84**
- Mondrian Dancing** [painting by Rothenberg]
Painting (New image painting) **P: 87** *with picture*
- Monégasques** [people]
Monaco (People) **M: 699**
- Monel metal** **M: 703**
- Moneran** [biology] See Prokaryote *in this index*
- Monestrous mammal** [zoology]
Mammal (Mating) **M: 122-123**
- Monet, Claude** [French painter] **M: 703** *with picture*
Derain, André **D: 152**
Impressionism (French impressionism) **I: 94**
Painting (Light and shade) **P: 35** *with picture*; (Edouard Manet and the impressionists)
P: 71
Renoir, Pierre Auguste **R: 241**
- Monet, Jean Baptiste Pierre Antoine de** See Lamarck, Chevalier de *in this index*
- Moneta, Ernesto Teodoro** [Italian statesman]
Nobel Prizes (Peace: 1907) **N: 447**
- Monetarism**
Depression (Monetary policy) **D: 151**
Economics (New solutions for old problems)
E: 65
Keynes, John Maynard **K: 308a**
- Monetary Conference, International** [1944]
Bretton Woods **B: 594**
Morgenthau, Henry, Jr. **M: 805**
New Hampshire (The mid-1900's) **N: 226-227**
with picture
- Monetary History of the United States, A**
[book by Friedman]
Friedman, Milton **F: 533**
- Monetary policy**
Depression (Causes and prevention) **D: 150-151**
Inflation (Weapons against inflation) **I: 268**
Money (Money and the economy) **M: 714**
Recession (Fighting recession) **R: 175**
- Monetary value**
Money (The value of money) **M: 714**
- Money** **M: 704** *with pictures*
Coin collecting **Ci: 756** *with pictures*
Colonial life in America (Money) **Ci: 811**
Convertibility **Ci: 1024**
Counterfeiting **Ci: 1097**
Devaluation **D: 173**
Exchange rate **E: 435**
Free silver **F: 499**
Gold (Money) **G: 251**
Gold standard **G: 254**
Gresham's law **G: 391**
Income **I: 100**

Indian, American (Money) I: 149 *with picture*
 Inflation I: 266
 Investment I: 366
 Legal tender I: 183
 Trade (The use of money) T: 362
See also the list of Related Articles in the Money article

Money (book by Amis)
 Novel (The novel today) N: 575

Money (play by Bulwer-Lytton)
 Bulwer-Lytton, Edward George Earle Lytton B: 697

Money-back guarantee
 Consumerism (The right to quality) Ci: 1018

Money fund [economics] *See* Money market fund *in this index*

Money income
 Income (Types of income) I: 100

Money market account
 Bank (Safeguarding deposits) B: 88-89
 Investment (Indirect investments) I: 367

Money market fund M: 718
 Bank (A boom in money market funds) B: 94
 Investment (Other kinds of indirect investments) I: 368
 Mutual fund M: 969

Money order M: 719 *with pictures*
 Postal Service, United States (Other services) P: 700

Money supply
 Depression (Monetary policy) D: 151
 Federal Reserve System (History) F: 66
 Inflation (Theories about the causes of inflation) I: 268; (Monetary policy) I: 268
 Money (Money and the economy) M: 714 *with diagram*

Money wages
 Wages and hours (Wages) W: 2

Moneylender
 Pawnbroker P: 202

Moneywort (plant)
 Loosetrife L: 453

Mongkut (king of Thailand)
 Thailand (Modernization) T: 227

Mongol Empire [Asian history] M: 719 *with pictures and map*
 Asia (Nomadic invasions) A: 805-806 *with map*
 China (Mongol rule) C: 502 *with map*
 Exploration (The great age of European exploration) E: 442
 Genghis Khan G: 88 *with map*
 Georgia (History) G: 111
 Hungary (The Kingdom of Hungary) H: 445
 Iran (The rise of Islam) I: 406
 Kublai Khan K: 391 *with map*
 Kyrgyzstan (History) K: 400
 Mongolia (History) M: 723
 Muslims (The fall of the Abbasids) M: 964c
 Russia (Mongol rule) R: 548
 Timur T: 293
 Uzbekistan (History) U: 254

Mongolia M: 722 *with picture and map*
 Asia (Way of life in Central Asia) A: 790 *with picture*
 Communism (The Comintern) Ci: 893
 Exploration (European exploration) E: 442
 Flag *picture on* F: 204
 Genghis Khan G: 88
 Kublai Khan K: 391 *with map*

Mongolie, Inner [region, China]
 China (The land) C: 491
 Mongolia M: 722

Mongolian gerbil [animal]
 Gerbil G: 136 *with picture*

Mongolian oak (tree)
 Oak (Other oaks) O: 636

Mongolian People's Revolutionary Party
 Mongolia (History) M: 723-724

Mongolians [people] *See* Mongols *in this index*

Mongolism [birth defect] *See* Down syndrome *in this index*

Mongoloids [people]
 Races, Human (The three-race theory) R: 53-54 *with picture*

Mongols [people]
 China (Nationalities) C: 481 *with map, picture on* C: 482
 Korea (Early years) K: 375-376
 Manchuria (People) M: 134
 Mongolia M: 722; (The people) M: 722
 Russia (Ancestry) R: 532

Mongoose [animal] M: 724 *with picture*
 Cobra Ci: 742

Mongrel [animal]

Dog (Kinds of dogs) D: 265-266; (Choosing a dog) D: 277-278; *picture on* D: 262
 Pet (Choosing a pet) P: 320

Monier, Joseph (French inventor)
 Cement and concrete (History) C: 345

Monilia [fungus]
 Vaginitis V: 260

Monism [philosophy]
 Metaphysics (Mind and body) M: 430

Monito del monte [animal]
 Mammal (table) M: 128 *with picture*
 Marsupial (Kinds of marsupials) M: 232

Monitor [electronic device]
See also Computer monitor *in this index*
 Television (Putting a show on the air) T: 111-112 *with picture*

Monitor [reptile] M: 724
 Lizard (Sizes of lizards) L: 399; *picture on* L: 400

Monitor [ship]
See also Monitor and Merrimack *in this index*
 Ericsson, John E: 351

Monitor and Merrimack [ships] M: 724
See also Monitor [ship] *in this index*
 Battleship (Development of the battleship) B: 172
 Civil War (First battle between ironclads) Ci: 626 *with picture*
 Navy, United States (The Civil War [1861-1865]) N: 88; *picture on* N: 90

Monitoring center
 Burglar alarm B: 704

Monitoring station [radio] M: 725

Moniz, Antônio Caetano de Abreu Freire Egas [Portuguese physician]
 Nobel Prizes (Physiology or medicine: 1949) N: 444

Monk [religion] M: 725
 Asia *picture on* A: 785
 Buddhism (The sangha) B: 668 *with picture*
 Clothing *picture on* Ci: 691
 Friar F: 531
 Hermit H: 211
 Monasticism M: 700
 Religious life R: 226
 Scribe S: 226
 Trappists T: 404
 World, History of the *picture on* W: 434

Monk, George [English general] *See* Monk, George *in this index*

Monk, Henk [American frontiersman]
 Western frontier life in America (The people) W: 235

Monk, The [book by Lewis]
 Gothic novel G: 279

Monk, Thelonious [American musician] M: 725
 Jazz (Bebop) J: 72

Monk parakeet [bird]
 Parrot P: 179

Monkey [animal] M: 725 *with pictures and map*
 AIDS (History of AIDS) A: 165
 Animal (A table of animal intelligence) A: 493; *pictures on* A: 481, A: 499, A: 507
 Ape (Differences between apes and monkeys) A: 563
 Capuchin C: 199 *with picture*
 Colobus Ci: 777
 Comparative psychology *picture on* Ci: 902a
 Guenon G: 419
 Instinct (Instinct and learning) I: 305
 Macaque M: 3 *with picture*
 Primate (Anthropoids) P: 778 *with picture*; (The evolution of primates) P: 778b *with diagram*
 Rhesus monkey R: 291 *with picture*
 Titi T: 301 *with picture*

Monkey bread [fruit]
 Baobab B: 100

Monkey-faced owl
 Owl (Important owls) O: 884

Monkey flower [shrub] M: 729
 Flower *picture on* F: 288

Monkey Island [book by Fox]
 Literature for children (Fiction) L: 358-359

Monkey puzzle tree M: 730 *with pictures*
 Tree (Needleleaf trees) T: 414-415

Monk's Mound [Illinois]
 Mound builders (The Mississippian culture) M: 882 *with picture*

Monmouth, Battle of [1778]
 Lee, Charles L: 175
 New Jersey (The Revolutionary War) N: 250 *with picture*
 Pitcher, Molly P: 499

Revolutionary War in America (table) R: 276; (France's entry into the Revolutionary War) R: 283

Monmouth, Duke of [English public figure] M: 730
 Rye House Plot R: 574

Monmouth Battlefield State Park [New Jersey]
 New Jersey (Places to visit) N: 240

Monnet, Jean [French economist] M: 730
 European Union (History) E: 420

Monnet Plan [economics]
 Monnet, Jean M: 730

Mono [disease] *See* Mononucleosis *in this index*

Mono-block process [manufacturing]
 Artillery (The mono-block process) A: 763

Mono Gramático, El [book by Paz]
 Paz, Octavio P: 205

Monalphabetic substitution
 Codes and ciphers (Substitution) Ci: 750

Monoamine oxidase inhibitor [drug]
 Antidepressant A: 553

Monocacy, Battle of [1864]
 Maryland (The Civil War) M: 258-259

Monocacy National Battlefield [Maryland]
 National Park System (table: National battlefields) N: 55

Monochromatic color scheme
 Color (Producing color harmony) Ci: 823-824 *with diagram*
 Interior design (Using color) I: 331
 Malevich, Kasimir M: 105 *with picture*

Monochromatic light
 Laser (Characteristics of laser light) L: 84

Monochrome ink painting
 Painting (Japanese painting) P: 47

Monoclinic system [chemistry]
 Crystal (Classifying crystals) Ci: 1166-1167 *with picture*
 Pyroxene P: 920

Monoclonal antibody [physiology] M: 730
 Cancer (Biological response modifiers) C: 172
 Immune system (Further breakthroughs) I: 88d

Monocoque [engineering]
 Airplane (Other pioneer planes and fliers) A: 233-234; *picture on* A: 232
 Automobile racing (Formula One racing) A: 976-977

Monocot *See* Monocotyledon *in this index*

Monocotyledon [botany] M: 731
 Angiosperm A: 462
 Cotyledon Ci: 1095
 Flower (The classifying of flowers) F: 299; F: 301 *with pictures*
 Plant (Angiosperms) P: 519; (Classification of plants) P: 546-547 *with picture, picture on* P: 531
 Seed (The parts of a seed) S: 281 *with diagram*
 Stem (Herbaceous stems) So: 887
 Tree (Broadleaf trees) T: 414

Monocyte [physiology]
 Blood (Protecting against disease) B: 410
 Immune system (Other white blood cells) I: 88

Monod, Jacques Lucien [French biochemist] M: 731
 Nobel Prizes (Physiology or medicine: 1965) N: 445

Monody [music]
 Song S: 592
 Classical music (The Baroque period) Ci: 647

Monococious plant [botany]
 Flower (Variations in flower structure) F: 294

Monofilament
 Fishing (Lines) F: 177

Monogamy [marriage]
 Marriage (Marriage in other cultures) M: 222

Monogram [sewing]
 Sewing machine *picture on* S: 333

Monolith [geology]
 Seven Natural Wonders of the World (Ayers Rock) S: 324 *with picture*

Monolithic idea [electronics]
 Kilby, Jack K: 315

Monologion [book by Anselm]
 Anselm, Saint A: 519

Monomer [chemistry] M: 731
 Plastics (The chemistry of plastics) P: 556
 Polyester P: 649
 Polyethylene P: 649
 Polymer P: 650
 Polypropylene P: 651 *with diagram*
 Polystyrene P: 651 *with diagram*

- Polyvinyl chloride P: 652 *with diagram*
 Rubber (The chemistry of rubber) R: 501
- Monometer** [poetry]
 Poetry (table) P: 594
- Monomial** [mathematics]
 Algebra (Other definitions) A: 354
- Monomyth**
 Campbell, Joseph C: 90a
- Monona, Lake** [Wisconsin]
 Madison M: 30
- Monongahela National Forest**
 West Virginia (Places to visit) W: 216
- Monongahela River** [Pennsylvania-West Virginia] M: 731
 Pittsburgh (The city) P: 500a *with picture*
- Mononucleosis** [disease] M: 731
 Disease (table) D: 226
 Epstein-Barr virus E: 345
- Monophonic recording**
 Phonograph (History) P: 401-402
 Stereophonic sound system (History) So: 893
- Monophony** [music]
 Classical music (Songs) Ci: 644; (The Middle Ages) Ci: 645
 Song So: 592
- Monophysitism** [religion]
 Roman Catholic Church (The recognition of Christianity) R: 406
- Monoplacophora** [zoology]
 Mollusk (Monoplacophora) M: 696; *picture on* M: 695
 Shell (Kinds of mollusk shells) S: 385
- Monoplane** [airplane]
 Aircraft, Military (World War I [1914-1918]) A: 204
 Airplane (Other pioneer planes and fliers) A: 233 *with pictures*
 Blériot, Louis B: 400
- Monopoly and competition** [economics] M: 731
See also Competition *in this index*
 Capitalism (Ensuring competition) C: 194
 Cartel C: 251
 Consumerism (Beginnings of consumerism) Ci: 1019
 Economics (Markets, prices, and competition) E: 60-61
 Industry (Structure) I: 261
 Inflation (The cost-push theory) I: 268
 Merger M: 418
 Price (How price is determined) P: 774
 Public utility P: 867
 Telephone (Competition in the U.S. telephone industry) T: 101
 United States, History of the (Monopolies) U: 178
- Monoreil** [railroad] M: 732 *with picture*
 Washington (Interesting facts about Washington) W: 47
- Monosaccharide** [sugar]
 Carbohydrate (Kinds of carbohydrates) C: 203 *with diagram*; (How the body uses carbohydrates) C: 204
 Glucose G: 236
 Life (Carbohydrates) L: 277 *with diagram*
 Saccharides S: 4
 Sugar (Kinds of sugar) So: 959
- Monosodium glutamate** [chemical] M: 733
 Migraine M: 537
 Wheat (Other uses) W: 267
- Monotheism** [religion]
 Mythology (The influence of Egyptian mythology) M: 977
 Polytheism P: 651
 Religion (Belief in a deity) R: 215; (Judaism) R: 219
- Monotreme** [mammal]
 Mammal (Reproduction) M: 123-124 *with picture*; (table) M: 128 *with picture*
- Monotype** M: 733
 Printing (Hot-metal typesetting) P: 797
- Monounsaturated fatty acid**
 Fat (Structure) F: 52
 Nutrition (Fats) N: 625
- Monowitz** [concentration camp]
 Auschwitz A: 892
- Monozygotic twins** *See* Identical twins *in this index*
- Monpezat, Henri de Laborde de** [husband of] Margrethe II M: 198
- Monroe** [racing car]
 Chevrolet, Louis C: 416
- Monroe, Bill** [American musician] M: 733
 Country music (Bluegrass music) Ci: 1098a *with picture*
- Monroe, Charlie** [American musician]
 Monroe, Bill M: 733
- Monroe, Elizabeth Jones** [mother of] Monroe, James (Boyhood) M: 734
- Monroe, Elizabeth Kortright** [wife of James Monroe]
 First ladies (table) F: 142
 Monroe, James (Monroe's family) M: 735-736 *with portrait*; (Life in the White House) M: 737
- Monroe, Harriet** [American editor] M: 733
- Monroe, James** [U.S. President] M: 734 *with pictures*
 Adams, John Quincy (Secretary of state) A: 42
 Jefferson, Thomas (Governor) J: 80; (The Louisiana Purchase) J: 85
 Louisiana Purchase (New Orleans closed to Americans) L: 503
 Monroe Doctrine M: 739
 Paine, Thomas (French revolutionary) P: 22-23
 Virginia (table) V: 417; (*The Mother of Presidents*) V: 421
 White House (A new building) W: 290
- Monroe, Marilyn** [American actress] M: 739 *with portrait*
 DiMaggio, Joe D: 204
 Miller, Arthur M: 553
 Warhol, Andy W: 36 *with picture*
- Monroe, Mount**
 New Hampshire (Mountains) N: 220
- Monroe, William Smith** [American musician]
See Monroe, Bill *in this index*
- Monroe Doctrine** [international relations] M: 739
 California (Spanish and Russian settlement) C: 60
 Latin America (Latin America and the United States) L: 109
 Maximilian M: 319
 Monroe, James (The Monroe Doctrine) M: 738 *with picture*
 Roosevelt, Theodore (Foreign policy) R: 469
- Monrovia** [Liberia] M: 740 *with picture*
 Liberia (Transportation and communication) L: 231 *with pictures*
- Monrovia** [Liberian history]
 Liberia (The Liberian settlement) L: 231
- Monserate** [mountain, Colombia]
 Bogotá B: 437
- Monsoon** [weather] M: 740
 Asia (Climate) A: 794
 China (Climate) C: 495
 India (The rainy season) I: 124 *with picture and map*
 Japan (Climate) J: 48
 Korea (Climate) K: 374
 Rain (Rainfall distribution) R: 124
 Vietnam (Climate) V: 368
 Wind (Local winds) W: 329
- Monster** [legendary creature]
 Abominable Snowman A: 13
 Bigfoot B: 298
 Frankenstein F: 484
 Loch Ness monster L: 410
See also the Monsters and Creatures section of the list of Related Articles in the Mythology article
- Monster** [book by Myers]
 Literature for children (Children's literature today) L: 365
- Monster's Ball** [film]
 Berry, Halle B: 272
- Mont Blanc** [mountain, Europe] M: 741
 France (The land) F: 464-466 *with picture and map*
 Mountain (table) M: 894 *with diagram*
 "Mont Blanc" [poem by Shelley]
 Shelley, Percy Bysshe (His writings) S: 391
- Mont Blanc** [ship]
 Shipwreck (table: Major shipwrecks) S: 428
- Mont Blanc Tunnel** [France-Italy]
 Tunnel (table) T: 491
- Mont D'Iberville** [Canadian Shield]
 Quebec (Land regions) Q: 22
- Mont Kartala** [volcano, Comoros]
 Comoros (Land and climate) Ci: 900 *with map*
- Mont-Saint-Michel** [island, France] M: 741
 France *picture on* F: 453
- Mont-Saint-Michel and Chartres** [book by Adams]
 Adams, Henry Brooks A: 33
- Mont Sainte-Victoire** [painting by Cézanne]
 Cézanne, Paul C: 365 *with picture*
- Mont Tendre** [mountain, Switzerland]
 Switzerland (The Jura Mountains) So: 1054-1055 *with map*
- Mont Tremblant Provincial Park**
 Quebec (Land regions) Q: 22
- Montage** [art]
 Eisenstein, Sergei Mikhailovich E: 156
 Motion picture (Filmmaking in Europe) M: 866-867
- Montagnais Indians** M: 741
 Labrador L: 17
 Newfoundland and Labrador (Early European exploration) N: 375
 Quebec (Indian days) Q: 30
- Montagne d'Ambre National Park** [Madagascar]
 National park (table) N: 42f
- Montagu, Mary Wortley** [English author]
 Jenner, Edward J: 91
- Montagu-Chelmsford Reforms** [1919]
 India (Rise of Indian nationalism) I: 131
- Montagu House** [London]
 British Museum B: 632
- Montague** [literary figures]
 Shakespeare, William (*Romeo and Juliet*) S: 358
- Montague, Andrew Jackson** [American political leader]
 Virginia (table) V: 417
- Montaigne, Michel Eyquem de** [French author] M: 741
 Essay (Personal essays) E: 359
 French literature (The Renaissance) F: 519-520
- Montale, Eugenio** [Italian poet] M: 741
 Italian literature (The 1900's) I: 495
 Nobel Prizes (Literature: 1975) N: 446
- Montalvo, Garcí Ordóñez de** [Spanish author]
Arnadís of Gaul A: 399
- Montana** M: 742 *with pictures and maps*
See also the list of Related Articles in the Montana article
- Montana, Joe** [American football player] M: 761
- Montana, University of** M: 761
- Montana State University** M: 762
- Montanari doll**
 Doll (Wax dolls) D: 290
- Montane forest**
 Forest (Mountain evergreen forests) F: 395
- Montauk Block building** [Chicago]
 Root, John Wellborn R: 475
- Montcalm, Marquis de** [French general] M: 762 *with portrait*
 French and Indian wars (The French and Indian War) F: 512-513
 Quebec (The 1700's) Q: 36
 Quebec, Battle of Q: 37
 Wolfe, James W: 377
- Montcalm-Gozon, Louis Joseph de** *See* Montcalm, Marquis de *in this index*
- Monte, Philippe de** [Franco-Flemish composer]
 Classical music (Instrumental music) Ci: 646
- Monte Albán** [ancient city] M: 762
 Mexico (The Southern Uplands) M: 462; (The Classic Period) M: 468
 Zapotec Indians Z: 591
- Monte Carlo** [Monaco] M: 762
 Monaco M: 698 *with picture*; (Land) M: 699
- Monte Carlo Rally**
 Monaco M: 698
- Monte Cassino** [abbey, Italy] M: 762
 Benedict of Nursia, Saint B: 248
 Cassino C: 277
- Monte Cristo** [island, Mediterranean] M: 762
- Montefiore, Sir Moses** [British philanthropist]
 Jerusalem (Muslim rule) J: 101
- Montejo, Francisco de, the Younger** [Spanish colonial official]
 Yucatán Peninsula Y: 575
- Montemayor, Jorge de** [Spanish author]
 Spanish literature (The 1500's) So: 758-759
- Montenegriins** [people]
 Yugoslavia (People) Y: 577
- Montenegro** [republic, Yugoslavia] M: 763 *with picture and map*
 Balkans (The First Balkan War) B: 42; (The Second Balkan War) B: 42
 Croatia (History) Ci: 1148a-1148c
 Serbia and Montenegro S: 315
 Yugoslavia Y: 576; (History) Y: 579
- Monteregians** [hills]
 Quebec (Land regions) Q: 22
- Monterey** [California] M: 764
- Monterey** [ship]
 Ford, Gerald Rudolph (Naval officer) F: 374
- Monterey Bay Aquarium** [California]

552 Monterey Bay National Marine Sanctuary

Aquarium, Public (Conservation) A: 578b-579

Monterey Bay National Marine Sanctuary

California (Places to visit) C: 46

Monterey cypress

Cypress Ci: 1205

Tree pictures on T: 424

Monterey Jack [cheese]

Cheese (Kinds of cheese) C: 392

Monterey Peninsula [California]

California (Places to visit) C: 46

Monterey pine

Pine (Western pines) P: 469-470

Monterrey [Mexico] M: 764

Mexico (The Plateau of Mexico) M: 460-462;
(table: Average monthly weather) M: 464

Monterrey, Battle of [1846]

Mexican War (Taylor's campaign) M: 446

Montesinos, José Fernández [Spanish author]

Spanish literature (The Generation of 1898)

So: 762

Montespan, Marquise de [mistress of Louis XIV]

Maintenon, Marquise de M: 93

Montesquieu [French author] M: 764 *with portrait*

Age of Reason (The orderliness of nature)

A: 139

Democracy (French contributions to democracy) D: 123

Freedom (During the Age of Reason) F: 503

French literature (The Age of Reason) F: 520

Political science (Liberalism) P: 639

Montessori, Maria [Italian educator] M: 764a

with portrait

Education (The organization of U.S. education) E: 89

Montessori method M: 764a

Nursery school (Nursery school instruction) N: 615-616

Montessori method [education] M: 764a

Education (The organization of U.S. education) E: 89

Montessori, Maria M: 764a

Nursery school (Nursery school instruction) N: 616

Montessori Society, American

Montessori method M: 764a

Monteux, Pierre [French conductor] M: 764a

Monteverdi, Claudio [Italian composer]

M: 764a *with portrait*

Italy (Music) I: 505

Opera (Early baroque opera) O: 797

Montevideo [Uruguay] M: 764b *with picture*

Uruguay (Way of life) U: 223-224 *with pictures*; (Climate) U: 226; U: 222 *with picture*

Montez, Pedro [Spanish slave trader]

Amistad Rebellion A: 433

Montezuma [opera by Sessions]

Caldwell, Sarah C: 28

Montezuma I [Aztec emperor]

Aztec (Growth of the Aztec empire) A: 1003

Mexico City (City of the Aztec) M: 478

Montezuma II [Aztec emperor] M: 764b *with picture*

Aztec (The Spanish conquest) A: 1003

Cortés, Hernando (Victory over the Aztec)

Ci: 1073 *with picture*

Indian, American (After European contact) I: 171

Mexico (The Spanish conquest) M: 469

Montezuma baldcypress

Tree (Interesting facts about trees) T: 411

Montezuma Castle National Monument

[Arizona] M: 765 *with picture*

National Park System (table: National monuments) N: 51

Montezuma quail

Quail Q: 4

Montfort, Simon de [English political leader]

M: 765

Henry III H: 186

Parliament (History) P: 174

Montgolfier, Jacques Étienne [French inventor]

Montgolfier brothers M: 766

Montgolfier, Joseph Michel [French inventor]

Montgolfier brothers M: 766

Montgolfier brothers [French inventors] M: 765

Airplane (First human flights) A: 230; *picture on A: 229*

Balloon (History) B: 60 *with picture*

Montgomery [Alabama] M: 766 *with picture*

Alabama (Interesting facts) A: 257; (The Civil War and Reconstruction) A: 276; *picture on A: 277*

Confederate States of America (Government) Ci: 931

King, Martin Luther, Jr. (The early civil rights movement) K: 320 *with picture*

Parks, Rosa Louise P: 171

Montgomery, Bernard Law [British general]

M: 766 *with portrait*

World War II (In northern Africa) W: 480

Montgomery, Lucy Maud [Canadian author]

M: 767

Canadian literature (Fiction: 1850-1918) C: 158

Montgomery, Richard [American general]

Arnold, Benedict (A courageous soldier)

A: 741

Montgomery M: 766

Revolutionary War in America (The invasion of Canada) R: 275

Montgomery GI Bill

Veterans Affairs, Department of (Benefits and other services) V: 343

Montgomery of Alamein, Viscount See

Montgomery, Bernard Law *in this index*

Montgomery Street

San Francisco (Downtown San Francisco)

S: 92-93

Montgomery Ward and Company

Mail-order business M: 66

Ward, Aaron Montgomery W: 35

Month M: 767

Calendar C: 28

Month in the Country, A [play by Turgenev]

Drama (Russian drama and Chekhov) D: 338

Russian literature (Early realism) R: 562

Monthly Catalog of United States

Government Publications [reference]

Guide to Research Skills **Research Guide: 34**

Monticello [estate] M: 767

Charlottesville C: 385

Jefferson, Thomas (Lawyer) J: 78; (The sage of Monticello) J: 86; *picture on J: 78*

Nickel *picture on N: 405*

Montigny mitrailleuse [gun]

Machine gun (History) M: 16 *with picture*

Montini, Giovanni Battista

Paul VI P: 200

Montmartre [district, Paris]

Paris (Arts) P: 164 *with picture*

Montmartre [hill]

Paris (Famous buildings) P: 163-164 *with map*

Montmorency Falls [Quebec]

Montmorency River M: 767

Quebec (Rivers, waterfalls, and lakes) Q: 24;

(Parks) Q: 36

Montmorency River [Quebec] M: 767

Quebec (Rivers, waterfalls, and lakes) Q: 24

Montoya, Joseph [American political leader]

Hispanic Americans (Political developments)

H: 255

Montoya, Juan [Colombian race driver]

Automobile racing (table: Indianapolis 500 winners) A: 980

Montpelier [Vermont] M: 767

Montreal [city, Quebec] M: 768 *with pictures*

and maps

Architecture *picture on A: 610*

Cartier, Jacques (Exploration of Canada)

C: 262

Olympic Games (Boycotts) O: 753

Quebec Q: 10; (Population) Q: 14 *with pictures*; (table: Average monthly weather)

Q: 25; *picture on Q: 11*

Quebec, Battle of (The attack on Quebec)

Q: 37-38

Montreal, Island of

Montreal (The city) M: 768-769

Montreal, School of [poetry]

Canadian literature (Poetry: 1850-1918)

C: 157-158; (Literature between the world wars) C: 159

Montreal, University of M: 779 *with picture*

Montreal Alouettes

Football (Canadian Football League) F: 364

Montreal (Sports) M: 775

Montreal Canadiens

Hockey (table: National Hockey League)

H: 281

Montreal Exchange [stock exchange]

Montreal (Trade and finance) M: 776-777

Montreal Expos

Baseball (table) B: 130

Montreal Harbour

Montreal (Transportation) M: 775-776

Montreal International Airport

Montreal (Transportation) M: 775-776

Montreal Museum of Fine Arts

Montreal (Museums) M: 773

Quebec (Museums) Q: 15

Montreal Protocol on Substances That

Deplete the Ozone Layer [1987]

United Nations (Important dates in UN history) U: 94

Montresor, Beni [Italian artist]

Caldecott Medal (table: 1965) C: 26

Montreux Convention [1936]

Bosporus B: 494

Dardanelles D: 36

Monts, Sieur de [French explorer] M: 780

Canada, History of (Early settlements) C: 142

New Brunswick (Exploration and settlement)

N: 196

New France (Exploration and settlement)

N: 204

Nova Scotia (Exploration and settlement)

N: 568

Poutrincourt, Jean de Biencourt de P: 722

Montserrat [island, West Indies] M: 780

Montserrat [monastery, Spain] M: 780

Montserrat [mountain, Spain]

Montserrat M: 780

Montuno [clothing]

Panama (Clothing) P: 118

"Monty Python's Flying Circus" [television

program]

Cleese, John Ci: 661 *with picture*

Monument [architecture] M: 780

American Battle Monuments Commission

A: 408

Sculpture (As monuments and memorials)

S: 229

Monument Avenue [Richmond]

Richmond (The city) R: 332 *with picture*

Monument to Balzac [sculpture by Rodin]

France *picture on F: 463*

Monument to Independence [Mexico City]

Mexico City *picture on M: 476*

Monument to the Boy Heroes

Mexico (War with Texas and the United

States) M: 471

Mexico City (Independence) M: 478

Monument Valley

Arizona (Land regions) A: 680 *with picture*

Earth *picture on E: 28*

Utah (Places to visit) U: 238; *picture on U: 230*

Monument Valley Navajo Tribal Park

Arizona (Places to visit) A: 678

Monumental Park See Public Square *in this*

index

Mood [grammar] M: 780

Conjugation Ci: 950

Mood [psychology] M: 780

Bipolar disorder B: 326

Clothing (Communication) Ci: 688-689

Depression D: 151

Mental illness M: 404

Seasonal affective disorder S: 271

Mood disorder [psychology]

Fibromyalgia F: 90

Mental illness (Mood disorders) M: 405

Moody, Susanna [Canadian author] M: 781

Canadian literature (Early English-Canadian literature) C: 157

Moody, Thomas H. [American political leader]

North Dakota (table) N: 513

Moody, Dan [American political leader]

Texas (table) T: 203

Moody, Dwight Lyman [American religious

leader] M: 781

Hymn (History) H: 474

Revivalism R: 268

Moody, Helen Wills [American tennis player]

See Wills, Helen Newington *in this index*

Moody, Maryon Elspeth [wife of]

Pearson, Lester Bowles (Boyhood) P: 220

Moody, Paul [American inventor]

Lowell, Francis Cabot L: 510

Moody, William Henry [American jurist]

Justice, Department of (table) J: 203

Roosevelt, Theodore (table) R: 470

Supreme Court of the United States (table)

Moon [astronomy] **M:** 782 *with pictures and maps*

See also Satellite *in this index*

Armstrong, Neil Alden **A:** 723

Astronaut (Achievements in space) **A:** 829 *with picture*

Astronomy (How the moon moves) **A:** 835; (Direct sampling) **A:** 846

Blue moon **B:** 420

Earth (Earth and its moon) **E:** 18

Eclipse **E:** 51

Geology (Geology of the solar system) **G:** 100

Harvest moon **H:** 81

Laser (Measuring) **L:** 83 *with picture*

Magnetism (The magnetism of other astronomical bodies) **M:** 60c

Month **M:** 767

Ocean (Tides) **O:** 659

Planetarium **P:** 514

Satellite (Inert satellites) **S:** 150a-150c

Selene **S:** 289

Space exploration **So:** 694 *with picture*; (Lunar probes) **So:** 709 *with picture*; (Apollo: Mission to the moon) **So:** 714 *with pictures*

Telescope *picture on* **T:** 107

Television *picture on* **T:** 110

Tide **T:** 280 *with diagrams*

Moon, Keith [British musician]

Who, The **W:** 296 *with picture*

Moon, Sun Myung [Korean religious leader]

Cult (Modern cults) **Ci:** 1185

Moon and Sixpence, The [book by Maugham]

Maugham, W. Somerset **M:** 312

Moon bear

Bear (Asiatic black bears) **B:** 185

Moon Festival

September **S:** 308

Moon for the Misbegotten, A [play by O'Neill]

American literature (Drama) **A:** 422-423

O'Neill, Eugene Gladstone (His plays) **O:** 762

Moon rock

Moon *picture on* **M:** 790

Mooney, Edward Francis Cardinal [American religious leader]

Cardinal (table: American cardinals) **C:** 211

Mooney, William [American political leader]

Tammany, Society of **T:** 22

Moonflower **M:** 796 *with picture*

Morning-glory **M:** 809

"Moonies" [religion]

Cult (Modern cults) **Ci:** 1185

Moonlit Street Scene in Edo [painting by Hiroshige]

Tokyo *picture on* **T:** 319

Moonstone [mineral] **M:** 796

Feldspar **F:** 68

Gem *picture on* **G:** 78

Moonstone, The [book by Collins]

Collins, Wilkie **Ci:** 776

Detective story (History) **D:** 163

Moor [geography] **M:** 796

Scotland (Land regions) **S:** 217

Moor [shipping]

Ship (Nautical terms) **S:** 416

Moorcock, Michael [British author]

Science fiction (Growing popularity) **S:** 205-206

Moore, A. Harry [American political leader]

New Jersey (table) **N:** 249

Moore, Alfred [American jurist]

Supreme Court of the United States (table) **So:** 1000

Moore, Andrew Berry [American political leader]

Alabama (table) **A:** 274

Moore, Anne Carroll [American librarian]

Regina Medal (table: 1960) **R:** 206

Moore, Arch A., Jr. [American political leader]

West Virginia (table) **W:** 225

Moore, Archie [American boxer]

Boxing (The mid-1900's) **B:** 534

Moore, Brian [Irish author]

Irish literature (Fiction and poetry) **I:** 432-433

Moore, Charles C. [American political leader]

Idaho (table) **I:** 42

Moore, Clement Clarke [American poet] **M:** 796

Christmas (Other customs) **C:** 536

Santa Claus (Santa's appearance) **S:** 114

Moore, Daniel K. [American political leader]

North Carolina (table) **N:** 490

Moore, Douglas Stuart [American composer]

M: 796

Moore, G. E. [British philosopher] **M:** 796

Moore, Gabriel [American political leader]

Alabama (table) **A:** 274

Moore, George Augustus [Irish author] **M:** 796

Moore, George Edward [British philosopher]

See Moore, G. E. *in this index*

Moore, Gerald [British pianist]

Fischer-Dieskau, Dietrich **F:** 143

Moore, Gordon [American engineer]

Noyce, Robert **N:** 578

Moore, Harriet Louise [wife of]

Bowell, Sir Mackenzie (Early life) **B:** 518

Moore, Harry T. [American social reformer]

Spingarn Medal (table: 1952) **So:** 793

Moore, Henry [British sculptor] **M:** 797

Hirshhorn Museum and Sculpture Garden

H: 243 *with picture*

Sculpture (Henry Moore) **S:** 258 *with picture*

Moore, Hiram [American inventor]

Combine **Ci:** 867

Moore, Marianne [American poet] **M:** 797 *with portrait*

Moore, Samuel B. [American political leader]

Alabama (table) **A:** 274

Moore, Sara Jane [American public figure]

Ford, Gerald Rudolph (The national scene)

F: 376-378

Moore, Stanford [American chemist]

Nobel Prizes (Chemistry: 1972) **N:** 443

Moore, Thomas [Irish poet] **M:** 797

Irish literature (Prose and poetry) **I:** 431

Popular music (Revolutionary War to 1840)

P: 669

Moore, Thomas O. [American political leader]

Louisiana (table) **L:** 496

Moore, William [American political leader]

Pennsylvania (table) **P:** 263

Moore College of Art

Philadelphia (Education) **P:** 362

Moore, Thomas Hinman [American admiral]

Joint Chiefs of Staff (table) **J:** 156

Moore, Frank [Canadian political leader]

Newfoundland and Labrador (Leadership

changes) **N:** 377

Moore's Creek Bridge, Battle of [1776]

North Carolina (Revolution and independence)

N: 492

Revolutionary War in America (Fighting in the

Southern Colonies) **R:** 275

Moore's Creek National Battlefield [North

Carolina]

National Park System (table: National battle-

fields) **N:** 55

Moorhead [Minnesota]

Fargo **F:** 28

Moorhen [bird]

Gallinule **G:** 16

Mooring [oceanography]

Ocean (Research ships) **O:** 662-663

Mooring mast

Airship (Storage) **A:** 251

Moorish architecture

Alhambra **A:** 367 *with picture*

Islamic art **I:** 467 *with picture*

Moorish Empire *See* Moors *in this index*

Moorish idol [fish]

Fish *picture on* **F:** 154

Moorland-Spingarn Research Center

Howard University **H:** 400

Moors [people] **M:** 797 *with picture*

Alhambra **A:** 366

Boabdil **B:** 427

Charlemagne (Military conquests) **C:** 378-379

Granada **G:** 304, **G:** 304

Mali (People) **M:** 106-107

Mauritania (People) **M:** 314

Sahara (People) **S:** 21

Sri Lanka (People) **So:** 817-818

Moore's Indian Charity School

Dartmouth College **D:** 39

Moose [animal] **M:** 798 *with picture*

Animal *picture on* **A:** 478

Ecology (Ecosystems) **E:** 54-55

Moose, Loyal Order of [organization]

Moose International, Inc. **M:** 799

Moose International, Inc. [service organization]

M: 799 *with picture*

Moose Jaw [Saskatchewan] **M:** 799

Moosehaven [Florida]

Moose International, Inc. **M:** 799

Moosehead Lake

Maine (Rivers and lakes) **M:** 82

Mooseheart [Illinois]

Moose International, Inc. **M:** 799

Moosilauke, Mount

New Hampshire (Mountains) **N:** 220

Moot court

Law *picture on* **L:** 138

Moped [motorcycle]

Motorcycle (Motorbikes) **M:** 878

Mora, Juan Rafael [Costa Rican political leader]

M: 799

Costa Rica (Independence) **Ci:** 1084

Mora y Aragon, Fabiola de [wife of]

Baudouin **B:** 173

Moraine [geology] **M:** 799

Alps (How the Alps were formed) **A:** 384

Glacier (How glaciers shape the land) **G:** 204-

205 *with diagrams*

Ice age (Extent of the Pleistocene glaciers) **I:** 6

Island (Barrier islands) **I:** 472

Minnesota (Land regions) **M:** 596

Moraine Lake [Alberta]

Banff National Park **B:** 76

Moral development

Moral education (Methods of moral education) **M:** 799

Moral dilemma

Moral education (Moral development) **M:** 799

Moral education **M:** 799

Curriculum (Curriculum changes) **Ci:** 1197

Moral Essays [book by Leopardi]

Leopardi, Giacomo **L:** 203

Moral Essays [book by Pope]

Pope, Alexander **P:** 667

Moral values

Business (Moral regulations) **B:** 726

Ethics **E:** 365

Law (Early developments in the East) **L:** 133

Moral education **M:** 799

Philosophy (Ethics) **P:** 384

Religion (A code of conduct) **R:** 216

Morale [psychology] **M:** 800

Fatigue **F:** 54

Morales Bermúdez, Francisco [Peruvian political leader]

Peru (Socialistic reforms) **P:** 315-316

Moralist literature

French literature (Classical prose) **F:** 520

Morality play **M:** 800

Drama (Miracle plays and morality plays)

D: 329

English literature (Early English drama) **E:** 316

Morals *See* Ethics; Moral education *in this index*

Morals [book by Plutarch]

Plutarch **P:** 580

Moran [people]

Maasai **M:** 2

Moran, Edward [American artist]

Statue of Liberty *picture on* **So:** 877

Morane-Saulnier M.S. 760 [airplane]

Airplane *picture on* **A:** 236

Morant Bay Rebellion [Jamaican history]

Jamaica (History) **J:** 24-25

Moratin, Leandro Fernández de [Spanish

author]

Spanish literature (The 1800's) **So:** 761

Moratorium [economics] **M:** 800

Whale (The future of whales) **W:** 264

Morazán, Francisco [Central American statesman]
Costa Rica (Independence) Ci: 1084

Mordan, Sampson [British engineer]
Pencil (History) P: 236

Mordant [chemistry] M: 801
Dye (How dyes work) D: 395
Lake L: 35

Mordecai [Biblical figure]
Esther, Book of E: 361

Mordvinoff, Nicolas [American artist]
Caldecott Medal (table: 1952) C: 26

More, Saint Thomas [English government official] M: 801 *with portrait*
Biography (The Renaissance) B: 313
Holbein, Hans, the Younger H: 290
Renaissance (Desiderius Erasmus and Saint Thomas More) R: 237-238
Science fiction (Forerunners of science fiction) S: 205
Utopia U: 252

More Bab Ballads [poems by Gilbert]
Gilbert, Sir William Schwenck G: 189

More Die of Heartbreak [book by Bellow]
Bellow, Saul B: 244

More New Arabian Nights [stories by Stevenson]
Stevenson, Robert Louis (Other writings) So: 898

More Than Human [book by Sturgeon]
Sturgeon, Theodore So: 934

Morea See Peloponnesus in *this index*

Moréau, Gustave [French painter]
Prometheus *picture on* P: 818

Moréau River
South Dakota (Rivers and lakes) So: 676

Morehead, Charles S. [American political leader]
Kentucky (table) K: 290

Morehead, James T. [American political leader]
Kentucky (table) K: 290

Morehead, John H. [American political leader]
Nebraska (table) N: 110

Morehead, John M. [American political leader]
North Carolina (table) N: 490

Morehead Planetarium [Chapel Hill]
North Carolina (Places to visit) N: 482

Morehouse, Albert P. [American political leader]
Missouri (table) M: 668

Morel
Mushroom (Mushroomlike fungi) M: 945

Morelos [state, Mexico]
Mexico City (Metropolitan area) M: 476b

Morélos y Pavón, José María [Mexican patriot]
Latin America (The wars of independence) L: 107
Mexico (Revolt against the Spaniards) M: 470-471

Moreno, Rita [Puerto Rican actress]
Motion picture (Best performance by an actress in a supporting role: 1961) M: 863

Mores [sociology] M: 802
Custom Ci: 1201
Sumner, William Graham So: 973

Moresby, John [British explorer]
Port Moresby P: 681

Moresby Island
Queen Charlotte Islands Q: 39

Moreton Bay
Queensland (History) Q: 40

Moreton Bay fig [tree]
Tree *picture on* T: 427

Morgagni, Giovanni Battista [Italian anatomist]
M: 802

Morgan, Daniel [American general] M: 803
Revolutionary War in America (Cowpens and Guilford Courthouse) R: 285

Morgan, Edwin Denison [American political leader]
Arthur, Chester Alan (Political growth) A: 755
New York (table) N: 313

Morgan, Ephraim F. [American political leader]
West Virginia (table) W: 225; (Labor developments) W: 229

Morgan, Garrett Augustus [American inventor]
M: 803 *with portrait*

Morgan, Sir Henry [English pirate] M: 803
Panama (The Spanish colonial period) P: 120
Panama City P: 128

Morgan, Joe [American baseball player]
Baseball (table: Hall of Fame) B: 135

Morgan, John Hunt [Confederate general]
M: 804
Civil War (Raids) Ci: 629
Indiana (The Civil War) I: 216

Morgan, John Pierpont [American businessman] M: 802 *with portrait*
Carnegie, Andrew (Retirement) C: 242
Cleveland, Grover (Saving the gold standard) Ci: 673
Morgan, John Pierpont, Jr. M: 803
Pierpont Morgan Library P: 458
Roosevelt, Theodore ("Trust buster") R: 468
United States, History of the (Investment and banking) U: 178
United States Steel Corporation U: 204

Morgan, John Pierpont, Jr. [American businessman] M: 803
Pierpont Morgan Library P: 458

Morgan, Julia [American architect] M: 804

Morgan, Junius Spencer [American businessman] M: 802

Morgan, Justin [American farmer] M: 804

Morgan, Leon O. [American physicist]
Americium A: 431

Morgan, Lewis Henry [American anthropologist] M: 804
Anthropology (Early anthropological thought) A: 548

Morgan, Morgan [American settler]
West Virginia (White settlement) W: 226

Morgan, Thomas Hunt [American geneticist] M: 804
Biology (The growth of modern biology) B: 319-320
Cell (The 1900's) C: 337-338
Evolution (The synthetic theory) E: 432-433
Heredity (The birth of genetics) H: 208
Science (Science in the early 1900's) S: 201-202

Morgan, William [American public figure]
Anti-Masonic Party A: 556

Morgan, William G. [American educator]
Massachusetts (Interesting facts) M: 271
Volleyball V: 445
Young Men's Christian Association (History) Y: 573

Morgan, William W. [American astronomer]
Star (The Hertzsprung-Russell diagram) So: 845-846

Morgan & Company, J. P. [bank]
Morgan, John Pierpont M: 802

Morgan and Company, J. S. [bank]
Morgan, Junius Spencer M: 802

Morgan horse
Horse (table: Some types and breeds of horses) H: 343; (Saddle horses) H: 343; *picture on* H: 344
Morgan, Justin M: 804

Morganite [mineral]
Gem *picture on* G: 78

Morgann, Maurice [British author]
Shakespeare, William (Neoclassical criticism) S: 369

Morgan's Raiders [U.S. history]
Civil War (Raids) Ci: 629
Indiana (The Civil War) I: 216
Morgan, John Hunt M: 804
Ohio (The Civil War) O: 702

Morgantown [West Virginia] M: 805

Morgarten, Battle of [1315]
Switzerland (The struggle for freedom) So: 1059

Morgenstern, Oskar [Austrian economist]
Game theory G: 22

Morgenthau, Henry, Jr. [American government official] M: 805
Truman, Harry S. (table) T: 469

Morgenthau Plan [World War II]
Morgenthau, Henry, Jr. M: 805

Morial, Ernest N. Dutch [American political leader]
Louisiana (The mid-1900's) L: 500
New Orleans (Political developments) N: 285

Morial, Marc H. [American political leader]
New Orleans (Political developments) N: 285

Morinigo, Higinio [Paraguayan political leader]
Paraguay (Political unrest) P: 149

Morison, Samuel Eliot [American historian]
M: 805

Morisot, Berthe [French painter] M: 805 *with picture*
Impressionism (French impressionism) I: 94-95
Painting (Edouard Manet and the impressionists) P: 71, (Women artists) P: 73-75

Morissette, Alanis [Canadian singer]
Rock music (Rock music today) R: 381

Morita, Akio [Japanese businessman]

Sony Corporation So: 594

Morley, Christopher [American author]
Doyle, Arthur Conan D: 316

Morley, Clarence J. [American political leader]
Colorado (table) Ci: 844

Morley, Edward W. [American physicist]
Ether E: 365
Michelson, Albert Abraham M: 487
Physics (Einstein and relativity) P: 441
Relativity (The Michelson-Morley experiment) R: 210

Morley, Thomas [English composer] M: 805

Morley-Minto Reforms [1909]
India (Rise of Indian nationalism) I: 131

Mormacsea [ship]
Ship (Multipurpose ships) S: 421-422

Mormon cricket [insect] M: 806 *with picture*
Grasshopper (Long-horned grasshoppers) G: 328
Utah (The Mormons) U: 246

Mormon Tabernacle [Salt Lake City]
Mormons *picture on* M: 808

Mormon Tabernacle Choir [organization]
Mormons (Mormons today) M: 809 *with picture*

Mormon Temple [Salt Lake City]
Mormons *picture on* M: 808
Utah (Visitor's guide) U: 238 *with picture*

Mormon Trail [U.S. history]
Wyoming W: 517; (The great trails) W: 533

Mormon War See Utah War in *this index*

Mormons [religious group] M: 806 *with pictures*
Deseret D: 154
Genealogy G: 82
Idaho (Exploration and early settlement) I: 42
Las Vegas (Early days) L: 89
Nevada (Early settlement) N: 174
Pioneer life in America (Crossing the Plains) P: 485-486
Salt Lake City S: 76
Smith, Joseph S: 517
Utah U: 230; (The Mormons) U: 246
Westward movement in America (Utah) W: 249
Young, Brigham Y: 571

Mormyrid, Elephant-nose [fish] See Elephant-nose mormyrid in *this index*

Morning-glory [flower] M: 809 *with picture*
Flower (Garden annuals) F: 276 *with picture*; F: 300 *with picture*

Morning sickness
Pregnancy (Other common symptoms of pregnancy) P: 734b

Morning star [planet]
Evening star E: 423
Lucifer L: 514

Morningside Heights [district]
New York City (Manhattan) N: 323-326

Moro [people]
Moors M: 797
Pershing, John Joseph (Promotion) P: 296

Moro, Aldo [Italian political leader]
Italy (Social problems) I: 518

Moro Islamic Liberation Front [political group]
Philippines (Recovering democracy) P: 381

Moro Naba [title]
Burkina Faso (People) B: 706

Moro National Liberation Front [political group]
Philippines (Recovering democracy) P: 381

Moroccan Letters [play by Cadalso]
Spanish literature (The 1700's) So: 760-761

Morocco [country] M: 810 *with pictures and maps*
Africa *picture on* A: 99
Barbary States B: 105 *with map*
Clothing *pictures on* Ci: 686, Ci: 692
Flag *picture on* F: 199
Standard of living (table) So: 834
Tangier T: 27
Trade *picture on* T: 362
Western Sahara W: 241

Moroni [angel]
Mormons (Church doctrines) M: 806 *with picture*; (Revelations) M: 808
Smith, Joseph (Early life) S: 517

Moroni [city, Comoros] M: 816
Comoros *picture on* Ci: 900

Moronobu [Japanese printmaker]
Japanese print (The master print artists) J: 63

Morphea [disease]
Scleroderma S: 209

Morpheus [Greek mythology] M: 816
Hypnos H: 477

- Morphine** [drug] M: 816
 Analgesic A: 448
 Codeine C: 749
 Drug (Effect on the body) D: 354
 Drug abuse (Heroin) D: 362; (table: Some commonly abused drugs) D: 363; (History) D: 365
 Morpheus M: 816
 Opiate O: 810
 Opium O: 811
- Morphological type** [classification]
 Archaeology (Classification) A: 597
- Morphology** [language]
 Language (The makeup of language) L: 62
- Morphology** [science] M: 816
 Botany (Plant classification and form) B: 508
- Morphy, Paul** [American chess player]
 Chess (United States chess champions) C: 414
- Morrill, Anson P.** [American political leader]
 Maine (table) M: 87
- Morrill, David L.** [American political leader]
 New Hampshire (table) N: 223
- Morrill, Edmund Needham** [American political leader]
 Kansas (table) K: 234
- Morrill, Justin Smith** [American political leader] M: 816
 Land-grant university L: 56
- Morrill, Lot M.** [American government official]
 Maine (table) M: 87
 Treasury, Department of the (table) T: 407
- Morrill Act** [1862]
 Agricultural education (Colleges and universities) A: 144
 Civil War (Economy) Ci: 623
 Land-grant university L: 56
 Morrill, Justin Smith M: 816
 Public lands (Disposal of public lands) P: 858
 Universities and colleges (Governing boards) U: 208
 Vocational education (Early vocational education in schools) V: 435
- Morrill Act** [1890]
 Land-grant university L: 56
- Morrill Tariff Act** [1861]
 Morrill, Justin Smith M: 816
 Tariff (United States tariffs) T: 44
- Morris, Desmond** [British zoologist] M: 816
- Morris, Esther Hobart** [American social reformer] M: 816
 Wyoming W: 517; (Territorial progress) W: 534
- Morris, Gouverneur** [American patriot] M: 816
 Cent C: 350
 Constitution of the United States (The Constitutional Convention) Ci: 999-1000
 Erie Canal (The building of the Erie Canal) E: 351
- Morris, Lewis** [American jurist]
 New Jersey (Colonial days) N: 250
 Zenger, John Peter Z: 593
- Morris, Lewis** [American patriot] M: 817
- Morris, Luzon B.** [American political leader]
 Connecticut (table) Ci: 967
- Morris, Mark** [American choreographer]
 Ballet (Ballet in Europe) B: 54 *with picture*
 Dance (European and American theatrical dance) D: 31
- Morris, Robert** [American patriot] M: 817
 Philadelphia (The Revolutionary War period) P: 366
 Washington, George (Recall to duty) W: 107
- Morris, William** [British designer] M: 817
 Architecture (Early modern architecture in Europe) A: 627
 Book (The 1800's) B: 467-468
 Tapestry (History) T: 40
- Morris Canal**
 Newark (History) N: 358
- Morris chair** [furniture]
 Morris, William M: 817
- Morris dance**
 Dance (Folk dances) D: 27-28
- Morrisania** [district]
 New York City (The Bronx) N: 328-329
- Morrison, Cameron** [American political leader]
 North Carolina (table) N: 490
- Morrison, deLesseps S.** [American political leader]
 New Orleans (Civic improvements) N: 285
- Morrison, Frank B.** [American political leader]
 Nebraska (table) N: 110
- Morrison, John T.** [American political leader]
 Idaho (table) I: 42
- Morrison, Marion Michael** [American actor]
 See Wayne, John *in this index*
- Morrison, Robert** [British missionary]
 Missionary (History) M: 621
- Morrison, Toni** [American author] M: 817
 African Americans (Achievements) A: 136p *with picture*
 African American literature (Recent developments) A: 136a
 American literature (Works by minority writers) A: 425 *with portrait*
 Nobel Prizes (Literature: 1993) N: 446
- Morrison, William** [American inventor]
 Automobile (The electric car) A: 963 *with picture*
- Morrissey** [ship]
 Bartlett, Robert Abram B: 121
- Morristown** [New Jersey]
 Washington, George (Shortage of supplies) W: 99
- Morristown National Historical Park** [New Jersey]
 National Park System (table: National historical parks) N: 56-57
 New Jersey (Places to visit) N: 240 *with picture*
- Morro Castle** [Cuba]
 Havana (The city) H: 86
 Santiago de Cuba S: 116
- Morro Castle** [Puerto Rico]
 San Juan S: 103
- Morrow, Anne**
 Lindbergh, Anne Morrow L: 329
- Morrow, Dwight Whitney** [American diplomat]
 Coolidge, Calvin (Foreign affairs) Ci: 1033
- Morrow, Edwin P.** [American political leader]
 Kentucky (table) K: 290
- Morrow, Jeremiah** [American political leader]
 Ohio (table) O: 699
- Morse, Frances Amelia** [wife of]
 Tupper, Sir Charles (Tupper's family) T: 493
- Morse, Robert** [American actor]
 Theater *picture on* T: 243
- Morse, Samuel Finley Breese** [American inventor] M: 817 *with pictures*
 Cable (Telegraph cables) C: 6
 Communication (The 1800's) Ci: 881-882 *with picture*; (Famous first words) Ci: 884
 Morse code M: 819
 Telegraph (The Morse telegraph) T: 90 *with picture*
- Morse, Wayne Lyman** [American political leader] M: 819
- Morse code** [communications] M: 819 *with pictures*
 Flag (Flags that talk) F: 208
 Heliograph H: 174
 Radio, Amateur R: 95
 Telegraph T: 90; (The Morse telegraph) T: 90 *with picture*
- Mortality**
 Life expectancy L: 280
- Mortality, Infant** See *Infant mortality in this index*
- Mortality rate** See *Death rate in this index*
- Mortality table**
 Insurance (How premiums are figured) I: 310
- Mortar** [building material]
 Brick (Mortar) B: 599
- Mortar** (weapon) M: 820 *with picture*
 Army *picture on* A: 725
 Artillery (Kinds of artillery) A: 762
- Mortarboard** [clothing]
 Caps and gowns C: 198 *with pictures*
 Graduation G: 297
- Morte Darthur, Le** [book by Malory]
 Arthur, King A: 757
 English literature (The development of English romances) E: 315
 Galahad, Sir G: 7
 Gawain, Sir G: 71
 Lancelot, Sir L: 56
 Malory, Sir Thomas M: 111
- Mortgage** [economics] M: 820
 Credit (Lending institutions) Ci: 1124
 Equity E: 348
 Federal Home Loan Mortgage Corporation F: 64
 Federal National Mortgage Association F: 65
 Government National Mortgage Association G: 293
 Housing (Private housing) H: 390; (Housing since 1900) H: 391-392
 Interest I: 321
- Savings and loan association S: 165
- Mortgage bond**
 Bond (Kinds of bonds) B: 454
- Mortician**
 Embalming (Modern embalming) E: 255
- Mortise lock**
 Lock (Types of locks) L: 410-411 *with picture*
- Morton, Jelly Roll** [American jazz musician] M: 821
 Jazz *picture on* J: 69; (Early jazz) J: 70
- Morton, John** [American patriot] M: 821
- Morton, Julius Sterling** [American political leader] M: 821
 Arbor Day A: 592
 Cleveland, Grover (table) Ci: 672
 Nebraska (Places to visit) N: 102
- Morton, Levi Parsons** [American political leader] M: 821
 Harrison, Benjamin (Election of 1888) H: 72; (table) H: 72
 New York (table) N: 313
 Vice President of the United States (table) V: 351; V: 348 *with portrait*
- Morton, Marcus** [American political leader]
 Massachusetts (table) M: 288
- Morton, Oliver Perry** [American political leader] M: 821
 Harrison, Benjamin (Army commander) H: 71
 Indiana (table) I: 214
- Morton, Paul** [American government official]
 Roosevelt, Theodore (table) R: 470
- Morton, Rogers Clark Ballard** [American government official]
 Commerce, Department of (table) Ci: 871
 Interior, Department of the (table) I: 325
- Morton, William Thomas Green** [American dentist] M: 821
 Dentistry (Modern dentistry) D: 145
 Ether E: 365
 Hospital (The 1800's) H: 373
 Long, Crawford Williamson L: 446
 Medicine (The first anesthetic) M: 375; *picture on* M: 374
- Morton Arboretum** [Illinois]
 Illinois (Places to visit) I: 62
- Mortuary science**
 Embalming (Modern embalming) E: 255
- Morula** [biology]
 Reproduction, Human (The first days of pregnancy) R: 246
- Morumbi Stadium**
 São Paulo (The city) S: 117-118
- Mosaic** [art] M: 822 *with pictures*
 Architecture (Medieval architecture) A: 617
 Byzantine art (Frescoes and mosaics) B: 750; *picture on* B: 749
 Byzantine Empire *pictures on* B: 752, B: 754
 Indian, American *picture on* I: 146
 Klimt, Gustav K: 344
 Latin America (Architecture) L: 101
 Mural M: 929
 Shell *picture on* S: 390
- Mosaic Code** [law]
 Law (Early developments in the East) L: 133
- Mosaic disease** M: 822
 Lily L: 304
 Potato (Diseases and insect pests) P: 713
 Raspberry (Diseases and pests) R: 145
- Mosander, Carl** [Swedish chemist]
 Erbium E: 349
 Lanthanum L: 69
 Terbium T: 172
 Yttrium Y: 575
- Mosasauro** [extinct reptile]
 Dinosaur (Plant and animal life) D: 206b
 Lizard (How lizards move) L: 399
 Prehistoric animal (Other reptiles) P: 737
- Mosbacher, Robert A.** [American government official]
 Commerce, Department of (table) Ci: 871
- Mosby, John Singleton** [Confederate military leader] M: 822
- Moscione, George** [American political leader]
 San Francisco (Political leaders murdered) S: 98
- Moscoso, Luis de** [Spanish explorer]
 De Soto, Hernando (Journey to the Mississippi) D: 160-161 *with map*
- Moscoso, Mireya** [Panamanian political leader]
 Panama (Recent developments) P: 121
- Moscow** [capital city, Russia] M: 823 *with pictures and map*
 Ivan IV, the Terrible I: 520
 Kremlin K: 387

Lenin, V. I. *picture on* L: 194
 Olympic Games (Boycotts) O: 753
 Russia (The rise of Moscow) R: 548;
 (Alexander I) R: 550; *pictures on* R: 525,
 R: 537
 Union of Soviet Socialist Republics *pictures on*
 U: 29, U: 31
Moscow, Peace of [1940]
 Russo-Finnish wars (The Winter War) R: 565
Moscow Art Theater [Russia] M: 828
 Russian literature *picture on* R: 558
 Shakespeare, William *picture on* S: 362
 Theater (Russia) T: 248-249
Moscow Canal [waterway, Russia]
 Canal (table) C: 164
 Russia (Transportation and communication)
 R: 546
Moscow Declaration on General Security
 [1943]
 United Nations (The Atlantic Charter) U: 94
Moscow State University
 Moscow (Education) M: 824
 Russia (Education) R: 535-536
Moscow to the End of the Line [book by
 Erofeev]
 Russian literature (Modern Soviet literature)
 R: 564-565
Mosel River See Moselle River *in this index*
Moseley, Henry Gwyn-Jeffreys [British physi-
 cist] M: 828
Moseley, William D. [American political leader]
 Florida (table) F: 260
Moseley-Braun, Carol [American political
 leader] M: 828 *with portrait*
 African Americans (Achievements) A: 136p
with picture
Mosella [book by Ausonius]
 Latin literature (Later periods) L: 116
Moselle [wine]
 Moselle River M: 828
Moselle River [France-Germany] M: 828
 Luxembourg (Economy) L: 531
 Wine (Wines from Germany) W: 337
Moser-Proell, Annemarie [Austrian skier]
 Skiing (The middle and late 1900's) S: 487-488
Moses [Biblical figure] M: 828 *with picture*
 Aaron A: 3
 Bible (Books of the Hebrew Bible) B: 279-280
with picture
 Deuteronomy D: 172
 Exodus E: 438
 Jews (The Exodus) J: 121
 Judaism (The Bible) J: 180
 Law (Early developments in the East) L: 133
 Pentateuch P: 274
 Religion (Judaism) R: 219
 Tabernacle T: 2
 Ten Commandments T: 131
Moses [sculpture by Michelangelo]
 Italy *picture on* I: 505
Moses, Franklin J., Jr. [American political leader]
 South Carolina (table) So: 658
Moses, Grandma [American painter] M: 830
with pictures
Moses, Horace A. [American businessman]
 Junior Achievement J: 196
Moses, John [American political leader]
 North Dakota (table) N: 513
Moses, Phoebe Ann [American frontier-
 swoman] See Oakley, Annie *in this index*
Moses, Thomas Salmon [husband of]
 Moses, Grandma M: 830
Moses and Aron [opera by Schoenberg]
 Caldwell, Sarah C: 28
Moses de Leon [Spanish author]
 Hebrew literature (Medieval works) H: 162
 Kabbalah K: 208
Moses-Saunders Dam [Saint Lawrence River]
 Saint Lawrence Seaway (The hydroelectric
 power project) S: 44
MOSFET [electronics] See Metal oxide semicon-
 ductor field effect transistor *in this index*
Moshev
 Asia (Country life) A: 779
 Israel (Rural life) I: 481 *with picture*
Moshoeshoe [African king]
 Lesotho (History) L: 207
Moshoeshoe II, Motlotlehi [king of Lesotho]
 Lesotho (History) L: 207-208
Mosi oa Tunya [waterfall] See Victoria Falls *in*
this index
Mosi oa Tunya National Park [Zambia]
 National park (table) N: 42f; (Other interesting
 national parks) N: 42g-42h

Moslems [religious group] See Muslims *in this*
index
Mosolov, G. [Russian aviator]
 Airplane (table) A: 232
Mosque [architecture] M: 830 *with picture*
 Afghanistan *picture on* A: 93
 Africa *picture on* A: 117
 Architecture (Islamic architecture) A: 613; *dia-*
gram on A: 614
 Cairo (The city) C: 15-16 *with picture*
 Egypt *picture on* E: 125
 Iran *picture on* I: 398
 Islam (The Five Pillars of Islam) I: 463; *picture*
on I: 465
 Islamic art (Mosques) I: 468; *picture on* I: 467
 Minaret M: 562 *with picture*
 Ottoman Empire (Cultural life) O: 877
 Turkey *picture on* T: 503
 United Arab Emirates *picture on* U: 44
 World, History of the *picture on* W: 436
Mosquitia [region, Honduras-Nicaragua] See
 Mosquito Coast *in this index*
Mosquito [insect] M: 831 *with pictures*
 Antennae A: 544
 Disease (Spread of infectious diseases) D: 228
 Elephantiasis E: 233
 Finlay, Carlos Juan F: 118
 Fly (Head) F: 309; (Egg) F: 310; (table) F: 310
 Insect (Hearing) I: 290; *picture on* I: 282
 Larva *picture on* L: 79
 Malaria M: 95 *with picture*
 Reed, Walter R: 194
 Yellow fever Y: 556
Mosquito bite
 Malaria (Spread) M: 96
 Mosquito (How a mosquito "bites") M: 832
with diagram
Mosquito boat
 PT boat P: 853
Mosquito Coast [region, Honduras-Nicaragua]
 M: 834
 Honduras (The Northeastern Plain) H: 310 *with*
picture
Mosquito hawk See Nighthawk *in this index*
Moss [plant] M: 834 *with pictures*
 Bryophyte B: 656
 Plant *picture on* P: 516; (Lycopsids) P: 520
with picture; (Bryophytes) P: 522 *with pic-*
ture; (In ferns and mosses) P: 534;
 (Classification of plants) P: 546 *with pic-*
ture
 Spore (Plant spores) So: 801 *with diagram*
Moss agate [mineral]
 Agate A: 138 *with picture*
Moss animal See Bryozoan *in this index*
Moss campion
 Flower *picture on* F: 289
Moss man [doll]
 Doll (Traditional dolls) D: 287
Moss rose
 Rose R: 478
Mossadegh, Mohammad [Iranian political
 leader]
 Iran (The nationalist movement) I: 406a
 Mohammad Reza Pahlavi M: 687
Mössbauer, Rudolf Ludwig [German physicist]
 M: 836
Mössbauer Effect [physics]
 Mössbauer, Rudolf Ludwig M: 836
Mossbunker See Menhaden *in this index*
Mosses from an Old Manse [book by
 Hawthorne]
 Hawthorne, Nathaniel (His stories and sketch-
 es) H: 114
Mossi [people]
 Burkina Faso (People) B: 706 *with picture*;
 (History) B: 707
Most-favored nation [international relations]
 General Agreement on Tariffs and Trade G: 82
 Reciprocal trade agreement R: 175
 Tariff T: 43
Most Holy Redeemer, Congregation of the
 [religious group]
 Alphonsus Liguori, Saint A: 384
Most Venerable Order of the Hospital of
Saint John of Jerusalem, The [organiza-
 tion]
 Saint John, Order of S: 35
Motagua River
 Guatemala (The Highlands) G: 414
Moteczuhzome See Montezuma II *in this index*
Motel M: 836 *with picture*
 Automobile *picture on* A: 969
 Hotel H: 377

Motel chain [business]
 Motel M: 836
Motet [music]
 Classical music (Church music) Ci: 645-646
 Desprez, Josquin D: 161
 Lasso, Orlando di L: 87
Moth [insect] M: 837 *with pictures*
 Animal (Camouflage) A: 493
 Butterfly B: 733 *with picture*
 Caterpillar C: 300
 Flower (Cross-pollination) F: 295
 Insect (Smell) I: 291; *pictures on* I: 279, I: 282
 Jumping bean J: 190 *with picture*
 Metamorphosis M: 428
 Pea (Diseases and pests) P: 205
 Rain forest *picture on* R: 126c
 See also the list of Related articles in the
 Moth article
Moth fly
 Sand fly S: 107
Moth mullein [plant]
 Mullein M: 914
Moth orchid [plant]
 Orchid *picture on* O: 824
Mother See Parent *in this index*
Mother [sound recording]
 Phonograph (How phonograph records are
 made) P: 401
Mother, The [book by Gorki]
 Gorki, Maxim G: 277
Mother and Sister of the Artist, The [painting
 by Morisot]
 Morisot, Berthe *picture on* M: 805
Mother Bickerdyke
 Bickerdyke, Mary Ann Ball B: 289
Mother Carey's chicken [bird]
 Petrel P: 328
Mother Earth [magazine]
 Goldman, Emma G: 258
Mother Frost [legendary figure]
 Jack Frost J: 2
Mother Goose [legendary figure] M: 842
 Fairy (Fairies in literature) F: 11
 Literature for children (Mother Goose) L: 361
with picture
 Perrault, Charles P: 293
Mother Goose's Melody [book]
 Mother Goose (The history of Mother Goose
 literature) M: 842
 Nursery rhyme (History) N: 614-615
Mother-in-law
 Family (Family relationships) F: 21
Mother Jones See Jones, Mary Harris *in this*
index
Mother of Canada [name for]
 Saint Lawrence River S: 41
Mother of Exiles [name for]
 Statue of Liberty (The statue as a symbol)
 So: 872-873
Mother of God [name for]
 Mary M: 238
Mother of Parliaments [name for]
 United Kingdom (National government) U: 49
Mother-of-pearl [zoology] M: 842
 Mussel M: 966
 Oyster (Shell) O: 890
 Pearl (Cultured pearls) P: 217
 Shell (How shells are formed) S: 385; (Uses of
 shells) S: 389-390 *with picture*
Mother of Presidents [nickname]
 Ohio O: 680
 Virginia V: 398
Mother of States [nickname]
 Virginia V: 398
Mother of the West [nickname]
 Missouri M: 650
Mother Road [nickname]
 Route 66 R: 493
Mother Seton See Seton, Saint Elizabeth Ann *in*
this index
Mother superior [title]
 Convent Ci: 1024
Mother Teresa See Teresa, Mother *in this index*
Motherboard [electronics]
 Computer (Parts of computers) Ci: 911-912
with picture
Mothering Sunday [custom]
 Mother's Day M: 843
Motherland Party
 Turkey (Political parties) T: 503; (Political
 changes) T: 512
Mothers, National Congress of [organization]
 Birney, Alice Josephine McLellan B: 377
 Hearst, Phoebe Apperson H: 131

- National Congress of Parents and Teachers N: 31
- Mother's Day** [custom] M: 843 *with picture*
Howe, Julia Ward H: 401
May M: 320
- Mothershed, Thelma** [American social reformer]
Spingarn Medal (table: 1958) So: 793
- Motherwell, Robert** [American painter] M: 843 *with picture*
Painting (Abstract painting) P: 34;
(Composition) P: 35
- Motier, Marie Joseph Paul Yves Roch Gilbert du** *See* Lafayette, Marquis de *in this index*
- Motion** [parliamentary procedure]
Parliamentary procedure (Motions) P: 176
- Motion** [physics] M: 843 *with picture*
Coriolis effect Ci: 1053
Dynamics D: 397
Energy E: 273
Force (Characteristics of force) F: 369
Galileo (Mature scientific career) G: 11
Inertia I: 262
Machine *diagrams on* M: 13
Momentum M: 698
Newton, Sir Isaac (The theories of motion and gravitation) N: 388
Perpetual motion machine P: 293
Relativity (Galilean relativity) R: 209; (Special relativity) R: 210-211; (General relativity) R: 211
Velocity V: 297
- Motion, Andrew** [British poet] M: 845
Poet laureate (table: Poets laureate of the United Kingdom) P: 590
- Motion, Laws of** *See* Newton's laws of motion *in this index*
- Motion, Perpetual**
Perpetual motion machine P: 293 *with diagrams*
- Motion picture** M: 846 *with pictures*
See also Film *in this index*
Academy of Motion Picture Arts and Sciences A: 20
Animation A: 511
Audio-visual materials (Multisensory materials) A: 883
Ballet (Preserving a ballet) B: 50
Blindness (Aids for blind people) B: 402
Camcorder C: 75
Camera (Motion-picture cameras) C: 84 *with picture*
Communication (The 1800's) Ci: 881-883 *with picture*
Copyright (Works protected) Ci: 1046
Disney, Walt D: 235; (Full-length movies) D: 236 *with pictures*
DVD D: 393
Edison, Thomas Alva (Motion pictures) E: 80
Germany (Motion pictures) G: 156
India (Music and dance) I: 120; (Motion pictures) I: 121 *with picture*
Internet (Push technology) I: 350b-350c
Italy I: 506
Los Angeles (Industry) L: 464
New Jersey (The early 1900's) N: 253 *with picture*
Projection screen P: 816
Public opinion (The motion picture) P: 860
Sweden (Motion pictures) So: 1027
Television (Other production methods) T: 113; (Effects on society) T: 117-118; (Telecine) T: 122
United States *pictures on* U: 118
United States, History of the (An age of heroes) U: 186
Walt Disney Company W: 20
Westerns W: 242 *with picture*
Writing (Scriptwriting) W: 512
See also the list of Related Articles in the Motion Picture article
- Motion Picture Arts and Sciences, Academy of**
Academy of Motion Picture Arts and Sciences A: 20
Motion picture (Festivals and awards) M: 861
- Motion Picture Association of America**
Motion picture (Censorship and self-regulation) M: 861
- Motion-picture camera** *See* Movie camera *in this index*
- Motion Picture Patents Company**
Edison, Thomas Alva (Motion pictures) E: 80
- Motion Picture Producers and Distributors of America**
Motion picture (Censorship and self-regulation) M: 861
- Motion sickness** [disorder] M: 874
Dramamine D: 342
Ear (Disturbances of the organs of balance) E: 11
Space exploration (Microgravity) So: 701-702
- Motivation** [psychology] M: 875
Child (Motivating the child's behavior) C: 453
Developmental psychology (Cognitive theory) D: 174
Industrial psychology (Organizational psychologists) I: 245
Learning (Motivation) L: 164
Literature (Characters) L: 353
Motivation M: 875
Perception (Learning, emotion, and motivation) P: 283
Personality (Personality development) P: 303
Sales (Characteristics needed) S: 65
- Motivation research** [psychology] M: 875
Advertising (Research) A: 76b
- Motive** [music]
Counterpoint Ci: 1097
Music (Melody) M: 951
- Motmot** [bird] M: 876 *with picture*
- Moto Perpetuo** [music by Paganini]
Paganini, Niccolò P: 20
- Motocross** [race]
Bicycle racing (Bicycle motocross races) B: 294
Motorcycle (Motorcycling as a sport) M: 879
- Moton, Robert Russa** [American educator] M: 876
- Motonobu, Kano** [Japanese artist]
Painting (Japanese painting) P: 47
- Motor** *See* Engine *in this index*
- Motor, Electric** *See* Electric motor *in this index*
- Motor car** *See* Automobile *in this index*
- Motor Carrier Act** [1980]
Public utility (History) P: 867
- Motor City** [nickname]
Detroit D: 167
- Motor coach** [vehicle]
Bus B: 714
- Motor cortex**
Brain (The cerebrum) B: 550b *with diagram*;
(In controlling movement) B: 553 *with diagram*
- Motor fuel tax** *See* Gasoline tax *in this index*
- Motor home** [vehicle]
Recreational vehicle (Motor homes) R: 184;
picture on R: 183
Truck (Special uses) T: 457; *picture on* T: 459
- Motor hotel** *See* Motel *in this index*
- Motor inn** *See* Motel *in this index*
- Motor lodge** *See* Motel *in this index*
- Motor neuron**
Amyotrophic lateral sclerosis A: 446
Human body (The peripheral nervous system) H: 426
Nervous system (How the nervous system works) N: 132 *with diagram*; *diagram on* N: 135
- Motor octane number**
Gasoline (Gasoline octane ratings) G: 61
- Motor paralysis** *See* Paralysis *in this index*
- Motor play**
Play P: 570 *with picture*
- Motor scooter**
Motorcycle (Kinds of motorcycles) M: 878
- Motor skills**
Baby (From 1 to 6 months) B: 7 *with pictures*
- Motor Vehicle Air Pollution and Control Act** [1965]
Automobile (The growth of government regulation) A: 971
- Motor Vehicle Code** [law]
Code Ci: 748
- Motorbike**
Motorcycle (Kinds of motorcycles) M: 878
- Motorboat**
Boating (Motorboats) B: 428 *with picture*; *pictures on* B: 430
Motorboat racing M: 876 *with pictures*
- Motorboat racing** [sport] M: 876 *with pictures*
- Motorcade** [ballet]
Ballet *picture on* B: 55
- Motorcycle** M: 877 *with pictures*
Maybach, Wilhelm M: 326
- Motorcycle Operator Skills Test**
Motorcycle M: 878
- Motorcycle racing**
Motorcycle (Motorcycling as a sport) M: 879
- Motorcyclist Association, American**
Motorcycle (Motorcycling as a sport) M: 879
- Motorized rifle division**
Infantry (Divisions) I: 265
- Motorola** [company]
Manufacturing (table) M: 170
- Motorship**
Ship (Increasing power and speed) S: 413;
(The chief parts of a ship) S: 424
- Motorway** [expressway]
England (Transportation and communication) E: 302
Road (Primary highways) R: 358
- Motorway 25** [road]
London (Dealing with problems) L: 442
- Motown** [company]
Gaye, Marvin G: 73
Gordy, Berry G: 273
Rock music (Expanding styles and sounds) R: 378-379
- Mott, Charles Stewart** [American businessman]
Mott Foundation M: 880
- Mott, John Raleigh** [American religious leader]
Nobel Prizes (Peace: 1946) N: 447
- Mott, Jordan L.** [American inventor]
Range (History) R: 138
- Mott, Lucretia Coffin** [American social reformer] M: 880 *with portrait*
Philadelphia (Industrial beginnings) P: 366
Stanton, Elizabeth Cady So: 839
Woman suffrage (Beginnings of the movement) W: 380
Women's movements (The beginnings of women's movements) W: 385
- Mott, Sir Nevill** [British physicist]
Nobel Prizes (Physics: 1977) N: 441
- Mott Foundation** M: 880
- Motte** [structure]
Castle (Structure) C: 280
- Mottelson, Ben Roy** [Danish physicist]
Nobel Prizes (Physics: 1975) N: 441
- Mottled feather**
Chicken (Kinds of chickens) C: 441
- Motto** [expression]
For the mottoes of each of the states of the United States, see the Facts in Brief section of the specific articles, such as California (Facts in Brief)
- Motto** [heraldry]
Heraldry (Elements of a coat of arms) H: 194-196 *with picture*
- Motu** [geography]
Pacific Islands (The low islands) P: 7-8
- Mouawad, René** [Lebanese political leader]
Lebanon (Recent developments) L: 174
- Mouflon** [animal]
Sheep (Wild sheep) S: 380-381 *with picture*
- Moulin, Jean** [French patriot]
Paris (Famous buildings) P: 163-164
- Moulting** *See* Molting *in this index*
- Moultrie, William** [American general] M: 880
Flag *picture on* F: 209
Fort Moultrie F: 415
South Carolina So: 640; (table) So: 658
- Mound** [baseball]
Baseball (The infield) B: 126 *with diagram*
- Mound** [entomology]
Termite (Life and habits) T: 174-175
- Mound bird** M: 880 *with picture*
- Mound builders** [American Indians] M: 881 *with pictures*
Indian, American (The first farmers) I: 152
Indiana (Indian days) I: 215
Iowa (Indian days) I: 393
Missouri (Indian days) M: 669
Ohio (Places to visit) O: 690 *with picture*;
(Indian days) O: 700
Tennessee (Indian days) T: 153
West Virginia (Indian days) W: 226
- Mound layering** [botany]
Plant (Layering) P: 535 *with diagram*
- Mounds, Cave of the** [Wisconsin]
Wisconsin (Places to visit) W: 356
- Mount**
Palmistry P: 111 *with diagram*
- Mount** [riding]
Horse (Mounting a horse) H: 353 *with pictures*
- Mount, James A.** [American political leader]
Indiana (table) I: 214
- Mount Aconcagua** *See* Aconcagua *in this index*
- Mount Adams** [mountain, New Hampshire]

558 Mount Aetna

New Hampshire (Mountains) N: 220
Mount Aetna See Mount Etna in this index
Mount Agel [mountain, Monaco]
 Monaco (Land) M: 699
Mount Airy Forest
 Cincinnati (Parks and playgrounds) Ci: 556
Mount Apo [volcano, Philippines]
 Philippines (Land and climate) P: 376 with map
Mount Apo National Park [Philippines]
 National park (table) N: 42f
Mount Aragats [mountain, Armenia]
 Armenia (Land and climate) A: 718a with map
Mount Ararat [volcano, Turkey] M: 883
 Ararat A: 591
 Mountain (table) M: 894 with diagram
 Turkey (The land) T: 507-508 with map; picture on T: 502
Mount Assiniboine Provincial Park
 British Columbia picture on B: 612
Mount Athos [religious community]
 Greece (Macedonia) G: 357
 Religious life (The Eastern Orthodox Churches) R: 227
Mount Balaneshity [Moldova]
 Moldova (Land and climate) M: 690-690a
Mount Barbeau [Nunavut]
 Nunavut (Land and resources) N: 608-609 with map
Mount Bartle Frere [mountain, Australia]
 Queensland (Location, size, and surface features) Q: 39
Mount Bia [mountain, Laos]
 Laos (Land and climate) L: 71
Mount Cameroon [mountain, Cameroon]
 Kingsley, Mary Henrietta K: 331
Mount Cardigan [mountain, New Hampshire]
 New Hampshire (Mountains) N: 220
Mount Carleton [mountain, New Brunswick]
 New Brunswick (Land regions) N: 190 with picture
Mount Caubvick [mountain, Canada]
 Newfoundland and Labrador (Mountains) N: 370 with map
 Quebec (Land regions) Q: 22
Mount Cenis Tunnel See Fréjus Tunnels in this index
Mount Chambi [mountain, Tunisia]
 Tunisia (Land) T: 488 with map
Mount Chapman [mountain, North Carolina-Tennessee]
 Great Smoky Mountains G: 349
Mount Clay [mountain, New Hampshire]
 New Hampshire (Mountains) N: 220
Mount Cleveland [mountain, Montana]
 Glacier National Park (Mountains) G: 205
Mount Collins [mountain, North Carolina-Tennessee]
 Great Smoky Mountains G: 348
Mount Columbia [mountain, Alberta]
 Alberta (Land regions) A: 322 with map
Mount Cook [New Zealand] M: 883
 Mountain (table) M: 894 with diagram
 New Zealand (The South Island) N: 351 with picture
Mount Cook National Park [New Zealand]
 National park (table) N: 42f
Mount Curwood
 Michigan (Land regions) M: 500
Mount Damavand [mountain, Iran]
 Iran (The Mountains) I: 403
Mount Desert Island [island, Maine]
 Maine (Mountains) M: 82
Mount Elbert [mountain, Colorado]
 Rocky Mountains (Chief ranges of the Rockies) R: 395
Mount Elbrus [Caucasus Mountains] M: 883
 Caucasus Mountains C: 317
 Mountain (table) M: 894 with diagram
 Russia (The European Plain) R: 539 with map
Mount Elgon [Uganda-Kenya]
 Uganda (Land) U: 3
Mount Erebus [volcano, Antarctica]
 Antarctica (Land regions) A: 532-534 with picture
 Exploration (The exploration of Antarctica) E: 450
 Ross, Sir James Clark R: 483
Mount Etna [volcano, Sicily] M: 883 with picture
 Italy (Sicily) I: 508
 Mountain (table) M: 894 with diagram
 Volcano (table) V: 441 with map
Mount Evans [mountain, Colorado]
 Colorado (Transportation) C: 843

Mount Everest [mountain, Nepal-Tibet] M: 884 with picture
 Abominable Snowman A: 13
 Hillary, Sir Edmund Percival H: 232
 Mountain M: 891; (table) M: 894 with diagram
 National park (Other interesting national parks) N: 42e
 Seven Natural Wonders of the World (Mount Everest) S: 324 with picture
 Sherpas S: 398
 Tenzing Norgay T: 171
 Tibet T: 276
Mount Fairweather [Alaska-British Columbia]
 Alaska (Land regions) A: 292
 British Columbia (Land regions) B: 622
Mount Frissell [mountain, Connecticut-Massachusetts]
 Connecticut (Mountains) Ci: 962
Mount Fuji [mountain, Japan] M: 884 with picture
 Japan (Honshu) J: 45 with picture; picture on J: 32
 Mountain (table) M: 894 with diagram
 Mythology (Mythical places) M: 974
 National park (Japan) N: 42c with picture
 Tokyo (The city) T: 313
Mount Godwin Austen See K2 in this index
Mount Goverla [Ukraine]
 Ukraine (The Eastern Carpathian Mountains) U: 9 with map
Mount Gréboun [mountain, Niger]
 Niger (Land and climate) N: 408-409
Mount Greylock [mountain, Massachusetts]
 Massachusetts (Land regions) M: 282; picture on M: 284
Mount Gunnbjørn [mountain, Greenland]
 Greenland (The land) G: 385 with map
Mount Guyot [mountain, North Carolina-Tennessee]
 Great Smoky Mountains G: 349
Mount Hamilton [California]
 Lick Observatory L: 270
Mount Hermon [mountain, Lebanon-Syria]
 Jordan River J: 167
Mount Hillaby [mountain, Barbados]
 Barbados (Land) B: 104
Mount Hira [Saudi Arabia]
 Religion (Islam) R: 222
Mount Holyoke College
 Coeducation Ci: 752
 Lyon, Mary L: 537
Mount Hood [volcano, Oregon] M: 885
 Mountain (table) M: 894 with diagram
 Oregon pictures on O: 841, O: 843, O: 846
Mount Horeb See Mount Sinai in this index
Mount Ida [mountain, Crete]
 Crete (Land and climate) Ci: 1127
Mount Inyangani [mountain, Zimbabwe]
 Zimbabwe (Land) Z: 596
Mount Jacques Cartier [mountain, Quebec]
 Gaspé Peninsula G: 66
Mount Jefferson [mountain, New Hampshire]
 New Hampshire (Mountains) N: 220
Mount Jefferson [mountain, Oregon]
 Oregon (Land regions) O: 838; picture on O: 840
Mount Kailas [mountain, Tibet]
 Himalaya (Peaks) H: 233
Mount Kamet [mountain, Asia]
 Himalaya (Peaks) H: 233
Mount Kanchenjunga [mountain, Nepal-Sikkim]
 M: 885
 Mountain (table) M: 894 with diagram
Mount Katahdin [mountain, Maine]
 Maine (Mountains) M: 82
Mount Katmai [volcano, Alaska]
 Alaska (Land regions) A: 292-294
Mount Kearsarge [mountain, New Hampshire]
 New Hampshire (Mountains) N: 220
Mount Kebnekaise [mountain, Sweden]
 Sweden (The Mountain Range) So: 1028 with map
Mount Kékes [mountain, Hungary]
 Hungary (The land) H: 442 with map
Mount Kenya [mountain, Kenya]
 Kenya (The highland) K: 301
 Mountain (table) M: 894 with diagram
Mount Kenya National Park [Kenya]
 Mount Kenya M: 885
Mount Kaphart [mountain, North Carolina-Tennessee]
 Great Smoky Mountains G: 349
Mount Kilimanjaro See Kilimanjaro in this index
Mount Kinabalu [mountain, Borneo]

Borneo (The land and its resources) B: 489 with map
 Malaysia (Land and climate) M: 99 with picture
Mount Kinchinjunga See Mount Kanchenjunga in this index
Mount Klyuchevskaya [volcano]
 Siberia (The land and climate) S: 444
 Russia (The East Siberian Uplands) R: 541
Mount Korab [mountain, Albania]
 Albania (Land) A: 306
Mount Kosciuszko [mountain, Australia] M: 885
 Australia (Mountains) A: 909-910 with picture and map
 Mountain (table) M: 894 with diagram
Mount Le Conte [mountain, North Carolina-Tennessee]
 Great Smoky Mountains G: 348
Mount Locust [Mississippi]
 Mississippi (Places to visit) M: 632
Mount Logan [mountain, Yukon Territory]
 M: 885
 Mountain (table) M: 894 with diagram
 Saint Elias Mountains S: 33
 Yukon Territory (Location, size, and description) Y: 582 with map
Mount Madison [mountain, New Hampshire]
 New Hampshire (Mountains) N: 220
Mount Makalu [mountain, Nepal-Tibet] M: 885
 Hillary, Sir Edmund Percival H: 232
 Mountain (table) M: 894 with diagram
Mount Mansfield [mountain, Vermont]
 Green Mountains G: 381
 Vermont (Land regions) V: 328
Mount Marcy [mountain, New York]
 Adirondack Mountains A: 56
 New York (Land regions) N: 304
Mount Mayon [volcano, Philippines]
 Volcano (Composite volcanoes) V: 440 with picture
Mount Mazama [mountain, Oregon]
 Crater Lake Ci: 1121 with picture
Mount McKinley [mountain, Alaska] M: 886
 Alaska A: 282 with picture
 Mountain (table) M: 894 with diagram
 Sea level S: 262
Mount McKinley National Park See Denali National Park in this index
Mount McLoughlin [mountain, Oregon]
 Oregon (Land regions) O: 838
Mount Meron [mountain, Israel]
 Israel (The Judeo-Galilean Highlands) I: 482
Mount Minsi [mountain, Pennsylvania]
 Delaware Water Gap D: 114
Mount Mitchell [mountain, North Carolina]
 Blue Ridge Mountains B: 421
 North Carolina (Land regions) N: 484
Mount Moldoveanu
 Romania (Surface features) R: 419 with map
Mount Monadnock [mountain, New Hampshire]
 New Hampshire (Mountains) N: 220
Mount Monroe [mountain, New Hampshire]
 New Hampshire (Mountains) N: 220
Mount Moosilauke [mountain, New Hampshire]
 New Hampshire (Mountains) N: 220
Mount Moriah Cemetery [South Dakota]
 South Dakota (Places to visit) So: 672
Mount Nebo [Old Testament]
 Mount Pisgah M: 886
Mount Nebo [Utah]
 Wasatch Range W: 45
Mount Nimba
 Guinea (Land and climate) G: 431
Mount of Olives [hills, Israel] M: 886
Mount Olivet See Mount of Olives in this index
Mount Olympus [mountain, Cyprus]
 Cyprus (Land and climate) Ci: 1206
Mount Olympus [mountain, Greece] M: 886
 Mountain (table) M: 894 with diagram
 Mythology (Mythical places) M: 974
 Zeus Z: 594
Mount Olympus [Washington]
 Olympic Mountains O: 755
Mount Olympus National Monument [Washington]
 Olympic National Park O: 756
Mount Ossa [mountain, Australia]
 Tasmania (Location, size, and description) T: 49
Mount Palomar Observatory See Palomar Observatory in this index
Mount Parnassus [Greece]
 Parnassus P: 177
Mount Pelée [volcano, West Indies] M: 886

- Martinique **M**: 235
 Volcano (table) **V**: 441 *with map*
 West Indies (Land and climate) **W**: 204
- Mount Pinatubo** [volcano, Philippines] **M**: 886
 Climate (Volcanic eruptions) **Ci**: 676d
 Philippines (Recovering democracy) **P**: 381 *with picture*
- Mount Pisgah** [mountain range, Jordan] **M**: 886
- Mount Rainier** [mountain, Washington] **M**: 887
 Cascade Range **C**: 271
 Mountain (table) **M**: 894 *with diagram*
 Seattle *pictures on* **S**: 272, **S**: 275
 Tacoma **T**: 5 *with picture*
 Washington *picture on* **W**: 46
- Mount Rainier National Park** [Washington] **M**: 887
 Seattle (Recreation) **S**: 275 *with picture*
 National Park System (table: National parks) **N**: 48
- Mount Revelstoke National Park** [British Columbia]
 Canada (table: National parks and national park reserves) **C**: 113
- Mount Roberts Tramway**
 Alaska *picture on* **A**: 296
- Mount Rogers** [Virginia]
 Virginia (Land regions) **V**: 410
- Mount Royal** [mountain, Quebec]
 Cartier, Jacques (Exploration of Canada) **C**: 262
 Montreal **M**: 768; (Parks) **M**: 774
 Quebec (Land regions) **Q**: 22
- Mount Royal Park** [Quebec]
 Montreal (Parks) **M**: 774; *picture on* **M**: 774
 Quebec (Places to visit) **Q**: 20
- Mount Rushmore National Memorial** [South Dakota] **M**: 887 *with picture*
 Borglum, Gutzon **B**: 488
 National Park System (table: National memorials) **N**: 54
 South Dakota **So**: 664 *with picture*; *picture on* **So**: 682
- Mount Rushmore State**
 South Dakota **So**: 664
- Mount Saint Elias** [mountain, Alaska]
 Alaska (Land regions) **A**: 292
 Saint Elias Mountains **S**: 33
- Mount Saint Helens** [volcano, Washington] **M**: 888 *with picture*
 Cascade Range **C**: 271
 Mountain (table) **M**: 894 *with diagram*
 Volcano (table) **V**: 441 *with map*
 Washington (Recent developments) **W**: 68 *with picture*
- Mount Saint Helens National Volcanic Monument** [Washington]
 Washington (Places to visit) **W**: 56
- Mount Shasta** [mountain, California] **M**: 888
 California (Land regions) **C**: 48-50
 Cascade Range **C**: 271
 Mountain (table) **M**: 894 *with diagram*
- Mount Shkhara** [mountain, Georgia]
 Georgia (Land and climate) **G**: 110 *with map*
- Mount Sinai** [mountain, Sinai peninsula] **M**: 888
 Moses (The covenant with God) **M**: 829
 Ten Commandments **T**: 131
- Mount Sir James MacBrien** [mountain, Canada]
 Northwest Territories (The land) **N**: 530 *with map*
- Mount Sir Sandford** [British Columbia]
 Selkirk Mountains **S**: 290
- Mount Sokhondo** [mountain, Russia]
 Yablonovyy Mountains **Y**: 548
- Mount Somma** [mountain, Italy]
 Vesuvius **V**: 342 *with picture*
- Mount Soufrière** [volcano, Saint Vincent]
 Saint Vincent and the Grenadines (Land and climate) **S**: 57
- Mount Stephen, Baron** [Canadian businessman]
 Stephen, George **So**: 890
- Mount Suribachi** [volcano, Iwo Jima] **M**: 523
- Mount Tabor** [mountain, Israel] **M**: 887
 Deborah **D**: 65
- Mount Tahat** [mountain, Algeria]
 Algeria (The Sahara) **A**: 363
- Mount Tambora** [volcano, Indonesia]
 Volcano (table) **V**: 441 *with map*
- Mount Tammany** [mountain, New Jersey]
 Delaware Water Gap **D**: 114
- Mount Terror** [volcano, Antarctica]
 Exploration (The exploration of Antarctica) **E**: 450
- Mount Titano** [mountain, San Marino]
 San Marino [country] (Land) **S**: 103
 San Marino [city] **S**: 104
- Mount Triglav** [Slovenia]
 Slovenia (Land and climate) **S**: 511
- Mount Vernon** [city, New York] **M**: 890
- Mount Vernon** [estate, Virginia] **M**: 888 *with pictures*
 Virginia (Visitor's guide) **V**: 408 *with picture*
 Washington, D.C. (Mount Vernon) **W**: 78
 Washington, George (Boyhood) **W**: 92;
 (Surrender of Fort Mifflin) **W**: 94;
 (Farmer and landowner) **W**: 96 *with picture*
- Mount Vernon Ladies' Association**
 Mount Vernon (A national shrine) **M**: 890
- Mount Vesuvius** *See* Vesuvius *in this index*
- Mount Waddington** [mountain, British Columbia]
 British Columbia (Land regions) **B**: 622
- Mount Waialeale** [mountain, Hawaii]
 Hawaii (Kauai) **H**: 102
 Rain (Some rainfall records) **R**: 124 *with map*
 United States (Climate) **U**: 126-128
- Mount Washington** [hill, Pittsburgh]
 Pittsburgh (The city) **P**: 500a-500b
- Mount Washington** [New Hampshire] **M**: 890
 New Hampshire (Places to visit) **N**: 216;
 (Mountains) **N**: 220
 White Mountains **W**: 291
- Mount Washington Cog Railway**
 New Hampshire (Places to visit) **N**: 216 *with picture*
- Mount Washington Observatory**
 New Hampshire (table: Average monthly weather) **N**: 220; (Land regions) *picture on* **N**: 218
 White Mountains **W**: 291
- Mount Whitney** [California] **M**: 890
 California (Land regions) **C**: 48
 Mountain (table) **M**: 894 *with diagram*
 Sequoia National Park **S**: 312
- Mount Williamson, Sierra Nevada, from Manzanar, California 1944** [photograph by Adams]
 Adams, Ansel *picture on* **A**: 33
- Mount Wilson Observatory** [California] **M**: 890
 Telescope (Reflecting telescopes) **T**: 104-105
- Mountain** **M**: 891
See also Volcano *in this index*
 Animal (Animals of the mountains) **A**: 474 *with pictures and map*
 Climate (The role of topography) **Ci**: 676a;
 (Highland climates) **Ci**: 676d; (Mountain building) **Ci**: 678
 Deep sea (The deep-sea floor) **D**: 82a
 Earth (Mountain building) **E**: 24
 Ocean (The land at the bottom of the sea) **O**: 659 *with map*
 Pacific Ocean (The ocean floor) **P**: 14
 Plate tectonics (Convergent plate boundaries) **P**: 563 *with diagram*
 Weather (Synoptic-scale systems) **W**: 159-160
 World **W**: 417
See also the list of related articles in the Mountain article
- Mountain, The** [French history]
 French Revolution (The National Convention) **F**: 526
- Mountain ash** [tree] **M**: 897
 Tree *pictures on* **T**: 422
- Mountain avens** [plant] **M**: 897
 Flower *picture on* **F**: 283
- Mountain beaver** [animal] **M**: 897
- Mountain bicycle**
 Bicycle (Kinds of bicycles) **B**: 290 *with picture*;
 (Bicycle riding today) **B**: 293
 Bicycle racing (Road races) **B**: 294
- Mountain blue** [insect]
 Butterfly *picture on* **B**: 737
- Mountain bluebird**
 Bluebird **B**: 422
- Mountain climbing** [sport] **M**: 897
 Alps (Climbing the Alps) **A**: 386
 Hiking **H**: 230
 Scotland (Recreation) **S**: 214-215
- Mountain cranberry** [fruit]
 Lingonberry **L**: 335 *with picture*
- Mountain dulcimer**
 Dulcimer **D**: 380 *with picture*
- Mountain evergreen forest**
 Forest (Mountain evergreen forests) **F**: 395 *with map*
- Mountain goat** **M**: 898 *with picture*
 Animal *picture on* **A**: 474
 Cashmere goat **C**: 274
 Ibex **I**: 3
- Mountain gorilla** [animal]
 Gorilla **G**: 275
 Fossey, Dian **F**: 421
 Primate (Conservation) **P**: 778c
- Mountain hemlock** [tree]
 Hemlock **H**: 182
- Mountain laurel** [plant] **M**: 898
 Poisonous plant (Some poisonous plants) **P**: 602
- Mountain lion** [wildcat] **M**: 898 *with pictures*
 Animal *pictures on* **A**: 472, **A**: 501
 Florida panther **F**: 266
- Mountain Meadows Massacre** [1857]
 Utah (Territorial days and statehood) **U**: 246-248
- Mountain men** [U.S. history]
 Fur trade (The 1800's) **F**: 565
 Westward movement in America (Exploration) **W**: 248-249
- Mountain nestor** *See* Kea *in this index*
- Mountain pass** [geography] **M**: 899
 Himalaya (Passes and glaciers) **H**: 233 *with picture*
- Mountain plover** [bird]
 Plover **P**: 574
- Mountain quail** [bird]
 Quail **Q**: 4
- Mountain rosebay** [shrub]
 Rhododendron **R**: 319
- Mountain Sami** [people]
 Sami **S**: 79 *with picture*
- Mountain sheep** *See* Bighorn *in this index*
- Mountain silverbell** [plant]
 Silverbell **S**: 465
- Mountain State** [nickname]
 West Virginia **W**: 206
- Mountain State Forest Festival**
 West Virginia (Visitor's guide) **W**: 216 *with picture*
- Mountain Time Zone**
 Standard time (Time zones) **So**: 835
 Time (Time zones in the United States and Canada) **T**: 289 *with maps*
- Mountain wave**
 Glider (Soaring) **G**: 229
- Mountain zebra**
 Zebra **Z**: 591
- Mountaineering** [sport] *See* Mountain climbing *in this index*
- Mountains and the Sea** [painting by Frankenthaler]
 Painting (Abstract painting) **P**: 34 *with picture*;
 (Color-field painting) **P**: 86
- Mountains of Antrim** [Northern Ireland]
 Northern Ireland (Surface features) **N**: 523 *with map*
- Mountains of California, The** [book by Muir]
 American literature (Nonfiction writers) **A**: 420
- Mountbatten, Louis** [British admiral] **M**: 899
 Philip, Prince **P**: 371
 World War II (The China-Burma-India theater) **W**: 489-490
- Mountbatten, Philip** *See* Philip, Prince *in this index*
- Mountbatten-Windsor** [British history]
 Windsor **W**: 334
- Mounted animal**
 Taxidermy **T**: 55 *with pictures*
- Mounted Police** *See* Royal Canadian Mounted Police *in this index*
- Mountolive** [book by Durrell]
 Durrell, Lawrence **D**: 389
- Mouride brotherhood** [religious group]
 Senegal (People) **S**: 297-298
- Mourne Mountains** [Northern Ireland]
 Northern Ireland (Surface features) **N**: 523 *with map*
- Mourning**
 Clothing (Communication) **Ci**: 688-689
 Flag (Raising and lowering the flag) **F**: 219
 Funeral customs (Mourning) **F**: 558
- Mourning Becomes Electra** [play by O'Neill]
 Naturalism (Naturalism in drama) **N**: 66
 O'Neill, Eugene Gladstone (His plays) **O**: 762
- Mourning Bride, The** [play by Congreve]
 Congreve, William **Ci**: 949
- Mourning cloak** [insect]
 Butterfly (Brush-footed butterflies) **B**: 734

560 Mourning dove

Mourning dove [bird] M: 900 *with picture*

Dove *picture on D: 315*

Pigeon (Wild pigeons) P: 460

Turtle dove T: 524

Mourning wheatear [bird]

Desert *picture on D: 155*

Mouse [animal] M: 900 *with pictures*

Dormouse D: 310

Jumping mouse J: 190 *with pictures*

Skull *picture on S: 495*

Mouse [electronic device]

Computer (Input devices) Ci: 912 *with picture*

Computerized instruction Ci: 924h

Word processing (Personal computers) W: 403

Mouse pad [device]

Computer (A mouse) Ci: 912-914

Mouse Tower (Germany) M: 902

Mousetrap

Trapping (Kinds of traps) T: 403 *with picture*

Mousetrap, The [play by Christie]

Christie, Agatha C: 527

Moussavi, Ruhollah [Iranian religious leader]

See Khomeini, Ruhollah *in this index*

Mousseau, J.-Alfred [Canadian political leader]

Quebec (table) Q: 29

Mouton peony [plant]

Peony P: 276 *with picture*

Mouth [anatomy] M: 902 *with diagram*

Cancer (table) C: 170

Cleft palate Ci: 661

Cosmetics (Kinds of cosmetics) Ci: 1075

Human body (The digestive system) H: 419;

diagram on H: 422

Insect (Mouthparts) I: 286 *with diagrams*

Reproduction, Human (Development of organs and organ systems) R: 248

Spider (Mouth) So: 784 *with diagrams*

Trench mouth T: 435

Mouth brush [biology]

Mosquito (Larva) M: 833

Mouth organ [musical instrument]

Harmonica H: 61

Mouth-to-mouth resuscitation

First aid (Giving artificial respiration) F: 138 *with pictures*

Mouthbreeder [fish]

Fish *picture on F: 170*

Mouthparts [zoology]

Butterfly B: 733 *with picture*; (The head)

B: 738 *with diagram*

Mouthpiece [sports]

Boxing (Equipment) B: 528

Mouton [fur]

Clothing (Clothing materials) Ci: 704

Mouton, Alexandre [American political leader]

Louisiana (table) L: 496

Movable feast [religion]

Calendar (The Christian church calendar) C: 29

Movable joint [anatomy]

Human body (The skeletal system) H: 418

Joint J: 155 *with diagrams*

Movable pulley

Pulley P: 897 *with diagram*

Movable type [printing]

Book (The development of printed books) B: 466

Communication (The rise of printing) Ci: 879-880 *with picture*

Gutenberg, Johannes G: 444

Printing P: 796; (The invention of movable type) P: 803

Type (History) T: 537

Moveable bridge

Bridge (Moveable bridges) B: 602 *with diagram*

Moveable Feast, A [book by Hemingway]

Hemingway, Ernest (Later years) H: 180-181

Movement

Clock (Kinds of clocks) Ci: 682i *with diagrams*

Watch (How watches work) W: 114

Movement [art]

Design (Rhythm and movement) D: 157

Sculpture (Form and treatment) S: 230

Movement [music]

Classical music (Orchestral music) Ci: 644

Serenade S: 315

Symphony So: 1067

Movement education

Physical education (Elementary school programs) P: 432

Movement for a Democratic Slovakia [political party]

Slovakia (Government) S: 508c

Movement for Democracy [political party]

Cape Verde (Government) C: 189-190;

(History) C: 190-191

Movement for the Restoration of the Ten

Commandments of God [cult]

Uganda (History) U: 4

Movements [music by Stravinsky]

Stravinsky, Igor (The 12-tone works) So: 923

Movie See Motion picture *in this index*

Movie camera

See also Camcorder *in this index*

Camera (Motion-picture cameras) C: 84 *with picture*

Communication *picture on Ci: 885*

Moviegoer, The [book by Percy]

American literature (Southern fiction) A: 424

Moving-coil microphone

Microphone (Moving-coil microphones) M: 516 *with diagram*

Moving sidewalk

Conveyor belt (Uses) Ci: 1024 *with picture*

Moving Target, The [book by Macdonald]

Macdonald, Ross M: 11

Movius, Hallam L. [American anthropologist]

Prehistoric people (table) P: 752

Mowat, Farley [Canadian author] M: 903

Mowat, Sir Oliver [Canadian political leader] M: 903

Confederation of Canada (Fathers of

Confederation) Ci: 935

Macdonald, Sir John Alexander (Lawyer) M: 6

Ontario (table) O: 783

Mowgli [literary figure]

Kipling, Rudyard (Kipling in America) K: 334

Mowing [gardening]

Lawn (Mowing) L: 144

Moynihan, Daniel Patrick [American government official] M: 903

Clinton, Hillary Rodham Ci: 682h

United Nations (table) U: 86

Mozambican National Resistance See Renamo *in this index*

Mozambique [country] M: 904 *with pictures and map*

Flag *picture on F: 199*

Portugal (Empire and wealth) P: 693-694 *with map*

Portuguese language P: 695

Zimbabwe (History) Z: 597

Mozarabic [language]

Spanish literature (Early medieval literature) So: 757-758

Mozart, Leopold [Austrian composer]

Mozart, Wolfgang Amadeus (His life) M: 906 *with picture*

Mozart, Wolfgang Amadeus [Austrian composer] M: 906 *with picture*

Beethoven, Ludwig van (Beethoven's life)

B: 213

Classical music (The Classical period) Ci: 647-648 *with picture*

Clementi, Muzio Ci: 662a

Concerto Ci: 928

Germany (Music) G: 153

Haydn, Joseph H: 117

Opera (Mozart) O: 798; (*Don Giovanni*) O: 803 *with picture*; (*Magic Flute, The*) O: 805

with picture; (*Marriage of Figaro, The*) O: 805

Overture O: 881

Serenade S: 316

Symphony So: 1067

Mozzarella [cheese]

Cheese (Kinds of cheese) C: 392

Mozzetta [vestment]

Pope (Titles, clothing, and symbols) P: 661

MP

Military police M: 543

MP3 [recording]

Recording industry (History) R: 182

MPD [political party] See Movement for Democracy *in this index*

MPLA [political party] See Popular Movement for the Liberation of Angola *in this index*

MPR [political party]

Congo (Kinshasa) (Rebuilding the nation) Ci: 940e

Mpumalanga [province, South Africa]

South Africa (Provincial government) So: 609

Mr. and Mrs. Andrews [painting by Gainsborough]

Painting (People) P: 31 *with picture*; (Landscapes and seascapes) P: 32-33

Mr. Bones [minstrel character]

Minstrel show M: 612 *with picture*

"Mr. Flood's Party" [poem by Robinson]

Robinson, Edwin Arlington R: 368

Mr. H. [play by Lamb]

Lamb, Charles (His essays) L: 50

Mr. Madison's War [U.S. history]

Madison, James ("Mr. Madison's War") M: 35

War of 1812 (Declaration of war) W: 30-31

Mr. Mani [book by Yehoshua]

Hebrew literature (A new generation of

Hebrew writers) H: 163

Mr. Micawber [literary figure]

Dickens, Charles (Dickens' life) D: 187

Mr. Moto [literary figure]

Marquand, John Phillips M: 217

Mr. President [book by Asturias]

Asturias, Miguel Angel A: 851

Mr. Sammler's Planet [book by Bellow]

Bellow, Saul B: 244

Mr. Tambo [minstrel character]

Minstrel show M: 612 *with picture*

Mr. Wilson's War [book by Dos Passos]

Dos Passos, John D: 311

MRBM [weapon] See Medium-range ballistic missile *in this index*

MRI [medicine] See Magnetic resonance imaging *in this index*

mRNA See Messenger RNA *in this index*

Mrs. Frisby and the Rats of NIMH [book by O'Brien]

O'Brien, Robert C. O: 643

Mrs. Malaprop [literary figure]

Sheridan, Richard Brinsley S: 397

Mrs. Miniver [film]

Motion picture (Best picture: 1942) M: 861

Mrs. Silence Dogood

Franklin, Benjamin (Student and apprentice) F: 487

Mrs. Warren's Profession [play by Shaw]

Shaw, George Bernard (Early life) S: 378

MS [disease] See Multiple sclerosis *in this index*

Ms. [magazine]

Magazine (History) M: 43-45

Steinem, Gloria So: 886

M.S. 760 [airplane]

Airplane *picture on A: 236*

MS-DOS [computer software]

Computer (Operating system software) Ci: 916-917

Gates, Bill G: 67

MSA [language] See Modern Standard Arabic *in this index*

MSF [organization] See Doctors Without Borders *in this index*

MSG [chemical] See Monosodium glutamate *in this index*

MSH [hormone]

Hormone (Other hormones) H: 336

Mswati III [king of Swaziland]

Swaziland (History) So: 1019

Mt [symbol]

Meitnerium M: 387

Mthethwa [people]

Shaka S: 343

MTV [television network]

Rock music (Rock videos) R: 380

Mu [letter]

M M: 1

Mu-neutrino [atomic particle]

Lepton L: 205

Muawiya [Muslim ruler]

Muslims (Muhammad) M: 964-964a; (Ali) M: 964b; (The Muslim Empire) M: 964c

Saudi Arabia (The rise of Islam) S: 160

Muay Thai [sport] See Kickboxing *in this index*

Mubarak, Hosni [Egyptian political leader]

M: 908 *with portrait*

Egypt (Recent developments) E: 133

Mubarak, Suzanne M: 908

Mubarak, Suzanne [Egyptian reformer] M: 908

Much Ado About Nothing [play by

Shakespeare]

Shakespeare, William (*Much Ado About Nothing*) S: 360 *with picture*

Mucha, Alphonse [Czech artist]

Art nouveau *picture on A: 749*

Mucilage [glue] M: 908

Dextrin D: 177

Gum arabic G: 440

Muckrakers [journalism] M: 908

Consumerism (Beginnings of consumerism) Ci: 1019

Journalism (The age of sensationalism) J: 174

Lloyd, Henry Demarest L: 402

Magazine (History) M: 43-4

- Progressive movement (Social reforms) P: 814
 Sinclair, Upton S: 468
 Steffens, Lincoln So: 883
 Tarbell, Ida Minerva T: 42
 United States, History of the (The Progressive Era) U: 181
- Muckross Lake** [Ireland]
 Lakes of Killarney L: 49 *with map*
- Mucous colitis** [disease]
 Colitis Ci: 772
- Mucous membrane** [anatomy]
See also Mucus *in this index*
 Disease (Natural barriers) D: 231 *with diagram*
 Membrane M: 391
 Mouth M: 903
 Nose N: 548
 Nosebleed N: 549
- Mucoviscidosis** [disease] *See* Cystic fibrosis *in this index*
- Mucus** [physiology] M: 909
 Allergy (How an allergy develops) A: 373;
 (Diagnosis and treatment) A: 373-374
 Cystic fibrosis Ci: 1208
 Disease (Natural barriers) D: 231
 Esophagus E: 358
 Eye (The outer parts) E: 460
 Human body (The air passages) H: 420
 Lung (Other jobs of the lungs) L: 524
 Membrane (Mucous membranes) M: 391
- Mucus gland**
 Gland (table) G: 209
- Mud bath**
 Bath (Bathing for relaxation or pleasure) B: 163-164
- Mud-brick architecture**
 Arabs (Shelter) A: 587
- Mud dauber**
 Wasp W: 110
- Mud hen** [bird]
 Coot [Coot] Ci: 1038
- Mud pickerel** [fish]
 Pickerel P: 450
 Pike P: 461
- Mud turtle**
 Turtle (Kinds of turtles) T: 522
- Mudd, Samuel Alexander** [American doctor]
 M: 909
 Lincoln, Abraham (The trial of the conspirators) L: 326
- Muddy River**
 Nevada (Rivers and lakes) N: 166
- Muddy shore** [ocean]
 Seashore (Life on muddy shores) S: 270 *with picture*
- Mudflat** [geology]
 Estuary E: 364
- Mudflow** [geology]
 Volcano (Rock fragments) V: 439
- Mudpot**
 Yellowstone National Park (The Lower Loop) Y: 558
- Mudpuppy** [amphibian] M: 909 *with picture*
- Mudra** [gesture]
 Dance (Asian theatrical dance) D: 30
- Mudrock** [geology]
 Earth (Sedimentary rocks) E: 21
- Mudumalai National Park** [India]
 National park (table) N: 42f
- Muelich, Hektor** [German artist]
 Germany *picture on* G: 163
- Mueller, Frederick H.** [American government official]
 Commerce, Department of (table) Ci: 871
 Eisenhower, Dwight David (table) E: 152
- Mueller, Robert Swan, III** [American political leader]
 Federal Bureau of Investigation (History) F: 62-63
- Muench, Aloisius J. Cardinal** [American religious leader]
 Cardinal (table: American cardinals) C: 211
- Muerto Canyon virus** *See* Pulmonary syndrome hantavirus *in this index*
- Muezzin** [religion]
 Cairo (The city) C: 15-16
 Islam (The Five Pillars of Islam) I: 463
 Minaret M: 562
- Mufakat** [government]
 Indonesia (Rural life) I: 129
- Muff**
 Clothing (The 1600's) Ci: 701
- Muff** [bird]
 Chicken (Kinds of chickens) C: 441
- Muffle furnace**
 Furnace (Sources of heat) F: 567
- Muffler** [mechanics] M: 909 *with diagram*
 Automobile (The exhaust system) A: 952
 Gasoline engine (Exhaust system) G: 65
- Mufhahi** [sheikdom]
 South Arabia, Federation of So: 639
- Mugabe, Robert Gabriel** [Zimbabwe political leader] M: 909
 Zimbabwe Z: 596; (History) Z: 597-598
- Mugger** [reptile]
 Crocodile Ci: 1150
- Mughal Empire** [history of India] M: 910
 Aurangzeb A: 891
 Babur B: 3
 Bangladesh (Mughal rule) B: 85
 India (The Mughal Empire) I: 129 *with map*;
 (The rise of the East India Company) I: 130
 Mongol Empire (Breakup) M: 721
 Muslims (The Mughal Empire) M: 964d
 Painting (Indian painting) P: 44 *with picture*
 Pakistan (The Mughal Empire) P: 99
 Shah Jahan S: 342
 World, History of the (The Islamic empires) W: 441-442
- Mugwort** [plant]
 Wormwood W: 502
- Mugwumps** [U.S. history] M: 910
 Cleveland, Grover (Election of 1884) Ci: 670
- Muhajirs** [people]
 Pakistan (Cultural groups and languages) P: 93
- Muhammad** [prophet] M: 910 *with picture*
 Arabs (The rise and spread of Islam) A: 588
 Carnelian C: 243
 Islam I: 463
 Jerusalem (Islamic sites) J: 96
 Khalid ibn al-Walid K: 308a
 Medina M: 380
 Middle Ages (The rise of Islam) M: 524
 Muslims M: 964 *with picture*
 Quran Q: 44
 Ramadan R: 132
 Religion (Islam) R: 222 *with picture*
 Saudi Arabia S: 155; (The rise of Islam) S: 160
 Shiites S: 400
 Sunnites So: 991
 World, History of the (The Islamic world) W: 434
- Muhammad II** [sultan of the Ottoman Empire]
See Mehmet II *in this index*
- Muhammad V** [sultan of Morocco]
 Morocco (Independence) M: 815
- Muhammad V University** [Morocco]
 Rabat R: 46
- Muhammad VI** [king of Morocco]
 Morocco (Recent developments) M: 815
- Muhammad VI** [king of Morocco]
 Hassan II H: 82
- Muhammad, Benjamin Chavis** [American civil rights leader] *See* Chavis, Benjamin Franklin, Jr. *in this index*
- Muhammad, Elijah** [American religious leader] M: 911
 African Americans (Black militancy) A: 136o
with picture
 Black Muslims B: 389
 Malcolm X M: 103
 Nation of Islam N: 27
- Muhammad, Warith Deen** [American religious leader] *See* Mohammed, Warith Deen *in this index*
- Muhammad Ahmed** [Sudanese patriot]
 Khartoum K: 308b
 Sudan (Egyptian and British control) So: 955-956
- Muhammad Ali** [Ottoman military leader] M: 911
 Alexandria (History) A: 344
 Egypt (Muhammad Ali and modernization) E: 131
 Khartoum K: 308b
 Mamelukes M: 115
- Muhammad Ali** [American boxer] *See* Ali, Muhammad *in this index*
- Muhammad Ali Mosque**
 Cairo (The city) C: 15-16
- Muhammad Daoud Khan** [Afghan political leader] *See* Daoud Khan, Muhammad *in this index*
- Muhammad of Ghor** [king of the Turks]
 Delhi Sultanate D: 116
- Muhammadden art** *See* Islamic art *in this index*
- Muhammedenism** *See* Islam *in this index*
- Muhammediyah** [political movement]
 Muslims (Reform and renewal) M: 965
- Muharram** [month]
 Calendar (The Islamic calendar) C: 29
- Muhlenberg, Frederick Augustus Conrad** [American political leader]
 Muhlenberg, Henry Melchior M: 912
- Muhlenberg, Henry Melchior** [American religious leader] M: 911
- Muhlenberg, John Peter Gabriel** [American general] M: 912
- Muhlenberg, William Augustus** [American religious leader]
 Muhlenberg, Henry Melchior M: 912
- Muir, John** [American conservationist] M: 912
 American literature (Nonfiction writers) A: 420
 Conservation (Early conservation problems) Ci: 985; *picture on* Ci: 986
 Sierra Club S: 450
- Muir Woods National Monument** [California] M: 912 *with picture*
 Muir, John M: 912
 National Park System (table: National monuments) N: 51
- Mujahideen** [Afghan history]
 Afghanistan (The Soviet invasion) A: 96
 Bin Laden, Osama B: 308
 Qa'ida, Al- Q: 2
- Mujibur Rahman** [Bangladeshi political leader] M: 912
 Bangladesh (East Pakistan) B: 85; (The new nation) B: 86
- Mukden** [city, China] *See* Shenyang *in this index*
- Mukden, Battle of** [1905]
 Russo-Japanese War (Final battles) R: 566
- Mukerji, Dhan Gopal** [Indian author]
 Newbery Medal (table) N: 359
- Mukoshima** [island, Japan]
 Bonin Islands B: 460
- Mukti Bahini** [Bangladeshi history]
 Bangladesh (Armed forces) B: 79
- Mulatto** [people] M: 912
 Brazil (Ancestry) B: 572
 Colombia (Ancestry) Ci: 779
 Cuba (Ancestry and language) Ci: 1170
 Hispanic Americans (Who are the Hispanic Americans?) H: 245
 Indian, American (In Latin America) I: 178
 Latin America (Ancestry) L: 94-95 *with picture*
- Mulberry** [tree] M: 913 *with picture*
 Silk (Discovery of silk) S: 461
 Tree *pictures on* T: 422
- Mulberry Bend** [U.S. history]
 Riis, Jacob August R: 341
- Mulch** [agriculture] M: 913
 Compost Ci: 905
 Farm and farming (Preparing the soil) F: 35
 Gardening (Caring for the garden) G: 35-36
 Lawn (Planting the grass) L: 142-144
- Mulct Law** [1894]
 Iowa (The temperance movement) I: 395
- Muldoon, Sir Robert** [New Zealand political leader] M: 913
- Muldowney, Shirley** [American race driver]
 Automobile racing (Automobile racing today) A: 981
- Mule** [animal] M: 913 *with pictures*
 Evolution (Evolution of new species) E: 429-430
- Mule** [locomotive]
 Panama Canal (The Gatun Locks) P: 123
- Mule** [machine]
 Spinning (The mule) So: 794
- Mule deer** M: 914 *with picture*
 Animal *picture on* A: 483
 Balance of nature (Upsetting the balance) B: 35
 Deer (North American deer) D: 85; *picture on* D: 84
- Mule-Foot hog**
 Hog (Feet) H: 287
- Mule skinner** [U.S. history]
 Western frontier life in America (Transportation) W: 238
- Mulets**
 Bullfighting (The order of the bullfight) B: 695-696 *with picture*
- Mulhacén** [mountain]
 Spain (The Meseta) So: 740 *with map*
- Mullah** [title]
 Afghanistan (Religion) A: 94
- Mullanphy Fund, Bryan**
 Foundations (Independent foundations) F: 430
- Mullein** [plant] M: 914 *with picture*
- Mullen** [plant] *See* Mullen *in this index*
- Mullen, Larry** [Irish musician]
 U2 U:2

Mullens, Priscilla See Alden, John and Priscilla *in this index*

Mullens, William [Pilgrim]

Alden, John and Priscilla A: 339

Müller, Erwin W. [German-American physicist]
Ion microscope I: 372

Müller, Friedrich Max [German linguist]

Mythology (Müller's theory) M: 986

Religion (The origin of religion) R: 218-219

Müller, Heiner [German dramatist]
Drama (Later German-language drama) D: 340

Muller, Hermann Joseph [American geneticist]
Heredity (The birth of genetics) H: 208
Nobel Prizes (Physiology or medicine: 1946)
N: 444

Müller, Johann [German mathematician]
Trigonometry T: 442

Müller, Johannes P. [German physiologist]
Psychology (Psychology becomes a science)
P: 849

Müller, Karl Alexander [Swiss physicist]
Nobel Prizes (Physics: 1987) N: 441
Superconductivity So: 993

Muller, Marcia [American author] M: 915

Müller, Paul Hermann [Swiss chemist]
DDT D: 55

Müller, Walther [German physicist]
Geiger counter G: 76

Mullet [fish] M: 915 *with picture*

Mullet [heraldry]
Heraldry *picture on* H: 195

Mulligan, Gerry [American saxophonist] M: 915
Jazz (Cool jazz) J: 72

Mulliken, Robert Sanderson [American chemist] M: 915

Mullion [construction]
Window W: 334

Mullis, Kary Banks [American chemist]
Nobel Prizes (Chemistry: 1993) N: 443

Mulock, Sir William [Canadian political leader]
King, William Lyon Mackenzie (Education)
K: 325

Mulready, William [British inventor]
Stamp collecting (Origins) So: 829-830

Mulroney, Brian [Canadian political leader]
M: 916 *with pictures*
Campbell, Kim C: 90b; (Member of parliament)
C: 90c-90d
Canada, History of (Constitutional changes)
C: 153

Chrétien, Jean (Political career) C: 522b
Quebec (Recent developments) Q: 32-33
Progressive Conservative Party P: 812
Turner, John Napier (Political comeback) T: 517

Multatuli [Dutch author]
Netherlands (Arts) N: 142-144

Multiband radio
Radio (How radio programs are received)
R: 88

Multicellular organism
Life (The structure of living things) L: 276

Multiconductor cable
Cable (Cable construction) C: 4-5 *with diagram*

Multicultural education program
Education (Education for whom?) E: 107
Multiculturalism M: 918
Teaching (Current issues in U.S. teaching)
T: 69

Multiculturalism [sociology] M: 918
Culture (Culture and society) Ci: 1188

Multielectrode tube
Vacuum tube (Kinds of vacuum tubes) V: 258-259

Multi-infarct dementia [disease]
Senility S: 300

Multilateral aid
Foreign aid (Multilateral aid programs) F: 384

Multilateral development bank
Bank (Kinds of banks) B: 90-91

Multilateral treaty
International relations (Treaties) I: 344

Multimedia [electronics] M: 919
Audio-visual materials (Multisensory materials)
A: 883
Compact disc (CD-ROM's) Ci: 902
Computer (CD-ROM drives) Ci: 915-916
Computerized instruction (How computerized instruction works) Ci: 924h
Information retrieval I: 268b
Internet I: 350
Library (Contents and kinds of libraries) L: 235
Publishing (Reference books) P: 868
Video game V: 359
Web site W: 175

World Wide Web W: 499

Multimedia Super Corridor [area, Malaysia]
Putrajaya P: 913

Multimeter [instrument]
Electric meter E: 176; (Digital meters) E: 177
with picture

Multimodality therapy [treatment]
Cancer (Multimodality therapy) C: 172

Multi-mode fiber
Fiber optics (Kinds of optical fibers) F: 88 *with diagram*

Multinational corporation M: 919
Chemistry (The chemical industry) C: 405
Globalization (Features of globalization) G: 233

Multiparty system
Democracy (Political parties) D: 121
Government (Party systems) G: 288-290
Political party (Multiparty systems) P: 634

Multiperil insurance
Crop insurance Ci: 1153

Multiple [measurement]
Metric system (Kinds of metric units) M: 436

Multiple birth M: 919 *with pictures*
Infertility (Treatment) I: 265
Reproduction, Human (Multiple birth) R: 246

Multiple element antenna
Antenna (Receiving antennas) A: 543-544 *with picture*

Multiple fracture
Fracture F: 451 *with diagram*

Multiple fruit
Fruit (Compound fruits) F: 548; *pictures on*
F: 547

Multiple Independently Targetable Reentry Vehicle [weapon]

Guided missile (The warhead) G: 423; *diagrams on* G: 425

Multiple intelligences [psychology]
Teaching (Guiding and assisting student learning) T: 66

Multiple mailing
Internet (Communications) I: 350-350a

Multiple origins theory [anthropology]
Prehistoric people (The multiple origins theory)
P: 746

Multiple-party system See Multiparty system *in this index*

Multiple-peril insurance
Insurance (Homeowners' insurance) I: 313

Multiple personality [psychology]
Mental illness (Dissociative disorders) M: 406

Multiple-product forestry
Forestry (Community forestry) F: 406

Multiple-response learning
Learning (Multiple-response learning) L: 163

Multiple sclerosis [disease] M: 920

Brain (Other brain disorders) B: 558

Nervous system (Disorders of the nervous system) N: 136

Occupational therapy (Helping people with physical disabilities) O: 648

Multiple-unit operation
Locomotive (Kind of locomotives) L: 414

Multiple use forest management
Conservation (Forest conservation) Ci: 981

Forestry F: 404

Multiple Use-Sustained Yield Act [1960]
Forestry (Laws that protect U.S. forest resources) F: 408

Multiplex stereo
Radio (Stereophonic receivers) R: 89-90

Multiplex system
Radio (Stereophonic receivers) R: 89-90

Telegraph (Service expansion and improvement) T: 91-92

Multiplexer [machine]
Television (Telecine) T: 122

Multiplicand
Arithmetic (Multiplication) A: 667

Multiplication (Writing multiplication) M: 921

Multiplication [mathematics] M: 921 *with pictures*

Algebra (Multiplication) A: 355

Arithmetic (Multiplication) A: 667 *with picture*;
(Arithmetic of small fractions) A: 668;
(Arithmetic of negative numbers) A: 668-669

Decimal system (Multiplication) D: 71 *with diagrams*

Division (Checking by multiplication) D: 251

Fraction (Equivalent fractions) F: 446 *with diagram*;
(Calculations using fractions) F: 448 *with diagram*

Logarithms (Multiplication) L: 424

Multiplication table

Multiplication (Multiplication facts) M: 921 *with picture*

Multiplier [mathematics]

Arithmetic (Multiplication) A: 667

Multiplication (Writing multiplication) M: 921

Multipolar system [political science]
Balance of power B: 36

Multipoint fuel injection system
Automobile (The fuel system) A: 950

Multisensory materials
Audio-visual materials (Multisensory materials)
A: 883

Multistage flash distillation
Water (Distillation) W: 127; *diagram on* W: 128

Multistage rocket
Rocket (Multistage rockets) R: 385 *with diagram*

Multistop truck
Truck *picture on* T: 459

Multitrack recorder [machine]
Recording industry (Recording) R: 181

Multnomah Falls [waterfall, Oregon]
Waterfall (table: Famous waterfalls of North America) W: 142 *with picture*

Muluzi, Bakili [Malawi political leader]
Malawi (History) M: 98

Mumbai [city, India] M: 924 *with picture*
India I: 108; (Service industries) I: 126; *picture on* I: 115

Mumbo Jumbo [book by Reed]
American literature (Experimental styles)
A: 424

Mumford, Lewis [American author] M: 925

Mummers' Parade
Christmas *picture on* C: 530

Pennsylvania *picture on* P: 255

Philadelphia (The arts) P: 363 *with picture*

Mummification
Fossil (Other processes) F: 425-426

Mumming [custom]
Halloween (Halloween customs and symbols)
H: 24a

Mummy [archaeology] M: 925 *with pictures*

Egypt, Ancient (Religion) E: 137

Embalming (Ancient embalming) E: 255

Funeral customs (History) F: 558

Pyramids (Egyptian pyramids) P: 916

Mumps [disease] M: 926

Disease (table) D: 226

Mumtaz Mahal [wife of Shah Jahan]
Taj Mahal T: 18

Munch, Edvard [Norwegian artist] M: 926 *with picture*

Expressionism E: 455

Norway (Arts) N: 541 *with picture*

Painting (Symbolism) P: 76

Munchausen, Baron [literary figure] M: 926

München [Germany] See Munich *in this index*

Munda, Battle of [45 B.C.]

Caesar, Julius (Last victories) C: 13

Mundelein, George William Cardinal

[American religious leader]
Cardinal (table: American cardinals) C: 211

Mundell, Robert Alexander [Canadian economist]

Nobel Prizes (Economics: 1999) N: 449

Mundugumor [people]

Sexuality (Cultural influences) S: 338a

Mundus Novus [letter by Vespucci]
Vespucci, Amerigo (Life and expeditions)
V: 341-342

Mundy Scheme, The [play by Friel]
Friel, Brian F: 533

Mung bean
Bean (Kinds of beans) B: 181

Muni, Paul [American actor]
Motion picture (Best performance by an actor: 1936) M: 862

Munich [Germany] M: 927 *with picture*

Bavaria B: 175

Germany *picture on* G: 151

Olympic Games (Terrorism in Munich) O: 752

Munich Agreement [1938] M: 927

Czech Republic (The Munich Agreement)
Ci: 1213

Czechoslovakia (The Munich Agreement)
Ci: 1215

United Kingdom ("Peace in our time") U: 70

World War II (The failure of appeasement)
W: 472

Municipal Assistance Corporation [New York]
New York City (Recent developments) N: 342

Municipal Auditorium and Theater

- Mobile (The city) **M**: 681
Municipal authority See *Special district in this index*
Municipal bond
 Bond (Kinds of bonds) **B**: 454
 Investment (Indirect investments) **I**: 367-368
Municipal Building
 Kansas City *picture on* **K**: 240
Municipal Civic Center
 New York City (Manhattan) **N**: 323-324; *picture on* **N**: 340
Municipal corporation
 Corporation (Other corporations) **Ci**: 1070
Municipal government See *City government in this index*
Municipal solid waste
 Environmental pollution (Solid waste) **E**: 334
 Waste disposal **W**: 112
Municipal Theatre [São Paulo]
 Brazil *picture on* **B**: 567
Municipality
 City government **Ci**: 594
Municipality of Metropolitan Toronto
 Toronto (Growth and federation) **T**: 340a
Municipio [district]
 Brazil (Local government) **B**: 569
Munitions See *Ammunition; Bomb; Weapon in this index*
Muniz v. Illinois [U.S. history]
 Granger cases **G**: 311
Muñoz Marín, Luis [Puerto Rican political leader] **M**: 928
 Puerto Rico (Building a democracy) **P**: 883-884
Munro, Alice [Canadian author] **M**: 928
Munro, Hector Hugh [British author] **M**: 928
Munsee Indians [American Indians] **M**: 928
 Delaware Indians **D**: 114
Munsell, Albert H. [American painter]
 Color (The Munsell Color System) **Ci**: 824
Munsell Color System
 Color (The Munsell Color System) **Ci**: 824 *with diagrams*
Munsey, Frank Andrew [American publisher]
M: 928
Munsey's Magazine
 Munsey, Frank Andrew **M**: 928
Munster [cheese]
 Cheese (Semisoft cheese) **C**: 392 *with picture*
Münter, Gabriele [German artist]
 Painting (Expressionism) **P**: 78-79
Muntjac [animal]
 Deer (Asian and European deer) **D**: 86
Muntz metal
 Brass **B**: 565
Muon [atomic particle] **M**: 928
 Anderson, Carl David **A**: 451
 Cosmic rays (Secondary cosmic rays) **Ci**: 1077
 Lepton **L**: 205
 Relativity (Time dilation) **R**: 211
 Subatomic particle (Kinds of subatomic particles) **So**: 937
Muon-neutrino [physics]
 Astronomy (Neutrino astronomy) **A**: 845
 Neutrino **N**: 154
Muonio River
 Finland (Rivers) **F**: 114
Muppets [puppets]
 Henson, Jim **H**: 191
 Puppet (Hand puppets) **P**: 904-905
Muqaddima [book by Ibn Khaldun]
 Ibn Khaldun **I**: 3
Murad I [Ottoman ruler]
 Janissaries **J**: 29
Murad, Farid [American pharmacologist]
 Nobel Prizes (Physiology or medicine: 1998) **N**: 445
Mural [art] **M**: 928 *with picture*
 See also *Mosaic in this index*
 Benton, Thomas Hart **B**: 254
 Latin America (Painting) **L**: 101-102 *with picture*
 Mexico (Arts) **M**: 458-459 *with picture*
 Orozco, José Clemente *picture on* **O**: 858
 Painting (Modern Mexican painting) **P**: 83
 Rivera, Diego **R**: 355 *with picture*
 Siqueiros, David **S**: 475
Murano [Italy]
 Glass (The Middle Ages) **G**: 218
 Venice (Economy) **V**: 307-308
Murano glass
 Italy *picture on* **I**: 505
Murasaki Shikibu [Japanese author] **M**: 929
 Japanese literature (The Heian period) **J**: 61
 Painting (Japanese painting) **P**: 47
Murat, Joachim [French general] **M**: 929
Murder [crime] **M**: 930
 Capital punishment **C**: 193
 Euthanasia (Self-induced euthanasia) **E**: 421
 Homicide **H**: 305
 Manslaughter **M**: 167
Murder in the Cathedral [play by Eliot]
 Eliot, T. S. (His works) **E**: 237-238
Murder of Lidice, The [book by Millay]
 Millay, Edna St. Vincent **M**: 553
"Murders in the Rue Morgue, The" [story by Poe]
 Poe, Edgar Allan **P**: 589; (Poe's life) **P**: 589
 Detective story (History) **D**: 163
Murdoch, Iris [British author] **M**: 930
 English literature (Recent English fiction) **E**: 323
Murdoch, Rupert [Australian publisher] **M**: 930
Murdock, William [British inventor]
 Gas [fuel] (First uses of manufactured gas) **G**: 58
 Lamp (Gas lamps) **L**: 53
Murex sea snail
 Shell (Uses of shells) **S**: 389-390; *picture on* **S**: 386
Murfreesboro, Battle of [1863]
 Civil War (table) **Ci**: 624; (Battle of Stones River) **Ci**: 630
Muriatic acid See *Hydrochloric acid in this index*
Muridiyya brotherhood [religious group]
 Senegal (People) **S**: 297-298
Murieta, Joaquín [legendary figure] **M**: 930
Murillo, Bartolomé Esteban [Spanish painter]
M: 930 *with picture*
Murine typhus
 Typhus (Murine typhus) **T**: 541
Murmansk [city, Russia] **M**: 930
Murmur [disorder]
 Heart murmur **H**: 147
 Rheumatic fever **R**: 291
Murnau, F. W. [German director]
 Motion picture (Filmmaking in Europe) **M**: 866-867
Murner, Thomas [German author]
 German literature (The Renaissance) **G**: 139-140
Muroc Field
 Edwards Air Force Base **E**: 114
Murphree, Dennis [American political leader]
 Mississippi (table) **M**: 640
Murphy, Audie [American soldier] **M**: 931 *with portrait*
 Texas (The mid-1900's) **T**: 208; *picture on* **T**: 205
Murphy, Carl [American publisher]
 Spingarn Medal (table: 1955) **So**: 793
Murphy, Charles Francis [American political leader]
 Wilson, Woodrow (Presidential candidate) **W**: 322
Murphy, Emily Gowan [Canadian social reformer] **M**: 931
Murphy, Francis P. [American political leader]
 New Hampshire (table) **N**: 223
Murphy, Frank [American jurist]
 Michigan (table) **M**: 507
 Roosevelt, Franklin Delano (table) **R**: 458
 Supreme Court of the United States (table) **So**: 1000
Murphy, Franklin [American political leader]
 New Jersey (table) **N**: 249
Murphy, Isaac [American political leader]
 Arkansas (table) **A**: 712
Murphy, Jimmy [American race driver]
 Automobile racing (table: Indianapolis 500 winners) **A**: 980
Murphy, John [American political leader]
 Alabama (table) **A**: 274
Murphy, William Parry [American physician]
 Nobel Prizes (Physiology or medicine: 1934) **N**: 444
Murphy bed
 Bed (Types of beds) **B**: 197
Murrah, Pendleton [American political leader]
 Texas (table) **T**: 203
Murrah Federal Building See *Alfred P. Murrah Federal Building in this index*
Murray, Alfalfa Bill [American political leader]
 Oklahoma (The 1930's) **O**: 732
Murray, Donald [British inventor]
 Telegraph (Decline) **T**: 92
Murray, George H. [Canadian political leader]
 Nova Scotia (table) **N**: 567
Murray, James [British colonial official] **M**: 931
 Canada, History of (The Quebec Act) **C**: 143-144
Murray, James A. [Canadian political leader]
 New Brunswick (table) **N**: 196
Murray, John Courtney [American Jesuit theologian]
 Vatican Council II (The work of the council) **V**: 289-290
Murray, Johnston [American political leader]
 Oklahoma (table) **O**: 730; (The mid-1900's) **O**: 734
Murray, Joseph Edward [American physiologist]
 Nobel Prizes (Physiology or medicine: 1990) **N**: 445
Murray, Margaret A. [British anthropologist]
 Witchcraft (Witchcraft in modern times) **W**: 373
Murray, Philip [American labor leader] **M**: 931
 Congress of Industrial Organizations **Ci**: 941
 Labor movement (Reunification of the AFL and the CIO) **L**: 13
Murray, William H. [American political leader]
 Oklahoma (table) **O**: 730; (The 1930's) **O**: 732
Murray of Tullibardine plaid
 Tartan *picture on* **T**: 47
Murray River [Australia] **M**: 932
 Australia (Rivers) **A**: 910
 Exploration (Exploring Australia's interior) **E**: 448
 River (table) **R**: 352
Murre [bird] **M**: 932 *with picture*
 Auk **A**: 890
Murrow, Edward R. [American journalist]
M: 932 *with portrait*
 Journalism (Radio journalism) **J**: 175
Murrumbidgee [river, Australia]
 Australia (Rivers) **A**: 910-911
 Exploration (Exploring Australia's interior) **E**: 448
Murry and Leonie Guggenheim Foundation
 Guggenheim, Meyer **G**: 421
Mururoa atoll [Pacific]
 Tuamotu Islands **T**: 476
Musala Peak
 Bulgaria (The land) **B**: 691 *with map*
Musandam Peninsula
 Oman (Land and climate) **O**: 758
Musashi [ship]
 Battleship (The modern battleship) **B**: 172-173
Muscadine grape
 Grape (North American grapes) **G**: 320
Muscat [Oman] **M**: 932
 Oman **O**: 757
Muscat and Oman [former name]
 Oman (History) **O**: 759
Muscat of Alexandria [raisin]
 Raisin (Varieties of raisins) **R**: 130; (Preparation for market) **R**: 130
Muscle [anatomy] **M**: 933 *with diagrams*
 Allergy (How an allergy develops) **A**: 373
 Back **B**: 17
 Cataplexy **C**: 298
 Convulsions **Ci**: 1025
 Cramp **Ci**: 1116
 Curare **Ci**: 1193
 Fish (Skeleton and muscles) **F**: 161
 Hand (Parts of the hand) **H**: 40 *with diagram*
 Heart (Outer lining and muscle) **H**: 133
 Human body (Cells and tissues) **H**: 417-418, (The muscular system) **H**: 418 *with picture; picture on* **H**: 416; *diagram on* **H**: 422
 Incontinence **I**: 105
 Insect (Muscular system) **I**: 289
 Iron (How bodies use iron) **I**: 435
 Knee **K**: 345
 Nervous system *diagrams on* **N**: 134
 Neurology **N**: 152
 Paralysis **P**: 152
 Physical fitness (Muscular strength) **P**: 433
 Posture **P**: 710
 Rheumatism **R**: 291
 Rheumatology **R**: 291
 Tendon **T**: 132 *with diagram*
 Tissue (Animal tissues) **T**: 299
Muscle Shoals [region, Alabama] **M**: 936
 Goethals, George Washington (Early life) **G**: 246
 Tennessee Valley Authority (Other activities) **T**: 160; (History) **T**: 160
Muscling [slang]
 Heroin **H**: 213
Muscovite [mineral]

- Mica M: 482
Mineral picture on M: 569
- Muscovite literature**
Russian literature (Muscovite literature) R: 559
- Muscovites** [people]
Moscow (People) M: 824
- Muscovy Company** [British history]
Hudson, Henry (Northern voyages) H: 404
- Muscular Christianity**
Kingsley, Charles K: 331
- Muscular dystrophy** M: 936
Heredity (table) H: 204
Paralysis (Paralysis of muscular origin) P: 152
- Muscular system** See Muscle in this index
- Musculoskeletal system** [anatomy]
Osteopathic medicine O: 867
- Musée d'Art Contemporain** [Montreal]
Montreal picture on M: 775
- Muses** [Greek mythology] M: 937
Mythology (Greek divinities) M: 979; picture on M: 980
- Musetta** [opera character]
Opera (*Bohème, La*) O: 801
"Musetta's Waltz" [aria]
Opera (*Bohème, La*) O: 801
- Museum** M: 937 with pictures
United States (Museums) U: 114; picture on U: 113
See also the list of Related articles in the Museum article
- Museum at Warm Springs** [Oregon]
Oregon (Places to visit) O: 836
- Museum Island** [island]
Berlin (The downtown areas) B: 260-261
- Museum of African American History** [Detroit] M: 940
United States picture on U: 113
- Museum of African Art, National** [Washington D.C.] See National Museum of African Art in this index
- Museum of Anthropology** [Mexico]
Library picture on L: 254
- Museum of Decorative Art** [Paris]
Paris (Museums and art galleries) P: 164
- Museum of Fine Arts** [Boston]
Boston (Cultural life and recreation) B: 501-502 with picture
Folk art (Folk art collections) F: 319
- Museum of Fine Arts** [Houston]
Houston (Museums and libraries) H: 397
- Museum of History and Technology, National**
See National Museum of American History in this index
- Museum of Modern Art** [New York City] M: 940
New York City (A visitor's guide) N: 338
- Museum of Natural History** [Providence]
Rhode Island (Museums) R: 301
- Museum of Natural History, American** See American Museum of Natural History in this index
- Museum of Natural History, National** See National Museum of Natural History in this index
- Museum of New Mexico** [Santa Fe]
New Mexico (Libraries and museums) N: 260
- Museum of Science and Industry** [Chicago] M: 940
Chicago (Museums) C: 428-429
Illinois picture on I: 57
- Museum of the Confederacy** [Richmond]
Richmond (Other interesting places to visit) R: 332
Virginia (Libraries and museums) V: 402-403 with picture
- Museum of the Fur Trade** [Chadron]
Nebraska (Places to visit) N: 102
- Museum of the Revolution** [Moscow] See Central Museum of the Revolution in this index
- Museums and Women** [stories by Updike]
Updike, John U: 213
- Museveni, Yoweri** [Ugandan political leader]
Uganda (History) U: 4
- Musgrave Ranges** [mountain ranges]
Australia (Mountains) A: 909-910 with map
South Australia So: 639
- Musgrove, Ronnie** [American political leader]
Mississippi (table) M: 640
- Musharraf, Pervez** [Pakistani political leader]
Pakistan (Government) P: 92; (Recent developments) P: 100
- Mushet, Robert Forester** [British metallurgist]
Iron and steel (The birth of modern steelmaking) I: 451
- Mushroom** M: 941 with pictures
- Mushroom anchor**
Anchor A: 449 with picture
- Mushroom coral**
Coral picture on Ci: 1048a
- Musial, Stan** [American baseball player] M: 945 with portrait
Baseball (table: Hall of Fame) B: 135; (Depression and war) B: 136
- Music** M: 946 with pictures
See also Classical Music in this index
Ballet (Music) B: 50
Baroque (Baroque music) B: 117
Careers (Sports and entertainment) C: 230-231
Colonial life in America (Music) Ci: 808
Copyright (Works protected) Ci: 1046
Drama (Other parts of drama) D: 325
Folk music F: 321
Impressionism (Music, literature, and sculpture) I: 95
Indian, American (Music) I: 148
Poe, Edgar Allan (Poetry and poetic theory) P: 589-590
Pulitzer Prizes (Prizes in literature, drama, and music) P: 888; (table) P: 896
Radio (Entertainment) R: 85
Rap music R: 141
Rhythm R: 320
Rock music R: 376 with pictures
Romanticism (Romanticism in music) R: 427
Sound (Musical sounds) So: 598
- Music box** M: 958 with picture
- Music Box Revues** [musicals]
Berlin, Irving B: 266
- Music Center: Performing Arts Center of Los Angeles County**
Los Angeles (The arts) L: 466 with picture
- Music City, U.S.A.** [nickname]
Nashville N: 22
- Music Clubs, National Federation of** M: 958
- Music in space**
Stockhausen, Karlheinz So: 904
- Music in the Tuileries Gardens** [painting by Manet]
Painting (Edouard Manet and the impressionists) P: 71 with picture
- Music Television** [network] See MTV in this index
- Music therapy**
Music (Careers in music) M: 957
- Music video** [recording]
Jackson, Michael J: 15
Popular music (New technologies) P: 671
Television picture on T: 121
- Musical** [film]
Motion picture (Movies in the 1930's) M: 868 with picture; (Vaudeville and musical comedy) [Musical comedy] P: 670
- Musical chairs**
Game picture on G: 21
- Musical comedy** M: 958 with pictures
Ballet picture on B: 54
Dance picture on D: 31
Hammerstein, Oscar, II H: 35
Hart, Lorenz H: 77
Popular music (Vaudeville and musical comedy) P: 670
Theater picture on T: 244
United States picture on U: 119
- Musical glasses** [musical instrument] See Glass harmonica in this index
- Musical instrument**
Music (Musical instruments) M: 948 with pictures
Catgut C: 301
Country music (The instruments) Ci: 1098
Orchestra O: 820 with pictures
Rock music (Characteristics of rock music) R: 376
Suzuki method So: 1013
- Musical Offering** [music by Bach]
Canon C: 183
- Musical pause**
Poetry (Rhythm and meter) P: 591-593
- Musical Ride** [custom]
Royal Canadian Mounted Police picture on R: 495
- Musical score**
Opera (The elements of opera) O: 791
Orchestra (The conductor) O: 821
- Musical top**
Top (Kinds of tops) T: 331
- Musician**
Jazz J: 68 with pictures
Opera (The orchestra) O: 793 with picture
Orchestra O: 820 with pictures
Television (Planning and preparation) T: 110c-111
- Musicians, American Federation of** [labor union] M: 961
Labor movement (table) L: 8
Petrillo, James Caesar P: 329
- Musicians of the United States and Canada, American Federation of** See Musicians, American Federation of in this index
- Musil, Robert** [Austrian author] M: 961
- Musique concrète** [music]
Classical music (Electronic music) Ci: 650
- Musk** [animal product] M: 961
Civet Ci: 604
Deer (Asian and European deer) D: 86
Musk deer M: 961
Skunk S: 496
Weasel W: 155
- Musk deer** M: 961 with picture
Deer (Asian and European deer) D: 86
- Musk hog**
Peccary P: 226
- Musk ox** M: 962
Animal picture on A: 484
Takin T: 18b
- Musk turtle**
Turtle (Kinds of turtles) T: 522
- Muskellunge** [fish] M: 962 with picture
Fish picture on F: 159
Pike P: 461
- Musket** [gun] M: 962
Army (The rise of modern armies) A: 727
Blunderbuss B: 425
Flintlock F: 236
Revolutionary War in America (Weapons and tactics) R: 279 with pictures
- Muskie, Edmund Sixtus** [American political leader] M: 963
Humphrey, Hubert Horatio (Presidential candidate) H: 437
Maine (table) M: 87; (The mid-1900's) M: 91-92 with picture
Nixon, Richard Milhous (The 1968 election) N: 432
- Muskingum River** [Ohio]
Ohio River O: 705
- Muskmelon** [food] M: 963 with picture
- Muskogee Indians** [American Indians]
Creek Indians Ci: 1126
- Muskoka Lakes** [Ontario] M: 963
- Muskrat** [animal] M: 963 with picture
Animal picture on A: 479
Fur (table) F: 561; picture on F: 562
- Musky** See Muskellunge in this index
- Musky rat-kangaroo** [mammal]
Kangaroo (Other macropods) K: 215
- Muslim American Society**
Black Muslims B: 390
- Muslim art** See Islamic art in this index
- Muslim Brotherhood** [political group] M: 964
Egypt (The 1940's) E: 132
Muslims (Reform and renewal) M: 965
Qutb, Sayyid Q: 44
- Muslim Girls Training** [organization]
Nation of Islam N: 27
- Muslim League** [history of India]
Bangladesh (British India) B: 85
India (Rise of Indian nationalism) I: 131; (New Constitution) I: 132; (World War II [1939-1945]) I: 132-133; (Independence and partition) I: 133
Jinnah, Mohammad Ali J: 127
Pakistan (The nationalist movement) P: 99
- Muslims** [religious group] M: 964 with pictures
See also Islam in this index
Algeria (Religion) A: 362
Arab-Israeli conflict A: 582
Arabs A: 585 with picture; (Religion) A: 586
Azerbaijan (People) A: 996
Bangladesh (Religion) B: 82
Black Muslims B: 389
Bosnia-Herzegovina (People) B: 492; (History) B: 492-493
China (Religion) C: 486
Columbus, Christopher (Years of waiting) Ci: 858
Crusades Ci: 1159
Egypt (Religion) E: 124 with picture; (Muslim rule) E: 130
Ethiopia (Religion) E: 369

- Hausa H: 86
 India (Islam) I: 117 *with picture*; (History) I: 129
 Indonesia I: 226; (Religion) I: 232 *with picture*
 Iran I: 398
 Kolkata (People) K: 363
 Lebanon (Ethnic groups and religion) L: 171
 Libya (Religion) L: 266 *with picture*
 Malaysia (Religion) M: 98d
 Middle Ages (The rise of Islam) M: 524
 Middle East (Religion and language) M: 532
 Moors M: 797
 Muslim Brotherhood M: 964
 Name (Black names) N: 5
 Niger (People) N: 407-408
 Nigeria (Religion) N: 413 *with picture*
 Palestinians P: 107
 Philippines (Recovering democracy) P: 381
 Quran Q: 44
 Racial profiling R: 61
 Senegal (People) S: 297-298
 Sunnites So: 991
 Syria (Religion) So: 1071
 Tajikistan (People) T: 18a
 Turkey (Religion) T: 506
 Turkmenistan (People) T: 514
 Uzbekistan (People) U: 253
 Women's movements (In developing nations) W: 387
 Yugoslavia (Ethnic tensions) Y: 580-581
- History**
 Asia (The people) A: 781
 Eastern Orthodox Churches (History) E: 45-46
 Europe (Muslim influence) E: 411
 Exploration (Medieval exploration) E: 441 *with picture*; (The great age of European exploration) E: 442-443
 Harun al-Rashid H: 80
 Iran (The rise of Islam) I: 406
 Jerusalem (Muslim rule) J: 101
 Middle East (Islamic empires) M: 533
 Ottoman Empire O: 877
 Palestine (Arab control) P: 105
 Persia, Ancient (The Sassanid dynasty) P: 300
 Portugal (Visigoths and Muslims) P: 693
 Saracens S: 123
 Seljuks S: 289
 Slavery (The Middle Ages) S: 501
 Spain (Muslim control) So: 746
 World, History of the (The Islamic world) W: 434-435 *with picture*; (The age of invasions of India) W: 436; (African civilizations) W: 437
- Way of life**
 Circumcision Ci: 561
 Clothing (Why clothing varies) Ci: 690
 Fast F: 52
 Food (Religious reasons) F: 332
 Friday F: 532
 Hajj H: 17
 Harem H: 60
 Islamic art (Characteristics) I: 467
 Mecca M: 352
 Medina M: 380
 New Year's Day (The date of New Year's) N: 289
 Saudi Arabia (Religion) S: 158
 Sheikh S: 383
- Muslims, Black** See Black Muslims in this index
Muslin [fabric] M: 966
Muslin wheel [machine]
 Spinning (The mule) So: 794
Muspellsheim [Norse mythology]
 Mythology (The creation of life) M: 984
Musquodoboit River
 Nova Scotia (Rivers and lakes) N: 562
Mussel [sea animal] M: 966
 Deep sea (Invertebrates) D: 82a-82b; *picture on* D: 82
 Mollusk (Bivalves) M: 695
 Pearl (How pearls are formed) P: 216-217
 Shell *pictures on* S: 387
Musset, Alfred de [French author] M: 967
 Drama (Romanticism) D: 337-338
 French literature (Romantic poetry) F: 521, (Romantic drama) F: 521
 Sand, George S: 106
Mussolini, Benito [Italian dictator] M: 967 *with picture*
 Fascism (Fascism in Italy) F: 49
 Hitler, Adolf (World War II) H: 268
 Italo-Ethiopian War I: 495
 Italy (Italy under Mussolini) I: 517; (World War II) I: 517
 Rome (Period of construction) R: 435
 World War II (The rise of dictatorships) W: 469-470 *with picture*; (The invasion of Italy) W: 482
Mussorgsky, Modest [Russian composer] M: 967
 Opera (*Boris Godunov*) O: 801-802 *with picture*
 Rimsky-Korsakov, Nikolai R: 342
Must [juice]
 Wine (How wine is made) W: 337-338
Must [zoology]
 Elephant (Musth) E: 231
Mustagh Range [alternate name, Karakoram Range]
 Himalaya H: 233
Mustang [automobile]
 Automobile (World War II and the postwar years) A: 968-971 *with picture*
Mustang [horse] M: 968 *with picture*
 Cowboy (His horse) Ci: 1109
 Horse (table: Horse terms) H: 343; (Wild horses) H: 348
Mustard [food]
 Turmeric T: 515
Mustard [plant] M: 968 *with picture*
 Flower F: 300 *with picture*
Mustard gas
 Chemical-biological-radiological warfare (Chemical) C: 396
Mustard plaster
 Mustard M: 968
Mustard poultice
 Mustard M: 968
Mustel, Auguste [French inventor]
 Celesta C: 325
Musth [zoology]
 Elephant (Musth) E: 231
Musyawah [government]
 Indonesia (Rural life) I: 229
Mutagen [genetics]
 Heredity (Mutation) H: 203
 Mutation M: 969
Mutanabbi, al- [Arab poet]
 Syria (The arts) So: 1072
Mutant gene [genetics]
 Evolution (How mutations change a species) E: 428
 Mutation M: 968
Mutara III [Watutsi king]
 Rwanda (History) R: 571-572
Mutation [genetics] M: 968
 Antibiotic (Resistance to antibiotics) A: 551
 Cell (Metabolic diseases) C: 336
 De Vries, Hugo D: 175
 Evolution (Causes of evolutionary change) E: 427
 Fruit (Developing new varieties of fruit) F: 546
 Genetic testing (How genes carry information) G: 85
 Genetics (Molecular genetics) G: 86
 Heredity (Sources of genetic variation) H: 203; (Heredity and natural selection) H: 203
 Prion P: 804
 Races, Human (Mutation) R: 58
 Radiation (Effects of radiation) R: 79
Mutation Theory, The [book by De Vries]
 De Vries, Hugo D: 176
Mutawwiin [Islam]
 Saudi Arabia (Religion) S: 158
Mute [music]
 Jazz (The brass) J: 69
Mute swan
 Swan (Kinds) So: 1015; *picture on* So: 1016
Mutesa II, Sir Edward [Ugandan political leader]
 Ganda G: 24
 Uganda (History) U: 4
Mutiny [law] M: 969
Mutiny on the Bounty [book by Nordhoff and Hall]
 Nordhoff and Hall N: 453
Mutiny on the Bounty [film]
 Motion picture (Best picture: 1935) M: 861
Mutiwa, Peter Nzube [Kenyan anthropologist]
 Prehistoric people (table) P: 752
Mutsuhito [emperor of Japan] See Meiji, Emperor in this index
Mutt [dog] See Mongrel in this index
Mutt and Jeff [cartoon characters]
 Comics (Comic strips) Ci: 869
Muttart Conservatory
 Edmonton *picture on* E: 84
- Mutton** [food] M: 969
 Lamb L: 50
 Meat (Kinds of meat) M: 347
Mutton chops [hair]
 Beard B: 187
Mutual benefit association
 Insurance (Types of insurance companies) I: 315
Mutual fund [economics] M: 969
 Bank (Other services) B: 89
 Investment (Other kinds of indirect investments) I: 368
 Money market fund M: 718
Mutual inductance [electricity]
 Inductance I: 239
Mutual insurance
 Insurance (Types of insurance companies) I: 315
Mutual of Omaha
 Nebraska (Service industries) N: 108 *with picture*
Mutual savings bank See Savings bank in this index
Mutualism [biology]
 Life (The biological environment) L: 275-276
 Plant (How plants protect themselves) P: 544
 Symbiosis So: 1065
Mutualist socialism
 Proudhon, Pierre Joseph (Ideas) P: 838
Mutually assured destruction
 Nuclear weapon (Control of nuclear weapons) N: 600
Mutwatallis [Hittite military leader]
 Hittites (History) H: 269
Muumuu
 Hawaii (Clothing) H: 94
 Pacific Islands (Clothing) P: 6
Muwashshaha [poetry]
 Spanish literature (Early medieval literature) So: 757
Muybridge, Eadweard [British photographer]
 Edison, Thomas Alva (Motion pictures) E: 80
 Motion picture (The history of motion pictures) M: 864 *with picture*
Muzaffar al-Din [shah of Iran]
 Iran (The Qajar dynasty) I: 406
Muzdalifah [encampment]
 Islam (The Five Pillars of Islam) I: 463-464
Muzorewa, Abel T. [Zimbabwe political leader]
 Zimbabwe (History) Z: 597
Muzzle [gun]
 Rifle (The parts of a rifle) R: 338 *with diagram*
 Artillery (Parts of a gun) A: 762
Muzzle velocity
 Ballistics (Interior ballistics) B: 56
MVD [Russian government agency]
 Police (In other countries) P: 623
MVP [disorder] See Mitral valve prolapse in this index
Mwanamutapa Empire [African history]
 Africa (Eastern, central, and southern kingdoms) A: 132-133
 Zimbabwe (History) Z: 597
Mwanawasa, Levy [Zambian political leader]
 Zambia (History) Z: 589-590
Mwinyi, Ali Hassan [Tanzanian political leader]
 Tanzania (Recent developments) T: 35
My Antonia [book by Cather]
 Cather, Willa C: 302
"My Confession" [essay by Tolstoy]
 Tolstoy, Leo (His conversion) T: 323
"My Country Calls" [song]
 Wyss, Johann Rudolph W: 538
My Egypt [painting by Demuth]
 Painting (Precisionism) P: 82-83 *with picture*
My Experiments with Truth [book by Gandhi]
 Gandhi, Mohandas Karamchand (Gandhi's beliefs) G: 24
My Fair Lady [film]
 Motion picture (Best picture: 1964) M: 861
My Fair Lady [musical]
 Lerner, Alan Jay L: 205
 Musical comedy (The modern musical emerges) M: 960
 Pygmalion P: 914
 Shaw, George Bernard (Mature period) S: 378
My Fatherland [music by Smetana]
 Smetana, Bedřich S: 515
My Friend Flicka [book by O'Hara]
 O'Hara, Mary O: 679
My Friend's Book [book by France]
 France, Anatole F: 480
My Heart is Broken [book by Gallant]
 Gallant, Mavis G: 13

My Lai [Vietnam]
 Vietnam War (Growing protest) V: 376
 War crime (The Vietnam War) W: 27

My Little Chickadee [film]
 Fields, W. C. F: 95 with picture

My Michael [novel by Oz]
 Hebrew literature (A new generation of Hebrew writers) H: 163

My Name is Kofi [book by Asare]
 Literature for children picture on L: 355

My Old Field Horse: Stable Scene [painting by Bingham]
 Bingham, George Caleb picture on B: 309

My Old Kentucky Home [Bardstown]
 Kentucky (Places to visit) K: 282 with picture

My Past and Thoughts [book by Herzen]
 Herzen, Alexander Ivanovich H: 217

My Weekly Reader [magazine]
 Literature for children (Children's magazines) L: 364

Myalgia [disorder]
 Rheumatism R: 291

Myanmar [country] M: 970
 Dance (Asian theatrical dance) D: 30
 Flag picture on F: 204
 India (British India) I: 130-131
 World War II (The China-Burma-India theater) W: 489
 See also See also the list of Related articles in the Myanmar article in this index

Myanmar, Union of See Myanmar in this index

Myasthenia gravis [disease] M: 970f
 Thymus T: 274

Mycelium
 Fungi (Parts of a fungus) F: 558-559 with diagram
 Mushroom M: 941; (Fairy rings) M: 942 with picture

Mycena [mushroom]
 Mushroom picture on M: 944

Mycenae [ancient city] M: 970f
 Aegean civilization (The Mycenaean culture) A: 83
 Architecture (Mycenaean architecture) A: 815
 Galley G: 15
 Greece, Ancient (History) G: 372
 Mediterranean Sea (History of the Mediterranean) M: 382
 Mythology (Greek mythology) M: 978
 Ship (Minoan and Mycenaean ships) S: 404
 World, History of the (The Greeks) W: 428

Mycenaean civilization [ancient Greece]
 Aegean civilization (The Mycenaean culture) A: 83
 Painting (Aegean painting) P: 41

Mycerinus [king of ancient Egypt]
 Sculpture (Egyptian) S: 234 with picture

Mycobacterium bovis [bacteria]
 Tuberculosis (How tuberculosis affects the body) T: 477

Mycobacterium leprae [bacteria]
 Leprosy (Causes) L: 203 with picture

Mycobacterium tuberculosis [bacteria]
 Bacteriology (History) B: 22-23
 Tuberculosis (How tuberculosis affects the body) T: 477

Mycology [botany]
 Fungi F: 558
 Mushroom (Kinds of mushrooms) M: 943

Mycoplasma pneumoniae [microbe]
 Pneumonia (How pneumonia develops) P: 586

Mycorrhiza
 Fungi (How a fungus lives) F: 559
 Mushroom (How a mushroom obtains food) M: 942
 Plant (Roots) P: 529
 Squirrel (Obtaining food) So: 815-816
 Tree (Roots) T: 417

Mycotoxin [botany] M: 970f
 Plant (Diseases) P: 543

Myelin [anatomy]
 Brain (Brain cells) B: 551-552
 Multiple sclerosis M: 920

Myelin sheath [anatomy]
 Nervous system (The axon) N: 133-134 with diagram

Myelitis [disease] M: 970f

Myeloid cell [physiology]
 Leukemia L: 215

Myers, Richard [American government official]
 Joint Chiefs of Staff (table) J: 156

Myers, Walter Dean [American author]
 Literature for children (Fiction) L: 358-359;
 (Children's literature today) L: 365

Myiasis [disorder]
 Bot fly B: 507

Myna [bird] M: 970f with picture

Myocardial infarction [disorder]
 Coronary thrombosis Ci: 1068

Myocarditis [disease] M: 971
 Diphtheria (Cause, symptoms, and complications) D: 215
 Heart (Inflammatory heart disease) H: 142

Myocardium [anatomy]
 Heart (Outer lining and muscle) H: 133;
 (Inflammatory heart disease) H: 142
 Myocarditis M: 971

Myoelectricity
 Artificial limb (Control of artificial limbs) A: 761

Myoglobin [physiology]
 Iron (How bodies use iron) I: 435
 Kendrew, Sir John Cowdery K: 259

Myomere [zoology]
 Fish (Skeleton and muscles) F: 161

Myopathy [disease]
 Muscle (Disorders of the muscles) M: 935-936

Myopia See Nearsightedness in this index

Myosin cross-bridge [anatomy]
 Muscle (How muscles work) M: 935

Myotonic muscular dystrophy
 Muscular dystrophy (Myotonic muscular dystrophy) M: 937

Myrdal, Alva Reimer [Swedish diplomat]
 M: 971

Myrdal, Gunnar [Swedish sociologist] M: 971

Myriad Gardens [Oklahoma City]
 Oklahoma picture on O: 713

Myrick, Sue [American political leader]
 Charlotte (Government and history) C: 385

Myriobiblion [book by Photius]
 Photius P: 404

Myron [Greek sculptor]
 Europe picture on E: 392

Myrrh [tree product] M: 971

Myrtle [shrub] M: 971 with picture

Myrtle Beach
 South Carolina (Places to visit) So: 650 with picture

Myrtlewood
 Laurel L: 121

Mysophobia [psychology]
 Phobia P: 392

Mysore [India]
 Religion picture on R: 215

Mysteries [religion] M: 972

Mysteries of Udolpho, The [book by Radcliffe]
 Gothic novel G: 279

Mysterious Stranger, The [book by Twain]
 Twain, Mark (Later works) T: 529-530

Mystery and Melancholy of a Street [painting by Chirico]
 Chirico, Giorgio de picture on C: 514

Mystery of Edwin Drood, The [book by Dickens]
 Detective story (History) D: 163
 Dickens, Charles (The second phase) D: 188-189

"Mystery of Marie Rogêt, The" [story by Poe]
 Detective story (History) D: 163

Mystery play [drama] M: 972
 Drama (Mystery plays) D: 328
 English literature (Early English drama) : 316
 Miracle play M: 615
 Morality play M: 800

Mystery story
 Detective story D: 162
 Literature for children (Fiction) L: 358-359

Mystic Aquarium [Mystic]
 Connecticut (Places to visit) Ci: 960

Mystic Marriage of Saint Catherine, The [painting by Correggio]
 Correggio picture on Ci: 1071

Mystic Seaport [Connecticut] M: 972
 Connecticut (Places to visit) Ci: 960 with picture

Mysticism [religion] M: 972
 Kabbalah K: 208
 Meditation M: 380
 Spanish literature (The 1400's) So: 758-759

Myth [story]
 Mythology M: 973
 Campbell, Joseph C: 90a
 Folklore (Myths) F: 323
 Legend L: 183
 Literature for children (Folk literature) L: 357

Religion (The use of sacred stories) R: 216

Myth of Sisyphus, The [book by Camus]
 Camus, Albert C: 97

Myth of the Twentieth Century [book by Rosenberg]
 Rosenberg, Alfred R: 481

Myth, Ritual, and Religion [book by Lang]
 Lang, Andrew L: 60

Mythological cycle
 Irish literature (Heroic tales, romances, and sagas) I: 430

Mythology M: 973 with pictures
 Campbell, Joseph C: 90a
 Fire (Fire in legend and religion) F: 122
 Greece, Ancient (Religion) G: 367
 Lévi-Strauss, Claude L: 218
 Painting (Mythology paintings) P: 34
 Raven R: 151
 Storytelling (History) So: 913-914
 See also the list of Related articles in the Mythology article

Myths and Texts [book by Snyder]
 American literature (Poetry) A: 423

Myxedema [disorder]
 Thyroid gland (Underactive thyroid) T: 274-275

Myxomatosis [disease]
 Conservation (Australia) Ci: 989-990

N

N [letter] N: 1 with pictures

N [symbol]
 Newton N: 388
 Nitrogen N: 425

N-1 [rocket]
 Space exploration (Soviet attempts to reach the moon) So: 720

N-doped crystal [electronics]
 Semiconductor (Doped crystals) S: 291; (Using doped crystals) S: 292

N gauge [size]
 Railroad, Model (Scale and size) R: 120 with picture

N-type dopant
 Solar energy (How a photovoltaic cell is made) So: 577

N-type material
 Solar energy (How a photovoltaic cell is made) So: 577-578 with diagram

N-type semiconductor [physics]
 Electronics (Solid-state components) E: 210
 Transistor (Transistor materials) T: 372-373

Na [symbol]
 Sodium (Chemical properties) So: 569

NAA
 National Aeronautic Association N: 27

NAACP See National Association for the Advancement of Colored People in this index

NAACP Legal Defense and Educational Fund, Inc. [organization]
 Marshall, Thurgood M: 230
 National Association for the Advancement of Colored People N: 29

NAB
 National Alliance of Business N: 28

Nabataeans [ancient people]
 Jordan (Early days) J: 164
 Petra P: 327
 Saudi Arabia (History) S: 160

Nabisco [company] See RJR Nabisco Holdings in this index

Nabiyev, Rakhman [Tajik political leader]
 Tajikistan (History) T: 18b

Nabokov, Vladimir [Russian-American author]
 N: 2
 American literature (Experimental styles) A: 424-425
 Novel (After World War II) N: 574

Nabopolassar [king of Babylon]
 Babylon (The New Babylonian Empire) B: 12
 Chaldea C: 370

Nebrit, James Madison, Jr. [American educator] N: 2

Nabu [Assyrian god]
 Assyria (Religion) A: 821

Nabucco [opera by Verdi]
 Verdi, Giuseppe V: 316

Nacelle [airplane]

- Airplane (The wing) A: 213-214
Nacimianto [custom]
 Christmas (In Spain) C: 531
NaCl [formula]
 Salt S: 72
Nacogdochas [Texas]
 Bowie, James B: 520
Nacre
 See also *Mother-of-pearl in this index*
 Pearl (How shells are formed) P: 216 *with diagram*; (Cultured pearls) P: 217
Nacreous layer [zoology]
 Shell (How shells are formed) S: 385
Nadar [French photographer]
 Photography (The beginnings of modern photography) P: 426
Na-Dene [language group]
 Indian, American (Language groups) I: 149-150
Nader, Ralph [American lawyer] N: 2 *with portrait*
 Automobile (The growth of government regulation) A: 971
 Consumerism (Growth of the movement) C: 1019
 Green party G: 381
Nadir [astronomy] N: 2
Nadir Shah [king of Iran]
 Iran (The rule of Nadir Shah) I: 406
Nadir Shah, Muhammad [king of Afghanistan]
 Afghanistan (Independence) A: 96
Nadja [book by Breton]
 Breton, André B: 594
Nadolol [drug]
 Beta-blocker B: 274
NAEP [organization] See National Assessment of Educational Progress *in this index*
Naevius, Gnaeus [Roman author]
 Latin literature (Early Latin literature) L: 115
Nafcillin [drug]
 Penicillin (Forms of penicillin) P: 240
NAFTA [trade agreement] See North American Free Trade Agreement *in this index*
Nagako [Japanese empress]
 Japan (Postwar boom) J: 58-59
Nagana [disease]
 Trypanosome T: 475
 Tsetse fly T: 475
Nagananda [play by Harsha]
 Harsha H: 77
Nagas [people]
 India (Religious and ethnic unrest) I: 134
Nagasaki [city, Japan] N: 2
 Japan (Tokugawa period) J: 55
 Nuclear weapon N: 596; (World War II) N: 601; *picture on* N: 598
 Truman, Harry S. (The end of World War II) T: 469
 World War II (The atomic bomb) W: 492
Nagel, Charles [American government official]
 Commerce, Department of (table) C: 871
 Taft, William Howard (table) T: 11
Nagawaza
 Judo (Judo techniques) J: 184
Nagorno-Karabakh [region]
 Armenia (History) A: 718b-719
 Azerbaijan (History) A: 997-998
Nagoya [city, Japan] N: 3
Naguib, Muhammad [Egyptian political leader]
 Egypt (Republic) E: 132
 Faruk I F: 48
Nagumo, Chuichi [Japanese admiral]
 Pearl Harbor (The attack) P: 218
Nagy, Imre [Hungarian political leader]
 Cold War (Unrest in Eastern Europe) C: 765
 Hungary (Communist Hungary) H: 447;
 (Unsuccessful revolution) H: 447
Naha [Okinawa]
 Okinawa O: 710 *with picture and map*
Nahanni National Park
 Canada (table: National parks and national park reserves) C: 113
 Northwest Territories (The land) N: 530-531
Nahl, Charles [American artist]
 Western frontier life in America *picture on* W: 235
Nahr Ibrahim [river, Lebanon]
 Lebanon (Land and climate) L: 172
Nahrawan, Battle of [A.D. 658]
 Muslims (Ali) M: 964b
Nahtwin [ceremony]
 Myanmar (Way of life) M: 970a
Nahua Indians
 El Salvador (History) E: 252
Náhuatl [language]
 Aztec (Language) A: 1002
 El Salvador (Ancestry) E: 249
Nahuel Huapi [park, Argentina]
 National park (Argentina) N: 42b; (table) N: 42g
Nahum, Book of [Biblical figure] N: 3
Nahyssen Indians [American Indians]
 Virginia (Early days) V: 418
NAIA [organization] See National Association of Intercollegiate Athletics *in this index*
Naiad [entomology]
 Insect (Incomplete metamorphosis) I: 293
 Larva L: 78
Naiad [mythology]
 Nymph N: 633
Nail [anatomy] N: 4
 Cosmetics (Kinds of cosmetics) C: 1075
 Skin (Hair, nails, and glands) S: 489; *picture on* S: 490
Nail [hardware] N: 3 *with pictures*
Nailsea glass
 Glass (Types of art glass) G: 221
Nailset [tool]
 Nail (The parts of a nail) N: 3
Naipaul, V. S. [Trinidad-born author] N: 4
 Nobel Prizes (Literature: 2001) N: 446
 Novel (The novel today) N: 575
Naira [money]
 Money *picture on* M: 704
Nairobi [Kenya] N: 4
 Africa *picture on* A: 98
 Kenya K: 297 *with pictures*; (Building the new nation) K: 304
Naismith, James [Canadian-American educator]
 N: 4
 Basketball (Beginnings) B: 151
 Gulick, Luther Halsey G: 439
 Young Men's Christian Association (History) Y: 573
Naismith Memorial Basketball Hall of Fame
 See Basketball Hall of Fame *in this index*
Najd [region]
 Saudi Arabia (The Central Plateau) S: 158 *with map*; (The rise of Islam) S: 160
Naked and the Dead, The [book by Mailer]
 Mailer, Norman M: 67
Naked Ape, The [book by Morris]
 Morris, Desmond M: 816
Naked mole-rat [animal]
 Mole-rat M: 691 *with picture*
Naked seed [botany]
 Plant (Seeds) P: 531-532 *with picture*
 Seed (Kinds of seeds) S: 281
Nakota Indians
 Sioux Indians S: 474
Nakotchtank Indians [American Indians]
 Washington, D.C. (Early days) W: 85
Naktong River
 Korea (The Southern Plain) K: 373-374
Nalidixic acid [medication]
 Quinolone Q: 42
Naltrexone [drug]
 Alcoholism (Treatment) A: 338
NAM
 National Association of Manufacturers N: 29
Nam Viet [Vietnamese history]
 Indochina (The Viets) I: 224-225
 Vietnam (History) V: 369
Nama [people]
 Khoikhoi K: 308b
Namath, Joe [American football player] N: 4
Name N: 5
 Iceland (People) I: 21
 Pen name P: 234
 Pseudonym P: 844
Name Above the Title, The [book by Capra]
 Capra, Frank C: 198
Nameless and Friendless [painting by Osborn]
 Painting (Women artists) P: 73 *with picture*
Names of Christ, The [book by León]
 Spanish literature (The 1500's) So: 758-759
Namgyal, Palden Thondup [king of Sikkim]
 Sikkim (History) S: 456
Namgyal, Penchu [king of Sikkim]
 Sikkim (History) S: 456
Namib Desert [Africa]
 South Africa (The Namib and Kalahari deserts) So: 615 *with map*
Namibia [country] N: 8 *with pictures and map*
 Africa (The movement to independence) A: 134-135
 Flag *picture on* F: 199
 Mandated territory M: 136
 United Nations (Working for self-government) U: 93-94
 Walvis Bay W: 22
Namingha, Dan [American painter]
 Indian, American *picture on* I: 182
NAMMCO [organization] See North Atlantic Marine Mammal Commission *in this index*
Namphy, Henri [Haitian political leader]
 Haiti (History) H: 15-17
Namyong-Ho [ship]
 Shipwreck (table: Major shipwrecks) S: 428
Nan-ching See Nanjing *in this index*
Nan Guinin [Voodoo afterworld]
 Voodoo V: 449
Nana [book by Zola]
 Zola, Emile Z: 602
Nanak [Indian religious leader]
 India (Sikhism) I: 117
 Sikhism S: 455
Nance, Albinus [American political leader]
 Nebraska (table) N: 110
Nancy [city, France] N: 10
Nanduti [lace]
 Paraguay (The arts) P: 147 *with picture*
Nanga Parbat [mountain, Kashmir]
 Himalaya (Peaks) H: 233
Nanjing [city, China] N: 10 *with picture*
Nanjing, Treaty of [1842]
 China (Clash with the Western powers) C: 502
 Hong Kong (British control) H: 319
Nanjing Road
 Shanghai (The city) S: 371-372
Nanking [China] See Nanjing *in this index*
Nanking, Rape of See Nanking Massacre *in this index*
Nanking Massacre [Chinese history] N: 11
Nanny [occupation]
 Day care (Types of day care for children) D: 52
Nanny goat
 Goat G: 239
Nano [prefix]
 Metric system (Metric prefixes) M: 439
Nanocrystal
 Nanotechnology (Types of nanostructures) N: 12
Nanometer [unit of measure]
 Color *diagram on* C: 818
 Nanotechnology N: 11
 Light (Measuring light) L: 291
 Ultraviolet rays U: 17
Nanook of the North [film]
 Flaherty, Robert Joseph F: 225
Nanostructure
 Nanotechnology (The challenge of nanotechnology) N: 11
Nanotechnology [engineering] N: 11
 Science fiction (Recent developments) S: 206
Nanotube
 Nanotechnology (Types of nanostructures) N: 12
 Carbon C: 206
Nansen, Fridtjof [Norwegian explorer] N: 12
 Refugee R: 203
Nansen bottle [oceanography]
 Nansen, Fridtjof N: 12
Nansen International Office for Refugees
 [organization]
 Nobel Prizes (Peace: 1938) N: 447
Nansen passport [document]
 Nansen, Fridtjof N: 12
Nansen Ridge [geography]
 Arctic Ocean (Depth and the ocean floor) A: 642-643 *with map*
Nansen sled [vehicle]
 Sled S: 505
Nantahala Gorge [region]
 North Carolina (Places to visit) N: 482
Nantes [France] N: 12
Nantes, Edict of [1598] N: 12
 France (Religious wars) F: 473; (The age of absolutism) F: 473
 Henry IV (of France) H: 186
 Huguenots (The massacre) H: 410-411
 La Rochelle L: 78
 Louis XIV L: 475
Nantucket [Massachusetts] N: 12
 Massachusetts (Places to visit) M: 280
Naomi [Biblical figure]
 Ruth, Book of R: 568

Nap

Sleep (Human sleep patterns) **S**: 506

Napa Valley [California]

California *picture on C*: 56

Napalm [weapon] **N**: 12

Bomb (Incendiary bombs) **B**: 450

Flame thrower **F**: 225

Naphtha [chemical] **N**: 13**Naphthalene** [chemistry]

Hydrocarbon (Aromatics) **H**: 465

Napier, John [Scottish mathematician] **N**: 13

Logarithms (History) **L**: 424

Mathematics (Mathematics and the scientific revolution) **M**: 306-307

Naples [Italy] **N**: 13 *with picture*

Bourbon (In Naples and Sicily) **B**: 516

Italy *picture on I*: 503

Naples, Bay of **N**: 14

Naples (The city) **N**: 13 *with picture*

Naples, Kingdom of [Italian history]

Sicilies, Kingdom of the Two **S**: 446

Naples, University of [Italy]

Frederick II **F**: 497

Naples (Way of life) **N**: 13-14

Napoleon I [emperor of France] **N**: 14 *with picture and map*

Austria (Wars in the 1700's and 1800's) **A**: 938

Autograph *picture on A*: 943

Josephine **J**: 168

Marie Louise **M**: 200

Milan Decree **M**: 541

Muslims (Colonialism) **M**: 964d

Paris (The Napoleonic era) **P**: 166

Pius VII **P**: 502

Domestic affairs

Arc de Triomphe **A**: 593

Code Napoléon **Ci**: 748

Continental System **Ci**: 1022

Émigrés **E**: 260

Fascism (History) **F**: 49

French Revolution (The revolution ends)

F: 527

Government (Modern times) **G**: 290-291

Lafayette, Marquis de (The revolution at home) **L**: 28

Law (The first modern law codes) **L**: 135-136

Medals, decorations, and orders (Europe)

M: 358

Napoleon II **N**: 19

Painting (History paintings) **P**: 33

Talleyrand (Joins Napoleon) **T**: 20

Military leader

Alexander I [czar] **A**: 341

Antwerp (History) **A**: 562

Army (The rise of modern armies) **A**: 727-728 *with picture*

Belgium (The Brabant Revolution) **B**: 233

Egypt (Ottoman and French control) **E**: 130

France (Napoleon) **F**: 474

Francis II [Holy Roman emperor] **F**: 480

Germany (Conflicts with France) **G**: 164-165

Italy (The French Revolution and Napoleon)

I: 514-515

Latin America (The wars of independence)

L: 107

Minnesota (The Louisiana Purchase) **M**: 603

Moscow (Destruction and rebirth) **M**: 827

Murat, Joachim **M**: 929

Ney, Michel **N**: 390

Rome (Under Napoleon) **R**: 434

Russia (Alexander I) **R**: 550

Toussaint L'Ouverture **T**: 348

Trafalgar, Battle of **T**: 366

United Kingdom (The Napoleonic Wars)

U: 68

Waterloo, Battle of **W**: 145

Wellington, Duke of (Victory at Waterloo)

W: 194-195

Napoleon II [son of Napoleon I] **N**: 19

Josephine (Her last years) **J**: 169

Marie Louise **M**: 200

Napoleon III [emperor of France] **N**: 19

Eugénie Marie de Montijo **E**: 377

Foreign Legion **F**: 386

France (The revolutions of 1830 and 1848)

F: 474

Franco-Prussian War (Events leading up to the war)

F: 483

Maximilian **M**: 319

Mexico (The French invasion) **M**: 472

Paris (The Napoleonic era) **P**: 166

Revolution of 1848 **R**: 269

Napoleon of Notting Hill, The [book by

Chesterton]

Chesterton, G. K. **C**: 415

Napoleon of the Stump [nickname]

Polk, James Knox (Lawyer and legislator)

P: 641

Napoleon on the Battlefield at Eylau [painting

by Gros]

Army *picture on A*: 727

Napoleonic Code See Code Napoléon in this

index

Napoleonic Ideas [book by Napoleon III]

Napoleon III (Early life) **N**: 19

Napoleon's Tomb [Paris]

Napoleon I (The Hundred Days and Waterloo)

N: 18 *with picture*

Napoli See Naples in this index

Napster

Copyright (Users' rights) **Ci**: 1048

Narayan, R. K. [Indian author]

India (Literature) **I**: 120

Narayan Shah, Prithwi [king of Nepal]

Nepal (History) **N**: 126

Narborough Island

Galapagos Islands **G**: 7 *with map*

Narcissa and Other Fables [stories by

Auchincloss]

Auchincloss, Louis **A**: 880

Narcissus [Greek mythology] **N**: 20

Narcissus [plant] **N**: 20 *with picture*

Daffodil **D**: 3 *with picture*

Poisonous plant (Some poisonous plants)

P: 602

Narcolepsy [disease] **N**: 20

Amphetamine (Medical uses) **A**: 439

Cataplexy **C**: 298

Narcotic [drug] **N**: 21

Analgesic **A**: 448

Drug (Analgesics) **D**: 352

Pain (Treating pain) **P**: 22

Nard [plant]

Spikenard **So**: 792

Nares, George S. [British explorer]

Exploration (Deep-sea exploration) **E**: 451

Narita Airport See New Tokyo International

Airport in this index

Narragansett [turkey]

Turkey (Domestic turkeys) **T**: 513

Narragansett Indians [American Indians] **N**: 21

Indian, American (In the United States) **I**: 179

Rhode Island (Indian days) **R**: 312

Narragansett Pacer [horse]

Rhode Island (The early 1700's) **R**: 313

Narration [literature]

Novel **N**: 571

Narrative of Arthur Gordon Pym, The [book

by Poe]

Poe, Edgar Allan (Poe's life) **P**: 589; (Fiction

and theory of fiction) **P**: 590

Narrative of the Life of Frederick Douglass

[book by Douglass]

African American literature (The 1800's)

A: 136a

Douglass, Frederick **D**: 314

Narrative poetry

English literature (Elizabethan poetry) **E**: 316-317

Fiction **F**: 90

Narrow-angle glaucoma [disease]

Eye (Glaucoma) **E**: 466

Narrow-footed marsupial mouse [animal] See

Dunnart in this index

Narrow-gauge railroad [Durango-Silverton]

Colorado (Places to visit) **Ci**: 836 *with picture*

Narrow goods

Textile (Making the fabric) **T**: 216

Narrow-mouthed toad

Frog (Other frogs) **F**: 540

Narrow spectrum antibiotic [drug]

Antibiotic (Antibacterial antibiotics) **A**: 550

Narrowcasting

Television (Cable television) **T**: 110b; (The

1980's and 1990's) **T**: 120

Narrowleaf sword fern [plant]

Evolution (Evolution of new species) **E**: 429-430

Narrowleaf tree

Leaf **L**: 151 *with pictures*

Narthex [architecture]

Architecture (Medieval architecture) **A**: 617

Naruhito [Japanese prince]

Akihito **A**: 253

Narva [river]

Estonia (Land and climate) **E**: 362 *with map*

Narváez, Pánfilo de [Spanish explorer] **N**: 21

Cortés, Hernando (Victory over the Aztec)

Ci: 1073-1074

Florida (Exploration and Spanish settlement)

F: 261

Narwhal [sea animal] **N**: 21

Whale (Belugas and narwhals) **W**: 258; *picture on W*: 257

NAS See National Academy of Sciences in this

index

NASA See National Aeronautics and Space

Administration in this index

Nasal bone [anatomy]

Face **F**: 3

Head *diagram on H*: 123

Human body *diagram on H*: 422

Nasal duct [anatomy]

Tears **T**: 72

Nasal passage [anatomy]

Nose **N**: 548 *with diagram*

Nasal sac system [zoology]

Whale (Senses) **W**: 260

Nasby, Petroleum Vesuvius [American author]

N: 21

NASC [organization]

Student government **So**: 932

Nasca [people] See Nazca in this index

NASCAR

Automobile racing (Racing organizations)

A: 976

NASCAR Busch Race

Nevada *picture on N*: 165

Nascimento, Milton [Brazilian musician]

Brazil (The arts) **B**: 576-577

Nasdaq [stock market] **N**: 21

Stock exchange (Listing stocks) **So**: 903

Naseby, Battle of [1645]

Cromwell, Oliver (Rise to power) **Ci**: 1151

Nash, Abner [American political leader]

North Carolina (table) **N**: 490

Nash, Charles William [American businessman]

N: 22

Automobile (William Crapo Durant) **A**: 965

Nash, Elizabeth Hall [granddaughter of]

Shakespeare, William (His last years) **S**: 349

Nash, Francis [American general]

Nashville **N**: 22

Nash, George K. [American political leader]

Ohio (table) **O**: 699

Nash, James S. [American aviator]

Airplane (table) **A**: 232

Nash, John Forbes, Jr. [American economist]

N: 22

Nobel Prizes (Economics: 1994) **N**: 449

Nash, Ogden [American poet] **N**: 22

Nash equilibrium [mathematics]

Nash, John Forbes, Jr. **N**: 22

Nash Motors Company

Nash, Charles William **N**: 22

Nasharo Council

Pawnee Indians **P**: 203

Nashe, Thomas [English author] **N**: 22

English literature (Elizabethan fiction) **E**: 317

Nashim [Talmud]

Talmud **T**: 21

Nashoba [community]

- Quebec (Indian days) Q: 30
Nasmyth, James [Scottish engineer] N: 24
Nassau [city, Bahamas] N: 24
 Bahamas B: 28 *with picture*
Nassau, House of
 Luxembourg (Government) L: 530
Nassau County [New York]
 New York City (Metropolitan area) N: 330
Nassau grouper [fish]
 Fish *picture on F*: 154
 Grouper G: 403
Nassau Hall
 Princeton University (Campus buildings)
 P: 795
Nasser, Gamal Abdel [Egyptian political leader]
 N: 24
 Arab-Israeli conflict (The Suez crisis of 1956)
 A: 582
 Cold War (Trouble at Suez) Ci: 765
 Egypt (Republic) E: 132; (The United Arab Republic) E: 132; (Progress and conflict) E: 133
 Israel (The Six-Day War) I: 488
 Middle East (Continuing conflict) M: 533
 Muslim Brotherhood M: 964
 Suez Canal (History) So: 958
 Suez crisis So: 958
 United Arab Republic U: 45
Nasser, Lake
 Lake Nasser L: 41 *with map*
 Aswan High Dam A: 851
Nast, Thomas [American cartoonist] N: 24 *with picture*
 Caricature C: 237
 Carpetbaggers *picture on C*: 247
 Cartoon (Editorial cartoons) C: 263-265
 Democratic Party *picture on D*: 125
 New York City *picture on N*: 342
 Republican Party *picture on R*: 254
 Santa Claus (Santa's appearance) S: 114 *with picture*
 Tweed, William Marcy T: 530
Nasturtium [plant] N: 25 *with picture*
 Flower F: 301 *with picture*; *picture on F*: 276
Natajara [Hinduism]
 Sculpture (India) S: 236-237 *with picture*
Natal [province, South Africa] N: 25
Netation Amateur, Fédération Internationale de [organization]
 Diving (Diving meets) D: 243
Natchez [Mississippi] N: 26
 Mississippi *picture on M*: 622
Natchez Indians [American Indians] N: 26
 Indian, American (Empires and states) I: 144;
 (Indians of the Southeast) I: 157
Natchez National Historic Park [Mississippi]
 National Park System (table: National historical parks) N: 56-57
Natchez Trace [U.S. history] N: 26
Natchez Trace National Scenic Trail
 National Park System (table: National parkways and other national parklands) N: 56
Natchez Trace Parkway
 Alabama (Places to visit) A: 266
 National Park System (table: National parkways and other national parklands) N: 56
Natchitoches
 Louisiana (Places to visit) L: 488
Nathan [Biblical figure]
 Parable P: 141
Nethan, George Jean [American newspaper editor]
 Mencken, H. L. M: 397
Nethan Phillips Square
 Toronto (Landmarks) T: 336-337; *picture on T*: 340
Nathan Road
 Hong Kong (Kowloon) H: 316
Nathanael [Biblical figure]
 Bartholomew, Saint B: 120
Nathans, Daniel [American physiologist]
 Nobel Prizes (Physiology or medicine: 1978) N: 445
Nation N: 26
 Country Ci: 1097
 Culture (The boundaries of cultures) Ci: 1187
 Nationalism N: 62
 Tribe T: 440
 World (Nations of the world) W: 407, (table) W: 408-412
Nation, Carry Amelia Moore [American social reformer] N: 26 *with portrait*
 Kansas (Spirit of reform) K: 237
Nation, The [magazine]
 Godkin, Edward Lawrence G: 245
 Magazine (History) M: 43-45
Nation at Risk, A [report]
 Education (How can performance be improved?) E: 105
Nation of Islam [organization] N: 27
 See also Black Muslims in *this index*
 Farrakhan, Louis F: 48
Nation-state [political science]
 Government (The Middle Ages) G: 290
 Middle Ages (The decline of feudalism) M: 527
 Nationalism (The rise of nationalism) N: 62
 Patriotism (Foundations of patriotism) P: 198
National
 Citizenship Ci: 568
National Abortion and Reproductive Rights Action League
 Abortion (Abortion in the United States) A: 15-16
National Academy of Engineering
 National Academy of Sciences N: 27
National Academy of Recording Arts and Sciences
 Recording industry (Recording industry awards) R: 182
National Academy of Santa Cecilia
 Rome (Music and theater) R: 429
National Academy of Sciences N: 27
 National Research Council N: 60
 Nutrition (Eat a balanced diet) N: 626
National Academy of Television Arts and Sciences
 Television (Television awards) T: 116
National Action Charter
 Bahrain (History) B: 30-31
National Action Committee on the Status of Women [organization]
 Women's movements (Women's organizations) W: 386
National Action Party [political party]
 Fox Quesada, Vicente F: 442
National Advertising Review Board
 Advertising (Advertising associations) A: 77
National Advisory Commission on Civil Disorders See Kerner Commission Report in *this index*
National Aeronautic Association N: 27
National Aeronautics and Space Administration N: 27
 See also Space exploration in *this index*
 Astronaut A: 828
 Galileo G: 12
 Houston (Petroleum capital) H: 398-399
 Hubble Space Telescope (How the telescope works) H: 403
 International Space Station (History) I: 346B-347
 Medals, decorations, and orders (table) M: 357; (Civilian awards) M: 355-357
 Johnson, Lyndon Baines (Majority leader) J: 147-148
 Kennedy Space Center K: 270
 Observatory (Observatories with telescopes) O: 644-645
 SETI Institute S: 323
 Space exploration (Organizing and managing space activities) So: 708
 Texas T: 184, (The mid-1900's) T: 208; *picture on T*: 205
 Virtual reality V: 426
 Voyager V: 451
 Washington, D.C. *map on W*: 76
National Aeronautics and Space Administration Launch Operations Center [Cape Canaveral]
 Cape Canaveral C: 187
National Agricultural Library
 Library (United States government libraries) L: 248 *with picture*
National Air and Space Museum [Washington, D.C.] N: 28
 Smithsonian Institution (Museums) S: 519
 Washington, D.C. (Smithsonian museums) W: 71-72; *map on W*: 76
National Air Transport
 Aviation *picture on A*: 989
National airline
 Airport (Commercial service airports) A: 243
National Alliance for Reconstruction [political party]
 Trinidad and Tobago (Government) T: 445; (History) T: 446
National Alliance for the Mentally Ill
 Mental illness (Recent developments) M: 409
National Alliance of Business N: 28
National American Lyceum [U.S. history]
 Adult education (During the 1800's) A: 69
National American Woman Suffrage Association
 Anthony, Susan Brownell A: 545
National anthem N: 28
 See also the Facts in brief section of various country articles, such as Italy (Italy in brief)
National Aquarium in Baltimore
 Baltimore (Other interesting places to visit) B: 69
National Archaeological Museum [Naples]
 Library (Ancient libraries of papyrus) L: 258-259
 Naples (Way of life) N: 13-14
National Archery Association
 Archery (Target archery) A: 602-603
National Archives [Washington, D.C.] N: 28 *with picture*
 Declaration of Independence *picture on D*: 79
 Library (United States government libraries) L: 248
 Washington, D.C. (Executive branch buildings) W: 75; *map on W*: 76
National Archives Building [Washington]
 National Archives N: 28 *with picture*
National Arts Centre
 Ottawa (The National Arts Centre) O: 872 *with picture*
National Assembly [French history]
 Estates-General E: 360
 French Revolution (The revolution begins) F: 525; (The National Assembly) F: 525
National Assembly [government]
 Canada, Government of (The ten provinces) C: 138
 Hungary (National government) H: 439
 Laos (Government) L: 70
 Mali (Government) M: 106
 Quebec (Legislature) Q: 29 *with picture*
 Poland (Government) P: 604
 South Africa (National government) So: 608
 Thailand (Government) T: 221
National Assembly, Eidsvoll 1814, The [painting by Wergeland]
 Norway *picture on N*: 546
National Assembly for Wales [legislature]
 Wales (The National Assembly for Wales) W: 8
National Assembly of People's Power
 Cuba (National government) Ci: 1169
National Assessment of Educational Progress [U.S.] N: 29
 Education (How can performance be improved?) E: 105-106
National Association for Stock Car Auto Racing
 Automobile racing (Racing organizations) A: 976
 Gordon, Jeff G: 273
 Petty, Richard P: 351
National Association for the Advancement of Colored People N: 29
 African Americans (The rise of new black leaders) A: 136j-136k; (The civil rights movement) A: 136m
 Bond, Julian B: 455
 Chavis, Benjamin Franklin, Jr. C: 389
 Du Bois, W. E. B. D: 372
 Evers-Williams, Myrlie E: 425
 Marshall, Thurgood M: 230
 Mfume, Kweisi M: 479
 Niagara Movement N: 394
 O'Reilly, Leonora O: 851
 Wells-Barnett, Ida Bell W: 195
National Association for the Education of Young Children
 Kindergarten (Kindergartens today) K: 319
 Nursery school (Nursery schools in the United States) N: 616-617
National Association of Colored Women
 Terrall, Mary Church T: 175
National Association of Congregational Christian Churches N: 29

National Association of Government Employees

Labor movement (table) L: 8

National Association of Intercollegiate AthleticsBasketball (College competition) B: 150
Football (College competition) F: 364**National Association of Letter Carriers of the United States of America**

Labor movement (table) L: 8

National Association of Manufacturers N: 29**National Association of Realtors**

Real estate R: 171

National Association of Rocketry

Rocket, Model (Model rocket clubs and competition) R: 393

National Association of Securities Dealers

Nasdaq N: 21

National Association of Securities DealersAutomated Quotation system *See*
Nasdaq *in this index***National Association of Social Workers** *See*Social Workers, National Association of *in this index***National Association of Student Councils**

Student government So: 932

National Association of the Deaf

Deafness (Education) D: 59

Disabled (table) D: 222

National Audubon Society *See* AudubonSociety, National *in this index***National Ballet** (Canada)

Ballet (Ballet in Canada) B: 54

Canada (Ballet and opera) C: 111

National bank (banking)

Bank (Regulation of U.S. banks) B: 92

National Bank Acts (1863-1864)

Bank (The national banking system) B: 93

Money (The rebirth of paper money) M: 709

National Bank noteMoney (The rebirth of paper money) M: 709
*with picture***National Baptist Convention, U.S.A., Inc.** (religious group) N: 30

Baptists (Baptists in America) B: 101

National Baptist Convention of America, Inc.

(religious group) N: 30

Baptists (Baptists in America) B: 101

National Baseball Congress

Baseball (Amateur leagues) B: 131

National Baseball Hall of Fame and Museum*See* Baseball Hall of Fame *in this index***National Baseball League** *See* National League*in this index***National Basketball Association**

Basketball (Professional competition) B: 151

National battlefield

National Park System (table: National battle-

fields) N: 55; *map on* N: 45**National Battlefields Park**

Quebec (Parks) Q: 36

Quebec, Battle of (The attack on Quebec)

Q: 37-38

National Bell Telephone Company

Telephone (The Bell System) T: 100-101

National Bison Range (Montana)

Montana (Places to visit) M: 750

National Blindness Information Center

Blindness (Education and training) B: 403

National Blood Transfusion Service

Red Cross (Health services) R: 186

National Board for Professional Teaching

Standards

Teaching (Certification of teachers) T: 68

National Book Award for Young People's Literature

Literature for children (Awards) L: 366

National Broadcasting Company

New York City (Rockefeller Center) N: 338

Radio (The start of broadcasting) R: 92

Sarnoff, David S: 127

Television (The national networks) T: 114; (The start of broadcasting) T: 118-119

National Broadcasting Company Symphony

[orchestra]

Toscanini, Arturo T: 343

National Brotherhood of Electrical Workers

Electrical Workers, International Brotherhood

of E: 189

National budget (economics) N: 30

Budget (Government budgets) B: 671

Budget, Bureau of the B: 672

Taft, William Howard (Legislative achievements) T: 11

National Bureau of Economic Research N: 30**National Bureau of Standards** *See* National
Institute of Standards and Technology *in this index***National Business Hall of Fame**

Junior Achievement J: 196

National Business Leadership Conference

Junior Achievement J: 196

National Capital ParksNational Park System (table: National park-
ways and other national parklands) N: 56**National Cathedral** (Washington, D.C.)

Washington Cathedral W: 109

National Catholic Educational Association

N: 30

Teaching (Teachers organizations) T: 69

National cemetery N: 30**National Center for Health Statistics**Vital statistics (Collecting and publishing vital
statistics) V: 429-430**National Center on Child Abuse and Neglect**

Child abuse C: 455

National certification [program]

Education (Who should teach?) E: 107

National Circus Festival of Australia

Circus (Places to visit and annual events)

Ci: 566

National Civil Rights Museum (Memphis)

Memphis (The economy) M: 395

National Classical Music Institute (Korea)Korea *picture on* K: 371**National Coal Association**

Coal (Coal producers) Ci: 728

National Collegiate Athletic Association N: 31

Basketball (College competition) B: 150

Football (College competition) F: 364

Hockey (Amateur organization) H: 280-281;

(Amateur development) H: 281-282

Track and field (Organizations) T: 356

National Commission on Excellence in EducationEducation (How can performance be
improved?) E: 105**National Commission on Libraries and Information Science** [U.S.]Library (Libraries in the United States) L: 261-
262**National Commission on the Causes and Prevention of Violence**

Riot (During the 1900's) R: 349

National Committee for Mental Hygiene

Beers, Clifford Whittingham B: 212

National Committee on the Cause and Cure of War

Catt, Carrie Chapman C: 305

National Computer Center

Income tax (Processing income tax returns)

I: 105

National Conference of Christians and Jews

N: 31

Brotherhood/Sisterhood Week B: 642

National Congress of American Indians N: 31**National Congress of Mothers**

Birney, Alice Josephine McLellan B: 377

Hearst, Phoebe Apperson H: 131

National Congress of Parents and Teachers

N: 31

National Congress of Parents and Teachers

N: 31

Birney, Alice Josephine McLellan B: 377

Hearst, Phoebe Apperson H: 131

Parent-teacher organizations (Parent-Teacher

Associations) P: 158

National Conservation CommissionConservation (The rise of the conservation
movement) Ci: 985-986**National Consumers League** N: 32

Kelley, Florence K: 255

National Convention [French history]

French Revolution (The National Convention)

F: 526; (Terror and equality) F: 526-527

National costumeClothing *pictures on* Ci: 692**National Council for Accreditation of Teacher Education**

Teaching (Teacher-training programs) T: 67

National Council for Geographic Education

Geography (Careers in geography) G: 96

National Council of Churches N: 32**National Council of Government**

Uruguay (National council government) U: 228

National Council of Jewish Women

Jewish Women, National Council of J: 119

National Council of La Raza [organization] N: 32**National Council of Provinces** [government]

South Africa (National government) So: 608

National Council of Senior Citizens N: 32 *with**picture*

Old age (Employment and other activities)

O: 739

National Council of Teachers of English

Teaching (Teachers organizations) T: 69

National Covenant [1638]

Covenanters Ci: 1106

Scotland (War with the king) S: 220

National Cowboy & Western Heritage

Museum (Oklahoma City)

Oklahoma (Places to visit) O: 722 *with picture***National Credit Union Administration**

Bank (Regulation of U.S. banks) B: 92

National Credit Union Share Insurance Fund

Bank (Regulation of U.S. banks) B: 92

National Crime Information CenterFederal Bureau of Investigation (Other ser-
vices) F: 62

Police (Federal law enforcement agencies)

P: 622

National culture

Culture (The boundaries of cultures) Ci: 1187

National Day [holiday]Iceland *picture on* I: 21**National debt** N: 32

Constitution of the United States (Article VI)

Ci: 1011

Treasury, Department of the (Department
functions) T: 407-408**National defence, Minister of** [office]Canada, Government of (The Cabinet) C: 132;
diagram on C: 137**National Defence Force**

South Africa (Armed forces) So: 609

National Defense

Government (Defense) G: 287

Radar (In the military) R: 65

National Defense, Council of [U.S. history]

Civil defense (History) Ci: 606

National Defense Act [1916]

Reserve Officers Training Corps (History)

R: 258

National Defense Education Act [1958] N: 34**National Defense Program, Committee to Investigate the**Truman, Harry S. (The Truman Committee)
T: 468**National Democratic Alliance** [political party]

Vajpayee, Atal Bihari V: 260

National Democratic Congress [political party]

Ghana (History) G: 179-180

National Democratic Front [Mexico]

Mexico (Recent developments) M: 474

National Democratic Party [Egypt]

Egypt (Politics) E: 121

National Diet Building [Tokyo]

Tokyo (Government buildings) T: 316

National Doukhobour Heritage Village

[Saskatchewan]

Saskatchewan (Places to visit) S: 136

National Drug Control Policy, Office ofPresident of the United States (The executive
branch) P: 764**National Easter Seal Society**

Disabled (table) D: 222

National Economic Council [U.S.]

Rubin, Robert Edward R: 507

National economy

Gross domestic product G: 399

Inflation I: 266

National Education Association of the United States N: 34

Labor movement (table) L: 8

Teaching (Teachers organizations) T: 69

National Elk Refuge [Wyoming]

Wyoming (Places to visit) W: 524

National Endowment for the Arts

National Foundation on the Arts and the

Humanities N: 36

National Endowment for the Humanities

National Foundation on the Arts and the

Humanities N: 36

National Enquirer [magazine]

Lundy, Benjamin L: 523

Magazine (table) M: 45

National Environmental Policy Act [1970]
Conservation (Renewed interest in conservation) Ci: 986-987
Environmental impact statement E: 329

National Environmental Satellite, Data and Information Service
National Oceanic and Atmospheric Administration N: 42

National Farm Workers Association
Chavez, Cesar Estrada C: 389
Huerta, Dolores Fernandez H: 408

National Farmers' Bank [Owatonna, Minnesota]
Sullivan, Louis Henri *picture on* So: 970

National Farmers Organization N: 35

National Farmers Union N: 35

National Fascist Party [Italian history]
Mussolini, Benito (Fascist dictator) M: 967

National Federation for Catholic Youth Ministry
Catholic Youth Organization C: 304

National Federation of Federal Employees
American Federation of Government Employees A: 410

National Federation of Music Clubs
Music Clubs, National Federation of M: 958

National Federation of State High School Associations
Football (High school competition) F: 364

National Federation of the Blind
Blindness (Education and training) B: 403
Disabled (table) D: 222

National Fertilizer Development Center
Tennessee Valley Authority (Other activities) T: 160

National Field Archery Association
Archery (History) A: 603-604

National Film Board of Canada
Animation (Animation in the mid-1900's) A: 514a
Canada (Motion pictures) C: 111 *with picture*

National Fire Academy
Fire department (Recent developments) F: 128-129

National Fire Prevention and Control Administration [U.S.]
Fire department (Recent developments) F: 128

National Fire Prevention Week
Fire prevention (In the community) F: 131-132;
(Fire prevention laws) F: 132

National Fire Protection Association
Fire department (Fire prevention and fire safety) F: 124-125

National Five-Digit ZIP Code and Post Office Directory [publication]
Postal Service, United States (Other services) P: 700

National flag
Flag F: 192 *with picture*

National Football Conference
Football (Professional competition) F: 364

National Football League
Football (Professional competition) F: 364;
(The rise of professional football) F: 366
Thorpe, Jim T: 267

National forest N: 35 *with pictures*
Forest Service F: 403

National Foundation Day [holiday]
February F: 61
October O: 670

National Foundation for Infantile Paralysis
March of Dimes Birth Defects Foundation M: 196

National Foundation—March of Dimes [organization]
March of Dimes Birth Defects Foundation M: 196

National Foundation on the Arts and the Humanities N: 36

National 4-H Council [organization]
4-H (4-H sponsors) F: 435

National 4-H Service Committee, Inc.
4-H (4-H sponsors) F: 435-436

National Fraternal Congress
Fraternal organization (History) F: 495

National Fraternal Congress of America
Fraternal organization (History) F: 495

National Freedom Day See National Freedom Day *in this index*

National Front [political party]
France (Politics) F: 455

National Front [Malaysia]
Malaysia (Political parties) M: 98b

National Gallery [Germany]
Berlin (Libraries and museums) B: 262

National Gallery of Art [Washington, D.C.]
N: 36 *with picture*
Smithsonian Institution (Affiliated institutions) S: 519
Washington, D.C. (Smithsonian museums) W: 71-73; *map on* W: 76

National Gallery of Canada N: 36

National Geodetic Survey
Survey (Types of surveys) So: 1010

National Geographic Magazine
Grosvenor, Gilbert Hovey G: 400
Magazine (table) M: 45
National Geographic Society N: 37

National Geographic Society N: 37
Map (Map projections) M: 182-183

National Geographic World [magazine]
Literature for children (The middle and late 1900's) L: 364-365
National Geographic Society N: 37

National Grange See Grange, National *in this index*

National guard [military]
Army A: 724

National Guard [U.S.] N: 37 *with picture*
Air Force, United States (Air Force reserves) A: 194
Militia M: 544

National hands [writing]
Paleography P: 103

National Health Council
Health Council, National H: 128

National health insurance See Health Insurance, National *in this index*

National Health Service Act [United Kingdom]
Labour Party (History) L: 16

National Health Service Corps
Medicine (Providing medical care) M: 366

National Highway System
Road (Modern roads) R: 362

National Highway Traffic Safety Administration
Automobile (The automobile today) A: 972
Consumerism (The right to safety) Ci: 1018

National Hispanic Heritage Month
Hispanic Americans (Holidays) H: 249-250

National Historic Oregon Trail Interpretive Center [Baker City]
Oregon (Places to visit) O: 836

National historic site
National Park System (table: National historic sites) N: 52; *map on* N: 45

National Hockey Association
Hockey (Professional hockey) H: 281

National Hockey League
Hockey (How to play hockey) H: 274; (Playing time) H: 275; (Violations and penalties) H: 278; (Professional leagues) H: 279; (Professional hockey) H: 281
Stanley Cup So: 838

National holiday
Holiday (In the United States) H: 290

National Home Study Council
Correspondence school Ci: 1072

National Honor Society N: 37

National Horseshoe Pitchers' Association
Horseshoe pitching (History) H: 369

National Hot Air Balloon Classic [Indianola]
Iowa *picture on* I: 384

National Hot Rod Association
Automobile racing (Racing organizations) A: 976

National Housing Agency [U.S.]
Housing and Urban Development, Department of (History) H: 393

National Imagery and Mapping Agency [U.S.]
Map (Database development) M: 180

National income N: 37 *with diagram*
Economics (Distribution of incomes) E: 61-62
Income (Types of income) I: 100

National Income and Its Composition, 1919-1938 [book by Kuznets]
Kuznets, Simon K: 397

National Indian Education Association
Indian, American (In the United States) I: 179

National Industrial Recovery Act [1933]
National Recovery Administration N: 59
New Deal (Helping industry and labor) N: 201
Schechter v. United States S: 174

National Institute for Occupational Safety and Health [U.S.] N: 39
Centers for Disease Control and Prevention C: 351

National Institute for Scientific Research
Quebec, University of Q: 38

National Institute of Justice [U.S.]
Police (Federal law enforcement agencies) P: 622

National Institute of Standards and Technology N: 39
Weights and measures (Measurement systems) W: 184

National Institute on Alcohol Abuse and Alcoholism [U.S.]
Drug abuse (Causes and effects of drug abuse) D: 364

National Institute on Drug Abuse [U.S.]
Drug abuse (Causes and effects of drug abuse) D: 364; (History) D: 365-366

National Institutes of Health [U.S.] N: 39
Genetic engineering (Concerns about genetic engineering) G: 85
Health and Human Services, Department of (The Public Health Service) H: 128
Heredity (History of the study of heredity) H: 208-209
Stem cell So: 889

National Insurance Act [1967]
Norway (Social welfare) N: 541; (Social and economic changes) N: 547

National Interfraternity Conference
Fraternity (Organization) F: 496

National Islamic Front [political group]
Sudan (Recent developments) So: 956

National Junior Honor Society
National Honor Society N: 37

National Labor Relations Act [1935] N: 39
Labor movement (The New Deal) L: 12
New Deal (National Labor Relations Act) N: 202
Taft-Hartley Act T: 13

National Labor Relations Board [U.S.] N: 39
National Labor Relations Act N: 39

National Labor Relations Board v. Jones and Laughlin Steel Corporation [U.S. history]
Interstate commerce (Interstate commerce today) I: 351
Labor movement (The New Deal) L: 12

National labor union
Labor movement (The first nationwide labor organizations) L: 9-10

National laboratory [U.S.] N: 40
Brookhaven National Laboratory B: 639

National League
Baseball (Players) B: 125; (Major leagues) B: 130; (table) B: 130; (Professional baseball) B: 133

National League for Democracy [political party]
Aung San Suu Kyi A: 890
Myanmar (Military rule) M: 970e

National League of Cities [organization] N: 40

National Legal Aid and Defender Association
Legal aid L: 182

National Liberation Army
Colombia (Recent developments) Ci: 784

National Liberation Front [Albania]
Albania (World War II) A: 307-308

National Liberation Front [political party] See Front de Libération Nationale *in this index*

National Liberation Front [Chad] See Frolinat *in this index*

National Liberation Front [Yemen]
Yemen (Formation of Yemen [Aden]) Y: 563-564

National Library [Rio de Janeiro]
Brazil (Education) B: 575-576

National library [U.S.]
Library (United States government libraries) L: 248

National Library of Canada [Ottawa]
Library (Canadian government libraries) L: 249

National Library of Medicine [Bethesda, Maryland]
Library (United States government libraries) L: 248
Medicine (Computers and electronic communication) M: 370

National Mall [Washington, D.C.]
National Park System (table: National parkways and other national parklands) N: 56

National Marine Fisheries Service

National Oceanic and Atmospheric Administration N: 42

National Mediation Board [U.S.] N: 40
Labor movement (Handling labor disputes) L: 6
Railway Labor Act R: 122

National Medical Association N: 40
Medicine (Professional organizations and medical reform) M: 376

National memorial
National Park System *map on* N: 45

National Memorial Cemetery of the Pacific
Hawaii (World War II) H: 108-109

National Merit Scholarship
Scholarship (Merit scholarships) S: 178
College entrance examination (The College Entrance Examination Board) Ci: 775
Foundations (Education) F: 430-431

National Meteorological Center [Washington, D.C.]
Weather Service, National W: 172

National Military Establishment [U.S. history]
Defense, Department of (History) D: 88

National Military Park
National Park System (table: National military parks) N: 55

National Model Railroad Association
Railroad, Model (History) R: 121

National monument
National Park System *map on* N: 45

National Motto, United States N: 40

National Movement [political party]
France (Politics) F: 455

National Movement for Simeon II [political party]
Bulgaria (Recent developments) B: 693

National Movement of the Development Society [political party]
Niger (Government) N: 407

National Museum, United States
National Museum of American History N: 41

National Museum of African Art [Washington, D.C.] N: 40
Smithsonian Institution (Museums) S: 519
Washington, D.C. *map on* W: 76

National Museum of American History
[Washington, D.C.] N: 41
Smithsonian Institution (Museums) S: 519
Washington, D.C. (Smithsonian museums) W: 71-72; *map on* W: 76

National Museum of Anthropology, The
Mexico (Architecture) M: 459 *with picture*
Mexico City (Cultural life and recreation) M: 477 *with picture*

National Museum of History and Technology
See National Museum of American History *in this index*

National Museum of Modern Art [Paris]
Paris (Museums and art galleries) P: 164

National Museum of Modern Art [Tokyo]
Tokyo (Museums and libraries) T: 315

National Museum of Natural History
[Washington, D.C.] N: 41 *with picture*
Smithsonian Institution (Museums) S: 519
Washington, D.C. (Smithsonian museums) W: 71-73; *map on* W: 76

National Museum of Painting and Sculpture
See Prado *in this index*

National Museum of the American Indian
[Washington, D.C.]
Washington, D.C. (Smithsonian museums) W: 71-72

National Museum of the Building Arts
[Washington, D.C.]
Washington, D.C. *map on* W: 76

National Museum of Transport [Missouri]
Saint Louis (Museums) S: 48

National Museum of Wales
Cardiff C: 209

National Museum of Women in the Arts
[Washington, D.C.]
Washington, D.C. (Other Washington museums) W: 75

National Naval Medical Center N: 41

National Negro Business League
Washington, Booker T. (Racial leader) W: 89

National Ocean Service [U.S.]
National Oceanic and Atmospheric Administration N: 42

National Ocean Survey [U.S.]
Map (Mapping the Americas) M: 184-185

National Oceanic and Atmospheric Administration [U.S.] N: 41

Earle, Sylvia Alice E: 14

National Opposition Union [political group]
Nicaragua (Recent developments) N: 400-401

National Optical Astronomy Observatories [U.S.] N: 42

National Organ Transplant Act [1984]
Organ donation O: 853

National Organization for Women N: 42
Feminism F: 70
Friedan, Betty F: 533
Women's movements (Women's organizations) W: 386

National Organization for Women v. Scheidler [U.S. history]
Abortion (Abortion in the United States) A: 15-16

National Organization on Disability
Disabled (table) D: 222

National Palace [Mexico City]
Rivera, Diego *picture on* R: 355

National Panhellenic Conference
Sorority So: 597

National park N: 42a *with pictures*
Canada (Recreation and sports) C: 108; (table: National park system) C: 113
National Park System N: 43
Park (Kinds of parks) P: 168; (History) P: 168-169
Wildlife conservation (History) W: 304

National Park of American Samoa See American Samoa, National Park of *in this index*

National Park Service [U.S.] N: 42j
National Park System N: 43
National Trails System N: 61

National Park System N: 43 *with pictures and map*
Canada (table: National parks and national park reserves) C: 113
Wildlife conservation (History) W: 304

National Parks and Protected Areas, Commission on
National park (International concern for national parks) N: 42j

National Party [Australia]
Australia (Political parties) A: 900; (History) A: 922-925

National Party [New Zealand]
Bolger, Jim B: 441
New Zealand (Political parties) N: 347
Shipley, Jenny S: 428

National People's Congress
China (National government) C: 477; *picture on* C: 477

National Philanthropist [newspaper]
Garrison, William Lloyd G: 45

National Policy [Canadian history]
Canada, History of (The return of Macdonald) C: 147
Macdonald, Sir John Alexander (The national policy) M: 9; (Threats to Canadian unity) M: 10
Mackenzie, Alexander (Economic difficulties and defeat) M: 22
Tilley, Sir Samuel Leonard T: 287

National Portrait Gallery [Washington, D.C.]
Smithsonian Institution (Museums) S: 519
Washington, D.C. *map on* W: 76

National Postal Museum [Washington, D.C.]
Washington, D.C. (Smithsonian museums) W: 71-73

National Primitive Baptist Convention in the U.S.A. [religious group] N: 59

National Progressive Front [political party]
Syria (National government) So: 1070

National PTA
National Congress of Parents and Teachers N: 31

National Public Radio [radio network] N: 59

"National Question and Social Democracy, The" [article by Stalin]
Stalin, Joseph (Young revolutionist) So: 825-826

National Radio Astronomy Observatory N: 59
Green Bank Telescope G: 380
West Virginia (Places to visit) W: 216; *picture on* W: 227

National Railroad Adjustment Board [U.S.]
Railway Labor Act R: 122

National Recovery Act See National Industrial Recovery Act *in this index*

National Recovery Administration [U.S. history] N: 59
Johnson, Hugh Samuel J: 143
New Deal (Helping industry and labor) N: 201

National recreation area
National Park System (table: National recreation areas) N: 49

National Republican Party [U.S. history] N: 60
Adams, John Quincy (Democratic-Republican Party split) A: 42
Clay, Henry (National leader) Ci: 658

National Research Council N: 60
National Academy of Sciences N: 27

National Resistance Movement [political organization]
Mozambique (History) M: 905-906

National revenue, Minister of
Canada, Government of (The Cabinet) C: 132; *diagram on* C: 137

National Revolutionary Movement
Bolivia (The Revolution of 1952) B: 447

National Revolutionary Party [political party]
Mexico (Politics) M: 451; (Economic and social changes) M: 473

National Rifle Association of America N: 60

National Right to Life Committee N: 60
Abortion (Abortion in the United States) A: 15

National Road [U.S. history] N: 60
Baltimore (The 1800's) B: 69
Indianapolis (History) I: 222
Pioneer life in America (Crossing the Appalachians) P: 477-478 *with map*
Transportation (Development of inland transport) T: 389
United States, History of the (Nationalism and the economy) U: 165 *with picture*

National Romanization
Japanese language J: 61

National Safety Council N: 60

National Salvation Front [political organization]
Romania (Protests and political change) R: 425

National School of Public Administration
Quebec, University of Q: 38

National Science Foundation [U.S.] N: 60
Green Bank Telescope G: 380
National Radio Astronomy Observatory N: 59

National Security Act of 1947
Central Intelligence Agency C: 357
Defense, Department of (History) D: 88

National Security Agency/Central Security Service [U.S.] N: 61

National Security Council [U.S.] N: 61
Central Intelligence Agency C: 357
Iran-contra affair (Administration actions) I: 407
President of the United States (The executive branch) P: 764
State, Department of (Since World War II) So: 861

National Security Medal
Medals, decorations, and orders (table) M: 357

National Selective Service [Canada]
World War II (In the United States and Canada) W: 494-495

National service See Draft, Military *in this index*

National Short Ballot Organization
City government (The council-manager form) Ci: 596

National Ski Hall of Fame
Michigan (Places to visit) M: 498

National Socialist German Workers' Party
See Nazism *in this index*

National Socialist Party See Nazism *in this index*

National Society for Hebrew Day Schools
Parochial school P: 178

National Society of the Colonial Dames of America
Colonial Dames of America, National Society of the Ci: 785

National Solar Observatory
National Optical Astronomy Observatories N: 42
Sun (Earth-based studies) So: 986 *with picture*

National Spiritual Assembly [religion]
Bahá'ís B: 27

National Stadium of Tokyo
Japan *picture on* J: 44
Tokyo (Recreation) T: 316

National Student Association, United States
Student government So: 932

National Symphony Orchestra
Kennedy Center for the Performing Arts K: 270

National Synchrotron Light Source [machine]
Brookhaven National Laboratory B: 639

National Teachers Association
National Education Association of the United States N: 34

National Technical Institute for the Deaf
Deafness (Education) D: 59

National Telegraphic Union [labor union]
Telegraph (Uses for the telegraph) T: 91

National Theater [Munich]
Munich (Important buildings) M: 927

National Toxicology Program
Artificial sweetener A: 761
Saccharin S: 4

National Traffic and Motor Vehicle Safety Act [1966]
Consumerism (Growth of the movement) C: 1019
Nader, Ralph N: 2

National Trails System N: 61

National Transportation Safety Board
Safety (Government agencies) S: 15

National Union Catalog [U.S.]
Library (Research libraries) L: 247

National Union for the Total Independence of Angola [political group]
Angola (History) A: 465-466

National University Continuing Education Association
Correspondence school Ci: 1072
Adult education (In the 1900's) A: 69-70

National University of Ireland
Ireland (Education) I: 420-421

National University of Nicaragua
Nicaragua (People) N: 396-397

National University of the Litoral
Santa Fe S: 114

National Urban Coalition See Urban Coalition, National in *this index*

National Urban League See Urban League in *this index*

National Vital Statistics Division
Vital statistics (Collecting and publishing vital statistics) V: 429-430

National War Memorial
Ottawa (The National War Memorial) O: 872

National Water Carrier [water system]
Israel (The Negev Desert) I: 484
Negev N: 119

National Weather Service See Weather Service, National in *this index*

National Wildlife Federation N: 61

National Wildlife Refuge System [U.S.] N: 61
with picture
Alaska (Federally protected lands) A: 294
Bird (Bird refuges) B: 368
Wildlife conservation (History) W: 304-305

National Woman Suffrage Association
United States, History of the (Early reform efforts) U: 181
Woman suffrage (Growth of the movement) W: 380
Women's movements (The right to vote) W: 385

National Woman's Relief Corps See Woman's Relief Corps, National in *this index*

National Woman's Rights Convention [1850]
Massachusetts (Interesting facts) M: 271

National Women's Political Caucus
Abzug, Bella Savitzky A: 19
Friedan, Betty F: 533
Steinem, Gloria So: 886
Women's movements (Women's organizations) W: 386

National Women's Social and Political Union
Pankhurst, Emmeline Goulden P: 131

National Women's Trade Union League of America
O'Reilly, Leonora O: 851

National World War II Memorial [Washington, D.C.]
Washington, D.C. (The National World War II Memorial) W: 73

National Youth Administration [U.S. history]
Johnson, Lyndon Baines (Youth administrator) J: 146
New Deal (table) N: 201

National Zoological Park [Washington, D.C.] N: 62
Smithsonian Institution (Other facilities) S: 519
Washington, D.C. (Smithsonian museums) W: 71-73
Zoo (The first modern zoos) Z: 608-609

Nationalism N: 62
Arabs (Arab nationalism) A: 589
Christianity (The rise of nationalism) C: 527
Classical music (The Romantic era) Ci: 648-649
Education (The rise of universal public schools) E: 101
Imperialism (Motives) I: 93
Italian literature (Romanticism) I: 495
Latvia (History) L: 119-120
Nation N: 26
Nazism (The birth of Nazism) N: 92
Opera (Nationalism) O: 799
Patriotism (Foundations of patriotism) P: 198
Prejudice P: 755
Revolution of 1848 R: 269
Roman Catholic Church (The decline of church influence) R: 410
United States, History of the (Growing nationalism) U: 165
Westward movement in America (The frontier influence) W: 252
World, History of the (The rise of democracy and nationalism) W: 443; (Imperialism) W: 445; (The birth of new nations) W: 448
World War I (The rise of nationalism) W: 452
World War II (Nationalism) W: 469

Nationalist Action Party [political party]
Turkey (Political parties) T: 503

Nationalist China See Taiwan in *this index*

Nationalist Party [China] See Kuomintang Party in *this index*

Nationalist Republican Alliance [political party]
El Salvador (Government) E: 248-249

Nationalists [political party, Spain]
Franco, Francisco (His early life) F: 483
Spanish Civil War So: 756 *with picture*

Nationality N: 62
See also Citizenship in *this index*

Nationality mark
Aviation (table) A: 986

Nationalization [government] N: 63
See also Government ownership in *this index*
Communism (The centrally planned economy) Ci: 891
Labour Party (History) L: 16
Lenin, V. I. (Lenin the dictator) L: 194
Privatization P: 808b
United Kingdom (The welfare state) U: 71

Nationalrat
Austria (The chancellor and Cabinet) A: 929

Nations, Battle of the [1813]
Napoleon I (The enemy alliance) N: 18

Nations, Law of [Roman Empire]
Law (Ancient Roman law) L: 133-134

Nations, Palace of [Geneva, Switzerland]
League of Nations *picture on* L: 160

Nations' Cups
Horse (Jumping) H: 357

Nation's Report Card [nickname]
National Assessment of Educational Progress N: 29

Nationwide Life Insurance Company
Insurance (table) I: 315

Native American Graves Protection and Repatriation Act [1990]
Archaeology (Archaeology today) A: 600
Indian, American (Current issues) I: 182-183

Native American Rights Fund
Indian, American (In the United States) I: 179

Native Americans
See also Indian, American in *this index*
Indian, American I: 136; (American Indians or Native Americans?) I: 136c

Native bear See Koala in *this index*

Native Council of Canada
Indian, American (In Canada) I: 178b

Native Land Court [New Zealand history]
New Zealand (The New Zealand Wars) N: 355

Native metal
Ore O: 825

Native Son [book by Wright]
African American literature (The 1900's) A: 136a
Wright, Richard W: 508

Native states [government] See Princely states in *this index*

Nativism [philosophy]
Latin-American literature (Romanticism) L: 112
Morse, Samuel Finley Breese (Morse as artist) M: 818
Psychology (Beginnings) P: 849

Roman Catholic Church (In the United States) R: 412

Nativity [religion]
Christmas C: 528 *with picture*
Jesus Christ (The Nativity) J: 104 *with picture*

Nativity, The [painting by Dürer]
Dürer, Albrecht *picture on* D: 388

NATO See North Atlantic Treaty Organization in *this index*

NATO-Russia Council
North Atlantic Treaty Organization (History) N: 471

Natsume Soseki [Japanese author] N: 63
Japanese literature (The modern period) J: 62

Natta, Giulio [Italian chemist]
Nobel Prizes (Chemistry: 1963) N: 443
Polypropylene P: 651

Natty Bumppo [literary figure]
Cooper, James Fenimore Ci: 1034

Natural
Music (Indicating pitch) M: 953

Natural, The [book by Malamud]
Malamud, Bernard M: 95

Natural areas
National Park System (Areas preserved for natural features) N: 43

Natural Born Killers [film]
Stone, Oliver So: 909

Natural bridge [geology]
Rainbow Bridge National Monument R: 128
Virginia (Places to visit) V: 408 *with picture*

Natural Bridges National Monument [Utah]
National Park System (table: National monuments) N: 51

Natural cereal
Cereal C: 361

Natural childbirth
Childbirth (Methods of childbirth) C: 456-457

Natural Chimneys
Virginia (Places to visit) V: 408

Natural community [biology]
See also Community [biology] in *this index*
Plant (Where plants live) P: 522

Natural dye
Lake L: 35

Natural fiber
Agriculture (Chief agricultural products) A: 147
Textile (Sources of textile fibers) T: 212
Thread T: 269 *with diagram*

Natural foods
Food preservation (Modern food preservation) F: 344
Health food H: 129

Natural fur
Fur (Kinds of fur) F: 561 *with pictures*

Natural gas [fuel]
Gas [fuel] G: 50; (How natural gas was formed) G: 57 *with diagrams*; (Early uses of natural gas) G: 58; (Development of the natural gas industry) G: 58
Alberta A: 312
Brunei (Economy) B: 651
Energy supply (Fossil fuels) E: 277-278; (Depletion of fuel reserves) E: 281
Fuel (Natural gas) F: 551
Heating (Gas) H: 160
Helium (Production) H: 176
Netherlands (Mining) N: 147
Ocean (Sources of energy) O: 654
Oklahoma (Mining) O: 729
Persian Gulf P: 300
Pipeline P: 490
Russia *picture on* R: 545
Texas (Mining) T: 201-202
West Virginia (Early industries) W: 226

Natural gas liquids N: 63

Natural gasoline
Gasoline (How gasoline is produced) G: 61

Natural glass
Pumice P: 898

Natural guide-star system [astronomy]
Telescope (Adaptive optical systems) T: 106

Natural habitat [ecology]
See also Community [biology] in *this index*
Habitat H: 3

Natural History [book by Pliny the Elder]
Botany (The history of botany) B: 509
Pliny the Elder P: 573
Science (Ancient Rome) S: 197

Natural History, National Museum of See National Museum of Natural History in *this index*

Natural history museum

Museum (Science museums) M: 938
Natural History Museum of Los Angeles County

California (Museums) C: 41

Natural increase

Population P: 672

Natural killer cell [physiology]

Disease (Immune responses) D: 231-232
 Immune system (The cell-mediated immune response) I: 88a-88b

Natural language processing

Artificial intelligence (Natural language processing) A: 760
 Information retrieval (Research) I: 269

Natural law [philosophy]

Civil rights (Development of civil rights) C: 610
 Law (Ancient Roman law) L: 133-134;
 (Beginnings of U.S. law) L: 136

Natural light

Light (Other sources of light) L: 283
 Photography (Light) P: 412

Natural logarithms

Logarithms (Natural logarithms) L: 424

Natural materials

Materials (Natural materials) M: 300c

Natural minor scale [music]

Music (Tone) M: 950 *with diagram*

Natural number [mathematics]

Number theory N: 605

Natural pest control [agriculture]

Environmental pollution (Agriculture) E: 337

Natural population

Races, Human R: 53

Natural Questions [work by Seneca]

Latin literature (The Imperial Period) L: 116

Natural raisin

Raisin (Preparation for market) R: 130

Natural resources N: 64

Conservation C: 974
 Economics (Making the economy grow) E: 59
 Industry (Natural resources) I: 257
 Interior, Department of the I: 324
 National park (Development of park resources) N: 42h
 Technology (Using technology safely) T: 77
 United States, History of the (Natural resources) U: 177
 World (Threats to the environment) W: 418

Natural resources, Minister of [office]

Canada, Government of (The Cabinet) C: 132;
diagram on C: 137

Natural rights [philosophy]

Civil rights (Development of civil rights) C: 610
 Democracy (Origins of democracy) D: 122
 Freedom (During the Age of Reason) F: 503
 Locke, John (His philosophy) L: 413

Natural satellite *See* Satellite [astronomy] *in this index***Natural science**

Liberal arts L: 226

Natural selection [biology] N: 64

Adaptation A: 45
 Animal (How species change) A: 503
 Darwin, Charles Robert (Darwin's theories) D: 40
 Evolution (Main ideas of evolutionary theory) E: 426-427; (Natural selection) E: 428
 Genetics (Population genetics) G: 87
 Heredity (Heredity and natural selection) H: 203
 Life (Adaptation) L: 275
 Plant (How plants change) P: 540
 Protective coloration P: 832
 Races, Human (Evolutionary theory) R: 53;
 (Natural selection) R: 57
 Social Darwinism So: 551
 Wallace, Alfred Russel W: 15

Natural speaking method

Language (Methods of study) L: 62

Natural State, The [nickname]

Arkansas A: 694

Natural Tunnel

Virginia (Places to visit) V: 408

Naturalism [literature] N: 65

American literature (Naturalists) A: 419
 Drama (Early realism) D: 338
 Dreiser, Theodore D: 346
 French literature (Naturalism) F: 522
 German literature (Naturalism) G: 142

Latin-American literature (Realism) L: 112

Novel (France) N: 573

Realism (In fiction) R: 171-172

Naturalist on the River Amazons, The [book by Bates]

Bates, Henry Walter B: 162

Naturalistic exhibit

Zoo (Exhibits) Z: 605

Naturalization [law] N: 66

Citizenship (Naturalization) Ci: 570 *with picture*; (U.S. citizenship laws) Ci: 571
 Immigration and Naturalization Service I: 86

Naturalization Act [1798]

Alien and Sedition Acts A: 367

Nature [book by Emerson]

Emerson, Ralph Waldo (His prose works) E: 259

Nature [philosophy]

See also Balance of nature *in this index*
 Age of Reason (The orderliness of nature) A: 139
 Aristotle (Philosophy of nature) A: 664
 Civil rights (Development of civil rights) Ci: 610

Balance of nature B: 34

God G: 243

Lotze, Rudolf Hermann L: 473

Nature study N: 67

Nature worship N: 68

Painting (What painters paint) P: 28-32

Philosophy P: 383

Science (The importance of science) S: 191-192
 Wordsworth, William W: 404

Nature Conservancy [organization] N: 67**Nature reserve**

National park N: 42a

Nature study N: 67**Nature versus nurture**

Heredity (Heredity and environment) H: 205

Nature worship [religion] N: 68**Naturopathy** [medicine]

Alternative medicine A: 388

Naturphilosophie

Science (Scientific advances of the 1800's) S: 200

Naturwissenschaften, Die [publication]

Max Planck Society for the Advancement of Science M: 318

Natyasastra [essay by Bharata]

Drama (India) D: 336

Naudé, Gabriel [French librarian]

Library (Libraries of the 1600's and 1700's) L: 260-261

Naughty Marietta [operetta by Herbert]

Herbert, Victor H: 197

Naulahka, The [book by Kipling and Balesier]

Kipling, Rudyard (Kipling in America) K: 334

Nauplius [zoology]

Barnacle B: 114

Larva L: 78

Nauru [country] N: 68 *with maps*

Flag *picture on F: 204*

Nauruans [people]

Nauru (People) N: 68

Nausea [book by Sartre]

Sartre, Jean-Paul S: 127

Nausea [disorder] N: 69

Vomiting V: 447

Nautical ball

Ship (Nautical terms) S: 416

Nautical chart [map]

Map (Navigation maps) M: 177-178

Nautical league [unit of measure]

League L: 159

Nautical mile [unit of measure]

Inertial guidance I: 263

Knot K: 355

Latitude L: 117

League L: 159

Mile M: 542

Nautical survey

Surveying (Other surveys) So: 1011

Nautical terms

Ship (Nautical terms) S: 416

Nautilus [nuclear submarine]

Submarine (Nuclear submarines) So: 943

Arctic (Arctic exploration) A: 639-640

Connecticut (Places to visit) Ci: 960; (The mid-1900's) Ci: 971 *with picture*

Exploration (Arctic exploration) E: 449-450

with map

Navy, United States (The nuclear age Navy) N: 89

New London Naval Submarine Base N: 255

Nuclear energy (The first peaceful uses) N: 591

Rickover, Hyman George R: 335

Ship (Nuclear power and automation) S: 413

Warship (Warships in the nuclear age) W: 42

Nautilus [sea animal] N: 69 *with picture*

Mollusk (Octopuses and squids) M: 695

Shell (Octopuses and squids) S: 388; *pictures on S: 387*

Nautilus [submarine]

Fulton, Robert (The inventor) F: 555

Submarine (Early submarines) So: 942

Nautilus, Paper [sea animal] *See* Argonaut [sea animal] *in this index*

Nauvoo [Illinois]

Illinois (Places to visit) I: 62 *with picture*

Mormons (Mormons in the Middle West) M: 808-809

Smith, Joseph (Life at Nauvoo) S: 518

Nauvoo Legion [U.S. history]

Smith, Joseph (Life at Nauvoo) S: 518

Navaho Indians *See* Navajo Indians *in this index***Navaho Weavers** [painting by Begay]

Indian, American *picture on I: 168*

Navajo Community College

Arizona (Schools) A: 674; (The mid-1900's) A: 691

Navajo Indians N: 69

Navajo Indians [American Indians] N: 69

Arizona (Population) A: 674

Baby *picture on B: 4*

Code talkers Ci: 749

Folklore *picture on F: 324*

Hogan H: 288

Indian, American (Shelter) I: 136d; (Weaving) I: 146; (Indians of the Southwest) I: 166-

168 *with picture*; *picture on I: 136a*

Indian reservation (Description) I: 188

Indian wars (Navajo conflicts) I: 195

Manuelito M: 168

Sand painting S: 107

Navajo National Monument [Arizona]

National Park System (table: National monuments) N: 51

Navajo sheep

Sheep (Coarse-wooled sheep) S: 382

Naval Academy, United States *See* United States Naval Academy *in this index***Naval Air Basic Training Command** [Florida]

Pensacola Naval Air Station P: 272

Naval Air Training Command, United States [Florida]

Pensacola Naval Air Station P: 272

Naval architect

Ship (Designing and constructing a ship) S: 425

Naval attaché [military officer]

Attaché A: 878

Naval Aviation Museum [Florida]

Pensacola Naval Air Station P: 272

Naval base

Navy, United States (The Shore Establishment) N: 85

Naval cadet [military]

Cadet C: 11

Naval mine

Mine warfare (Naval mines) M: 565

Navy (Wartime roles) N: 77

Naval Observatory, United States

[Washington, D.C.] N: 70

Naval Officer, or Scenes and Adventures in the Life of Frank Mildmay, The [book by Marryat]

Marryat, Frederick M: 222

Naval Officer Candidate School

Navy, United States (Training an officer) N: 83

Naval Reserve

Navy, United States (Regulars and reserves) N: 85

Naval Reserve Officers Training Corps

Reserve Officers Training Corps (Navy ROTC) R: 258

Navy, United States (Training an officer) N: 83

Naval School of Aviation Medicine [Florida]

Pensacola Naval Air Station P: 272

Naval Service Bill [1910]

Borden, Sir Robert Laird (A new Conservative program) B: 485

Naval stores [industry]
Forest products (Naval stores) F: 402

Naval Surface Weapons Center [Dahlgren, Virginia]
Ballistics B: 56

Naval War College [Rhode Island] N: 70
Navy, United States (Training an officer) N: 83

Naval War of 1812, The [book by Roosevelt]
Roosevelt, Theodore (State legislator) R: 466

Navarino, Battle of [1827]
Greece (Independence) G: 362

Navarino Island [Chile]
Tierra del Fuego T: 283

Navarre, Henry of *See* Henry IV [king of France] *in this index*

Nave [architecture]
Architecture (table) A: 608-609 *with picture*;
(Medieval architecture) A: 617
Basilica B: 140
Byzantine art (Architecture) B: 749
Cathedral (The plan of a cathedral) C: 301-302 *with diagram*
Romanesque architecture R: 415

Navel [anatomy]
Baby (Birth) B: 6 *with picture*; (Bathing the baby) B: 10
Umbilical cord U: 18

Nave, orange [tree]
Orange (Sweet oranges) O: 815

Navicular [disease]
Horse (Medical care) H: 356

Navicular bone [anatomy]
Wrist W: 510 *with diagram*

Navigation N: 70 *with pictures*
Airplane (Air navigation) A: 226 *with picture*
Bird (How birds migrate) B: 361
Chronometer C: 539
Global Positioning System G: 231
Great-circle route G: 338
Gyrocompass G: 452
Laser (Guiding) L: 83
Migration (How migrating animals find their way) M: 539
Radar (In ship navigation) R: 65 *with diagram*
Radio (Navigation) R: 85
Ship (Ships of the future) S: 422; (Navigating a ship) S: 423 *with picture*
Space exploration (Navigation, guidance, and control) So: 704
Vikings (The Vikings as navigators) V: 381
See also the list of Related Articles in the Navigation article

Navigation Acts [English history] N: 75
Colonial life in America (Trade) Ci: 811
Virginia (Westward expansion) V: 418

Navigation canal
Canal C: 162 *with pictures*

Navigation light
Airplane (The wing) A: 213-214

Navigation map
Map (Types of maps) M: 177 *with picture*

Navigation Rules, International-Inland
Boating (Boating regulations) B: 429

Navigation satellite
Satellite, Artificial (Types of artificial satellites) S: 150f

Navigators Islands
Samoa Islands S: 80b

Navistar International Corporation
McCormick, Cyrus Hall M: 334

Navona, Piazza [Rome]
Rome *picture on* R: 430

Navratilova, Martina [American tennis player]
N: 75
Tennis (Tennis today) T: 168-169 *with picture*

Navstar Global Positioning System *See* Global Positioning System *in this index*

Navy N: 76 *with pictures*
Flag (Military flags) F: 195-208
Mine warfare (Naval mines) M: 565
See also the list of Related Articles in the Navy article

Navy, Department of the [U.S.] N: 81
Defense, Department of (History) D: 88
Navy, United States (Organization of the Navy) N: 85

Navy, Royal Canadian [Canadian history]
Canada, Armed Forces of (Organization) C: 128

Navy, Secretary of the [office]
Navy, Department of the N: 81

Navy, United States (Organization of the Navy) N: 85

Navy, United States N: 82 *with pictures*
Admiral A: 58
Coast Guard, United States (National defense) Ci: 735, (History) Ci: 737
Defense, Department of D: 87
Flag (Military flags) F: 195-208 *with pictures*;
pictures on F: 197, F: 209, F: 211
Hydrofoil (Modern hydrofoil development) H: 468
Jones, John Paul J: 158
Medals, decorations, and orders (Military awards) M: 355 *with pictures*
Navy (Major navies of the world) N: 78
Navy, Department of the N: 81
Rank, Military R: 139
Pensacola Naval Air Station P: 272
Puerto Rico (Puerto Rico today) P: 885
Reserve Officers Training Corps (Navy ROTC) R: 258
Salute (Military hand salutes) S: 76b
United States Naval Academy U: 203
Warship (Kinds of warships) W: 39
See also the list of Related Articles in the Navy, United States article

Navy and Marine Corps Medal
Medals, decorations and orders (table) M: 357

Navy bean [plant]
Bean (Kinds of beans) B: 181

Navy commission pennant [U.S.]
Flag *picture on* F: 194

Navy Cross
Medals, decorations, and orders (table) M: 357 *with picture*

Navy Jack [flag] N: 91
Flag (Flags of the United States and Canada) F: 208; *picture on* F: 194

Navy Pier
Chicago (New construction) C: 437

Navy ROTC
Reserve Officers Training Corps (Navy ROTC) R: 258
Navy, United States (Training an officer) N: 83

Nawruz [holiday]
Islam (Holidays and celebrations) I: 465

Naxcivan Autonomous Republic [region]
Azerbaijan A: 996

Naylor, Phyllis Reynolds [American author]
Literature for children (Fiction) L: 358
Newbery Medal (table) N: 359

Nazarbayev, Nursultan [Kazakh political leader]
N: 91 *with portrait*
Kazakhstan (History) K: 251-252

Nazareth [Israel] N: 91

Nazca [people] N: 92 *with picture*
Indian, American (Indians of the Andes) I: 173

Nazca line [etching]
Nazca N: 92 *with picture*

Nazi Party [U.S.]
Nazism (Neo-Nazism) N: 93

Nazism (political science) N: 92
Anti-Semitism A: 559
Aryans A: 765
Beckmann, Max B: 197
Concentration camp Ci: 926
Fascism (Fascism in Germany) F: 49
Flag *picture on* F: 217
German literature (Literature under the Nazis) G: 142
Germany (Nazi Germany) G: 167 *with picture*
Gestapo G: 175
Goering, Hermann Wilhelm G: 246
Hess, Rudolf H: 218
Hindenburg, Paul von H: 235
Hitler, Adolf H: 264; (Birth of the Nazi Party) H: 266
Holocaust H: 296
Jews (Beginnings of Nazi persecution) J: 124; (The Holocaust) J: 124
Kristallnacht K: 388
Mein Kampf M: 386
Nationalism (Different forms of nationalism) N: 62
Nuremberg N: 612
Pius XII P: 503
Propaganda (Between the wars) P: 825
Races, Human (Race and discrimination) R: 59
Rosenberg, Alfred R: 481
Swastika So: 1017 *with picture*
War (Changes in the rules of war) W: 24
Warsaw (History) W: 38

World War II (Nationalism) W: 469
See also the list of Related Articles in the Nazism article

Nb
Niobium N: 424

NBA *See* National Basketball Association *in this index*

NBC [company] *See* National Broadcasting Company *in this index*

NC-17 [rating]
Motion picture (Censorship and self-regulation) M: 861

NCA
Coal (Coal producers) Ci: 728

NCAA *See* National Collegiate Athletic Association *in this index*

NCJW *See* Jewish Women, National Council of *in this index*

NCM *See* National Congress of Mothers *in this index*

NCR Corporation
AT&T Corp. A: 852

NCSC
National Council of Senior Citizens N: 32

Nd
Neodymium N: 123

Ndadaye, Melchior [African political leader]
Burundi (History) B: 713-714

NDEA *See* National Defense Education Act *in this index*

Ndebele [people]
Bulawayo B: 686
Rhodes, Cecil John (Gains Rhodesia) R: 317
Zimbabwe (People) Z: 596; (History) Z: 597

Nd:glass laser
Laser (Solid-state lasers) L: 85

N'Djamena [city, Chad] N: 93
Chad C: 365

Ndlovukazi [title]
Swaziland (Government) So: 1017

NDP *See* New Democratic Party *in this index*

Ndyuka Maroons [people]
Maroons M: 217

Ne
Neon N: 124

Ne Win, U [Burmese political leader]
Myanmar (History) M: 970d-970e

NEA *See* National Education Association of the United States *in this index*

Neagh, Lough [lake, Northern Ireland] *See* Lough Neagh *in this index*

Neal, Patricia [American actress]
Motion picture (Best performance by an actress: 1963) M: 862

Neale, Thomas [English colonial official]
Postal Service, United States (Colonial times) P: 700
Postal services (Postal service in the United States) P: 706

Neanderthal man [anthropology] *See* Neanderthals *in this index*

Neanderthals [anthropology] N: 93
Europe (Prehistoric times) E: 408
Evolution (Contributions from other scientific fields) E: 433
Funeral customs (History) F: 558
Germany (Ancient times) G: 162
Prehistoric people (The development of *Homo sapiens*) P: 746; (Neanderthals) P: 747 *with pictures*; (table) P: 752 *with map, pictures on* P: 749

Neap tide
Ocean (Tides) O: 659
Tide (Tidal cycles) T: 282; *diagram on* T: 281

Neapolis
Naples N: 13

Neapolitan pizza [food]
Pizza P: 504

Neapolitans [people]
Naples N: 13

Near-complementary color
Color (Producing color harmony) Ci: 823-824 *with diagram*

Near-Earth asteroid [astronomy]
Asteroid (Orbits) A: 824

Near Earth Asteroid Rendevous [space probe]
Asteroid (Measuring asteroids) A: 824
National Aeronautics and Space Administration N: 28
Space exploration (Probes to asteroids) So: 711

Near Earth Asteroid Rendezvous-Shoemaker

[space probe]

Eros E: 355

Space exploration (Probes to asteroids)

So: 711

Near East [region, Africa-Asia] N: 93**Near Infrared Camera/Multi-Object Spectrometer** [machine]

Astronomy (Infrared astronomy) A: 842-843

Near rhyme

Rhyme R: 320

Near sideMoon (Rotation and orbit) M: 783; *map on*

M: 786

Near-video-on-demand [service]

Television (Cable and satellite systems) T: 115-

116

Nearchus [Greek explorer]

Exploration (The Greeks) E: 441

"Nearer My God to Thee" [hymn]

Mason, Lowell M: 266

Nearsightedness [disorder] N: 93Eye (Nearsightedness) E: 464 *with pictures*

Glasses (Prescription glasses) G: 224

Neat soap

Detergent and soap (The kettle method)

D: 164

Nebiim [Old Testament]

Bible (Books of the Hebrew Bible) B: 279-280

Old Testament O: 740

Nebina, Pico da [mountain]Brazil (The Amazon Region) B: 577 *with map***Nebraska N: 94** *with pictures and maps*

Abortion (Abortion in the United States) A: 15-

16

Farm and farming *picture on* F: 33

Kansas-Nebraska Act K: 243

*See also the list of Related Articles in the**Nebraska article***Nebraska, University of** N: 115

Lincoln L: 309

Nebraska (Museums) N: 98

Nebraska Education Television Act [1963]

Nebraska (The mid-1900's) N: 114

Nebraska marble

Nebraska (Territorial days) N: 112

Nebraska National Forest

Nebraska (Interesting facts) N: 95

Nebraska Palladium and Platte Valley*Advocate* [newspaper]

Nebraska (Communication) N: 109

Nebraska State Historical Society [Lincoln]

Nebraska (Museums) N: 98

Nebraska Territory

Nebraska (Territorial days) N: 112

Nebraskaland Days

Nebraska (Visitor's guide) N: 102

Nebraskan ice age [geology]

Ice age (Evidence of ice ages and their climates) I: 6-7

Nebrija, Antonio de [Spanish author]

Spanish literature (The 1400's) So: 758

Nebuchadnezzar II [king of Babylonia] N: 116

Babylon (The New Babylonian Empire) B: 12

World, History of the (Civilizations of south-west Asia) W: 426

Nebula [astronomy] N: 116 *with picture*

Astronomy (Discovering other galaxies) A: 848

Galaxy (Emissions from galaxies) G: 8b

Nebular hypothesis N: 116

Universe (Changing views of the universe)

U: 205

Nebular hypothesis [astronomy] N: 116

Laplace, Marquis de L: 74

NEC Corporation

Computer (Manufacturing) Ci: 924

Manufacturing (table) M: 170

Necessity [philosophy]

Age of Reason (The worship of reason) A: 138

Metaphysics (Possibility and necessity)

M: 430

Nechako River [British Columbia]

Kitimat K: 341

Necho [king of ancient Egypt]

Josiah J: 169

Neck [anatomy]

Shaken baby syndrome S: 343

Skeleton (The axial skeleton) S: 479 *with diagrams*

Throat T: 271

Whiplash W: 280

Neck [harpl]Harp H: 65 *with picture***Necker, Anne Louise Germaine** [French author]

Staël, Madame de So: 820

Necker, Jacques [French government official]

Louis XVI L: 476

Neckerchief

Cowboy (His clothing) Ci: 1108-1109

NecklaceJewelry J: 116 *with picture*Pearl (Matching pearls) P: 217 *with picture***Necktie** [clothing] N: 117**Necrobiosis** [physiology]

Death (Medical aspects of death) D: 61

Necrology [death] N: 117**Necropolis** [archaeology] N: 117**Necropsy** [law] *See Autopsy in this index***Necrosis** [disorder]

Death (Medical aspects of death) D: 61

Match (The first matches) M: 300-300a

Necrotizing fasciitis [infection]

Streptococcus So: 926

Necrotizing ulcerative gingivitis [disease] *See**Trench mouth in this index***Nectar** [botany] N: 117

Bee (Life of the honey bee) B: 202-204

Honey H: 314

Honeyeater H: 315

Nectar [Greek mythology]

Ambrosia A: 405

Nectarines [entomology]

Bee (Making honey) B: 204

Nectarine [fruit] N: 117 *with picture***Nedda** [opera character]Opera (*Pagliacci*) O: 806**Neddermeyer, Seth H.** [American physicist]

Muon M: 928

Nederlanders [people]

Netherlands N: 138

Nednais [American Indians]

Geronimo G: 173

Need [psychology]

Child (Understanding a child's basic needs)

C: 452

Culture (Satisfying basic needs) Ci: 1187

Human relations (Individual needs) H: 427

Needham, James [English explorer]

Tennessee (Exploration) T: 153

Needle [botany] *See Needleleaf tree in this**index***Needle** [tool] N: 117 *with pictures*

Acupuncture A: 31

Clothing Ci: 686

Sewing S: 332

Needle bar

Rugs and carpets (Tufting) R: 515

Needle-clawed galago [animal]

Galago G: 7

Needle-leaved cedar [tree]Cedar (Needle-leaved cedars) C: 324 *with picture***Needle-punched fabric**

Rugs and carpets (Other methods) R: 516

Textile (Other textiles) T: 215

Needlefish [fish]

Gar G: 28

Needleleaf tree

Tree (Needleleaf trees) T: 414; (Leaves) T: 417

with diagram; (Needleleaf forests) T: 429*with picture*; *pictures on* T: 413, T: 424,

T: 425

Cell *picture on* C: 327Leaf L: 151 *with pictures*Pine P: 468 *with pictures***Needlepoint** [handicraft] N: 118 *with pictures*Petit point P: 326 *with picture***Needlepoint lace** [fabric]Lace L: 22; *pictures on* L: 21**Needle's Eye, The** [book by Drabble]

Drabble, Margaret D: 317

Needletrades, Industrial and TextileEmployees, Union of *See* Union of

Needletrades, Industrial and Textile

Employees *in this index***Needlework** [handicraft]

Colonial life in America (Decorative arts)

Ci: 807-808 *with picture*Crochet Ci: 1148c *with pictures*Embroidery E: 256 *with picture*Knitting K: 353 *with diagrams*Needlepoint N: 118 *with picture*Petit point P: 326 *with picture*Quilt Q: 41 *with picture*Sampler S: 81 *with picture*Sewing S: 332 *with diagrams***Needs-based education**

Education (What should be taught?) E: 105

Néel, Louis Eugène Félix [French physicist]

Nobel Prizes (Physics: 1970) N: 441

Néel temperature [physics]

Magnetism (Magnetism of materials) M: 60b-

60c

Neely, Matthew M. [American political leader]

West Virginia (table) W: 225

Neem tree N: 118 *with pictures***Ne'eman, Yuval** [Israeli physicist]

Gell-Mann, Murray G: 77

Nefertari [wife of Ramses III]

Abu Simbel, Temples of A: 19

Nefertiti [queen of ancient Egypt] N: 119 *with**portrait***Neff, Pat M.** [American political leader]

Texas (table) T: 203; (The early 1900's) T: 207-

208

Negative [photography]

Photoengraving and photolithography

(Transferring the image) P: 406

Photography (Developing the film) P: 410-411

with pictures; (Developing and printing)P: 420-424 *with pictures*

Talbotype T: 19

Technicolor T: 73

Negative acceleration [physics]

Velocity (Acceleration) V: 297

Negative charge [electricity]

Electricity (Electric charge) E: 191

Vacuum tube (How a vacuum tube works)

V: 258

Negative eugenics [genetics]

Eugenics E: 377

Negative income tax [welfare]

Friedman, Milton F: 533

Negative ion [chemistry]

Bond (An ionic bond) B: 454

Negative lens

Lens (Lens shapes) L: 196; (Viewed through a negative lens) L: 196b

Negative number

Algebra (Positive and negative numbers) A: 352

Arithmetic (Arithmetic of negative numbers)

A: 668

Mathematics (Branches of mathematics) M: 303

Scientific notation S: 207

Square root (Square roots of negative numbers) So: 812

Negative theology

Neoplatonism N: 124

Negative transfer [psychology]

Learning (Transfer of training) L: 164

Negative tropism [botany]

Plant (Factors affecting plant growth) P: 538-

539

Negative-working offset plate [printing]

Photoengraving and photolithography

(Transferring the image) P: 406

Printing (Offset printing plates) P: 798

Negev [region, Israel] N: 119Israel (The Negev Desert) I: 484 *with picture*

Irrigation (Other sources) I: 456

Neglect [law]

Juvenile court J: 205

Negligence [law] N: 119

Medicine (Treatment) M: 364-365

Product liability suit P: 810

Negligent homicide [crime]

Negligence N: 119

Negotiable instrument [law] N: 119

Note (Liability of the maker) N: 550

Negotiable order of withdrawal account

Bank (A boom in money market funds) B: 94

Check (Checks and the economy) C: 391

Negotiation

International relations (Diplomacy) I: 344

Negret, Edgar [Colombian sculptor]

Colombia (The arts) Ci: 781

Negrin, Juan [Spanish political leader]

Spanish Civil War (Progress of the war)

So: 756a-756b

Negrino [botany]

Ivory palm I: 522

Negritos [people] N: 120

Pacific Islands (Melanesians) P: 4

Philippines (Ancestry) P: 373-374; (Early days)

P: 379

Pygmies P: 914

- Négritude** [philosophy]
Senghor, Léopold Sédar S: 300
- Negro Business League, National**
Washington, Booker T. (Racial leader) W: 89
- Negro Digest** [magazine]
Magazine (History) M: 43-45
- Negro Family in the United States, The** [book by Frazier]
Frazier, Edward Franklin F: 497
- Negro History Week**
Black History Month 8: 388
- Negro in Our History** [book by Woodson]
Woodson, Carter Goodwin W: 395
- Negro league**
Baseball (Postwar baseball) B: 137
- Negroes** [people] See African Americans; Blacks in this index
- Negroids** [people]
Races, Human (The three-race theory) R: 53-54 with picture
- Negroponte, John** [American political leader]
United Nations (table) U: 86
- Negros** [island, Philippines]
Philippines (The main islands) P: 376-378 with map
- Nehemiah, Book of** [Old Testament] N: 120
- Neher, Erwin** [German physiologist]
Nobel Prizes (Physiology or medicine: 1991) N: 445
- Nehru, Indira Priyadarshini** See Gandhi, Indira in this index
- Nehru, Jawaharlal** [Indian political leader]
N: 120 with picture
India (Independence and partition) I: 133 with picture, (India in the 1950's and early 1960's) I: 133
- Nehru, Motilal** [Indian political leader] N: 120
- Nehru Report** [book by Nehru]
Nehru, Motilal N: 120
- Neige noire** [book by Aquin]
Canadian literature (Modern literature: 1945 to the present) C: 160
- Neighborhood** [sociology]
City (Cultural variety in cities) Ci: 593
New York City (Social problems) N: 332-333
- Neighborhood center** [social work]
Addams, Jane A: 46
- Neighborhood health clinic**
Hospital (Recent developments) H: 374
- Neighborhood Watch program**
Police (In the United States since the mid-1900's) P: 624
- Neihardt, John** [American author] N: 121
- Neil, Helen** [wife of]
Mackenzie, Alexander (Emigration to Canada) M: 21
- Neisseria gonorrhoeae** [bacteria]
Gonorrhea G: 268
- Nekton** [biology]
Ocean (The nekton) O: 655; pictures on O: 656, O: 657
- Nelligan, Émile** [Canadian poet]
Canadian literature (Poetry: 1850-1918) C: 157-158
- Nelmes, Sarah** [patient of]
Jenner, Edward (Jenner's work) J: 91 with picture
- Nelson, C. William** [American political leader]
Astronaut (A look at the astronauts) A: 831
- Nelson, E. Benjamin** [American political leader]
Nebraska (table) N: 110
- Nelson, Gaylord A.** [American political leader]
Earth Day E: 32
Wisconsin (table) W: 365; (Decline of LaFollette Progressivism) W: 368
- Nelson, Horatio** [British admiral] N: 121 with pictures
London picture on L: 428
Trafalgar, Battle of L: 366
United Kingdom (The Napoleonic Wars) U: 68
- Nelson, John** [American government official]
Justice, Department of (table) J: 203
Tyler, John (table) T: 534
- Nelson, Knute** [American political leader]
Minnesota (table) M: 602
- Nelson, S. D.** [American illustrator]
Literature for children picture on L: 360
- Nelson, Samuel** [American jurist]
Supreme Court of the United States (table) So: 1000
- Nelson, Thomas, Jr.** [American patriot] N: 122
Virginia (table) V: 417
- Nelson, Viscount** See Nelson, Horatio in this index
- Nelson, William Rockhill** [American editor]
N: 123
- Nelson, Willie** [American singer]
Country music (Modern country music) Ci: 1098c with picture
- Nelson-Atkins Museum of Art**
Kansas City [Missouri] (Cultural life) K: 242
Missouri (Museums) M: 655 with picture
- Nelson Pillar** [Dublin]
Ireland picture on I: 428
- Nelson River** [Manitoba] N: 123
Canada (Rivers, waterfalls, and lakes) C: 118-119
- Nelson's Column** [London]
London picture on L: 428; (Squares) L: 435
Nelson, Horatio (Nelson monument) N: 122
- NEM** [Hungarian history] See New Economic Mechanism in this index
- Neman River** [Belarus-Lithuania] N: 123
Lithuania (Land and climate) L: 388-389
- Nemanja, Stefan** [king of Serbia]
Serbia (History) S: 314
- Nematocyst** [zoology]
Ribbon worm R: 321
- Nematode** [worm] N: 123
Alfalfa (Diseases and pests) A: 347
Animal (A classification of the animal kingdom) A: 506 with picture
Fumigation F: 556
Grape (Diseases and pests) G: 320
Plant (Diseases) P: 543
Roundworm R: 491
- Nembutal** [medication]
Barbiturate (Medical uses) B: 107
Drug abuse (table: Some commonly abused drugs) D: 363
- Nemean Games** [ancient Greece]
Olympic Games (The ancient games) O: 750
- Nemean lion** [Greek mythology]
Hercules (The twelve labors) H: 198-199
- Nemerov, Howard** [American poet]
Poet laureate (table: Poets laureate of the United States) P: 590
- Nemertina** [zoology] See Ribbon worm in this index
- Nemesis** [Greek mythology]
Helen of Troy H: 168
- Németh, Miklós** [Hungarian political leader]
Hungary (Beginnings of change) H: 448
- Nemirovich-Danchenko, Vladimir** [Russian businessman]
Moscow Art Theater M: 828
- Nemo, Captain** [literary figure]
Verne, Jules V: 338
- Nemours, Pierre Samuel du Pont de** See Du Pont de Nemours, Pierre Samuel in this index
- Nemov, Alexei** [Russian gymnast]
Olympic Games (The recent games) O: 753-754
- Nemunas River** [Belarus] See Neman River in this index
- Nene** [bird] N: 123
Bird (Birds of Australia and the Pacific Islands) B: 349 with picture
- Nenetz** [people]
Arctic (In the Siberian arctic) A: 639
- Neoclassicism**
Architecture (Neoclassical architecture) A: 623 with pictures
Classical music (Neoclassicism) Ci: 649
Drama (Italian Renaissance drama) D: 330; (The French theater) D: 333
English literature (The Augustan Age) E: 318
Furniture (The neoclassical style) F: 577
Ingres, Jean Auguste Dominique I: 270
Italian literature (The baroque period and the Age of Reason) I: 494-495
Latrobe, Benjamin Henry L: 117 with picture
Painting (Neoclassicism) P: 66 with picture; (Later neoclassicism) P: 67
Picasso, Pablo (The 1920's and 1930's) P: 448b-449
Poetry (Neoclassical poetry) P: 597
Sculpture (European sculpture) S: 253-254 with picture
Shakespeare, William (Neoclassical criticism) S: 369
Spanish literature (The 1700's) So: 760
Stravinsky, Igor (Neoclassical works) So: 922
- Neocolonialism** [political science]
Colonialism (Decolonization) Ci: 814
- Neo-Confucianism** [religion]
China (The Song dynasty) C: 502
Confucianism (Later Confucianism) Ci: 937
Painting (Chinese painting) P: 44-45
Religion (Confucianism) R: 220
- Neocortex**
Brain (In vertebrates) B: 559
- Neo-Darwinism** [biology]
Darwin, Charles Robert (The influence of Darwin's ideas) D: 40
- Neo-Destour Party** [political party]
Tunisia (History) T: 489
- Neodymium** [element] N: 123
- Neosexpressionism** [art]
Kiefer, Anselm K: 313
Painting (Recent painting) P: 87 with picture
- Neopressionism** [art]
Painting (Postimpressionism) P: 75-76 with picture
Seurat, Georges S: 324
- Neoliberalism**
Liberalism (Liberalism today) L: 228
- Neolithic Period** [anthropology]
City (How cities began and developed) Ci: 575-577 with pictures
Invention (Prehistoric times) I: 357-358
Lake dwelling L: 37
Prehistoric people (The first human beings) P: 745; (Changes in lifestyle) P: 753
Sculpture (China) S: 238
Stone Age So: 909
- Neologism**
Language (Linguistic terms) L: 63
- Neo-Melanesian** [language]
Pacific Islands (Languages) P: 5
- Neomycin** [medication]
Antibiotic (table) A: 551
- Neon** [element] N: 123 with pictures
Atom diagram on A: 872
- Neon goby** [fish]
Fish picture on F: 154
- Neon light**
Electric light (Neon lamps) E: 174 with picture
Invention picture on I: 356
Plasma P: 552
- Neon sign**
Color picture on Ci: 817
Neon picture on N: 124
- Neon tetra** [fish]
Fish picture on F: 157
Tetra T: 183 with picture
- Neon Vernacular** [book by Komunyakaa]
African American literature (Recent developments) A: 136a
- Neonatal death**
Infant mortality I: 264
- Neonatal period** [medicine]
Neonatology N: 124
- Neonaticide** [homicide]
Infanticide I: 264
- Neonatology** [medicine] N: 124
- Neo-Nazism** [political science]
Germany (The unification of East and West Germany) G: 171
Nazism (Neo-Nazism) N: 93
- Neophonic Orchestra** [music]
Kenton, Stan K: 271
- Neoplasia** [disorder]
Cervical cancer C: 364
- Neoplasm** See Tumor in this index
- Neoplasticism** [art]
Mondrian, Piet M: 703
- Neoplatonism** [philosophy] N: 124
Augustine, Saint (His life) A: 888
Humanism (Work of the humanists) H: 431
Hypatia H: 475
Philosophy (Ancient philosophy) P: 386-387
Plato (Plato's place in Western thought) P: 569
Plotinus P: 574
- Neoprene**
Rubber (Special-purpose rubbers) R: 504
- Neopterygian** [animal]
Fish (The first modern fish) F: 171
- Neoptolemus** [legendary figure]
Priam P: 774
- Neorealism** [art]
Italian literature (The 1900's) I: 495
Italy I: 506
Motion picture (Postwar realism) M: 869 with picture

Neosho River [Oklahoma]Lake O' The Cherokees L: 42 *with map***Neo-Volcanic Chain** [region of Mexico]

Mexico (The Plateau of Mexico) M: 460

NEP See New Economic Policy in *this index***Nepal** [country] N: 124 *with pictures and maps*

Flag picture on F: 204

Food picture on F: 333

Food supply picture on F: 345

Himalaya picture on H: 234

Standard of living (table) So: 834

Nepalese [people]

Sikkim (People) S: 456

Nepalese swift [bird]

Animal picture on A: 475

Nepali [language]

Nepal (People) N: 125-126

Nepenthe [legend]

Douglas, Norman D: 312

Nephele [legendary figure]

Golden Fleece G: 255

Nephrectomy

Surgery (Some common surgical operations)

So: 1006

Nephridium [zoology]

Earthworm picture on E: 39

Nephrite [mineral]

Jade (Nephrite) J: 20

Nephritis [disease] N: 127

Bright, Richard B: 609

Nephroblastoma [disease]

Cancer (Cancer in children) C: 169

Nephron [anatomy]

Human body (The urinary system) H: 424

Kidney (How the kidneys produce urine)

K: 311 *with diagrams***Nephtys** [Egyptian goddess]Mythology (The Great Ennead) M: 976 *with**picture*; (The Osiris myth) M: 976-977**Nepotism** [politics] N: 128**Neptune** [planet] N: 128 *with picture*

Astronomy (Finding new planets) A: 848

Kuiper belt K: 392

Planet P: 507 *with pictures*

Satellite (Currently active satellites) S: 150a;

(table: Satellites of the solar system)

S: 150b; (History of satellite study)

S: 150c-150d

Science (Forming a hypothesis) S: 195

Space exploration (Probes to Jupiter and

beyond) So: 710

Triton T: 448

Voyager V: 451

Neptune [Roman mythology] N: 128 *with pic-**ture*See also Poseidon in *this index*

Mythology (table) M: 980

Neptune [ship]

Shipwreck (table: Major shipwrecks) S: 428

Neptunist

Geology (The rock dispute) G: 98-99

Neptunium [element] N: 130

Transuranic element T: 401

Nereid [satellite]

Neptune (Satellites and rings) N: 129

Nereids [Greek mythology] N: 130

Mythology (Greek divinities) M: 979

Nymph N: 633

Nereus [Greek mythology] N: 130

Nereids N: 130

Neri, Saint Philip [Italian religious leader]

N: 130

Neris River [Lithuania]

Lithuania picture on L: 388

Nernst, Walther Hermann [German chemist]

Nobel Prizes (Chemistry: 1920) N: 442

Nero [Roman emperor] N: 130 *with portrait*

Agrippina the Younger A: 162

Claudius C: 657

New Testament (The life of Paul) N: 288

Petronius P: 351

Seneca, Lucius Annaeus S: 296

Nero, Tiberius Claudius [Roman emperor] SeeClaudius in *this index***Nero Claudius Caesar Drusus Germanicus**See Nero in *this index***Nerone** [opera by Boito]

Boito, Arrigo B: 440

Neruda, Pablo [Chilean poet] N: 131

Chile (The arts) C: 463

Latin-American literature (The early 1900's)

L: 113

Nerve [Roman emperor]

Rome, Ancient (table) R: 447

Trajan T: 369

Nervel, Gérard de [French poet] N: 131**Nerve** [anatomy]See also Nervous system in *this index*

Human body (The nervous system) H: 425;

diagram on H: 422

Marine biology (What marine biologists do)

M: 204-205

Nervous system N: 132 *with diagrams; dia-**grams on N: 134*

Neuralgia N: 152

Neuritis N: 152

Pain (How the body feels pain) P: 21

Nerve agent

Chemical-biological-radiological warfare

(Chemical) C: 396

Nerve cell [anatomy]See also Neuron in *this index*Cell (Shapes of cells) C: 328 *with picture;*

(Death of a cell) C: 332

Nerve fiber See Axon; Dendrite in *this index***Nerve impulse** See Impulse in *this index***Nerve membrane** [anatomy]

Nervous system (Parts of a neuron) N: 133

Nerve net [zoology]

Nervous system (In invertebrates) N: 136

Nervi, Pier Luigi [Italian architect] N: 131

Architecture picture on A: 607

Nervous breakdown N: 131

Mental illness M: 404

Nervous system [anatomy] N: 132 *with dia-**grams*

Allergy (Emotional factors) A: 373

Butterfly (The internal organs) B: 739 *with dia-**gram*

Depressant D: 149

Fish (Nervous system) F: 163

Heart H: 132; (Regulating the heart rate)

H: 135-136

Human body (The nervous system) H: 425

Insect (Nervous system) I: 289 *with diagram*

Learning disabilities (Causes) L: 165

Leprosy L: 203

Mammal (Internal organ systems) M: 119-120

Neurofibromatosis N: 152

Neurology N: 152

Reflex action (How reflex action occurs)

R: 195

Tissue (Animal tissues) T: 299

See also the list of *Related Articles in the**Nervous system article***Nervous tissue** [anatomy]

Human body (Cells and tissues) H: 417-418

Tissue (Animal tissues) T: 299

Neskihi [writing]

Islamic art (Calligraphy) I: 468

Ness, Eliot [American crime fighter] N: 136 *with**portrait***Ness, Evaline** [American artist]

Caldecott Medal (table: 1967) C: 26

NessieLoch Ness monster L: 410 *with picture***Nessler, Charles L.** [German-American inventor]

Hairdressing (The 1900's) H: 12

Nessus [Greek mythology]

Hercules (The death of Hercules) H: 199

Nest

Animal (Animal homes and communities)

A: 501

Ant (Nests) A: 523 *with picture*Bird (Building a nest) B: 356 *with pictures*

Chipmunk picture on C: 513

Hornet H: 340

Hummingbird (The ruby-throated humming-

bird) H: 435 *with picture*

Rhea R: 290

Spider (How spiders use silk) So: 786 *with**picture*

Squirrel (Obtaining shelter) So: 816

Stork picture on So: 911

Termite (Life and habits) T: 173-174

Wasp (Nests) W: 111 *with pictures*

Weaver picture on W: 172

Nest-egg gourdGourd G: 281 *with picture***Nester** [U.S. history]

Western frontier life in America (The cattle

boom) W: 234

Nestlé [company]

Manufacturing (table) M: 170

Nestor [legendary figure]

Messenia M: 423

Nestor Company

Hollywood H: 294

Nestorius [early Christian]

Cyril of Alexandria, Saint C: 1208

Roman Catholic Church (Conflict with the

East) R: 406-407

Nestos, R. A. [American political leader]

North Dakota (table) N: 513

Net [computing] See Internet in *this index***Net** [fabric] N: 137 *with pictures*See also Net, Fishing in *this index*

Textile (Other textiles) T: 215

Net [sports]

Table tennis (Equipment) T: 3

Tennis (The court and equipment) T: 161 *with**diagram; diagram on T: 162***Net, Fishing**Fishing industry (Nets) F: 183 *with pictures*Oyster (Oyster harvesting) O: 892 *with picture***Net asset value**

Mutual fund M: 969

Net ball

Tennis (The serve) T: 163

Net blotch [plant disease]

Barley (Diseases and insect pests) B: 113

Net force [physics] See Resultant force in *this**index***Net income**

Economics (table) E: 58

Income (Types of income) I: 100

Net material product [economics]

Gross domestic product (Interpreting the GDP)

G: 399-400

Net national product

National income (Determining national

income) N: 37-38

Net price

Discount (Trade discount) D: 224

Net tonnage

Ship (Nautical measurements) S: 416

Netanyahu, Benjamin [Israeli political leader]N: 137 *with portrait*

Israel (Recent developments) I: 489

Netcasting See Push technology in *this index***Netherlands N: 138** *with pictures and maps*

Aruba A: 764

Euro E: 378

Euthanasia (Active and passive euthanasia)

E: 421

Flood (Seacoast floods) F: 237

Agriculture

Tulip T: 482

Art and architecture

Painting (The Dutch masters) P: 62 *with pic-**tures*

Communications and mass media

Postal services (Competition and privatiza-

tion) P: 707

History

Netherlands (History) N: 148 *with pictures*

Asia (The Western conquest of Asia) A: 806

Belgium (Habsburg rule) B: 233

Brazil (Portuguese rule) B: 583

Colonialism (Early European colonialism)

C: 813-814

Dutch East India Company D: 392

Indonesia I: 226; (Dutch rule) I: 237;

(Independence) I: 237; (Indonesia under

Sukarno) I: 238

Luxembourg (History) L: 531

Marine (History) M: 204

Navy (The beginning of modern navies) N: 79

Palmares P: 110

South Africa (History) So: 617

World War II (table: The Allies) W: 471; (The

invasion of the Low Countries) W: 473

People

Netherlands (People) N: 139

Christmas (In the Netherlands, Belgium, and

Luxembourg) C: 531 *with picture*

Ice skating (History) I: 16

Social and cultural life

Marriage (Laws concerning marriage)

M: 220-221

Trade

Benelux B: 248

Transportation

See also the list of *Related Articles in the**Netherlands article and Dutch ... in this**index*

Netherlands, Kingdom of the [European history]
 Belgium (The Brabant Revolution) B: 233; *map on* B: 234
 Netherlands (The Kingdom of the Netherlands) N: 139

Netherlands Antilles [islands, Caribbean]
 N: 151
 Aruba A: 764
 Netherlands (The Kingdom of the Netherlands) N: 139; (Political changes) N: 150

Netherlands Indies [former name, Indonesia]
 Indonesia (Dutch rule) I: 237

Netherlands New Guinea [former name, New Guinea]
 New Guinea (History) N: 207

Netherlands West Indies *See* Netherlands Antilles *in this index*

Netherstocks
 Clothing (The Renaissance) Ci: 700

Netleaf hackberry [shrub]
 Hackberry H: 3

NetLibrary [electronic library]
 Library (The growth of information and technology) L: 238

NetPost Mailing Online [service]
 Postal Service, United States (Electronic services) P: 700

Nets, New Jersey
 Basketball (table) B: 150

Netsuke [ornament]
 Ivory (Ivory carving) I: 521 *with picture*

Nettle [plant] N: 151 *with picture*

Nettle rash [disorder]
 Hives H: 270

Network [astronomy]
 Galaxy (Groups of galaxies) G: 8a

Network [communications]
See also Computer network *in this index*
 Radio (Stations and networks) R: 90; (The start of broadcasting) R: 92
 Television (The national networks) T: 114

Network, Computer *See* Computer network *in this index*

Network computer
 Internet (New technologies) I: 350f

Network interface card [electronic device]
 Computer (A modem or network interface card) Ci: 915

Network time
 Advertising (Television) A: 73-74

Networking
 Careers (Finding job opportunities) C: 217

NEXRAD [network]
 Weather (Weather radar) W: 162-163

Netzahualcōyotl [city, Mexico] N: 152

Neuber, Caroline [German actress]
 Drama (Germany) D: 336

Neuberger, Richard Lewis [American political leader]
 Peace Corps (History) P: 208

Neue Rheinische Zeitung [magazine]
 Marx, Karl (Marriage and move to Paris) M: 236-237

Neuilly, Treaty of [1919]
 World War I (The Paris Peace Conference) W: 465-466

Neumann, Balthasar [German architect]
 Architecture (Baroque architecture) A: 622

Neumann, Saint John Nepomucene [American religious leader] N: 152

Neume [symbol]
 Classical music (The Middle Ages) Ci: 645-646

Neumeier, John [American choreographer]
 Ballet (Ballet in Europe) B: 54

Neural circuit [physiology]
 Nervous system (Simple pathways) N: 134

Neural network
 Artificial intelligence (Knowledge representation and reasoning) A: 760

Neural tube [central nervous system]
 Reproduction, Human (Development of organs and organ systems) R: 248

Neural tube defect [disorder]
 Folic acid F: 315

Neuralgia [disorder] N: 152

Neuritis [disorder] N: 152
 Neuralgia N: 152

Neurobiology
 Biology (table) B: 317; (The growth of modern biology) B: 319-320
 Brain B: 550b

Zoology (History) Z: 610-611

Neuroblastoma [disease]
 Cancer (Cancer in children) C: 169

Neurodermatitis
 Eczema E: 74

Neurofibroma [disorder]
 Neurofibromatosis N: 152

Neurofibromatosis [disorder] N: 152

Neurofibromin [protein]
 Neurofibromatosis N: 152

Neurogenic shock [disorder]
 Shock S: 429

Neuroleptic drug
 Psychiatry (Somatic therapy) P: 845

Neurological surgery
 Medicine (table) M: 369

Neurologist [career]
 Neurology N: 152

Neurology N: 152
 Medicine (table) M: 369

Neuromancer (book by Gibson)
 Science fiction (Recent developments) S: 206

Neuromuscular junction [anatomy]
 Myasthenia gravis M: 970f

Neuron [anatomy]
 Nervous system (How the nervous system works) N: 132 *with diagram*; (Parts of a neuron) N: 133; *diagrams on* N: 134
 Brain (The parts of the brain) B: 550b; (The chemistry of the brain) B: 555
 Human body (The nervous system) H: 425

Neuropathology [medicine] N: 153

Neurophysiology [science]
 Galvani, Luigi G: 17

Neuroptera [entomology]
 Insect (table) I: 300; *picture on* I: 281

Neuroscience
 Brain B: 550a
 Psychology (Modern psychology) P: 850

Neurosis [psychology] N: 153
 Abnormal psychology (Theories of abnormal psychology) A: 12
 Clinical psychology (Psychotherapy and consultation) Ci: 681
 Introvert I: 353
 Mental illness M: 404
 Psychiatry (Psychiatric disorders) P: 845

Neurosurgery
 Medicine (table) M: 369
 Cushing, Harvey C: 1200

Neurotoxin [poison]
 Snake (Fangs and venom glands) S: 528-529

Neurotransmitter [physiology]
 Alcoholism (Causes of alcoholism) A: 337
 Antidepressant A: 553
 Brain (The brain's chemical messengers) B: 556; (Brain chemistry and mental illness) B: 556
 Depression D: 151
 Dopamine D: 309
 Mental illness (Chemical imbalances in the brain) M: 406
 Nervous system (Transmission across synapses) N: 135
 Ritalin R: 350
 Schizophrenia S: 176
 Serotonin S: 318
 Smoking S: 520

Neuschwanstein Castle [Bavaria]
 Germany *picture on* G: 145
 Ludwig II L: 515

Neuse River
 North Carolina (Rivers, waterfalls, and lakes) N: 484

Neusiedler Lake [Austria]
 Austria (The land and climate) A: 934

Neustria [former region]
 Charlemagne *map on* C: 379

Neuter gender
 Gender G: 80
 Noun (Gender) N: 553

Neutering
 Cat (Birth control) C: 295
 Pet (Birth control) P: 322
 Rabbit (Health) R: 49

Neutra, Richard Joseph [Austrian-American architect] N: 153 *with picture*

Neutral [mechanics]
 Transmission (How a manual transmission works) T: 378 *with diagram*

Neutral Buoyancy Laboratory
 Astronaut (Basic mission training) A: 832

Neutral corner
 Boxing (Fight rules) B: 529-530

Neutral nations
 Cold War Ci: 762; (The battle for the neutral nations) Ci: 769
 Neutrality N: 153
 Third World T: 258

Neutral Nations' Repatriation Commission
 Korean War (The end of the war) K: 382-383

Neutral trait [biology]
 Races, Human (Evolutionary theory) R: 53-54

Neutrality [political science] N: 153
 Austria (After World War II) A: 939-940
 International law (The laws of neutrality) I: 341
 Switzerland (Neutrality in the world wars) So: 1060

Neutrality, Principle of [economics]
 Taxation (Other principles of taxation) T: 54

Neutrality Act [1935]
 Roosevelt, Franklin Delano (Neutrality acts) R: 459

Neutrality Act [1939]
 Roosevelt, Franklin Delano (Neutrality acts) R: 458-459

Neutrality Proclamation [1793]
 Washington, George (Neutrality proclamation) W: 105

Neutralization [chemistry] N: 154

Neutralization [political science]
 Neutrality N: 153

Neutrino [atomic particle] N: 154 *with picture*
 Astronomy (Neutrino astronomy) A: 845
 Dark matter D: 37
 Jordan, Ernst Pascual J: 166
 Lepton L: 205
 Nuclear physics N: 596
 Observatory (Neutrino observatories) O: 645
 Pauli, Wolfgang P: 201
 Physics (Physics today) P: 442-443
 Radiation (Beta particles) R: 76
 Star (Hydrogen fusion) So: 846-847
 Subatomic particle (Kinds of subatomic particles) So: 937
 Sun (Analyzing neutrinos) So: 984
 Supernova So: 994

Neutrino astronomy
 Astronomy (Neutrino astronomy) A: 845

Neutrino detector [machine]
 Neutrino N: 154 *with picture*

Neutrino observatory
 Observatory (Neutrino observatories) O: 645

Neutron [atomic particle] N: 155
 Alpha particle A: 381
 Atom (The parts of an atom) A: 870 *with diagrams*; (The properties of atoms) A: 871 *with diagrams*; (Forces in the nucleus) A: 873
 Baryon B: 122
 Chadwick, Sir James C: 368
 Cosmic rays (Galactic cosmic rays) Ci: 1076
 Electricity (Electric charge) E: 191
 Element, Chemical (The periodic table of the elements) E: 219
 Fermi, Enrico F: 73
 Force (Kinds of force) F: 370
 Gluon G: 236
 Harkins, William Draper H: 61
 Kendall, Henry Way K: 258
 Matter (Structure of matter) M: 310
 Neutron star N: 155
 Nuclear energy (Atoms and nuclei) N: 581 *with diagram*; (Nuclear fission) N: 582; (Artificial fission) N: 590
 Nuclear physics N: 595
 Nuclear weapon (Fission weapons) N: 596; (Residual nuclear radiation) N: 599
 Physics (Uncovering the secrets of the atom) P: 442
 Quark Q: 7
 Radiation (In science) R: 75; (Radiation and radioactivity) R: 75; (Particle radiation) R: 76
 Star (Fusion in stars) So: 846; (Supernovae) So: 850
 Subatomic particle So: 936

Neutron activation analysis
 Radiation (In science) R: 75
 Radiochemistry R: 98

Neutron bomb [weapon]
 Bomb (Hydrogen bombs) B: 451-452

Neutron diffraction [physics]
 Molecule (Studying molecules) M: 693

Neutron star [astronomy] N: 155

Astronomy (Finding quasars and pulsars)

A: 849

Bell Burnell, Jocelyn B: 242

Black hole (Galactic black holes) B: 388

Cosmic rays (Galactic cosmic rays) Ci: 1076

Galaxy (Emissions from galaxies) G: 8b

Magnetism (The magnetism of other astronomical bodies) M: 60c

Pulsar P: 898

Relativity (Gravitational waves) R: 212

Star So: 840; (Neutron stars) So: 851

Supernova So: 994

Telescope (X-ray telescopes) T: 109

X rays (In outer space) X: 543

Neutropenia [disorder]

Blood (White-cell abnormalities) B: 414

Neutrophil [physiology]Blood (Protecting against disease) B: 410; *diagram on B: 409*

Immune system (Other white blood cells) I: 88

Neuville, René [French anthropologist]

Prehistoric people (table) P: 752

Neva River [Russia]

Saint Petersburg [Russia] (The city) S: 54

Nevada N: 156 *with pictures and maps*United States *picture on U: 124**See also the list of Related Articles in the Nevada article***Nevada, University of** N: 178Nevada (Schools) N: 160-161 *with picture*; (Libraries) N: 161**Nevada Falls** [falls, California]

Yosemite National Park (Waterfalls) Y: 570

Nevada Historical Society

Nevada (Museums) N: 161

Nevada State Museum [Carson City]

Nevada (Museums) N: 161

Nevado del Ruiz [volcano, Colombia]

Colombia (The Andes Mountains) Ci: 782

Volcano (table) V: 441 *with map***Neve, Felipe de** [Spanish colonial official]

Los Angeles (Settlement) L: 469

Nevelson, Louise [American sculptor] N: 178*with picture*

Sculpture (As artistic expression) S: 229;

(Assemblages) S: 257-258 *with picture***Never Cry Wolf** [book by Mowat]

Mowat, Farley M: 903

Never-Never Land [fictional place]

Peter Pan P: 325

Neves, Tancredo de Almeida [Brazilian political leader]

Brazil (Return to civilian government) B: 586

Neville, Emily Cheney [American author]

Newbery Medal (table) N: 359

Neville, Keith [American political leader]

Nebraska (table) N: 110

Neville, Richard [English political leader]

Warwick, Earl of W: 44

Nevins, Allan [American historian] N: 178**Nevis** [island, West Indies]

Saint Kitts and Nevis S: 38

Nevis, Ben *See Ben Nevis in this index***Nevsky Prospekt** [street]Saint Petersburg [Russia] *picture on S: 54***New, Harry S.** [American government official]

Coolidge, Calvin (Cabinet) Ci: 1032

Hoover, Herbert Clark (table) H: 330

New Age movement [cultural movement]

N: 178

New Albion [U.S. history]

California (Spanish and English exploration) C: 60

New American Bible

Bible (Modern English translations) B: 286-287

New American Practical Navigator, The [book by Bowditch]

Bowditch, Nathaniel B: 517

New American Standard Bible

Bible (Modern English translations) B: 286-287

New Amsterdam [former name]

Buffalo B: 676

New Amsterdam [U.S. history]

New York City (People) N: 331; (Settlement)

N: 341 *with picture*; (English rule) N: 341

Minuit, Peter M: 613

Netherlands (Prosperity and power) N: 148-149

New York (Exploration and settlement) N: 314 *with picture*

Stuyvesant, Peter So: 935

New Arabian Nights [stories by Stevenson]

Stevenson, Robert Louis (Other writings)

So: 898

New Art of Writing Plays, The [book by Vega]

Vega, Lope de V: 292

New Atlantis, The [book by Bacon]

Science (The scientific revolution) S: 198-199

New Babylonian Empire [Asian history]

Babylon (The New Babylonian Empire) B: 12

Chaldea C: 370

World, History of the (Civilizations of southwest Asia) W: 426

New Bedford [Massachusetts] N: 179**New Bedford Whaling Historical Park**

National Park System (table: National historical parks) N: 57

New Bern [North Carolina] N: 179

North Carolina (Colonial days) N: 492

New Britain [city, Connecticut] N: 179**New Britain** [island, Papua New Guinea] N: 179

Bismarck Archipelago B: 382

New Brunswick [province, Canada] N: 180 *with pictures and maps*

Acadia A: 21

Atlantic Provinces A: 868

Canada, Government of *picture on C: 133*

Tilley, Sir Samuel Leonard T: 287

*See also the list of Related Articles in the New Brunswick article***New Brunswick** [city, New Jersey] N: 179**New Brunswick, University of** N: 199New Brunswick *picture on N: 185***New Brunswick Museum** [Saint John]New Brunswick (Museums) N: 185 *with picture*

Saint John (Description) S: 35

New Caledonia [islands, Pacific] N: 200 *with picture***New Castle** [Delaware]

Delaware (Places to visit) D: 102

New Castle [Stuttgart]Stuttgart *picture on So: 935***New Castle and Frenchtown Railroad**

Delaware (Transportation) D: 108

New Church

Amsterdam (The city) A: 443-444

New city

City (Future cities) Ci: 593

City planning (Building new communities) Ci: 601

New City Hall [Munich]Munich *picture on M: 927***"New Colossus, The"** [poem by Lazarus]

Statue of Liberty (The statue as symbol) So: 872-873

New Columbia [proposed U.S. state]

Washington, D.C. (Government changes) W: 87-88

New comedy

Drama (New Comedy) D: 327

Greek literature (Drama) G: 377

New Connecticut [former name]

Vermont (Independent republic) V: 334

New Criticism [literature]

Criticism (History of literary criticism) Ci: 1146-1147

Ransom, John Crowe R: 140

New Deal [Canadian history]

Bennett, Richard Bedford (Economic reforms) B: 253

New Deal [U.S. history] N: 200 *with picture*

Democratic Party (The New Deal) D: 127

Government regulation G: 293

Great Depression (The New Deal) G: 341

Great Society (Development) G: 349

Hopkins, Harry Lloyd H: 333

Hughes, Charles Evans H: 408

Ickes, Harold Le Claire I: 24

Johnson, Lyndon Baines (Election to the House) J: 146

La Guardia, Fiorello Henry L: 31

Republican Party (From 1933 to 1953) R: 256

Roosevelt, Franklin Delano R: 452; (The New Deal) R: 457; (The Supreme Court) R: 458-459

Socialism (World Wars I and II) So: 561

Taxation (Taxation in the United States) T: 54

United States, History of the (Roosevelt, recovery, and reform) U: 189

Wallace, Henry Agard W: 16

Works Progress Administration W: 405

New Negro, The [book by Locke]

Locke, Alain LeRoy L: 412

New Delhi [city, India] N: 202 *with picture*City *picture on Ci: 591*

Delhi D: 115

India I: 108; *picture on I: 111***New Democracy Party** [political party]

Greece (Politics) G: 353

New Democratic Party [Canada] N: 203

British Columbia (Politics) B: 628

Canada, Government of (Political parties) C: 138-139

McLaughlin, Audrey Marlene M: 343

Political party (Other parties) P: 636-637

Saskatchewan (Political changes) S: 147; (Economic changes) S: 147

Woodsworth, James Shaver W: 396

New Development Policy [Malaysian history]

Malaysia (Recent developments) M: 102

New drug

Drug (The new drug application) D: 358

Pure food and drug laws (Drugs and devices) P: 908

New Economic Mechanism [Hungarian history]

Hungary (Beginnings of change) H: 448

New Economic Policy [Malaysian history]

Malaysia (Building national unity) M: 102

New Economic Policy [Russian history]

Communism (Under Lenin) Ci: 892

Lenin, V. I. (Civil war) L: 194-195

Russia (Civil war and the formation of the U.S.S.R.) R: 553

Union of Soviet Socialist Republics (The New Economic Policy) U: 36

New England [region, U.S.] N: 203

American literature (Colonial literature [1608-1764]) A: 414

Colonial life in America (Economic reasons)

Ci: 787-788; (Geographic divisions)

Ci: 789 *with map*; (Government and law enforcement) Ci: 794

Cotton (American colonists) Ci: 1092

Dialect D: 180

Puritans (History) P: 910

Textile (The Industrial Revolution) T: 219

United States (Regions) U: 99 *with picture and map*

United States, History of the (New England) U: 153

New England, Council for [U.S. history]

Plymouth Colony (Life in Plymouth Colony) P: 583

Plymouth Company P: 585

New England, Dominion of [U.S. history]

N: 203

Plymouth Colony (Later years) P: 584

New England, United Colonies of [U.S. history]New England Confederation N: 204 *with map***New England Anti-Slavery Society** [U.S. history]

Massachusetts (Progress as a state) M: 292

New England aster [plant]Aster A: 823 *with picture***New England Confederation** [U.S. history]N: 204 *with map***New England Council** [1620] *See New England, Council for in this index***New England Library Information Network**

Library (The growth of information and technology) L: 238

New England Mind, The [book by Miller]

American literature (The study of American literature) A: 426

New England Patriots

Football (National Football League) F: 364

New England Primer [textbook]

Colonial life in America (Education) Ci: 803-804

Literature for children (The Puritans) L: 361 *with picture***"New England Reformers"** [essay by Emerson]

Emerson, Ralph Waldo (His prose works) E: 259

New England Telephone Company

Telephone (The Bell System) T: 100

New England Triptych [music by Schuman]

Schuman, William S: 188

New English Bible, The

Bible (Modern English translations) B: 286-287

New English Dictionary on Historical Principles, A

Dictionary (Modern dictionaries) D: 194

New Federalism

Nixon, Richard Milhous (The national scene)
N: 433

New France [Canadian history] N: 204 *with picture and map*

Canada, History of (The development of New France) C: 141-143 *with picture and map*
Quebec (Indian days) Q: 30; Q: 34
Tennessee (Exploration) T: 153

New Freedom, The [book by Wilson]

Wilson, Woodrow (Presidential candidate)
W: 322

New French Revue, The [newspaper]

French literature (The four masters) F: 522
Gide, André G: 187

New Frontier [U.S. history]

Democratic Party (The New Frontier) D: 127
Kennedy, John Fitzgerald K: 260; (The 1960 campaign) K: 263-264; (The New Frontier) K: 264

New Frontier Party [political party]

Japan (Political changes) J: 59; (Recent developments) J: 59

New Granada [Colombian history] See New Kingdom of Granada in this index**New Grub Street** [book by Gissing]

Gissing, George Robert G: 202

New Guinea [island, Pacific] N: 206 *with pictures and maps*

Clothing picture on Ci: 689
Indonesia (Irian Jaya) I: 234
Pacific Islands (Villages) P: 5 *with picture*;
(Clothing) P: 6 *with picture*
Rain forest picture on R: 126a
Tattooing T: 51
World War II (The South Pacific) W: 487-488
See also the list of Related Articles in the New Guinea article

New Guinea, Trust Territory of [UN]

New Guinea (History) N: 207
Pacific Islands (Recent developments) P: 12-13

New Hampshire N: 208 *with pictures and maps*

Colonial life in America (Development of the Thirteen Colonies) Ci: 789 *with map*
United States, History of the (New England) U: 153

Vermont (Independent republic) V: 334

See also the list of Related Articles in the New Hampshire article

New Hampshire, University of N: 228 *with picture***New Hampshire chicken**

Chicken (American class chickens) C: 441 *with picture*; (table) C: 443

New Hampshire College of Agriculture and Mechanic Arts

New Hampshire, University of N: 228

New Hampshire Gazette [newspaper]

New Hampshire (Communication) N: 222-223

New Hampshire Grants [U.S. history]

Vermont (Land disputes) V: 334

New Harbinger Party [political party]

Japan (Political changes) J: 59

New Harmony [Indiana] N: 228 *with pictures*

Indiana (Schools) I: 200-201; (Places to visit) I: 206; (Early statehood) I: 216
Owen, Robert (New Harmony) O: 882

New Harmony Gazette [magazine]

Wright, Frances W: 506

New Haven [Connecticut] N: 229 *with picture*

Blue laws B: 420
Eaton, Theophilus E: 48

New Haven Colony [U.S. history]

Connecticut (Expanding the colony) Ci: 968

New Hebrides Islands [Pacific]

See also Vanuatu in this index

Mythology (Pacific Islands divinities) M: 982

New Heloise, The [book by Rousseau]

Rousseau, Jean-Jacques (His ideas) R: 492

New historicism [literature]

Criticism (History of literary criticism) Ci: 1146-1147

New Holland

Australia (Exploring the new land) A: 922

New Image movement [art]

Painting (New image painting) P: 87 *with picture*

New immigration

Immigration (The third wave) I: 82

New Industrial State, The [book by Galbraith]

Galbraith, John Kenneth G: 9

New International Version

Bible (Modern English translations) B: 286-287

New Ireland [island, Papua New Guinea] N: 229

Bismarck Archipelago B: 382
Sculpture (Pacific Islands sculpture) S: 241-242 *with picture*

New Jersey [state] N: 230 *with pictures and maps*

Boy Scouts (Organization) B: 540
Colonial life in America (Development of the Thirteen Colonies) Ci: 789 *with map*
Ellis Island E: 244
New York City (Metropolitan area) N: 330-331; (Trade) N: 333-334

See also the list of Related Articles in the New Jersey article

New Jersey [ship]

Battleship (The modern battleship) B: 172-173

New Jersey, College of

Princeton University (History) P: 795
Tennent, William T: 133

New Jersey Devils

Hockey (table: National Hockey League) H: 281

New Jersey Nets

Basketball (table) B: 150

New Jersey Plan [U.S. history]

Constitution of the United States (The compromises) Ci: 1000

New Jersey (The Revolutionary War) N: 250-251

Paterson, William P: 196

New Jersey State Aquarium [Camden]

New Jersey (Places to visit) N: 240

New Jersey State Museum [Trenton]

New Jersey (Museums) N: 235

New Jersey Turnpike

New Jersey (Transportation) N: 247-248

New Jerusalem, The [religious group]

Swedenborgians So: 1035

New Journalism

Wolfe, Tom W: 378

New Kingdom [Egyptian history]

Egypt, Ancient (The New Kingdom) E: 143
Painting (Egyptian painting) P: 40-41

New Kingdom of Granada

Bogotá B: 437

Colombia (History) Ci: 783

New Left [political science] N: 254

Socialism (The New Left) So: 561

New Life [poems by Dante]

Dante Alighieri (His works) D: 34

New Living Translation [Bible]

Bible (Modern English translations) B: 286-287

New London [city, Connecticut] N: 255**New London Naval Submarine Base**

[Connecticut] N: 255

New Look [fashion]

Dior, Christian D: 215

New Madrid Fault Zone

Earthquake (Recording, measuring, and locating earthquakes) E: 37-38

Kentucky (Land regions) K: 285-286

Missouri (Exploration and settlement) M: 669

New Market [race track]

Horse racing (History) H: 366

New mathematics N: 255

Mathematics (Trends in teaching mathematics) M: 308

Set theory (History) S: 322

New Meaning of Treason, The [book by West]

West, Rebecca W: 199

New Mecklenburg

West Virginia (White settlement) W: 226

New Medina [district]

Casablanca C: 270

New Mexico N: 256 *with pictures and maps*

Hispanic Americans (In the Southwest) H: 250
Mission life in America (Western missions) M: 618-619

Peonage P: 276

United States, History of the picture on U: 151

See also the list of Related Articles in the New Mexico article

New Mexico, University of N: 277

New Mexico picture on N: 260

New Mexico State University N: 277**New Mexico Territorial Library** [Santa Fe]

New Mexico (Libraries and museums) N: 260

New moon

Moon (Phases) M: 783-784

New Mosque [Turkey]

Turkey picture on T: 503

New National Party

See also National Party [South Africa] in this index

New National Party [South Africa]

Hertzog, James Barry Munnik H: 217
South Africa (Political parties) So: 609; (The rise of Afrikaner nationalism) So: 619

New Nationalism [U.S. history]

Roosevelt, Theodore ("Bull Moose" Candidate) R: 471-472

Taft, William Howard (Election of 1912) T: 12

New Negro movement See Harlem

Renaissance in this index

New Netherlands [U.S. history] N: 277

Dutch West India Company D: 393
Minuit, Peter M: 613
Netherlands (Prosperity and power) N: 148-149

New York N: 290; (Exploration and settlement) N: 314

Stuyvesant, Peter So: 935

New Novel movement

French literature (The 1950's and 1960's) F: 523

Novel (After World War II) N: 574

New Objectivity [artistic style]

Beckmann, Max B: 197

New Order [German history]

Hitler, Adolf (The New Order) H: 267

New Orleans [Louisiana] N: 278 *with pictures and maps*

Bechet, Sidney B: 196
Civil War (Capture of New Orleans) Ci: 629
Ironwork, Decorative picture on I: 454
Jazz (Early jazz) J: 70
Louisiana L: 478 *with picture*; (Places to visit) L: 488 *with picture*; (table: Average monthly weather) L: 492
Louisiana Purchase L: 502
Mardi Gras M: 197
Mississippi River picture on M: 648

New Orleans [boat]

Louisiana (Territorial days) L: 498; picture on L: 499

New Orleans (The early 1800's) N: 284

Roosevelt, Nicholas J. R: 463

New Orleans, Battle of [1815]

Jackson, Andrew (Glory at New Orleans) J: 9; picture on J: 10
Louisiana (Statehood) L: 498; picture on L: 499
War of 1812 ("The needless battle") W: 31 *with picture*; (New Orleans) W: 33

New Orleans, University of

New Orleans (Education) N: 281

New Orleans Hornets [basketball team]

Basketball (table) B: 150

New Orleans (Recreation) N: 282

New Orleans Jazz National Historical Park

[Louisiana]

National Park System (table: National historical parks) N: 56-57

New Orleans Saints

Football (National Football League) F: 364

New Orleans Union [newspaper]

Louisiana (Communication) L: 495

New Palace of Westminster [London]

Parliament (The Houses of Parliament) P: 174

New Panama Canal Company [French history]

Panama Canal (The French failure) P: 125

New peso [money]

Money picture on M: 704

New Philadelphia [former city]

Montgomery (Government and history) M: 766

New Place [Stratford]

Shakespeare, William (The years of fame) S: 348

New Play, A [play by Tamayo y Baus]

Spanish literature (The 1800's) So: 761

New populists [politics]

Populism (Influences of populism) P: 675

New process system

Corn (The dry-milling industry) Ci: 1061

New Providence Island

Bahamas B: 28 *with map*

New Purchase [U.S. history]

Indiana (Early statehood) I: 216

New Religions [religious groups]

Shinto S: 401
Japan (Religion) J: 40-41

New religious movement See *Cult in this index*

New Religious Right [religious movement]
Fundamentalism F: 557

New Republic [magazine]
Lippmann, Walter L: 346

New Revised Standard Version
Bible (Modern English translations) B: 286-287

New River [aqueduct, London]
Aqueduct (Later aqueducts) A: 581

New River [U.S.]
Kanawha River K: 212
Virginia (Rivers and lakes) V: 412
West Virginia picture on W: 217
New River Gorge Bridge [West Virginia]
Bridge (table: Steel arch) B: 603
West Virginia (Places to visit) W: 216
New River Gorge National River [West Virginia]
National Park System (table: National park-ways and other national parklands) N: 56

New Salem [Illinois]
Lincoln, Abraham (Youth on the frontier) L: 313

New Salem State Historic Site [Illinois]
Illinois (Places to visit) I: 62 with picture
Springfield So: 807

New School University
New York City (Education) N: 332

New Scotland
Nova Scotia N: 555

New Scotland Yard [London]
Police (In other countries) P: 623

New South Wales [state, Australia] N: 285 with picture and map

Queensland (History) Q: 40

New Spain [Mexican history]
Mexico City (Spanish rule) M: 478

New Stone Age See *Neolithic Period in this index*

New Sufferings of Young W., The [book by Plenzdorf]
German literature (German literature after 1945) G: 142

New Sweden [U.S. history] N: 286
Delaware (Exploration and early settlement) D: 110

Stuyvesant, Peter So: 935

New Symphony Orchestra

Varèse, Edgard V: 285

New Taiwan dollar [money]

Yuan Y: 575

New Territories [region, Hong Kong]
Hong Kong H: 316

New Testament N: 287 with picture
Bible B: 279; (table) B: 281; (The New Testament) B: 282 with pictures
Christianity (Beliefs) C: 524
Four Horsemen of the Apocalypse F: 437 with picture
Gospels G: 277
Simon, Saint S: 467
See also the list of Related Articles in the New Testament article

New Thought [philosophy] N: 288

New Tokyo International Airport
Tokyo (Transportation) T: 318

New town
City (Future cities) Ci: 593
City planning (Building new communities) Ci: 601 with picture
Housing (New towns) H: 390
Hong Kong (Way of life) H: 317
Washington, D.C. (Metropolitan area) W: 80-81

New Town [Chicago]
Chicago (The North Side) C: 423-424

New traditionalist [music]
Country music (Modern country music) Ci: 1098c-1098d

New Ulm [Minnesota]
Indian wars (The Sioux wars) I: 194

New Valley
Egypt (Recent developments) E: 133-134

New Valley Corporation
Western Union W: 241

New Variorum Edition [book by Furness]
Shakespeare, William (Editions of the 1700's and 1800's) S: 368

New Voyage Around the World, A [book by Dampier]
Dampier, William D: 24

New Wave [arts]

France (Motion pictures) F: 464
Motion picture (The New Wave in France) M: 870 with picture

Popular music (New forms of rock) P: 671
Rock music (Disco and punk) R: 380
Science fiction (Growing popularity) S: 205-206

New Way to Pay Old Debts, A [play by Massinger]

Massinger, Philip M: 296
New Westminster [city, British Columbia] N: 288

New Wind in a Dry Land [book by Laurence] Laurence, Margaret L: 122

New wool
Wool (Types of wool) W: 399

New World [geography] N: 289
Exploration (Exploring the New World) E: 444
Hemisphere H: 181
Indian, American I: 136
United States, History of the (Columbus) U: 151
World (How nations are grouped) W: 407

New World cotton
Cotton (New World cotton) Ci: 1088

New World monkey
Monkey M: 725 with pictures
Primate (Anthropoids) P: 778; diagram on P: 778b

New World Symphony [music by Dvořák] Dvořák, Antonín D: 394

New World culture [bird]
Vulture (New World vultures) V: 453 with pictures

New Year's Day N: 289 with picture
April Fools' Day A: 578

Islam (Holidays and celebrations) I: 465

New York [state] N: 290 with pictures and maps
Colonial life in America (Development of the Thirteen Colonies) Ci: 789 with map

Ellis Island E: 244
New York City (Trade) N: 333-334
United States, History of the (The drive for women's rights) U: 171
Vermont (Independent republic) V: 334
See also the list of Related Articles in the New York article

New York [magazine]
Magazine (History) M: 43-45

New York, City University of N: 321

New York, Port Authority of See *Port Authority of New York and New Jersey in this index*

New York, State University of N: 321
New York (Schools) N: 294

New York and Mississippi Valley Printing Telegraph Company
Western Union W: 241

New York Athletic Club
Track and field (Revival in the 1800's) T: 357

New York Botanical Garden
New York City (The Bronx) N: 328; (Parks) N: 338

New York Central Railroad
Railroad (Expansion in the United States) R: 115

New York City [New York] N: 322 with pictures and maps

Ballet (Ballet in the United States) B: 53
City Ci: 574

Hall of fame (The Hall of Fame for Great Americans) H: 22

Hispanic Americans (Where Hispanics live) H: 245; (Puerto Rican migration) H: 253

New York N: 290 with pictures; (table: Average monthly weather) N: 307

Painting (Europeans in America) P: 84
Police (Law and order in America) P: 624

September 11 terrorist attacks S: 310 with picture

Subway So: 949
Theater (Theater in the United States) T: 244

United Nations (Building UN Headquarters) U: 95

United States, History of the (The Middle Colonies) U: 154

United States capitals U: 199
See also the list of Related Articles in the New York City article

New York City Ballet

Balanchine, George B: 36
Ballet (Ballet in the United States) B: 53

Lincoln Center for the Performing Arts L: 327

New York City Center of Music and Drama
New York City (The arts) N: 336

New York City Marathon
Running R: 521

New York City Opera
Lincoln Center for the Performing Arts L: 327

New York City Transit Authority
New York City (Transportation) N: 334-335

New York College for the Training of Teachers [former name]
Teachers College, Columbia University (History) T: 64

New York Cotton Exchange
Cotton (Selling) Ci: 1091

New York Curb Market [organization]
American Stock Exchange A: 430

New York Daily News [newspaper]
New York (Communication) N: 312

New York fern [plant]
Plant picture on P: 521

New-York Gazette [newspaper]
New York (Communication) N: 312

New York Giants [football team]
Football (National Football League) F: 364
New York City (Sports) N: 338

New York Harbor
New York City (Trade) N: 333; (The growing city) N: 341

New York Herald [newspaper]
Journalism (The growth of U.S. newspapers) J: 174

New York Islanders
Hockey (table: National Hockey League) H: 281
New York City (Sports) N: 338

New York Jets
Football (National Football League) F: 364
Namath, Joe N: 4
New York City (Sports) N: 338

New York Journal [newspaper]
Hearst, William Randolph H: 131
Outcault, Richard Felton O: 879

New York Knickerbockers
Basketball (table) B: 150

New York City (Sports) N: 338

New York Life Insurance Company
Housing (Private housing projects) H: 390
Insurance (table) I: 315

New York Mercantile Exchange
Commodity exchange Ci: 873

New York Mets
Baseball (table) B: 130

New York City (Sports) N: 338

New York Military Band
Goldman, Edwin Franko G: 258

New York Nine [baseball team]
Baseball picture on B: 133

New York Peace Society [organization]
Peace (The 1800's and early 1900's) P: 206

New York Philharmonic [orchestra]
Bernstein, Leonard B: 271
Lincoln Center for the Performing Arts L: 327
Masur, Kurt M: 298

New York City (The arts) N: 336

New York Port Authority See *Port Authority of New York and New Jersey in this index*

New York Post [newspaper]
New York (Communication) N: 312

New York Public Library [New York City] N: 344

Lincoln Center for the Performing Arts L: 327
New York picture on N: 297

New York City (Libraries) N: 337

New York Rangers
Hockey (table: National Hockey League) H: 281

New York City (Sports) N: 338

New York Renaissance Big Five
Basketball (The history of professional basketball) B: 153-155

New York School of Philanthropy
Social work (History) So: 559

New York Shakespeare Festival
Shakespeare, William picture on S: 361

New York State Barge Canal System N: 345 with map

Canal (table) C: 164

Erie Canal E: 351

Great Lakes (Water routes to the sea) G: 345

Inland waterway (Other systems) I: 274

New York (Transportation) N: 311

New York State Museum [Albany]

New York (Museums) N: 297; *picture on* N: 296

New York Stock Exchange N: 345

Dow Jones averages D: 315
Great Depression (The stock market crash) G: 339

New York *picture on* N: 309

New York City (Finance) N: 334; (Financial District) N: 338

Stock exchange (How a stock exchange operates) So: 903

New York style pizza [food]

Pizza P: 504

New York Sun [newspaper]

Dana, Charles Anderson D: 24

Day, Benjamin Henry D: 52

Journalism (The growth of U.S. newspapers) J: 174

New York Symphony Society

Damrosch, Walter Johannes D: 24

New York Times, The [newspaper]

New York (Communication) N: 312

New York City (Communications) N: 335

Ochs, Adolph Simon O: 668

Raymond, Henry Jarvis R: 153

Sulzberger, Arthur Hays So: 971

Sulzberger, Arthur Ochs So: 971

New York Times Co. v. Sullivan [U.S. history]

Supreme Court of the United States (Freedom of speech) So: 1001; (table) So: 1002

New York Times Index, The [reference]

A Guide to Research Skills Research Guide: 31

New York Tribune [newspaper]

Dana, Charles Anderson D: 24

Greeley, Horace G: 379

Journalism (The growth of U.S. newspapers) J: 174

Linotype (History) L: 339

New York University N: 345**New-York Weekly Journal** [newspaper]

Journalism (Early American journalism) J: 174

New York (Under English rule) N: 314-315; *picture on* N: 317

Zenger, John Peter Z: 593

New York World, The [newspaper]

Crossword puzzle Ci: 1157

Journalism (The age of sensationalism) J: 174

Outcault, Richard Felton O: 879

Pulitzer, Joseph (His career) P: 887

New York World's Fair [1939-1940]

New York City (Queens) N: 329

World's fair W: 500

New York Yankees

Baseball (table) B: 130; (The Babe Ruth Era) B: 136; (Postwar baseball) B: 137

New York City (Sports) N: 338

New Yorker, The [magazine]

Addams, Charles A: 46

Cartoon (Single panel cartoons) C: 265-266

Magazine (History) M: 43-45

Ross, Harold Wallace R: 483

Thurber, James T: 273

New Yorker, The [newspaper]

Greeley, Horace (His publications) G: 379

New Zealand N: 346 *with pictures and maps*

Agriculture (Australia and New Zealand) A: 154

Bank (Australia and New Zealand) B: 92

Cook, James (First Pacific voyage) Ci: 1025

Exploration (Exploring the Pacific) E: 448

Gold rush (Gold rushes in other countries) G: 254

Immigration (Australia and New Zealand) I: 85

Maori M: 175

National park (New Zealand) N: 42d; (table) N: 42f; (The rights of original inhabitants) N: 42i

Newspaper (In Australia and New Zealand) N: 386

Pacific Islands (Polynesia) P: 3

Railroad (In other countries) R: 113-114

Remembrance Day R: 229

Samoa (History) S: 80a-80b

Tasman, Abel Janszoon T: 48

Television (In Australia and New Zealand) T: 116

Textile (In Australia and New Zealand) T: 218

Welfare (Welfare around the world) W: 190

Women's movements (The right to vote) W: 385

World War II (table: The Allies) W: 471

See also the list of Related Articles in the New Zealand article

New Zealand [boat]

America's Cup A: 431

New Zealand Company [British history]

New Zealand (European colonization) N: 355

New Zealand Correspondence School

New Zealand (Education) N: 349

New Zealand Defence Force

New Zealand (Armed forces) N: 348

Newark [city, Delaware] N: 357**Newark** [city, New Jersey] N: 357 *with picture*

Riot (During the 1900's) R: 349

Newark Airport [Newark]

New Jersey (The late 1900's) N: 253

Newark College of Arts and Sciences

Rutgers, The State University of New Jersey R: 568

Newark Earthworks

Mound builders (The Hopewell culture) M: 881-882

Ohio (Places to visit) O: 690

Newark International Airport

Airport (table) A: 245

Newars [people]

Kathmandu K: 249

Newberry, Truman H. [American government official]

Roosevelt, Theodore (table) R: 470

Newberry Library [Chicago]

Chicago (Libraries) C: 430

Library (Research libraries) L: 247

Newbery, John [British publisher] N: 358

Literature for children (The 1700's) L: 361

Newbery Medal N: 358

Newbery Medal [award] N: 358 *with picture*

Literature for children (Awards) L: 366

Melcher, Frederic Gershon M: 389

Newbold, Joshua G. [American political leader]

Iowa (table) I: 391

Newborn center

Hospital (Recent developments) H: 374

Newcastle [city, Australia] N: 359**Newcastle, Duke of** [British political leader]

Pitt, William P: 500

United Kingdom (table: British prime ministers) U: 72

Newcastle upon Tyne [city, England] N: 359**Newcomen, Thomas** [English inventor] N: 359

Industrial Revolution (The steam engine) I: 249

Steam engine (The first steam engines) So: 881

Newcomes, The [book by Thackeray]

Thackeray, William Makepeace (Later career) T: 220

Newell, William A. [American political leader]

New Jersey (table) N: 249

Newfoundland and Labrador N: 360 *with pictures and maps*

Atlantic Provinces A: 868

Bowell, Sir Mackenzie (The Newfoundland question) B: 519

Canada, Government of *picture on* C: 133

Ericson, Leif E: 350

Labrador L: 17; (History) L: 18

See also the list of Related Articles in the Newfoundland and Labrador article

Newfoundland dog N: 378

Dog *picture on* D: 267

Newfoundland Time Zone

Standard time (Time zones) So: 835

Time (Time zones in the United States and Canada) T: 289 *with map*

Newgate Prison [London] N: 378

Fry, Elizabeth Gurney F: 549

Newhouser, Hal [American baseball player]

Baseball (table: Hall of Fame) B: 135

Newkirk, Ingrid [American activist]

People for the Ethical Treatment of Animals P: 277

Newlands Irrigation Project

Nevada N: 156; (Natural resources) N: 169;

(Mine failure and recovery) N: 176

Newman, Barnett [American painter] N: 378

Painting (Abstract expressionism) P: 84-85

Newman, I. DeQuincey [American public official]

South Carolina (Recent developments) So: 662-663

Newman, John Henry [British religious leader]

N: 378

Oxford Movement O: 887

Newman, Larry [American balloonist]

Balloon (Long-distance balloon flights) B: 62

Newman, Paul [American actor] N: 379 *with portrait*

Motion picture (Best performance by an actor: 1986) M: 862-863

Newman, Robert [American patriot]

Old North Church O: 740

Newport [city, Rhode Island] N: 379

Jazz (The spread of jazz) J: 72-73

Rhode Island (The early 1900's) R: 315; *pictures on* R: 296, R: 297, R: 303, R: 304

Newport, Christopher [English sea captain]

Jamestown J: 28

Newport News N: 379

Richmond (History) R: 333

Newport Bridge

Rhode Island *picture on* R: 303

Newport Casino

Rhode Island *picture on* R: 301

Newport News [city, Virginia] N: 379

Virginia (Manufacturing) V: 414 *with picture*

Newport News Shipbuilding [shipyard]

Virginia (Interesting facts) V: 399;

(Manufacturing) V: 414

News and Observer, The [newspaper]

North Carolina (Communication) N: 489

News commentator

Journalism (Influencing public opinion) J: 172

News Corporation Limited

Murdoch, Rupert M: 930

"News Item" [poem by Parker]

Parker, Dorothy P: 169

News magazine

See also Newsmagazine in this index

Magazine (Consumer magazines) M: 42

News media *See Media in this index***News photography** *See Photojournalism in this index***News service** [communications] N: 379

Journalism (News services) J: 171

Newspaper (News services) N: 383 *with picture*

News syndicate

Journalism (News services) J: 171

News service N: 379

Newsboard

Cardboard C: 209

Newscast

Journalism (Radio) J: 171; (Television) J: 171 *with picture*

Radio (Information) R: 86

Television (Commercial television) T: 110-

110a; (Public television) T: 110a-110b; *picture on* T: 110d

Newsgroup [computing]

Computer (The Internet) Ci: 920-921

Internet (Communications) I: 350-350a;

(Glossary of Internet terms) I: 350a

Journalism (Online journalism) J: 172

Newsmagazine

Journalism (Magazines) J: 171

Television (Commercial television) T: 110-110a

Newspaper N: 380 *with pictures*

Advertising (Newspapers) A: 74 *with picture*

Colonial life in America (Communication) Ci: 806

Communication (The 1800's) Ci: 881; (The digital age) Ci: 885

Employment agency E: 263

Fourth estate F: 438

Franklin, Benjamin (Publisher) F: 487

Journalism (Newspapers) J: 170 *with picture*; (History) J: 174

Magazine M: 42

Public opinion (The press) P: 860

Spanish-American War (American intervention) So: 753

Telegraph (Uses for the telegraph) T: 91

Writing W: 511

See also the list of Related articles in the

Newspaper article; the Communication section of specific state, province, and country articles; and Journalism in this index

Newspaper Guild [labor union] N: 388

Brown, Heywood Campbell B: 642

Newspaper Rock [anthropology]

Arizona *picture on* A: 688

Newspaper syndicate [communications]

Newspaper (News services) N: 383

Journalism (News services) J: 171

News service N: 379

Newsprint [paper]

Newspaper (Kinds of newspapers) N: 380
 Paper (Special kinds of paper) P: 136
 Quebec (Manufacturing) Q: 26

Newsroom

Journalism *picture on* J: 171
 Newspaper *picture on* N: 380

Newsstand

Magazine (Sales) M: 43 *with picture*

Newsweek [magazine]

Magazine (table) M: 45

Newt [animal] N: 388 *with picture*

Amphibian *pictures on* A: 441

Newton [unit of measure] N: 388

Force (Characteristics of force) F: 369
 Metric system (Mechanics) M: 437-440
 Power P: 727
 Weight W: 180

Newton, Huey P. [American social reformer]

African Americans (Black militancy) A: 1360
 Black Panther Party B: 390

Newton, Sir Isaac [English physicist] N: 388 *with pictures*

Astronomy (Developing the modern view) A: 847
 Calculus (History) C: 25
 Châtelet, Marquise Du C: 387
 Color (Newton and Goethe) Ci: 826
 Dynamics D: 397
 Force (Gravitation) F: 370; (Overcoming inertia) F: 369
 Gravitation G: 331
 Inertia I: 263
 Light (Early ideas about light) L: 292
 Mathematics (Mathematics and the scientific revolution) M: 306-307
 Momentum M: 698
 Motion (Newton's laws of motion) M: 845
 Newton's rings N: 390
 Physics (Newton) P: 439
 Planet (How planets move) P: 508-509
 Quantum mechanics Q: 6
 Radiation (Early theories and discoveries) R: 80
 Relativity (Inertial frames) R: 210; (General relativity) R: 211
 Science (Expressing findings mathematically) S: 195; (The scientific revolution) S: 198; *picture on* S: 200
 Sound (The study of waves) So: 605
 Space exploration (The dawn of the space age) So: 706
 Telescope (Reflecting telescopes) T: 104
 Tide T: 280

Newton's constant [physics] See Gravitational constant *in this index***Newton's laws of motion** [physics]

Aerodynamics (Lift) A: 85-86
 Force (Acceleration) F: 369-370
 Jet propulsion (The principle of jet propulsion) J: 110

Mass M: 268

Motion (Newton's laws of motion) M: 845

Newton, Sir Isaac (The theories of motion and gravitation) N: 388

Physics (Newton) P: 439

Relativity (Inertial frames) R: 210; (General relativity) R: 211

Rocket R: 385

Space exploration (The dawn of the space age) So: 706

Newton's rings [physics] N: 390 *with picture***Newton's theory of gravitation** [physics]

Force (Gravitation) F: 370; [physics] G: 2
 Gravitation (Newton's theory of gravitation) G: 331

Mass (Mass and weight) M: 268

Newton, Sir Isaac (The theories of motion and gravitation) N: 388

Newtowne [former name]

Cambridge C: 74

Newtonian equation [physics]

Energy (Calculating quantities of energy) E: 274

Next of kin [law] N: 390**Ney, Michel** [French general] N: 390

Napoleon I (Exile to Elba) N: 18

Neyman, Jerzy [English statistician]

Statistics (History) So: 869-870

Nez Perce Indians [American Indians] N: 391

Indian, American *picture on* I: 166

Nez Perce National Historical Park [Idaho]

National Park System (table: National historical parks) N: 57

Nez Perce War [1877]

Idaho (Indian fighting) I: 44
 Indian, American (After European contact) I: 166

Indian wars (The Nez Perce War) I: 194

Joseph, Chief J: 168

Montana (Indian fighting) M: 758-760 *with picture*

Oregon (Indian wars) O: 846-848

NF [disorder] See Neurofibromatosis *in this index***NFB**

Blindness (Education and training) B: 403

NFFE

American Federation of Government

Employees A: 410

NFL See National Football League *in this index***NFO**

National Farmers Organization N: 35

Ngami, Lake [Botswana]

Stanley and Livingstone (Livingstone's discoveries) So: 837 *with map*

Ngendandumwe, Pierre [African political leader]

Burundi (History) B: 713-714

Ngeneo, Bernard [Kenyan anthropologist]

Prehistoric people (table) P: 752

Ngewo [religion]

Sierra Leone (People) S: 451

NGL [chemical] See Natural gas liquids *in this index***Ngo Dinh Diem** [Vietnamese political leader]

N: 391

Geneva Accords G: 87

Vietnam (The Vietnam War) V: 371

Vietnam War (The divided country) V: 373-374;

(The Buddhist crisis) V: 374

Ngo Dinh Nhu [Vietnamese political leader]

Ngo Dinh Diem N: 391

Vietnam War (The Buddhist crisis) V: 374

Ngo Quyen [Vietnamese ruler]

Vietnam (Nam Viet) V: 369

Ngor, Haing S. [Cambodian-American actor]

Motion picture (Best performance by an actor in a supporting role: 1984) M: 863

Ngorongoro National Park [Tanzania]

National park (table) N: 42f

Nguyen [dynasty]

Vietnam (Independence) V: 370

Nguyen Anh [Vietnamese ruler]

Vietnam (Independence) V: 370

Nguyen Du [Vietnamese poet]

Vietnam (The arts) V: 366-368

Nguyen Huy Thiep [Vietnamese author]

Vietnam (The arts) V: 367-368

Nguyen Sang [Vietnamese artist]

Vietnam (The arts) V: 366

Nguyen Trai [Vietnamese author]

Vietnam (The arts) V: 366-368

Nguyen Tu Nghiem [Vietnamese artist]

Vietnam (The arts) V: 366

Nguyen Van Thanh See Ho Chi Minh *in this index***Nguzo Saba** [principles]

Kwanzaa K: 397

Ngwane II [Swazi chief]

Swaziland (History) So: 1019

Ngwenyama [title]

Swaziland (Government) So: 1017

NHI See Health insurance, National *in this index***Nhialic** [African god]

Dinka D: 205

NHL See National Hockey League *in this index***NHRA**

Automobile racing (Racing organizations) A: 976

NHS [medicine] See National Health Service

Corps *in this index*

NHS [transportation] See National Highway

System *in this index*

Nhu, Ngo Dinh See Ngo Dinh Nhu *in this index***Ni** [symbol]

Nickel N: 404

Ni-Cad [electricity] See Nickel-cadmium battery

in this index

Ni Tsan [Chinese artist]

Painting (Chinese painting) P: 44-46

Niacin [vitamin]

Vitamin (Vitamin B complex) V: 430

Cholesterol (Treatment of high blood cholesterol) C: 520

Goldberger, Joseph G: 255

Nutrition (Vitamins) N: 626

Pellagra P: 232

Seafood S: 265

Niagara [ship]

Erie E: 351

Pennsylvania (Places to visit) P: 254 *with picture*

Perry, Oliver Hazard P: 294 *with picture*

Niagara Escarpment [region, Canada]

Hamilton (The city) H: 30

Niagara Falls (History) N: 392

Ontario (Land regions) O: 776

Niagara Falls [waterfall, Canada-U.S.] N: 391

with pictures and map

Buffalo (Economy) B: 677

New York (Places to visit) N: 302 *with picture*;

(Waterfalls) N: 306

Niagara River N: 394

Ontario (Places to visit) O: 774 *with picture*

Waterfall (table: Famous waterfalls of North

America) W: 142 *with picture*

Niagara Falls Park [park, U.S.]

Niagara Falls (History) N: 392-393

Niagara Movement [U.S. history] N: 394

African Americans (The rise of new black leaders) A: 136j

Du Bois, W. E. B. D: 372

Niagara River [Canada-U.S.] N: 394

Lake Ontario L: 43 *with map*

Niagara Falls N: 391 *with picture*

River (table) R: 352

Niamey [Niger] N: 395

Niger (People) N: 407-408

Niari Valley [Congo]

Congo (Brazzaville) (Land) Ci: 939

Nib

Pen (Fountain pens) P: 233

Nibelung [mythology]

Nibelungenlied N: 395

Nibelungenlied [poem] N: 395

Brunhild B: 652

Mythology (Teutonic heroes) M: 985

Siegfried S: 450

NIC [electronic device] See Network interface

card *in this index*

Nicaea, Councils of See Nicene Council *in this index***Nicaragua** [country] N: 396 *with pictures and maps*

See also Central America *in this index*

Central America (Attempts at unification)

C: 355-356

Hispanic Americans (Central American migration) H: 254

Iran-contra affair (Background) I: 407

Standard of living (table) So: 834

United Nations *picture on* U: 91

Walker, William W: 15

World War II (table: The Allies) W: 471

See also the list of Related Articles in the

Nicaragua article

Nicaragua, Lake

Lake Nicaragua L: 41

Nicaragua, National University of

León L: 198

Nicaragua Canal [U.S. history]

Nicaragua (The United States and Nicaragua)

N: 400

Nicarao Indians [American Indians]

Nicaragua N: 396; (The colonial period) N: 398

Nice [city, France] N: 401**Nice, Harry W.** [American political leader]

Maryland (table) M: 255

Nicene-Constantinopolitan Creed [religion]

Eastern Orthodox Churches (Doctrines) E: 46

Nicene Council [325]

Nicene Councils N: 402

Athanasius, Saint A: 853

Constantine the Great Ci: 993

Roman Catholic Church (The recognition of

Christianity) R: 406

Trinity T: 447

Nicene Council [787]

Nicene Councils N: 402

Nicene Councils [religious history] N: 402

Eastern Orthodox Churches (History) E: 45

Nicene Creed [religion]

Nicene Councils N: 402

Christianity (The early church) C: 525

Constantine the Great Ci: 993

Roman Catholic Church (Roman Catholic

beliefs) R: 403

Niche publication

Magazine (History) M: 43-45

Nichol, Barrie Phillip [Canadian poet]

Canadian literature (Modern Canadian poets) C: 160

Nicholas I [czar] N: 402

Russia (table: Czars and empresses) R: 549;
(Nicholas I) R: 551

Nicholas I, Saint [pope]

Pope (table) P: 666

Nicholas II [pope] N: 402

Christianity (The Middle Ages) C: 526

Pope (The early Middle Ages) P: 663

Nicholas II [czar of Russia] N: 402 *with picture*

Divine right of kings D: 242

Duma D: 381

Finland (Control by Russia) F: 116-117

Lenin, V. I. (Young revolutionist) L: 192

Peace (The 1800's and early 1900's) P: 206

Rasputin, Grigori Efimovich R: 145

Romanov R: 426

Russia (table: Czars and empresses) R: 549;
(Nicholas II) R: 551; (The Revolution of
1905) R: 552; (The February Revolution)
R: 553

Stalin, Joseph (Boyhood and education)

So: 825

Union of Soviet Socialist Republics (The

February Revolution) U: 35

World War I (How the conflict spread) W: 455

Nicholas III [pope]

Pope (table) P: 666

Nicholas IV [pope]

Pope (table) P: 666

Nicholas V [pope] N: 403

Pope (table) P: 666

Nicholas V [antipope]

Pope (table) P: 666

Nicholas, Saint [early Christian] N: 403

Christmas (In The Netherlands, Belgium, and

Luxembourg) C: 531 *with picture*; (Gift

giving) C: 534

Netherlands (Holidays and recreation) N: 141

Santa Claus S: 113

Nicholas, Wilson Cary [American political

leader]

Virginia (table) V: 417

Nicholas Nickleby [book by Dickens]

Dickens, Charles (The first phase) D: 188

Nicholas of Cusa [German religious leader]

N: 403

Nicholls, Francis T. [American political leader]

Louisiana (table) L: 496

Nichols, Kid [American baseball player]

Baseball (table: Hall of Fame) B: 135

Nichols, Mika [American director] N: 403

Motion picture (Best achievement in directing:

1967) M: 862

Nichols, Terry L. [American public figure]

Oklahoma City (History) O: 736-737

Nichols Arboretum [Ann Arbor]

Michigan (Places to visit) M: 498

Nicholson, Ben [British artist] N: 404**Nicholson, Jack** [American actor] N: 404 *with*

portrait

Motion picture (Best performance by an actor:

1975, 1997) M: 862-863; (Best perfor-

mance by an actor in a supporting role:

1983) M: 863

Nicias [Greek political leader]

Peloponnesian War P: 232

Nicias, Peace of [ancient Greece]

Peloponnesian War P: 232

Nickel [element] N: 404

Brass B: 565

Greater Sudbury G: 350

Manitoba (The mid-1900's) M: 162

Monel metal M: 703

Thompson T: 262

Nickel [money] N: 404 *with pictures*

Money (United States currency today) M: 709-

711 *with pictures*

Nickel-cadmium battery

Battery (Secondary batteries) B: 170-171

Nickel Capital of the World [nickname]

Greater Sudbury G: 350

Nickel silver [metal] N: 405**Nickelodeon** [theater]

Motion picture (The nickelodeon) M: 864 *with*

picture

Nicklaus, Jack [American golfer] N: 405

Golf (British Open) G: 264

Nickname

Name (Nicknames) N: 7

Nicks [English bandit]

Turpin, Dick T: 519

Nicobar Islands [India]

Bay of Bengal B: 175

Nicodamus National Historic Site [Kansas]

National Park System (table: National historic

sites) N: 52-53

Nicol, Mary Douglas [British anthropologist]

See Leakey, Mary Douglas *in this index*

Nicol prism

Polarized light (Polarizing materials) P: 618

Nicola, Lewis [American military leader]

Washington, George (Turning down a crown)

W: 100

Nicolet, Jean [French explorer] N: 405

Michigan (French exploration and settlement)

M: 508

Wisconsin (Exploration and settlement)

W: 365

Nicolle, Charles Jules Henri [French physiolo-

gist]

Nobel Prizes (Physiology or medicine: 1928)

N: 444

Nicollet Mall

Minneapolis (The city) M: 580-581 *with picture*;

(Downtown redevelopment) M: 583

Nicolson, Sir Harold [British diplomat]

Sackville-West, Victoria Mary S: 5

Nicolson, Nigel [British author]

Sackville-West, Victoria Mary S: 5

Nicomachean Ethics [book by Aristotle]

Aristotle (Ethics and politics) A: 664

Nicosia [city, Cyprus] N: 405

Cyprus Ci: 1205; *picture on* Ci: 1207

Nicot, Jean [French diplomat]

Tobacco (History) T: 307

Nicotine [chemical] N: 405

Cigarette Ci: 553

Drug abuse (Tobacco) D: 361

Insecticide (Botanical insecticides) I: 302

Smoking S: 520; (Smoking regulations) S: 521

Tobacco T: 305

Nicotine patch [drug]

Drug abuse (Treatment of substance use dis-

orders) D: 364

Nictitating membrane [zoology]

Eye (Eyes of animals) E: 469 *with picture*

Nidaros Cathedral [Norway]

Trondheim T: 450

Niebuhr, H. Richard [American theologian]

N: 405

Niebuhr, Reinhold [American theologian] N: 405**Niekro, Phil** [American baseball player]

Baseball (table: Hall of Fame) B: 135

Niello [art]

Islamic art (Metalware) I: 470

Nielsen, Carl August [Danish composer] N: 406**Nielsen Media Research**

Television (The national networks) T: 114

Niemen River [Belarus] See Neman River *in this*

index

Niemeyer, Oscar [Brazilian architect] N: 406

with picture

Brasilia (History) B: 565

Brazil (The arts) B: 576-577 *with picture*

Latin America (Architecture) L: 101

Niépcé, Joseph Nicéphore [French inventor]

N: 406

Communication (The 1800's) Ci: 881

Photography (Early developments) P: 425 *with*

picture

Nietzsche, Elisabeth [sister of]

Nietzsche, Friedrich (His life) N: 407

Nietzsche, Friedrich [German philosopher]

N: 406

Ethics (Nietzsche) E: 367

Existentialism E: 436

Philosophy (Modern philosophy) P: 387-390

Nieuwe Kerk [church, Netherlands]

Amsterdam (The city) A: 443-444

Delft D: 115

Nieuwe Maas [river, Netherlands]

Rotterdam R: 488

Nieuwe Waterweg [channel, Netherlands]

Rotterdam R: 488

Nifedipine [drug]

Calcium channel blocker C: 21

Niflheim [Norse mythology]

Mythology (The creation of life) M: 984; (The

construction of the world) M: 984-985

Niger N: 407 *with picture and map*

Flag *picture on* F: 199

French West Africa F: 528 *with map*

Hausa H: 86

Niger-Kordofanian language

Africa (Languages) A: 104-105

Niger River [Africa] N: 409

Exploration (The exploration of Africa)

E: 448

Mali (Land and climate) M: 108

Niger (Land and climate) N: 408-409

Nigeria (Niger Delta) N: 415 *with picture and*

map

Park, Mungo P: 169

River (table) R: 352

Nigeria N: 410 *with pictures and maps*

Africa *picture on* A: 105

Benin B: 250

Flag *picture on* F: 199

Hausa H: 86

Igbo I: 47

Sculpture (African sculpture) S: 239

See also the list of *Related articles in the*

Nigeria article

Nigeriens [people]

Niger (People) N: 407

Nigger of the "Narcissus," The [book by

Conrad]

Conrad, Joseph Ci: 973

Nigh, George [American political leader]

Oklahoma (table) O: 730

Night

Day D: 51

Night [book by Wiesel]

Wiesel, Elie W: 299

Night [sculpture by Michelangelo]

Sculpture (Michelangelo) S: 252-253 *with pic-*

ture

Night After Night [film]

West, Mae W: 198

Night and Day [play by Stoppard]

Stoppard, Tom So: 911

"Night and Day" [song by Porter]

Porter, Cole P: 682

Night at an Inn, A [play by Dunsany]

Irish literature (Drama) I: 432

Night blindness

Blindness B: 401

Eye (Diseases of the retina) E: 467-468

Night-blooming cereus

Flower *picture on* F: 271

Night Café, The [painting by Van Gogh]

Van Gogh, Vincent V: 282

Night crawler See Earthworm *in this index***Night game**

Baseball (Depression and war) B: 136

Night in Acadie, A [book by Chopin]

Chopin, Kate C: 521

Night in Lisbon, The [book by Remarque]

Remarque, Erich Maria R: 228

Night Must Fall [book by Williams]

Williams, Emlyn W: 310

Night of Broken Glass [German history] See

Kristallnacht in this index

Night on Bald Mountain, A [music by

Mussorgsky]

Mussorgsky, Modest M: 968

Night school [education]

School (Other kinds of schools) S: 182

Night shade [plant] See Nightshade *in this*

index

Night sweat [disorder]

Hormone replacement therapy H: 338

Night terror

Nightmare N: 421

Night They Burned the Mountain, The [book

by Dooley]

Dooley, Thomas Anthony, III D: 309

Night vision systems [electronic devices]

N: 419 *with picture*

Night Watch, The [painting by Rembrandt]

Netherlands *picture on* N: 144

Rembrandt (The last years) R: 229

Medicine *picture* on M: 374
 Nursing (The history of nursing) N: 620
Nightingale, William [father of]
 Nightingale, Florence (Early years) N: 420
Nightingale Training School for Nurses
 [London]
 Nightingale, Florence (Return to England) N: 421
Nightjar [bird]
 Goatsucker G: 242 *with picture*
"Nightline" [television program]
 Koppel, Ted K: 365
Nightmare N: 421
 Dream D: 344
Nights [poem by Musset]
 French literature (Romantic poetry) F: 521
Nightshade [botany] N: 421 *with pictures*
 Flower F: 301 *with picture*
 Poisonous plant P: 603
See also the Related articles in the
Nightshade article
NIH *See* National Institutes of Health *in this*
index
Nihilism [philosophy] N: 421
 Turgenev, Ivan T: 500
 Russian literature (Early realism) R: 562
Nihon *See* Japan *in this index*
Nihongi [book]
 Shinto S: 401
Niihau [island]
 Hawaii (Niihau) H: 102
Nijinsky, Vaslav [Russian dancer] N: 422 *with*
picture
 Ballet (Ballet in Russia) B: 52 *with picture*
Nikau palm [tree]
 Tree *picture* on T: 427
Nike [Greek mythology]
 Winged Victory W: 339
Nike, Temple of [Athens]
 Acropolis A: 29
Nikko National Park [Japan]
 National park (table) N: 42f
Nikolais, Alwin [American choreographer]
 N: 422
Nile, Battle of the [1798]
 Nelson, Horatio (Battle of the Nile) N: 122
Nile crocodile
 Crocodile Ci: 1150
 Reptile R: 250 *with picture*
Nile Delta [region, Egypt]
 Arabs (Land of the Arabs) A: 585
 Delta D: 118 *with map*
 Egypt (The land) E: 125 *with map*
 Nile River (The Nile Valley and Nile Delta)
 N: 423 *with map*
Nile monitor [reptile]
 Lizard *picture* on L: 400
Nile River [Africa] N: 422 *with pictures and map*
 Baker, Sir Samuel White B: 32
 Egypt (The land) E: 125; (Agriculture) E: 128
 Egypt, Ancient (The land) E: 135-136 *with pic-*
ture and map
 Exploration (The exploration of Africa) E: 449
 Flood F: 236
 Irrigation (History) I: 459
 Lake Victoria L: 48
 Middle East (The land) M: 532
 Mythology (Egyptian mythology) M: 976
 River (table) R: 352
 Sudan (Land and climate) So: 954
Nile Tributaries of Abyssinia, The [book by
 Baker]
 Baker, Sir Samuel White B: 32
Nile Valley [region, Egypt]
 Arabs (Land of the Arabs) A: 585
 Egypt (The land) E: 125 *with picture*
 Nile River (The Nile Valley and Nile Delta)
 N: 423 *with map*
 World, History of the (The Nile Valley) W: 424
Niles, John M. [American government official]
 Van Buren, Martin (table) V: 273
Nilgai [animal]
 Antelope (Kinds of antelope) A: 542-543
Nilo-Saharan language
 Africa (Languages) A: 104-105
Nilotes [people]
 Africa (Peoples of Africa) A: 104
Nilson, Lars [Swedish chemist]
 Scandium S: 171
Nilsson, Birgit [Swedish singer] N: 424
 Opera *picture* on O: 807
Nimba Mountains
 Liberia (Land and climate) L: 230

Nimbostratus
 Cloud (Middle clouds) Ci: 709
Nimeiri, Gaafar [Sudanese political leader]
 Sudan (Independence) So: 956; (Recent devel-
 opments) So: 956
Nimes [France]
 World, History of the *picture* on W: 429
Nimitz [ship]
 Aircraft carrier (The United States carrier fleet)
 A: 206
Nimitz, Chester William [American admiral]
 N: 424
 World War II (The South Pacific) W: 487-488;
 (Island hopping in the Central Pacific)
 W: 488
Niña [ship]
 Caravel C: 202
 Columbus, Christopher (First voyage west-
 ward) Ci: 859 *with picture*
 Exploration (Columbus reaches America) E: 444
Nine-ball [game]
 Billiards (Pool) B: 306
Nine-day queen *See* Grey, Lady Jane *in this*
index
900 service
 Telephone (Other services) T: 99
Nine-Power Treaty [1921-1922]
 Washington Conference W: 109
Nine-spotted ladybug
 Beetle *picture* on B: 218
Nine Stories [book by Salinger]
 Salinger, J. D. S: 66
9-volt battery
 Battery *diagram* on B: 169
Ninepins [game]
 Bowling (Other kinds of bowling) B: 525
1919 [book by Dos Passos]
 Dos Passos, John D: 311
1984 [book by Orwell]
 English literature (Literature after World War
 II) E: 322-323
 Orwell, George O: 860
Nineteenth Amendment
 Civil rights (The struggle for women's rights)
 Ci: 609
 Constitution of the United States (Amendment
 19) Ci: 1015
 Sex discrimination (Changes in laws) S: 335
 Stanton, Elizabeth Cady So: 839
 United States, History of the (Life during the
 Roaring Twenties) U: 185
 Woman suffrage (The 19th Amendment)
 W: 381
 Women's movements (The right to vote)
 W: 385
19th Century Village [New York]
 New York (Places to visit) N: 302
Ninety-Five Theses [religion]
 Luther, Martin (The Ninety-Five Theses) L: 527
 Reformation (Martin Luther) R: 197
 Tetzel, Johann T: 183
94th Pursuit Squadron
 Air Force, United States (World War I) A: 194
Ninety-Nines [organization]
 Earhart, Amelia E: 14
Ninety Six National Historic Site [South
 Carolina]
 National Park System (table: National historic
 sites) N: 52-53
Ninety-Three [book by Hugo]
 Hugo, Victor Marie (His works) H: 410
Nineveh [ancient city] N: 424
 Library (Ancient libraries of clay) L: 257-258
 Nahum, Book of N: 3
 Sculpture (Middle Eastern) S: 233
 World, History of the (Civilizations of south-
 west Asia) W: 426
Ninfale Fiesolano [poem by Boccaccio]
 Boccaccio, Giovanni B: 433
Ning-po [city, China] *See* Ningbo *in this index*
Ningau [animal]
 Marsupial mouse M: 233 *with picture*
Ningbo [city, China] N: 424
 Treaty port T: 409
Ninja [Japanese history]
 Martial arts (Japanese martial arts) M: 234
Ninjutsu [sport]
 Martial arts (Japanese martial arts) M: 234
Niños envueltos
 Christmas (In Latin America) C: 532
Ninotchka [film]
 Lubitsch, Ernst L: 513

Ninstints [British Columbia]
 Canada (table: National historic sites) C: 114
Ninth Amendment
 Constitution of the United States Ci: 1013
Ninurta [Assyrian god]
 Assyria (Religion) A: 821
Ninus [mythology]
 Semiramis S: 293
Niobe [Greek mythology] N: 424
Niobium [element] N: 424
 Columbite Ci: 853
Niobrara National Scenic Riverway [Nebraska-
 South Dakota]
 National Park System (table: National park-
 ways and other national parklands) N: 56
Niobrara River [Nebraska-Wyoming]
 Nebraska (Rivers and lakes) N: 106
Niokolo-Koba National Park [Senegal]
 National park (table) N: 42f
NIOSH
 National Institute for Occupational Safety and
 Health N: 39
Nipkow, Paul Gottlieb [German physicist]
 Television (Early development) T: 125
Nipple [anatomy]
 Breast B: 590 *with diagram*
 Mammal (Care of the young) M: 124 *with pic-*
ture
Nippon *See* Japan *in this index*
Nirenberg, Marshall Warren [American bio-
 chemist]
 Cell (The 1900's) C: 337-338
 Heredity (The chemistry of genes) H: 209
 Nobel Prizes (Physiology or medicine: 1968)
 N: 445
Nirvana [religion] N: 424
 Bodhisattva B: 434
 Buddha (The search for enlightenment) B: 667
 Buddhism (The dharma) B: 668
 Dharma D: 178
 Religion (A doctrine of salvation) R: 216;
 (Buddhism) R: 220
Nisan [month]
 Calendar (The Hebrew calendar) C: 29
Nisga'a Treaty
 British Columbia (Recent developments)
 B: 631
Nishizawa, Hiroyoshi [Japanese aviator]
 Ace A: 24
Niska, Maralin [American singer]
 Opera *picture* on O: 808
Nisqually Indians [American Indians]
 Salish Indians (The Coast Salish) S: 67
Nissan [automobile]
 Automobile *picture* on A: 971
 Sports car So: 802
Nissan Motor Company
 Automobile (Major producing countries and
 companies) A: 955-956
 Manufacturing (table) M: 170
Nit [entomology]
 Head lice H: 123
 Louse L: 507
NIT [sports]
 Basketball (The history of college basketball)
 B: 152
Nit-picking
 Head lice H: 124
Niter *See* Saltpeter *in this index*
Nitrate [chemistry] N: 425
 Eutrophication (Eutrophication and water pollu-
 tion) E: 421
 Sewage S: 329
Nitrate bacteria
 Nitrogen cycle N: 426 *with diagram*
Nitrate of silver *See* Silver nitrate *in this index*
Nitric acid [chemical] N: 425
 Acid rain A: 27
 Lithography (How lithography works) L: 387
 Nitrogen (Nitrogen and life) N: 425
Nitric oxide [chemistry]
 Catalysis C: 297
Nitrifying bacteria
 Nitrogen cycle N: 426
Nitrite [chemistry] N: 425
 Bacon B: 18
 Sausage S: 163
Nitrite bacteria
 Nitrogen cycle N: 426 *with diagram*
Nitrocarbonate [chemical]
 Dynamite (History) D: 397
Nitrocellulose

- Guncotton G: 441
Gunpowder (Kinds of gunpowder) G: 441
- Nitrogen** [element] N: 425
Air (Gases of the air) A: 167 *with diagram*
Bends B: 247
Diving, Underwater (Dangers of underwater diving) D: 246
Fertilizer (Inorganic fertilizers) F: 79
Haber process H: 2
Liquid air L: 346
Nitrogen cycle N: 426 *with diagram*
Star (Hydrogen fusion) So: 846-847
Triton T: 448
Weather (What causes weather) W: 157
- Nitrogen cycle** [biology] N: 426 *with diagram*
Alfalfa (As a cover crop) A: 346-347
Bacteria (Helpful bacteria) B: 19
Nitrogen (Nitrogen and life) N: 425
Root (The importance of roots) R: 474-475
- Nitrogen fixation** [chemistry]
Nitrogen (Nitrogen and life) N: 425
Nitrogen cycle N: 426
- Nitrogen-fixing bacteria**
Nitrogen cycle N: 426 *with diagram*
- Nitrogen freezing**
Cryobiology Ci: 1165
Food, Frozen (Nitrogen freezing) F: 338
- Nitrogen monoxide** [gas] See Nitrous oxide *in this index*
- Nitrogen narcosis** [disorder]
Diving, Underwater (Dangers of underwater diving) D: 246-247
Helium (Uses) H: 176 *with picture*
- Nitrogen oxides** [gas]
Acid rain A: 27
Nitrogen (Nitrogen and pollution) N: 426
Smog (Photochemical smog) S: 519
- Nitroglycerin** N: 426
Angina pectoris A: 461
Dynamite D: 397
Glycerol (Uses) G: 237
Heart (Treatment) H: 138
Peanut (In industry) P: 214
- Nitrosamine** [chemical]
Bacon B: 18
Food preservation (Curing) F: 341
Nitrite N: 425
- Nitrous oxide** [gas] N: 427
Dentistry (Modern dentistry) D: 145
- Nitze School of Advanced International Studies**
Johns Hopkins University J: 135
- Nivelle, Robert** [French general]
World War I (Allied failures) W: 461
- Niven, David** [British actor]
Motion picture (Best performance by an actor: 1958) M: 863
- Nixon** [film]
Stone, Oliver So: 909
- Nixon, Harry C.** [Canadian political leader]
Ontario (table) O: 783
- Nixon, Julie** [daughter of] See Eisenhower, Julie
Nixon in this index
- Nixon, Pat** [wife of Richard M. Nixon]
First ladies (table) F: 142
Nixon, Richard Milhous (Nixon's family) N: 430; (Life in the White House) N: 435 *with picture*
- Nixon, Patricia** [daughter of]
Nixon, Richard Milhous *picture on* N: 435
- Nixon, Richard Milhous** [U.S. President] N: 428 *with pictures*
Agnew, Spiro Theodore A: 142
Bush, George Herbert Walker (Early political career) B: 718; (Appointive positions) B: 718
Cold War (The spirit of Camp David) Ci: 766; (The Cold War in the 1970's) Ci: 769-770
Congress of the United States (Continued struggle for power) Ci: 948
Eisenhower, Dwight David (Election of 1952) E: 151; *picture on* E: 153
Ford, Gerald Rudolph F: 372; (The resignation of Nixon) F: 376; (The national scene) F: 376-377
Impeachment (In the United States) I: 91
Kissinger, Henry Alfred K: 337
Postal Service, United States (Establishment of the Postal Service) P: 701
President of the United States (The Watergate scandal) P: 769
- Republican Party (Defeat, then victory) R: 257; (The Watergate scandal) R: 257
Richardson, Elliot Lee R: 330
Television (The 1960's) T: 119
Un-American Activities Committee U: 19
Union of Soviet Socialist Republics *picture on* U: 39
United States, History of the (The Vietnam War) U: 193; (Political scandals) U: 194; (Improved U.S.-Soviet relations) U: 195
Vice President of the United States (table) V: 351
Vietnam War (The U.S. withdrawal begins) V: 376
Watergate W: 144
- Nixon, Thelma Ryan** [wife of Richard M. Nixon]
See Nixon, Pat *in this index*
- Nixon, Walter L., Jr.** [American jurist]
Impeachment (History) I: 91-92
- Nixon in China** [opera by Adams]
Opera (American opera) O: 800
- Niyazov, Saparmurad A.** [Turkmen political leader]
Turkmenistan (Government) T: 514; (History) T: 514b
- Niza, Marcos de** [Spanish explorer]
Arizona (Spanish exploration) A: 688
New Mexico (Exploration and settlement) N: 273
- Nizaris** [sect]
Islam (Divisions of Islam) I: 466
- Nizhniy Novgorod** [city, Russia] N: 438
- Njal's Saga** [story]
Saga S: 17
Scandinavian literature (Beginnings) S: 171
- Njord** [Norse mythology]
Frey F: 531
Freyja F: 531
- NK cell** [biology] See Natural killer cell *in this index*
- Nkisi** [sculpture]
Sculpture (Royal and public sculpture) S: 240 *with picture*
- Nkomo, Joshua** [Zimbabwe political leader]
Zimbabwe (History) Z: 597-598
- Nkrumah, Kwame** [Ghanaian political leader]
N: 438
Ghana (History) G: 179-180
- Nkuwu, Nzinga** [king of Kongo] See Nzinga
Nkuwu *in this index*
- NLD** [political party] See National League for Democracy *in this index*
- NLRB** See National Labor Relations Board *in this index*
- NMA**
National Medical Association N: 40
- NMP** [economics] See Net material product *in this index*
- NMR** [medicine] See Nuclear magnetic resonance *in this index*
- No** [symbol]
Nobelium N: 450
- No ball**
Cricket (Scoring) Ci: 1132
- No Child Left Behind Act** [2001]
Education (Development of U.S. education) E: 102-105; (How can performance be improved?) E: 105-106
Elementary and Secondary Education Act E: 224
- No Cross, No Crown** [book by Penn]
Penn, William (Persecution) P: 242
- No fault** [law]
Law (Law since 1900) L: 136-137
- No-fault divorce**
Abandonment A: 4
Divorce (No-fault divorce) D: 253
- No-fault insurance** N: 438
Insurance (Automobile insurance) I: 313
- No Laughing Matter** [book by Heller]
Heller, Joseph H: 177
- No-load fund**
Mutual fund M: 969
- No man's land**
Jerusalem (British rule) J: 101-102
World War I (Trench warfare) W: 457-458
- No-par stock** [economics]
Stock, Capital (Kinds of stock) So: 903
- No Place to Be: Voices of Homeless Children** [book by Berck]
Literature for children (Information books) L: 360
- No play** [drama]
Dance (Asian theatrical dance) D: 30
Drama (Japan) D: 336
Japan (Theater) J: 43
Japanese literature (The medieval period) J: 62
Mask (Theatrical masks) M: 265
Music (Japanese music) M: 956
Tokyo *picture on* T: 316
- No-see-um**
Gnat G: 237
Midge M: 535
- No-till** [agriculture]
Conservation (Soil conservation) Ci: 979-980
Farm and farming (Preparing the soil) F: 35
- NOAA** [organization] See National Oceanic and Atmospheric Administration *in this index*
- Noachian Period**
Mars (Periods of evolution) M: 226b-226c
- Noah** [Biblical figure] N: 439
Ark A: 693
Deluge D: 118
Mount Ararat M: 883
- Noailles, Adrienne de** [wife of]
Lafayette, Marquis de L: 27
- NOAO** See National Optical Astronomy Observatories *in this index*
- Noatak National Preserve** [Alaska]
National Park System (table: National preserves) N: 58
- Nob Hill**
San Francisco (Downtown San Francisco) S: 92-93 *with map*; S: 92
- Nobel, Alfred Bernhard** [Swedish chemist]
N: 439 *with portrait*
Dynamite (History) D: 397
Gunpowder (History) G: 441
Nitroglycerin N: 427
Nobel Prizes *picture on* N: 440
Peace (The 1800's and early 1900's) P: 206
- Nobel, Ludwig** [Swedish shipbuilder]
Ship (Tankers) S: 420
- Nobel Institute for Physics**
Nobelium N: 450
- Nobel Prizes** [awards] N: 439 *with pictures*
Nobel, Alfred Bernhard N: 439
- Nobelium** [element] N: 450
Transuranium element T: 401
- Nobile, Umberto** [Italian explorer]
Amundsen, Roald (Other achievements) A: 445-446
Exploration (Arctic exploration) E: 449-450
- Nobility** N: 450
Heraldry (The development of heraldry) H: 194
- Noble, John W.** [American government official]
Harrison, Benjamin (table) H: 72
Interior, Department of the (table) I: 325
- Noble, Noah** [American political leader]
Indiana (table) I: 214
- Noble, Patrick** [American political leader]
South Carolina (table) So: 658
- Noble Eightfold Path** [religion]
Dharma D: 178
Nirvana N: 424
- Noble fir** [tree]
Fir F: 119
- Noble gas** [chemistry] N: 451
Element, Chemical (Classes) E: 224; *diagram on* E: 221
Helium H: 175
Radon R: 100
- Noble Numbers** [poems by Herrick]
Herrick, Robert H: 215
- Noble Order of the Knights of Labor** See Knights of Labor *in this index*
- Noble savage**
Latin-American literature (Romanticism) L: 112
Romanticism (Romanticism and society) R: 427
- Noboa Bejerano, Gustavo** [Ecuadorian political leader]
Ecuador (The 1900's) E: 73-74
- Nobody Knows My Name** [book by Baldwin]
Baldwin, James B: 39
- Nobunega, Oda** [Japanese military leader]
Hideyoshi H: 225
- Noces, Les** [ballet]
Robbins, Jerome R: 365
- Noche triste, La** [battle]
Mexico (The Spanish conquest) M: 469
- Nock**
Archery (Arrows) A: 602 *with diagram*

Knocking point

Archery (Bows) A: 601-602

Nocturnal animal

Zoo (Exhibits) Z: 605

Noddack, Walter [German chemist]

Rhenium R: 290

Node [botany]Plant (Stems) P: 530 *with picture*

Stem So: 887

Node of Ranvier [anatomy]Nervous system (Conduction along the axon)
N: 135 *with diagrams***Nodule** [botany]Alfalfa (As a cover crop) A: 346-347; *picture on A: 345*

Legume L: 185

Nodule [oceanography]

Ocean (Sediments) O: 654

Nodule [physiology]

Leprosy (Symptoms) L: 204

Silicosis S: 458

Noe, James A. [American political leader]

Louisiana (table) L: 496

Noel, Edmond F. [American political leader]

Mississippi (table) M: 640

Noel, Philip W. [American political leader]

Rhode Island (table) R: 311

Noel-Baker, Philip John [British statesman]

Nobel Prizes (Peace: 1959) N: 448

Noel Kempff Mercado National Park [Bolivia]

National park (table) N: 42g

Nofukuji, Temple of [Japan]

Kobe K: 360

Noguchi, Isamu [American sculptor] N: 451
*with picture***Noise** [sound] N: 451

Acoustics (Environmental acoustics) A: 29

Deafness (Environmental factors) D: 57

Sound (Noises) So: 599

Noise pollution

Environmental pollution (Noise pollution)

E: 335

Acoustics (Environmental acoustics) A: 29

Airport (Airport noise) A: 249

Disease (Environmental and occupational diseases) D: 230

Road (Noise control) R: 360

Sound (Controlling sound) So: 604

Nok [ancient civilization] N: 451

Nigeria (The arts) N: 414

Pottery (Early pottery) P: 718

Sculpture (African sculpture) S: 239

Nok [village, Nigeria]

Nok N: 451

Nolan, Philip [literary figure]

Hale, Edward Everett H: 18

Nolan, Sir Sidney [Australian painter]

Australia (Painting) A: 906-907

Noland, Kenneth [American artist]

Painting (Color-field painting) P: 86

Nolde, Emil [German painter]

Painting (Expressionism) P: 78

Nomad [sociology] N: 452Africa (Rural life) A: 110-112 *with picture*

Agriculture (Nomadic herding) A: 149

Arabs (Life in the Arab world) A: 586

Asia (Country life) A: 778

Food *picture on F: 332*Iran *picture on I: 404*Mali (People) M: 106-107; *picture on M: 108*

Niger (People) N: 407-408

Oman (People) O: 757-758

Sahara (People) S: 21

Sami S: 78

Somalia (People) So: 588

Sudan (Northern Sudan) So: 954 *with picture***Nomadic cattle raising**

Cattle (Nomadic cattle raising) C: 315

Nomarch [office]

Crete (Government) Ci: 1128

Nombre de Dios MissionMission life in America (A visitor's guide)
M: 620**Nome** [Alaska] N: 452

Sled dog S: 506

Nome [political division]

Egypt, Ancient (Government) E: 139-142

Nome sledge [vehicle]

Sled S: 505

Nomenclature, Binomial [biology]

Classification, Scientific (The language of classification) Ci: 654

Nomex [fiber] See *Aramid in this index***Nominal** [grammar]

Noun (Nominals) N: 553

Nominal account

Bookkeeping (Accounts) B: 472

Nominal damages [law]

Damages D: 22

Nominalistic theory [philosophy]

Metaphysics (Universals and particulars)

M: 430

Nominating convention See *Political convention in this index***Nominating election** See *Primary election in this index***Nominating speech**

Political convention (Making nominations)

P: 629

Nomination [voting]

Election campaign (Winning the nomination)

E: 160

Parliamentary procedure (Electing officers)

P: 175

Political convention (Convention activities)

P: 629

Nominative case [grammar]Case (Cases in Latin) C: 272; (Pronouns)
C: 272

Declension D: 80

Nomoli [religion]

Sierra Leone (People) S: 451

Nomothetic study

Abnormal psychology (Studies in abnormal psychology) A: 12

Non compos mentis [law]

Incompetence I: 105

Non la [hat]

Vietnam (Clothing) V: 366

Nonadaptive trait [biology]

Races, Human (Evolutionary theory) R: 53-54

Nonaggression pact [international relations]

N: 452

Communism (World War II) Ci: 893

Russia (World War II) R: 554

Union of Soviet Socialist Republics (Stalin's policies) U: 36-37

Nonaligned nations See *Neutral nations in this index***Nonballistic missile**

Guided missile (Nonballistic missiles) G: 426

Nonbearing wall [construction]Building construction (Types of construction)
B: 683**Noncitizen national**Citizenship Ci: 568; (The rights of citizens)
Ci: 569**Noncommissioned officer**

Rank, Military R: 139

Noncooperative game

Game theory G: 22

Nondegerming system

Corn (The dry-milling industry) Ci: 1061-1062

Nondiscrimination [trade policy]

General Agreement on Tariffs and Trade G: 82

Nondispersive wave

Waves (How waves move) W: 152

Nondrying oil

Oil (Fixed oils) O: 707

Nondurable goodsIndustry (Other systems of classification)
I: 261Manufacturing (Kinds of manufacturing)
M: 169**Nonelectrolyte** [chemistry]

Electrolyte E: 202

Nones [Roman calendar]

Month M: 767

Nonesential amino acid

Protein (The structure of proteins) P: 832

Non-Euclidean geometry

Geometry (Types of geometry) G: 103-104

Mathematics (Branches of mathematics)
M: 303**Nonexecutive president**

President P: 756b

Nonexpandable clay

Clay Ci: 658

Nonfiction [literature]

Literature L: 352

Novel (The novel today) N: 575

Writing (Nonfiction) W: 511

Nonfiction novel [literature]

Novel (The novel today) N: 575

Nonfigurative art See *Abstract art in this index***Nonfinite verb**

Verb (Finite and nonfinite verbs) V: 315

Nonforfeiture option

Insurance (Main kinds of life insurance) I: 309-310

Nongovernmental organization

UNESCO U: 24

Nongraded schoolEducation (The organization of U.S. education)
E: 89-90

Elementary school (Kinds of elementary schools) E: 224-225

School (Elementary schools) S: 181

Teaching (Checking student progress) T: 67

Non-Hodgkin's lymphoma [disease]Cancer (Classification by primary body site)
C: 167-168**Nonillion** [number] N: 452**Non-Importation Act** [1806]

War of 1812 (American reaction) W: 29

Nonindigenous speciesConservation (Biodiversity conservation)
Ci: 976-977**Noninfectious disease**Disease (Noninfectious diseases) D: 228; *picture on D: 225***Non-insulin dependent diabetes** [disease]

Diabetes (Causes) D: 178-179

Non-Intercourse Act [1809]

Embargo Act E: 256

United States, History of the (Jefferson and foreign policy) U: 164

War of 1812 (American reaction) W: 29-30

Non-ionizing radiation [physics]

Radiation (Ionizing ability) R: 79

Nonlinear editing system

Motion picture (Computer editing) M: 856

Nonmaterial culture

Culture (Forming patterns) Ci: 1187

Nonmetal [chemistry]

Metal (What metal is) M: 425

Element, Chemical *diagram on E: 221***Nonmetallic luster** [physical property]

Mineral (Luster) M: 566-567

Nonmilitary sanctionInternational relations (Nonmilitary sanctions)
I: 345**Nonobjective art** See *Abstract art in this index***Nonofficial cover**

Central Intelligence Agency C: 357

Nonparticipating policy

Insurance (Dividends) I: 310

Nonpartisan electionPrimary election (Nonpartisan primaries) P: 777
City government (Administering city government) Ci: 596-597**Nonpartisan League** [U.S. history] N: 452**Nonpoint source pollution**

Environmental pollution E: 330

Nonprofit corporation

Corporation (Other corporations) Ci: 1070

Economics (Business and profits) E: 60

Foundations (How foundations are organized)
F: 429**Nonprofit voluntary hospital**

Hospital (Type of ownership) H: 371

Nonprogrammable decision

Management information systems M: 132

Non-Proliferation of Nuclear Weapons, Treaty on the See *Nuclear Nonproliferation Treaty [1968] in this index***Nonrenewable resource**

Conservation Ci: 974

Nonresistance [philosophy]

Pacifism P: 18

Nonscheduled flight

Aviation (Airline operations) A: 984-985

Nonseminoma [disease]

Testicular cancer T: 181

Nonsense song

Folk music (Kinds of folk music) F: 321

Nonsense verse

Literature for children (Poetry) L: 356

Nursery rhyme (Nonsense rhymes) N: 614

Nonsporting dogDog (Nonsporting dogs) D: 266; *pictures on D: 275***Nonsteroidal anti-inflammatory drug**

Pain (Treating pain) P: 22

Nonstriker

Cricket Ci: 1131

- Nonsyncytium inducing protein** [biology]
Evolution (Direct observation of evolution)
E: 431
- Nontaxable income item**
Income tax (Figuring the individual income tax)
I: 104
- Nonthermal radiation** [astronomy]
Galaxy (Emissions from galaxies) G: 8b
- Nonvascular plant** See *Bryophyte in this index*
- Nonverbal behavior**
Kinesics K: 319
- Nonverbal communication**
Body language B: 435
Communication (The study of communication)
Ci: 887
- Nonverbal test**
Testing (Interpreting test scores) T: 182
- Nonviolent action**
Pacifism P: 18
- Nonviolent resistance**
Gandhi, Mohandas Karamchand G: 24
India (Rise of Indian nationalism) I: 131
King, Martin Luther, Jr. (The early civil rights movement) K: 320-321
Pacifism P: 18
- Nonwoven fabric**
Textile (Other textiles) T: 215
- Norzero-sum game**
Game theory G: 22
- Noodle** [food]
Pasta P: 192
- Noon**
Day D: 51
Time (Measuring time by the sun) T: 288;
(Measuring time by the stars) T: 288;
(Local and standard time) T: 288-289
- Noonan, Frederick J.** [American aviator]
Earhart, Amelia E: 14
- Nooning** [custom]
Pioneer life in America (Life on the trail)
P: 486-487
- Nootka Convention** [1790]
British Columbia (The Nootka Sound controversy) B: 628
- Nootka Indians** [American Indians] N: 453 *with picture*
- Nootka Sound Controversy** [Canadian history]
British Columbia (The Nootka Sound controversy) B: 628
- Nopal** See *Prickly pear in this index*
- NORAD** [alliance] N: 453
Air Force, United States (Defense and deterrence) A: 190
Colorado (The mid-1900's) Ci: 847
North Warning System N: 519
- Noradrenalin** See *Norepinephrine in this index*
- Norbeck, Peter** [American political leader]
South Dakota (table) So: 680
- Norblad, A. W.** [American political leader]
Oregon (table) O: 845
- Norchip**
Potato P: 712; *picture on* P: 711
- Nord-Ostsee-Kanal** [waterway, Germany] See *Kiel Canal in this index*
- Nordberg, Martin** [American chemist]
Glass (table) G: 218
- Norden** [region, Europe]
Scandinavia S: 171
- Nordenskjöld, Nils Adolf Erik** [Swedish explorer] N: 453
Arctic (Arctic exploration) A: 639-640
Exploration (Arctic exploration) E: 449-450
- Nordestinos** [people, Brazil]
Brazil (The Northeast Region) B: 579-580
- Nordhoff, Charles Bernard** [American author]
Nordhoff and Hall N: 453
- Nordhoff and Hall** [American authors] N: 453
- Nordic combined** [sports]
Olympic Games (Winter Olympic Games)
O: 746d-746e
Skiing (Nordic competitions) S: 487
- Nordic Council** [alliance]
Finland (Postwar developments) F: 118
- Nordic skiing**
Skiing (Ski equipment and clothing) S: 483;
(Nordic skiing) S: 482 *with pictures*;
(Nordic competitions) S: 487; *diagrams on* S: 484
- Nördlingen, Battle of** [1634]
Thirty Years' War (The Swedish period) T: 260
- Nordraak, Rikard** [Norwegian composer]
Grieg, Edvard G: 392
- Norepinephrine**
Adrenal gland A: 67
Brain (Brain chemistry and mental illness) B: 556; (How drugs affect brain chemistry) B: 556
Fibromyalgia F: 90
Hormone (Stress hormones) H: 336
Mental illness (Chemical imbalances in the brain) M: 406
Ritalin R: 350
- Norfolk** [Virginia] N: 453
Virginia (table: Average monthly weather) V: 412
- Norfolk International Terminals**
Norfolk (Economy) N: 454
- Norfolk Island** [island, Pacific] N: 454
- Norfolk National Fish Hatchery**
Arkansas (Interesting facts about Arkansas) A: 695
- Norfolk Naval Base** [Virginia] N: 454
Norfolk (Economy) N: 454
- Norfolk Southern Corporation**
Railroad (Railroad systems) R: 112
- Norfolk system** [agriculture]
Agriculture (Improved crop-growing methods) A: 157
Invention (The Industrial Revolution) I: 361-362
- Norfolk terrier** [dog] N: 454 *with picture*
- Norgay, Tenzing** See *Tenzing Norgay in this index*
- Norge** [airship]
Airship (Between world wars) A: 252
Amundsen, Roald (Other achievements) A: 445-446
Exploration (Arctic exploration) E: 449-450
- Norheim, Sondre** [Norwegian skier]
Skiing (The development of modern skiing) S: 487
- Nori** [food]
Algae (Red algae) A: 349
- Noriega, Manuel Antonio** [Panamanian political leader] N: 455 *with portrait*
Bush, George Herbert Walker (International affairs) B: 721
Panama (The Noriega years) P: 121
- Norma** [opera by Bellini]
Bellini, Vincenzo B: 244
- Normal** [optics]
Mirror (Plane mirrors) M: 616
- Normal distribution**
Statistics (Probability) So: 868-869 *with diagram*
- Normal fault**
Earthquake (Where and why earthquakes occur) E: 36 *with picture*
- Normal heptane** [chemistry]
Gasoline (Gasoline octane ratings) G: 61
- Normal school**
Education (Development of U.S. education) E: 102-103
Teaching (The effectiveness of teacher training) T: 70
Mann, Horace M: 164
- Normal School Association, American**
National Education Association of the United States N: 34
- Normalcy** [U.S. history]
United States, History of the (Looking backward) U: 186
- Norman, E. Herbert** [Canadian diplomat]
United Nations (table) U: 86
- Norman architecture** N: 455 *with picture*
England (The arts) E: 298
- Norman Conquest** [English history] N: 455 *with picture*
Bayeux Tapestry B: 177 *with picture*
England (The Norman Conquest) E: 305
English language (Middle English) E: 313
Hastings, Battle of H: 83
Scotland (Struggles with England) S: 219
- Norman Conquests, The** [play by Ayckbourn]
Ayckbourn, Alan A: 995
- Norman Wells** [Northwest Territories]
Northwest Territories (Mining) N: 532 *with picture*
- Normand, Mable** [American actress]
Sennett, Mack *picture on* S: 301
- Normandie** [ship]
Ship (Ocean liners) S: 415
- Normandy** [region, France] N: 456
France (The land) F: 464 *with picture and map*;
(The Capetian dynasty) F: 471-472
- Normandy, Duke of** [father of]
William I, the Conqueror W: 308
- Normandy Bridge** [Le Havre, France]
Bridge (table: Cable-stayed) B: 603
- Normandy Invasion** [1944]
Canada, History of *picture on* C: 151
D-day D: 2
Eisenhower, Dwight David (Operation Overlord) E: 150
World War II (D-Day) W: 482 *with picture and map*
- Normans** [people] N: 456
Ireland (The Norman invaders) I: 425
- Norns** [Norse mythology] N: 457
Mythology (The construction of the world) M: 984-985
- Norodom Ranariddh** [Cambodian political leader]
Cambodia (History) C: 73-74
- Norodom Sihanouk** [king of Cambodia] N: 457
Indochina (World War II) I: 225
Lon Nol L: 427
- Norquay, John** [Canadian political leader]
Manitoba (table) M: 159
- Norris, Clarence** [American public figure]
Scottsboro Case S: 223
- Norris, Edwin L.** [American political leader]
Montana (table) M: 757
- Norris, Frank** [American author] N: 457
American literature (Naturalists) A: 419
Dreiser, Theodore D: 346
Novel (The United States) N: 573
- Norris, George William** [American political leader] N: 457
Nebraska (Economic depression) N: 114
Norris-La Guardia Act N: 457
Taft, William Howard (Legislative defeats) T: 10-11
- Norris, Tobias C.** [Canadian political leader]
Manitoba (table) M: 159; (Political developments) M: 162
- Norris Dam** [Clinch River]
Tennessee Valley Authority *picture on* T: 158
- Norris Geyser Basin**
Yellowstone National Park (The Upper Loop) Y: 559 *with map*
- Norris-La Guardia Act** [1932] N: 457
Labor movement (The Great Depression) L: 12
La Guardia, Fiorello Henry L: 31
- Norrish, Ronald George Wreyford** [British chemist]
Nobel Prizes (Chemistry: 1967) N: 443
- Norse mythology**
Mythology (Teutonic mythology) M: 984
Raven R: 151
- Norsemen** See *Vikings in this index*
- Norte Chico**
Chile (The Northern Desert) C: 464
- North, Andrew** [pen name]
Norton, Andre N: 535
- North, Douglass Cecil** [American economist]
Nobel Prizes (Economics: 1993) N: 449
- North, Idea of** [literature]
Canadian literature (Characteristics of Canadian literature) C: 157
- North, Lord** [British political leader] N: 457
Jefferson, Thomas (Revolutionary leader) J: 78-79
Revolutionary War in America (The Tea Act) R: 273
- North, Oliver L.** [American public figure]
Iran-contra affair (Administration actions) I: 407 *with picture*
Reagan, Ronald Wilson (The Iran-contra affair) R: 170
- North, Sir Thomas** [English scholar]
Plutarch P: 580
- North Against South** [book by Verne]
Verne, Jules V: 338
- North America N: 458** *with pictures and maps*
Exploration (Linking the globe) E: 446 *with map*
National park (table) N: 42g
Prehistoric animal (The distribution of mammals) P: 741
Prehistoric people (The spread of settlement) P: 751
Wheat (North America) W: 272 *with map*
See also *the list of Related articles in the North America article*
- North American Aerospace Defense Command** See *NORAD in this index*

North American Aviation [company]Aviation (The industry comes of age) **A: 989****North American College** [Italy]Rome (Schools) **R: 430****North American Free Trade Agreement** [1992]**N: 470**Bush, George Herbert Walker (International trade) **B: 722-722a**Campbell, Kim (The 1993 election) **C: 90d**Canada, History of (Recent developments) **C: 153-154**Chrétien, Jean (The 1993 election) **C: 522c**Clinton, Bill (International affairs) **Ci: 682e**Common market **Ci: 875**Economics (World trade) **E: 63-64**Globalization (Features of globalization) **G: 233**Hills, Carla Anderson **H: 232**International trade (Government trade policies) **I: 348-349**Mexico (Recent developments) **M: 474**Mulroney, Brian (Other economic developments) **M: 917-918**Ontario (Recent developments) **O: 787**United States, History of the (Changes in the economy) **U: 194****North American Indian Days**Montana picture on **M: 751****North American Plate**Plate tectonics (Transform plate boundaries) **P: 563**San Andreas Fault **S: 83 with map****North American porcupine** [animal]Porcupine **P: 678 with picture****North American rainbow water snake**Snake picture on **S: 526****North American Review** [magazine]Sparks, Jared **So: 764****North American turkey**Turkey **T: 513 with picture****North and South** [book by Gaskell]Gaskell, Elizabeth **G: 61****North arrow** [cartography]Map (Reading a map) **M: 178****North Asia** [region, Asia]Asia (Way of life in North Asia) **A: 789 with pictures; (Land regions) A: 792****North Atlantic Council**North Atlantic Treaty Organization (Organization) **N: 471****North Atlantic Current**Arctic Ocean (Currents, water masses, and tides) **A: 643 with map****North Atlantic iceberg**Iceberg (North Atlantic icebergs) **I: 17-18 with map****North Atlantic Marine Mammal Commission**Whale (The future of whales) **W: 264****North Atlantic Ocean**Atlantic Ocean (Boundaries and size) **A: 864****North Atlantic Treaty** [1949]North Atlantic Treaty Organization (History) **N: 471**Cold War (The West rearms) **Ci: 764**International relations (Treaties) **I: 344****North Atlantic Treaty Organization** [alliance]**N: 471**Air Force, United States (The Balkans) **A: 196**Balkans (Recent developments) **B: 42**Bosnia-Herzegovina (History) **B: 492-494**Cold War (The West rearms) **Ci: 764; (The great blocs split) Ci: 768**Communism (The Cold War) **Ci: 895**Czech Republic (Recent developments) **Ci: 1214**Eisenhower, Dwight David (NATO commander) **E: 150-151**Europe (The Cold War) **E: 415**European Union (Relations with other countries) **E: 419**Flag picture on **F: 216**Foreign aid (Economic development and mutual security) **F: 383-384**Foreign policy (Alliances) **F: 386-387**France (France under de Gaulle) **F: 476-477**Germany (Armed forces) **G: 147**Greece (Politics) **G: 353**Hungary (Recent developments) **H: 448**International relations (The Cold War begins) **I: 345**Kosovo **K: 385**Organization for Security and Cooperation in Europe **O: 853**Putin, Vladimir Vladimirovich **P: 912**Serbia (History) **S: 314-315**Stalin, Joseph (The Cold War) **So: 827**Truman, Harry S. (Foreign affairs) **T: 471**United States, History of the (Keeping peace in the Balkans) **U: 195**Warsaw Pact **W: 39**Yugoslavia (Ethnic tensions) **Y: 580-581****North Beach** [district]San Francisco (Residential districts) **S: 93 with map****North Borneo** [Malaysia history]Malaysia (Coming of the Europeans) **M: 101****North Bridge** [Concord]Revolutionary War in America (Lexington and Concord) **R: 274 with map****North Canal**Soo Canals (The American canals) **So: 595 with map****North Carolina** **N: 472 with pictures and maps**Colonial life in America (Development of the Thirteen Colonies) **Ci: 789 with map**United States, History of the (The Southern Colonies) **U: 154**

See also the list of Related Articles in the North Carolina article

North Carolina, University of **N: 495 with picture**North Carolina (The mid-1900's) **N: 493****North Carolina Agricultural and Technical State University** [Greensboro]North Carolina, University of **N: 495****North Carolina Battleship Memorial** [Wilmington]North Carolina (Places to visit) **N: 482****North Carolina Central University** [Durham]North Carolina, University of **N: 495****North Carolina Gazette** [newspaper]North Carolina (Communication) **N: 489****North Carolina Museum of Art**North Carolina (Museums) **N: 477 with picture****North Carolina Research Triangle**North Carolina (The mid-1900's) **N: 493****North Carolina School of the Arts** [Winston-Salem]North Carolina, University of **N: 495****North Carolina State University** [Raleigh]North Carolina, University of **N: 495****North Carolina Zoological Park** [Asheboro]North Carolina (Places to visit) **N: 482 with picture****North Cascades National Park** [Washington]**N: 495 with picture**National Park System (table: National parks) **N: 48****North Central States** [region, U.S.] **N: 495****North Channel** [waterway, Canada-U.S.]Lake Huron **L: 39 with map****North Charleston** [South Carolina]South Carolina (Population) **So: 644****North Coast Harbor**Cleveland (Comeback City) **Ci: 667****North Dakota** **N: 496 with pictures and maps**

See also the list of Related Articles in the North Dakota article

North Dakota, University of **N: 517****North Dakota State University** **N: 517****North East Land** [island, Arctic]Svalbard **So: 1013****North End** [district, Boston]Boston (The North End) **B: 497****North Equatorial Current** [Atlantic]Atlantic Ocean (Moving ocean waters) **A: 866**Gulf Stream **G: 437**Ocean (Circulation) **O: 658**Pacific Ocean (Currents) **P: 15****North geographic pole**North Pole **N: 517****North German Confederation** [German history]Germany (The unification of Germany) **G: 165**Prussia (German empire) **P: 843****North German Lloyd Line**Ship (Passenger vessels) **S: 414-415****North Island**New Zealand (The North Island) **N: 351 with map****North Korea**Army (The North Korean Army) **A: 726**Asia (Korea and Taiwan) **A: 789; (The spread of Communism) A: 809 with map**Carter, Jimmy (Later years) **C: 259**Cold War (The Korean War) **Ci: 764**Cooperative (In other countries) **Ci: 1036**Flag picture on **F: 203**Korea **K: 366; (North Korea) K: 368; (North Korea) K: 377**Korean War **K: 379**United Nations (Military actions) **U: 91****North Korean Workers' Party** [Korean political party]Pyongyang **P: 915****North magnetic pole**North Pole **N: 517**Magnetic equator **M: 55****North Mountain**Nova Scotia (Land regions) **N: 562****North Pacific Current** [oceanography]Pacific Ocean (Currents) **P: 15****North Philadelphia** [district, Philadelphia]Philadelphia (Residential districts) **P: 360-362****North Platte** [Nebraska] **N: 517****North Platte River** [U.S.]Platte River **P: 569****North Pole** [geography] **N: 517**Amundsen, Roald (Other achievements) **A: 445-446 with map**Arctic Ocean (Ice) **A: 643**Cook, Frederick Albert **Ci: 1025**Earth (How Earth moves) **E: 17**Exploration (Arctic exploration) **E: 449-450**Henson, Matthew Alexander **H: 191**Midnight sun **M: 535**North Star **N: 518**Peary, Robert Edwin **P: 224****North pole of balance** [geography]North Pole **N: 517****North Portico**White House picture on **W: 286****North Sami** [dialect]Sami (Language and culture) **S: 79****North Saskatchewan River**Alberta (Land and climate) **A: 322 with map****North Sea** **N: 517 with picture and map**England (The land) **E: 299**Great Britain **G: 337**Scotland (Energy sources) **S: 218 with map**United Kingdom (Energy sources) **U: 65-66 with picture****North Sea Canal** [waterway, The Netherlands]Canal (table) **C: 164**Netherlands (Transportation) **N: 147****North Ship, The** [poems by Larkin]Larkin, Philip **L: 77****North-South Ministerial Council** [organization]**N: 18**Ireland (Recent developments) **I: 428**Northern Ireland (Government) **N: 521**United Kingdom (Regional government) **U: 50****North Star** [newspaper]Douglass, Frederick **D: 314****North Star** [star] **N: 518 with pictures**Astronomy (How the stars move) **A: 835**Big and Little Dippers (The Big Dipper) **B: 296; (The Little Dipper) B: 296**Equator **E: 346**Pole **P: 618**Vega **V: 291****North Vietnam**Cold War (The death of Stalin) **Ci: 764-765; (The Vietnam War) Ci: 769**Geneva Accords **G: 87**Ho Chi Minh **H: 270**Indochina (The Geneva Accords) **I: 225**Vietnam **V: 364; (History) V: 369-371**Vietnam War **V: 372 with map****North Warning System** [defense] **N: 519**Radar (In the military) **R: 65; picture on R: 66****North West** [province, South Africa]South Africa (Provincial government) **So: 609****North West Company** [Canadian history]**N: 519**Canada, History of (Exploration of the West) **C: 145**Fur trade (The early fur trade) **F: 564**Grand Portage National Monument **G: 309**Hudson's Bay Company (Growth and problems) **H: 407**Manitoba (The Red River Colony) **M: 160**Minnesota (Struggle for control) **M: 603**Saskatchewan (The coming of the fur traders) **S: 146**Winnipeg (History) **W: 341****North-West Mounted Police**Alberta picture on **A: 330**

- Royal Canadian Mounted Police (History) R: 497 *with picture*
- North West Rebellion** [1885] N: 519
- Crowfoot Ci: 1158
- Dumont, Gabriel D: 383
- Laurier, Sir Wilfrid (The execution of Louis Riel) L: 124-125
- Macdonald, Sir John Alexander (Threats to Canadian unity) M: 10
- Métis M: 435
- Poundmaker P: 722
- Quebec (Early years as a province) Q: 30
- Riel, Louis R: 337
- Royal Canadian Mounted Police (History) R: 497
- Saskatchewan (Métis and Indian troubles) S: 146; *picture on S: 145*
- North Yemen**
- Yemen Y: 561
- Northampton, Battle of** [1460]
- Warwick, Earl of W: 44
- Northanger Abbey** [book by Austen]
- Austen, Jane A: 892
- Gothic novel G: 279
- Northcliffe, Viscount** [British publisher] N: 520
- Northeast Division**
- Hockey (table: National Hockey League) H: 281
- Northeast Passage** [Arctic Ocean]
- Amundsen, Roald (Other achievements) A: 445-446
- Exploration (The search for a northern passage) E: 446
- Northeast Rail Service Act** [1981]
- Conrail Ci: 973
- Northen, William J.** [American political leader]
- Georgia (table) G: 130
- Norther** [weather] N: 520
- Northern Alliance** [Afghan history]
- September 11 terrorist attacks (War on terrorism) S: 310a
- Northern Argentina** [region]
- Argentina (Northern Argentina) A: 652 *with map*
- Northern bluefin** [fish]
- Tuna T: 485
- Northern bobwhite** [bird]
- Bird (Birds of brushy areas) B: 338 *with picture*
- Quail Q: 4
- Northern Cape** [province, South Africa]
- South Africa (Provincial government) So: 609
- Northern Caucasus** [region]
- Caucasus C: 317
- Northern Chinese** [dialect]
- Chinese language (Spoken Chinese) C: 510
- Northern copperhead** [snake]
- Snake *picture on S: 533*
- Northern deciduous-evergreen forest**
- Forest (Forests of the United States and Canada) F: 394 *with map*
- Northern deer tick** [animal]
- Deer tick D: 87 *with picture*
- Northern diver** [bird]
- Loon L: 452
- Northern harrier** [bird] N: 520 *with picture*
- Harrier H: 67
- Hawk *picture on H: 112*
- Northern Hemisphere** [geography]
- Hemisphere H: 181 *with picture*
- Astronomy (The stars and constellations of the Northern Hemisphere) *map on A: 836*
- Ocean (Circulation) O: 658
- Season S: 270
- Northern Ireland** N: 521 *with pictures and map*
- See also* Ireland *in this index*
- Adams, Gerry A: 33
- Heaney, Seamus H: 130
- Ireland I: 416; (Religious persecution) I: 426; (The Irish Free State) I: 427; (The Republic of Ireland) I: 427-428
- Irish Republican Army I: 433
- North-South Ministerial Council N: 518
- Orange Order O: 817
- Parliament (The House of Commons) P: 172
- Trimble, David T: 445
- Ulster U: 15
- Ulster Unionist Party U: 15
- United Kingdom U: 48 *with picture*; (Regional government) U: 50; (Local government) U: 54; (The land) U: 58-61 *with map*; (Postwar problems) U: 70; (Political changes) U: 74
- Northern Ireland Assembly**
- Ireland (Recent developments) I: 428
- Northern Ireland (Government) N: 521
- United Kingdom (Regional government) U: 50
- Northern Ireland Office**
- Northern Ireland (Government) N: 521
- Northern Jezabel** [insect]
- Butterfly *picture on B: 735*
- Northern lights** *See* Aurora *in this index*
- Northern Limestone Alps** [mountains, Austria]
- Austria (Land regions) A: 934
- Northern Mandarin** [dialect]
- Chinese language (Spoken Chinese) C: 510
- Northern Mariana Islands, Commonwealth of the** [Pacific] N: 525 *with picture and map*
- Flag *picture on F: 213*
- Pacific Islands, Trust Territory of the P: 13
- Northern metalmark** [insect]
- Butterfly (Metalmarks) B: 736
- Northern Nigeria, Protectorate of** [former colony]
- Nigeria (British rule) N: 417
- Northern oriole** [bird] *See* Baltimore oriole *in this index*
- Northern Pacific Railroad**
- North Dakota N: 515
- Northern Pacific rattlesnake**
- Rattlesnake R: 149 *with picture*
- Northern pike** [fish]
- Pike P: 461 *with picture*
- Fish *picture on F: 159*
- Northern Province** [province, South Africa]
- South Africa (Provincial government) So: 609
- Northern red oak**
- Oak (Red oaks) O: 635
- Northern Rhodesia**
- Rhodesia and Nyasaland, Federation of R: 318
- Zambia Z: 588; (History) Z: 589
- Zimbabwe (History) Z: 597
- Northern Rockies** [U.S.]
- Rocky Mountains (Chief ranges of the Rockies) R: 395
- Northern Rugby Union** [organization]
- Rugby football (History) R: 513
- Northern Securities Company**
- Morgan, John Pierpont M: 803
- Roosevelt, Theodore ("Trust buster") R: 468
- Northern shoveler** [duck]
- Shoveler S: 439
- Northern shrike** [bird]
- Shrike S: 440
- Northern spotted owl** [bird]
- Spotted owl So: 804
- Northern Territory** [Australia] N: 526 *with pictures*
- Northern water snake**
- Snake *picture on S: 532*
- Northern white-cedar**
- Cedar (Scale-leaved cedars) C: 324
- Tree *pictures on T: 424*
- Northern wild rice** [plant]
- Wild rice W: 301
- Northfield** [Minnesota] N: 528
- Northmen** *See* Vikings *in this index*
- Northrop, John Howard** [American biochemist] N: 528
- Northumberland Strait** [Canada]
- New Brunswick (Recent developments) N: 199
- Northumbria** [ancient kingdom]
- English literature (Old English poetry) E: 314-315
- Northwest Atlantic Fisheries Organization**
- Newfoundland and Labrador (Recent developments) N: 377
- Northwest Coast Indians**
- Indian, American (Indians of the Northwest Coast) I: 161-162 *with pictures and map*
- Kwakwaka'wakw Indians K: 397
- Sculpture (The European impact) S: 244-245
- Totem T: 344 *with picture*
- Northwest Division**
- Hockey (table: National Hockey League) H: 281
- Northwest Highlands** [mountains, Scotland]
- Scotland (Land regions) S: 217
- Northwest Ordinance** [1787] N: 528 *with pictures and map*
- Fugitive slave laws F: 553
- Illinois (Early national period) I: 72-74
- Jefferson, Thomas (Congressman) J: 80
- King, Rufus K: 323
- Northwest Territory (Early history) N: 534-535
- Ohio (Exploration and settlement) O: 700
- Ohio Company (The second Ohio Company) O: 705
- Pioneer life in America (Government) P: 484
- Territory (In the United States) T: 176
- Westward movement in America (The Northwest Ordinance) W: 247
- Northwest Passage** [Arctic Ocean] N: 528 *with picture and map*
- Amundsen, Roald (Other achievements) A: 445-446 *with map*
- Cabot, Sebastian C: 8
- Coast Guard, United States (The Coast Guard since World War II) Ci: 738
- Exploration (The search for a northern passage) E: 446; (Exploring the Pacific) E: 448; (Arctic exploration) E: 449
- Frobisher, Sir Martin F: 535
- Hudson, Henry (Northern voyages) H: 404 *with map*
- Mackenzie, Sir Alexander M: 22
- McClure, Sir Robert John Le Mesurier M: 333
- Northwest School** [art]
- Seattle (The arts) S: 274
- Northwest Territories** N: 530 *with pictures and map*
- Nunavut N: 608; (Arrival of the Europeans) N: 611-612
- Ohio (Exploration and settlement) O: 700
- Saskatchewan (North West Territories) S: 146
- Territory (Territories in Canada) T: 177
- See also the list of Related Articles in the Northwest Territories article*
- Northwest Territory** [U.S. history] N: 534 *with picture*
- Clark, George Rogers Ci: 639
- Jefferson, Thomas (Congressman) J: 80; (Western expansion) J: 85
- Northwest Ordinance N: 528
- Pioneer life in America (Government) P: 484
- Territory (In the United States) T: 176
- Westward movement in America (The Northwest Ordinance) W: 247
- Northwestern Mutual Life Insurance Company**
- Insurance (table) I: 315
- Northwestern University** N: 535
- Chicago (Education) C: 427
- Willard, Frances Elizabeth Caroline W: 307
- Norton, Alice Mary**
- Norton, Andre N: 535
- Norton, Andre** [American author] N: 535
- Norton, Gale A.** [American government official]
- Bush, George Walker (table) B: 723
- Interior, Department of the (table) I: 325
- Norwalk Islands**
- Connecticut (Coastline) Ci: 962
- Norway** N: 536 *with pictures and maps*
- Christmas (In Denmark, Norway, and Sweden) C: 531
- Europe *picture on E: 407*
- Greenland (History) G: 385
- Lapland L: 74
- Newspaper (Newspapers in other countries) N: 385
- Races, Human *picture on R: 56*
- Sami S: 78
- Scandinavia S: 171 *with map*
- Shelter *picture on S: 392*
- Standard of living (table) So: 834
- Svalbard So: 1013
- Sweden (History) So: 1032-1033
- Welfare state W: 192
- Whale (The future of whales) W: 264
- World War II (table: The Allies) W: 471; (The conquest of Denmark and Norway) W: 473
- See also the list of Related articles in the Norway article*
- Norway maple** [tree]
- Maple (Other maples) M: 187 *with pictures*
- Norway pine** [tree]
- Tree *pictures on T: 413*
- Norway spruce** [tree]
- Spruce (Kinds) So: 809
- Tree *picture on T: 427*
- Norwegian Broadcasting Corporation**
- Norway (Communication) N: 544
- Norwegian elkhound** [dog] N: 548
- Dog *picture on D: 270*

Norwegian Folk Tales [book by Asbjørnsen and Moe]

Asbjørnsen, Peter Christen A: 766

Norwegian forest cat

Cat (Long-haired breeds) C: 292

Norwegian saltpeter

Saltpeter S: 76a

Nor'Wester [merchant]

North West Company N: 519

Norwich terrier [dog] N: 548 *with picture*

Norfolk terrier N: 454

Nose [anatomy] N: 548 *with diagrams*

See also index entries under Nasal...in this index

Cocaine C: 742

Smell (How odors are detected) S: 514

Nose [astronomy]

Heliosphere H: 174

Nose [torpedo]

Torpedo (How a torpedo works) T: 340-340b *with diagram*

Nose clip [ornament]

Indian, American *picture on I*: 140

Nose guard

Football (The defensive team) F: 357 *with diagrams*

Nose-leaf [zoology]

Bat (Head) B: 160

Nose leather

Cat (Head) C: 286-287

Nose ring [ornament]

Ring R: 342

Nosebleed N: 549 *with pictures*

Bleeding (First aid for bleeding) B: 399

First aid (Nosebleed) F: 141

Nosepiece

Microscope (How an optical microscope works) M: 517 *with picture*

Nosferatu [film]

Motion picture (Filmmaking in Europe) M: 866

Noshi [craft]

Origami O: 855

Nostradamus [French astrologer] N: 550 *with picture*

Nostril

Nose N: 548 *with diagram*

Nostromo [book by Conrad]

Conrad, Joseph C: 973

Novel (New directions in the novel) N: 573-574

NOT-gate [computer]

Electronics (Digital circuits) E: 213-214

Not Honour More [book by Cary]

Cary, Joyce C: 270

Notary public [office] N: 550 *with picture*

Notater [occupation]

Ballet (A dancer's life) B: 47-48

Notation [symbols] N: 550

Classical music (The Middle Ages) C: 645-646
Music (Musical notation) M: 952 *with diagrams*

Note [banking] N: 550

See also Bank note in this index

Discount (Bank discount) D: 224

Draft D: 318

Mortgage M: 820

Note [music]

Music (The elements of music) M: 950 *with pictures*;
[Musical notation] M: 952 *with pictures*

Note of hand [economics]

Note N: 550

Notebook computer

Computer (Personal computers) C: 909-910
Laptop computer L: 74

Notebooks [books by Leonardo]

Leonardo da Vinci (Drawings and scientific studies) L: 200-200a

Notebooks of Malte Laurids Brigge, The [book by Rilke]

Rilke, Rainer Maria R: 341

Notebooks of Thomas Wolfe, The [book by Wolfe]

Wolfe, Thomas Clayton W: 378

Notes from the House of the Dead [book by Dostoevsky]

Dostoevsky, Fyodor D: 311

Notes from Underground [book by Dostoevsky]

Dostoevsky, Fyodor D: 311

Notes on the Federal Convention [book by Madison]

Madison, James (Constitutional Convention) M: 33

Notes on the State of Virginia [book by Jefferson]

Jefferson, Thomas (Congressman) J: 80

Notice of allowance [law]

Patent (How to get a U.S. patent) P: 194-195

Notions [sewing]

Sewing (Choosing the equipment, fabric, and pattern) S: 332

Notker [Swiss religious leader]

German literature (Early German literature) G: 139

Notochord [zoology]

Amphioxus A: 443

Animal (Invertebrates and vertebrates) A: 488 *with diagram*

Chordate C: 522

Notoryctemorphia [zoology]

Mammal (table) M: 128 *with picture*

Notre Dame, Cathedral of [Antwerp, Belgium]

Antwerp (Chief buildings) A: 561

Belgium *picture on B*: 226

Notre Dame, Cathedral of [Chartres, France]

Chartres C: 386

Notre Dame, Cathedral of [Paris, France]

N: 550 *with picture*

Paris (Famous buildings) P: 163-164 *with map*;
picture on P: 160

Notre Dame, Cathedral of [Reims, France]

City *picture on C*: 582

Reims R: 207 *with picture*

Sculpture (The peak of architectural sculpture) S: 249-250 *with picture*

Notre Dame, University of [Indiana] N: 551

with picture

Indiana *picture on I*: 201

Notre-Dame Basilica See *Basilique Notre-Dame in this index*

Notre-Dame-de-Bon-Secours Church

Montreal (Churches) M: 773

Notre-Dame-de-la-Garde [church, France]

Marseille (The city) M: 226-227

Notre-Dame-la-Grande [church, Poitiers]

Romanesque architecture *picture on R*: 415

Notre Dame Mass [music by Machaut]

Classical music (Secular music) C: 646

Notre-Dame Mountains

Quebec (Land regions) Q: 22

Notredame, Michel de [French astrologer]

Nostradamus N: 550

Notte, John A., Jr. [American political leader]

Rhode Island (table) R: 311

Notte, Le [film]

Antonioni, Michelangelo A: 561

Nottingham [city, England] N: 552

Nottoyway Indians [American Indians]

Virginia (Early days) V: 418

Nouabalé-Ndoki National Park [Congo (Brazzaville)]

National park (table) N: 42f

Nouadhibou [city, Mauritania]

Mauritania (Land) M: 314-315 *with map*

Nouakchott [city, Mauritania] N: 552

Mauritania M: 314

Nougat

Candy (Whipped candies) C: 176

Nouméa [city, New Caledonia]

New Caledonia N: 200 *with picture*

Noumena [philosophy]

Kant, Immanuel (Kant's ideas) K: 244

Noun [grammar] N: 552

Antecedent A: 541

Capitalization C: 196

Case (Nouns) C: 272

Gender (Nouns) G: 80

Grammar G: 303

Number N: 604

Participle P: 184

Sentence (Subject and predicate) S: 303

Nouveau roman [literature]

Novel (After World War II) N: 574

Nova [astronomy] N: 553

Galaxy (Emissions from galaxies) G: 8b

Star (Binary stars) So: 852

Supernova So: 994

Nova [laser]

Laser (Solid-state lasers) L: 85

Nuclear energy (Experimental fusion devices) N: 592-593

Nova Colonia do Sacramento

Uruguay (Colonial years) U: 227

Nova Scotia N: 554 *with pictures and maps*

Acadia A: 21

Atlantic Provinces A: 868

Canada, Government of *picture on C*: 133

Tupper, Sir Charles T: 493

See also the list of Related Articles in the Nova Scotia article

Nova Scotia Power Corporation

Nova Scotia (The early to middle 1900's) N: 570

Novaculite [mineral]

Whetstone W: 280

Novalis [German poet] N: 571

Novascotian [newspaper]

Howe, Joseph H: 401

Novatian [antipope]

Pope (table) P: 666

Novaya Zemlya [islands, Arctic] N: 571

Barents, Willem B: 109

Novel [literature] N: 571

American literature (The sentimental novel)

A: 415

English literature (The rise of the novel)

E: 318; (Fiction between the wars) E: 322

Fiction F: 90

Fielding, Henry F: 94

French literature (The 1950's and 1960's)

F: 523

Romance R: 414

Writing (Fiction) W: 511

See also the list of Related articles in the Literature article

Novel of manners

American literature (Mark Twain and Henry James) A: 420

Novel (Britain) N: 573

Novel of the soil

Canadian literature (Early Québécois literature) C: 157

Novelas ejemplares [stories by Cervantes]

Cervantes, Miguel de (His literary career)

C: 363-364

Novello, Antonia Coello [American physician]

Hispanic Americans (Political developments)

H: 255-256 *with picture*

Novels [law]

Justinian Code J: 204

Novelty

Advertising (Novelties) A: 76 *with picture*

November [month] N: 576 *with pictures*

Calendar (The Romans) C: 30

Noverre, Jean Georges [French dancer]

Ballet (Ballet d'action) B: 51; *picture on B*: 52

Novgorod [Russia] See *Velikiy Novgorod in this index*

Novi Sad [city, Serbia] N: 578

Novial [language]

Universal language U: 205

Novice [religion]

Religious life R: 226

Novillada

Bullfighting (Types of bullfights) B: 695

Novillero

Bullfighting (Types of bullfights) B: 695

Novisimos [literature]

Spanish literature (Spanish literature today) So: 763

Novitiate [religion]

Nun N: 608

Novo-Kholmogory [former name]

Arkhangelsk A: 716

Novocain [medication] See *Procaine in this index*

Novosibirsk [city, Russia] N: 578

Siberia (The people) S: 445

Novotný, Antonín [Czechoslovak political leader]

Czechoslovakia (Communist rule) C: 1215-1216

Novum Organum [book by Bacon]

Philosophy (Modern philosophy) P: 387

Novus ordo seclorum

Great Seal of the United States (The reverse side) G: 348

NOW See National Organization for Women in this index

NOW account See Negotiable order of withdrawal account in this index

Now and Then [poems by Warren]

Warren, Robert Penn W: 37

Now We Are Six [poems by Milne]

Literature for children (Poetry) L: 356-357

- Nowruz** [holiday]
Iran (Recreation) I: 402
- Noyce, Robert** [American physicist] N: 578
Computer chip (History) Ci: 924f
Electronics (The solid-state revolution) E: 215-216
Invention (Recent developments) I: 364
Kilby, Jack K: 315
- Noyes, Alfred** [British poet] N: 578
- Noyes, Edward F.** [American political leader]
Ohio (table) O: 699
- Noyes, John Humphrey** [American social reformer]
Oneida Community O: 761
- Noye's Fludde** [play by Britten]
Britten, Benjamin B: 634
- Noyori, Ryoji** [Japanese chemist]
Nobel Prizes (Chemistry: 2001) N: 444
- Nozze di Figaro, Le** See Marriage of Figaro, The in this index
- Nozzle** [mechanics]
Turbine (How turbines work) T: 495
- Np** [symbol]
Neptunium N: 130
- NPN transistor**
Transistor (How transistors work) T: 373 with picture
- NPR** [radio system] See National Public Radio in this index
- NRA** [organization]
National Rifle Association of America N: 60
- NRA** [U.S. history] See National Recovery Administration in this index
- NRAO**
National Radio Astronomy Observatory N: 59
- NRC** See Nuclear Regulatory Commission in this index
- ROTC**
Navy, United States (Training an officer) N: 83
Reserve Officers Training Corps (Navy ROTC) R: 258
- NSA/CSS**
National Security Agency/Central Security Service N: 61
- NSAID** [drug] See Nonsteroidal anti-inflammatory drug in this index
- NSC** See National Security Council in this index
- NSF** [organization] See National Science Foundation in this index
- NSFNET** [computer network]
Internet (Early development) I: 350e
- Ntaryamira, Cyprien** [African political leader]
Burundi (History) B: 713-714
- Ntibantunganya, Sylvestre** [African political leader]
Burundi (History) B: 713-714
- NTSC system** [electronics]
Television (The television camera) T: 121-122
- Nu, U** [Burmese political leader]
Myanmar (Independence) M: 970e
- Nubia** [ancient region, Sudan] N: 578 with map
Africa (The influence of Christianity) A: 131
Sudan (History) So: 955
- Nubian goat** See Anglo-Nubian goat in this index
- Nubians** [people]
Egypt (People) E: 123
- Nuclear attack**
Civil defense (History) Ci: 606
Army (Prevention of war) A: 725
- Nuclear bomb**
See also Atomic bomb in this index
Bomb (Nuclear bombs) B: 451 with diagrams
Terrorism (Nuclear attacks) T: 178
- Nuclear depth bomb**
Depth charge D: 152
- Nuclear deterrence**
War (The Cold War era) W: 26
- Nuclear disarmament** See Arms control in this index
- Nuclear division** [biology]
Cell (Cell division) C: 330 with diagram
- Nuclear energy** N: 579 with pictures
 $E=mc^2$ E: 2
Einstein, Albert (Famous theories) E: 146-146b
Environmental pollution (Hazardous waste) E: 334-335; (Weighing benefits and risks) E: 339
Fission F: 189
Furnace (Sources of heat) F: 567
Fusion F: 589
International Atomic Energy Agency I: 337
Invention (The early and middle 1900's) I: 363
Laser (Heating) L: 83
Physics (Uncovering the secrets of the atom) P: 442
Uranium U: 214
History
Fermi, Enrico F: 73
Uses
Electric power (Nuclear power plants) E: 184
Energy supply (Nuclear energy) E: 278
Engineering (Nuclear engineering) E: 287
Heat (Sources of heat) H: 149
Perpetual motion machine P: 293
Ship (Nuclear power and automation) S: 413 with picture
Submarine (The power plant) So: 941
United Nations (Peaceful uses of nuclear energy) U: 89
Uranium (History of the use of uranium) U: 216-217
See also the list of Related Articles in the Nuclear energy article
- Nuclear engineering**
Engineering (Nuclear engineering) E: 287; picture on E: 288
- Nuclear family** [sociology]
Family (Varieties of families) F: 20 with picture
- Nuclear fission** See Fission in this index
- Nuclear forces** [physics] See Strong interaction in this index
- Nuclear fuel**
Fuel (Nuclear fuels) F: 551
- Nuclear fusion** See Fusion in this index
- Nuclear magnetic resonance**
Magnetic resonance imaging M: 57
Magnetism (Modern research in magnetism) M: 61
- Nuclear medicine**
Isotope (Uses of radioisotopes) I: 477
Medicine (table) M: 369
- Nuclear membrane** [biology]
Cell (The nucleus) C: 328 with diagram
Life (Cells) L: 276
- Nuclear mine**
Mine warfare (Land mines) M: 564
- Nuclear Nonproliferation Treaty** [1968] N: 595
Arms control (History of arms control) A: 721-722
Cold War (Soviet-American relations) Ci: 769
International Atomic Energy Agency I: 338
Nuclear energy (The spread of nuclear capability) N: 591
Nuclear weapon (Limiting proliferation) N: 600-601
Peace (Arms control) P: 207
Ukraine (Independence) U: 13
United Nations (Arms control) U: 92-93
- Nuclear physics** N: 595
Atom (Studying the nucleus) A: 876
Physics (Nuclear physics) P: 437
Science (Achievements of the mid-1900's) S: 202
- Nuclear power** See Nuclear energy in this index
- Nuclear power plant**
See also Nuclear reactor in this index
Glass (Modern glassmaking) G: 222-223
Nuclear energy (The role of nuclear energy in power production) N: 580 with pictures
Nuclear physics N: 596
Pennsylvania (Economic decline) P: 268 with picture
Technology (Using technology safely) T: 77
- Nuclear radiation**
Nuclear energy N: 579; (Radioactive decay) N: 582
Nuclear weapon (Initial nuclear radiation) N: 599
Radiation R: 74; (Particle radiation) R: 76
- Nuclear reaction**
Isotope (Artificial radioisotopes) I: 477
Transmutation of elements T: 378
- Nuclear reactor** N: 596
Electric power (Nuclear power plants) E: 184
Energy supply picture on E: 277
Fallout (History) F: 19
Idaho National Engineering and Environmental Laboratory I: 46
Graphite G: 323
Nuclear energy N: 579 with pictures; (How nuclear energy is produced) N: 584 with pictures; (Research on new types of reactors) N: 592 with pictures
- Nuclear weapon (Limiting testing) N: 600-601
Radiation (Artificial radioactive substances) R: 77; (Dose) R: 79-80 with picture
Turbine (Steam turbines) T: 496-497
- Nuclear Regulatory Commission** [U.S.] N: 596
Hazardous wastes H: 122
Nuclear energy (Government regulation) N: 589; (The spread of nuclear capability) N: 591
- Nuclear rocket**
Rocket (Nuclear rockets) R: 389 with diagram
Space exploration (Developing more efficient rockets) So: 728
- Nuclear shell model** [physics]
Atom (Forces in the nucleus) A: 873-874
Radiation (Causes of radiation) R: 78
- Nuclear ship**
Navy (Navies during the Cold War) N: 80
Ship (Nuclear power and automation) S: 413 with picture
Warship (Warships in the nuclear age) W: 42 with pictures
- Nuclear submarine** [ship]
Connecticut (The mid-1900's) Ci: 971 with picture
Navy (Navies during the Cold War) N: 80
Submarine (The power plant) So: 941; (Nuclear submarines) So: 943
Warship (Warships in the nuclear age) W: 42 with picture
- Nuclear testing**
Bikini Atoll B: 299
- Nuclear theory** See Atomic theory in this index
- Nuclear war**
Nuclear weapon N: 596
Nuclear winter N: 602
- Nuclear War, International Physicians for the Prevention of**
Nobel Prizes (Peace: 1985) N: 449
- Nuclear waste**
Nuclear energy (Wastes and waste disposal) N: 588
Radiation (Artificial radioactive substances) R: 77-78
- Nuclear weapon** N: 596 with pictures
Air force (Air forces in the nuclear age) A: 186
Arms control (The current arms-control debate) A: 721; (History of arms control) A: 721-722
Army (Prevention of war) A: 725; (Armies in the nuclear age) A: 728
Chemical-biological-radiological warfare (Radiological) C: 397
Canada, History of (The return of the Liberals) C: 152
Clinton, Bill (International affairs) Ci: 682f
Cold War (The death of Stalin) Ci: 764; (The missile gap) Ci: 765; (The space race begins) Ci: 767; (Easing Cold War tensions) Ci: 767; (The shifting Cold War battleground) Ci: 767; (Soviet-American relations) Ci: 768-769
Fallout F: 18; (History) F: 19
Guided missile (The warfare) G: 423
International relations (The Cold War begins) I: 345
Iraq (Recent developments) I: 415
Los Alamos National Laboratory L: 455
Navy (Navies during the Cold War) N: 80
New Zealand (International tensions) N: 356
North Atlantic Treaty Organization (History) N: 471
Nuclear energy (The development of nuclear weapons) N: 590
Nuclear Nonproliferation Treaty N: 595
Pakistan (Recent developments) P: 100
Pauling, Linus Carl P: 202
Sandia National Laboratories S: 109
Strategic Arms Limitation Talks So: 919
Strategic Arms Reduction Treaty So: 919
Strategic Defense Initiative So: 919
Technology (Challenges of technology) T: 76-77
United Nations (Arms control) U: 92
War (The history of warfare) W: 26; (Warfare today) W: 26
See also the list of Related Articles in the Nuclear weapon article
- Nuclear winter** N: 602
Nuclear weapon (Thermal radiation) N: 598

Nucleic acid [biology]

Human body (Chemical elements and molecules) H: 417

Life (Nucleic acids) L: 278; *diagram on* L: 277

Nucleoid [biology]

Bacteria (The structure of bacteria) B: 20 *with diagram*

Nucleolus [biology]

Cell (The nucleus) C: 328 *with diagrams*

Nucleon [subatomic particle]

Baryon B: 122

Nucleotide

DNA D: 258

Heredity (The flow of genetic information) H: 205

Life (Nucleic acids) L: 278

RNA R: 357

Nucleus [astronomy]

Comet Ci: 867

Nucleus [biology]

Cell C: 326; (The nucleus) C: 328 *with diagrams*

Ameba A: 406

Blood (Red blood cells) B: 408

Heredity (Chromosomes and genes) H: 201

Life (Cells) L: 276

Nucleus [physics]

Atom (The parts of an atom) A: 870-871 *with diagrams*; (Forces in the nucleus) A: 873; (Studying the nucleus) A: 876

Bacteria (The structure of bacteria) B: 20

Cosmic rays (Galactic cosmic rays) Ci: 1076

Electricity (Atoms) E: 191-192

Electron E: 203

Magnetic resonance imaging M: 57

Neutron N: 155

Nuclear energy (Atoms and nuclei) N: 581 *with diagram*

Nuclear physics N: 595

Particle accelerator (Uses of accelerators) P: 184

Physics (Nuclear physics) P: 437; (Uncovering the secrets of the atom) P: 442

Radiation (Radiation and radioactivity) R: 75; (Particle radiation) R: 76; (Sources of radiation) R: 77 *with diagrams*

Rutherford, Ernest R: 569

Star (Fusion in stars) So: 846

Nude Descending a Staircase, No. 2 [painting by Duchamp]

Duchamp, Marcel D: 373 *with picture*

Nueces River (Texas)

Mexican War (Background of the war) M: 445 *with map*; (Events leading up to the war) M: 446

Nuer [people] N: 602

Anthropology (Linguistic anthropology) A: 547

Sudan (People) So: 952

Nuer, The [book by Evans-Pritchard]

Ethnography E: 373

Nuestra Señora del Carmen Mission

Mission life in America (A visitor's guide) M: 620

Nueva Isabela (Latin American history)

Santo Domingo S: 117

Nuevo Laredo [Mexico] N: 603 *with picture*

Laredo L: 76

Nuffield Radio Astronomy Laboratories, Jodrell Bank

Jodrell Bank Observatory J: 130

Nugent, Luci Baines Johnson [daughter of]

Johnson, Lyndon Baines (Marriage) J: 146

Nuggets, Denver

Basketball (table) B: 150

Nuku Hiva [island, Pacific]

Marquesas Islands M: 217

Nuku'alofa [city, Tonga]

Tonga T: 328; (Economy) T: 328

Null and void [law]

Nullification N: 603

Null set [mathematics]

Set theory (Empty sets) S: 321

Nullarbor Plain [Australia]

Australia (Land regions) A: 908-909 *with map*

Nullification [U.S. history] N: 603

Calhoun, John Caldwell C: 35

Force bill F: 371

Hayne, Robert Young H: 122

Jackson, Andrew (Split with Calhoun) J: 11

South Carolina (Nullification) So: 660

States' rights (Early history) So: 866

United States, History of the (Jackson as President) U: 170

Webster, Daniel (The U.S. senator) W: 177

Nullification, Ordinance of (1832)

South Carolina (Nullification) So: 660

Numa Pompilius [legendary figure]

Calendar (The Romans) C: 30

February F: 60

Mythology (The seven kings) M: 981

Numbat [animal] N: 603 *with picture***Number** [cards]

Bridge (Bidding) B: 604

Number [grammar] N: 604

Noun (Number and case) N: 553

Number, Denominate [mathematics] *See*

Denominate number *in this index*

Number and numeral N: 604

See also Numeration systems *in this index*

Arabic numerals A: 584

Arithmetic A: 665

Flag pictures on F: 197

Integer I: 317

Maya (Communication and learning) M: 324

Numeration systems N: 605

Roman numerals R: 413

Scientific notation S: 207

Number 8 [painting by Rothko]

Rothko, Mark *picture on* R: 487

Number line [mathematics]

Addition (Regrouping) A: 49

Number 9: In Praise of Gertrude Stein [painting by Tomlin]

Tomlin, Bradley Walker *picture on* T: 327

Number 10 Downing Street

London (Central London) L: 429-430

Number the Stars [book by Lowry]

Lowry, Lois L: 511

Number theory [mathematics] N: 605

Fermat, Pierre de F: 73

Numbers, Book of [Old Testament] N: 605

Pentateuch P: 274

Numeral *See* Number and numeral *in this index***Numeral flag**

Flag pictures on F: 197

Numeration systems [mathematics] N: 605 *with pictures*

Decimal system D: 70

Duodecimal system D: 386

Gupta dynasty (Cultural life under the guptas) G: 442-443

Number and numeral N: 605

Zero Z: 594

See also the list of Related articles in the Numeration systems article

Numerator [mathematics]

Fraction (In symbols) F: 445-446

Numerianus (Roman emperor)

Rome, Ancient (table) R: 447

Numerical control

Machine tool (Numerical control of machine tools) M: 19

Numerical reasoning aptitude

Careers (Aptitudes) C: 215

Numerical weather prediction model

Meteorology (Computer modeling) M: 433

Numerology [superstition] N: 607

Fortunetelling (Methods of fortunetelling) F: 419-420

Numidia (ancient region) N: 608**Numismatics** *See* Coin collecting *in this index***Numitor** [legendary figure]

Romulus and Remus R: 450

Nummulitic limestone

Ooze O: 788

Nun [Egyptian god]

Mythology (The Great Ennead) M: 976

Nun [religion] N: 608

Address, Forms of (Members of the clergy) A: 54

Clothing *picture on* Ci: 691

Convent C: 1024

Monasticism M: 700

Religious life R: 226

Nun buoy [navigation]

Buoy B: 701 *with picture*

Nunavut [territory, Canada] N: 608 *with pictures and map*

Boothia Peninsula B: 481

Canada, History of (Territorial and provisional changes) C: 154

Ellesmere Island E: 242

Flag *picture on* F: 214

Indian, American (Current issues) I: 182-183

Inuit (Canada) I: 354i

Northwest Territories (Recent developments) N: 534

Territory (Territories in Canada) T: 177

Nunavut Act (1993)

Nunavut (Establishment of Nunavut) N: 612

Nunavut Land Claims Agreement Act (1993)

Nunavut (Establishment of Nunavut) N: 612

Nuncio [diplomat]

Pope (The powers of the pope) P: 660-661

Vatican City (Diplomatic corps) V: 288

Nunes, Pedro (Portuguese navigator)

Great-circle route G: 338

Núñez de Arce, Gaspar [Spanish author]

Spanish literature (The 1800's) So: 761

Núñez del Prado, Marina (Bolivian artist)

Bolivia (The arts) B: 445

Nunivak Island

Alaska (Coastline) A: 294

Nunn, Louie B. [American political leader]

Kentucky (table) K: 290

Nuoc mam [food]

Vietnam (Food and drink) V: 366

Nuoro [province, Italy]

Sardinia S: 124

Nuqrashi, Mahmud (Egyptian political leader)

Muslim Brotherhood M: 964

Nur al-Din [Muslim political leader]

Fatimid dynasty F: 55

Nurek Dam (Vakhsh River, Tajikistan)

Dam (table) D: 18

Tajikistan (Economy) T: 18a-18b

Nuremberg (Germany) N: 612

Bavaria B: 175

Clock *picture on* Ci: 682j

Germany *picture on* G: 169

Nuremberg doll

Doll (The Renaissance) D: 288

Nuremberg Laws (German history)

Holocaust (Before the Holocaust) H: 296

Nuremberg N: 612

Nuremberg trials [1945-1949]

Nuremberg Trials N: 612

Germany (Occupied Germany) G: 169

Holocaust (The Nuremberg Trials) H: 296b

Human rights (The development of human rights) H: 428-428a

International law (Punishment) I: 341

War crime (World War II) W: 27

Nureyev, Rudolf (Russian dancer) N: 613 *with picture*

Ballet (Ballet in Russia) B: 52-53

Fonteyn, Margot F: 327 *with picture*

Nurmi, Paavo (Finnish athlete) N: 613

Olympic Games (Between the wars) O: 751

Track and field (The early and mid-1900's) T: 357

Nürnberg *See* Nuremberg *in this index***Nurse** *See* Nursing *in this index***Nurse** [entomology]

Insect (Family life) I: 294-295

Nurse, Sir Paul [British biologist]

Nobel Prizes (Physiology or medicine: 2001) N: 445

Nurse cell

Sponge (Sexual reproduction) So: 800

Nurse grass

Lawn (Planting the grass) L: 142

Nurse-midwife

Midwife M: 536

Pregnancy (Planning for pregnancy) P: 734a

Nurse practitioner

Medicine (Other health-care professionals) M: 366

Nursing (Nurse practitioners) N: 618

Nurse researcher [occupation]

Nursing (Other nursing careers) N: 618-619

Nurse shark [fish]

Shark (Kinds of sharks) S: 375 *with picture*

Zoo *picture on* Z: 606

Nursery [agriculture] N: 613

Conservation *picture on* Ci: 980

Nursery rhyme N: 614 *with picture*

Literature for children (Poetry) L: 356

Nursery Rhymes of England, The [book by Halliwell]

Nursery rhyme (History) N: 615

Nursery school [education] N: 615 *with picture*

Early childhood education (Formal education programs) E: 15

Education (The organization of U.S. education) E: 89
Montessori method M: 764a
School (Nursery schools) S: 181
Nursery-web weaver
 Spider (Fisher spiders) So: 787 *with picture*
Nurse's aide N: 617
 Hospital (The professional services staff) H: 371
Nurses' Association, American
 Nursing (The history of nursing) N: 620
Nurses' Settlement (New York City)
 Wald, Lillian D. W: 7
Nursing [career] N: 617 *with pictures*
 Barton, Clara B: 121
 Careers (Health care) C: 223-224
 Emergency room E: 258
 Hospital (The professional services staff) H: 371; (The 1800's) H: 373
 Medicine *pictures on* M: 363, M: 365
 Nightingale, Florence N: 420
 Nurse's aide N: 617
 Nutting, Mary Adelaide N: 632
Nursing (feeding)
 See also *Breast-feeding in this index*
 Baby (Feeding procedures) B: 9
 Cat (Growth and development) C: 293 *with picture*
 Dog (Life history) D: 266-277 *with picture*
 Mammal M: 117; (Care of the young) M: 124 *with picture; pictures on* M: 119
 Mammary glands M: 129
Nursing education
 Nursing (Nursing as a career) N: 619
 Nutting, Mary Adelaide N: 632
Nursing home N: 620
 Foster care F: 429
 Interior design *picture on* I: 335
Nüsslein-Volhard, Christiane [German physiologist]
 Nobel Prizes (Physiology or medicine: 1995) N: 445
Nut [Egyptian goddess]
 Mythology (The Great Ennead) M: 976; (The Osiris myth) M: 976; *picture on* M: 974
Nut [food] N: 621 *with pictures*
 Fruit (Simple fruits) F: 548
 Halloween (Fortunetelling) H: 24b
 Nutrition (Kinds of nutrients) N: 625
 Tree (Food products) T: 412
 See also *the list of Related Articles in the Nut article*
Nut [hardware]
 Bolt B: 449
Nutcrack Night [custom]
 Halloween (Fortunetelling) H: 24b
Nutcracker [bird] N: 622 *with picture*
Nutcracker, The [ballet]
 Ballet (Kinds of ballet) B: 48
 Baryshnikov, Mikhail *picture on* B: 123
Nuthatch [bird] N: 622 *with picture*
 Bird (Birds of forests and woodlands) B: 334 *with picture*
Nutmeg [spice] N: 623 *with picture*
 Mace M: 11
Nutmeg State [nickname]
 Connecticut (Colonial life) Ci: 968-970
Nutria [animal] N: 623 *with picture*
 Fur (table) F: 561
 Invasive species (Managing invasive species) I: 354k
Nutriculture [agriculture] See *Hydroponics in this index*
Nutrient [biology]
 Blood (Transporting nutrients and wastes) B: 408 *with diagram*
 Ecology E: 53
 Environmental pollution (Water pollution) E: 334
 Fertilizer F: 78
 Food (How the body uses food) F: 330
 Milk M: 545
 Nutrition (Kinds of nutrients) N: 625
 Ocean (The food cycle) O: 655-658
 Rain forest (Climate and soil) R: 126
 Soil So: 573
 Starvation So: 858
 Water pollution (Disruption of natural processes) W: 138 *with diagram*
Nutrient deficiency
 Plant (Plant enemies) P: 543
Nutrition N: 624 *with pictures*

Cancer (Reducing the risk of cancer) C: 171
 Carbohydrate C: 203
 Center for Science in the Public Interest C: 351
 Circulatory system (In nutrition) Ci: 560 *with picture*
 Disease (Metabolic diseases) D: 229
 Fat (Biological and nutritional importance) F: 52-53
 Fiber, Dietary F: 88
 Flour F: 268
 Food (How the body uses food) F: 330
 Food additive (Kinds of additives) F: 339
 Food supply (Basic human food needs) F: 346 *with pictures*
 Health (Nutrition) H: 125
 Health food H: 129
 Home economics (Nutrition, dietetics, and food science) H: 300
 Malnutrition M: 111
 Milk M: 545
 Mushroom (The importance of mushrooms) M: 945
 Physical fitness (Developing physical fitness) P: 435
 Protein (Proteins in the diet) P: 832 *with diagrams*
 Seafood S: 265
 Teeth (A good diet) T: 81
 Trace elements T: 353
 Vegetarianism V: 294
 Vitamin V: 430
 Weight control (Diet) W: 182
 See also *the list of Related Articles in the Nutrition article*
Nutrition Labeling and Education Act [1990]
 Center for Science in the Public Interest C: 351
 Nutrition (Eat a balanced diet) N: 626
Nutritional supplement
 Food additive (Kinds of additives) F: 339
Nutritionist
 Nutrition (Careers in nutrition) N: 631 *with picture*
Nutter, Donald G. [American political leader]
 Montana (table) M: 757
Nutting, Mary Adelaide [Canadian-American nurse] N: 632
Nuu-chah-nulth
 Nootka Indians N: 453
Nuuanu Pali [cliff]
 Hawaii (Places to visit) H: 98
Nuuanu Pali, Battle of [1795]
 Kamehameha I K: 212
Nuwas, Abu [Arab poet]
 Arabic literature (Poetry) A: 583
Nuyoricans [people]
 Hispanic Americans H: 244
NYA [U.S. history]
 New Deal (table) N: 201
Nyame [African god]
 Mythology (African mythology) M: 982-983
Nyamwezi [people]
 Tanzania (Population and ancestry) T: 31; (The development of trade) T: 34
Nyasa, Lake [Africa] See *Lake Nyasa in this index*
Nyasaland
 Malawi M: 97
 Rhodesia and Nyasaland, Federation of R: 318
Nyaya [philosophy]
 Hinduism (The six schools of philosophy) H: 236
Nye, Bill [American author] N: 632
Nye, Edgar Wilson
 Nye, Bill N: 632
Nye, James Warren [American political leader]
 Nevada (Nevada becomes a territory) N: 174
Nye, Naomi Shihab [American poet]
 Literature for children (Children's literature today) L: 365
Nye and Riley's Railway Guide [book by Nye and Riley]
 Nye, Bill N: 632
Nyerere, Julius Kambarage [Tanzanian political leader] N: 632
 Tanzania (Independence) T: 35; (The united republic) T: 35; (Recent developments) T: 35
Nyhan, William [American physician]
 Lesch-Nyhan syndrome L: 205
Nyhavn Canal [Copenhagen]
 Denmark *picture on* D: 132

Nylon [synthetic] N: 632
 Air conditioning (In business and industry) A: 176-177
 Aramid A: 591
 Fiber *picture on* F: 87
 Interior design (Choosing patterns and textures) I: 332
 Plastics (table) P: 556; (Growth of the plastics industry) P: 560
 Rope (Synthetic-fiber rope) R: 476 *with picture*
 Rugs and carpets (Materials used in rugs and carpets) R: 513-514
 Sailing (Sails) S: 24
 Tent (Kinds of tents) T: 171
 Textile (Manufactured fibers) T: 213
Nylon salt
 Nylon (How nylon is made) N: 632
Nylon 6
 Nylon (History) N: 633
Nylon 66
 Nylon (History) N: 633
Nymph [entomology]
 Cicada (Development) Ci: 551
 Insect (Incomplete metamorphosis) I: 293
 Larva L: 78
Nymph [mythology] N: 633
 Dionysus D: 215
 Mythology (Greek divinities) M: 979
Nymph of Fontainebleau [sculpture by Cellini]
 Cellini, Benvenuto C: 339
Nymphidia [poem by Drayton]
 Drayton, Michael D: 344
Nynorsk
 Norway (Language) N: 539
Nyoman River [Belarus] See *Neman River in this index*
NYSE See *New York Stock Exchange in this index*
Nystagmus [disorder] N: 633
Nystatin [medication]
 Antibiotic (Disruption of the cell membrane) A: 550-551
Nyswander, Marie [American doctor]
 Methadone M: 433
Nyx [Greek mythology]
 Hypnos H: 477
Nzinga Mbemba [king of Kongo]
 Kongo K: 365
Nzinga Nkuwu [king of Kongo] N: 633
 Kongo K: 365

O

O [letter] O: 634 *with pictures*
 O [symbol]
 Oxygen (Chemical properties) O: 889
O Beautiful for Spacious Skies [song] See *America the Beautiful in this index*
"O Canada" [song] O: 635
"O Captain! My Captain!" [poem by Whitman]
 Whitman, Walt (His work) W: 294
O gauge [size]
 Railroad, Model (Scale and size) R: 120 *with picture*
"O God, Our Help in Ages Past" [hymn]
 Hymn (Words and music) H: 474
O Guarani [book by Alencar]
 Latin-American literature (Romanticism) L: 112
O. Henry See *Henry, O. in this index*
O ring
 Space exploration (The Challenger disaster) So: 725-726
"O soave fanciulla" [aria]
 Opera (*Bohème, La*) O: 801
O the Chimneys [poetry collection]
 Sachs, Nelly S: 5
OAAU [organization]
 Malcolm X M: 103
Oahe, Lake
 South Dakota (Rivers and lakes) So: 676
Oahe Dam [United States]
 Dam (table) D: 18
Oahu [island, Hawaii]
 Hawaii H: 88; (Oahu) H: 102
 Honolulu H: 320
Oak [tree] O: 635 *with pictures*
 Forest (Forest succession) F: 397
 Live oak L: 393 *with picture*
 Plant (How plants protect themselves) P: 544-545

- Tree pictures on T: 423, T: 427
Wood picture on W: 389
- Oak Creek Canyon** [Arizona]
Arizona (Places to visit) A: 678
- Oak Hammock Marsh** [Manitoba]
Manitoba (Places to visit) M: 152
- Oak Hill** [estate]
Monroe, James (Later years) M: 738
- Oak Park** [Illinois]
Architecture picture on A: 631
- Oak Ridge Cemetery** [Illinois]
Lincoln, Abraham (Assassination) L: 326 with picture
Springfield So: 807
- Oak Ridge National Laboratory** [Tennessee]
O: 636
- Oak toad**
Toad (Kinds of toads) T: 304
- Oak-tree shilling**
Colonial life in America (Money) Ci: 812
Money (History of United States currency) M: 707 with picture
- Oakland** [California] O: 637 with picture
California (The late 1900's) C: 63
- Oakland Athletics**
Baseball (table) B: 130
- Oakland Raiders**
Football (National Football League) F: 364
- Oaklawn Park** [Arkansas]
Arkansas picture on A: 705
- Oakley, Annie** [American frontierswoman]
O: 638 with picture
- Oakmoss** [lichen]
Lichen (The importance of lichens) L: 269
- Oar**
Rowing R: 493
- Oarfish** [fish] O: 638
Fish picture on F: 156
- OAS** See Organization of American States in this index
- OAS** [Algerian history] See Secret Army
Organization in this index
- OASDHI** [government program]
Insurance (Social insurance) I: 314
Social security So: 553
- Oasis** O: 638 with pictures
Africa picture on A: 119
Desert (Desert land and climate) D: 156
Merv M: 420
Sahara (Land and climate) S: 20-21 with picture
- Oasis mirage**
Mirage M: 615
- Oates, Joyce Carol** [American author] O: 639
American literature (Fiction and other prose) A: 424 with portrait
- Oates, William Calvin** [American political leader]
Alabama (table) A: 274
- Oath** [law] O: 639
Perjury P: 289
Witness W: 374
- Oath of allegiance** [Canada]
Citizenship (Canadian citizenship) Ci: 571;
(Canadian citizenship) Ci: 570
- Oath of allegiance** [U.S.]
Citizenship (Naturalization) Ci: 570
Oath (Oath of office) O: 639
- Oath of fealty** [European history]
Homage H: 300
- Oath of Hippocrates** See Hippocratic oath in this index
- Oath of office** [law]
Oath (Oath of office) O: 639
- Oath of the Horatii, The** [painting by David]
David, Jacques Louis D: 46
Painting (History paintings) P: 33-34;
(Neoclassicism) P: 66-67 with picture
- Oaths of Strasbourg** [B42]
French language (Old French) F: 517
- Oatmeal** [food] O: 640
Scotland (Food and drink) S: 214
- Oats** [plant] O: 640 with pictures
Grain (Kinds) G: 301
Grass (Cereals) G: 326
Horse (Food) H: 355
Leaf picture on L: 151
- OAU** See Organization of African Unity in this index
- Oaxaca** [city, Mexico] O: 641
- Oaxaca** [state, Mexico]
Mixtec Indians M: 680
- Oaxaca Plateau**
Mexico (The Southern Uplands) M: 462
- Ob River** [Russia] O: 642
Russia (The West Siberian Plain) R: 540-541
- Oba**
Yoruba Y: 569
- Obadiah, Book of** [Old Testament] O: 642
- O'Bannon, Frank L.** [American political leader]
Indiana (table) I: 214
- Obasan** [book by Kogawa]
Canadian literature (Modern English-Canadian fiction) C: 160
- Obasanjo, Olusegun** [Nigerian political leader]
Nigeria (Recent developments) N: 418
- Obed Wild and Scenic River** [Tennessee]
National Park System (table: National parkways and other national parklands) N: 56
- Obedience training**
Dog (Obedience training) D: 280 with picture
- Obedience trial**
Dog (Dog competitions) D: 280-281
- Obelisk** [architecture] O: 642
Cleopatra's Needles Ci: 662b
Washington Monument W: 109
- Obelisk of Luxor**
Obelisk O: 642
Paris (Gardens, squares, and parks) P: 162 with picture
- Oberammergau** [Germany] O: 642 with picture
Passion play P: 192
- Oberlin College** O: 642
Coeducation Ci: 752
Ohio picture on O: 701
Women's movements (The beginnings of women's movements) W: 385
- Oberon** [legendary figure]
Fairy (Fairies in literature) F: 11 with picture
Shakespeare, William (A Midsummer Night's Dream) S: 357
- Oberon** [satellite]
Satellite (Inert satellites) S: 150a-150c
- Oberth, Hermann** [German physicist]
Rocket (Rockets of the early 1900's) R: 390
Space exploration (Early dreams of space flight) So: 706
- Oberto** [opera by Verdi]
Verdi, Giuseppe V: 316
- Obesity** [disorder]
See also Weight control in this index
Fat (Fats and disease) F: 53
Food (Recent developments) F: 337
Health (Nutrition) H: 125
Nutrition (Do not overeat) N: 630 with picture
- Obi** [clothing]
Japan (Clothing) J: 39
- Obin, Philomé** [Haitian painter]
Latin America (Painting) L: 101-102
- Object** [computing]
Computer (Using programming languages) Ci: 923
- Object** [grammar]
Case (Pronouns) C: 272
Grammar G: 303
- Object ball**
Billiards B: 305
- Object marble**
Marbles M: 193
- Object-oriented programming** [computing]
Computer (Using programming languages) Ci: 923
- Objective case** [grammar]
Case (Pronouns) C: 272
Declension D: 80
- Objective lens**
Binoculars B: 309 with diagram
Microscope (How an optical microscope works) M: 517 with pictures
Telescope (Refracting telescopes) T: 103 with diagram
- Objectivism** [philosophy]
Philosophy (Ethics) P: 384-385
Rand, Ayn R: 136
- Oblast** [political unit]
Kazakhstan (Government) K: 250a
Russia (Local government) R: 531
Ukraine (Local government) U: 6
- Oblata spheroid** [geometry]
Spheroid So: 780
- Obligation** [philosophy]
Ethics (Modern ethics) E: 366
- Oblique circular cylinder** [geometry]
Cylinder Ci: 1204
- Oblique prism**
Prism P: 805
- Obliquity** [astronomy]
Mars (Orbit and rotation) M: 225
- Oblovov** [book by Goncharov]
Russian literature (Early realism) R: 562
- OBO carrier** [ship]
Ship (Dry bulk carriers) S: 420-421; picture on S: 422
- Obock** [city, Djibouti]
Djibouti (History) D: 257
- Oboe** [musical instrument] O: 643 with pictures
Music (Wind instruments) M: 949 with picture
- Obote, Apollo Milton** [Ugandan political leader]
O: 643
Ganda G: 24
Uganda (History) U: 4
- O'Boyle, Patrick Aloysius Cardinal** [American religious leader]
Cardinal (table: American cardinals) C: 211
- Obrecht, Jacob** [Flemish composer]
Classical music (Franco-Flemish music) Ci: 646
- Obregón, Alejandro** [Colombian painter]
Colombia (The arts) Ci: 781
- Obregón, Álvaro** [Mexican political leader]
O: 643
Mexico (Economic and social changes) M: 473
Villa, Pancho V: 384 with picture
- Obrenović, Miloš** [Serbian political leader]
Serbia (History) S: 314
- O'Brien, Davey** [American football player]
Football (table) F: 363
- O'Brien, Edmond** [British actor]
Motion picture (Best performance by an actor in a supporting role: 1954) M: 863
- O'Brien, Flann** [Irish author]
Irish literature (Fiction and poetry) I: 432-433
- O'Brien, Joseph C.** [American harness driver]
Harness racing (History) H: 64
- O'Brien, Lawrence Francis** [American political leader] O: 643
- O'Brien, Parry** [American track athlete]
Track and field (The early and middle 1900's) T: 357
- O'Brien, Robert C.** [American author] O: 643
- Obscenity and pornography** O: 643
Censorship (Moral censorship) C: 345
Freedom of the press F: 507
- Obscenity and Pornography, Commission on**
Obscenity and pornography (In the United States) O: 643-644
- Observation** [psychology]
Psychology (Naturalistic observation) P: 847
Pestalozzi, Johann Heinrich P: 318
- Observation balloon**
Balloon (Balloons in war) B: 61
- Observation elevator**
Elevator (Special kinds of elevators) E: 234
- Observational study**
Statistics (Collecting the data) So: 868
- Observatory** [astronomy] O: 644 with picture
National Radio Astronomy Observatory N: 59
Telescope picture on T: 102
See also the list of Related Articles in the Observatory article
- Observed trial** [race]
Bicycle racing (Road races) B: 294
- Observer mission** [UN]
United Nations (Peacekeeping operations) U: 90
- Obsession** [psychology]
Mental illness (Anxiety disorders) M: 405
Obsessive-compulsive disorder O: 646
- Obsessive-compulsive disorder** [psychology] O: 646
Mental illness (Anxiety disorders) M: 405
- Obsidian** [rock] O: 646
Glass (Early times) G: 217-218
Igneous rock I: 48
Rock (table) R: 373 with picture; (Extrusive rock) R: 371
Silicon S: 458
Tula T: 482
- Obsidian Cliff**
Yellowstone National Park (The Upper Loop) Y: 559 with map
- Obstetrical toad** See Midwife toad in this index
- Obstetrics and gynecology** O: 646
Medicine (table) M: 369
Surgery (Obstetrics and gynecology) So: 1007
- Obstructive jaundice** [disorder]
Jaundice J: 66

Obstructive lung disease

Lung (Diseases of the lungs) L: 524

Obstructive sleep apnea [disorder]

Sleep apnea S: 507

Obtuse angle [mathematics]Angle A: 463 *with picture***Obtuse triangle** [geometry]Triangle (Kinds of triangles) T: 438 *with diagram***Óbuda** [former city, Hungary]

Budapest B: 666

Ocalan, Abdullah [Kurdish military leader]

Turkey (Recent developments) T: 512

O'Callaghan, Mike [American political leader]

Nevada (table) N: 173

Ocarina [musical instrument] O: 646 *with picture***O'Casey, Sean** [Irish dramatist]

O'Casey, Sean O: 646

Irish literature (The Irish literary revival) I: 431-432

Realism (In drama) R: 172

Occam, William of [English theologian] *See*William of Ockham *in this index***Occaneechi Indians** [American Indians]

Virginia (Early days) V: 418

Occasional Offices [religion]

Eastern Orthodox Churches (Services) E: 46

Occasions, The [book by Montale]

Montale, Eugenio M: 741

Occipital bone [anatomy]Head H: 123 *with diagram*Human body *diagram on* H: 422

Skull S: 495

Occipital lobe [anatomy]Brain (The cerebrum) B: 550b *with diagram***Occluded front**

Weather (Synoptic-scale systems) W: 159-161

Occult

New Age movement N: 178

Witchcraft (Witchcraft as a religion) W: 371

Occultation [astronomy]

Eclipse E: 51

Occulting signal

Lighthouse (Identifying lighthouses) L: 294

Occultism O: 647

Religion (Religion today) R: 223

*See also the list of Related Articles in the Occultism article***Occupancy** [law] O: 647**Occupation**Careers C: 214 *with pictures*

Career education C: 213

*For a list of articles on career opportunities, see the Related Articles in the Careers article***Occupation zone** [German history]

Cold War (The alliance breaks up) Ci: 763

Germany (Occupied Germany) G: 169 *with map***Occupational disease**

Disease (Environmental and occupational diseases) D: 230

Health (Occupational health hazards) H: 127

Occupational medicine O: 647

Occupational medicine O: 647**Occupational Safety and Health**

Administration (U.S.) O: 647

Asbestos (Hazards of asbestos) A: 765-766

Labor, Department of (Functions) L: 2

National Institute for Occupational Safety and Health N: 39

Occupational therapistOccupational therapy O: 648 *with pictures*; (Careers) O: 649**Occupational therapy** O: 648 *with pictures*

Disabled (Rehabilitation medicine) D: 220

Hospital (Professional services departments) H: 371

Stroke (Rehabilitation) So: 930

Occupational therapy assistant

Occupational therapy O: 648; (Careers) O: 649

Occupational Therapy Association, American

Occupational therapy (Careers) O: 649

Ocean O: 650 *with pictures and maps*

Airplane (Navigating across oceans) A: 227

Animal (Animals of the oceans) A: 486 *with pictures*Bird (Birds of the ocean and the Antarctic) B: 344 *with pictures*

Climate (Oceans and large lakes) Ci: 676a;

(Changes in ocean circulation) Ci: 676d

Conservation (Ocean conservation) Ci: 978 *with picture*

Deep D: 81

Deep sea D: 82

Estuary E: 364

Exploration (Deep-sea exploration) E: 451

Fish (Saltwater environments) F: 150 *with pictures*Fishing industry (Ocean fisheries) F: 181 *with pictures*

Global warming (Harm to ocean life) G: 232

Ice age (Evidence of ice ages and their climates) I: 6-7

Law of the Sea Convention L: 141

Ooze O: 788

Plate tectonics (Plate interactions) P: 562 *with diagram*

Rain R: 122

Salt (Salt from the sea) S: 72

Seamount S: 268

Seashore S: 269

Seaweed S: 276 *with pictures*Tide T: 280 *with pictures*

Tsunami T: 475

United Nations (Peaceful uses of outer space and the seabed) U: 93

World (Water) W: 418; *maps on* W: 410*See also the list of Related Articles in the Ocean article***Ocean basin** [geography]

Atlantic Ocean (The ocean depths) A: 864

Earth (The shaping of the continents) E: 24

Tide (Tidal patterns) T: 282

Ocean conservationConservation (Ocean conservation) Ci: 978 *with picture***Ocean current** *See* Current, Ocean *in this index***Ocean Drilling Program** O: 667 *with pictures*

Indian Ocean (Exploration) I: 187

Ocean engineering

Engineering (Other specialized fields) E: 287

Ocean (Careers in oceanography) O: 666

Ocean floor *See* Sea floor *in this index***Ocean Island** [Pacific] *See* Banaba *in this index***Ocean liner** [ship]*See also* Passenger ship *in this index*

Cruise ship Ci: 1159

Ship (Ocean liners) S: 415 *with pictures*; *picture on* S: 423Transportation *picture on* T: 390**Ocean ridge** [geology] *See* Mid-ocean ridge *in this index***Ocean Springs** [Mississippi]

Iberville, Sieur d' I: 2

Ocean State, The [nickname]

Rhode Island R: 296

Ocean sunfishFish *picture on* F: 153**Ocean to Ocean** [book by Grant]

Grant, George Monro G: 311

Oceanarium

Aquarium, Public A: 578b; (History) A: 580

Oceania *See* Pacific Islands *in this index***Oceanic and Atmospheric Administration, National** *See* National Oceanic andAtmospheric Administration *in this index***Oceanic island** [geography]

Evolution (Geographic distribution of species) E: 430

Seamount S: 269

Oceanid [mythology]

Nymph N: 633

OceanographyOcean O: 650; (Exploring the ocean) O: 662; (Careers in oceanography) O: 666 *with pictures*

Exploration (Deep-sea exploration) E: 451

Geography (Physical geography) G: 93; *picture on* G: 92

Geophysics G: 106

Marine biology (Biological oceanographers) M: 205

Pacific Ocean (Scientific research) P: 15

Radar (In scientific research) R: 67-68

Scripps Institution of Oceanography S: 227

Ship (Specialized types of vessels) S: 422

Woods Hole Oceanographic Institution W: 395

Ocellated turkey

Turkey T: 513

Ocelli [entomology]

Ant (Sense organs) A: 522

Insect (Sight) I: 290

Ocelot [wild cat] O: 667 *with picture*Animal *pictures on* A: 472, A: 480**Ocher** [mineral] O: 668

Limonite L: 308

Ochoa, Ellen [American astronaut]

Astronaut (table) A: 830

Ochoa, Severo [Spanish-American biochemist]

Nobel Prizes (Physiology or medicine: 1959) N: 445

Ochre *See* Ocher *in this index***Ochs, Adolph Simon** [American publisher]

O: 668

Sulzberger, Arthur Hays So: 971

Ochs, Baron [opera character]Opera (*Rosenkavalier*, *Der*) O: 807**Ochterlony Monument**

Kolkata (The city) K: 362-363

Ociat [animal]

Cat (Short-haired breeds) C: 290-291

Ockeghem, Johannes [Flemish composer]

Classical music (Franco-Flemish music) Ci: 646

Ockham, William of (English theologian) *See*William of Ockham *in this index***Ockham's Razor**

William of Ockham W: 309

OCCL [library network]Library (The growth of information and technology) L: 238 *with picture***Ocmulgee National Monument** [Georgia]

O: 668

Georgia (Museums) G: 117

National Park System (table: National monuments) N: 51

O'Connell, Daniel [Irish political leader] O: 668

Ireland (Union with Britain) I: 426

Peel, Sir Robert P: 229

O'Connell, William H. Cardinal [American religious leader]

Cardinal (table: American cardinals) C: 211

O'Connell BridgeDublin *picture on* D: 371**O'Connell Street**

Dublin (The city) D: 370-371

Ireland *picture on* I: 427**O'Connor, Flannery** [American author] O: 668

American literature (Southern fiction) A: 424

Novel (After World War II) N: 574

O'Connor, Frank [Irish author]

Irish literature (Fiction and poetry) I: 432-433

O'Connor, John Joseph Cardinal [American religious leader] O: 668**O'Connor, Sandra Day** [American jurist] O: 668

Arizona (The late 1900's) A: 691-692

Reagan, Ronald Wilson (Events at home)

R: 167-168; *picture on* R: 165Supreme Court of the United States *picture on* So: 999**O'Connor, Turlough** [king of the Irish]

Ireland (The Norman invaders) I: 425

O'Conor, Herbert R. [American political leader]

Maryland (table) M: 255

Ocotillo [shrub] O: 669 *with picture***Ocracoke Island** [North Carolina]

North Carolina (Places to visit) N: 482

Octadecanoic acid *See* Viscic acid *in this index***Octagon** [geometry] O: 669 *with diagram***Octagon House** [U.S. history]

Madison, James (Life in the White House) M: 36

Octahedron [geometry] O: 669 *with diagram*Polyhedron P: 650 *with diagram***Octameter** [poetry]

Poetry (table) P: 594

Octane [petroleum] O: 669**Octane number** [petroleum] O: 669Gasoline (Gasoline octane ratings) G: 61; *picture on* G: 62**Octave** [music]

Music (Tone) M: 950

Octave [poetry]

Poetry (table) P: 594

Sonnet So: 593

Octavia [wife of Mark Antony] O: 669

Antony, Mark A: 561

Augustus (Rise to power) A: 889

Cleopatra (Cleopatra and Mark Antony)

Ci: 662a-662b

Octavia [wife of Nero]

Nero N: 130

Octavian [opera character]Opera (*Rosenkavalier*, *Der*) O: 807 *with picture*

Octavian [Roman emperor] See Augustus in this index

Octavian Library [Rome]

Library (Ancient libraries of papyrus) L: 258

Octavianus, Gaius Julius Caesar See Augustus in this index

Octavius [literary figure]

Shakespeare, William (*Antony and Cleopatra*) S: 364

Octavo [publishing]

Folio F: 315

Octillion [number] O: 669

October [month] O: 670 with pictures

Calendar (The Romans) C: 30

October Revolution [1917]

Communism (Before 1917) Ci: 892

Lenin, V. I. (The October Revolution) L: 193

Russia (The October Revolution) R: 553

Stalin, Joseph (Young revolutionist) So: 825-826

Union of Soviet Socialist Republics (The October Revolution) U: 35

October War [1973]

Arab-Israeli conflict (The 1973 war) A: 582a

Octofoil

Heraldry picture on H: 195

Octopod [animal]

Deep sea (Invertebrates) D: 82a-82b; picture on D: 82

Octopus [sea animal] O: 672 with pictures

Animal picture on A: 486

Brain (In invertebrates) B: 559

Deep sea (Invertebrates) D: 82a-82b; picture on D: 82

Mollusk (Octopuses and squids) M: 695 with picture

Shell (Octopuses and squids) S: 388

Octopus, The [book by Norris]

Novel (The United States) N: 573

Ocular [lens]

Microscope (How an optical microscope works) M: 517 with pictures

Oculist

Eye (Receiving regular eye examinations) E: 469

Oculus [architecture]

Pantheon P: 131

O.D. [degree]

Optometry O: 814

Ode Nobunaga [Japanese military leader]

Japan (Warring states period) J: 54

O'Daniel, W. Lee [American political leader]

Johnson, Lyndon Baines (World War II) J: 147

Texas (table) T: 203

Odd Couple, The [play by Simon]

Simon, Neil S: 466

Odd Fellows, Independent Order of [organization] O: 673

Odd John [book by Stapledon]

Stapledon, Olaf So: 839

Odd number [mathematics]

Series (Working with odd numbers) S: 317

Odd Women, The [book by Gissing]

Gissing, George Robert G: 202

Oddi, Sphincter of [anatomy]

Gallbladder G: 14

Oddie, Tasker L. [American political leader]

Nevada (table) N: 173

Ode [poetry] O: 673

Greek literature (Lyric poetry) G: 377

Pindar P: 468

Poetry (Lyric poetry) P: 591

"Ode: Intimations of Immortality" [poem by Wordsworth]

Wordsworth, William (Later career) W: 404

"Ode on a Distant Prospect of Eton College" [poem by Gray]

Gray, Thomas G: 334

"Ode on the Death of the Duke of Wellington" [poem by Tennyson]

Tennyson, Lord (His poems) T: 169

"Ode to Evening" [poem by Collins]

Ode O: 673

"Ode to Felitsa" [poem by Derzhavin]

Russian literature (The classical movement) R: 559-560

Ode to the Agriculture of the Torrid Zone

[poem by Bello]

Latin-American literature (Romanticism)

L: 112

"Ode to the West Wind" [poem by Shelley]

Shelley, Percy Bysshe (His writings) S: 391

Odell, Benjamin B., Jr. [American political leader]

New York (table) N: 313

Odell, Jonathan [Canadian author]

Canadian literature (Early English-Canadian literature) C: 157

O'Dell, Scott [American author] O: 673

Regina Medal (table: 1978) R: 206

Odelling [government]

Norway (National government) N: 537-539

Odenethus, Septimius [Palmyrene military leader]

Palmyra P: 111

Odeon [theater]

Athens (Other buildings) A: 856

Oder-Neisse boundary [Germany-Poland]

Oder River O: 674

Oder River [Europe] O: 674

Odes [poems by Horace]

Horace H: 334

Latin literature (The Augustan Age) L: 116

Odes and Various Poems [work by Hugo]

French literature (Romantic poetry) F: 521

Hugo, Victor Marie (Early life) H: 409

Odessa [city, Ukraine] O: 674

Odets, Clifford [American dramatist] O: 674

American literature (Drama) A: 422-423

Odin [Norse god] O: 674

Mythology (The construction of the world) M: 984

Balder B: 38

Brunhild B: 652

Raven R: 151

Vikings (Religion) V: 379-380

Odooer [Ostrogoth ruler] O: 674

Europe (Germanic invasions) E: 409

Italy (History) I: 512-513

Ravenna R: 151

Rome, Ancient (Decline and fall) R: 448

Theodorich T: 252

Odometer [measuring device]

Speedometer So: 774 with diagram

Odonata [anatomy]

Insect (table) I: 299 with picture; picture on I: 280

Odor

Deodorizer D: 148

Flower (The corolla) F: 293

Perfume P: 286

Smell S: 514

Odorant

Perfume P: 286

Odris, Manuel [Peruvian political leader]

Peru (The rise of APRA) P: 315

Odysseus See Ulysses in this index

Odyssey [poem by Homer] O: 674 with picture

Argus A: 661

Art and the arts (The aesthetic experience) A: 745

Epic E: 342

Greek language (Development of ancient Greek) G: 376

Greek literature (Epic poetry) G: 377

Homer H: 303

Lotus-eaters L: 473

Penelope P: 238

Poetry (Narrative poetry) P: 591; (Ancient poetry) P: 595-596

Poseidon P: 697

Sirens S: 475

Ulysses U: 18

Odyssey: A Modern Sequel, The [poem by Kazantzakis]

Kazantzakis, Nikos K: 252

Odyssey: A Stage Version [play by Walcott]

Walcott, Derek W: 7

Oe, Kenzaburo [Japanese author]

Nobel Prizes (Literature: 1994) N: 446

Oee [city, Libya]

Tripoli T: 448

OECD See Organization for Economic Cooperation and Development in this index

O.E.D.

Dictionary (Modern dictionaries) D: 194

Oedema See Edema in this index

Oedipe [play by Voltaire]

Voltaire (Imprisonment and early success) V: 446

Oedipus [Greek mythology] O: 676 with picture

Antigone A: 554

Mythology (Lévi-Strauss's theory) M: 988

Oedipus at Colonus [play by Sophocles]

Sophocles So: 595

Oedipus complex [psychology] O: 676

Psychoanalysis (Psychoanalytic theory) P: 846

Oedipus Rex [play by Sophocles]

Aristotle (Literary criticism) A: 664

Drama (Tragedy) D: 326-327

Irony I: 455

Oedipus O: 676

Sophocles So: 595

OECC

Marshall Plan M: 231

Oenone [Greek mythology]

Paris P: 159

"Oenone" [poem by Tennyson]

Tennyson, Lord (His poems) T: 169-170

Oeresund Fixed Link

Bridge (table: Cable-stayed) B: 603

Oerlikon gun

Machine gun (Antiaircraft weapons) M: 16

Oersted, Hans Christian [Danish physicist]

O: 676

Aluminum (The first aluminum) A: 397

Electric meter (History) E: 177

Electric motor (History) E: 181

Electricity (Electricity and magnetism) E: 197

Electromagnet E: 202

Electromagnetism E: 203

Magnetism (Electricity and magnetism) M: 61

Physics (Developments in the 1800's) P: 440

Telegraph (Development of the telegraph) T: 90

Oerter, Al [American track athlete]

Track and field (The early and middle 1900's) T: 357

Oesophagus See Esophagus in this index

"Of Friendship" [essay by Montaigne]

Montaigne, Michel Eyquem de M: 741

Of Human Bondage [book by Maugham]

Maugham, W. Somerset M: 312

Of Mice and Men [book by Steinbeck]

Steinbeck, John So: 885

Of Plimoth Plantation [book by Bradford]

Bradford, William [1590-1657] B: 545

Of Reformation in England [pamphlet by Milton]

Milton, John (Middle years) M: 557

Of Thee I Sing [musical]

Gershwin, George G: 174

Kaufman, George S. K: 250

Musical comedy (Musical comedy matures) M: 960

Of Time and the River [book by Wolfe]

Wolfe, Thomas Clayton W: 377

O'Faolain, Sean [Irish author]

Irish literature (Fiction and poetry) I: 432-433

O'Feeney, Sean Aloysius [American director]

Ford, John F: 381

O'Ferrall, Charles T. [American political leader]

Virginia (table) V: 417

Off-Broadway theater

Drama (Later United States drama) D: 340

New York City (The arts) N: 336

Theater (New York City) T: 244-245

Off-campus experience

Cooperative education Ci: 1037

Off-highway truck [vehicle]

Truck (Off-highway trucks) T: 458

Off-road race

Automobile racing (Other kinds of racing) A: 979

Off Stonington [painting by Marin]

Painting picture on P: 41

Off-track betting

Horse racing (Betting) H: 365

Offa [king of Mercia]

Wales (Struggles against the Anglo-Saxons) W: 12

Offa's Dyke [English history]

Wales (Struggles against the Anglo-Saxons) W: 12

Offenbach, Jacques [French-German composer]

O: 676

Operetta O: 809

Offhand grinding

Grinding and polishing (Grinding methods)

G: 395

Office [business]

Furniture picture on F: 569

Interior design pictures on I: 327, I: 335

Lighting (In offices, stores, and factories)

L: 296

Office work O: 677

Office and Professional Employees International Union

Labor movement (table) L: 8

Office-block ballot

Ballot (In the United States) B: 63

Office Girls (painting by Soyer)Soyer brothers So: 693 *with picture***Office of ...**

Government offices appear under their key words, as in Management and Budget, Office of

Office work O: 677

Careers (Administrative support) C: 219

Safety (In offices) S: 14

Secretarial work S: 278

See also the list of *Related articles* in the Office work article**Officer**

Parliamentary procedure (Officers) P: 175

Rank, Military R: 139

Reserve Officers Training Corps R: 258

Ship (Officers and crew) S: 423

Officer and Laughing Girl (painting by Vermeer)Vermeer, Jan *picture on* V: 317**Officers and Gentlemen** (book by Waugh)

Waugh, Evelyn W: 149

Officers Reserve Corps (military)

Reserve Officers Training Corps (History) R: 258

Official (sports)Basketball *diagrams on* B: 149**Official IRA** (political group)

Irish Republican Army (Another split) I: 433-434

Official Languages Act [1969]

Canada (Languages) C: 106

Canada, History of (The separatist threat) C: 153

New Brunswick (The mid-1900's) N: 198-199

Trudeau, Pierre Elliott (The national scene) T: 464

Official scorer

Baseball (Baseball terms) B: 124

Offset (printing) O: 678 *with diagram*

Book (Modern books) B: 468

Duplicator (Offset duplicators) D: 387

Magazine (Editing and assembling an issue) M: 43

Newspaper (Printing the newspaper) N: 385 *with picture*

Photoengraving and photolithography (Transferring the image) P: 406

Printing (Offset lithography) P: 798 *with diagram***Offset press**

Offset O: 678

Offshore banking unit

Bank (Asia and the Middle East) B: 91-92

Offshore racing

Motorboat racing (Types of racing) M: 877

Offshore wellEnergy supply *picture on* E: 277

Gas [fuel] (Producing gas) G: 53

Nigeria *picture on* N: 416

Ocean (Sources of energy) O: 654

Petroleum (table) P: 331; (Offshore drilling) P: 340 *with picture; picture on* P: 333**Offside** (sports)

Football (Violations and penalties) F: 363

Hockey (Playing the game) H: 277 *with diagram*

Lacrosse (Men's lacrosse) L: 24

Soccer (Fouls) So: 546

Offutt, Denton (American businessman)

Lincoln, Abraham (Youth on the frontier) L: 313

Offutt, Jarvis J. (American airman)

Offutt Air Force Base O: 678

Offutt Air Force Base [Nebraska] O: 678Nebraska (The mid-1900's) N: 114 *with picture*

Strategic Air Command So: 919

O'Flaherty, Liam (Irish author) O: 679

Irish literature (Fiction and poetry) I: 432-433

Ofrenda (altar)

Día de los muertos D: 178

Og (Biblical figure)

Giant G: 183

Ogaden (region, Ethiopia)

Ethiopia (Haile Selassie) E: 371

Somalia (History) So: 589

Ogallala aquifer

Kansas (Agriculture) K: 232

Ogam (writing)

Celts C: 342

Irish literature (Early Irish literature) I: 430

Ogasawara-gunto

Bonin Islands B: 460

Ogbu, John (Nigerian anthropologist)

Anthropology (The middle and late 1900's) A: 549

Ogburn, William F. (American sociologist)

Cultural lag Ci: 1185

Ogden (city, Utah) O: 679**Ogden, Aaron** (American businessman)*Gibbons v. Ogden* G: 185

New Jersey (table) N: 249

Ogden, Peter Skene (American settler)

Nevada (Exploration) N: 173

Ogden O: 679

Ogeechee-lime (tree)

Tupelo T: 492

Ogeechee tupelo (tree)

Tupelo T: 492

Ogilvie, Richard B. (American political leader)

Illinois (table) I: 71

Oglala Indians (American Indians)

Red Cloud R: 185

Sioux Indians S: 474

Sun dance So: 987

Wounded Knee (The 1973 incident) W: 502

Oglesa

Monte Cristo M: 762

Ogle, Benjamin (American political leader)

Maryland (table) M: 255

Oglebay Park

Wheeling W: 279

Oglesby, Richard J. (American political leader)

Illinois (table) I: 71

Oglethorpe, James Edward (British colonial official) O: 679

Fort Frederica National Monument F: 413

Georgia *picture on* G: 133

Savannah S: 165

United States, History of the (The Southern Colonies) U: 154

Ogooué River (Gabon)Gabon (Land) G: 3 *with map; (History) G: 3***Ogotai** (Mongol leader)

Mongol Empire (Invasions) M: 720

Ogre-faced stick spiderSpider (Tangled-web weavers) So: 788; (table) So: 790; *picture on* So: 783; *picture on* So: 785**Ogygia** (legendary place)*Odyssey* (The *Odyssey* begins) O: 675**Oh, Boy!** (musical)

Kern, Jerome K: 306

Oh, Lady! Lady! (musical)

Kern, Jerome K: 306

Ohain, Hans von (German physicist)

Jet propulsion (Development of jet propulsion) J: 114

O'Hara, Frank (American poet)

American literature (Poetry) A: 423

O'Hara, John (American author) O: 679**O'Hara, John Francis Cardinal** (American religious leader)

Cardinal (table: American cardinals) C: 211

O'Hara, Mary (American author) O: 679**O'Hara, Scarlett** (literary figure)

Mitchell, Margaret M: 678

O'Hara International Airport

Airport (table) A: 245

Chicago (The North Side) C: 423-424; (Transportation) C: 433

Illinois (Transportation) I: 70

O'Higgins, Bernardo (Chilean political leader) O: 679Argentina *picture on* A: 657Chile (Independence) C: 468 *with picture; (Building the nation) C: 468*

Latin America (The wars of independence) L: 107

San Martín, José de S: 105

Ohio O: 680 *with pictures and maps*See also the list of *Related Articles* in the Ohio article**Ohio** (nuclear submarine)

Navy, United States (The nuclear age Navy) N: 89

Submarine (Nuclear submarines) So: 943

Ohio Company (U.S. history) O: 705 *with picture*

Northwest Territory (Settlement) N: 535

Ohio (Exploration and settlement) O: 700

Putnam, Rufus P: 913

Ohio Company of Associates (U.S. history)

Ohio Company (The second Ohio Company) O: 705

Ohio Company of Virginia (U.S. history)

Ohio Company (The first Ohio Company) O: 705

Ohio gang (U.S. history)

Harding, Warren Gamaliel (Government scandals) H: 58

Ohio River (river, U.S.) O: 705 *with map*

Inland waterway (Mississippi River System) I: 274

Ohio (Rivers and lakes) O: 692; *picture on* O: 694

West Virginia (Rivers and lakes) W: 218

Ohio State University O: 706

Columbus (Education) Ci: 855

Hayes, Rutherford Birchard (Governor) H: 120

Ohio *picture on* O: 684**Ohio University** O: 706**Ohlin, Bertil Gotthard** (Swedish economist)

Nobel Prizes (Economics: 1977) N: 449

Ohm (unit of measure) O: 706

Ohm, Georg Simon O: 707

Rowland, Henry Augustus R: 494

Ohm, Georg Simon (German physicist) O: 707

Electricity (Experiments with electric charge) E: 196-197

Ohm's law O: 707

Ohman, Olof (Swedish farmer)

Kensington rune stone K: 271

Ohmmeter (instrument)

Electric meter E: 176

Ohm O: 707

Ohm's law (physics) O: 707

Electric circuit (Circuit mathematics) E: 167

Electricity (Experiments with electric charge) E: 196-197

Ohrid, Lake See Lake Ohrid *in this index***Ohno, Apolo Anton** (American speed skater)Olympic Games *picture on* O: 746e**OIC** (Philadelphia)

Sullivan, Leon Howard So: 969

Oil (animal and vegetable products) O: 707

Fat F: 52

Fat substitute F: 53

Lipid L: 344

Nutrition (Nutrition guidelines) N: 626

Perfume (How perfumes are made) P: 286

See also Vegetable oil *in this index*, and the list of *Related articles* in the Oil articleOil (mineral product) See Petroleum *in this index***Oil-based paint**

Paint (Household paints) P: 23-24

Oil, Chemical and Atomic Workers International Union

Labor movement (table) L: 8

Oil circuit breaker (electricity)

Circuit breaker Ci: 558

Oil derrickPetroleum (table) P: 331 *with picture; picture on* P: 338**Oil field**

Petroleum (table) P: 331; (Conservation by the oil industry) P: 347

Oil-for-food program

Iraq (Recent developments) I: 415

Oil gas

Gas [fuel] (How gas is manufactured) G: 57

Oil gland (anatomy) See Sebaceous gland *in this index***Oil immersion lens**

Microscope (Using an optical microscope) M: 519

Oil lampLamp (Fat or oil lamps) L: 52 *with pictures*Invention *picture on* I: 356**Oil of bergamot** (tree product)

Bergamot B: 257

Oil of ginger (spice)

Ginger G: 191

Oil of jasmine (plant product)

Jasmine J: 64

Oil of tansy (poison)

Tansy T: 29

Oil painting (art)Painting (Materials and techniques) P: 36; (Oil painting) P: 39 *with picture; (The northern Renaissance) P: 57*

- Oil palm** [tree]
Palm oil P: 109
- Oil priming**
Painting (Grounds) P: 36
- Oil refinery**
Indiana *picture on* I: 197
Petroleum *picture on* P: 331
- Oil sands** See Bituminous sands *in this index*
- Oil shale** [geology] O: 708 *with diagram*
Colorado (Mining) Ci: 843
Energy supply (Fossil fuels) E: 277-278
Fuel (Synthetic liquid fuels) F: 550
Petroleum (table) P: 331; (The United States and Canada) P: 333 *with picture*
Synthetic fuel So: 1068
- Oil spill**
Alaska (Recent developments) A: 304
Coast Guard, United States (The Coast Guard since World War II) Ci: 738-739 *with picture*
Environmental pollution *picture on* E: 332
Exxon Mobil Corporation E: 459
Ocean (Marine pollution) O: 664 *with picture*
Persian Gulf War (Consequences of the war) P: 300d-301
Tanker (Oil spills) T: 28
- Oil tanker** [ship]
Tanker (Kinds of tankers) T: 28 *with picture*
- Oil tanning** [industrial process]
Leather (Tanning) L: 167-168
- Oil trap**
Petroleum (table) P: 331
- Oil well**
Pennsylvania *picture on* P: 266
Persian Gulf War (Consequences of the war) P: 300d-301 *with picture*
Petroleum *picture on* P: 338
Well (Oil and natural gas wells) W: 193
- Oilbird** O: 708 *with picture*
- Oilcloth** O: 708
- Oilers, Edmonton**
Edmonton (Culture and recreation) E: 84-85
Hockey (table: National Hockey League) H: 281
- Oilseed crops**
Food supply (Developing new sources of food) F: 350
- Oireachtas** [government, Ireland]
Ireland (Parliament) I: 417
- Oise River** [France]
Aisne River A: 253
- Oisin** [legendary figure]
Finn MacCool F: 119
- Oisin in the Land of Youth** [poem by Comyn]
Irish literature (Modern works in Gaelic) I: 431
- Oistrakh, David** [Russian violinist] O: 708
- Ojeda, Alonso de** [Spanish explorer]
Exploration *map on* E: 443
Vespucci, Amerigo (Life and expeditions) V: 342
- Ojibwa Indians** See Chippewa Indians *in this index*
- Ojos del Salado** [mountain, South America]
O: 709
- Ojukwu, Odumegwu** [Nigerian military leader]
Nigeria (Civil war) N: 418
- O.K. Corral** [U.S. history]
Earp, Wyatt E: 15
Tombstone T: 327
- Oka** [river, Russia]
Volga River V: 444
- Okanagan** [river]
British Columbia (Rivers, waterfalls, and lakes) B: 624
- Okanagan Lake**
British Columbia (Rivers, waterfalls, and lakes) B: 624
- Okanagan Valley**
British Columbia (Places to visit) B: 620;
(Agriculture) B: 626
- Okapi** [animal] O: 709 *with picture*
- Okavango** [river, Africa]
Botswana (Land and climate) B: 511-512
- Okavango Swamps** [Botswana]
Botswana (Land and climate) B: 511-512
- Okeechobee, Lake**
Lake Okeechobee L: 43
Florida (Rivers, lakes, and springs) F: 256
- O'Keeffe, Georgia** [American painter] O: 709
with picture
Painting (Georgia O'Keeffe) P: 83 *with picture*
Stieglitz, Alfred So: 900
- Okefenokee National Wildlife Refuge** [Florida-Georgia]
Okefenokee Swamp O: 709 *with picture*
- Okefenokee Swamp** [region, Florida-Georgia]
O: 709 *with picture*
Georgia (Places to visit) G: 122 *with picture*
- Okello, Tito** [Ugandan political leader]
Uganda (History) U: 4
- Okhotsk, Sea of** [Russia] O: 710
- Okhrana** [Russian history]
Secret police S: 278
- Okinawa** [island, Pacific] O: 710 *with pictures and map*
Japan (The Ryukyu and Bonin islands) J: 48
Karate (History) K: 247
Ryukyu Islands R: 574
World War II (Closing in on Japan) W: 490-491
- Oklahoma** O: 712 *with pictures and maps*
Chickasaw Indians C: 439
Indian Territory I: 189 *with map*
Riot (During the 1900's) R: 349
Trail of Tears T: 368
See also the list of Related Articles in the Oklahoma article
- Oklahoma!** [musical]
Ballet *picture on* B: 54
De Mille, Agnes D: 119
Hammerstein, Oscar, II H: 35
Musical comedy (The modern musical emerges) M: 960 *with picture*
Oklahoma O: 712
Rodgers, Richard R: 398
- Oklahoma, University of** O: 735
- Oklahoma City** [Oklahoma] O: 735 *with pictures*
Clinton, Bill *picture on* Ci: 682a
Oklahoma O: 712 *with picture*
Terrorism (Terrorism in the 1900's) T: 179
- Oklahoma City National Memorial** [Oklahoma]
National Park System (table: National memorials) N: 54 *with picture*
Oklahoma (Places to visit) O: 722
- Oklahoma land rush** [U.S. history]
Oklahoma (The great land rushes) O: 732
- Oklahoma State University** O: 737
Oklahoma *picture on* O: 717
- Oklahoma Territory** [U.S. history]
Oklahoma (Progress toward statehood) O: 732
- Okra** [plant] O: 738 *with picture*
Hibiscus H: 222
- Oktoberfest** [festival]
Germany *picture on* G: 151
- Ol' Man Adam an' His Chillun** [book by Bradford]
Bradford, Roark B: 545
- Olah, George Andrew** [Hungarian-born chemist]
Nobel Prizes (Chemistry: 1994) N: 443
- Olajuwon, Hakeem** [Nigerian-American basketball player] O: 738
- Öland** [island]
Sweden (The land) So: 1028 *with map*
- Olav I Tryggvason** [king of Norway]
Norway (The Viking period) N: 545
Trondheim T: 450
- Olav II** [king of Norway]
Norway (The Viking period) N: 545
- Olav V** [king of Norway]
Norway (Postwar developments) N: 546-547
- Olbers, Heinrich** [German astronomer]
Cosmology (The dark sky) Ci: 1078
- Olbers's paradox** [astronomy]
Cosmology (The dark sky) Ci: 1078
- Olbrich, Josef** [Austrian architect]
Architecture (Early modern architecture in Europe) A: 627-628 *with picture*
- Olcott, Ben W.** [American political leader]
Oregon (table) O: 845
- Old age** O: 738
See also Geriatrics; Retirement income *in this index*
Aging A: 141
Alzheimer's disease A: 398
Day care (Day care for the elderly) D: 53
Death (Attitudes about death) D: 62
Developmental psychology (Maturity and old age) D: 174
Gray Panthers G: 335
Growth (When people stop growing) G: 406
Incontinence I: 106
Library (Services for special groups) L: 241
Medicaid M: 361
Medicare M: 362
- Nursing home N: 620
Senility S: 300
- Old-age, survivors, disability, and hospital insurance** See OASDI *in this index*
- Old-age pension**
Pension P: 272
- Old Age Security Program**
Social security (Social security in Canada) So: 556
- Old Arsenal** [Little Rock]
Arkansas *picture on* A: 713
- Old Babylonian Empire**
Babylon (The Old Babylonian Empire) B: 11
- Old Bailey** [London] O: 739
- Old Barracks Museum** [Trenton]
Colonial life in America (Places to visit) Ci: 801
- Old Believers** [religious group]
Russia (The early Romanovs) R: 549
- Old Biloxi** [U.S. history]
Iberville, Sieur d' I: 2
- Old Blood and Guts** [nickname]
Patton, George Smith, Jr. P: 199
- Old Bullion** [nickname]
Benton, Thomas Hart B: 254
- Old Cathedral Library** [Vincennes]
Indiana (Libraries) I: 201
- Old Catholic churches** [religious group] O: 740
- Old Christmas** [book by Irving]
Caldecott, Randolph C: 25
- Old Church Slavonic** [language]
Russian language (History) R: 557
Russian literature (Religious literature) R: 558
Slavs (West Slavs) S: 505
- Old City** [district]
Jerusalem (The Old City) J: 95 *with picture*
- Old comedy** [Greek drama]
Drama (Old Comedy) D: 327
Greek literature (Drama) G: 377
- Old Constitution House** [Windsor]
Vermont (Places to visit) V: 326
- Old Courthouse** (St. Louis)
Missouri *picture on* M: 651
- Old Curiosity Shop, The** [book by Dickens]
Dickens, Charles (The first phase) D: 188
- Old Dominion**
Virginia V: 398
- Old Dominion Foundation**
Mellon Foundation M: 389
- Old English** [language]
Beowulf B: 256
English language (Old English) E: 313
English literature (Old English literature) E: 314; *picture on* E: 316
- Old English black-breasted red game rooster**
Chicken *picture on* C: 442
- Old English mastiff** [dog]
Mastiff M: 298
- Old English sheepdog** O: 740
Dog *picture on* D: 276
- Old Faithful** [geyser]
Geyser G: 177
Wyoming *picture on* W: 525
Yellowstone National Park (The Lower Loop) Y: 558-559 *with map*
- Old Farmer's Almanac** [book]
Almanac A: 379
- Old Field schools**
Virginia (Schools) V: 402
- "Old Folks at Home"** [song]
Suwannee River So: 1013
- Old Fort Hall** [Idaho]
Idaho (Places to visit) I: 34
- Old Fort Niagara** [New York] See Fort Niagara *in this index*
- Old Fort York** [Ontario]
Toronto (Landmarks) T: 336-337
- Old French** [language]
French language (Old French) F: 517
Trouvère T: 454
- Old Fuss and Feathers** [nickname]
Scott, Winfield S: 222
- Old Gaoi Museum** [York, Maine]
Colonial life in America (Places to visit) Ci: 801
Maine (Places to visit) M: 78
- Old Glory** [flag]
Flag (Flags of the United States and Canada) F: 208
- Old Glory, The** [plays by Lowell]
Lowell, Robert L: 511
- Old Gringo, The** [book by Fuentes]
Fuentes, Carlos F: 553
- Old Guard** [U.S. politics]

- Eisenhower, Dwight David (Presidential candidate) E: 151; (Challenges from the Old Guard) E: 152
- Old Guitarist, The** [painting by Picasso]
Color picture on C: 817
Picasso, Pablo (The Blue Period) P: 448a
Painting (Color) P: 35; (Cubism) P: 77
- Old Harbor**
Marseille (The city) M: 227
- Old Hickory** See Jackson, Andrew in *this index*
- Old immigration**
Immigration (The third wave) I: 82
- Old Ironsides** [locomotive]
Baldwin, Matthias William B: 39; picture on 8: 40
Railroad (Developments in the United States) R: 115
- "Old Ironsides"** [poem by Holmes]
Constitution C: 995
Holmes, Oliver Wendell (His life) H: 294
- Old Ironsides** [ship] See Constitution [ship] in *this index*
- Old King, The** [painting by Rouault]
Rouault, Georges picture on R: 489
- Old Kingdom** [Egyptian history]
Egypt, Ancient (The Old Kingdom) E: 142
- Old Line State** [nickname]
Maryland M: 240
- Old Main** [building]
Pennsylvania State University picture on P: 271
- Old Man and the Sea, The** [book by Hemingway]
American literature picture on A: 417
Hemingway, Ernest (Later years) H: 181
- Old Man and the Sea, The** [film]
Tracy, Spencer T: 361
- Old man cactus**
Cactus (Kinds of cactuses) C: 10 with picture
- Old Man Eloquent** [nickname]
Adams, John Quincy A: 40
- Old Man in the Corner** [literary figure]
Detective story (History) D: 163
- Old Man of the Mountain**
New Hampshire (Places to visit) N: 216 with picture
White Mountains W: 291
- Old Man of the Sea** [Greek mythology]
Nereus N: 130
- Old man of the woods** [fungus]
Mushroom (Nonpoisonous mushrooms) M: 943-945 with picture
- Old Man River** [nickname]
Mississippi River M: 646
- Old man's beard** [lichen]
Lichen picture on L: 269
- Old Manse** [estate]
Hawthorne, Nathaniel (Life) H: 114
- Old Market Square** [Winnipeg]
Manitoba picture on M: 148
- Old Medina** [district]
Casablanca C: 270
- Old Montreal** [district]
Montreal (The city) M: 768-769 with picture;
(Old Montreal) M: 770; picture on M: 778
- Old Mortality** [book by Scott]
Scott, Sir Walter (The Waverley novels) S: 222
- Old Mother Frost** [legendary figure]
Jack Frost J: 2
- Old Narragansett Church** [North Kingstown, Rhode Island]
Colonial life in America (Places to visit) Ci: 801
Rhode Island (Places to visit) R: 304 with picture
- Old Norse**
Norway (Language) N: 539
- Old North Church** [Boston] O: 740 with picture
- Old Northwest**
Westward movement in America (Reaching the Mississippi River) W: 246
- Old Orchard Beach**
Maine (Land regions) M: 80
- Old Order Amish Church** [religious group] See Amish in *this index*
- Old Osawatimie Brown** [nickname]
Brown, John (The abolitionist) B: 643
- Old Post Office Building** [Washington, D.C.]
Washington, D.C. map on W: 76
- Old Pretender** [Scottish history] See Stuart, James Francis Edward in *this index*
- Old process system**
Corn (The dry-milling industry) Ci: 1061-1062
- Old Quarter** [district]
Hanoi H: 53 with picture
- Old Regime and the Revolution, The** [book by Tocqueville]
Tocqueville, Alexis de T: 308
- Old Religion**
Witchcraft W: 371
- Old Rough and Ready** [nickname]
Taylor, Zachary T: 58
- Old Sacramento**
Sacramento (Education and cultural life) S: 6
- Old Saint Peter's Church** [Rome]
Architecture (Medieval architecture) A: 617 with picture
- Old Salamander** [nickname]
Farragut, David Glasgow F: 47
- Old Salem** [Winston-Salem]
Colonial life in America (Places to visit) Ci: 801
North Carolina (Places to visit) N: 482
- Old Shepherd's Chief Mourner, The** [painting by Landseer]
Painting (Art for a new public) P: 70 with picture
- Old Silk Trade Route**
Road (The first roads) R: 361
- Old South Meeting House**
Boston (Downtown Boston) B: 496
- Old Southwest**
Westward movement in America (Reaching the Mississippi River) W: 246
- Old Spanish Days Fiesta** [Santa Barbara]
California picture on C: 47
- Old Spanish Trail** [U.S. history]
Nevada (Exploration) N: 173
Pioneer life in America (Routes to the West) P: 486
Santa Fe Trail S: 115
- Old squaw duck** [bird]
Duck (Sea ducks) D: 376
- Old State House** [Philadelphia]
Independence Hall I: 107
- Old State House** [Providence]
Providence (Description) P: 839
- Old Stone Age** See Paleolithic Period in *this index*
- Old Stone House** [Richmond]
Richmond (Other interesting places to visit) R: 332 with picture
- Old Sturbridge Village**
Folk art (Folk art collections) F: 319
- Old Testament** O: 740
Bible B: 279; (table) B: 281
Dead Sea Scrolls D: 56
Judaism J: 179
Pentateuch P: 274
Poetry (Ancient poetry) P: 595-596
Psalms, Book of P: 844
Septuagint S: 310b
See also *the Old Testament section of the Related Articles in the Bible article and Bible in the index*
- Old-time music**
Country music (Varieties of country music) Ci: 1098
- Old Town** [district]
Chicago (The North Side) C: 423
Illinois picture on I: 56
Montevideo M: 764b
- Old Town square** [district]
Prague (The city) P: 730 with picture
- Old Vic company** [theater group]
Theater (Britain) T: 247-248
- Old Water Tower**
Chicago (Downtown Chicago) C: 420-421
- Old West** [U.S. history]
Western frontier life in America W: 232
Westward movement in America (The Old West) W: 245
- Old Wives Lake**
Saskatchewan (Rivers and lakes) S: 138
- Old Wives' Summer**
Indian summer I: 189
- Old Wives' Tale, The** [book by Bennett]
Bennett, Arnold B: 251
English literature (Literature before World War I) E: 322
- Old World** [geography] O: 741
World (How nations are grouped) W: 407
- Old World cotton**
Cotton (Old World cotton) Ci: 1088
- Old World monkey**
Monkey M: 725 with pictures
- Primate (Anthropoids) P: 778, diagram on P: 778b
- Old World vulture** [bird]
Vulture (Old World vultures) V: 454 with picture
- Old World Wisconsin**
Wisconsin (Places to visit) W: 356
- Old York Road**
Pennsylvania (Transportation) P: 262
- Olden, Charles S.** [American political leader]
New Jersey (table) N: 249
- Oldenburg, Claes** [American sculptor] O: 741 with picture
Performance art P: 285
- Oldfield, Barney** [American race driver] O: 742
Aviation picture on A: 988
- Olds, Ransom Eli** [American businessman] O: 742
Automobile (Ransom E. Olds) A: 965
Michigan (The early 1900's) M: 509
- Olds Motor Works**
Automobile (Ransom E. Olds) A: 965
Michigan (The early 1900's) M: 509
Olds, Ransom Eli O: 742
- Oldsmobile**
Automobile (The birth of the automobile industry) A: 963-964 with picture
Olds, Ransom Eli O: 742
- Oldtown Folks** [book by Stowe]
Stowe, Harriet Beecher (Other works) So: 916
- Olduvai Gorge** [Africa]
Homo habilis H: 306
Leakey, Louis Seymour Bazett L: 161
Prehistoric people (Three species) P: 745
Tanzania (History) T: 34
- Oleander** [shrub] O: 742 with picture
Poisonous plant P: 602
- O'Leary, Eileen** [Irish poet]
Irish literature (Modern works in Gaelic) I: 431
- O'Leary, Hazel Rollins** [American government official] O: 742
- Olefin** [chemistry] O: 742
Fiber (Synthetic fibers) F: 87
Hydrocarbon (Aliphatic hydrocarbons) H: 465
Petrochemicals P: 329
Rugs and carpets (Materials used in rugs and carpets) R: 513-514
Textile (Manufactured fibers) T: 213
- Olefin unit** [measurement]
Olefin O: 742
- Oleg** [Varangian ruler]
Russia (The state of Kievan Rus) R: 547
Ukraine (Kievan Rus) U: 12
- Olein** [chemical]
Lard L: 76
- Oleomargarine** [food] See Margarine in *this index*
- Oleoresin** [tree product]
Resin R: 259
- Oleoresinous varnish**
Varnish (Types of varnish) V: 286
- Olericulture**
Horticulture H: 370
- Olestra** [fat substitute]
Fat substitute F: 54
- Oleum** [chemical]
Sulfuric acid (Uses and properties) So: 968
- Oleuropein** [chemical]
Olive (Appearance of the fruit and tree) O: 743
- Olfaction**
Smell S: 514
- Olfactory bulb** [anatomy]
Nose N: 549 with picture
Smell (How odors are detected) S: 514 with diagram
- Olfactory nerve** [anatomy]
Nose N: 548
- Olfactory system**
Smell S: 514 with diagram
- Ofloxacin** [medication]
Quinolone Q: 42
- Olga** [grand duchess of Russia]
Nicholas II [czar] picture on N: 403
- Olhona Indians** [American Indians]
San Jose (History) S: 101
- Olbanum** [tree product]
Frankincense F: 485
- Oligarchy** [government] O: 742
Greece, Ancient (Government) G: 372
- Oligocene Epoch** [geology]
Earth (The Cenozoic Era) E: 28-29; (table) E: 30

Prehistoric animal (table) P: 740

Oligochaete worm

Worm (Segmented worms) W: 501

Oligopoly [economics]

Inflation (The cost-push theory) I: 268

Monopoly and competition (Kinds of monopoly and competition) M: 731

Olipant, Patrick Bruce [American cartoonist] O: 743

Oltitski, Jules [American artist]

Painting (Color-field painting) P: 86

Olivares, Antonio [Spanish missionary]

Alamo (Early days) A: 280

San Antonio (History) S: 86

Olive [tree] O: 743 *with pictures*

Olive Branch Petition [U.S. history]

Revolutionary War in America (The Declaration of Independence) R: 276

Olive foots

Olive oil O: 744

Olive fruit fly

Fly (table) F: 310

Olive oil O: 744

Invention (Ancient Greece) I: 358-359

Olive O: 743

Vegetable oil V: 294

Olive orchard

Spain *picture on* So: 743

Olive Tree [political party]

Italy (Recent developments) I: 519

Oliver! [film]

Motion picture (Best picture: 1968) M: 861

Oliver, Giorgio Borg [Maltese political leader]

Malta (History) M: 113-114

Oliver, Jack E. [American geologist]

Plate tectonics (History of tectonic theory) P: 564-565

Oliver, James [American inventor]

Indiana (Early statehood) I: 216

Oliver, James H. [American government official]

Virgin Islands (Commercial development) V: 396-397

Oliver, John [Canadian political leader]

British Columbia (table) B: 627

Oliver, King [American bandleader]

Jazz (Early jazz) J: 70

Oliver Cromwell's Letters and Speeches [book by Carlyle]

Carlyle, Thomas (Later career) C: 240

Oliver Hazard Perry class

Frigate F: 534

Oliver Twist [book by Dickens]

Dickens, Charles (The first phase) D: 188 *with picture*

Child labor C: 455

English literature (Early Victorian literature) E: 321 *with picture*

Olives, Mount of [hills, Jerusalem]

Mount of Olives M: 886

Olivet, Mount

Mount of Olives M: 886

Olivia [literary figure]

Shakespeare, William (*Twelfth Night*) S: 360

Olivier, Laurence [British actor] O: 744 *with picture*

Motion picture (Best performance by an actor: 1948) M: 862

Olivine [mineral] O: 745

Mantle M: 168

Peridot P: 287

Ollie Matson's House Is Just a Square Red Cloud [painting by Milne]

Milne, David Brown *picture on* M: 556

Olmec Indians O: 745

Indian, American (Before European contact) I: 169

Latin America (The first inhabitants) L: 104

Maya (The Preclassic Period) M: 325

Mexico (The growth of villages) M: 468

Mound builders (Other mound builders) M: 883

Science (Early civilizations) S: 196

Sculpture (Early sculpture) S: 242 *with picture*

Olmedo, José [Ecuadorian poet]

Latin-American literature (The 1800's) L: 112

Olmsted, Frederick Law [American landscape architect] O: 745

Landscape architecture (History) L: 59

Montreal (Parks) M: 774

Park (History) P: 168-169

Olmsted, Frederick Law, Jr. [American landscape architect]

Olmsted, Frederick Law O: 745

Olmütz, Bishop of [German religious leader]

Pied Piper of Hamelin P: 453

Olney, Richard [American government official]

Cleveland, Grover (Foreign affairs) C: 673

Justice, Department of (table) J: 203

State, Department of (table) So: 860

Olney Hymns [hymns]

Cowper, William C: 1113

Olof Skotkonung [king of Sweden]

Sweden (The early kingdom) So: 1032

Olson, Allen I. [American political leader]

North Dakota (table) N: 513

Olson, Charles [American poet] O: 745

American literature (Poetry) A: 423

Olson, Culbert L. [American political leader]

California (table) C: 59

Olson, Floyd B. [American political leader]

Farmer-Labor Party F: 46

Minnesota (table) M: 602; (The early 1900's) M: 604-606

Olson, Ole H. [American political leader]

North Dakota (table) N: 513

Olson, Regina [friend of]

Kierkegaard, Søren Aabye (His life) K: 314

Olustee, Battle of [1864]

Florida (The Civil War and Reconstruction) F: 262 *with picture*

Olvera Street

Los Angeles (Downtown Los Angeles) L: 458-460

Olvidados, Los [film]

Motion picture (Postwar realism) M: 869-870

Olybrius [Roman emperor]

Rome, Ancient (table) R: 447

Olympia [city, Washington] O: 746

Olympia [painting by Manet]

Manet, Edouard M: 138

Olympia [region, Greece] O: 745

Olympic Games (Olympic ceremonies and symbols) O: 746-746a; (The ancient games) O: 750 *with picture*

Olympia [ship]

Dewey, George D: 176

Navy, United States (The Spanish-American War [1898]) N: 88

Olympiad [time] O: 746

Olympian gods [mythology]

Mount Olympus M: 886

Olympian Zeus, Temple of

Athens (Other buildings) A: 856; *picture on* A: 854

Olympians [Greek mythology]

Mythology (The Creation myth) M: 978-979

Olympias [mother of Alexander the Great] O: 746

Alexander the Great (His youth) A: 342

Olympic flag

Flag *picture on* F: 216

Olympic flame

Olympic Games (Olympic ceremonies and symbols) O: 746-746a; *picture on* O: 746b

Olympic Games O: 746 *with pictures*

Atlanta (The late 1900's) A: 861

Blood doping B: 416

Calgary (History) C: 34

Decathlon D: 66

Discus throw D: 224

Greece, Ancient (Recreation) G: 367-368; *pictures on* G: 371

Hockey (Amateur development) H: 281

Homing pigeon (History) H: 306

Horse racing (History) H: 366

Ice skating (History) I: 16

International Olympic Committee I: 343

Judo (History) J: 185

Moscow (The early 1900's) M: 827

Olympia O: 745

Peace (Ancient Greece and Rome) P: 206

Pentathlon, Modern P: 275

Television (Commercial television) T: 110-110a *with picture*

Track and field (History) T: 357

Olympic Mountains [Washington] O: 755

Olympic National Park [Washington] O: 755

National Park System (table: National parks) N: 48

Washington W: 58; *pictures on* W: 47, W: 57

Olympic Ocean Strip [region, Washington]

Olympic National Park O: 756

Olympic Saddledome [arena] See Pengrowth Saddledome *in this index*

Olympic Stadium [Berlin]

Berlin (Recreation) B: 262

Olympic Village

Olympic Games (Between the wars) O: 751

Olympics See Olympic Games *in this index*

Olympio, Sylvanus [Togolese political leader]

Togo (History) T: 310-311

Olympus, Mount [mountain, Cyprus]

Cyprus (Land and climate) C: 1206

Olympus, Mount [mountain, Greece] See

Mount Olympus *in this index*

Olympus, Mount [mountain, Washington]

Olympic Mountains O: 755

Olympus Mons [volcano, Mars]

Mars (Volcanoes) M: 226

Om [religion]

Hinduism *picture on* H: 237

Omaha [Nebraska] O: 756 *with picture*

Curfew C: 1194

Nebraska (table: Average monthly weather) N: 106; *picture on* N: 95

Omaha [horse]

Kentucky Derby (table) K: 296

Omaha Indians [American Indians] O: 757

Neihardt, John N: 121

Oman O: 757 *with pictures and map*

Flag *picture on* F: 204

Standard of living (table) So: 834

Oman, Gulf of

Persian Gulf P: 300 *with map*

Omar Khayyam [Persian poet] O: 759

Algebra (History) A: 359

FitzGerald, Edward F: 190

Mathematics (Arab mathematics) M: 306

Rubaiyat R: 499

Omasum [zoology]

Cattle (Stomach) C: 307 *with diagram*

Ruminant R: 519 *with diagram*

Omayyad, Order of the [Syria]

Medals, decorations, and orders (table) M: 359

Omayyad dynasty See Umayyad dynasty *in this index*

OMB

Management and Budget, Office of M: 131

Ombú [tree]

Tree (Interesting facts about trees) T: 411 *with picture*

Ombudsman [government official] O: 760

Denmark (Government) D: 132-133

New Zealand (Ombudsmen) N: 347

Norway (Government) N: 537

Sweden (Ombudsmen) So: 1023

Omdurman [city, Sudan] O: 760

Omdurman, Battle of [1898]

Sudan (Egyptian and British control) So: 955-956

Omega [instrument]

Shipwreck S: 429

Omega-minus [particle]

Gell-Mann, Murray G: 77

Omega navigation system

Navigation (Electronic navigation) N: 71-73

Omega-3 fatty acid

Seafood S: 265

Omen [superstition] O: 760

Omeros [poem by Walcott]

Walcott, Derek W: 7

Omertà [custom]

Sicily (The people) S: 447

Omotepe [island, Nicaragua]

Lake Nicaragua L: 42

O—Mika [ballet]

Saint Denis, Ruth S: 33

Omineca Mountains

British Columbia (Land regions) B: 622

Ommatidium [zoology]

Compound eye C: 906 *with diagram*

Omní [magazine]

Science fiction (Growing popularity) S: 205-206

Omnibus [vehicle]

Bus (History) B: 715

Omnibus bill [political science] O: 760

Omnicom Group [company]

Advertising (Advertising in other countries) A: 78

Omnidirectional microphone

Microphone M: 516

Omnirange navigation system

Navigation (Electronic navigation) N: 71-73

Omnivore [zoology]

Mammal (What mammals eat) M: 121

Omonoia SquareAthens (Landmarks) A: 854 *with map***Omomyid** [animal]

Primate (The evolution of primates) P: 778b

Omoo [book by Melville]

Melville, Herman (His early life) M: 390

Omri [king of ancient Israel]

Samaria S: 78

Omsk [city, Russia] O: 760**Omyéné** [people]

Gabon (People) G: 3; (History) G: 3

"On a Grecian Urn" [poem by Keats]

Keats, John (His work) K: 253-254

"On a Piece of Chalk" [essay by Huxley]

Huxley, Thomas Henry H: 459

On Agriculture [book by Cato the Elder]

Latin literature (Early Latin literature) L: 115

On Architecture [book by Alberti]

Architecture (Early Renaissance architecture) A: 620-621

On Becoming a Person [book by Rogers]

Rogers, Carl Ransom R: 400

On Civility in Children [book by Erasmus]

Etiquette (Books on etiquette) E: 374

On Coming-to-be and Passing-away [book by Aristotle]

Aristotle (Philosophy of nature) A: 664

On Crimes and Punishments [book by Beccaria]

Criminology (History) Ci: 1145

On-deck circle

Baseball (Foul territory) B: 127

On Eloquence in the Vernacular [essay by Dante]

Dante Alighieri (His works) D: 34-35

On Eternal Peace [book by Kant]

Political science (Liberalism) P: 639

"On First Looking into Chapman's Homer"

[poem by Keats]

Keats, John (His work) K: 253-254

Chapman, George C: 377

On Germany [book by Staël]

Staël, Madame de So: 820

On guard [fencing]

Fencing picture on F: 70

On Heroes, Hero-Worship, and the Heroic in History [book by Carlyle]

Carlyle, Thomas (Early career) C: 239-240

On-highway truck [vehicle]

Truck (On-highway trucks) T: 457

On Laws [book by Suárez]

Suárez, Francisco So: 936

On Learned Ignorance [work by Nicholas]

Nicholas of Cusa N: 403

On Liberty [essay by Mill]

English literature (Early Victorian literature) E: 321

Mill, Harriet Taylor M: 552

Mill, John Stuart M: 552

On-line... See Online... *in this index***On Literature** [book by Staël]

French literature (The preromantics) F: 521

On Nature [poem by Parmenides]

Parmenides P: 177

On Painting [book by Alberti]

Perspective P: 304

On Temporal Authority, To What Extent It Should Be Obeyed [book by Luther]

Luther, Martin (Reformation leader) L: 528

"On the Banks of the Wabash, Far Away"

[song by Dreiser]

Dreiser, Theodore D: 346

"On the Beautiful, Blue Danube" [music by Strauss]

Strauss, Johann, Jr. So: 921

On the Church [book by Hus]

Hus, John H: 456

"On the Crown" [speech by Demosthenes]

Demosthenes D: 129

"On the Electrodynamics of Moving Bodies"

[paper by Einstein]

Einstein, Albert (Famous theories) E: 146-146a

On the Fabric of the Human Body [book by Vesalius]See On the Structure of the Human Body *in this index***On the Heavens** [book by Aristotle]

Aristotle (Philosophy of nature) A: 664

On the History of Religion and Philosophy in Germany [book by Heine]

Heine, Heinrich H: 167

On-the-job training

Careers (On-the-job training) C: 217

Vocational education (Other sources) V: 434

On the Law of War and Peace [book by Grotius]

Peace (From the 1400's to the 1700's) P: 206

On the Magnet, Magnetic Bodies, and the Great Magnet of the Earth [book by Gilbert]

Gilbert, William G: 189

On the Magnitudes and Distances of the Sun and Moon [essay by Aristarchus]

Aristarchus A: 662

On the Mall [music by Goldman]

Goldman, Edwin Franko G: 258

On the Nature of Things [poem by Lucretius]

Atomism A: 877

Latin literature (The age of Cicero) L: 115-116

Lucretius L: 514

On the Origin of Species See *Origin of Species in this index***On the Pyramid of Choula** [poem by Heredia]

Latin-American literature (Romanticism) L: 112

On the Revolutions of the Heavenly Spheres [book by Copernicus]

Copernicus, Nicolaus Ci: 1039

Geology (The Renaissance) G: 98

Science (The rebirth of science) S: 197, *picture on S: 199***On the Road** [book by Kerouac]

American literature (Fiction and other prose) A: 424

Beat movement B: 189

Kerouac, Jack K: 306

On the Seats and Causes of Diseases [book by Morgagni]

Morgagni, Giovanni Battista M: 802

On the Shores of the River Sar [poem by Castrol]

Spanish literature (The 1800's) So: 761

On the Soul [book by Aristotle]

Aristotle (Philosophy of nature) A: 664

On the Southern Plains [painting by Remington]

Cavalry picture on C: 318

On the Sphere and Cylinder [book by Archimedes]

Archimedes A: 604

On the Structure of the Human Body [book by Vesalius]Biology (The Renaissance) B: 318 *with picture*

Science (The rebirth of science) S: 197-198

Vesalius, Andreas V: 341

On the Sublime [essay by Longinus]

Longinus L: 451

On the Town [musical]

Bernstein, Leonard B: 271

On the Tragedies of Shakespeare [book by Lamb]

Shakespeare, William (Romantic criticism) S: 369

"On the Trail" [music by Grofé]

Grofé, Ferde G: 397

On the Waterfront [film]

Brando, Marlon B: 563

Kazan, Elia K: 252

Motion picture (Best picture: 1954) M: 861

On the Wing of Occasions [stories by Harris]

Harris, Joel Chandler H: 68

On to Ottawa Trek [Canadian history]

Saskatchewan (The Great Depression) S: 147

On War [book by Clausewitz]

Clausewitz, Karl von Ci: 657

On World-Government [essay by Dante]

Dante Alighieri (His works) D: 34-35

Ona IndiansIndian, American (Indians of the Marginal Regions) I: 176-177, *pictures on I: 140***Onager** [animal] O: 760 *with picture***Onam** [festival]

September S: 308

Onassis, Aristotle Socrates [Greek businessman]

Kennedy, John Fitzgerald (Kennedy's family) K: 262

Onassis, Jacqueline Kennedy O: 761

Onassis, Jacqueline Kennedy [American public figure] O: 761 *with portrait*

Johnson, Lyndon Baines picture on J: 149

Kennedy, John Fitzgerald (Kennedy's family) K: 262; (Life in the White House) K: 265 *with picture*

White House (Rebuilding and redecorating) W: 290

Oñate, Juan de [Spanish explorer] O: 761

El Paso E: 247

New Mexico (Exploration and settlement) N: 273

On-board navigation system

Automobile (The automobile today) A: 972-973

Once in a Lifetime [play by Kaufman and Hart]

Hart, Moss H: 77

Oncenter Complex

Syracuse S: 1069

Oncogene [genetics]

Cancer (How damaged genes cause cancer) C: 169

Oncology [medicine] O: 761

Cancer C: 167

Medicine (Specialty care physicians) M: 365-366; (table) M: 369

Oncosphere [biology]

Tapeworm T: 40

Ondaatje, Michael [Canadian author]

Canadian literature (Modern English-Canadian fiction) C: 160

Ondol [floor]

Korea (Rural life) K: 370

One, The [philosophy]

Neoplatonism N: 124

Plotinus P: 574

One-and-one

Basketball (Fouls) B: 147-148

One-celled organism [biology]

Protist P: 836

Protozoan P: 836 *with pictures*Reproduction (Through asexual reproduction) R: 242 *with picture***One-crop farm**

Agriculture (Specialized farms) A: 148

One Day in the Life of Ivan Denisovich [book by Solzhenitsyn]

Russian literature (Modern Soviet literature) R: 564

Solzhenitsyn, Alexander So: 587

One-design class [racing]

Boating picture on B: 431

One Earth, Four or Five Worlds [book by Paz]

Paz, Octavio P: 205

One Fine Day [book by Hogrogian]

Hogrogian, Nonny H: 289

One Flew over the Cuckoo's Nest [book by Kesey]

American literature (Experimental styles) A: 424

One Flew Over the Cuckoo's Nest [film]

Motion picture (Best picture: 1975) M: 861

Nicholson, Jack N: 404

158-Pound Marriage, The [book by Irving]

Irving, John I: 459

100 Mile House [British Columbia]

British Columbia (Interesting facts about British Columbia) B: 613

101 Ranch Wild West Show

Pickett, Bill P: 451

120 Days of Sodom [book by Sade]

Sade, Marquis de S: 8

One Hundred Years of Solitude [book by García Márquez]

García Márquez, Gabriel José G: 29

Latin-American literature (Recent developments) L: 113

One-island ship

Ship (General cargo ships) S: 417-418

One-party system

Political party (One-party systems) P: 633

One Way to Heaven [book by Cullen]

Cullen, Countee Ci: 1185

One World [book by Willkie]

Willkie, Wendell Lewis (His public career) W: 314

O'Neal, Edward Asbury [American political leader]

Alabama (table) A: 274

O'Neal, Emmett [American political leader]

Alabama (table) A: 274

O'Neal, Shaquille [American basketball player] O: 761

Basketball picture on B: 154

O'Neal, Tatum [American actress]

Motion picture (Best performance by an actress in a supporting role: 1973) M: 863

O'Neale, Peggy [American public figure]

O'Neale, Peggy O: 761

Jackson, Andrew (Split with Calhoun) J: 11

Onega, Lake [Russia]

Lake Onega L: 43

Onegin, Eugene [literary figure]

Russian literature (Early romanticism) R: 560-561

Oneida Community [U.S. history] O: 761

Family (Varieties of families) F: 20-21

Oneida Indians

Indian, American (Indians of the Northeast) I: 154

Iroquois Indians I: 455

O'Neill, C. William [American political leader]

Ohio (table) O: 699

O'Neill, Danny [literary figure]

Farrell, James T. F: 48

O'Neill, Eugene Gladstone [American dramatist] O: 762

American literature (Drama) A: 422 *with portrait*

Drama (United States drama) D: 339

Naturalism (Naturalism in drama) N: 65-66

Realism (In drama) R: 172

O'Neill, Hugh [Irish nobleman]

Ireland (The conquest of Ireland) I: 426

O'Neill, Paul Henry [American government official]

Bush, George Walker (table) B: 723

Treasury, Department of the (table) T: 407

O'Neill, Rose [American artist]

Doll (The early 1900's) D: 291 *with picture*

O'Neill, Shane [Irish nobleman]

Ireland (The conquest of Ireland) I: 426

O'Neill, Thomas Philip [American political leader] O: 762

O'Neill, William A. [American political leader]

Connecticut (table) C: 967

Oneness churches [religion]

Pentecostal churches (Major Pentecostal churches) P: 275-276

One-time pad [cryptology]

Codes and ciphers (Unbreakable ciphers) C: 751

One-way clutch [engine]

Transmission (Clutches) T: 377-378

Ongan [priest]

Voodoo V: 449

Onion [plant] O: 763 *with pictures*

Onizuka, Ellison Shoji [American astronaut]

Asian Americans (Individual achievements) A: 812c

Astronaut (table) A: 830

Space exploration (The Challenger disaster) So: 725

Online auction

Auction A: 881

E-commerce (Business-to-consumer transactions) E: 2

Internet (Business transactions) I: 350b

Online catalog [information storage]

Database D: 41

Library (Other features) L: 237

Online Computer Library Center See OCLC in this index

Online database [information system]

Computerized instruction (Resource programs) Ci: 924h-925

Library (The growth of information and technology) L: 238

Online electronic encyclopedia

Encyclopedia (Today's encyclopedias) E: 268b-269

Online investing

Investment (How investors buy stocks) I: 369

Online journalism

Journalism (Online journalism) J: 172

Online newspaper

Newspaper (Kinds of newspapers) N: 380; (Recent trends) N: 386-387

Online resource See Online database in this index

Online service [electronics] O: 763

Computer (Internet service providers [ISP's] and online services) Ci: 921

Internet (Communications) I: 350-350a; (Glossary of Internet terms) I: 350a

Modem M: 686

Telephone (Modems) T: 97-98

Web site W: 175

Only Opal: The Diary of a Young Girl [book by Whiteley]

Literature for children *picture on* L: 379

Only True Mother Goose Melodies, The [book by Newbery]

Mother Goose (The history of Mother Goose literature) M: 842

Onnes, Heike Kamerlingh [Dutch physicist]

Nobel Prizes (Physics: 1913) N: 440

Superconductivity So: 993

Ono, Yoko [American musician]

Lennon, John L: 196

Onomatopoeia [language]

Poetry (table) P: 594

Onondaga Indians [American Indians]

Indian, American (Indians of the Northeast) I: 154

Iroquois Indians I: 455

Onorata Società [criminal organization]

Mafia M: 41

Onsager, Lars [American chemist]

Nobel Prizes (Chemistry: 1968) N: 443

Onsi [Voodoo worshipper]

Voodoo V: 449

Onside kick

Football (The kickoff) F: 359-360

Ontario O: 764 *with pictures and maps*

Canada (Ontario) C: 101

Canada, Government of *picture on* C: 133

Ontario O: 764

School (History of Canadian schools) S: 185

See also the list of Related Articles in the Ontario article

Ontario, Lake See Lake Ontario in this index

Ontario Place

Ontario (Places to visit) O: 774 *with picture*

Toronto (Landmarks) T: 336-337; (Urban renewal) T: 340a

Ontario Science Centre

Toronto (Museums and libraries) T: 339

Ontogeny [biology]

Biogenesis B: 312

Ontology [philosophy]

Philosophy (Metaphysics) P: 383

"Onward, Christian Soldiers" [hymn]

Sullivan, Sir Arthur Seymour So: 969

Onyx [gem] O: 788

Gem *picture on* G: 78

O/O ship

Ship (Dry bulk carriers) S: 420-421; *picture on* S: 422

Oocyte [cell]

Reproduction, Human (The human reproductive system) R: 244-245

Oolong tea

Tea (Processing tea) T: 62

Oophorectomy

Surgery (Some common surgical operations) So: 1006

Oort, Jan H. [Dutch astronomer]

Oort cloud O: 788

Solar system (Comets) So: 581

Oort cloud [astronomy] O: 788

Comet (Orbits) Ci: 868 *with diagram*

Solar system (Comets) So: 581

Oostende See Ostend in this index

Oosterhoff, William [Canadian artist]

Canada, Government of *pictures on* C: 133

Ooze [earth] O: 788

Ocean (Deep-sea peaks, valleys, and plains) O: 662

Op art

Moiré pattern M: 689

Opacity [physical property]

Light (Reflection, refraction, and absorption) L: 286

Opal [gem] O: 788 *with picture*

Gem *picture on* G: 78; (Value of gems) G: 79

Opal glass

Glass (Specialty glasses) G: 212; (Types of art glass) G: 221

Opal Terrace

Yellowstone National Park (The Upper Loop) Y: 559

Opaque projector

Audio-visual materials (Projectors) A: 882

Projector P: 817

Oparin, Alexander Ivanovich [Soviet biochemist] O: 789

Life (Modern theories) L: 278

OPEC See Organization of the Petroleum

Exporting Countries in this index

Opechancanough [American Indian chief]

Indian wars (Jamestown) I: 191

Powhatan Indians P: 728

Opelousas [Louisiana]

Baton Rouge (Government and history) B: 166

Open adoption

Adoption (Rights of adoptive parents and adoptees) A: 66-67

Open-angle glaucoma [disease]

Eye (Glaucoma) E: 466

Open area excavation

Archaeology (Excavating sites) A: 597

"Open Boat, The" [story by Crane]

Crane, Stephen C: 1120

Open caisson [construction]

Caisson C: 18

Open circuit

Electric circuit E: 166

Open circuit scuba

Diving, Underwater (Ambient diving) D: 245

Open City [film]

Motion picture (Postwar realism) M: 869

Open city [warfare]

Athens (War and decline) A: 857-858

International law (The laws of war) I: 341

Paris (Paris in wartime) P: 166

Open classroom

Alternative school (Features of alternative schools) A: 388-389

Elementary school (Elementary school instruction) E: 225

Open cluster [astronomy]

Milky Way (Shape of the galaxy) M: 550-551

Open cockpit

Automobile racing (Safety measures) A: 975-976

Open couplet [literature]

Couplet C: 1100

Open-cut subway

Subway So: 949

Open dating

Consumerism (The right to information) Ci: 1018-1019

Open-door admission policy [education]

Community college (Importance to students) Ci: 899

Open-Door Policy [international relations]

O: 789

China (The fall of the Manchus) C: 503

Hay, John Milton H: 116

McKinley, William (America becomes a world power) M: 341

Open dump

Waste disposal (Land disposal) W: 113

Open-end investment company

Mutual fund M: 969

Investment (Other kinds of indirect investments) I: 368

Open enrollment [public school]

Education (Who should choose a child's school) E: 106

Open fracture [injury]

Fracture F: 451 *with diagram*

Open-heart surgery

Heart (Development of heart surgery) H: 144 *with picture*

Hypothermia H: 481

Open-hearth furnace

Iron and steel (The open-hearth process) I: 444 *with diagram*

Open-hearth process [industry]

Iron and steel (The open-hearth process) I: 444 *with diagram*; (The birth of modern steelmaking) I: 451

Open housing [law] O: 789

Housing (Housing since 1900) H: 391-392

Open-market operations [economics]

Federal Reserve System (Managing the economy) F: 65-66

Money (The role of the Federal Reserve System) M: 716

Open-mesh fabric

Textile (Other textiles) T: 215

Open occupancy law [U.S.]

Open housing O: 789

Open-pit mine

Aluminum (Sources of aluminum) A: 392-393

Asbestos (How asbestos is mined and processed) A: 765

Bauxite (Mining and processing bauxite) B: 174

Brazil *picture on* B: 582

Copper (Sources of copper) Ci: 1042

Gold (Mining) G: 252

Iron and steel (Mining and processing iron ore) I: 438 *with picture*

- Mining (Surface mining methods) **M**: 574-575
with picture
- Newfoundland and Labrador picture on **N**: 361
- Peru picture on **P**: 313
- Uranium (Mining uranium) **U**: 215
- Open primary**
Primary election (Open and closed) **P**: 777
- Open range**
Ranching **R**: 134; (History) **R**: 135
- Open school**
School (Open schools) **S**: 185
- Open shop** [labor] **O**: 789
Labor movements (Organizing workers) **L**: 4
- Open Society and Its Enemies, The** [book by Popper]
Popper, Karl Raimund **P**: 668
- Open Society Institute**
Foundations (International affairs) **F**: 431
- Open space classroom** [education]
Alternative school (Features of alternative schools) **A**: 389
- Open-stack system**
Library (Other features) **L**: 237
- Open stage**
Theater (Modern theater architecture) **T**: 232-234 with picture
- Open Theater** [organization]
Drama (Experimental theater) **D**: 340
- Open tournament**
Golf (Tournaments) **G**: 264
Tennis (Tennis tournaments) **T**: 165
- Open turn**
Swimming (Starts and turns) **So**: 1046
- Open University** [Heerlen]
Netherlands (Education) **N**: 142
- Open University of the United Kingdom** [former name]
Distance learning **D**: 238
- Opening machine**
Textile (Making the yarn) **T**: 215
- Opening night**
Opera picture on **O**: 791
- Opening of Japan, The** [painting by Gassan]
Japan picture on **J**: 55
- Opening of the Field, The** [poems by Duncan]
Duncan, Robert **D**: 384
- Opening of the West**
Gold rush (Gold rushes in the United States) **G**: 254
Homestead Act (Effects of the law) **H**: 305
Squatter's rights **So**: 814
Western frontier life in America **W**: 232 with pictures
Westward movement in America **W**: 244 with pictures
See also Westward movement in America in this index, and the Related articles in the Westward movement in America article
- Opening to the left** [Italian history]
Italy (The Italian republic) **I**: 517-518
- Opera** **O**: 790 with pictures
Classical music (Operas) **Ci**: 644, (The Romantic era) **Ci**: 648
Drama (Intermezzi and operas) **D**: 330
Intermezzo **I**: 336
Italy picture on **I**: 505
Operetta **O**: 809
Overture **O**: 881
See also the list of Related articles in the Opera article
- Opera buffa** [music]
Opera (table) **O**: 791; (Opera seria and opera buffa) **O**: 797; (Barber of Seville, The) **O**: 801
- Opera Company of Boston**
Caldwell, Sarah **C**: 27
- Opère de la Bastille** [Paris]
Paris (Arts) **P**: 164 with picture
- Opera house**
Opera **O**: 790
- Opera seria**
Opera (table) **O**: 791; (Opera seria and opera buffa) **O**: 797 with picture
- Operant conditioning** [psychology]
Learning (Instrumental conditioning) **L**: 163
Mouse picture on **M**: 902
Skinner, B. F. **S**: 495
- Operating Engineers, International Union of**
Engineers, International Union of Operating **E**: 291
- Operating Forces**
Navy, Department of the **N**: 81
- Navy, United States (The Operating Forces) **N**: 85
- Operating room** [hospital]
Medicine picture on **M**: 365
Surgery picture on **So**: 1005
- Operating system** [electronics]
Computer (Operating system software) **Ci**: 916
- Operation** [medicine]
Surgery **So**: 1004 with pictures
- Operation Barbarossa** [World War II]
World War II (The invasion of the Soviet Union) **W**: 477
- Operation Bootstrap** [Puerto Rican history]
Puerto Rico (Building a democracy) **P**: 883
- Operation Breadbasket** [organization]
Jackson, Jesse Louis **J**: 15
- Operation Desert Storm** [1991]
Army (Armies in the nuclear age) **A**: 728-729
Persian Gulf War **P**: 300a
- Operation Highjump** [U.S. history]
Antarctica (Exploration by air) **A**: 537
Byrd, Richard Evelyn **B**: 746
- Operation Overlord** [World War II]
Eisenhower, Dwight David (Operation Overlord) **E**: 150
World War II (D-Day) **W**: 482-483
- Operation Rescue** [organization]
Abortion (Abortion in the United States) **A**: 15
- Operational analysis** [physics]
Bridgman, Percy Williams **B**: 607
- Operational audit** [business]
Audit **A**: 884
- Operator**
Telephone (Operator services) **T**: 98; picture on **T**: 99
- Operculum** [botany]
Moss (How mosses live) **M**: 834-835
- Operculum** [zoology]
Conch **Ci**: 928
Mollusk (Gastropods) **M**: 695
Shell (Gastropods) **S**: 385 with diagram
Snail (Groups of snails) **S**: 522-523
Whelk **W**: 279
- Operetta** **O**: 809
Musical comedy (The first musicals) **M**: 959
See also the list of Related Articles in the Operetta article
- Operette morali, Le** [essays by Leopardi]
Leopardi, Giacomo **L**: 203
- Opeteca-henawaywin**
Poundmaker **P**: 722 with portrait
- Ophelia** [literary figure]
Shakespeare, William (*Hamlet*) **S**: 361-362
- Ophelia** [painting by Millais]
Painting (The Pre-Raphaelite Brotherhood) **P**: 71 with picture
- Ophiderpeton** [animal]
Prehistoric animal (The move onto land) **P**: 737
- Ophidiophobia** [psychology]
Phobia **P**: 392
- Ophthalmia** [disease] **O**: 810
- Ophthalmia neonatorum** [disease]
Blindness (Diseases) **B**: 401-402
Ophthalmia **O**: 810
- Ophthalmologist** [career]
Eye (Receiving regular eye examinations) **E**: 469
Ophthalmology **O**: 810
- Ophthalmology** [medicine] **O**: 810
Glasses (How glasses are prescribed and made) **G**: 225
Medicine (table) **M**: 369
Surgery (Ophthalmology) **So**: 1007
- Ophthalmoscope** [instrument] **O**: 810 with picture
Helmholtz, Hermann Ludwig Ferdinand von **H**: 179
Medicine picture on **M**: 364
- Opiate** [drug] **O**: 810
Drug (Analgesics) **D**: 352
Drug abuse (Heroin) **D**: 362
- Opinion**
Public opinion **P**: 859
Public opinion poll **P**: 861
- Opinion** [law]
Supreme Court of the United States (Written opinions) **So**: 999
- Opinion poll**
Public opinion poll **P**: 861
- Opioid** [drug]
Endorphin **E**: 272
Pain (Treating pain) **P**: 22
- Opium** [drug] **O**: 811 with picture
Afghanistan (Agriculture) **A**: 94
Codeine **Ci**: 749
Drug (Plants and molds) **D**: 355 with picture
Drug abuse (Heroin) **D**: 362; (History) **D**: 365
Morphine **M**: 816
Poppy **P**: 668
- Opium poppy** [plant]
Opium **O**: 811 with picture
- Opium War** [1839-1842]
China (Clash with the Western powers) **C**: 502
Hong Kong (British control) **H**: 319
Shanghai (History) **S**: 372
- Opolek**
Christmas (In Poland) **C**: 531
- OPM** [government agency]
Civil service (Federal civil service) **Ci**: 612-613
- Oporto** [Portugal] See Porto in this index
- Opossum** [animal] **O**: 811 with pictures
Animal picture on **A**: 479
Fur (table) **F**: 561
Mammal (Reproduction) **M**: 123-124 with picture; (Methods of attack and defense) **M**: 126; (table) **M**: 128 with picture
Marsupial (Kinds of marsupials) **M**: 232
- Oppenheimer, J. Robert** [American physicist]
O: 812
Manhattan Project **M**: 141
- Oppidan** [student]
Eton College **E**: 374
- Opponent color theory**
Color (The opponent color theory) **Ci**: 826
- Opportunistic infection**
AIDS (Opportunistic illnesses) **A**: 163
Immune system (Immunodeficiency diseases) **I**: 88c-88d
Pneumonia (How pneumonia develops) **P**: 586
- Opportunities Industrialization Center**
[Philadelphia]
Sullivan, Leon Howard **So**: 969
- Opportunity** [magazine]
Johnson, Charles Spurgeon **J**: 142
- Opposable thumb**
Hand **H**: 39
Monkey (Hands and feet) **M**: 726
- Opposition** [astronomy] **O**: 812
- Opposition** [politics]
Democracy (Political parties) **D**: 121
Parliament (How the House of Commons works) **P**: 173
Political party (Providing opposition) **P**: 633
United Kingdom (National government) **U**: 49; picture on **U**: 50
- "Opry"** [radio program] See "Grand Ole Opry" in this index
- Opryland** [Tennessee]
"Grand Ole Opry" **G**: 308
- Ops** [Roman mythology]
Mythology (table) **M**: 980
Saturn **S**: 150h
- Opštini** [districts]
Macedonia (Government) **M**: 12
- Optacon** [device]
Blindness (Aids for blind people) **B**: 402
- Optic chiasm** [anatomy]
Eye (Depth perception) **E**: 463 with picture
- Optic lobe**
Brain (In invertebrates) **B**: 559
- Optic nerve** [anatomy]
Eye (The retina) **E**: 462 with picture; picture on **E**: 461
Blind spot **B**: 401
- Optic neuritis** [disease]
Eye (Diseases of the optic nerve) **E**: 469
- Optical absorption** [physics]
Materials (Optical properties) **M**: 300c
- Optical astronomy**
Astronomy (Optical astronomy) **A**: 838
- Optical axis** [optics]
Aberration (Point aberration) **A**: 10-11
Lens (Creating an image) **L**: 196
- Optical cavity**
Laser (Parts of a laser) **L**: 83 with diagram
- Optical character reader** [machine]
Postal services (Sorting) **P**: 703; picture on **P**: 704
- Optical character recognition** [electronics]
Census (Processing the results) **C**: 348-349
Computer (A scanner) **Ci**: 915

Optical disc [electronics]

Television (Video entertainment systems)
T: 110c

Optical fiber [physics] See *Fiber optics in this index***Optical glass**

Glass (Kinds of glass) G: 212; *picture on*
G: 211

Quartz (Properties and uses) Q: 8

Optical grain

Polarized light (How light is polarized) P: 617
with diagrams

Optical illusion O: 812 *with pictures*

Ames, Adelbert, Jr. A: 431
Color (Surprising color-vision effects) Ci: 819
with pictures

Mirage M: 615 *with pictures*

Perception (Learning, emotion, and motivation) P: 283

Optical mark recognition [electronics]

Census (Processing the results) C: 348-349

Optical microscope

Cell (Looking at a cell) C: 327
Microscope (How an optical microscope
works) M: 517 *with pictures*

Optical mouse [electronic device]

Computer (A mouse) Ci: 912-914

Optical plummet [instrument]

Surveying (Early tools) So: 1011-1012

Optical properties

Materials (Optical properties) M: 300c

Optical radar

Radar (How radar works) R: 68; (Continued
progress) R: 72-73 *with picture*

Optical scanner

See also *Scanner in this index*

Automobile *picture on* A: 956

Bar coding B: 102

Blindness (Aids for blind people) B: 402

Office work (Storing information) O: 677

Optical telescope

Astronomy (Optical astronomy) A: 838-839
Observatory (Observatories with telescopes)
O: 644

Palomar Observatory P: 112

Telescope T: 102; (Optical telescopes) T: 103
with pictures

Optician [career]

Eye (Receiving regular eye examinations)
E: 469

Glasses (How glasses are prescribed and
made) G: 225

Ophthalmology O: 810

Opticks [book by Newton]

Newton, Sir Isaac (Light and color) N: 389

Optics [book by Ptolemy]

Ptolemy P: 855

Optics [physics] O: 813

Kepler, Johannes K: 305

Lens L: 196 *with diagrams*

Leonardo da Vinci (Paintings) L: 200b

Light (The behavior of light) L: 287 *with pictures*

Physics (Light) P: 437

Prism P: 805

Optimist International [organization] O: 813**Option** [football]

Football (table) F: 356

Option [investment]

American Stock Exchange A: 430

Commodity exchange (Options contracts)
Ci: 874

Stock exchange (Trading) So: 903

Option [law]

Motion picture (Developing the story) M: 848-
849

Theater (Acquiring a script) T: 235

Optional foundation

Foundations (How foundations are organized)
F: 429

Optional referendum [government]

Initiative and referendum (The referendum)
I: 272

Optoelectronic device

Electronics (Electronics and light) E: 213

Optometrist [career]

Eye (Receiving regular eye examinations)
E: 469

Glasses (How glasses are prescribed and
made) G: 225

Optometry O: 814

Optometry [medicine] O: 814**Opus maius** [book by Bacon]

Bacon, Roger (His life) B: 19; (His work) B: 19

Or [color]

Heraldry (Expansion) H: 194 *with picture*

OR-gate [computer]

Electronics (Digital circuits) E: 213-214

Oracle [mythology] O: 814

Delphi D: 118

Greece, Ancient (Religion) G: 367

Mythology (Greek divinities) M: 979

Parnassus P: 177

Riddle R: 336

Oracle bones [religion]

Shang dynasty S: 371

World, History of the (The Huang He Valley)
W: 425

Oraibi [Arizona]

Arizona *picture on* A: 687-689

Hopi Indians H: 333

Oral arm [zoology]

Jellyfish J: 89

Oral contraceptive

Birth control (Methods of birth control) B: 378

Oral formulaic [literature]

Epic E: 342

Oral groove [biology]

Paramecium P: 152 *with picture*

Oral hygiene

Teeth (Cleaning the teeth) T: 81

Oral Law [religion]

Talmud T: 21

Oral literature

Africa (Literature) A: 117

Scandinavian literature (Beginnings) S: 171

Oral message [literature]

Ferlinghetti, Lawrence F: 73

Oral phase [psychology]

Libido L: 233

Psychoanalysis (Psychoanalytic theory) P: 846

Oral tradition

Folklore F: 322

Oralist method [education]

Deafness (Education) D: 59

Oran [city, Algeria] O: 814**Orang Asli** [people]

Malaysia (People) M: 98b; (Early days) M: 101

Orang Laut [people]

Malaysia (People) M: 98b; (Early days) M: 101

Orange [color]

Color *diagram on* Ci: 821

Orange [tree] O: 814 *with pictures*

Citrange Ci: 572 *with picture*

Florida *picture on* F: 258

Fruit (Subtropical fruits) F: 545

Mandarin M: 136

Spain (Agriculture) So: 744 *with picture*

Tangor T: 27

Orange, House of [English history]

Mary II M: 239

William III W: 309

Orange Book [standard]

Compact disc (CD-R) Ci: 902a; (CD-RW)
Ci: 902a

Orange Bowl Parade

Florida *picture on* F: 246

Orange County

Los Angeles (Metropolitan area) L: 462 *with picture*

Orange Free State [province, South Africa]

O: 817

Boer War B: 435

Orange gourd

Gourd G: 281 *with picture*

Orange hawkweed [plant]

Devil's paintbrush D: 175 *with picture*

Orange juice

Food, Frozen *picture on* F: 338

Orange O: 814; (Harvesting and processing)
O: 815

Orange Order [organization] O: 817

Northern Ireland (Religion) N: 522

Orange River [South Africa] O: 817

Namibia (Land and climate) N: 9

South Africa (Rivers) So: 615 *with map*

Orange roughy [fish]

Roughy R: 490 *with picture*

Orange sulfur [insect]

Butterfly *picture on* B: 735

Orange-tip butterfly

Butterfly (Sulfurs and whites) B: 734-736 *with picture*

Orangemen [Irish history]

Northern Ireland (Religion) N: 522

Orange Order O: 817

Orangemen's Day

July J: 188

Orangutan [animal] O: 817 *with picture*

Animal *picture on* A: 481

Ape (Way of life) A: 563-564 *with picture*

Endangered species (table) E: 270

Primate (Great apes) P: 778a

Oranmiyan [king of Benin]

Benin B: 250

Oration

Oratory O: 818

Orator

Oratory O: 818

Oratorians [religious group]

Neri, Saint Philip N: 130

Oratorio [music] O: 818

Classical music (Oratorios) Ci: 644

Handel, George Frideric (His work) H: 42

Opera O: 790

Oratory O: 818

Greek literature (Philosophical literature)
G: 378

See also *the list of Related Articles in the*

Oratory article

Oratory [architecture]

Cloister Ci: 683

Orb

Coronation (The British coronation) Ci: 1068-
1069

Orb weaver

Spider (table) So: 790; *pictures on* So: 786,
So: 789

Orbis Sensualium Pictus [book by Comenius]

Literature for children (Early children's literature)
L: 361

Orbit [anatomy]

Eye (Parts of the eye) E: 460

Orbit [astronomy] O: 819 *with diagram*

Climate (Changes in the earth's orbit) Ci: 677
with diagram

Comet (Orbits) Ci: 868

Earth (Earth as a planet) E: 16-17 *with diagram*

Kepler, Johannes K: 305

Mercury (Orbit) M: 414

Moon (The movements of the moon) M: 783
with diagram

Planet (How planets move) P: 508 *with diagrams*

Satellite, Artificial (Satellite orbits) S: 150d

Solar system So: 580

Space exploration *diagrams on* So: 697

Orbital plane [astronomy]

Earth (How Earth moves) E: 17

Orbital velocity [physics]

Space exploration (Getting into space and
back) So: 698

Orbiter

Space exploration (Space shuttles) So: 723;
picture on So: 700

Orbiter mission

Satellite (Spacecraft missions) S: 150c

Orbiting Astronomical Observatory

Rocket *picture on* R: 387

Orbus Pictus Award

Literature for children (Awards) L: 366

Orca [sea mammal] See *Killer whale in this index***Orchard** [agriculture]

Tree (Food products) T: 412

Orchard, Harry [American public figure]

Idaho (Early statehood) I: 44

Orchard grass

Grass *picture on* G: 325

Orchard oriole

Oriole O: 856 *with picture*

Orchestra [music] O: 820 *with pictures*

Classical music (Orchestral music) Ci: 644

Opera (The orchestra) O: 793 *with picture*

See also *the list of Related Articles in the*
Orchestra article

Orchestra [theater]

Drama (Greek drama) D: 326

Orchestra bells O: 823

Bell *picture on* B: 239

Glockenspiel G: 234

Orchestration

Music (Tone color) M: 952

Orchid [plant] O: 823 *with pictures*

Flower F: 301 *with picture, picture on* F: 271

Rain forest *picture on* R: 126c

- Root (Kinds of roots) R: 473-474 *with diagram*
- Orcus** [Roman mythology]
Pluto P: 581
- Orczy, Baroness** [British author] O: 825 *with portrait*
Detective story (History) D: 163
- Ordeal, Trial by** See *Trial by ordeal in this index*
- Ordeal of Richard Feverel, The** [book by Meredith]
Meredith, George M: 417
- Ordeal of the Union, The** [book by Nevins]
Nevins, Allan N: 178
- Ordeal of Woodrow Wilson, The** [book by Hoover]
Hoover, Herbert Clark (Elder statesman) H: 330-331
- Order** [architecture]
Architecture A: 609 *with diagrams*
- Order** [biology] O: 825
Classification, Scientific (Groups in classification) Ci: 654-655
- Order** [organization]
Knighthood, Orders of K: 346
Medals, decorations, and orders M: 355
- Order in Council** [British history] O: 825
Jefferson, Thomas (The struggle for neutrality) J: 86
- Order of ...**
Orders appear under their key words, as in De Molay, Order of
- Order of business**
Parliamentary procedure (Order of business) P: 176
- Order of protection** [law]
Restraining order R: 263
- Order of Things, The** [book by Foucault]
Foucault, Michel F: 429
- Ordered pair** [mathematics]
Algebra (Functions) A: 356-357
- Orders, Religious**
Knighthood, Orders of K: 346
Religious life R: 226
Roman Catholic Church (Church organization) R: 405; (Innocent III) R: 407
- Ordinance** [law] O: 825
Code Ci: 748
- Ordinance** [religion]
Ordinance O: 825
- Ordinance of Secession** [U.S. history]
Lincoln, Abraham (The South secedes) L: 320
- Ordinance of 1784** [U.S. history]
Jefferson, Thomas (Congressman) J: 80
- Ordinance of 1785** [U.S. history]
Jefferson, Thomas (Congressman) J: 80
Northwest Territory (Early history) N: 534-535
Pioneer life in America (How the pioneers obtained land) P: 479
Public lands (Disposal of public lands) P: 858
Westward movement in America (The Ordinance of 1785) W: 246 *with diagrams*
- Ordinance of 1787** See *Northwest Ordinance in this index*
- Ordinary**
Bicycle (Early bicycles) B: 292
- Ordinary** [tavern]
Colonial life in America (Recreation) Ci: 802-803
- Ordinary construction**
Building construction (Classification of buildings) B: 683
- Ordinary People** [film]
Motion picture (Best picture: 1980) M: 861
- Ordinary seaman**
Ship (Officers and crew) S: 423
- Ordinate** [mathematics]
Geometry (Analytic geometry) G: 104 *with diagrams*
- Ordinance** [munitions] O: 825
- Ordóñez de Montalvo, Garcí** [Spanish author]
Amadis of Gaul A: 399
Spanish literature (The 1400's) So: 758
- Ordovician Period** [geology]
Earth (The Paleozoic Era) E: 27; (table) E: 30
Prehistoric animal (table) P: 738
- Ore** [mineral] O: 825
Gold (Types of deposits) G: 252
Iron and steel (Sources of iron ore) I: 437;
(Mining and processing iron ore) I: 438
Mining (Mining terms) M: 577
Rock R: 371
- Ore-bulk-oil carrier** [ship]
Ship (Tankers) S: 420; (Dry bulk carriers)
- S: 420-421; *picture on* S: 422
- Ore carrier** [ship]
Great Lakes (Commerce) G: 345
- Ore Mountains** [Czech Republic]
Czech Republic (Land and climate) Ci: 1211
with map
- Ore-oil carrier**
Ship (Dry bulk carriers) S: 420-421; *picture on* S: 422
Tanker (Kinds of tankers) T: 28
- Ore pass** [mining]
Mining (Underground mining methods) M: 576; (Mining terms) M: 577
- Oread** [mythology]
Nymph N: 633
- Oregano** [seasoning] O: 825
Marjoram M: 213
- Oregon O: 826 with pictures and maps**
Euthanasia (Self-induced euthanasia) E: 421
Freedom of assembly (In the United States) F: 504
McLoughlin, John M: 343
Polk, James Knox ("Oregon fever") P: 643
Westward movement in America (The Oregon Trail) W: 249
See also the list of Related Articles in the Oregon article
- Oregon** [ship]
Panama Canal (The United States and the canal) P: 125
- Oregon, University of O: 849**
Oregon picture on O: 831
- Oregon Boundary Treaty** See *Oregon Treaty in this index*
- Oregon Caves National Monument** [Oregon]
National Park System (table: National monuments) N: 51
Oregon (Places to visit) O: 836
- Oregon Country** [U.S. history]
Oregon Territory O: 850
Ross, Alexander R: 482
United States, History of the (Expansion) U: 166; (Manifest destiny) U: 167 *with map*
Washington (Settlement) W: 66
- Oregon grape** [plant] O: 849
- Oregon holly grape** [plant]
Oregon grape O: 849
- Oregon junco** [bird]
Junco J: 191 *with picture*
- Oregon laurel** [tree] See *California laurel in this index*
- Oregon region**
Lewis and Clark expedition L: 222
Pioneer life in America (Crossing the Plains) P: 485-486
- Oregon Spectator** [newspaper]
Oregon (Communication) O: 844
- Oregon State University O: 850**
- Oregon Statesman** [newspaper]
Oregon (Communication) O: 844
- Oregon System** [political science]
Oregon (The early 1900's) O: 848
- Oregon Territory** [U.S. history] O: 850
Fifty-Four Forty or Fight F: 96
Gray, Robert G: 334
Oregon (Provisional and territorial governments) O: 848
Polk, James Knox ("Oregon fever") P: 643
Washington (Territorial days) W: 66
- Oregon Trail** [U.S. history] O: 850 *with map*
Meeker, Ezra M: 383
Nebraska (American exploration and settlement) N: 111
Oregon (Exploration and settlement) O: 846
Palmer, Joel P: 110
Parkman, Francis P: 171
Pioneer life in America (Routes to the West) P: 486 *with picture*
Westward movement in America (The Oregon Trail) W: 249
Wyoming W: 517; (The great trails) W: 533
- Oregon Trail, The** [book by Parkman]
Parkman, Francis P: 171
- Oregon Trail, The** [painting by Bierstadt]
Painting (Light and shade) P: 35
Pioneer life in America *picture on* P: 486
- Oregon Treaty** [1846]
Oregon Territory O: 850
Polk, James Knox ("Oregon fever") P: 643
- Oregon white oak**
Oak (White oaks) O: 635
- Oregonian, The** [newspaper]
Oregon (Communication) O: 844
- O'Reilly, Leonora** [American labor leader]
O: 851
- Orellana, Francisco de** [Spanish explorer]
O: 851
Amazon River (History) A: 404
Exploration *map on* E: 443; (Spain's conquests in the New World) E: 445
- Orenda** [religion]
Indian, American (Beliefs) I: 147
- Oresme, Nicole** [French mathematician]
Physics (The Renaissance) P: 438-439
- Oresteia** [plays by Aeschylus]
Aeschylus A: 90
Drama (Tragedy) D: 326
- Orestes** [legendary figure]
Electra E: 164
Iphigenia I: 397
- Orestes** [Roman political leader]
Hypatia H: 475
- Öresund Link** [bridge/tunnel, Sweden-Denmark]
Malmö M: 111
Sweden (Transportation) So: 1032
- Orfeo** [opera by Gluck]
Gluck, Christoph Willibald G: 235
- Orfeo** [opera by Monteverdi]
Monteverdi, Claudio M: 764a
Opera (Early baroque opera) O: 797
- Orff, Carl** [German composer] O: 851
- Organ** [anatomy]
Cell C: 326
Evolution (Vestigial organs) E: 431
Frog *picture on* F: 537
Human body (Organs and organ systems) H: 418; *diagrams on* H: 422
Life (Tissues, organs, and organ systems) L: 277 *with diagram*
Organ donation O: 852
Reproduction, Human (Origin of tissues and organs) R: 247; (Development of organs and organ systems) R: 248
Stem cell So: 889
Transplant T: 379
Xenotransplant X: 544
- Organ** [musical instrument] O: 851 *with diagram*
Harmonium H: 62
- Organ donation** [medicine] O: 852
Transplant (Sources of donor organs) T: 380
- Organ of Corti** [anatomy]
Ear (The inner ear) E: 8-9 *with diagram; diagram on* E: 10
Deafness (Types of hearing loss) D: 57;
(Environmental factors) D: 57
- Organ-pipe cactus**
Cactus (Kinds of cactuses) C: 10 *with picture*
- Organ Pipe Cactus National Monument** [Arizona]
Arizona *picture on* A: 670
National Park System (table: National monuments) N: 51
- Organ Procurement Organization**
Transplant (Sources of donor organs) T: 380
- Organ system** [biology]
Human body (Organs and organ systems) H: 418; *diagrams on* H: 422
Life (Tissues, organs, and organ systems) L: 277 *with diagram*
- Organ transplant** See *Transplant in this index*
- Organelle** [biology]
Cell (The cytoplasm) C: 329
Life (Cells) L: 276
- Organic Act** [1884]
Alaska (American purchase) A: 301
- Organic Act** [1900]
Puerto Rico (United States rule) P: 883
- Organic Act** [1912]
Alaska (The early 1900's) A: 301
- Organic Act** [1917]
Puerto Rico (United States rule) P: 883
- Organic chemistry O: 853**
Carbon (Carbon compounds) C: 204
Chemistry (Development of organic chemistry) C: 404
Hydrocarbon H: 465
Wöhler, Friedrich W: 374
- Organic compound** [chemistry]
Compound Ci: 906
Organic chemistry O: 853
- Organic design**
Furniture (Organic design) F: 583 *with picture*
- Organic disorder**

- Abnormal psychology (Theories of abnormal psychology) A: 12
- Organic evolution** See *Evolution in this index*
- Organic farming**
Farm and farming (Special crop-growing methods) F: 37
- Organic fertilizer**
Fertilizer (Organic fertilizers) F: 79
Gardening (Planning the garden) G: 31-34
- Organic food**
Health food H: 129
- Organic garden**
Gardening (Planning the garden) G: 31-34
- Organic hypoglycemia** [disorder]
Hypoglycemia H: 481
- Organic psychosis**
Psychosis P: 851
- Organic sediment** [geology]
Rock (Organic sediments) R: 372
- Organic soil**
Soil (Plant and animal matter) So: 573
- Organic solidarity** [sociology]
Durkheim, Émile D: 389
- Organic Statutes** [1834]
Romania (Russian control) R: 423-424
- Organic waste**
Sewage S: 329
- Organism** [biology]
Clone C: 684
Life (The structure of living things) L: 276
- Organization**
Parliamentary procedure (Forming an organization) P: 175
- Organization for Economic Cooperation and Development** O: 853
Foreign aid (Other countries' aid programs) F: 384
International trade (Government trade policies) I: 348-349
Marshall Plan M: 231
- Organization for European Economic Cooperation**
Marshall Plan M: 231
- Organization for Rehabilitation through Training**
Women's American ORT W: 382
- Organization for Security and Cooperation in Europe** O: 853
Helsinki Accords H: 180
- Organization of African Unity** [alliance] O: 853
Africa (Africa today) A: 135
African Union A: 136t
Chad (History) C: 367-368
- Organization of Afro-American Unity**
Malcolm X M: 103
- Organization of American States** [alliance] O: 854
Flag picture on F: 216
Latin America (The movement to establish unity) L: 109
Pan-American conferences (Stronger ties) P: 113
- Organization of the Petroleum Exporting Countries** O: 854
Cartel C: 251
Hussein, Saddam H: 457
Iraq (The Persian Gulf War) I: 414
Kuwait (Economy) K: 395-396
Middle East (Mining) M: 532
Persian Gulf War (Background to the war) P: 300b
Petroleum (In other countries) P: 346; (Recent developments) P: 348-349
Saudi Arabia (The oil industry) S: 159
- Organizational psychology**
Industrial psychology I: 245
- Organizational unit** [sociology]
Human relations (Programs) H: 428
- Organized crime**
Crime (Organized crime) C: 1136
Italy (Social problems) I: 518
Racketeering R: 63
- Organized Crime Control Act** [1970]
Racketeering R: 63
- Organized labor** See *Labor movement; Labor union in this index*
- Organized Trades and Labor Unions of the United States and Canada, Federation of**
American Federation of Labor and Congress of Industrial Organizations (History) A: 410
- Organizer** [labor]
- Labor movement (Organizing workers) L: 4
- Organochlorine** [insecticide]
Insecticide (Organic insecticides) I: 302
- Organometallic catalyst** [chemistry]
Rubber (General-purpose synthetic rubbers) R: 504
- Organon** [book by Aristotle]
Aristotle (Logic) A: 663
- Organophosphate insecticide**
Insecticide (Organic insecticides) I: 302
- Organum**
Classical music (The Middle Ages) C: 645
- Orhan** [Ottoman sultan]
Osman I O: 865
- Oriana** [literary figure]
Amadis of Gaul A: 399
- Oribe, Manuel** [Uruguayan political leader]
Uruguay (Civil war) U: 227
- Oriel window**
Window W: 334
- Orient** [region, Asia] O: 855
- Orient Express**
Railroad (Worldwide development) R: 116
- Oriental alabaster** [mineral]
Alabaster A: 280
- Oriental amethyst** [gem]
Amethyst A: 431
- Oriental dancing**
Dance (Asian theatrical dance) D: 30 *with pictures*
- Oriental exclusion acts** (U.S. history) O: 855
Asian Americans (History of Asian immigration) A: 812d
Harrison, Benjamin (Foreign affairs) H: 73
Riot (During the 1800's) R: 348-349
- Oriental fruit fly**
Fruit fly F: 549
- Oriental furniture**
Furniture (Oriental furniture) F: 571 *with pictures*
- Oriental Institute**
Breasted, James Henry B: 591
Chicago, University of (Research program) C: 438
- Oriental Jews**
Israel (Jews) I: 480
- Oriental longhair cat**
Cat (Long-haired breeds) C: 292
- Oriental Mask** [collage by Janco]
Dadaism picture on D: 2
- Oriental pear**
Pear P: 215
- Oriental pearl**
Pearl (Color) P: 217
- Oriental philosophy**
Philosophy (Oriental philosophy) P: 385-386
- Oriental poppy**
Poppy P: 668
- Oriental rug**
Asia picture on A: 780
Rugs and carpets (Oriental rugs) R: 516 *with pictures*
Turkey picture on T: 506
- Oriental shorthair cat**
Cat (Short-haired breeds) C: 290-291
- Orientele Basin** [lunar feature]
Moon (Basins) M: 789
- Orientalism** [psychology]
Comparative psychology C: 902a
- Orientalism-related disability**
Learning disabilities (Types) L: 165
- Oriente** [region, Ecuador]
Ecuador (The Eastern Lowland) E: 70
- Oriente tree snail**
Shell picture on S: 386
- Orienteering** [sport]
Hiking H: 230
- Orifica meter**
Water meter W: 135
- Origami** [Japanese art] O: 855 *with picture*
Paperwork (Paper handicrafts) P: 138
- Origin of Life on Earth, The** [book by Oparin]
Oparin, Alexander Ivanovich O: 789
- Origin of Species** [book by Darwin]
Darwin, Charles Robert D: 40
English literature (Victorian literature) E: 320
Evolution (Darwin's theory) E: 432
Races, Human (Evolutionary theory) R: 53-54
Science (Scientific advances of the 1800's) S: 200
Zoology (History) Z: 610-611
- Original Celtics**
Basketball (The history of professional basketball) B: 153
- Original dance**
Ice skating (Ice dancing) I: 13
- Original Dixieland Jass Band**
Jazz (Early jazz) J: 70
- Original jurisdiction** [law]
Court (Types of courts) C: 1101; (Federal courts) C: 1102
Supreme Court of the United States (Original and appellate jurisdiction) So: 998
- Original Poems for Infant Minds** [book by Taylor]
Literature for children (Masterpieces of poetry) L: 362
- Original sin**
Roman Catholic Church (Sin, the Incarnation and salvation) R: 404
- Originating post office**
Postal services (Sorting) P: 703
- Orinoco Basin** [Colombia-Venezuela]
Llanos L: 402
South America (Rivers) So: 628
- Orinoco River** [Colombia-Venezuela] O: 855
Venezuela (The Llanos) V: 302
- Oriole** [bird] O: 856 *with picture*
Bird (Birds of forests and woodlands) B: 334 *with picture*
- Orioles, Baltimore** [baseball team] See *Baltimore Orioles in this index*
- Orion** [constellation] O: 856
Betelgeuse B: 274
Nebula picture on N: 116
Star (Names of stars) So: 842 *with picture*
- Orion** [Greek mythology] O: 856
- Orion and Other Poems** [poems by Roberts]
Roberts, Charles George Douglas R: 365
- Oriskany, Battle of** [1777]
Revolutionary War in America (Victory at Saratoga) R: 282
Saint Leger, Barry S: 45
- Oriстано** [province, Italy]
Sardinia S: 124
- Orizaba** [city, Mexico]
Orizaba, Pico de O: 856
- Orizaba, Pico de** [mountain, Mexico] O: 856
Mexico (The Plateau of Mexico) M: 460
Mountain (table) M: 894
- Orkney and Shetland, Duke of** [Scottish nobleman]
Bothwell, Earl of B: 510
- Orkney Islands** [Scotland] O: 856
- Orlando** [Florida] O: 856
- Orlando** [book by Woolf]
Woolf, Virginia W: 401
- Orlando** [opera by Handel]
Handel, George Frideric (His work) H: 42-43
- Orlando, Vittorio Emanuele** [Italian political leader] O: 857
Versailles, Treaty of V: 340
Wilson, Woodrow picture on W: 326
World War I (The Paris Peace Conference) W: 465
- Orlando Furioso** [poem by Ariosto]
Ariosto, Ludovico A: 662
Italian literature (Humanism and the Renaissance) I: 494
- Orlando innamorato** [poem by Boiardo]
Italian literature (Humanism and the Renaissance) I: 494
- Orlando International Airport**
Airport (table) A: 245
- Orlando Magic**
Basketball (table) B: 150
- Orléans** [city, France] O: 857
- Orléans, Battle of** [1429]
England (The Hundred Years' War) E: 306
Joan of Arc, Saint (Joan's military career) J: 128
- Orléans, Charles, Duke of** [French nobleman]
French literature (Lyric poetry) F: 518
- Orléans, Île d'** [island, Quebec]
Quebec, Battle of (Bombardment of Quebec) Q: 37
- Orleans, Isle of** [former region]
Louisiana (Spanish rule) L: 498
- Orléans, Maid of** See *Joan of Arc, Saint in this index*
- Orloff, Prince** [Russian nobleman]
Diamond (Famous diamonds) D: 182

- Orloff diamond**
Diamond (Famous diamonds) D: 182; *picture on D*: 181
- Orly Airport**
Paris (Economy) P: 165
- Orman, James B.** [American political leader]
Colorado (table) Ci: 844
- Ormandy, Eugene** [American conductor] O: 857
- Ormer** See *Abalone in this index*
- Ormond** [book by Brown]
Brown, Charles Brockden B: 642
- Ormond-Daytona Beach**
Florida (Places to visit) F: 252
- Ormsbee, Ebenezer J.** [American political leader]
Vermont (table) V: 333
- Ornament**
See Art and the arts; Clothing, Gem; Jewelry *in this index*
- Ornamental crop**
Crop Ci: 1153
- Ornamental garden**
Gardening (Ornamental gardens) G: 31 *with picture*
- Ornamental horticulture**
Horticulture H: 370
- Orne, Emily** [American scientist]
Hypnotism (Scientific studies) H: 479-480
- Orne, Martin** [American scientist]
Hypnotism (Scientific studies) H: 479-480
- Ornithischian** [extinct animal]
Dinosaur (Kinds of dinosaurs) D: 206b *with pictures*
- Ornitholestes** [dinosaur]
Dinosaur *picture on D*: 207
- Ornithological Biography** [book by Audubon and MacGillivray]
Audubon, John James (His works) A: 884
- Ornithologists' Union, American** See American Ornithologists' Union *in this index*
- Ornithology** [zoology] O: 857
Biology (What biologists study) B: 316-317
Bird (Bird study and protection) B: 367
Radar (In scientific research) R: 67-68
- Ornithomimus** [dinosaur] O: 858
Dinosaur (True dinosaurs) D: 206b-211; *pictures on D*: 206a, D: 207
- Ornithopod** [dinosaur]
Dinosaur (True dinosaurs) D: 206b-206c
- Ornithopter** [aircraft] O: 858
Airplane (Early experiments and ideas) A: 229-230 *with picture*
- Ornithosis** See Psittacosis *in this index*
- Orogeny** [geology]
Earth (Mountain building) E: 24
- Oromifa** [language]
Ethiopia (People) E: 368
- Oromo** [people]
Ethiopia (People) E: 368
- Orontes River**
Lebanon (Land and climate) L: 172
Syria (The valleys and plains) So: 1073 *with picture*
- Oroonoko** [book by Behn]
Behn, Aphra B: 221
- O'Rourke, Jim** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Oroville Dam** [Feather River, California] O: 858
California (Natural resources) C: 53
- Orozco, José Clemente** [Mexican painter]
O: 858 *with picture*
Fresco F: 529
Painting (Modern Mexican painting) P: 83
- Orphan drug**
Drug (U.S. drug laws) D: 357-358
- Orphanage** See Children's home *in this index*
- Orphans** [play]
Theater *picture on T*: 245
- Orphans of the Storm** [film]
Gish, Dorothy G: 202 *with picture*
- Orpheus** [Greek mythology] O: 858
Cerberus C: 361
Eurydice E: 421
Mythology (Greek divinities) M: 979
- Orpheus** [play by Cocteau]
Cocteau, Jean Ci: 747
- Orpheus** [sculpture by Rodin]
Sculpture (Form and treatment) S: 230-231, (Sculpture from 1600 to 1900) S: 253-255
- Orpheus and Eurydice** [opera by Gluck]
Gluck, Christoph Willibald G: 235
- Orpheus in the Underworld** [opera by Offenbach]
Offenbach, Jacques O: 676
- Orpington**
Chicken (table) C: 443
- Orr, Bobby** [Canadian hockey player] O: 858 *with portrait*
- Orr, Gustavus J.** [American educator]
Georgia (Schools) G: 116
- Orr, James L.** [American political leader]
South Carolina (table) So: 658
- Orr, Kay A.** [American political leader]
Nebraska (table) N: 110
- Orr, Robert D.** [American political leader]
Indiana (table) I: 214
- Orrefors glass**
Glass (Types of art glass) G: 221
- Orrey**
Planetarium (Early planetariums) P: 514-514a *with picture*
- Orrisroot** [botany] O: 859
Iris I: 430
- Ororin turgenensis** [hominid]
Prehistoric people P: 744
- Orsay Museum** [Paris]
France (Museums and libraries) F: 461 *with picture*
- Orsino** [literary figure]
Shakespeare, William (*Twelfth Night*) S: 360
- ORT** [organization]
Women's American ORT W: 382
- Ortega, Daniel** [Nicaraguan political leader]
O: 859 *with portrait*
Nicaragua (Recent developments) N: 400-401
- Ortega, José Francisco de** [Spanish explorer]
Santa Barbara S: 113
- Ortega, Katherine** [American government official]
Hispanic Americans (Political developments) H: 255-256
- Ortega y Gasset, José** [Spanish philosopher]
O: 859
Spanish literature (The Generation of 1898) S: 762
- Orteig, Raymond** [American businessman]
Lindbergh, Charles Augustus (His historic flight) L: 330
- Ortelius, Abraham** [Flemish cartographer]
Atlas (History) A: 868
Map (Advances in European cartography) M: 183-184
- Orthochromatic film**
Photography (Color sensitivity) P: 418
- Orthoclase** [mineral]
Feldspar F: 68
- Orthodontics** [dentistry] O: 859
Dentistry (Orthodontics) D: 143-144 *with picture*
Teeth (Malocclusion) T: 84-85
- Orthodox Churches, Eastern** See Eastern Orthodox Churches *in this index*
- Orthodox Judaism** [religion]
Jerusalem (The people of Jerusalem) J: 96-98 *with picture*
Judaism (Orthodox Judaism) J: 180; (Worship) J: 181
Religion (Judaism) R: 219-220
- Orthodox method**
Tea (Processing tea) T: 62
- Orthodox Muslims** See Sunnites *in this index*
- Orthogneiss** [rock]
Gneiss G: 238
- Orthographic projection**
Mechanical drawing (Information in the drawing) M: 353 *with picture*
- Orthography** [language]
Spelling So: 775
- Orthopaedics** See Orthopedics *in this index*
- Orthopedics** [medicine] O: 860
Medicine (table) M: 369
Surgery (Other specialty fields) So: 1007
- Orthophosphoric acid** [chemical]
Phosphoric acid P: 403
- Orthoptera** [entomology]
Insect (table) I: 299; *pictures on I*: 280
- Orthopyroxene** [mineral]
Pyroxene P: 920
- Orthorhombic sulfur**
Sulfur (Forms) So: 966
- Orthorhombic system**
Crystal (Classifying crystals) Ci: 1166-1167 *with picture*
- Pyroxene P: 920
- Orwell, George** [British author] O: 860 *with portrait*
English literature (Literature after World War II) E: 322-323
Novel (After World War II) N: 574
- Orwell Corner Historic Village** [Orwell]
Prince Edward Island (Places to visit) P: 788
- Oryx** [animal]
Antelope (Kinds of antelope) A: 542-543 *with picture*
Addax A: 46
Gemsbok G: 80
- Os** [symbol]
Osmium O: 865
- Os ...**
Titles beginning Os appear under their key words, as in Lusitadas, Os
- Osage Indians** [American Indians] O: 860
Chouteau, Jean Pierre C: 522
- Osage orange** [tree] O: 860 *with picture*
- Osage Plains**
Missouri (Land regions) M: 662; (Natural resources) M: 665
- Osage River** [Missouri]
Lake of the Ozarks L: 42 *with map*
- Osaka** [city, Japan] O: 861 *with picture*
Japan *pictures on J*: 35, J: 38
- Osaka Port Bridge** [Japan]
Bridge (table: Cantilever) B: 603
- Osborn, Chase S.** [American political leader]
Michigan (table) M: 507
- Osborn, Emily** [British artist]
Painting (Women artists) P: 73 *with picture*
- Osborn, Henry Fairfield** [American paleontologist] O: 861
- Osborn, Sidney P.** [American political leader]
Arizona (table) A: 687
- Osborn, Thomas A.** [American political leader]
Kansas (table) K: 234
- Osborne, Henry** [British government official]
Newfoundland and Labrador (War with France) N: 375
- Osborne, John** [British dramatist] O: 861
Drama (Later British drama) D: 340
English literature (Literature after World War II) E: 322-323 *with picture*
- Osborne, John E.** [American political leader]
Wyoming (table) W: 532
- Osborne, Thomas Mott** [American social reformer] O: 862
- Osborne Collection** [books]
Toronto (Museums and libraries) T: 339
- Osbourne, Fanny** [wife of]
Stevenson, Robert Louis (Marriage) So: 897
- Osbourne, Lloyd** [stepson of]
Stevenson, Robert Louis (Novels) So: 898 *with picture*
- Oscan** [language] O: 862
- Oscar** [award] See Academy Awards *in this index*
- Oscar** [satellite]
Radio, Amateur (Uses of amateur radio) R: 95-96; (History) R: 96-97
- Oscar Peterson Trio**
Peterson, Oscar P: 325
- OSCE** [organization] See Organization for Security and Cooperation in Europe *in this index*
- Osceola** [American Indian chief] O: 862 *with portrait*
Fort Moultrie F: 415
Indian wars (In the South) I: 193-194
Seminoles Indians S: 293
- Oschin telescope**
Palomar Observatory P: 112
- Oscillation** [electronics]
Electronics (Transistors) E: 212
- Oscillation, Period of** [physics]
Pendulum P: 236 *with diagram*
- Oscillator**
Electronics (Transistors) E: 212
Radar (The oscillator) R: 70 *with diagram*
Radio (The tuner) R: 88-89
- Oscillograph** [instrument]
Oscilloscope O: 862
- Oscilloscope** [instrument] O: 862 *with picture*
Electroscope E: 218
- Osculum**
Sponge (Body openings) So: 799 *with diagram*
- Osei Tutu** [Ashanti leader]
Ashanti A: 767

- Osetra sturgeon** [fish]
Caviar C: 322
- Osgood, Charles** [American painter]
Hawthorne, Nathaniel *picture on* H: 114
- OSHA** [U.S.]
Occupational Safety and Health Administration
O: 647
- O'Shaughnessy, Margaret Mary** [American government official]
Heckler, Margaret Mary H: 164
- Oshawa** [Ontario] O: 862
- O'Shea, William** [Irish political leader]
Parnell, Charles Stewart P: 177
- Osheroff, Douglas Dean** [American physicist]
Nobel Prizes (Physics: 1996) N: 442
- Oshimizu Tunnel** [Japan]
Tunnel T: 491
- Oshiya** [transportation]
Tokyo (Transportation) T: 318
- Osier** [tree] O: 863
- Osiris** [Egyptian god] O: 863 *with picture*
Egypt, Ancient (Religion) E: 137; *picture on* E: 140
Horus H: 370
Isis I: 462
Mythology (The Great Ennead) M: 976; (The Osiris myth) M: 976 *with pictures*
Serapis S: 312
Seth S: 323
- Osler, Sir William** [Canadian doctor] O: 863 *with portrait*
- Oslo** [Norway] O: 864 *with pictures*
Norway *picture on* N: 537
- Oslo, University of**
Norway (Education) N: 541
Oslo O: 864
- Oslo accords** [peace treaty]
Norway (Recent developments) N: 547
- Osman I** [Ottoman sultan] O: 865
Muslims (The Ottoman Empire) M: 964d
Ottoman Empire O: 877
- Osmium** [element] O: 865
- Osmosis** [biology] O: 865 *with diagrams*
Fish (How fish adjust to change) F: 168
Plant (Water movement) P: 537
Water (Reverse osmosis) W: 128
- Osmotic pressure**
Osmosis O: 865
- Osprey** [bird] O: 866 *with picture*
Bird (In the air) B: 352-353
- OSS** *See* Strategic Services, Office of *in this index*
- Ossa, Mount** [mountain, Tasmania] *See* Mount Ossa *in this index*
- Osservatore Romano, L'** [newspaper]
Rome (Economy) R: 430
Vatican City (Communications) V: 288
- Ossietians** [people]
Georgia (History) G: 111
- Ossien** [legendary figure]
Finn MacCool F: 119
- Ossicle** [anatomy]
Deafness (Types of hearing loss) D: 57
Ear (The middle ear) E: 7-8 *with diagram*; (Diseases) E: 12
- Ossietzky, Carl von** [German journalist]
Nobel Prizes (Peace: 1935) N: 447
- Ossining Correctional Facility** [New York]
Sing Sing S: 469
- Ossoli, Marchioness** *See* Fuller, Margaret *in this index*
- Östberg, Ragnar** [Swedish architect]
Sweden (Fine arts) So: 1027
- Osteichthyes** [zoology]
Fish (table) F: 172 *with pictures*
- Osteitis fibrosa** [disease]
Bone (Bone disorders) B: 457
- Ostend** [Belgium] O: 866
- Ostend Manifesto** [U.S. history] O: 866
Buchanan, James (Minister to Great Britain) B: 660
- Ostenso, Martha** [Canadian author]
Canadian literature (Literature between the world wars) C: 159-160
- Osteoarthritis** [disorder]
Arthritis (Osteoarthritis) A: 751 *with diagram*
Disease (Diseases associated with aging) D: 230
- Osteoblast** [physiology]
Bone (Composition of bone) B: 456-457
- Osteoclast** [physiology]
Bone (Composition of bone) B: 456-457
- Osteocyte** [physiology]
Bone (Composition of bone) B: 456-457
- Osteoderm** [zoology]
Reptile (Skin) R: 251
- Osteomalacia** [disease]
Bone (Bone disorders) B: 457
Rickets R: 335
- Osteomyelitis** [disease] O: 866
- Osteon** [physiology]
Haversian canals H: 87
- Osteopathic Association, American**
Osteopathic medicine (Careers in osteopathic medicine) O: 867
- Osteopathic manipulation**
Osteopathic medicine O: 867
- Osteopathic medicine** O: 866
Medicine (A career as a doctor) M: 370
- Osteopathy, Doctor of**
Medicine (A career as a doctor) M: 370
Osteopathic medicine (Careers in osteopathic medicine) O: 867
- Osteopetrosis** [disease]
Osteosclerosis O: 868
- Osteoporosis** [disease] O: 867 *with pictures*
Bone (Bone disorders) B: 457
Menopause M: 402
Tamoxifen T: 23
Nutrition (Other diseases) N: 631
- Osteosclerosis** [disease] O: 868
- Osterley Park House** [London]
Adam [family] A: 32
Architecture (Neoclassical architecture) A: 623-624
- Österreich** *See* Austria *in this index*
- Ostia**
Insect (Circulatory system) I: 288
Sponge (Body openings) So: 799 *with diagram*
- Ostracod** [animal]
Deep sea (Invertebrates) D: 82a-82b
- Ostracoderm** [extinct animal]
Fish (The first fish) F: 171
- Ostrava** [city, Czech Republic] O: 868
- Ostrich** [bird] O: 868 *with pictures*
Animal pictures on A: 476, A: 488
Bird (On land) B: 353 *with picture*; *picture on* B: 329
Cell (Sizes of cells) C: 328
Rhea R: 290
- Ostrogoths** [people]
Goths G: 279
Italy (The Middle Ages) I: 513
Theodoric T: 252
- Ostrovsky, Alexander N.** [Russian dramatist]
Russian literature (Early realism) R: 562
Drama (Russian drama and Chekhov) D: 338
- Ostwald, Wilhelm** [German chemist] O: 869
Chemistry (Development of physical chemistry) C: 404-405
- Ostwald process** [chemistry]
Nitric acid N: 425
- O'Sullivan, John L.** [American author]
Manifest destiny M: 141
- Osumi Islands** [islands, Pacific]
Ryukyu Islands R: 574
- Oswald, Lee Harvey** [American public figure] O: 869
Kennedy, John Fitzgerald (The death of Oswald) K: 267; *picture on* K: 268
Texas (The mid-1900's) T: 208
Warren Report W: 37
- Oswald, Richard** [British diplomat]
Revolutionary War in America (The Treaty of Paris) R: 285
- Oswego** [New York] O: 870
- Oswego Canal**
New York State Barge Canal System N: 345 *with map*
- Osławiec** [Poland] *See* Auschwitz *in this index*
- OTA**
Technology Assessment, Office of T: 78
- Ota Dokan** [Japanese war lord]
Tokyo (Early development) T: 318
- Otago Plateaus**
New Zealand (The South Island) N: 351-352
- Otchipwe Indians**
Chippewa Indians C: 514
- Otello** [opera by Verdi]
Boito, Arrigo B: 440
Opera (Giuseppe Verdi) O: 798
Verdi, Giuseppe V: 316
- Otero, Blas de** [Spanish poet]
- Spanish literature (Spanish literature today) So: 763
- Otfried von Weissenburg** [German religious leader]
German literature (Early German literature) G: 139
- Othello** [play by Shakespeare]
Shakespeare, William (*Othello*) S: 363; (Rhetoric) S: 367
- Other Paris, The** [book by Gallant]
Gallant, Mavis G: 13
- Other Voice, The** [book by Paz]
Paz, Octavio P: 205
- Other Worlds** [book by Cyrano de Bergerac]
Science fiction (Forerunners of science fiction) S: 205
- Otherwise Engaged** [play by Gray]
Gray, Simon G: 334
- Othman** [Ottoman sultan] *See* Osman I *in this index*
- Otho** [Roman emperor]
Rome, Ancient (table) R: 447
- Otis, Elisha Graves** [American inventor] O: 870
Elevator (History) E: 235 *with picture*
- Otis, James** [American patriot] O: 870 *with portrait*
Writ of assistance W: 510
- Otis Elevator Company**
New York (Interesting facts) N: 291
- Otitis media** [disorder]
Deafness (Diseases) D: 57
Ear (Diseases) E: 12
- Otolaryngology**
Medicine (table) M: 369
Surgery (Other specialty fields) So: 1007
- Otolith** [zoology]
Ear (The response to gravity) E: 11
Fish (Other senses) F: 164
- Otosclerosis** [disease]
Deafness (Diseases) D: 57
Ear (Diseases) E: 12
- Otoscope** [instrument] O: 870 *with picture*
Medicine *picture on* M: 364
- Otranto, Strait of**
Adriatic Sea A: 68 *with map*
- Otrepiev, Gregory** [czar of Russia]
Russia (The Time of Troubles) R: 549
- Ott, Mel** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Otter** [Norwegian explorer]
White Sea W: 292
- Ottawa** [city, Ontario] O: 871 *with pictures and map*
Ontario O: 764; (table: Average monthly weather) O: 778; *picture on* O: 773
- Ottawa, University of** O: 875
Ottawa (Schools) O: 874
- Ottawa Indians**
Potawatomi Indians P: 714
- Ottawa National Forest**
Michigan (Places to visit) M: 498
- Ottawa River** [river, Quebec] O: 875
Ontario (Rivers, waterfalls, and lakes) O: 778
Quebec (Rivers, waterfalls, and lakes) Q: 24
Saint Lawrence River (The course of the St. Lawrence) S: 41
- Ottawa Senators**
Hockey (table: National Hockey League) H: 281
- Otter** [animal] O: 875 *with pictures*
Animal *picture on* A: 478
Fur (table) F: 561
Sea otter S: 263 *with picture*
- Otter** [ship]
California (American settlement) C: 60
- Otter board**
Fishing industry (Nets) F: 183 *with diagram*
- Otterhound** [dog] O: 876 *with picture*
- Otter Island** [Bering Sea]
Pribilof Islands P: 774
- Otter Tail River** [Minnesota]
Red River of the North R: 188
- Otter trawl**
Fishing industry (Nets) F: 183 *with diagram*
- Otterbein United Methodist Church**
Baltimore (The people) B: 67-68
- Ottinger, Albert** [American political leader]
Roosevelt, Franklin Delano (Return to politics) R: 455-456
- Otto I** [king of Greece] O: 876
George I G: 107
Greece (Otto I) G: 362

- Otto I, the Great** [Holy Roman Emperor] O: 877
Austria (Early years) A: 937
Germany (The breakup of Charlemagne's empire) G: 162 *with picture*
Holy Roman Empire H: 298
Italy (The Middle Ages) I: 513
Middle Ages (Feudal government) M: 524-525
- Otto II** [Holy Roman Emperor] O: 877
- Otto, Nikolaus August** [German engineer]
Gasoline engine (Development of the gasoline engine) G: 66
- Otto, Rudolf** [German theologian]
Religion (The origin of religion) R: 218-219
- Otto the Child** [duke of Brunswick]
Brunswick B: 652
- Ottokar** [king of Bohemia]
Austria (The Habsburgs) A: 937
- Ottoman Empire** O: 877 *with maps*
Albania (Ottoman rule) A: 307
Algeria (Ottoman rule) A: 364
Arabs (Ottoman and European rule) A: 588
Armenia (History) A: 718b
Army (Armies in the Middle Ages) A: 727
Balkans (Early history) B: 42
Bosnia-Herzegovina (History) B: 492
Bulgaria (Ottoman rule) B: 692
Columbus, Christopher (The world of Columbus) Ci: 857
Croatia (History) Ci: 1148a-1148b
Cyprus (History) Ci: 1207
Edirne E: 77
Egypt (Ottoman and French control) E: 130;
(Muhammad Ali and modernization) E: 131
Europe (Muslim influence) E: 411 *with map*
Greece (Ottoman rule) G: 361
Hungary (Ottoman Empire) H: 445
Iraq (Ottoman control) I: 413
Istanbul (History) I: 491
Janissaries J: 29
Jerusalem (Muslim rule) J: 101
Magyars M: 64
Mamelukes M: 115
Middle East (Islamic empires) M: 533
Moldova (History) M: 690a
Muslims (The spread of Islam) M: 964d *with picture*
Navy (The beginning of modern navies) N: 79
Nicholas I N: 402
Osman I O: 865
Palestine (World War I and the Balfour Declaration) P: 105
Peter I, the Great (Early life) P: 323
Romania (Ottoman rule) R: 423
Russia (Nicholas I) R: 551
Russo-Turkish wars R: 566
Safavid dynasty S: 8
Serbia (History) S: 314
Süleyman I So: 965
Syria (The Mamelukes and Ottomans) So: 1075
Turkey (The rise of the Ottoman Empire) T: 510 *with map*; (The Ottoman decline) T: 510 *with map*
World, History of the (The Islamic world) W: 434-435; (The Islamic empires) W: 441
World War I (The rise of nationalism) W: 452-453; (Fighting elsewhere) W: 457; (The Dardanelles) W: 459; (The fighting ends) W: 463; (Political consequences) W: 464-465
- Ottoman Turkish** [language]
Turkey (Languages) T: 505
- Ottomans** [people]
Egypt (Ottoman and French control) E: 130
Turkey T: 502
- Otway, Thomas** [English dramatist]
Drama (England) D: 334-335
- Ouabain** [medication]
Poison P: 601
- Ouachita, Lake** [Arkansas]
Lake Ouachita L: 44 *with map*
- Ouachita Mountains**
Arkansas (Land regions) A: 706
Oklahoma (Land regions) O: 724 *with map*
- Ouachita River** [Arkansas-Louisiana] O: 878
Arkansas (Land regions) A: 706
- Ouaddai**
Chad (History) C: 367
- Ouagadougou** [city, Burkina Faso] O: 878
Burkina Faso B: 705
- Oualata** [city, Mauritania]
Walata W: 7
- Ouattara, Alassane** [Côte d'Ivoire political leader]
Côte d'Ivoire (History) Ci: 1085
- Oubangui River** See Ubangi River *in this index*
- Oud** [musical instrument]
Music (Arab music) M: 956
- Ouémé River**
Benin (Land and climate) B: 249 *with map*
- Ouija board** O: 879
- Ouimet, Gédéon** [Canadian political leader]
Quebec (table) Q: 29
- Ould Daddah, Mokhtar** [Mauritanian political leader]
Mauritania (History) M: 315
- Oulujoki** [river, Finland]
Finland (Rivers) F: 114
- Ounasjoki** [river, Finland]
Finland (Rivers) F: 114
- Ounce** [unit of measure] O: 879
Apothecaries' weight A: 567
- Ounce** [wild cat] See Snow leopard *in this index*
- Our American Cousin** [play]
Lincoln, Abraham (Assassination) L: 326
- Our Cabaña** [home]
Girl Scouts (In other countries) G: 199-200
- Our Chalet** [home]
Girl Scouts (In other countries) G: 199-200
- "Our country, right or wrong"** [quotation]
Decatur, Stephen D: 67
- Our Father** [prayer] See Lord's Prayer *in this index*
- Our Home is Russia** [political party]
Russia (Politics) R: 531
- Our Lady, Church of** [Nuremberg]
Clock picture on Ci: 682j
- Our Lady of Fátima** [religion] See Fátima, Our Lady of *in this index*
- Our Lady of Guadalupe** [religion]
Guadalupe Day G: 408
Juan Diego, Saint J: 177
- Our Lady of Luján, Cathedral of** [Argentina]
Argentina picture on A: 651
- Our Lady of Mount Carmel, Order of** [religious group]
Carmelites C: 240
- Our Lady of Peace** [church]
Côte d'Ivoire picture on Ci: 1084b
Yamoussoukro Y: 550
- Our Land and Land Policy** [book by George]
George, Henry G: 108
- Our Mr. Wrenn** [book by Lewis]
Lewis, Sinclair L: 221
- Our Mutual Friend** [book by Dickens]
Dickens, Charles (The second phase) D: 188-189
- Our Nig** [book by Wilson]
African American literature (The 1800's) A: 136a
- Our Penal Machinery and Its Victims** [book by Altgeld]
Altgeld, John Peter A: 389
- Our Town** [play by Wilder]
American literature (Drama) A: 422-423
Wilder, Thornton Niven W: 303
- Ourray** [American Indian chief]
Colorado (Territorial days) Ci: 845
Indian wars (The Southern Plains) I: 194
Ute Indians U: 251
- Ouro Preto** [Brazil]
Brazil B: 575
- Ousmane, Mahamane** [Niger political leader]
Niger (History) N: 409
- Out** [sports]
Baseball (Outs by batters) B: 128; (Base runners—advancing and outs) B: 129
Cricket (Outs) Ci: 1132
- Out-apiary**
Bee (As an industry) B: 206-207
- Out for Christmas Trees** [painting by Moses]
Moses, Grandma picture on M: 830
- Out of Africa** [book by Dinesen]
Dinesen, Isak D: 205
- Out of Africa** [film]
Motion picture (Best picture: 1985) M: 861
- "Out of the Cradle Endlessly Rocking"** [poem by Whitman]
Whitman, Walt (His work) W: 294
- Out of the Dust** [book by Hesse]
Literature for children (Fiction) L: 358-359
- Out of the Silent Planet** [book by Lewis]
Lewis, C. S. L: 220
- Outback** [region, Australia] O: 879 *with map*
Australia (Country life) A: 903; *picture on* A: 894
- Outboard cruiser** [boat]
Boating picture on B: 430
- Outboard motor**
Boating (Motorboats) B: 428; (Boating today) B: 432
Motorboat racing (Hull designs) M: 876
- Outboard runabout** [boat]
Boating picture on B: 430
- Outbreeding** [animal husbandry]
Livestock (Outbreeding) L: 398
- Outcast** [sociology]
City (The people) Ci: 578-580
- Outcast of the Islands, An** [book by Conrad]
Conrad, Joseph Ci: 973
- "Outcasts of Poker Flat, The"** [story by Harte]
Harte, Bret H: 78
- Outcalt, Richard Felton** [American cartoonist]
O: 879
Comics (Comic strips) Ci: 869 *with picture*
- Outcrop**
Coal (Strip mining) Ci: 721
Mining (Mining terms) M: 577
- Outcrossing** [animal husbandry]
Livestock (Outbreeding) L: 398
- Outdoor air pollution**
Environmental pollution (Air pollution) E: 331
- Outdoor relief**
Welfare (Early welfare laws) W: 191
- Outdoor sign**
Advertising (Outdoor signs) A: 75
- Outer bark** [botany]
Tree (Trunk and branches) T: 416-417 *with diagram*
- Outer core** [geology]
Earth diagram on E: 20; (Earth's interior) E: 23
- Outer ear**
Ear (The outer ear) E: 7 *with diagram*; *diagram on* E: 8
Deafness (Types of hearing loss) D: 57
- Outer Hebrides** [islands, Scotland]
Hebrides H: 163
- Outer Mongolia** [former name] See Mongolia *in this index*
- Outer space** See Space [astronomy] *in this index*
- Outer Space Treaty** [1967]
Arms control (History of arms control) A: 721-722
- Outerbridge, Mary Ewing** [American sports-woman]
Tennis (The spread of tennis) T: 165
- Outerbridge Crossing**
New York City (Transportation) N: 334
- Outfield**
Baseball (The outfield) B: 126 *with diagram*
- Outfielder**
Baseball (Player positions) B: 127
- Outfitting pier**
Ship (Launching and outfitting a ship) S: 425
- Outlaw** [criminal]
Bandit B: 76
- Outlaw** [music]
Country music (Modern country music) Ci: 1098c *with picture*
- Outlaw strike**
Labor movement (Handling labor disputes) L: 6-7
- Outline** O: 880
Composition (Organizing your thinking) Ci: 905
Public speaking (Outline) P: 866
A Guide to Writing Skills Research Guide: 11, 16
- Outline of History, The** [book by Wells]
Wells, H. G. W: 195
- Outlook, The**
Standard & Poor's indexes So: 833
- Outpatient clinic**
Hospital (Recent developments) H: 374
- Outpatient expense insurance**
Insurance (Basic types of health insurance) I: 312
- Output** [automation]
Automation (How automation works) A: 945
- Output** [economics]
Business (Productive resources) B: 724
- Output device** [electronics]
Computer (Output devices) Ci: 916
Electronics (How an electronic system works) E: 208

Output shaft

Transmission (The gears) T: 378 *with diagram*

Output voltage [electricity]

Transformer T: 371

Outram, John [British architect]

Architecture (Architecture today) A: 632-633

Outre-Mer [book by Longfellow]

Longfellow, Henry Wadsworth (Professor and family man) L: 449

Outrigger [boat] O: 880

Crane Ci: 1120

Pirogue P: 496

Outside linebacker [sports]

Football (The defensive team) F: 357 *with diagrams*

Outside Over There [book by Sendak]

Sendak, Maurice S: 296

Outsiders, The [book by Hinton]

Hinton, S. E. H: 238

Outward Bound [educational organization] O: 880**Ouzo** [drink]

Cyprus (People) Ci: 1206

Ova See Egg [reproduction] *in this index*

Oval cut

Gem (Types of gem cuts) *picture on* G: 79

Oval Office

President of the United States (The White House) P: 766 *with picture*

Oval track [racing]

Automobile racing A: 975 *with picture; diagram on* A: 976

Oval window [anatomy]

Ear (The middle ear) E: 7-8 *with diagrams; diagram on* E: 10

Ovalbumin [chemical]

Albumin A: 333

Ovale, P. [protozoan]

Malaria (Symptoms) M: 96

Ovambo [people]

Namibia (People) N: 8 *with picture*

Ovamboland [region]

Namibia (People) N: 8

Ovando, Nicolás de [Spanish colonial official]

Columbus, Christopher (Columbus in disgrace) Ci: 862-863; (Fourth voyage westward) Ci: 863

Ovarian cancer [disease] O: 880

Cancer (table) C: 170

Overhysterectomy [surgery]

Dog (Social and moral responsibilities) D: 279-280

Ovary [anatomy] O: 881

Chicken (Producing eggs) C: 443

Cancer (table) C: 170

Endometriosis E: 272

Gland (table) G: 208

Human body (The reproductive system)

H: 425; *diagram on* H: 422

Hysterectomy H: 482

Insect (Reproductive system) I: 289 *with diagram*

Menstruation (The menstrual cycle) M: 404 *with pictures*

Ovarian cancer O: 880

Reproduction, Human (The human reproductive system) R: 244-245 *with diagram*

Sexuality (Biological factors) S: 337

Taxol T: 56

Ovary [botany]

Flower (The pistils) F: 294; (Fertilization)

F: 296; (The parts of a flower) *picture on* F: 293

Fruit (How botanists classify fruits) F: 546

Plant (Flowers) P: 531 *with picture; (Seeds)*

P: 531-532; (In seed plants) P: 532-534 *with diagram*

Pollen (Fertilization) P: 646

Seed (Kinds of seeds) S: 281

Oven

Range *pictures on* R: 138

Bread (How yeast bread is made) B: 588-589 *with picture*

Cooking (Methods of cooking) Ci: 1028, (History) Ci: 1029

Indian, American (Food) I: 136d

Microwave oven M: 520

Pacific Islands (Food) P: 6

Ovenbird [bird] O: 881 *with picture*

Animal *picture on* A: 479

Warbler W: 35

Over [sports]

Cricket (The fielding side) Ci: 1134

Over Prairie Trails [book by Grovel]

Grove, Frederick Philip G: 404

"Over-Soul, The" [essay by Emerson]

Emerson, Ralph Waldo (His prose works) E: 259

Over-the-counter drug

Drug (Nonprescription drugs) D: 356

Drug abuse (Abuse of legal drugs) D: 361

Pure food and drug laws (Over-the-counter drugs) P: 908

Over-the-counter trading

Nasdaq N: 22

Stock exchange (Listing stocks) So: 903

"Over the Rainbow" [song]

Garland, Judy G: 43

Over-the-Rhine [district]

Cincinnati (The 1800's) Ci: 556

Over-the-road bus

Bus B: 714

Overall operating budget

Budget (Business budgets) B: 670

Overbey, John [American businessman]

Bush, George Herbert Walker (Independent oilman) B: 718

Overbite

Teeth (Malocclusion) T: 84 *with picture*

Overburden [mining]

Bauxite (Mining and processing bauxite) B: 174

Coal (How coal is mined) Ci: 721

Mining (Surface mining methods) M: 574-575 *with diagram*

Overcast stitch

Sewing (Hand stitches) S: 332

"Overcoat, The" [story by Gogol]

Russian literature (Late romanticism) R: 561-562

Overcup oak [tree]

Oak (White oaks) O: 635

Overdrive [gear]

Transmission (Gears) T: 376

Overdubbing [recording]

Recording studio (Recording) R: 181

Overeaters Anonymous [organization] O: 881**Overflow tube**

Plumbing (How toilets work) P: 579-580 *with diagram*

Overgrazing [farming]

Conservation (Conservation of grazing lands) Ci: 981

Desert (How deserts develop and change) D: 156

Overhand knot

Knots, hitches, and splices (The language of knots) K: 356 *with diagram*

Overhand loop

Knots, hitches, and splices (The language of knots) K: 356

Overhaul

Fire department (Firefighting) F: 123-124

Overhead engine

Gasoline engine (Valve arrangement) G: 64

Overhead projector

Audio-visual materials (Projectors) A: 882

Projector P: 816

Overhead smash [sports]

Tennis (The ball in play) T: 163

Overland Monthly [magazine]

Harte, Bret H: 78

Overland trade route

British Columbia *picture on* B: 629

Overland Trail [Wyoming]

Wyoming (The great trails) W: 533-534

Overlapping set [mathematics]

Set theory (Kinds of sets) S: 321 *with diagrams*

Overpopulation

Birth control (The birth control movement) B: 378

Population (Effects) P: 674

Overpressure [atmosphere]

Nuclear weapon (Blast wave) N: 597-598

Overreach, Sir Giles [literary figure]

Massinger, Philip M: 296

Overrunning clutch

Starter (Automobile starters) So: 857 *with diagram*

Overshot water wheel

Water wheel W: 141 *with picture*

Overstrung scale

Steinway, Henry Engelhard So: 886

Overton, Anthony [American businessman]

Spingarn Medal (table: 1927) So: 793

Overton, John [American jurist]

Memphis (History) M: 396

Overton Park

Memphis (Recreation) M: 396

Overtones [music]

Harmonics H: 62 *with diagrams*

Pitch P: 498

Sound (Sound quality) So: 601

Overtrick [bridge]

Bridge (Scoring) B: 605

Overture [music] O: 881

Classical music (Orchestral music) Ci: 644

Opera (The orchestra) O: 793

Symphonic poem So: 1066

Overweight

Disease (Metabolic diseases) D: 229

Weight control W: 181

Ovid [Roman poet] O: 882

Latin literature (The Augustan Age) L: 116

Narcissus N: 20

Oviduct [zoology]

See also Fallopian tube *in this index*

Bird (The reproductive system) B: 366

Chicken (Producing eggs) C: 443

Egg (Development of the bird's egg) E: 117

Fallopian tube F: 17

Insect (Reproductive system) I: 289 *with diagram*

Ovington, Earle [American aviator]

Airmail A: 207

Postal Service, United States (Technological advancements) P: 701

Oviparous animal [zoology] O: 882

Reptile (Reproduction) R: 252

Ovipositor

Fly (Egg) F: 310

Grasshopper (The body) G: 327-328 *with diagrams*

Ichneumon wasp I: 24 *with picture*

Insect (Abdomen) I: 288; *diagram on* I: 286

Oviraptor [prehistoric animal] O: 882**Ovoid** [astronomy]

Uranus (Satellites) U: 218-219

Ovoviviparity [zoology]

Reptile (Reproduction) R: 252

Ovulation [physiology]

Menstruation (The menstrual cycle) M: 404 *with picture*

Ovary O: 881

Progesterone P: 811

Reproduction, Human (The human reproductive system) R: 244-245

Ovule [botany]

Angiosperm A: 462

Flower (Fertilization) F: 296

Plant (Flowers) P: 531; (In seed plants) P: 532-534

Pollen (Fertilization) P: 646

Seed (Kinds of seeds) S: 281

Ovum See Egg [reproduction] *in this index***Owen, John** [American political leader]

North Carolina (table) N: 490

Owen, Lemuel C. [Canadian political leader]

Prince Edward Island (table) P: 791

Owen, Sir Richard [British scientist]

Dinosaur (Dinosaur discoveries) D: 213

Owen, Robert [British social reformer] O: 882

with portrait

Collectivism Ci: 775

Indiana (Early statehood) I: 216

Kindergarten (Early kindergartens) K: 318

New Harmony N: 228

Socialism (Early socialist ideas) So: 560

Wright, Frances W: 506

Owen, Robert Dale [American political leader] O: 883

Wright, Frances W: 506

Owen, Ruth Bryan [American diplomat] O: 883 *with portrait***Owen, Wilfred** [British poet]

Britten, Benjamin B: 634

Owen Falls Dam [Nile River, Uganda]

Lake Victoria L: 48

Owenites [social reformers]

New Harmony N: 229

Owens, Bill [American political leader]

Colorado (table) Ci: 844

Owens, Jesse [American athlete] O: 883 *with portrait*

Olympic Games (Between the wars) O: 751; *picture on* O: 753

- Track and field (The early and mid-1900's) T: 357
- Owens, Mary** [American settler]
Lincoln, Abraham (Search for a career) L: 314
- Owens, Michael Joseph** [American inventor]
Toledo (Government and history) T: 321
- Owens, Steve** [American football player]
Football (table) F: 363
- Owens-Illinois, Inc.**
Fiberglass (History) F: 89
- Owensboro** [Kentucky] O: 883
- Owl** [bird] O: 883 *with pictures*
Animal pictures on A: 478, A: 483, A: 494
Bird (Birds of grasslands) B: 336 *with picture*;
(Birds of the desert) B: 339 *with picture*;
(Sight) B: 365 *with picture*
Minerva M: 572
- Owl** [magazine]
Literature for children (The middle and late 1900's) L: 364-365
- "Owl and the Pussy-Cat, The"** [poem by Lear]
Lear, Edward L: 162
- Owl parrot**
Parrot (Kinds of parrots) P: 179
- Owlet moth**
Moth (Owlet moths and underwingmoths) M: 840 *with pictures*
- Owl's clover**
Flower picture on F: 288
- Owl's Head, Penobscot Bay, Maine** [painting by Lane]
Painting (Landscapes and seascapes) P: 32-33 *with picture*
- Ownership**
Business (Types of business ownership) B: 724
Marx, Karl (Marx's ideas) M: 237
Property P: 826
Title T: 302
- Owsley, William** [American political leader]
Kentucky (table) K: 290
- Owyhee Dam** [Owyhee River, Oregon] O: 886
Oregon (The early 1900's) O: 848
- Owyhee River**
Nevada (Rivers and lakes) N: 166
- Ox** [animal] O: 886
Aurochs A: 891
Cell picture on C: 327
Transportation picture on T: 387
- Oxalic acid** [chemical] O: 886
Oxalis O: 887
Rhubarb R: 319
Sorrel So: 597
- Oxalis** [botany] O: 886 *with picture*
- Oxbow lake** [geography] O: 887 *with picture*
Arkansas (Rivers and lakes) A: 706-708
Kentucky (Land regions) K: 285-286
Louisiana (Rivers, bayous, and lakes) L: 490-492
River (Flood plains) R: 353 *with diagram*
- Oxen** See Ox *in this index*
- Oxenstierna, Axel Gustafsson** [Swedish statesman] O: 887
- Oxeye daisy** [plant]
Daisy D: 8 *with picture*
- Oxford** [England] O: 887
England (The beginnings of Parliament) E: 306
Oxford University O: 887
- Oxford** [Mississippi]
Faulkner, William F: 55
Kennedy, John Fitzgerald (Civil rights) K: 264-265
- Oxford** [shoe]
Shoe (Kinds of shoes) S: 431 *with picture*
- Oxford and Asquith, Earl of** See Asquith, Herbert Henry *in this index*
- Oxford Dictionary of Nursery Rhymes, The**
Nursery rhyme (History) N: 615
- Oxford English Dictionary**
Dictionary (Modern dictionaries) D: 194
- Oxford Movement** [religion] O: 887
Newman, John Henry N: 378
- Oxford University** [England] O: 887 *with picture*
Architecture picture on A: 626
England (Education) E: 297, (The beginnings of Parliament) E: 306
Europe picture on E: 391
History (History in the universities) H: 262-263
Penn, William (Youthful rebel) P: 241-242
Rhodes Scholarship R: 317
- Oxford Work** [book by Duns Scotus]
Duns Scotus, John D: 386
- Oxidation** [chemistry] O: 888 *with pictures*
Antioxidant A: 557
Battery (How batteries work) B: 168
Corrosion C: 1072
Deodorizer D: 148
Electrolysis (How electrolysis works) E: 200-201
Fire (What is fire?) F: 120
Forest (The cycling of chemicals) F: 396
Hydrogen peroxide H: 470
Ink (Printing inks) I: 273
Life (Metabolism) L: 275
Paint (Household paints) P: 23-24
Reduction R: 192
Rust R: 567
Vitamin (Vitamin E) V: 432
- Oxide** [chemistry] O: 888
Ore O: 825
Oxygen (Chemical properties) O: 889
- Oxidizer** [fuel]
Fuel cell F: 551
Guided missile (The engine) G: 424 *with diagram*
Rocket (Rocket propellant) R: 385; (Liquid-propellant rockets) R: 388 *with diagram*
Space exploration (Getting into space and back) So: 698
- Oxisol** [soil]
Soil (How soils are classified) So: 575-576 *with map*
- Oxley, John** [Australian political leader]
Brisbane B: 609
- Oxnam, G. Bromley** [American religious leader] O: 889
- Oxyacetylene**
Acetylene A: 25
- Oxycodone** [drug]
Drug abuse (table: Some commonly abused drugs) D: 363
- Oxygen** [element] O: 889
Air (Gases of the air) A: 167 *with diagram*
Animal (Adaptations for breathing) A: 491
Blood B: 407, (What blood does in the body) B: 408 *with diagram*
Brain B: 550a
Chemistry (Lavoisier's contributions) C: 401
Drug abuse (Inhalants) D: 361
Earth (The lithosphere) E: 20
Electrolysis (How electrolysis works) E: 200-201
Fire (Kinds of fire) F: 120; (Gases) F: 121-122
Forest (Environmental value) F: 391
Heart (Coronary artery disease) H: 137
Human body (The exchange of carbon dioxide and oxygen) H: 421 *with picture*
Hydrogen (Hydrogen compounds) H: 469
Hyperbaric oxygen therapy H: 475
Ice age (Evidence of ice ages and their climates) I: 6-7
Iron (How bodies use iron) I: 435
Life (Metabolism) L: 275
Liquid air L: 346
Lung (Gas exchange in the lungs) L: 523
Oxidation O: 888
Ozone O: 893
Photosynthesis P: 430
Plant (Plants and the cycle of nature) P: 518 *with diagram*
Priestley, Joseph P: 776
Respiration R: 260
Weather (What causes weather) W: 157
See also the list of Related articles in the Oxygen article
- Oxygen lance** [industry]
Iron and steel (The basic oxygen process [BOP]) I: 443 *with diagram*; (The open-hearth process) I: 444-445 *with diagram*
- Oxygen poisoning**
Diving, Underwater (Dangers of underwater diving) D: 246-247
- Oxygen sensor**
Gasoline engine (Air pollution controls) G: 66
- Oxygen tank**
Oxygen (Making oxygen) O: 889
- Oxygen tent** O: 890
- Oxygenate** [chemical]
Gasoline (Gasoline blends and additives) G: 61; (History) G: 62
- Oxyhemoglobin** [physiology]
Hemoglobin H: 182
- Oxytocin** [hormone]
Hormone (Other hormones) H: 336
- Hypothalamus H: 481
Pituitary gland P: 502
- Oyapock River**
French Guiana (The land and climate) F: 515
- Oyashio Current** [Pacific]
Japan (Climate) J: 48
- Oyo** [African history]
Nigeria (Early kingdoms) N: 417
- Oyster** [sea animal] O: 890 *with pictures and map*
Egg (Other kinds of eggs) E: 116
Louisiana picture on L: 479
Mollusk (Bivalves) M: 695
Pearl P: 216 *with pictures*; (Cultured pearls) P: 217 *with picture*
Shell picture on S: 387
- Oyster farming**
Oyster (Oyster farming) O: 892
- Oyster mushroom**
Mushroom (Nonpoisonous mushrooms) M: 943 *with picture*
- Oyster plant** See Salsify *in this index*
- Oystercatcher** [bird] O: 893 *with picture*
Bird (Birds of the seacoasts) B: 342 *with picture*
- Oz, Amos** [Israeli author]
Hebrew literature (A new generation of Hebrew writers) H: 163
- Ozaki, Takashi** [Japanese mountain climber]
Mount Everest M: 884
- Ozark Folk Center**
Arkansas (Places to visit) A: 704
- Ozark Mountains** [U.S.] O: 893
Arkansas (Land regions) A: 706
- Ozark National Scenic Riverways** [Missouri]
National Park System (table: National parkways and other national parklands) N: 56
- Ozark-Ouachita Highlands** [region, U.S.]
United States (The Ozark-Ouachita Highlands) U: 124, *map on U: 123*
- Ozark Plateau**
Missouri (Land regions) M: 662; *picture on M: 650*
- Ozarks, Lake of the** See Lake of the Ozarks *in this index*
- Ozawa, Seiji** [Japanese conductor] O: 893
- Ozenfant, Amedée** [French painter]
Le Corbusier L: 175
- Ozick, Cynthia** [American author] O: 893
- Ozone** [gas] O: 893
See also Ozone hole *in this index*
Catalysis C: 297
Earth (The atmosphere) E: 18-19
Environmental pollution (Air pollution) E: 331
Greenhouse effect (The natural greenhouse effect) G: 382-383
Oxygen (Chemical properties) O: 889
Smog (Photochemical smog) S: 519
Stratosphere So: 920
Ultraviolet rays U: 17
- Ozone hole** [meteorology] O: 894 *with pictures*
Aerosol A: 89
Air (Changes in the atmosphere) A: 173-174
Antarctica (Antarctica today) A: 539-540
Chlorofluorocarbon C: 517
Fire extinguisher (Liquefied gas extinguishers) F: 130
Nitrogen (Nitrogen and pollution) N: 426
Ozone O: 893
Southern Ocean (Scientific research) So: 688b
Ultraviolet rays (Harmful effects) U: 18

P

- P [letter] P: 1 *with pictures*
- P [symbol]
Phosphorus P: 404
- P-doped crystal** [electronics]
Semiconductor (Doped crystals) S: 291; (Using doped crystals) S: 292
- P-N junction** [electronics]
Electronics (Solid-state components) E: 210 *with picture*
Transistor (Transistor materials) T: 372
- P-p chain** [physics] See Proton-proton chain *in this index*
- P-type dopant**
Solar energy (How a photovoltaic cell is made) So: 577
- P-type material**

Solar energy (How a photovoltaic cell is made)
So: 577 *with diagram*

P-type semiconductor [physics]

Electronics (Solid-state components) E: 210
Transistor (Transistor materials) T: 372-373

Pa [symbol]

Pascal P: 189

Protactinium P: 831

Paasikivi, Juho K. (Finnish political leader)

Finland (Postwar developments) F: 118

PABA (chemical)

Sulfa drug (How sulfa drugs work) So: 965

Pablos, Juan [Italian printer]

Printing (Early printing in North America)
P: 803

PAC [government] *See* Political action committee *in this index*

PAC [political group] *See* Pan-Africanist Congress *in this index*

Pac-Man [video game]

Video game (History) V: 359-360

Paca [animal] P: 2 *with picture*

Paca, William [American patriot] P: 2

Annapolis A: 516

Maryland (table) M: 255

Pacaembu Stadium

São Paulo (The city) S: 117-118

Paccard, Michel G. [French mountain climber]

Alps (Climbing the Alps) A: 386

Mont Blanc M: 741

Pace [gait]

Horse (Gaits) H: 353-354

Mammal (On land) M: 121-122

Pacelli, Eugenio [pope] *See* Pius XII *in this index*

Pacem in Terris [encyclical, 1963]

John XXIII [pope] J: 132

Pacemaker [medicine]

Arrhythmia A: 743

Electronics (Transistors) E: 212

Heart (Abnormal heart rhythms) H: 142

Medicine *picture on* M: 376

Spastic paralysis So: 767

Pacer [horse]

Harness racing H: 63

Pacers, Indiana

Basketball (table) B: 150

Pachacuti [Inca emperor]

Inca (The empire) I: 98

Machu Picchu M: 20

Pacheco, Alex [American activist]

People for the Ethical Treatment of Animals
P: 277

Pacheco, Francisco [Spanish artist]

Velázquez, Diego V: 296

Pacheco, Romualdo [American political leader]

California (table) C: 59

Pachomius, Saint [early Christian] P: 2

Monasticism (Christian monasticism) M: 701

Religious life (Religious life in early

Christianity) R: 226

Pachycephalosaur [dinosaur]

Dinosaur (True dinosaurs) D: 206b-208

Pachycephalosaur [dinosaur] P: 2

Pachyderm [zoology] P: 2

Elephant (The body of an elephant) E: 228

Pacific, The U.S. Army,

Army, United States (Organization of the
Army) A: 736-737

Pacific Air Forces

Air Force, United States (Combat commands)
A: 192

Pacific barracuda [fish]

Barracuda *picture on* B: 117; B: 118

Pacific blockade [international relations]

Blockade (Pacific blockade) B: 406

Pacific bonito [fish]

Bonito B: 460 *with picture*

Pacific Bottom Water

Pacific Ocean (Water masses) P: 15

Pacific Business Forum [organization]

Asia-Pacific Economic Cooperation A: 812a

Pacific cable [Australia-Canada]

Fleming, Sir Sandford F: 233

Pacific Coast States [region, U.S.] P: 2

United States (Regions) U: 99-108 *with map*

Pacific coastal forest

Forest (Pacific coastal forests) F: 396 *with map*

Pacific cod [fish]

Cod (Appearance and habits) Ci: 748 *with picture*; (Cod fishing and marketing) Ci: 748

Pacific Command, United States [military]

Camp H. M. Smith C: 90

Pacific Community [organization]

Pacific Islands (Recent developments) P: 12

Pacific Deep Water

Pacific Ocean (Water masses) P: 15

Pacific Division

Hockey (table: National Hockey League)

H: 281

Pacific dogwood [plant]

Dogwood D: 284

Pacific Fleet

Navy, United States (The Operating Forces)
N: 85

Pacific Flyway [route]

Bird (Where birds migrate) B: 360-361

Pacific Great Eastern Railway

British Columbia (The mid-1900's) B: 630

Pacific halibut [fish]

Fish *picture on* F: 153

Pacific herring [fish]

Herring *picture on* H: 215

Pacific Islands P: 2 *with pictures and maps*

Bird (Birds of Australia and the Pacific Islands)

B: 349 *with pictures*

Clothing *pictures on* Ci: 693

Heyerdahl, Thor H: 220

Mead, Margaret M: 344

Mythology (Mythology of the Pacific Islands)
M: 982

Rain forest (Australia and the Pacific Islands)

R: 126c *with map*

Sculpture (Pacific Islands sculpture) S: 241

with pictures

Stevenson, Robert Louis (The South Seas)

So: 897 *with picture*

Territory (American territorial government)
T: 177

Pacific Islands, Trust Territory of the [UN]

P: 13

Palau P: 101

Pacific Islands (Recent developments) P: 12-13

Pacific Life Insurance Company

Insurance (table) I: 315

Pacific mackerel *See* Chub mackerel *in this index*

Pacific Mail Steamship Company

Ship (Passenger vessels) S: 414-415

Pacific mountain system

Mountain (The Pacific Mountain System)
M: 893

Pacific Northwest [region, U.S.] P: 13

See also Pacific Coast States *in this index*

Pacific Ocean P: 14 *with map*

Balance of nature (Upsetting the balance)
B: 35

Balboa, Vasco Núñez de B: 37

Climate (Changes in ocean circulation)

Ci: 676d

Columbus, Christopher (Further explorations)

Ci: 863

Cook, James Ci: 1025

Deep sea (The deep-sea floor) D: 82a

El Niño E: 245

Exploration (The first explorers) E: 440; (The
great age of European exploration) E: 442-

444 *with map*; (Exploring the Pacific)

E: 447

Fishing industry (Where fish are caught)

F: 181-182

Hurricane H: 452

Magellan, Ferdinand (Sailing across the

Pacific) M: 47

Ocean (The world ocean) O: 651; (Discoveries)
O: 664

Pacific Islands P: 2

Plate tectonics (Plate movement) P: 563

Seamount S: 268

Pacific pearl oyster [sea animal]

Oyster *picture on* O: 891

Pacific Plate [geology]

Plate tectonics (Transform plate boundaries)
P: 563

San Andreas Fault S: 83 *with map*

Pacific Railroad Act [1862]

Civil War (Economy) Ci: 623

Railroad (The first transcontinental rail lines)
R: 116

Pacific Railway Dispute [Canadian history]

Mackenzie, Alexander (The Pacific Railway dis-
pute) M: 22

Pacific Ranges and Lowlands [region, U.S.]

North America (Land regions) N: 462

United States (The Pacific Ranges and

Lowlands) U: 125 *with picture*; *map on*
U: 122

Pacific Rim National Park [British Columbia]

Canada (table: National parks and national
reserves) C: 113

National park (table) N: 42g

Pacific salmon

Salmon S: 69

Pacific Scandal [Canadian history]

Abbott, Sir John Joseph Caldwell (The Pacific
Scandal) A: 6

Canada, History of (The Pacific Scandal) C: 147

Macdonald, Sir John Alexander (The Pacific

Scandal) M: 9

Mackenzie, Alexander (Leader of the
Opposition) M: 22

Pacific silver fir [tree]

Fir F: 120

Pacific thorny oyster [sea animal]

Shell *picture on* S: 387

Pacific Time Zone

Time (Time zones in the United States and
Canada) T: 289-292 *with maps*

Pacific water

Arctic Ocean (Currents, water masses, and
tides) A: 643

Pacific yaw [tree]

Taxol T: 56

Pacifism [philosophy] P: 18

Conscientious objector Ci: 974

Pacino, Al [American actor] P: 18

Motion picture (Best performance by an actor;
1992) M: 862-863

Pacioli, Fra Luca [Italian mathematician]

Bookkeeping (History) B: 473

Pack [scouting]

Boy Scouts (Cub Scouting) B: 536-537

Pack, Law of the [scouting]

Boy Scouts (Cub Scouting) B: 536-537

Pack, Wolf

Wolf (The life of a wolf) W: 375; *picture on*
W: 376

Pack ice [geology]

Arctic Ocean (Ice) A: 643

Pack rat *See* Woodrat *in this index*

Pack skating

Ice skating (Pack skating) I: 14; *picture on* I: 16

Package [electronics]

Computer chip (External connections) Ci: 924e
with picture

Package

Motion picture (Acquiring financing) M: 849

Package dyeing

Wool (Making fabric) W: 401

Package services

Postal Service, United States (Classes of mail)
P: 699

Packaging P: 18

Brewing *picture on* B: 595

Cellophane C: 340

Environmental pollution (Business and indus-
try) E: 336-337 *with picture*; (Individual

efforts) E: 338

Food (Packaging) F: 335

Food, Frozen (Packaging) F: 339 *with pictures*

Food preservation (Aseptic packaging) F: 343

Milk (Packaging) M: 549 *with pictures*

Paperwork (Wrapping paper) P: 138

Plastics (To replace paper) P: 555 *with picture*

Packard

Automobile *picture on* A: 967

Packard, Vance [American author]

Consumerism (Growth of the movement)
Ci: 1019

Packard Foundation

Foundations (table) F: 430; (Science and tech-
nology) F: 431

Packer, William Fisher [American political

leader]

Pennsylvania (table) P: 263

Packers, Green Bay *See* Green Bay Packers *in this index*

Packet ship

Ship (Packet ships) S: 409-410 *with picture*

Packet sniffer [program]

Computer (Computer security) Ci: 924

Packet switching [computer]

Communication (The development of the
Internet) Ci: 886

Packing house [food processing]

Fruit (Marketing fruit) F: 546

Meat packing (Packing processes) M: 350

with pictures; (U.S. government inspec-
tion) M: 352; (History) M: 352

Pact of Paris *See* Kellogg-Briand Pact *in this index*

Pacu [fish] P: 19 *with picture*

- Pacuvius, Marcus** (Roman poet)
Latin literature (Early Latin literature) L: 115
- P.A.D. pedigree**
United Kennel Club U: 47
- Paddle** See Racket in *this index*
- Paddle** [oar]
Canoeing (Paddles) C: 180 *with picture*
Indian, American *picture on* I: 140
- Paddle doll**
Doll (Ancient times) D: 288
- Paddle wheel**
Ship (Development of the ship propeller)
S: 412-413
- Paddlefish** [fish] P: 19
Fish (Bony fish) F: 147-148; *picture on* F: 159
- Paddling**
Canoeing (Paddling and steering) C: 181
- Paddock**
Horse racing ("They're off!") H: 365
- Paddy** [agriculture]
Rice (Kinds of rice) R: 323-324 *with picture*
Vietnam (Economy) V: 369; *picture on* V: 364
- Paddy Clarke Ha Ha Ha** [book by Doyle]
Novel (The novel today) N: 575
- Paddy rice**
Rice (How rice is processed) R: 326
- Padelford, Seth** [American political leader]
Rhode Island (table) R: 311
- Paderewski, Ignace Jan** [Polish pianist] P: 19
- Padjelanta National Park** [Sweden]
National park (table) N: 42g
- Padlock**
Lock (Mechanical locks) L: 411
- Padre Island** [island, Texas] P: 20
Texas (Coastline) T: 196
- Padre Island National Seashore** [Texas]
National Park System (Areas preserved for recreational use) N: 46; (table: National seashores) N: 57
Texas (Places to visit) T: 194 *with picture*
- Padres, San Diego** See San Diego Padres in *this index*
- Padua** [Italy] P: 20 *with picture*
- Paekche** [former region]
Korea (Early years) K: 375-376
- Paektu-san** [mountain, Korea]
Korea (The Northern Mountains) K: 373
- Paella** [food]
Spain (Food and drink) So: 737
- Páez, José Antonio** [Venezuelan political leader]
Venezuela (The struggle for independence)
V: 304-305
- Pagan** [ancient city]
Myanmar (Early days) M: 970d
- Pagan Papers** [book by Grahame]
Grahame, Kenneth G: 301
- Paganica** [game]
Golf (Beginnings) G: 264
- Paganini, Niccolò** [Italian violinist] P: 20
Liszt, Franz (His life) L: 349-350
- Pagans** [religion]
Theodosius I T: 252
- Page** [computing] See Web page in *this index*
- Page** [European history]
Knights and knighthood (The page) K: 348 *with pictures*
- Page** See Congressional page in *this index*
- Page, Carroll S.** [American political leader]
Vermont (table) V: 333
- Page, Earle** [Australian political leader]
Australia (table) A: 925
- Page, Geraldine** [American actress]
Motion picture (Best performance by an actress: 1985) M: 862
- Page, John** [American political leader]
New Hampshire (table) N: 223
- Page, John** [American political leader]
Virginia (table) V: 417
- Page, John B.** [American political leader]
Vermont (table) V: 333
- Page, P. K.** [Canadian poet]
Canadian literature (Modern Canadian poets)
C: 160
- Page, Walter** [American musician]
Basie, Count B: 140
- Page, William Tyler** [American government employee]
American's Creed A: 431
- Page layout program** [software]
Magazine (Editing and assembling an issue)
M: 43
- Page makeup** [printing]
Newspaper (Making up the pages) N: 383; *picture on* N: 384
- Printing (Electronic imagesetting) P: 797;
(Page makeup) P: 797
- Pageant wagon**
Drama (Mystery plays) D: 328-329 *with picture*
Mystery play M: 972
- Pager** [electronics] P: 20
Etiquette (Telephone etiquette) E: 373-374
Telephone (Wireless telephone equipment)
T: 97
- Pagliacci** [opera by Leoncavallo]
Opera (Verismo opera) O: 799; (*Pagliacci*)
O: 806; (*Cavalleria Rusticana*) O: 803; *picture on* O: 805
Leoncavallo, Ruggiero L: 202
- Pago Pago** [city, American Samoa]
American Samoa A: 429 *with picture and map*
- Pago Pago Bay** [American Samoa]
Pacific Islands *picture on* P: 3
- Pagoda** [architecture] P: 20 *with picture*
Architecture (Chinese architecture) A: 612
China (Architecture) C: 490
Myanmar *picture on* M: 970; (The arts)
M: 970c
Nepal *picture on* N: 126
- Pahlavi** See Mohammad Reza Pahlavi; Reza Shah Pahlavi in *this index*
- Pahoehoe** [geology]
Volcano (Lava) V: 439
- Pahranagat Range** [region, Nevada]
Western frontier life in America (Crime)
W: 238
- Paid-up insurance**
Insurance (Main kinds of life insurance) I: 309-310
- Paiewonsky, Ralph M.** [American government official]
Virgin Islands (Progress under the United States) V: 397
- PAIGC** [political party]
Guinea-Bissau (Government) G: 433; (History)
G: 434
- Paige, Roderick R.** [American government official]
Bush, George Walker (table) B: 723
Education, Department of (table) E: 111
- Paige, Satchel** [American baseball player] P: 21
Baseball (table: Hall of Fame) B: 135; (Postwar baseball) B: 137 *with picture*
- Pain** P: 21
Analgesic A: 448
Brain (The work of the brain) B: 552; (The brain's chemical messengers) B: 556
Drug (Analgesics) D: 352
Endorphin E: 272
Morphine M: 816
Placebo P: 505
- Paine, Charles** [American political leader]
Vermont (table) V: 333
- Paine, Lewis** [American public figure]
Lincoln, Abraham (The trial of the conspirators) L: 326
- Paine, Robert Treat** [American statesman] P: 22
- Paine, Thomas** [American patriot] P: 22
American literature (The revolutionary period [1765-1787]) A: 415
Declaration of Independence (The Continental Congress) D: 74
Revolutionary War in America (The Declaration of Independence) R: 276; (Results of the war) R: 286
United States, History of the (The Revolutionary War begins) U: 158
- Paint** P: 23 *with pictures*
Automobile *picture on* A: 956
Illuminated manuscript I: 78
Lead L: 149
Painting (Materials and techniques) P: 36 *with picture*
- Paint** [horse]
Horse (Coat and skin) H: 348-349 *with picture*
- Paint brush** [tool]
Paint (Applying the paint) P: 25; *pictures on*
P: 26
Painting (Materials and techniques) P: 36 *with picture*; (Water-color painting) P: 39;
(Chinese painting) P: 44
- Paint pad** [tool]
Paint (Applying the paint) P: 25-26 *with picture*
- Painted Bird, The** [book by Kosinski]
American literature (Experimental styles)
A: 424
- Painted bulletin**
Advertising (Outdoor signs) A: 75
- Painted bunting** [bird]
Bird (Birds of brushy areas) B: 338 *with picture*
Bunting B: 700
- Painted cup** [plant]
Indian paintbrush I: 187
- Painted daisy** [plant]
Pyrethrum P: 920
- Painted Desert** [region, Arizona] P: 26 *with picture*
Arizona (Places to visit) A: 678
- "Painted Dreams"** [soap opera]
Soap opera So: 543
- Painted lady** [insect]
Butterfly *picture on* B: 735
- Painted lady** [plant]
Pyrethrum P: 920
- Painted redstart** [bird]
Redstart R: 192
- Painted-tongue** [plant] P: 27 *with picture*
- Painted trillium** [plant]
Trillium T: 445
- Painted turtle**
Turtle *picture on* T: 520
- Painter** [artist]
Painting P: 28
See also the list of painters in the Related Articles of the Painting article
- Painter** [workman] P: 27
Building trade (Career opportunities) B: 686
- "Painter of Modern Life, The"** [essay by Baudelaire]
Baudelaire, Charles B: 173
- Painters and Allied Trades, International Brotherhood of**
Labor movement (table) L: 8
- Painter's colic** [disorder] P: 27
Lead poisoning L: 150
- Painting** [art] P: 28 *with pictures*
Barbizon School B: 107
Baroque (Baroque painting) B: 117
Byzantine art B: 749 *with pictures*
China (Painting) C: 488 *with pictures*
Classicism (The qualities of classicism) Ci: 653
Colonial life in America (Painting) Ci: 807 *with picture*
Cubism Ci: 1181 *with pictures*
Egypt, Ancient (Painting and sculpture) E: 139
Expressionism (Expressionist painting)
E: 455
Fauves F: 56 *with picture*
Finger painting F: 105 *with pictures*
Folk art (Painting) F: 316 *with pictures*
Fresco F: 529
Impressionism I: 94 *with picture*
Indian, American (Painting) I: 146
Netherlands (Arts) N: 142, *picture on* N: 144
Porcelain (Painting) P: 676
Postimpressionism P: 708 *with picture*
Prehistoric people (The appearance of art)
P: 750-751 *with pictures*
Realism (In painting) R: 172 *with picture*
Romanticism (Romanticism in painting) R: 427
Rome, Ancient (Sculpture and painting) R: 441
Surrealism So: 1010 *with picture*
See also the list of Related Articles in the Painting article
- Paintpot** [geology]
Yellowstone National Park (Touring Yellowstone) Y: 558
- Pair**
Ice skating (Long-track skating) I: 14
- Pair annihilation** [physics]
Radiation (Beta particles) R: 76
- Pair bond** [zoology]
Bird (Courtship and mating) B: 356
- Pair skating**
Ice skating (Pair skating) I: 12 *with picture*
Roller skating (Competitive roller skating)
R: 403 *with picture*
- Pairs play** [bridge]
Bridge (Duplicate bridge) B: 605
- Paisan** [film]
Motion picture (Postwar realism) M: 869
- Paise** [money]
Rupee R: 521
- Paisiello, Giovanni** [Italian composer]
Opera (*Marriage of Figaro*, *The*) O: 805
- Paisley** [city, Scotland] P: 91
- Paisley, Ian** [Irish political leader] P: 91
- Paiute Indians** P: 91
Indian, American (Shelter) I: 136d; *picture on*
I: 139
Klamath Indians K: 343

- Pajama** [clothing]
India (Clothing) **I**: 117-118
- Pakehas** [people]
New Zealand (People) **N**: 348; (Maori-Pakeha relations) **N**: 356
- Pakenham, Sir Edward Michael** [British general]
War of 1812 ("The needless battle") **W**: 31
- Pakhto** [language] See *Pashto in this index*
- Pakhtuns** [people] See *Pashtuns in this index*
- Pakicetus** [whale]
Prehistoric animal (The development of placental) **P**: 741
- Pakistan** [country] **P**: 92 *with pictures and maps*
Army picture on **A**: 725
Asia (Way of life in South Asia) **A**: 780; (Other struggles) **A**: 810
Bangladesh (British India) **B**: 85
Bin Laden, Osama **B**: 308
Clinton, Bill (International affairs) **Ci**: 682f
Cold War (The great blocs split) **Ci**: 768
Immigration (Asia) **I**: 85
India (New Constitution) **I**: 132; (Independence and partition) **I**: 133 *with map*; (Recent developments) **I**: 134-135
Iqbal, Sir Muhammad **I**: 397
Jinnah, Mohammad Ali **J**: 127
Kashmir **K**: 248
Khyber Pass **K**: 309 *with maps*
Muslims (Reform and renewal) **M**: 965; *picture on M*: 966
Pashtuns **P**: 190
Standard of living (table) **So**: 834
United Nations (Arms control) **U**: 92-93
- Pakistan People's Party**
Bhutto, Benazir **B**: 278
- Pakistani dwarf goat**
Goat (The bodies of goats) **G**: 240
- PAL** [electronics]
Television (The television camera) **T**: 121-122
- Pal Joey** [musical]
Musical comedy (Musical comedy matures) **M**: 960
- Palace** [architecture] **P**: 101
See also the list of Related articles in the Palace article
- Palace at 4 A.M., The** [sculpture by Giacometti]
Giacometti, Alberto **G**: 183
Sculpture (Assemblages) **S**: 257-258 *with picture*
- Palace of ...**
Palaces appear under their key words, as in Versailles, Palace of
- Palace of Desire** [book by Mahfouz]
Mahfouz, Naguib **M**: 65
- Palace School** [European history]
Charlemagne (Administration and influence) **C**: 379
- Palace Walk** [book by Mahfouz]
Mahfouz, Naguib **M**: 65
- Palacio Valdés, Armando** [Spanish author]
Spanish literature (The 1800's) **So**: 761-762
- Palade, George Emil** [American physiologist]
Nobel Prizes (Physiology or medicine: 1974) **N**: 445
- Palaestra** [school]
Olympia **O**: 745
- Palais de la Nation** [building, Brussels]
Belgium *picture on B*: 227
- Palais de Luxembourg** [France]
Museum (Museums of the 1700's) **M**: 939
- Palais Garnier** [building]
Architecture (Combined styles) **A**: 626 *with picture*
Paris (Arts) **P**: 164
- Palais Stoclet** [Brussels]
Architecture (Early modern architecture in Europe) **A**: 627-628 *with picture*
Klimt, Gustav **K**: 344
- Palamas, Kostas** [Greek poet]
Greek literature (Modern Greek literature) **G**: 378
- Palamedes** [legendary figure]
Ulysses (The Trojan War) **U**: 17-18
- Palance, Jack** [American actor]
Motion picture (Best performance by an actor in a supporting role: 1991) **M**: 863
- Palaquium gutta** [tree]
Gutta-percha **G**: 445
- Palate** [anatomy] **P**: 101 *with diagram*
Cleft palate **Ci**: 661
Throat **T**: 271
- Palatinate** [German history] **P**: 101
- Palatine bone** [anatomy]
Face **F**: 3
- Palatine Hill**
Rome **R**: 429
- Palatine tonsil** [anatomy]
Tonsil **T**: 330 *with diagram*
- Palau** [country, Pacific] **P**: 101 *with map*
Flag *picture on F*: 204
Pacific Islands (Recent developments) **P**: 12-13
Pacific Islands, Trust Territory of the **P**: 13
- Palau Islands** [Pacific]
Caroline Islands **C**: 244
Pacific Islands (Recent developments) **P**: 12-13
World War II (Island hopping in the Central Pacific) **W**: 488-489
- Palawan** [island, Philippines]
Philippines (The main islands) **P**: 376-378 *with map*
- Palazzo Vecchio**
Florence (The city) **F**: 239-240
- Pale** [region, Ireland]
Ireland (The Norman invaders) **I**: 425-426
- Pale of Settlement** [Russian history]
Jews (The growth of anti-Semitism) **J**: 123
Sholem Aleichem **S**: 433
- Palenque** [Maya ruins]
Maya (The Maya heritage) **M**: 326
Mexico *picture on M*: 449
- Paleo-Indians**
Nova Scotia (Indian days) **N**: 568
- Paleo-Siberians** [people]
Arctic (Americanoids) **A**: 639
- Paleoanthropology**
Anthropology (Physical anthropology) **A**: 546 *with picture*
- Paleobotany** [science] **P**: 102
Paleontology **P**: 103
- Paleocene Epoch** [geology]
Earth (table) **E**: 30; *map on E*: 31
Prehistoric animal (table) **P**: 740
- Paleogeography**
Paleontology **P**: 103
- Paleography** [writing] **P**: 103
- Paleolithic Period** [anthropology]
England (History) **E**: 303
Invention (Prehistoric times) **I**: 357
Painting (Prehistoric painting) **P**: 40
Prehistoric people (The first human beings) **P**: 745; (Physically modern human beings) **P**: 750
Stone Age **So**: 909
- Paleomagnetism** [geology]
Plate tectonics (Plate movement) **P**: 563
- Paleontology** [geology] **P**: 103
Biology (table) **B**: 317; (The origins of scientific classification) **B**: 318-319
Dinosaur (Working with dinosaur fossils) **D**: 210 *with pictures*
Earth (Life on Earth) **E**: 27
Evolution (The fossil record) **E**: 430; (Contributions from other scientific fields) **E**: 433
Fossil (How fossils reveal the past) **F**: 422-423
Geology (Areas of specialization) **G**: 100-101 *with picture*
Lamarck, Chevalier de **L**: 50
Paleobotany **P**: 102
Prehistoric animal **P**: 736
Zoology (What zoologists study) **Z**: 610
- Paleozoic Era** [geology]
Earth (The Paleozoic Era) **E**: 27; (table) **E**: 30; *pictures on E*: 28
Plant (Early plants) **P**: 540
Prehistoric animal (The world of prehistoric animals) **P**: 736; (Early forms of animal life) **P**: 736; (The Age of Reptiles) **P**: 737 *with picture*
- Palermo** [Sicily] **P**: 103
Italy *picture on I*: 508
Sicily **S**: 447
- Palestine** **P**: 103 *with maps*
See also Canaanites; Israel, Ancient; Israelites; Judah; Philistines in this index
Arab-Israeli conflict **A**: 582
Arabs (Land of the Arabs) **A**: 585; (Since independence) **A**: 589
Balfour Declaration **B**: 40
Holocaust (After the Holocaust) **H**: 296b
Israel **I**: 478; (Beginnings of a new state) **I**: 486
Jews *map on J*: 121; (The Zionist movement) **J**: 123; (The rebirth of Israel) **J**: 124
Jordan (History) **J**: 164-165
Joshua **J**: 169
Middle East (Palestine) **M**: 533
- Palestine Liberation Organization **P**: 106
Palestinians **P**: 107
Philistines **P**: 382
United Nations (Working for self-government) **U**: 93-94
Zionism **Z**: 599; *Judea in this index*
- Palestine Liberation Organization P**: 106
Arab-Israeli conflict **A**: 582
Arabs (Since independence) **A**: 589-590
Arafat, Yasir **A**: 591
Barak, Ehud **B**: 102
Israel (History) **I**: 486-488
Jericho **J**: 93
Jerusalem (The future of Jerusalem) **J**: 102
Jordan (History) **J**: 164-165
Lebanon (Internal conflicts) **L**: 173; (War and terrorism) **L**: 173; (Recent developments) **L**: 174
Libya (Independence) **L**: 268
Middle East (Continuing conflict) **M**: 533; (Recent developments) **M**: 534
Netanyahu, Benjamin **N**: 137
Palestine (The continuing conflict and peace efforts) **P**: 105-106
Rabin, Yitzhak **R**: 50
West Bank (History and government) **W**: 200
- Palestinian Authority** [government]
Arafat, Yasir **A**: 591
Palestinians **P**: 107
- Palestinian Gemara** [religious book]
Talmud **T**: 21
- Palestinians** [people] **P**: 107
Arab-Israeli conflict **A**: 582
Arabs (Since independence) **A**: 589
Gaza Strip **G**: 74
Jordan (Ancestry) **J**: 162; (History) **J**: 164-165 *with picture*
Lebanon (Ethnic groups and religion) **L**: 171; (Internal conflicts) **L**: 173
Olympic Games (Terrorism in Munich) **O**: 752
Palestine Liberation Organization **P**: 106
Sharon, Ariel **S**: 377
Terrorism (History of terrorism) **T**: 179
United Nations (Working for self-government) **U**: 93-94
West Bank **W**: 199
- Palestrina, Giovanni** [Italian composer] **P**: 107
Classical music (Italian music) **Ci**: 646
Classicism (The qualities of classicism) **Ci**: 653
- Palette** [tool]
Painting (Other materials) **P**: 36 *with picture*
- Palette knife** [tool]
Knife **K**: 345
Painting (Other materials) **P**: 36 *with diagram*
- Palikir** [city, Micronesia, Federated States of]
Micronesia, Federated States of **M**: 515
- Palin, Michael** [British actor]
Cleese, John **Ci**: 661 *with picture*
- Palisade** [fence]
Castle (Structure) **C**: 280
Indian, American (Before European contact) **I**: 154-155; *picture on I*: 156
- Palisade tissue** [botany]
Leaf (Photosynthesis) **L**: 155 *with diagram*
- Palisades, The** [cliffs, New Jersey-New York]
Hudson River **H**: 406
- Palla**
Clothing (Ancient times) **Ci**: 696-698
Rome, Ancient (Food, clothing, and shelter) **R**: 438-439
Toga **T**: 309
Tunic **T**: 487
- Palladian revival** [architecture]
Architecture (The Palladian Revival) **A**: 623 *with picture*
- Palladian style**
Furniture (The Palladian style) **F**: 578
- Palladio, Andrea** [Italian architect] **P**: 107 *with picture*
Architecture (Later Renaissance architecture) **A**: 621 *with picture*; (The Palladian Revival) **A**: 623
Furniture (The Palladian style) **F**: 578
Georgian architecture **G**: 136
Monticello **M**: 767
- Palladis Tamia: Wit's Treasury** [book by Meres]
Shakespeare, William (The years of fame) **S**: 348
- Palladium** [element] **P**: 108
- Palladius** [Irish religious leader]
Patrick, Saint (His life) **P**: 197
- Pallas** [Roman mythology]
Aeneid **A**: 84
- Pallavas dynasty**

- India (Southern India) I: 129
- Pallet**
Clock (Mechanical clocks) Ci: 682j
Organ (Pipe organs) O: 851-852
Watch (Mechanical watches) W: 114
- Pallet** [mattress]
Bed (History) B: 197-198
- Pallet** [space exploration]
Space exploration (Spacelab missions) So: 725
- Palliative care** [medicine] P: 108
- Pallid bat**
Animal *picture on* A: 483
- Pallidotomy** [medicine]
Parkinson disease (Other treatments) P: 171
- Palliser, John** [Irish explorer]
Saskatchewan (North West Territories) S: 146
- Pallium** [clothing]
Clothing (Ancient times) Ci: 696-698
Pope (Titles, clothing, and symbols) P: 661
with picture
- Palm** [anatomy]
Hand (Parts of the hand) H: 40
- Palm** [tree] P: 108 *with pictures*
Cabbage palm C: 3
Date palm D: 42 *with picture*
Ivory palm I: 522 *with pictures*
Manuscript (Palm leaf manuscripts) M: 173
Tree (Palm, pandanus, and lily trees) T: 415;
pictures on T: 413, T: 426, T: 427
- Palm, Heart of** [vegetable]
Cabbage palm C: 3
- Palm and needle method**
Knots, hitches, and splices (Preparing rope for knots) K: 356
- Palm Beach County** [Florida]
Election of 2000 (Court challenges) E: 161
- Palm civet** [animal]
Civet Ci: 604
- Palm cockatoo** [bird]
Parrot (Kinds of parrots) P: 179
- Palm oil** P: 109
- Palm reading**
Fortunetelling (Methods of fortunetelling)
F: 419-420
Palmistry P: 111 *with diagram*
- Palm Springs** [California] P: 109
- Palm Sunday** [religion] P: 109
Ash Wednesday A: 767
Easter (Holy Week) E: 42 *with picture*; E: 42
with picture
Holy Week H: 299
Jesus Christ (The Last Supper) J: 107
Mexico *picture on* M: 458
- Palma** [Majorca]
Balearic Islands B: 40
Majorca M: 94
- Palma, Ricardo** [Peruvian author]
Latin-American literature (Romanticism) L: 112
Peru (The arts) P: 310-311
- Palmach** [military]
Rabin, Yitzhak R: 50
- Palmares** [Brazilian history] P: 110
Maroons M: 217
- Palmate leaf** [botany]
Leaf (The blade) L: 153-154 *with picture*
- Palme, Olof** [Swedish public official]
Sweden (Political changes) So: 1034
- Palmer** [Alaska]
Alaska *picture on* A: 291
- Palmer, A. Mitchell** [American political leader]
P: 110
- Palmer, Alice Elvira Freeman** [American educator] P: 110
- Palmer, Arnold** [American golfer] P: 110
Golf (British Open) G: 264; (Masters Tournament) G: 265; *picture on* G: 266
- Palmer, Daniel David** [American chiropractor]
Chiropractic C: 515
- Palmer, Edward** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935 *with picture*
- Palmer, Herbert J.** [Canadian political leader]
Prince Edward Island (table) P: 791
- Palmer, Jim** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Palmer, Joel** [American government official]
P: 110
- Palmer, John M.** [American political leader]
Illinois (table) I: 71
- Palmer, Nathaniel Brown** [American sea captain] P: 110
Antarctica (Early exploration) A: 535-536
Exploration (The exploration of Antarctica)
E: 450
- Palmer, Olive Freeman** [wife of]
Diefenbaker, John George (Young lawyer)
D: 197
- Palmer, Potter** [American businessman] P: 110
- Palmer, Volney B.** [American businessman]
Advertising (The development of advertising agencies) A: 79-80
- Palmer, William A.** [American political leader]
Vermont (table) V: 333
- Palmer Land**
Antarctica (Early exploration) A: 535-536
- Palmer Raids** [U.S. history]
Palmer, A. Mitchell P: 110
- Palmer System**
Palmer, Potter P: 110
- Palmerston, Viscount** [British political leader]
P: 110
United Kingdom (Political confusion) U: 69
- Palmetto** [tree] P: 111
- Palmetto State**
South Carolina So: 640
- Palmistry** P: 111 *with diagram*
Fortunetelling (Methods of fortunetelling)
F: 419-420
- Palmitic acid** [chemical]
Lard L: 76
- Palmitin** [chemical]
Lard L: 76
- Palmito Hill, Battle of** [1865]
Texas (The Civil War and Reconstruction)
T: 207
- Palmtop computer**
Computer (Personal computers) Ci: 909-910
- Palmyra** [ancient city] P: 111
Arabs (The Arabs before Islam) A: 588
Syria *picture on* So: 1074
- Palmyra** [New York]
Mormons (Revelations) M: 808
- Palmyra palm** [tree] P: 111
Palm (Products of palms) P: 109
- Palo Alto** [California] P: 112
- Palo Alto, Battle of** [1846]
Mexican War (Taylor's campaign) M: 446 *with picture*; (Principal battles) M: 447 *with picture*
- Palo Alto Battlefield National Historic Site** [Texas]
National Park System (table: National historic sites) N: 52-53
- Palomar Observatory** [California] P: 112
Annealing A: 517
Halley's Comet H: 24
Quasar Q: 8
San Diego (Recreation) S: 90a
- Palometa** [fish]
Pompano P: 653
- Palomino** [horse]
Horse (table: Some types and breeds of horses) H: 343, (Color types) H: 345 *with picture*
- Paloverde** [tree] P: 112
- Palpi** [entomology]
Grasshopper (The body) G: 327
- Palpitations** See Tachycardia *in this index*
- Palsy** [disorder] P: 112
Bell's palsy B: 245
Parkinson disease P: 170
- Paltrow, Gwyneth** [American actress]
Motion picture (Best performance by an actress: 1998) M: 862
- Paludamentum**
Clothing (The Middle Ages) Ci: 698
- Paly**
Heraldry *picture on* H: 195
- Pamela** [book by Richardson]
Richardson, Samuel R: 330
Fielding, Henry (His novels) F: 94
Novel (The first English novelists) N: 572
- Pamina** [opera character]
Opera (*Magic Flute, The*) O: 805
- Pamirs** [region, Asia] P: 112
Asia (Mountains) A: 792-793
Tajikistan (Land and climate) T: 18a *with map*
- Pampa** [region, Argentina] P: 113
Argentina A: 646 *with picture*; (The Pampa)
A: 653 *with map*; (Agriculture) A: 655
Prairie P: 731
South America So: 626
- Pampas deer**
Deer (Central and South American deer)
D: 85-86
- Pamphilus, seu de Amore** [poem]
Pamphlet P: 113
- Pamphlet** P: 113
- Pamplona** [Spain]
Spain *picture on* So: 731
- PAN** [chemical]
Smog (Photochemical smog) S: 519-520
- Pan** [Greek mythology] P: 113 *with picture*
Faun F: 56
Midas M: 521
Mythology (Greek divinities) M: 979
- Pan** [gun]
Harquebus H: 67
- Pan** [musical instrument]
Trinidad and Tobago (People) T: 446
- Pan, Peter** See Peter Pan *in this index*
- Pan-Africanism** [international relations]
Africa (Africa today) A: 135
Du Bois, W. E. B. D: 372
- Pan-Africanist Congress**
South Africa (History) So: 617-619
- Pan-American conferences** P: 113
Harrison, Benjamin (Foreign affairs) H: 73
- Pan American Exposition** [1901]
McKinley, William (McKinley's second Administration [1901]) M: 341
New York N: 317; (The early 1900's) N: 318
- Pan American Gamas** [sports] P: 114
- Pan American Highway** [road] P: 114 *with map*
Monterrey M: 764
Panama City P: 128
South America (Transportation) So: 637 *with picture*
- Pan American Highway Congress**
Pan American Highway (Development) P: 114
- Pan American Union** [alliance]
Latin America (The movement to establish unity) L: 109
Organization of American States O: 854
Pan-American conferences (The "new" Pan Americanism) P: 113
- Pan American University**
Texas, University of (University of Texas-Pan American in Edinburg) T: 210
- Pan American World Airways**
Aviation (The industry comes of age) A: 989
with picture
- Pan Americanism** [international relations]
Latin America (The movement to establish unity) L: 109
- Pan-Arabism** [political movement]
Arabs (Arab nationalism) A: 589
Iraq (The 1950's) I: 413
- Pan bread** [food]
Bread (Kinds of bread) B: 588
- Pan-Islamism** [political movement]
Muslims (Reform and renewal) M: 965
- Panama** [country] P: 115 *with pictures and maps*
Panama Canal P: 122 *with map*
Panama Canal Zone P: 127
Bush, George Herbert Walker (International affairs) B: 721
Columbus, Christopher (Further explorations)
Ci: 863
Flag picture on F: 201
Herrera, Tomás H: 214
Merchant marine M: 412
Noriega, Manuel Antonio N: 455
World War II (table: The Allies) W: 471
- Panama, Free State of** [Panamanian history]
Herrera, Tomás H: 214
- Panama, Isthmus of** [region, Central America]
Panama Canal P: 122 *with map*
Panama P: 115; (Land and climate) P: 118
- Panama-California Exposition** [1915-1916]
California (Progress as a state) C: 62
San Diego (History) S: 90b-91
- Panama Canal** [waterway] P: 122 *with pictures and maps*
Canal (The Panama and Suez canals) C: 163;
(table) C: 164
De Lesseps, Ferdinand Marie D: 115
Goethals, George Washington G: 246
Gorgas, William Crawford G: 274
Hay-Pauncefote Treaty H: 116
Latin America (Latin America and the United States) L: 109
North America (Transportation and communication) N: 469
Panama P: 115 *with picture*; (Economy)
P: 119; (History) P: 120
Roosevelt, Theodore (Foreign policy) R: 469
Torrijos Herrera, Omar T: 341
- Panama Canal Authority**
Panama Canal (Administration) P: 124-125
- Panama Canal Commission** [U.S.]

- Panama Canal (Administration and defense) P: 124
- Panama Canal Company**
Panama Canal Zone P: 127
- Panama Canal treaties** [1977]
Carter, Jimmy (Foreign affairs) C: 257-258
with picture
- Panama P: 115; (Relations with the United States) P: 121
- Panama Canal Zone** P: 127 with map
Latin America (Latin America and the United States) L: 109
Panama P: 115; (Progress as a nation) P: 121
Panama Canal P: 122; (The canal since 1920) P: 126-127
Taft, William Howard (Secretary of war) T: 10
United States, History of the (A world power) U: 183
- Panama City** [Panama] P: 128
Morgan, Sir Henry (Attack on Panama) M: 804
Panama (Way of life) P: 116; picture on P: 118
- Panama disease**
Banana (How bananas grow) B: 72-73
- Panama hat** [clothing]
Ecuador picture on E: 72
Panama (Clothing) P: 118
- Panama-Pacific International Exposition** [1915]
California (Progress as a state) C: 62
- Panama Railroad**
Panama Canal (The Panama Railroad) P: 125
- Panama Tolls Act** [1912]
Wilson, Woodrow (Foreign affairs) W: 323
- Panamanian Revolution** [1903]
Panama (Colombian rule) P: 120
Panama Canal (The United States and the canal) P: 125-126
- Panamint Mountains** [California]
Death Valley D: 62 with picture
- Panay** [island, Philippines]
Philippines (The main islands) P: 376-378 with map
- Panay** [ship]
Roosevelt, Franklin Delano (Attitude toward Japan) R: 459
- Panbroiling**
Cooking (Broiling and grilling) C: 1028
- Pancake** [food]
Food (Interesting facts about food) F: 329
- Pancake Day** [custom]
Mardi Gras M: 197
Shrove Tuesday S: 442
- Pancake Tuesday** See Pancake Day in this index
- Pancasila** [government]
Indonesia (Government) I: 226
- Panchama** See Untouchable in this index
- Panchatantra** [stories]
Fable F: 3
India (Literature) I: 120
- Panchayat** [government]
India (Village life) I: 114-115
- Panchen Lama** [Tibetan religious leader]
Tibet (Religion and culture) T: 277; (History and government) T: 277
- Panchromatic film**
Photography (Color sensitivity) P: 418
- Pancoast, Thomas J.** [American businessman]
Miami Beach M: 482
- Pancratium** [ancient sport]
Olympic Games (The ancient games) O: 750
- Pancreas** [anatomy] P: 128 with diagram
Cancer (table) C: 170
Diabetes (Causes) D: 179
Gland (table) G: 208
Hormone (Metabolic hormones) H: 335
Human body (The small intestine and large intestine) H: 420; diagram on H: 422
Insulin I: 308
Pancreatitis P: 128
- Pancreatic juice** [physiology]
Digestive system (In the small intestine) D: 203
- Pancreatitis** [disorder] P: 128
Triglyceride T: 442
- Panda** [animal] P: 129 with pictures
Animal picture on A: 475
Ecology (Energy flow) E: 54
Endangered species (table) E: 270
Evolution (Contributions from other scientific fields) E: 433
National park picture on N: 42g
- Pandalid** [shrimp]
Shrimp (The life of a shrimp) S: 441
- Pandanus**
Tree (Palm, pandanus, and lily trees) T: 415; picture on T: 427
- Pandavas** [literary figures]
Mahabharata M: 65
- Panday, Basdeo** [Trinidad political leader]
Trinidad and Tobago (History) T: 446
- Pandemic** [disease]
Disease (Spread of infectious diseases) D: 228
Epidemic E: 343
Plague (History of plague) P: 506
- Pandemos** [Greek mythology]
Aphrodite A: 565
- Pandit, Vijaya Lakshmi** [Indian political figure]
P: 130
- Pandora** [Greek mythology] P: 130
Hesiod H: 218
- Pandora's box** [Greek mythology]
Pandora P: 130
- Pandosto** [stories by Greene]
Greene, Robert G: 382
- Pane** [window]
Window W: 334
- Panel**
Cartoon (Kinds of cartoons) C: 263
- Panel truck**
Truck picture on T: 459
- Paneling** [building material]
Lumber (table) L: 518
- Panero, Leopoldo** [Spanish poet]
Spanish literature (The Generation of 1927) S: 763
- Panettone** [food]
Christmas (In Italy) C: 531
- Panfish** See Sunfish in this index
- Panfrying** See Sauté in this index
- Pangaea** [geology]
Earth (The shaping of the continents) E: 24; map on E: 31
Mediterranean Sea (Formation) M: 382
Plate tectonics (Plate movement) P: 563; (The drifting continents) map on P: 564
Prehistoric animal (The distribution of mammals) P: 741
- Pangborn, Clyde** [American aviator]
Airplane (Fliers of the golden age) A: 237
- Pangolin** [animal] P: 130 with pictures
Anteater A: 541
Mammal (table) M: 129 with picture
- Panhandle** [land region]
Alaska (Land regions) A: 292
Florida F: 242
Idaho (Land regions) I: 36
Jefferson, State of J: 75
Oklahoma (Land regions) O: 724-726 with picture; (The great land rushes) O: 732
Texas (Land regions) T: 196; (Mining) T: 201-202
West Virginia (Land regions) W: 218
- Panhard et Levasor**
Automobile (The gasoline car) A: 963 with picture
- Panhellenic Socialist Movement** [political party]
Greece (Politics) G: 353; (The restoration of democracy) G: 365
- Panic attack**
Panic disorder P: 130
- Panic disorder** P: 130
Fatigue F: 54
Mental illness (Anxiety disorders) M: 405
- Panic of 1837** [U.S. history]
United States, History of the (Politics after Jackson) U: 170-171
Van Buren, Martin (The Panic of 1837) V: 272
Wildcat bank W: 301
- Panic of 1873** [U.S. history]
Black Friday B: 387
Grant, Ulysses S. (The Panic of 1873) G: 317
Greenback Party G: 381
- Panic of 1893** [U.S. history]
Cleveland, Grover (Saving the gold standard) C: 673
- Panicle** [botany]
Inflorescence I: 268b with picture
Rice (Structure) R: 323
- Panini** [Indian grammarian]
Sanskrit literature (The Classical period) S: 112
- Panipat, Battles of** [1526, 1556]
India (The Mughal Empire) I: 129
- Pankhurst, Emmeline Goulden** [British social reformer] P: 131
- Pankration** [sports]
Olympic Games (The ancient games) O: 750
- Panleukopenia** [disease]
Cat (Veterinary care) C: 295
Distemper D: 238
- Panmunjom** [Korea] P: 131
Korean War (The truce talks) K: 382
- Panned candy**
Candy (Other candies) C: 176
- Panning**
Gold (Mining) G: 252
Mining (Surface mining methods) M: 574-575
- Pannonian Plains** [region, Europe]
Croatia (Land and climate) C: 1148a
Serbia (Land and climate) S: 314
Yugoslavia (Land and climate) Y: 578
- Panoramic format**
Photography (Film) P: 417-418
- Panpipes** [musical instrument]
Indian, American picture on I: 175
Pan P: 113
- Panspermia, Theory of**
Life (Modern theories) L: 278
- Pansy** [plant] P: 131
Flower (Garden annuals) F: 276 with picture
Violet V: 388
- Pantagruel** [book by Rabelais]
Rabelais, François R: 49
- Pantaloon**
Drama (Commedia dell' arte) D: 331 with picture
Pantomime P: 132
- Pantaloon Seranading His Mistrass** [painting]
Drama picture on D: 330
- Pantanal** [region]
Brazil (The Central and Southern Plateaus) B: 580
- Pantanal National Park** [Brazil]
National park (table) N: 42g
- Panthalassa** [geology]
Earth (The shaping of the continents) E: 24
Plate tectonics (The overall pattern) P: 563
- Pantheism** [religion] P: 131
Theism T: 251
- Panthéon** [Paris]
Architecture (Neoclassical architecture) A: 623-624
Paris (Famous buildings) P: 163-164
- Pantheon** [Rome] P: 131
Architecture picture on A: 616
Rome (Other remains) R: 433 with picture
- Panther** [wild cat] P: 131
Leopard L: 202
Mountain lion M: 898
- Panthera** [zoology]
Animal (The scientific classification of animals) A: 472-473
- Panthers, Carolina**
Football (National Football League) F: 364
- Panthers, Florida**
Hockey (table: National Hockey League) H: 281
- Pantin doll**
Doll (The 1600's and 1700's) D: 288-289
- Panting** [respiration]
Dog (Why dogs do the things they do) D: 263 with picture
Perspiration P: 305
- Pantograph** [instrument] P: 131
- Pantograph** [railroad]
Electric railroad (Kinds of electric railroads) E: 188; picture on E: 187
Locomotive (Electric locomotives) L: 416
- Pantomime** [drama] P: 131 with picture
Drama (Minor forms) D: 328; (England) D: 334-335
Marceau, Marcel M: 193
- Pantothenic acid** [vitamin]
Nutrition (Vitamins) N: 626
Vitamin (Vitamin B complex) V: 430-431
- Pantothere** [extinct animal]
Mammal (The first mammals) M: 126-127
- Pants** [clothing]
Jeans J: 75
- Panza, Sancho** [literary figure]
Don Quixote D: 306
- Paoli, Giovanni** [Italian printer]
Printing (Early printing in North America) P: 803
- Paoli, Pasquale** [Corsican patriot]
Boswell, James B: 506
Napoleon I (Early military career) N: 15
- Paoli Massacre** [1777]
Pennsylvania (The Revolutionary War) P: 265
- Pap test** [medicine] P: 132
Cancer (Cancer checkups) C: 171
Cervical cancer C: 364

- Papa** [legendary figure]
Mythology (Creation myths) M: 982
- Papa Biedermeier** [literary figure]
Biedermeier B: 295
- Papacy** See Pope in this index
- Papadopoulos, George** [Greek political leader]
Greece (The revolt of 1967) G: 364; (The restoration of democracy) G: 365
- Papago Indians** [American Indians] See Tohono O'odham Indians in this index
- Papagos, Alexander** [Greek political leader]
Greece (The 1950's) G: 364
- Papain** [enzyme]
Papaya P: 133
- Papal infallibility** [religion]
Acton, Lord A: 31
Pope (The powers of the pope) P: 660
Roman Catholic Church (Vatican Council I) R: 410
Vatican Council I V: 289
- Papal Palace**
Avignon A: 993 with picture
- Papal Schism** See Great Schism in this index
- Papal States** [Italian history] P: 132 with map
Ghetto (Early ghettos) G: 181
Italy (The Middle Ages) I: 513 with map
Rome (Early days) R: 434; (Under Napoleon) R: 434
Vatican City (History) V: 288-289
- Papan, Louis** [European settler]
Topeka T: 332
- Papandreou, Andreas** [Greek political leader]
Greece (The restoration of democracy) G: 365
- Papandreou, George** [Greek political leader]
Greece (The revolt of 1967) G: 364
- Papanicolaou, George** [American doctor]
Pap test P: 132
- Papanicolaou Smear Test** [medicine] See Pap test in this index
- Papaw** [tree]
Pawpaw P: 204
- Papaya** [fruit] P: 133 with picture
Pawpaw P: 204
- Papeete** [Tahiti]
Society Islands So: 563
Tahiti T: 13
- Papen, Franz von** [German political leader]
P: 133
- Paper** P: 134 with pictures
Alabama (Manufacturing) A: 272 with picture
Cardboard C: 209
Forest products (Paper and paperboard) F: 401
Hornbook H: 339
Invention (China) I: 359
Library (Paper, printing, and libraries) L: 260
Lignin L: 302
Maine (Manufacturing) M: 85 with picture
Manuscript (Paper manuscripts) M: 173
Money (Printing paper money) M: 714
New Brunswick (Manufacturing) N: 194 with picture
Painting (Supports) P: 36; (Water-color painting) P: 39
Papyrus P: 141
Parchment P: 155
Plastics (To replace paper) P: 555
Wasp (Nests) W: 111
Watermark W: 145
Wisconsin picture on W: 362
World, History of the (The unification of China) W: 431
- Paper, Allied-Industrial, Chemical and Energy Workers International Union**
Labor movement (table) L: 8
- Paper bag** P: 138
Paper (Special kinds of paper) P: 136
- Paper birch** [tree]
Birch (Paper birch) B: 327 with pictures
Leaf picture on L: 153
Tree pictures on T: 420
- Paper blockade** [warfare]
Blockade (Paper blockade) B: 406
- Paper folding** See Origami in this index
- Paper gold** [economics]
Special Drawing Rights So: 770
- Paper money**
Money M: 705 with pictures; (The development of paper money) M: 706 with pictures; (United States currency today) M: 709-712; (Printing paper money) M: 714 with pictures
Engraving and Printing, Bureau of E: 327
Greenback G: 381
- Paper nautilus** [sea animal] See Argonaut in this index
- Paper wasp**
Insect pictures on I: 283
- Paper weaving**
Weaving (Weaving without a loom) W: 174
- Paper Wheat** [drama]
Canadian literature (Modern Canadian drama) C: 161
- Paperback book**
Book (Inside a book) B: 464; (The 1800's) B: 467-468 with picture; (Modern books) B: 468
Publishing (Designing and printing) P: 869
- Paperbark** [tree]
Invasive species (How invasive species affect habitats) I: 354j-354k
- Paperboard**
Cardboard C: 209
- Paperless design** [engineering]
Computer (Computer-aided design [CAD] programs) Ci: 919
- Paperwhite narcissus** [plant]
Narcissus N: 20
- Paperwork** [decorative art] P: 138
Origami O: 855 with picture
- Papiamento** [language]
Netherlands Antilles N: 151
West Indies (Languages) W: 201
- Papier-mâché** [art]
Papier-Mâché P: 138 with pictures
Doll (The 1800's) D: 289 with picture
- Papilionoideae** [botany]
Legume L: 185
- Papilla** [anatomy]
Cat (Head) C: 286; picture on C: 285
Frog (Skin) F: 536
Hair (The root and shaft) H: 9 with diagram
Skin (Dermis) S: 489
Taste T: 50 with diagrams
Tongue T: 330
- Papilloma virus**
Cancer (Viruses) C: 171
- Papillon** [dog] P: 138 with picture
- Papin, Denis** [French physicist]
Pump (History) P: 900
- Papineau, Louis Joseph** [Canadian political leader] P: 139
Canada, History of (The uprisings of 1837) C: 146
Rebellions of 1837 R: 173
- Paprika** [seasoning] P: 139
Hungary (Food and drink) H: 441
- Papua, Territory of** [former territory]
Papua New Guinea (History) P: 141
- Papua New Guinea** P: 139 with picture and map
Flag picture on F: 204
Indonesia (Indonesia under Suharto) I: 238-239
New Guinea (Political units) N: 206 with pictures and map
Pacific Islands (Recent developments) P: 12-13
Sculpture (Pacific Islands sculpture) S: 241-242 with picture
Shelter picture on S: 394
- Papuans** [people]
Indonesia (Irian Jaya) I: 234
- Papyrus** [plant] P: 141 with picture
Book (Early books) B: 465
Egypt, Ancient (Education) E: 136-137
Hieroglyphics (Development of hieroglyphic writing) H: 225-226
Library (Ancient libraries of papyrus) L: 258
Manuscript (Papyrus manuscripts) M: 172; (Illustrated manuscripts) M: 174
Mythology picture on M: 977
Paper (History) P: 136
Parchment (History) P: 155
- Paquin, Anna** [New Zealand actress]
Motion picture (Best performance by an actress in a supporting role: 1993) M: 863
- Par**
Golf (The course) G: 260
- Par value** [economics]
Investment (table) I: 366
Stock, Capital (Kinds of stock) So: 903
- Para-aminobenzoic acid**
Sulfa drug (How sulfa drugs work) So: 965
- Para nut** [nut]
Brazil nut B: 587 with picture
- Parable** [literature] P: 141
- Parabola** [geometry] P: 141 with diagram
Calculus (Finding areas) C: 24 with diagram
- Mathematics (Branches of mathematics) M: 303
Orbit O: 819 with diagram
- Parabolic dish system**
Solar energy (Parabolic dish systems) So: 579
- Parabolic mirror** [optics]
Telescope (Reflecting telescopes) T: 104
- Parabolic reflector** [electronics] See Dish [engineering] in this index
- Parabolic trough system**
Solar energy (Parabolic trough system) So: 578
- Paracas** [ancient city]
Necropolis N: 117
- Paracelsus, Philippus Aureolus** [Swiss doctor] P: 142
Alchemy A: 334
Gnome G: 238
Magic (From the 1500's to the 1700's) M: 50
Medicine (The Renaissance) M: 373-374
- Parachute** P: 142 with pictures
Air diagram on A: 169
Airborne troops A: 201 with picture
Missouri (Interesting facts) M: 651 with picture
Skydiving S: 496
Space exploration (Returning to the earth) So: 701
- Parachuta flare**
Fireworks (Other uses of fireworks) F: 135
- Parachute top** [balloon part]
Balloon (Hot-air balloons) B: 57
- Parade** P: 143
Circus (At the circus) Ci: 562 with picture; (The Greatest Show on Earth) Ci: 563 with picture
Flag (Carrying the flag) F: 219
- Parade** [ballet]
Picasso, Pablo (Picasso as a designer) P: 448b
- Parade** [music by Satie]
Satie, Erik S: 150h
- Parade's End** [books by Ford]
English literature (Fiction between the wars) E: 322
Ford, Ford Madox F: 371
- Paradise** [religion] P: 143
Divine Comedy D: 242
- Paradisa Lost** [poem by Milton]
Angel A: 460
Beelzebub B: 211
Doré, Gustave D: 310
English literature (John Milton) E: 318
Milton, John M: 557
- Paradise Regained** [poem by Milton]
Milton, John M: 557
- Paradise tree snake**
Snake picture on S: 534
- Paradise Valley** [region, Washington]
Mount Rainier M: 887
- Paradiso**
Divine Comedy D: 242
- Paraffin** [chemistry]
Hydrocarbon (Aliphatic hydrocarbons) H: 465
- Paraffin** [wax] P: 143
Candle C: 175
Wax (Mineral wax) W: 153
- Paraffin oil**
Mineral oil M: 572
- Parafoil**
Kite (The flexible kite) K: 340 with picture
- Paragneiss** [rock]
Gneiss G: 238
- Paragraph** [grammar] P: 143
- Paraguay** P: 144 with pictures and maps
Flag picture on F: 201
Latin America (Border disputes) L: 108
World War II (table: The Allies) W: 471
See also the Related articles in the Paraguay article
- Paraguay River** [Brazil-Paraguay] P: 150
Exploration (Spain's conquests in the New World) E: 445
Paraguay (The land and climate) P: 147
Paraná River P: 153
- Paraguay tea** See Maté in this index
- Paraguan War** See Triple Alliance, War of the in this index
- Parakeet** [bird] P: 150 with pictures
Bird (As pets) B: 331 with picture
Parrot P: 179
Pet (Pets for the home) P: 319-320; (Tricks) P: 321; picture on P: 321
- Parakramabahu VI** [Ceylonese king]
Sri Jayewardenepura Kotte So: 817

Paralegal work [career]

Careers (Law) C: 225

Law (The practice of law) L: 139

Parallax [measurement] P: 151 *with diagram*Astronomy (Units of distance) A: 837; *picture on A: 844*

Bessel, Friedrich Wilhelm B: 273

Photography (Direct vision cameras) P: 417

Range finder R: 139

Parallel [geography]

Latitude L: 116

Map (Geographic grids) M: 178; *diagram on M: 180***Parallel** [mathematics]

Geometry (Non-Euclidean geometry) G: 103

Parallel axiom [geometry]

Axiom A: 994

Geometry (Euclidean geometry) G: 103-104

Parallel bars

Gymnastics (Men's events) G: 448-449;

(Women's events) G: 449 *with picture***Parallel circuit**Electric circuit (Parallel circuits) E: 167 *with diagram*

Electricity (Series and parallel circuits) E: 194

Parallel computer

Computer (Mainframes and supercomputers) C: 910

Parallel Lives of Illustrious Greeks and Romans *See* Plutarch's *Lives in this index***Parallel motion linkage** [mechanics]

Watt, James W: 148

Parallel slalom [race]

Skiing (Alpine competitions) S: 486-487

Parallel turn

Skiing (Alpine skiing) S: 482

Parallelism [poetry]

Whitman, Walt (His work) W: 294

Parallels Between the Ancients and the Moderns [book by Perrault]

Perrault, Charles P: 293

Paralysis [disorder] P: 152

Disabled D: 218

Narcolepsy N: 20

Palsy P: 112

Poliomyelitis (Kinds of poliomyelitis) P: 626

Spastic paralysis So: 767

Paramagnetism [physics]

Magnetism (Magnetism in atoms) M: 60b

Paramaribo [city, Suriname] P: 152Suriname So: 1008 *with picture and map***Paramecium** [microorganism] P: 152 *with picture*Heredity *picture on H: 200*

Protozoan (Structure) P: 837

Reproduction *picture on R: 243***Paramedic** P: 153 *with picture*Ambulance A: 406 *with picture*Careers (Health care) C: 223-225 *with picture*

Emergency Medical Services E: 258

Fire department (Emergency medical operations) F: 124 *with picture*

Medicine (Other careers in medicine) M: 371

Radio *picture on R: 85***Paramount** [company]

Motion picture (Movies become big business) M: 866

Paraná [city, Argentina] P: 153**Paraná pine** [tree]

Brazil (Forestry) B: 581

Paraná River [South America] P: 153

Brazil (The Central and Southern Plateaus)

B: 580; (Energy sources) B: 581; *picture on B: 583*

Exploration (Spain's conquests in the New World) E: 445

Paraguay (The land and climate) P: 147

Paraguay River P: 150

Paranasal sinuses [anatomy]

Sinus S: 473

Paranoia

Mental illness (Schizophrenia) M: 405;

(Personality disorders) M: 406

Paranormal powers

Occultism O: 647

Parapithecoid [animal]

Primate (The evolution of primates) P: 778b

Paraplegia [disorder]

Paralysis (Paralysis of central nervous system origin) P: 152

Paraprofessional

Teaching (Certification of teachers) T: 68

Parapsychology P: 153

Extrasensory perception E: 458

Psychical research P: 846

Telepathy T: 93

Parasaurolophus [dinosaur]

Dinosaur (True dinosaurs) D: 206b-208

Parasite [biology] P: 153 *with pictures*

Balance of nature (Disease and parasites)

B: 35

Cat (Veterinary care) C: 295

Cattle (Diseases) C: 312-314

Flatworm F: 229 *with diagram*

Food poisoning F: 340

Fungal disease F: 558

Fungi (How a fungus lives) F: 559 *with picture*

Gall G: 13

Insect (Beneficial insects) I: 284

Life (The biological environment) L: 275-276

Mushroom (How a mushroom obtains food)

M: 942

Plant (Photosynthesis) P: 538 *with pictures;*

(Diseases) P: 543

Symbiosis So: 1065

*See also the list of Related articles in the**Parasite article***Parasitic jaeger** [bird]Bird (Birds of the Arctic) B: 343 *with picture***Paraskenia** [theater]

Drama (Greek drama) D: 326

Parasol

Umbrella U: 18

Parasol ant [insect]Animal *picture on A: 480*

Ant (Fungus growers) A: 527-528

Parasol mushroom [fungus]

Mushroom (Nonpoisonous mushrooms)

M: 943 *with picture***Parasympathetic nervous system** [anatomy]Nervous system (The autonomic nervous system) N: 133 *with diagram***Parathion**

Insecticide (Organic insecticides) I: 302

Parathormone [hormone]

Gland (Endocrine glands) G: 207-208

Hormone (Blood composition hormones)

H: 336

Parathyroid gland P: 155

Parathyroid gland [anatomy] P: 155

Gland (Endocrine glands) G: 207-208

Paratroops [military]Air force *picture on A: 183*

Airborne troops A: 201

Army (Armies in the two world wars) A: 728

Parachute (Uses of parachutes) P: 142

Paratyphoid fever [disease]

Typhoid fever (Paratyphoid fever) T: 539

Parboiling [cooking]

Rice (Food) R: 323

Parcae [Roman mythology]

Fates F: 54

Parcel delivery truck

Truck (Kinds of trucks) T: 457

Parcel post [mail] P: 155

Postal Service, United States (Package services) P: 699

Parcheesi [game]

Game (Board games) G: 21

Parchment P: 155

Book (Early books) B: 465

Library (Ancient libraries of animal skins)

L: 259

Manuscript (Parchment manuscripts) M: 172

Pardee, George C. [American political leader]

California (table) C: 59

Pardo Bazán, Emilia [Spanish author]

Spanish literature (The 1800's) So: 761-762

Pardon [law] P: 155

Amnesty A: 437

Para

Cooking (table) Ci: 1029

Paré, Ambroise [French surgeon] P: 156Medicine (The Renaissance) M: 373-374; *picture on M: 373*

Surgery (History) So: 1007

Paragoric [medication]

Opium (Medical uses) O: 811

Parenchyma [botany]

Potato (The potato plant) P: 712

Stem (Herbaceous stems) So: 887

Tissue (Plant tissues) T: 299

Parenchyma [zoology]Flatworm F: 229 *with pictures***Parent** [family] P: 156

Adolescent (Independence and responsibility)

A: 62; (Family relationships) A: 62

Adoption A: 66

Child C: 448 *with picture*; (The role of parents)C: 452 *with picture*

Child abuse C: 454

Family (Varieties of families) F: 20; (Family

relationships) F: 21

Guardian G: 411

Home schooling H: 301

Parent education P: 156

Planned Parenthood Federation of America

P: 515

Reading (Learning in the home) R: 160

Parent, S.-Napoléon [Canadian political leader]

Quebec (table) Q: 29

Parent advisory committee

Parent-teacher organizations (Local parent

advisory committees) P: 158

Parent-cooperative school

Nursery school N: 615

Parent education P: 156**Parent language**

Language (Language families) L: 64

Parent material

Soil (How soil is formed) So: 573

Parent-Teacher Association *See* PTA *in this index***Parent-teacher organizations** P: 157**Parent-Teacher-Student Association**

Parent-teacher organizations (Parent-Teacher-

Student Associations) P: 158

Parental control software [computing]

Internet (Concerns about material) I: 350d-

350e

Parental leave

Women's movements (Legal gains) W: 386-

387; (On attitudes and values) W: 388

Parenthesis [grammar]

Punctuation (Parentheses) P: 902

Parents and Teachers, National Congress of*See* National Congress of Parents andTeachers *in this index***Parents Without Partners** [organization] P: 158**Parerga and Paralipomena** [essays by

Schopenhauer]

Schopenhauer, Arthur S: 186

Pareto, Vilfredo [Italian economist] P: 159**Paretsky, Sara** [American author] P: 159**Parfleche**Indian, American *picture on I: 161***Parham, Charles Fox** [American religious

leader]

Pentecostal churches (Major Pentecostal

churches) P: 275

Parian Marble [ancient Greece]

Thespis T: 257

Paricutin [volcano, Mexico] P: 159 *with picture*Volcano (Cinder cones) V: 440 *with picture;*(table) V: 441 *with map***Parietal bones** [anatomy]Head *diagram on H: 123*Human body *diagram on H: 422*

Skull S: 495

Parietal lobe [anatomy]Brain (The cerebrum) B: 550b *with diagram***Parietal pleura** [anatomy]

Pleura P: 573

Parigi, Alfonso [Italian designer]Opera *picture on O: 797***Pari-mutuel betting**

Gambling (Sports betting) G: 20-21

Harness racing (Betting) H: 64

Horse racing (Betting) H: 365

Parini, Giuseppe [Italian poet]

Italian literature (The baroque period and the

Age of Reason) I: 494-495

Paris [France] P: 160 *with pictures and maps*

Ballet (History) B: 50-51

City (The people) Ci: 582; (Description) Ci: 589

City planning (The Renaissance) Ci: 602

France *pictures on F: 452, F: 461, F: 468,**F: 474, F: 476*July Revolution *picture on J: 190*

Marx, Karl (Marriage and move to Paris)

M: 236

Painting (Rococo painting) P: 65; (The 1800's)

P: 67

Paris [legendary figure] P: 159

Helen of Troy H: 168

Iliad I: 51

Menelaus M: 400

Mythology (Greek heroes) M: 979-980

Trojan War (The beginning of the war) T: 449

Troy (The legendary Troy) T: 454

Paris [literary figure]Shakespeare, William (*Romeo and Juliet*)

S: 358

- Paris, Congress of** [1856]
Congress C: 941
- Paris, Declaration of** [1856]
Blockade B: 406
- Peris, Pact of** See Kellogg-Briand Pact *in this index*
- Paris, Treaty of** [1763]
French and Indian wars (The French and Indian War) F: 512-513
Maine (French and Indian wars) M: 89
Montreal (British settlement) M: 777
New York (Under English rule) N: 314-315
Newfoundland and Labrador (War with France) N: 375
Prince Edward Island (Exploration and early history) P: 791
Quebec (Early years as a province) Q: 30; (The 1700's) Q: 36
Quebec, Battle of Q: 37; (The attack on Quebec) Q: 37-38
Seven Years' War (In Europe) S: 328
Toronto (Early settlement) T: 340-340a
United States, History of the (The French and Indian War) U: 156
Wisconsin (Struggle for control) W: 366
- Paris, Treaty of** [1783]
Franklin, Benjamin (Serving in France) F: 490-491
Gálvez, Bernardo de G: 18
Jay, John J: 67
Jefferson, Thomas (Congressman) J: 80
Mississippi (Exploration and early settlement) M: 641
Revolutionary War in America (The Treaty of Paris) R: 285
Spain (Conflict with United Kingdom) So: 748
United States, History of the (Forming a new nation) U: 160 *with map*
Wisconsin (Struggle for control) W: 366
- Paris, Treaty of** [1856]
Privateer P: 808b
- Paris, Treaty of** [1898]
Cuba (Struggle against Spain) Ci: 1176
Puerto Rico (United States rule) P: 883
Spanish-American War (Results of the war) So: 754
United States, History of the (The Spanish-American War) U: 183
- Paris, Treaty of** [1951]
European Union (History) E: 420
- Paris, University of** P: 167
Paris (Schools and libraries) P: 165
Education (The rise of the universities) E: 99 *with picture*
Sorbonne So: 596
Universities and colleges (European universities) U: 210
- Paris and Helen** [opera by Gluck]
Gluck, Christoph Willibald G: 235
- Paris Basin**
France (The land) F: 464
Gypsum G: 452
Paris (The city) P: 161
- Paris for a New Europe, Charter of** [1990]
Europe (Toward European unity) E: 415-416
- Paris of America** [nickname]
New Orleans (The *Paris of America*) N: 284
- Paris Opéra**
Ballet (The rise of professional ballet) B: 51
- Paris Peace Conference** [1919]
Foch, Ferdinand F: 313
Fourteen Points F: 438
Lloyd George, David (Prime minister) L: 403
United States, History of the (The peace conference and treaty) U: 185
World War I (The peace settlement) W: 465
World War II (The Peace of Paris) W: 468
- Paris Peace Talks**
Nixon, Richard Milhous (Foreign policy) N: 432-433
Vietnam War (The Tet offensive) V: 375-376
- Paris Spleen** [poems by Baudelaire]
Baudelaire, Charles B: 173
- Paris Zoo** [France]
Zoo (The first modern zoos) Z: 608
- Parish** [political unit]
Colonial life in America (Local government) Ci: 794
County Ci: 1099
Roman Catholic Church (Pastor and parish) R: 405
- Parisian chanson** [music]
Classical music (Music in other countries) Ci: 646
- Parisii** [ancient people]
Paris (Early years) P: 166
- Parison**
Plastics (Making plastic products) P: 557
- Perity** [economics] P: 167
- Parity** [physics] P: 167
Wu, Chien-shiung W: 514
- Perizeau, Jacques** [Canadian political leader]
Quebec (Recent developments) Q: 32-33
- Park P: 168** *with pictures*
National park N: 42a
National Park System N: 43 *with pictures*
Playground P: 571 *with picture*
State government (Recreation) So: 864
- Park, Guy B.** [American political leader]
Missouri (table) M: 668
- Park, J. K.** [American inventor]
Envelope E: 328
- Park, Linda Sue** [American author]
Newbery Medal (table) N: 359
- Park, Maud Wood** [American social reformer]
Woman suffrage (Growth of the movement) W: 380-381
- Park, Mungo** [Scottish explorer] P: 169
Exploration (The exploration of Africa) E: 448 *with map*
Niger River N: 409
- Park, National**
National Park System N: 43 *with pictures*
Park (Kinds of parks) P: 168
- Park, Provincial**
Park (Kinds of parks) P: 168
- Park, Robert E.** [American sociologist]
Collective behavior Ci: 774
- Park, State**
Park (Kinds of parks) P: 168 *with picture*
- Park Center Plaza**
San Jose (History) S: 101-102
- Park Chung Hee** [Korean political leader] P: 169
Korea (South Korea) K: 377
Seoul (History) S: 307
- Park, Parkway, and Recreation Area Study Act** [1936]
National Park System (History) N: 58
- Park Range**
Colorado (Land regions) Ci: 838 *with map*
- Park trailer** [vehicle]
Recreational vehicle (Park trailers) R: 184
- Parka** [clothing]
Indian, American (Peoples of the Arctic) I: 152-153
Inuit (Clothing) I: 354b
- Parkchester**
New York City (The Bronx) N: 328-329
- Perke County**
Indiana (Places to visit) I: 206
- Parker, Alton Brooks** [American political leader] P: 169
- Parker, B.** [Australian author]
Literature for children *picture on L*: 354
- Parker, Charlie** [American saxophonist] P: 169
Davis, Miles D: 49
Hines, Earl H: 238
Jazz (Bebop) J: 72 *with picture*
- Parker, Claire** [American artist]
Animation (Animation in Europe) A: 514
- Parker, Dorothy** [American author] P: 169
- Parker, Ely Samuel** [American government official] P: 170
- Parker, Francis Wayland** [American educator] P: 170
Education (Development of U.S. education) E: 102-104
Progressive education (Progressive educators) P: 812
- Parker, Sir Hyde** [British admiral]
Nelson, Horatio (Battle of Copenhagen) N: 122
- Parker, Isaac C.** [American jurist]
Arkansas (Interesting facts about Arkansas) A: 695
- Parker, Joel** [American political leader]
New Jersey (table) N: 249
- Parker, John M.** [American political leader]
Louisiana (table) L: 496
- Parker, N.** [Australian illustrator]
Literature for children *picture on L*: 354
- Parker, Quannah** [American Indian chief]
Quannah Q: 5
- Parker, Robert B.** [American author] P: 170
- Parker, Samuel** [American inventor]
Leather (History) L: 169
- Parker, Theodore** [American religious leader] P: 170
- Parker, Tom** [American businessman]
Presley, Elvis P: 772
- Parkes process**
Silver (Extracting and refining silver) S: 465
- Perkhurst, Frederic H.** [American political leader]
Maine (table) M: 87
- Parking**
Airport (Ground transportation and parking) A: 245
Traffic (Traffic problems) T: 366-367
- Parking brake**
Brake (Mechanical brakes) B: 560
- Parking meter**
Traffic (Parking meters) T: 367
- Parkinson, C. Northcote** [British historian]
Parkinson's law P: 171
- Parkinson, James** [British doctor]
Parkinson disease P: 170
- Parkinson disease** P: 170
Brain (Other brain disorders) B: 558
Dopamine D: 309
Palsy P: 112
- Parkinsonism** [disease]
Parkinson disease (Causes) P: 170-171
- Parkinson's disease** See Parkinson disease *in this index*
- Parkinson's law** [economics] P: 171
- Parkinson's Law and Other Studies in Administration** [book by Parkinson]
Parkinson's law P: 171
- Parkland**
National Park System N: 43
- Parklands** [region, Alberta]
Alberta (Land regions) A: 322
- Parkman, Francis** [American historian] P: 171
- Parks, Gordon** [American artist]
Spingarn Medal (table: 1972) So: 793
- Parks, Rosa Louise** [American civil rights activist] P: 171 *with portrait*
African Americans (The civil rights movement) A: 136m *with picture*
King, Martin Luther, Jr. (The early civil rights movement) K: 321
- Parks, William** [American printer]
Virginia (Communication) V: 416
- Parkway**
Road (Primary highways) R: 358
- Parliament** [Australia]
Australia (The federal government) A: 895
- Parliament** [Canada]
Canada, Government of (The Parliament) C: 132; (The prime minister) C: 132; *picture on C*: 130
Prime minister of Canada P: 778c
Senate (Senates in other countries) S: 296
- Parliament** [lawmaking body] P: 172 *with pictures*
See also specific *Parliaments*, such as Parliament (United Kingdom) *in this index*
President (Types of presidential government) P: 756b
- Parliament** [Russia]
Russia (National government) R: 531 *with picture*
- Parliament** [United Kingdom]
Democracy (Democracy in England) D: 123
England (Government) E: 292-293; (The beginnings of Parliament) E: 306
Government (Modern times) G: 290
Grattan, Henry G: 330
House of Commons H: 384
House of Lords H: 384
Industrial Revolution (The working class) I: 251-252
Nobility (Privileges of the peerage) N: 450
Northern Ireland (Government) N: 521
Parliament (The British Parliament) P: 172
Rump Parliament R: 519
United Kingdom (Government) U: 49 *with picture*; (The era of reform) U: 68
- Parliament, Houses of** [London]
London (The Houses of Parliament) L: 435; *picture on L*: 431
- Parliament, Palace of** [Bucharest]
Bucharest B: 662
- Parliament Buildings** [Ottawa]
Ontario (Places to visit) O: 774
Ottawa O: 871 *with picture*; (The Parliament buildings) O: 872
- Parliament Buildings** [Victoria]
British Columbia *picture on B*: 614
- Parliament House** [New Delhi]
India *picture on I*: 111

Parliament of Fowls, The [poem by Chaucer]

Chaucer, Geoffrey (Poetry) C: 388

Parliamentarian [office]

Parliamentary procedure (Officers) P: 175

Parliamentary Act [1911]

Asquith, Herbert Henry A: 816

Parliament (The decline of the House of Lords) P: 174

Parliamentary Act [1949]

Parliament (The decline of the House of Lords) P: 174

Parliamentary procedure P: 175

Parliamentary system [government]

Cabinet (The cabinet system of government) C: 4

Election (Elections in a democracy) E: 158

Government (Parliamentary government) G: 288

Political party (Organizing the government) P: 632

Parlor organ [musical instrument]

Harmonium H: 62

Parma [Italy] P: 177

Parma, University of [Italy]

Parma P: 177

Parmenides [Greek philosopher] P: 177

Pre-Socratic philosophy (The teachings of Parmenides) P: 772

Parmenides [book by Plato]

Plato (The dialogues) P: 567

Parmesan [cheese]

Cheese (Very hard, or grating, cheese) C: 392

with picture

Parnaíba River [Brazil]

Brazil (The Northeast Region) B: 579-580 with map

Parnassian [insect]

Butterfly (Swallowtails) B: 736 with picture

Parnassus [mountain, Greece] P: 177

Deucalion D: 172

Parnell, Charles Stewart [Irish political leader]

P: 177 with portrait

Parnell, Harvey [American political leader]

Arkansas (table) A: 712

Caraway, Hattie Ophelia Wyatt C: 203

Parochial school P: 177

Education (Control and support of U.S. education) E: 91

Elementary school (Kinds of elementary schools) E: 224

Montreal (Education) M: 772

Parent-teacher organizations (Home and School Associations) P: 158

Private school P: 808a

Religious education (Private education) R: 225

School (Private school operation) S: 183;

(Financial support) S: 183

Parody [humor] P: 178

Humor (The types of humor) H: 435-436

Parole [law] P: 178

Sentence S: 304

Paroles [poems by Prévert]

Prévert, Jacques P: 774

Paromomycin [drug]

Antibiotic (Other kinds of antibiotics) A: 550

Paroquet See Parakeet in this index

Parotid gland [anatomy]

Mumps M: 926

Saliva S: 68 with diagram

Parotitis See Mumps in this index

Parotoid gland [gland]

Cane toad C: 177

Toad T: 303

Paroxysmal atrial tachycardia [disorder]

Tachycardia T: 4

Parquet floor

Flooring F: 239

Parr, Catherine [wife of]

Henry VIII [of England] H: 188

Parrain [European history]

Knights and knighthood (Knighting) K: 348

Parakeet See Parakeet in this index

Parrant, Pierre [American settler]

Saint Paul (History) S: 52

Parrillada criollo

Uruguay (Food and drink) U: 225

Parris, Albion K. [American political leader]

Maine (table) M: 87

Parris, Alexander [American government official]

Parris Island Marine Corps Recruit Depot P: 178

Parris, Samuel [American religious leader]

Salem witchcraft trials S: 61

Parris Island Marine Corps Recruit Depot

[South Carolina] P: 178

Parrish, Maxfield [American artist] P: 179

Pied Piper of Hamelin picture on P: 453

Pyle, Howard P: 915

Parrot [bird] P: 179 with pictures

Animal picture on A: 507

Bird (As pets) B: 331 with picture

Endangered species (table) E: 270

Macaw M: 5

Parrot fever See Psittacosis in this index

Parrot fish See Parrotfish in this index

Parrotfish P: 181 with picture

Parrs Ridge

Maryland (Land regions) M: 250

Parry

Boxing picture on B: 529

Fencing (The foil) F: 70 with picture

Parry, Milman [American scholar]

Homer (The Homeric question today) H: 303

Parry, Sir William Edward [British explorer]

P: 181 with portrait

Exploration (Arctic exploration) E: 449

Melville Island M: 391

Ross, Sir James Clark R: 483

Parsec [unit of measure]

Astronomy (Units of distance) A: 837

Parsis [religious group]

Funeral customs (The funeral) F: 557-558

India (Other religions) I: 117

Zoroastrianism (History) Z: 611-612

Parsley [plant] P: 181 with picture

Flower F: 301 with picture

Parsnip [plant] P: 182 with picture

Parson Capen House [Massachusetts]

Architecture picture on A: 624

Parson Jack Russell terrier [dog] See Jack

Russell terrier in this index

Parson Weems [American author]

Weems, Mason Locke W: 180

Parsons, Andrew [American political leader]

Michigan (table) M: 507

Parsons, Benny [American race driver]

Automobile racing (table: NASCAR Winston

Cup champions, 1973) A: 981

Parsons, Charles A. [British inventor]

Invention (The Industrial Revolution) I: 361

Ship (Increasing power and speed) S: 413

Turbine (History) T: 498-499

Parsons, Elsie Clews [American anthropologist]

P: 182

Parsons, Estelle [American actress]

Motion picture (Best performance by an

actress in a supporting role: 1967) M: 863

Parsons, Johnny [American race driver]

Automobile racing (table: Indianapolis 500 win-

ners) A: 980

Parsons, Lewis E. [American political leader]

Alabama (table) A: 274

Parsons, Samuel [American settler]

Ohio Company (The second Ohio Company)

O: 705

Parsons, Talcott [American sociologist] P: 182

Sociology (Development of social research)

So: 566

Parson's Cause [U.S. history]

Henry, Patrick (Early life) H: 189-190

Part of Speech, A [poetry by Brodsky]

Brodsky, Joseph B: 635

Part-score [bridge]

Bridge (Scoring) B: 605

Part song

Classical music (Songs) Ci: 644

Part-whole [semantic relation]

Semantics S: 290

Partai Nasional Indonesia [political party]

Sukarno So: 965

Parthenogenesis [biology]

Aphid A: 565

Parthenon [Athens] P: 182 with picture

Acropolis A: 29 with picture

Elgin Marbles E: 236

Greece picture on G: 352

Greece, Ancient pictures on G: 370

Phidias P: 357

Relief (Low relief) R: 212

Sculpture (Classical sculpture) S: 245

Parthenon [Tennessee]

Nashville (Cultural life and recreation) N: 23

Parthenope

Naples N: 13

Parthenos See Athena in this index

Parthia [ancient country] P: 183 with map

Hadrian H: 4

Persia, Ancient (Government) P: 298; (The

Parthian Empire) P: 300

Parti Démocratique de Guinée [political party]

Guinea (History) G: 432

Parti Québécois [political party] P: 183

Bloc Québécois B: 404

Canada, History of (The separatist threat)

C: 153; (Quebec referendum) C: 154

Lévesque, René L: 218

Quebec (The mid-1900's) Q: 32; (Recent

developments) Q: 32

Royal Canadian Mounted Police (History)

R: 497-498

Partial [music]

Harmonics H: 62

Partial-birth abortion

Abortion (Abortion in the United States) A: 15-

16

Partial blindness

Blindness B: 401

Partial eclipse

Eclipse (Solar eclipses) E: 51; (Lunar eclipses)

E: 51

Partial parasite [biology]

Plant (Photosynthesis) P: 538 with picture

Partial product

Multiplication (Multiplying by large numbers)

M: 923

Participant observation

Anthropology (How anthropologists work)

A: 547

Participating policy

Insurance (Dividends) I: 310

Participatory caucus [meeting]

Caucus C: 317

Political convention (Delegate selection)

P: 628-629

Participle [grammar] P: 184

Verb (Formal characteristics) V: 314

Particle, Subatomic See Subatomic particle in

this index

Particle accelerator [machine] P: 184 with dia-

grams

Atom (How scientists study atoms) A: 874

with picture

CERN C: 363

Electricity picture on E: 198

Element, Chemical (Groups) E: 223

Fermi National Accelerator Laboratory F: 74

Lawrence, Ernest Orlando L: 145

Magnetism picture on M: 58; (In science and

medicine) M: 60a

Matter (Antimatter) M: 311; (Quark-gluon plas-

mas) M: 311

Neutrino N: 154

Particle detector P: 186

Physics (Particle physics) P: 438

Quark Q: 7

Radiation (Artificial radioactive substances)

R: 77-78

Radiocarbon (Radiocarbon dating) R: 97-98

with diagram

Radiochemistry R: 98

Science (Recent developments) S: 203; pic-

ture on S: 204

Transmutation of elements T: 379

Transuranium element T: 401

Van de Graaff generator V: 279

Walton, Ernest Thomas Sinton W: 21

Particle detector [machine] P: 186 with picture

Particle physics

Physics (Particle physics) P: 438

Particle radiation [physics]

Radiation R: 74; (Particle radiation) R: 76

Particleboard [building material]

Forest products (Particleboard) F: 401 with pic-

ture

Particular truth See Contingent truth in this

index

Particulate [chemistry] See Fiber in this index

Particulate [pollution]

- Partisans** [warfare] P: 187
Guerrilla warfare G: 419
- Partisans** [Yugoslav history]
Tito, Josip Broz (Early life) T: 302
Yugoslavia (World War II) Y: 579
- Partition** [construction]
House (Interior construction) H: 382 *with diagram*
- Partitions of Poland** [Polish history]
Poland (The partitions) P: 612 *with maps*
- Partner** [business]
Partnership P: 188
- Partnering**
Ballet (A ballet class) B: 46-47 *with picture*
- Partnership** [business] P: 188
Business (Partnerships) B: 725
- Partnership for Peace** [program]
North Atlantic Treaty Organization (History) N: 471
- Parton, Dolly** [American singer] P: 188 *with portrait*
Country music (Modern country music) Ci: 1098c-1098d *with picture*
Tennessee (Places to visit) T: 144
- Partridge** [bird] P: 188 *with picture*
Bird *picture on* B: 351
Grouse G: 403
- Partridge** [ship]
Korean War (Naval warfare) K: 382
- Partridgeberry** [fruit]
Lingonberry L: 335 *with picture*
- Parts of speech** [grammar] P: 189
Dictionary (What a dictionary tells you) D: 193
English language (Grammar) E: 312
Grammar G: 303
- Parturition** See Labor in *this index*
- Party, Political** See Political party in *this index*
- Party caucus** [meeting]
Caucus C: 317
Political convention (Delegate selection) P: 628-629
- Party column ballot**
Ballot (In the United States) B: 63
- Party congress** [Soviet history]
Union of Soviet Socialist Republics (The Communist Party) U: 29
- Party convention system** [politics]
Caucus C: 317
- Party lever**
Voting machine (Operation) V: 451
- Party line** [political policy]
Communism (The role of the Communist Party) Ci: 891
- Party of Democratic Socialism**
Germany (Politics) G: 147; (East Germany) G: 170-171
- Party of the Mexican Revolution** [political party]
Mexico (Economic and social changes) M: 473
- Party politics**
Political party (Organizing the government) P: 632-633
- Party state** [political theory]
Communism (The party state) Ci: 891
- Parvanov, Georgi** [Bulgarian political leader]
Bulgaria (Recent developments) B: 693
- Parvati** [Hindu goddess]
Hinduism (Divinities) H: 236
- Parvovirus** [disease]
Canine parvovirus C: 177
- Parzival** [poem by Wolfram von Eschenbach]
German literature (Epic poetry) G: 139
Wolfram von Eschenbach W: 378
- Pas de deux**
Ballet (table) B: 45; (Kinds of ballet) B: 48
- Pasadena** [California] P: 189
- Pasadena Freeway**
California (Transportation) C: 57
- Pascagoula River**
Mississippi M: 623
- Pascal** [unit of measure] P: 189
Metric system (Mechanics) M: 437-440
- Pascal** [computer language]
Computer (Using programming languages) Ci: 923
- Pascal, Blaise** [French philosopher] P: 189
Computer (History) Ci: 924a
French literature (Classical prose) F: 520
Hydraulics (Laws of hydrostatics) H: 463-464
Permutations and combinations (History) P: 291
Pressure P: 773
Roman Catholic Church (Jansenism) R: 409
- Pascal triangle** [mathematics]
Binomial theorem B: 310
Permutations and combinations (History) P: 291 *with diagram*
- Pascal's law** [physics] P: 190
Hydraulics (Laws of hydrostatics) H: 463-464
Pascal, Blaise P: 189
Pressure P: 773
- Pasch, Gustave E.** [Swedish chemist]
Match (The first safety matches) M: 300a
- Pascha**
Easter E: 42
- Paschal** [antipope]
Pope (table) P: 666
- Paschal I, Saint** [pope]
Pope (table) P: 666
- Paschal II** [pope] P: 190
Knights Hospitallers K: 351
Pope (table) P: 666
- Paschal III** [antipope]
Pope (table) P: 666
- Pascoli, Giovanni** [Italian poet]
Italian literature (Romanticism) I: 495
- Pascua Florida**
Florida F: 243
- Paseo** [custom]
Bullfighting (The order of the bullfight) B: 695
Spain (City life) So: 733
- Paseo de la Reforma** [street]
Mexico City (Residential and commercial centers) M: 476a *with picture*
- Paseo del Rio** [district]
San Antonio (The city) S: 84 *with picture; picture on* S: 86
Texas *picture on* T: 185
- Pashto** [language]
Afghanistan (Ethnic groups and languages) A: 92a
Pakistan (Cultural groups and languages) P: 93
Pashtuns P: 190
- Pashtuns** [people] P: 190
Afghanistan (Ethnic groups and languages) A: 92a; (Way of life) A: 92a-93
Pakistan (Cultural groups and languages) P: 93
- Pasig River** [Philippines]
Manila (Description) M: 142 *with picture*
- Paso** [literature]
Spanish literature (The 1500's) So: 758-759
- Paso, Alfonso** [Spanish dramatist]
Spanish literature (Spanish literature today) So: 763
- Paso doble** [dance]
Ballroom dancing B: 63
- PASOK** [political party] See Panhellenic Socialist Movement in *this index*
- Pasolini, Pier Paolo** [Italian poet]
Italian literature (The 1900's) I: 495
- Pasqueflower** [plant] P: 190
Anemone A: 458
Crocus Ci: 1150
Flower (Flowers of prairies and dry plains) F: 286-287 *with picture*
- Pass** [geography]
Mountain pass M: 899
- Pass** [sports]
Football (Advancing the ball) F: 360-361 *with pictures; diagram on* F: 359
Hockey (Hockey skills) H: 277
Soccer (Passing) So: 547
- Pass Christian** [Mississippi]
Mississippi *picture on* M: 626
- Passacaglia** [music]
Counterpoint Ci: 1097
- Passage** [geography]
Strait S: 918
- Passage** [movement]
Horse (Dressage) H: 357
"Passage to India" [poem by Whitman] Whitman, Walt (His work) W: 294
- Passage to India, A** [book by Forster]
Forster, E. M. F: 410
- Passaic River**
New Jersey (Rivers and lakes) N: 244
Paterson P: 195
- Passamaquoddy Bay** [Canada-U.S.] P: 190
- Passamaquoddy Indians** [American Indians]
Indian, American (In the United States) I: 179
Maine (Recent developments) M: 92 *with picture*
- Passau, Treaty of** [1552]
Schmalkaldic League S: 177
- Passback** [sports]
Field hockey (The game) F: 93
- Passbook account**
Savings bank S: 165
- Passchendaele, Battle of** [1907]
World War I (Allied failures) W: 461
- Passeggiata** [custom]
Italy (Recreation) I: 503
- Passel, Charles F.** [American explorer]
Wind chill W: 331
- Passenger elevator**
Elevator E: 234
- Passenger facility charge** [fee]
Airport (Airport operations) A: 246
- Passenger locomotive**
Locomotive (Kinds of locomotives) L: 414
- Passenger pigeon** [extinct bird] P: 190
Audubon, John James *picture on* A: 884
Bird (Extinct birds) B: 369-370 *with picture*
Pigeon (Wild pigeons) P: 460
- Passenger ship**
See also Ocean liner in *this index*
Ship (Roman ships) S: 406; (Packet ships) S: 409; (Passenger vessels) S: 414; (Other passenger vessels) S: 417; (Officers and crew) S: 423
- Passenger train** [transportation]
Railroad (Passenger service) R: 105; (Rolling stock) R: 107 *with picture; map on* R: 106
- Passion, The** [religion]
Jesus Christ (The Passion) J: 107
Lent L: 196b
- Passion According to Saint John, The** [music by Bach]
Bach, Johann Sebastian (His works) B: 16
- Passion According to Saint Matthew, The** [music by Bach]
Bach, Johann Sebastian (His works) B: 16
Passion music P: 191
- Passion-flower** [plant] P: 191 *with picture*
- Passion Flower, The** [play by Benavente]
Spanish literature (Drama) So: 763
- Passion fruit**
Passion-flower P: 191
- Passion music** P: 191
Classical music (Oratorios) Ci: 644
- Passion of Joan of Arc, The** [film]
Motion picture (The movies talk) M: 867
- Passion of Sacco and Vanzetti, The** [painting by Shahn]
Shahn, Ben *picture on* S: 342
- Passion play** [drama] P: 191 *with picture*
Easter (Easter customs) E: 44
Oberammergau O: 642 *with picture*
- Passionate Pilgrim, The** [book by Jaggard]
Shakespeare, William (The Globe Theatre) S: 348; (Composition and publication) S: 366
- "Passionate Shepherd to His Love, The"** [poem by Marlowe]
Marlowe, Christopher M: 216
- Passionflower** [plant] See Passion-flower in *this index*
- Passive component**
Electronics (Passive components) E: 212
- Passive euthanasia**
Death (The right to die) D: 61
Euthanasia (Active and passive euthanasia) E: 421
- Passive immunity**
Immune system (Passive immunity) I: 88c
- Passive resistance**
Thoreau, Henry David (His beliefs and works) T: 266
- Passive safety system**
Nuclear energy (Advanced fission reactors) N: 594
- Passive smoking** [cigarette] See Secondhand smoke in *this index*
- Passive voice** [grammar]
Voice V: 437
Conjugation Ci: 951
- Passively safe reactor**
Nuclear energy (Safety concern) N: 592
- Passover** [religion] P: 192
Easter E: 42
Judaism (The pilgrimage festivals) J: 181
Moses (The covenant with God) M: 829
Religion *picture on* R: 217
- Passport** P: 192
Visa V: 428
- Passy, Frédéric** [French statesman]
Nobel Prizes (Peace: 1901) N: 447
- Past and Present** [book by Carlyle]
Carlyle, Thomas (Later career) C: 240
- Past participle** [grammar]
Participle P: 184
Verb (Regular and irregular verbs) V: 314

Past perfect tense [grammar]

Tense T: 170

Past Recaptured, The [book by Proust]

Proust, Marcel P: 838

Past tense [grammar]

Tense T: 170

Past Through Tomorrow, The [book by Heinlein]

Heinlein, Robert A. H: 167

Pasta [food] P: 192

Italy (Food and drink) I: 502

Nutrition (Carbohydrates) N: 625

Paste [glass]

Gem (Imitation and synthetic gems) G: 79

Paste-up [printing]

Newspaper (Making up the pages) N: 383

Pastel [art]

Crayon Ci: 1122

Painting (Pastel) P: 39

Pastel de choco [food]

Chile (Food and drink) C: 462

Pasterka [religion]

Christmas (In Poland) C: 531

Pasternak, Boris [Soviet author] P: 192

Russian literature (Post-symbolism) R: 563-

564; (Modern Soviet literature) R: 564

Pasteur, Louis [French biochemist] P: 193 *with**portrait*

Bacteria (History) B: 21

Bacteriology (History) B: 22

Immune system (Early discoveries) I: 88d

Life (The theory of spontaneous generation)

L: 278

Medicine (Scientific study of the effects of

disease) M: 375

Pasteurization P: 193

Science (Scientific advances of the 1800's)

S: 200-201; *picture on* S: 202

Spontaneous generation So: 801

Yeast Y: 554

Pasteur Institute [Paris]

Pasteur, Louis (His life) P: 193

Pasteurization [food processing] P: 193

Butter (Pasteurization) B: 730

Food preservation (Other methods) F: 343

Milk (Pasteurization) M: 548 *with picture*

Pasteur, Louis (His work in industry) P: 193

Scrofula S: 227

Pastiche [art]

Postmodernism P: 709

Pastor, Tony [American producer]

Vaudeville V: 290

Pastor Aeternus [Roman Catholic constitution]

Vatican Council I V: 289

Pastoral Constitution on the Church in the**Modern World, The**

Vatican Council II (The work of the council)

V: 289-290

Teilhard de Chardin, Pierre T: 88

Pastoral Epistles [New Testament]

Timothy T: 293

Pastoral literature

Drama (Italian Renaissance drama) D: 330

English literature (Elizabethan fiction) E: 317

Greek literature (The Hellenistic Age) G: 378

Italian literature (Humanism and the

Renaissance) I: 494

Novel (Ancient Greek and Roman narratives)

N: 572

Poetry (Renaissance poetry) P: 596

Spanish literature (The 1500's) So: 758-759

Theocritus T: 252

Pastoral nomad [sociology]

Nomad N: 452

Pastore, John Orlando [American political

leader]

Rhode Island (table) R: 311

Pastorius, Francis Daniel [American settler]

P: 193

Pastrana Arango, Andrés [Colombian political

leader]

Colombia (Recent developments) Ci: 784

Pastry [food] P: 194**Pasture** [agriculture]Cattle *picture on* C: 306

Grass G: 324

Pasture thistle [plant]

Thistle T: 260

Pastures of Heaven, The [book by Steinbeck]

Steinbeck, John So: 885

Patagonia [region, South America] P: 194

Argentina (Patagonia) A: 654

Patagonian hare [animal]

Cavy C: 322

Pataki, George E. [American political leader]

New York (table) N: 313

Pataliputra [ancient city]

Mauryan Empire M: 318

Patapsco River [Maryland]Baltimore B: 66 *with map*United States, History of the *picture on* U: 154**Patas monkey**Monkey *picture on* M: 728**Petasse, Ange-Felix** [Central African political

leader]

Central African Republic (History) C: 353

Patchouli [oil] P: 194**Pâté de foie gras** [food]

Goose (Raising geese) G: 271

Patella [anatomy]Human body *diagram on* H: 422

Knee K: 345

Leg (The knee joint) L: 182 *with diagram***Patellar reflex** [physiology]

Reflex action R: 194

Patent [law] P: 194

Copyright Ci: 1046

Edison, Thomas Alva E: 77

Genetic engineering (History) G: 84b

Intellectual property I: 317

Manufacturing (How governments help manu-

facturing) M: 172

Public domain P: 855

Vermont (Interesting facts) V: 319

Patent and Trademark Office [U.S.]

Commerce, Department of (History) Ci: 871-

872

Edison, Thomas Alva E: 77

Patent P: 194; (How to get a U.S. patent)

P: 194-195

Patent Cooperation Treaty [1978]

Patent (International patent agreements)

P: 195

Patent ductus arteriosus [disorder]

Heart (Abnormal openings in the heart) H: 141

Patent law

Patent (Patent laws of other countries) P: 195

Patent leather

Leather (Final processing) L: 168-169

Pater, Walter Horatio [British author] P: 195**Pater Noster** [prayer] See Lord's Prayer *in this**index***Paterfamilias** [person]

Family (Ancient families) F: 21-22

Rome, Ancient (Family life) R: 437

Paternity test

Blood (The significance of blood groups)

B: 412

DNA fingerprinting D: 258

Paterson [New Jersey] P: 195**Paterson** [poem by Williams]

Williams, William Carlos W: 312

Paterson, Andrew Barton [Australian poet]

Australia (Literature) A: 906

Paterson, Katherine [American author] P: 195

Regina Medal (table: 1988) R: 206

Paterson, William [American jurist] P: 196

New Jersey (table) N: 249

Path of totality [astronomy]

Eclipse (Solar eclipses) E: 51

Path to Rome, The [book by Belloc]

Belloc, Hilaire B: 244

PATH tunnels [New Jersey-New York]

Hudson River tunnels (The PATH tunnels)

H: 406

Pathans [people] See Pashtuns *in this index***Pather Panchali** [film]

Ray, Satyajit R: 152

Pathet Lao [political group]

Laos L: 70; (History) L: 71-72

Pathétique Symphony [music by Tchaikovsky]

Tchaikovsky, Peter Ilich T: 61

Pathfinder [space probe] See Mars Pathfinder *in**this index***Pathfinder, The** [book by Cooper]

Cooper, James Fenimore Ci: 1034

Pathfinder of the Seas [nickname]

Maury, Matthew Fontaine M: 318

Pathfinders [scouts]

Girl Scouts (Pathfinders) G: 199

Pathogen [medicine]

Disease (Infectious diseases) D: 227

Immune system (Parts of the immune sys-

tem) I: 87

Pathology [medicine] P: 196

Biology (table) B: 317

Medicine (table) M: 369; (Scientific study of

the effects of disease) M: 375

Microtome *picture on* M: 520

Virchow, Rudolf V: 391

Patience [card game] See Solitaire *in this index***Patillo, Melba** [American social reformer]

Spingarn Medal (table: 1958) So: 793

Patina [chemistry]

Copper (Resistance to corrosion) Ci: 1041-

1042

Corrosion Ci: 1072 *with picture*

Sculpture (The sculptor at work) S: 232-233

Patio

Mexico (City life) M: 451-454

Patmos [island, Greece] P: 196**Pato** [game]Argentina (Recreation) A: 651 *with picture***Patois** [language]

Calypso (Development) C: 71

West Indies (Languages) W: 201

Paton, Alan [South African author] P: 196**Patriarch** [title] P: 196

Abraham A: 16

Jews (Beginnings) J: 120

Mormons (Church organization) M: 807

Patriarch Militant [title]

Odd Fellows, Independent Order of (Purpose

and organization) O: 673

Patriarch of the West [title]

Patriarch P: 196

Patriarchal cross [symbol]Cross *picture on* Ci: 1155**Patriarchal history**

Genesis G: 84

Patriarchs, Palace of the [Moscow]

Kremlin K: 387

Patricians [ancient Rome] P: 196

Rome, Ancient (The Roman Republic) R: 441-

444; (The early republic) R: 445

Patrick, Mason M. [American general]

Patrick Air Force Base P: 197

Patrick, Saint [Irish religious leader] P: 197 *with**picture*

Ireland (Saint Patrick) I: 425

Irish literature (Heroic tales, romances, and

sagas) I: 430-431

Patrick Air Force Base [Florida] P: 197**Patrick Henry Before the Virginia House of****Burgesses** [painting by Rothermel]Henry, Patrick *picture on* H: 190**Patrilineage**

Africa (Marriage and the family) A: 113

Family (Non-Western families) F: 24

Patriot [missile]

Guided missile (Surface-to-air missiles) G: 426;

(The flight of an advanced missile) G: 426

Patriotic Salvation Movement [Chadian rebel

group]

Chad (History) C: 367-368

Patriotic Union of Kurdistan [political party]

Kurds K: 393

Patriotism P: 197See also Nationalism *in this index***Patriots, New England**

Football (National Football League) F: 364

Patriots, The [play by Kingsley]

Kingsley, Sidney K: 331

Patroclus [legendary figure]

Hector H: 164

Iliad I: 51

Trojan War (The siege of Troy) T: 449

Patrol [scouting]

Boy Scouts (Boy Scouting) B: 537

Girl Scouts (Guides) G: 199

Patrol boat

Warship (Small combatants) W: 41

Patrol Hydrofoil Missiles

Hydrofoil (Modern hydrofoil development)

H: 468-469; *picture on* H: 466**Patrol officer**Police (Police activities) P: 620 *with pictures***Patron** [arts]

Painting P: 28

Patron saint

Saint (Roman Catholic saints) S: 30

Patronage [politics] P: 198

City government (Administering city govern-

ment) Ci: 596

Graft G: 298

Political party (National conventions and com-

mittees) P: 634-635

President of the United States (Party head)

P: 766

Spoils system So: 798

Patronite [mineral]

Vanadium V: 269

Patrons of Husbandry See Grange, National in *this index*

Patrol system [U.S. history] P: 199
New York (Exploration and settlement) N: 314
Van Rensselaer, Kilian V: 284

Patsayev, Victor I. [Russian cosmonaut]
Astronaut (Accidents in space) A: 830; (table) A: 830

Space exploration (Salyut and Skylab) So: 721

Pattakos, Stylianos [Greek general]
Greece (The restoration of democracy) G: 365

Patter call
Square dancing So: 811

Pattern
Cast and casting (Patterns for casting) C: 278
Clothing (Ready-to-wear clothes) Ci: 704-705

Interior design (Pattern and texture) I: 328
with picture; (Choosing patterns and textures) I: 332 *with picture*
Sewing (Preparing for a sewing project) S: 332

Pattern [psychology]
Gestalt psychology G: 175

Pattern, Cultural
Culture (Forming patterns) Ci: 1187

Patterson, D. T. [American political leader]
Johnson, Andrew (Life in the White House) J: 141

Patterson, Frederick [American educator]
Spingarn Medal (table: 1988) So: 793

Patterson, Haywood P. [American public figure]
Scottsboro Case S: 223

Patterson, I. L. [American political leader]
Oregon (table) O: 845

Patterson, John M. [American political leader]
Alabama (table) A: 274

Patterson, Joseph Medill [American publisher]
McCormick, Robert Rutherford M: 334

Patterson, Malcolm R. [American political leader]
Tennessee (table) T: 152

Patterson, Martha Johnson [daughter of]
Johnson, Andrew (Life in the White House) J: 141
White House hostesses W: 291

Patterson, P. J. [Jamaican political leader]
Jamaica (History) J: 24-25

Patterson, Paul L. [American political leader]
Oregon (table) O: 845

Patterson, Robert P. [American government official]
Truman, Harry S. (table) T: 469

Patterson, William J. [Canadian political leader]
Saskatchewan (table) S: 144

Patteson, Okey L. [American political leader]
West Virginia (table) W: 225

Patti Smith Group [musical group]
Rock music (Disco and punk) R: 380

Pattison, Edward [American businessman]
Connecticut (Colonial life) Ci: 968-970

Pattison, John M. [American political leader]
Ohio (table) O: 699

Pattison, Robert Emory [American political leader]
Pennsylvania (table) P: 263

Pattison, William [American businessman]
Connecticut (Colonial life) Ci: 968-970

Patton [film]
Motion picture (Best picture: 1970) M: 861

Patton, Elizabeth [wife of]
Crockett, Davy (Early life) Ci: 1148d

Patton, George Smith, Jr. [American general]
P: 199 *with portrait*

Bradley, Omar Nelson B: 546
World War II (The drive to the Rhine) W: 483

Patton, John Mercer [American political leader]
Virginia (table) V: 417

Patton, Paul E. [American political leader]
Kentucky (table) K: 290; (The late 1900's) K: 294

Patton, Robert Miller [American political leader]
Alabama (table) A: 274

Patton Museum of Cavalry and Armor [Fort Knox]
Kentucky *picture on* K: 283

Pattullo, Thomas D. [Canadian political leader]
British Columbia (table) B: 627

Patuxet Indians [American Indians]
Squanto So: 811

Pátzcuaro, Lake [Mexico]
Tarascan Indians T: 42

Paucituberculata [zoology]
Mammal (table) M: 128 *with picture*

Paul [czar of Russia]

Russia (table: Czars and empresses) R: 549;
(Catherine the Great) R: 550

Paul [Yugoslav prince]

Peter II P: 324

Yugoslavia (A new nation) Y: 579; (World War II) Y: 579

Paul I [king of Greece] P: 199
Greece (World War II) G: 363-364

Paul III [pope] P: 199

Jesuits (History) J: 103

Pope (Renaissance and Reformation) P: 664
with picture

Trent, Council of T: 435

Paul IV [pope] P: 199

Ghetto (Early ghettos) G: 181

Index of Forbidden Books I: 107

Paul V [pope]

Vatican City (Vatican Palace) V: 287

Paul VI [pope] P: 200 *with portrait*

Birth control (Opposition to birth control) B: 379

Eastern Orthodox Churches (History) E: 45-46
Pope (table) P: 666; (The papacy today) P: 665
with picture; *picture on* P: 661

Protestantism (The unity movement (the 1800's and 1900's)) P: 835

Roman Catholic Church (Paul VI) R: 410; *picture on* R: 413

Vatican Council II (The work of the council) V: 289

Vulgate V: 453

Paul, Alice [American social reformer] P: 200
with portrait

Woman suffrage (Growth of the movement) W: 380-381

Paul, Epistles of [New Testament]

Paul, Saint (Paul's letters and ideas) P: 201

Paul, John See Jones, John Paul in *this index*

Paul, Johnny [American magician]

Magician (Close-up magic) M: 51

Paul, Lewis [British inventor]
Industrial Revolution (Spinning machines) I: 248-249

Paul, Saint [apostle] P: 200 *with map*

Acts of the Apostles A: 31

Barnabas B: 113

Bible (The New Testament) B: 282-283

Carolingian art *picture on* C: 245

Christianity (The first Christians) C: 525 *with picture*; (The Reformation) C: 526

Colossians, Epistle to the Ci: 850

Corinthians, Epistles to the Ci: 1053

Encyclical E: 265

Galatians, Epistle to the G: 8

Gamaliel G: 18

Malta (History) M: 113

Mark, Saint M: 213

New Testament (The life of Paul) N: 288

Philemon, Epistle to P: 368

Roman Catholic Church (The first 300 years) R: 406

Romans, Epistle to the R: 426

Thessalonians, Epistles to the T: 257

Timothy T: 293

Titus T: 303

Paul, Wolfgang [German physicist]

Nobel Prizes (Physics: 1989) N: 441

Paul Bunyan See Bunyan, Paul in *this index*

Paul Clifford [book by Bulwer-Lytton]

Bulwer-Lytton, Edward George Earle Lytton B: 697

Paul Revere and the World He Lived In [book by Forbes]

Forbes, Esther F: 369

"Paul Revere's Ride" [poem by Longfellow]

Longfellow, Henry Wadsworth (Narrative poems) L: 450-451

Revere, Paul R: 266

Paul Taylor Dance Company

Taylor, Paul T: 57

Paula, Saint [early Christian religious leader]
Jerome, Saint J: 93

Paulding, James K. [American author]

Irving, Washington (Early career) I: 460

Van Buren, Martin (table) V: 273

Pauldron [armor]

Knights and knighthood (Armor) K: 350

Paulen, Ben S. [American political leader]

Kansas (table) K: 234

Pauli, Wolfgang [Austrian physicist] P: 201

Pauli exclusion principle [physics]

Pauli, Wolfgang P: 201

Pauline [poem by Browning]

Browning, Robert (Browning's poems) B: 646

Pauline Letters [New Testament]

Bible (The New Testament) B: 282-283

Paul, Saint (Paul's letters and ideas) P: 201

Pauling, Linus Carl [American chemist] P: 202

Paulinus, Suetonius [Roman general]

Boadicea B: 427

Paulistanos [people]

São Paulo (People) S: 118

Paulists [religious group] P: 202

Paulo Afonso Falls [Brazil]

São Francisco, River S: 117

Paulsen, Gary [American author]

Regina Medal (table: 1995) R: 206

Paulus, Friedrich von [German general]

Stalingrad, Battle of So: 828

World War II (On the Soviet front) W: 479

Paulus Hook [former name]

Jersey City (Government and history) J: 94

Pauncefote, Julian [British statesman]

Hay-Pauncefote Treaty H: 116

Paunch [zoology]

Ruminant R: 519 *with diagram*

Pauper children [British history]

Child labor (Early child labor laws) C: 455

Pausanias [Greek author]

Greek literature (The Greco-Roman Age) G: 378

Pavarotti, Luciano [Italian singer] P: 202 *with portrait*

Opera *picture on* O: 802

Pavelić, Ante [Croatian leader]

Yugoslavia (World War II) Y: 579

Pavement [building material]

Road (Paving) R: 359 *with picture*

Pavese, Cesare [Italian author]

Italian literature (The 1900's) I: 495

Pavillon d'Armide, Le [ballet]

Ballet *picture on* B: 53

Pavise

Shield S: 400

Pavlov, Ivan Petrovich [Russian physiologist] P: 202

Behavior (Behaviorism) B: 221

Developmental psychology (Learning theory) D: 174

Hypnotism (Scientific studies) H: 479-480

Learning (Classical conditioning) L: 163

Nobel Prizes (Physiology or medicine: 1904) N: 444 *with picture*

Psychology (Behaviorism) P: 849-850

Reflex action (Conditioned reflex) R: 195

Pavlova [food]

New Zealand (Food and drink) N: 348

Pavlova, Anna [Russian dancer] P: 202 *with picture*

Ballet (Ballet in Russia) B: 52 *with picture*

Paw [zoology]

Cat (Body size and structure) C: 286 *with picture*

Pawl [machine]

Ratchet R: 147

Pawley, Howard R. [Canadian political leader]
Manitoba (table) M: 159

Pawn

Chess (The board and the men) C: 412 *with diagram*

Pawnbroker [career] P: 202

Pawnee Indians [American Indians] P: 203

Nebraska (Indian days) N: 111

Pawnee Tribal Business Council

Pawnee Indians P: 203

Pawpaw [tree] P: 203 *with picture*

Papaya P: 133

Pawtucket [Rhode Island] P: 204

Pax Lodge

Girl Scouts (In other countries) G: 199-200

Pax Romana [Roman Empire]

Peace (Ancient Greece and Rome) P: 206

Rome, Ancient (The height of the empire) R: 446

Paxinou, Katina [Greek actress]

Motion picture (Best performance by an actress in a supporting role: 1943) M: 863

Paxton, Sir Joseph [British architect]

Architecture (The Industrial Revolution) A: 625
with picture

Paxton Boys [U.S. history]

Westward movement in America (Regional conflict) W: 245

Pay-per-call service

Telephone (Other services) T: 99

Pay-per-view television

Television (Cable television) T: 110b; (Cable and satellite systems) T: 115-116

Pay telephone

Telephone (Other services) T: 99

Payee [banking]

Bill of exchange B: 301

Payens, Hugh [French knight]

Knights Templars K: 353

Payload

Balloon (Hot-air balloons) B: 57

Bomber B: 453

Space exploration (table) So: 696

Payload specialist [astronaut]

Astronaut A: 828

Space exploration (The shuttle era begins)

So: 723-724

Payment-in-kind

Wheat (Controlling wheat production) W: 274-275

Payne, David L. [American settler]

Oklahoma (The great land rushes) O: 732

Payne, Dolley [wife of James Madison] See

Madison, Dolley Payne *in this index*

Payne, Frederick G. [American political leader]

Maine (table) M: 87

Payne, Henry C. [American government official]

Roosevelt, Theodore (table) R: 470

Payne, James M. [American pilot]

Glider (table) G: 230

Payne, John B. [American government official]

Interior, Department of the (table) I: 325

Payne, John Howard [American author] P: 204**Payne-Aldrich Tariff Act** [1909]

Taft, William Howard (Legislative defeats)

T: 10-11

Tariff (The 1900's) T: 45

Payne-Gaposchkin, Cecilia Helena [English

astronomer] P: 204

Paynter, Samuel [American political leader]

Delaware (table) D: 109

Payró, Roberto J. [Argentine author]

Latin-American literature (Realism) L: 112

Payroll tax

Pension (Social security) P: 272-273

Social security (Financing Social Security)

So: 555

Taxation (Income taxes) T: 52-53

Payton, Walter [American football player] P: 204

with picture

Football *picture on F: 368*

Paz, Octavio [Mexican author] P: 205

Latin-American literature (The mid-1900's)

L: 113

Nobel Prizes (Literature: 1990) N: 446

Paz Estenssoro, Victor [Bolivian political leader]

Bolivia (History) B: 446-447

Paz Zamora, Jaime [Bolivian political leader]

Bolivia (Recent developments) B: 447

Pazyryk rug

Rugs and carpets (History) R: 517

Pazzi Chapel [Florence, Italy]

Brunelleschi, Filippo B: 651

Renaissance (The fine arts) R: 235-236 *with pictures*

PB [drug] See Pyridostigmine bromide *in this index*

PBA World Championship

Bowling (table) B: 524

PBGV [dog] See Petit basset griffon vendéen *in this index*

PbO [chemistry]

Litharge L: 386

PBS See Public Broadcasting System *in this index*

PBX [switch] See Private branch exchange *in this index*

P.C. [abbreviation]

Privy Council P: 808b

PC [personal computer] See Personal computer *in this index*

PCB [chemical] See Polychlorinated biphenyl *in this index*

PCC [political party] See Partido Comunista de Cuba *in this index*

PCP [drug]

Drug abuse (Hallucinogenic drugs) D: 362; (table: Some commonly abused drugs)

D: 363

Hallucinogenic drug H: 26

PDA [computer] See Personal digital assistant *in this index*

PDA [disorder] See Patent ductus arteriosus *in this index*

PDG [political party]

Guinea (History) G: 432

PDVSA [company]

Manufacturing (table) M: 170

P.E. certificate [license]

Coal (Mineworkers) Ci: 728

Pea [plant] P: 205 *with pictures*

Flower F: 301 *with picture*

Heredity (Patterns of heredity) H: 202

Leaf *picture on L: 157*

Lupine L: 526

Nutrition (Carbohydrates) N: 625

Pea comb

Chicken (Kinds of chickens) C: 441 *with picture*

Pea crab [sea animal]

Crab *picture on Ci: 1115*

Pea Ridge, Battle of [1862]

Arkansas *picture on A: 713*

Civil War (Battles of Fort Henry and Fort Donelson) Ci: 629

Pea Ridge National Military Park

Arkansas (Places to visit) A: 704

National Park System (table: National military parks) N: 55

Peabody, Elizabeth P. [American educator]

Kindergarten (Early kindergartens) K: 318

Peabody, Endicott [American political leader]

Massachusetts (table) M: 288

Peabody, George [American philanthropist]

Foundations (History) F: 431

Museum (Early United States museums) M: 940

Peabody, James H. [American political leader]

Colorado (Interesting facts) Ci: 829; (table) Ci: 844

Peabody, Sophia [wife of]

Hawthorne, Nathaniel (Life) H: 114

Peabody Essex Museum [Salem,

Massachusetts]

Salem (Location and description) S: 60-61

Peabody Fund

Foundations (History) F: 431

Peabody Institute

Johns Hopkins University J: 135

Peabody Museum [New Haven, Connecticut]

Connecticut (Museums) Ci: 956

Yale University (The Yale campus) Y: 549

Peace P: 206

Balance of power B: 36

International law (The laws of peace) I: 341

Human rights (Peacekeeping) H: 428a

United Nations (Working for peace and security) U: 89

War (How wars end) W: 25; (Preventing war) W: 25

Peace, Breach of the [law]

Breach of the peace B: 587

Peace, Palace of

Hague, The H: 6 *with picture*

Peace and Plenty [painting by Inness]

Inness, George I: 274 *with picture*

Peace bond

Breach of the peace B: 587

Peace Bridge [New York-Ontario] P: 207

Buffalo (Economy) B: 677

Peace Bureau, International [organization]

Nobel Prizes (Peace: 1901) N: 447

Peace church, Historic [religious organization]

Brethren B: 593

Peace conferences [international relations]

Hague, The (History) H: 6-7

International law (History) I: 342

International relations (International conferences and organizations) I: 344

Israel (Recent developments) I: 489 *with picture*

Middle East (Recent developments) M: 534

Palestine Liberation Conference (History) P: 106

Peace (The 1800's and early 1900's) P: 206

Peace Corps [U.S.] P: 207 *with pictures*

Foreign aid (Economic development and mutual security) F: 383-384

Kennedy, John Fitzgerald (The New Frontier) K: 264

Latin America (Latin America and the United States) L: 109

State, Department of (Since World War II) So: 861

Peace Democrats [U.S. history]

Civil War (Government and politics) Ci: 622-623

Peace Dollar [money]

Dollar *picture on D: 295*

Peace Garden, International [Manitoba-North Dakota]

International Peace Garden I: 343

Manitoba (Places to visit) M: 152

Peace Garden State [nickname]

North Dakota N: 496

Peace Memorial Park

Hiroshima H: 243 *with picture*

Peace Mission Movement

Divine, Father D: 241

Peace of ...

Peace agreements appear under their key words, as in Utrecht, Peace of

Peace of God [European history]

Peace (The Middle Ages) P: 206

Peace Palace

Hague, The H: 6 *with picture*

Peace pipe [American Indians] P: 209**Peace River** [Canada] P: 209

British Columbia (Agriculture) B: 626; (The mid-1900's) B: 630

Mackenzie River M: 23

Peace River District [region, British Columbia]

British Columbia (Land regions) *picture on*

B: 622

Peace Society, New York [organization]

Peace (The 1800's and early 1900's) P: 206

Peace Tower [memorial]

Ottawa O: 871; (Metropolitan Ottawa) O: 871-872; (The Parliament buildings) O: 872

Peace treaty

Treaty (Kinds of treaties) T: 408-409

Peaceable Kingdom, The [paintings by Hicks]

Folk art *picture on F: 316*

Hicks, Edward H: 224

Peaceful coexistence [international relations]

Cold War (The spirit of Geneva) Ci: 765; (New challenges) Ci: 765; (Easing Cold War tensions) Ci: 767

Union of Soviet Socialist Republics (Khrushchev's policies) U: 38

Peacekeeping forces [UN]

United Nations (Peacekeeping operations) U: 90 *with pictures*

Peach [fruit] P: 210 *with pictures*

Nectarine N: 117

Peach leaf curl [fungus]

Peach (Diseases) P: 211

Peach moth [insect] P: 211 *with picture***Peach State** [nickname]

Georgia G: 112

Peach twig borer [insect]

Peach (Insects) P: 211

Peachtree Center

Atlanta (The city) A: 859 *with picture*

Peacock [bird] P: 211 *with picture*

Evolution *picture on E: 428*

Peacock fly [insect]

Fruit fly F: 549

Peacock Throne [Iranian history]

Iran (The rule of Nadir Shah) I: 406

Peafowl [bird]

Peacock P: 211

Peahen [bird]

Peacock P: 211

Peak flow meter [instrument]

Asthma A: 825

Peale [American painters] P: 212 *with picture***Peale, Charles Willson** [American painter]

Peale P: 212 *with picture*

Lafayette, Marquis de *picture on L: 27*

Lewis and Clark expedition *pictures on L: 222*

Maryland (Museums) M: 244

Museum (Early United States museums) M: 939-940

Peale, James [American painter]

Peale P: 212

Peale, Norman Vincent [American religious

leader] P: 213

Peale, Raphaelle [American painter]

Peale P: 212

Peale, Rembrandt [American painter]

Peale P: 212

Maryland (Museums) M: 244

Peale, Sarah Miriam [American painter]

Peale P: 212

Peale, Titian [American naturalist]

Wake Island W: 6

Peale Islet [Pacific Ocean]

Wake Island W: 6

Peale Museum

Baltimore (Museums) B: 68

Maryland (Museums) M: 244

Peanut P: 213 *with pictures*

Carver, George Washington C: 268; (Tuskegee instructor and researcher) C: 269

- Nigeria *picture on N*: 410
 Nut (Kinds of nuts) **N**: 621
 World *picture on W*: 414
- Peanut butter**
 Peanut (As food) **P**: 213
- Peanut oil**
 Peanut (As food) **P**: 213-214; (Processing peanuts) **P**: 214
 Vegetable oil **V**: 294
- "Peanuts"** [comic strip]
 Schulz, Charles Monroe **S**: 187 *with picture*
- Pear** [fruit] **P**: 215 *with picture*
- Pear blight** [plant disease]
 Pear (Diseases) **P**: 216
- Pear cut**
 Gem (Types of gem cuts) *picture on G*: 79
- Pear-leaf blister mite** [insect]
 Pear (Insects) **P**: 216
- Pear psylla** [insect]
 Pear (Insects) **P**: 216
- Pear thrips** [insect]
 Pear (Insects) **P**: 216
- Pearl** [gem] **P**: 216 *with pictures*
 Gem *picture on G*: 78; (Value of gems) **G**: 79
 Oyster (Shell) **O**: 890 *with picture*
- Pearl** [poem]
 English literature (The age of Chaucer) **E**: 316
- Pearl essence** [animal product]
 Pearl (Imitation pearls) **P**: 218
- Pearl Fishers, The** [opera by Bizet]
 Bizet, Georges **B**: 385
- Pearl Harbor** [Hawaii] **P**: 218 *with picture*
 Hawaii (Places to visit) **H**: 98; (Oahu) **H**: 102;
 (Growth of constitutional government) **H**: 106-108
 Honolulu (History) **H**: 322
 World War II (The Allies attack in Europe and Northern Africa) **W**: 478 *with picture*
 Yamamoto, Isoroku **Y**: 550
- Pearl Harbor Naval Complex**
 Pearl Harbor (Pearl Harbor as a naval base) **P**: 219
- Pearl Jam** [rock group]
 Rock music (Rock music today) **R**: 380
- Pearl millet** [grain]
 Millet **M**: 555
- Pearl of Great Price** [book by Smith]
 Mormons (Church doctrines) **M**: 806
- Pearl of the Orient** [nickname]
 Manila **M**: 141
- Pearl popcorn**
 Corn (Popcorn) **Ci**: 1059
- Pearl Street Station** [New York City]
 Electric power (Early developments) **E**: 186
- Pearleaf blister mite** [animal]
 Mite **M**: 678 *with picture*
- Pearled barley** [food]
 Barley (Uses of barley) **B**: 113
- Pearly eye** [insect]
 Butterfly (Satyrs and wood nymphs) **B**: 735-736 *with picture*
- Pearly-eyed thrasher** [bird]
 Thrasher **T**: 269
- Pearly nautilus** [sea animal]
 Nautilus **N**: 69 *with picture*
 Shell (Octopuses and squids) **S**: 388
- Pearse, Patrick H.** [Irish political leader]
 Ireland (The Easter Rising) **I**: 427
- Pearson, Annie Sarah** [mother of]
 Pearson, Lester Bowles (Boyhood) **P**: 220
- Pearson, David** [American race driver]
 Automobile racing (table: NASCAR Winston Cup champions, 1966, 1968, 1969) **A**: 981
- Pearson, Edwin Arthur** [father of]
 Pearson, Lester Bowles (Boyhood) **P**: 220
- Pearson, Egon** [English statistician]
 Statistics (History) **S**: 869-870
- Pearson, Geoffrey Arthur Holland** [son of]
 Pearson, Lester Bowles (Education and war service) **P**: 220-221
- Pearson, Gerald L.** [American physicist]
 Solar energy (The development of photovoltaic cells) **S**: 577
- Pearson, Grant** [American mountain climber]
 Mount McKinley **M**: 886
- Pearson, Karl** [British geneticist] **P**: 219
- Pearson, Lester Bowles** [Canadian political leader] **P**: 220 *with pictures*
 Canada, History of (Increasing foreign involvement) **C**: 151
 Chrétien, Jean (Early posts) **C**: 522b
 Diefenbaker, John George **D**: 196 *with portrait*
 Nobel Prizes (Peace: 1957) **N**: 448 *with portrait*
- Trudeau, Pierre Elliott (Parliamentary secretary) **T**: 463
- Pearson, Marmaduke** [brother of]
 Pearson, Lester Bowles (Boyhood) **P**: 220
- Pearson, Maryon Moody** [wife of]
 Pearson, Lester Bowles (Education and war service) **P**: 220-221; *picture on P*: 223
- Pearson, Mike**
 Pearson, Lester Bowles **P**: 220
- Pearson, Patricia Lillian** [daughter of]
 Pearson, Lester Bowles (Education and war service) **P**: 220-221
- Pearson, Vaughan** [brother of]
 Pearson, Lester Bowles (Boyhood) **P**: 220
- Peary, Robert Edwin** [American explorer] **P**: 224 *with picture*
 Arctic (Arctic exploration) **A**: 639-640
 Bartlett, Robert Abram **B**: 121
 Cape York **C**: 191
 Exploration (Arctic exploration) **E**: 449-450 *with map*
 Henson, Matthew Alexander **H**: 191
 North Pole **N**: 517
- Peary Arctic Club**
 Peary, Robert Edwin (Arctic expeditions) **P**: 224
- Peasant** [people]
See also Serf in this index
 Middle Ages (Life of the people) **M**: 526
 Russia (Ivan the Terrible) **R**: 548; (Alexander III) **R**: 551
 Union of Soviet Socialist Republics (History) **U**: 35
- Peasant Movement Training Institute**
 Guangzhou (The city) **G**: 410
- Peasant Unity Committee**
 Menchú, Rigoberta **M**: 397
- Peasant War, The** [etching by Kollwitz]
 Kollwitz, Käthe **K**: 364
- Peasants' Crusade**
 Crusades (The First Crusade) **Ci**: 1160
- Peasants' Revolt** [English history] *See Wat Tyler's Rebellion in this index*
- Peasants' War** [1524-1525] **P**: 224
 Germany (The Reformation) **G**: 164
- Pease, Elisha M.** [American political leader]
 Texas (table) **T**: 203
- Pease, Howard** [American author] **P**: 225
- Peasecod belly fashion**
 Clothing (The Renaissance) **Ci**: 700 *with picture*
- Peat** [fuel] **P**: 225 *with picture*
 Coal (How coal was formed) **Ci**: 717 *with pictures*
 Fuel (Solid fuels) **F**: 550
 Heath **H**: 157
- Peat bog**
 Ireland (Surface features) **I**: 422
 Peat **P**: 225 *with picture*
- "Peat Bog Soldiers"** [song]
 Folk music (Kinds of folk music) **F**: 321
- Peat moss** [plant] **P**: 225 *with picture*
 Bog **B**: 436 *with diagram*
 Gardening (Planning the garden) **G**: 31-34
 Moss **M**: 834 *with picture*; (The importance of mosses) **M**: 835
 Plant (Bryophytes) **P**: 522; (Layering) **P**: 535
- Peattie, Donald Culross** [American author] **P**: 225
- Peay, Austin** [American political leader]
 Tennessee (table) **T**: 152
- Pebble Jackstones** [game]
 Jacks **J**: 4
- Pebble mill** [machine]
 Paint (Grinding) **P**: 24-25
- Pebrine** [disease]
 Pasteur, Louis (His work in industry) **P**: 193
- Pecan** [tree] **P**: 225 *with pictures*
 Hickory **H**: 224
 Nut (Kinds of nuts) **N**: 621 *with picture*
 Tree *pictures on T*: 423
- Peccary** [animal] **P**: 226 *with picture*
 Hog (Wild hogs) **H**: 286
- Péché de vieillesse** [music by Rossini]
 Rossini, Gioacchino Antonio **R**: 484
- Pechorin** [literary figure]
 Russian literature (Late romanticism) **R**: 561-562
- Peck** [unit of measure] **P**: 226
- Peck, Asahel** [American political leader]
 Vermont (table) **V**: 333
- Peck, George W.** [American political leader]
 Wisconsin (table) **W**: 365
- Peck, Gregory** [American actor]
 Motion picture (Best performance by an actor: 1962) **M**: 862-863
- Peck, James** [American jurist]
 Impeachment (History) **I**: 91-92
- Peck, Richard** [American author]
 Newbery Medal (table) **N**: 359
- Peckford, A. Brian** [Canadian political leader]
 Newfoundland and Labrador (Leadership changes) **N**: 377
- Peckham, Rufus W.** [American jurist] **P**: 226
- Pecking order** [psychology]
 Dominance
- Pecksniff** [literary figure]
 Dickens, Charles (The first phase) **D**: 188
- Pecos Bill** [legendary figure] **P**: 226
- Pecos National Historical Park** [New Mexico] **P**: 227
 National Park System (table: National historical parks) **N**: 56-57
 New Mexico (Places to visit) **N**: 264
- Pecos River** [river, New Mexico-Texas] **P**: 227
 New Mexico (Land regions) **N**: 266-268
- Pécs** [Hungary] **P**: 227
- Pectin** [carbohydrate] **P**: 227
 Fat substitute **F**: 53
 Jelly and jam **J**: 89
- Pectoral fin** [zoology]
 Fish (Fins) **F**: 160-161 *with picture*
- Pectoral girdle** [zoology]
 Frog *picture on F*: 537
- Peculiar Penguins** [cartoon by Disney]
 Disney, Walt *picture on D*: 236
- Ped**
 Soil (Structure) **So**: 575
- Pedal**
 Organ (Pipe organs) **O**: 851-852 *with picture*
 Piano (The pedals) **P**: 446-447 *with picture*
- Peddler**
 Sales (The Industrial Revolution) **S**: 65 *with picture*
- Peddler doll**
 Doll (The 1800's) **D**: 289
- Pedersen, Charles John** [American chemist]
 Nobel Prizes (Chemistry: 1987) **N**: 443
- Pedestal**
 Harp **H**: 65 *with picture*
- Pedestrian** [traffic]
 Safety (Pedestrian safety) **S**: 14
- Pediatric cancer** [disease]
 Cancer (Cancer in children) **C**: 169
- Pediatric intensive care unit** [medicine]
 Intensive care unit **I**: 320
- Pediatrician** [career]
 Pediatrics **P**: 227
- Pediatrics** [medicine] **P**: 227
 Baby **B**: 4
 Hospital (Hospital units) **H**: 372
 Medicine (table) **M**: 369
- Pedicab** [vehicle] **P**: 228 *with picture*
 Asia (Transportation) **A**: 803
 Jinrikisha **J**: 127
 Transportation (Land transportation) **T**: 383-384
- Pedical** [botany]
 Raceme **R**: 51
- Pedical** [zoology]
 Spider (The spider's body) **S**: 784 *with diagram*
- Pedigree** [ancestry] **P**: 228
- Pedigree chart** [ancestry]
 Genealogy **G**: 82
- Pedigree line** [agriculture]
 Pedigree **P**: 228
- Pediment**
 Architecture (table) **A**: 608-609 *with picture*
- Pedipalp** [zoology]
 Spider (Pedipalpi) **S**: 785 *with diagrams*
- Pediveliger** [zoology]
 Oyster (The life of an oyster) **O**: 891
- Pedodontics**
 Dentistry (Pediatric dentistry) **D**: 144
- Pedologist** [career]
 Soil **S**: 573
- Pedometer** [instrument] **P**: 228
- Pedophilia** [disorder]
 Child abuse **C**: 454
- Pedrarías Dávila** [Spanish colonial official]
 Balboa, Vasco Núñez de (Later exploration) **B**: 38
 Latin America (The conquest of the Indians) **L**: 106
- Pedro** [Portuguese prince]
 Henry the Navigator **H**: 191

Pedro I [emperor of Brazil] P: 228
Andrada e Silva, José Bonifácio de A: 456
Brazil (Independence) B: 584 *with picture*
Lisbon *picture on* L: 348

Pedro II [emperor of Brazil] P: 228
Andrada e Silva, José Bonifácio de A: 456
Bell, Alexander Graham (The telephone)
B: 241
Brazil (The reign of Pedro II) B: 584

Pedro IV [king of Portugal] *See* Pedro I *in this index*

Pedro, Felix [American prospector]
Fairbanks F: 8

Pedro Miguel Locks [Panama Canal]
Panama Canal (The Pedro Miguel and
Miraflores locks) P: 124 *with diagram*;
map on P: 123

Pedro Páramo [book by Rulfo]
Latin-American literature (The mid-1900's)
L: 113

Peduncle [botany]
Raceme R: 51

Pee Dee River [United States]
South Carolina (Rivers, waterfalls, and lakes)
So: 652-654

Peel, Lady [British actress]
Lillie, Beatrice L: 303 *with portrait*

Peel, Sir Robert [British political leader] P: 228
with portrait
Police (Early law enforcement in England)
P: 624
Scotland Yard S: 221
United Kingdom (Establishment of free trade)
U: 69
Wellington, Duke of (Political career) W: 195

Peeler [British history]
Peel, Sir Robert P: 229

Peelites [British history]
United Kingdom (Political confusion) U: 69

Peeper [animal]
Tree frog T: 434

Peeping Tom [legend]
Godiva, Lady G: 245

Peer, Ralph [American record producer]
Country music (Early commercial success)
Ci: 1098b

Peer group [sociology]
Adolescent (The "invention" of adolescence)
A: 60 *with pictures*; (Relationships with
peers) A: 62
Child (The preteen-age years) C: 450
Sexuality (Peer groups) S: 338a

Peer Gynt [music by Grieg]
Grieg, Edvard G: 392

Peer Gynt [play by Ibsen]
Grieg, Edvard G: 392
Ibsen, Henrik (His plays) I: 4
Theater *picture on* T: 247

Peer pressure [sociology]
Adolescent (The "invention" of adolescence)
A: 60; (Independence and responsibility)
A: 62

Peer review organization
Hospital H: 371

Peer-to-peer network
Computer (Personal computers) Ci: 909

Peerage [nobility]
House of Lords H: 384
Nobility (In the United Kingdom) N: 450
Parliament (The House of Lords) P: 173
United Kingdom (National government) U: 49-
50

Peerce, Jan [American singer] P: 229

Peerness [nobility]
Nobility (In the United Kingdom) N: 450

Peery, George C. [American political leader]
Virginia (table) V: 417

Peewit [bird]
Lapwing L: 75 *with picture*

Pegasus [Greek mythology] P: 229 *with picture*
Chimera C: 471
Horse (table: Famous horses in history and
legend) H: 361
Medusa M: 383

Pegasus [ship]
Missile boat M: 618

Pegging [economics]
Exchange rate E: 435

Peggy Stewart [ship]
Maryland (The Revolutionary War) M: 258

Pegmatite [rock]
Columbite Ci: 853
Feldspar F: 68
Gem (Sources of gems) G: 77-79

Pegnitz Junction, The [book by Gallant]
Gallant, Mavis G: 14

Pégoud, Adolphe [French aviator]
Airplane (Other pioneer planes and fliers)
A: 233-234

Pegwooden doll
Doll (The 1800's) D: 289

Pehm, Joseph [Hungarian religious leader]
Mindszenty, Joseph Cardinal M: 563 *with por-
trait*

Pehuenche Indians [American Indians]
Araucanian Indians A: 592

Pei, I. M. [American architect] P: 230 *with pic-
ture*
National Gallery of Art N: 36 *with picture*

P.E.I. Preserve Company
Prince Edward Island (Places to visit) P: 788

Peipus, Lake [Estonia-Russia]
Lake Peipus L: 44
Estonia (Land and climate) E: 362 *with map*

Peirce, Charles Sanders [American philosopher]
P: 230
James, William J: 27
Pragmatism P: 729

Peking *See* Beijing *in this index*

Peking fossils [anthropology] P: 230
Black, Davidson B: 385
Teilhard de Chardin, Pierre T: 88

Peking opera *See* Beijing opera *in this index*

Peking people [Prehistoric people]
China (Beginnings of Chinese civilization)
C: 500

Pekingese [dog] P: 230
Dog *picture on* D: 274

Pekoe
Tea (Grades of tea) T: 62-63

Peláez, Amelia [Cuban painter]
Cuba (The arts) Ci: 1172

Pelagic fish
Fishing industry (Nets) F: 183

Pelagius I [pope]
Pope (table) P: 666

Pelagius II [pope]
Pope (table) P: 666

Pelé [Brazilian soccer player] P: 231

Pele [Polynesian goddess]
Mythology *picture on* M: 982

Pelée, Mount *See* Mount Pelée *in this index*

Peléeian eruption
Volcano (Classifying volcanic eruptions) V: 442

Peleliu [island, Pacific]
World War II (Island hopping in the Central
Pacific) W: 488-489

Peleus [Greek mythology]
Achilles A: 26
Trojan War (The beginning of the war) T: 449

Pelham [book by Bulwer-Lytton]
Bulwer-Lytton, Edward George Earle Lytton
B: 697

Pelham, Henry [British political leader]
United Kingdom (table: British prime minis-
ters) U: 72

Pelham bridle [riding equipment]
Horse (The bridle) H: 352

Pelias [Greek mythology]
Jason J: 64

Pelican [bird] P: 231 *with picture*
Bird (Birds of the seacoasts) B: 342 *with pic-
ture*

Pelican [ship]
Drake, Sir Francis (Voyage around the world)
D: 321

Pelican Brief, The [book by Grisham]
Grisham, John G: 396

Pelican flower [plant] P: 232

Pelican Island [Florida]
Florida (Interesting facts about Florida) F: 243
Pelican (Pelicans and people) P: 231
Wildlife conservation (History) W: 304

Pelican State
Louisiana L: 478

Péligot, Eugène [French chemist]
Uranium U: 214

Pellagra [disease] P: 232
Goldberger, Joseph G: 255
Nutrition (Deficiency diseases) N: 630-631

Pellatt, Sir Henry [Canadian financier]
Toronto (Landmarks) T: 336-337; *picture on*
T: 340a

Pelle the Conqueror [film]
Denmark (Arts) D: 136

Pelléas and Mélisande [opera by Debussy]
Debussy, Claude D: 66

Pelléas and Mélisande [play by Maeterlinck]

Maeterlinck, Maurice M: 41

Pellegrina, La
Gem (Some famous gems) G: 79

Pelles [English legend]
Holy Grail (Early history of the Grail) H: 298;
(The search for the Grail) H: 298

Pellet
Hawk H: 111

Pelletier, David [Canadian athlete]
Olympic Games (The recent games) O: 753-
754; *picture on* O: 746d

Pelletier, Gerard [Canadian diplomat]
United Nations (table) U: 86

Pellier, Louis [French farmer]
Prune P: 841

Pelly River [Yukon Territory]
Yukon River (The course of the Yukon) Y: 582
with map

Pelopidas [Greek general] P: 232
Boeotia B: 435
Thebes T: 251

Pelopion [ancient Greece]
Olympia O: 745

Peloponnesian League [ancient Greece]
Arcadia A: 593
Peloponnesian War P: 232
Sparta (History) So: 766

Peloponnesian War [431-404 B.C.] P: 232
Alcibiades A: 334
Greece, Ancient (The rivalry between Athens
and Sparta) G: 373-374 *with maps*
Pericles (War with Sparta) P: 287
Sparta (History) So: 766
Thebes T: 251
Thucydides T: 271
War (Struggles over power) W: 24

Peloponnesus [region, Greece] P: 232
Achaean A: 25
Arcadia A: 593
Greece (The Peloponnesus) G: 358 *with map*
Messenia M: 423 *with map*

Pelops [Greek mythology]
Tantalus T: 29

Pelorus
Navigation (Piloting) N: 71

Pelos [hat]
Hat (History) H: 84

Pelosi, Nancy [American political leader] P: 232
with portrait

Pelosi, Paul F. [American businessman]
Pelosi, Nancy P: 232

Pelota [ball]
Jai alai J: 21 *with picture*

Pelt
Fur F: 561; *pictures on* F: 563
Fur trade F: 564

Peltier, J. C. A. [French physicist]
Thermocouple T: 253

Pelton, Lester A. [English inventor]
Turbine (History) T: 498-499

Pelton wheel
Turbine (Water turbines) T: 496 *with pictures*

Pelvic fin [zoology]
Fish (Fins) F: 160-161 *with picture*

Pelvic girdle [anatomy]
Skeleton (The appendicular skeleton) S: 480
with diagram

Pelvic inflammatory disease P: 232
Chlamydia C: 516
Gonorrhea G: 268

Pelvis [kidney]
Kidney (How the kidneys produce urine)
K: 311 *with diagram*

Pelvis [skeleton] P: 233 *with diagram*
Skeleton (The axial skeleton) S: 479-480 *with
diagrams*

Pelycosaur [animal]
Dimetrodon D: 204

Pemadumcook Lake [Maine]
Penobscot River P: 271

Péman, José María [Spanish dramatist]
Spanish literature (Drama) So: 763

Pemaquid Indians [American Indians]
Samoset S: 80b

Pemba [island]
Tanzania (The coastal lowlands and islands)
T: 33 *with map*

Pemberton, John Styth [American pharmacist]
Coca-Cola Company Ci: 742

Pembina
North Dakota (Exploration and early settle-
ment) N: 513-514

Pembina Hills [North Dakota]
North Dakota (Land regions) N: 506

Pembroke State University
Lumbee Indians L: 516

Pembroke Welsh corgi [dog] P: 233
Dog *picture on* D: 276

Pemigewasset River
New Hampshire (Rivers and lakes) N: 220

Pemmican [food] P: 233
Indian, American (Food) I: 136d

Pen [bird]
Swan So: 1015

Pen [tool] P: 233 *with pictures*
Ink (Writing inks) I: 273

Pen [zoology]
Squid So: 814

Pen and ink drawing
Drawing *picture on* D: 344

Pen-based computer
Computer (A touch screen) Ci: 914-915

Pen name P: 234

Pen pal
Letter writing (Other personal letters) L: 213

Peña, Federico Fabian [American government official] P: 235
Hispanic Americans (Political developments) H: 255-256

Penacook [former name]
Concord (New Hampshire) Ci: 929

Penal colony [punishment] P: 235
Australia (Early settlement) A: 922
French Guiana F: 514
Queensland (History) Q: 40
Sydney (History) So: 1064

Penal Laws [British history]
Great Irish Famine G: 343

Penalty [sports]
Basketball (Fouls) B: 147-148
Football (Violations and penalties) F: 363; *pictures on* F: 361
Hockey (Violations and penalties) H: 278 *with pictures*

Penalty area [sports]
Soccer (The field) So: 544

Penalty box [hockey]
Hockey (The rink) H: 274-275

Penalty goal
Rugby football (Rugby Union) R: 510

Penalty kick [sports]
Rugby football (Rugby Union) R: 510; (Rugby League) R: 511-512
Soccer (How soccer is played) So: 545; (Fouls) So: 546

Penalty privilege [mail]
Franking and penalty privileges F: 485

Penalty shot
Hockey (Violations and penalties) H: 278-279

Penalty signals [sports]
Football *pictures on* F: 361

Penalty spot
Soccer (Fouls) So: 546

Penalty throw
Water polo W: 139

Penan [people]
Rain forest (Asia) R: 126b

Penance [religion]
Easter (Religious observances of Easter) E: 42
Eastern Orthodox Churches (Sacraments) E: 46-47
Roman Catholic Church (Worship) R: 404

Penang [state, Malaysia]
George Town G: 109
Malaysia (Coming of the Europeans) M: 101

Penates [Roman mythology] *See* Lares and penates *in this index*

Pencak silat [sport]
Indonesia (Recreation) I: 232
Malaysia (Recreation) M: 98d
Martial arts (Martial arts in other countries) M: 234

Pence
Penny P: 271

Pencil P: 235 *with pictures*
Eraser E: 349
Faber, Eberhard F: 2
Graphite G: 323

Pencil of Nature, The [book by Talbot]
Talbotype T: 19

Pend Oreille Lake [Idaho]
Idaho (Rivers, waterfalls, springs, and lakes) I: 38

Pendarvis [house]
Wisconsin (Places to visit) W: 356

Pendennis [book by Thackeray]
Thackeray, William Makepeace (Later career) T: 220

Pendensive
Architecture (table) A: 608-609 *with picture*;
(Byzantine architecture) A: 617

Penderecki, Krzysztof [Polish composer] P: 236

Pendergast, James [American political leader]
Pendergast, Thomas Joseph P: 236

Pendergast, Thomas Joseph [American political leader] P: 236
Kansas City [Missouri] (History) K: 243
Truman, Harry S. (Political career) T: 467-468

Pendleton, George Hunt [American political leader] P: 237
Civil service (History) Ci: 613
Lincoln, Abraham (Election of 1864) L: 323-324

Pendleton, Joseph H. [American general]
Camp Pendleton C: 90

Pendleton Civil Service Act *See* Civil Service Act [1883] *in this index*

Pendulum P: 236 *with diagrams*
Clock (Mechanical clocks) Ci: 682j *with pictures*
Foucault, Jean Bernard Léon F: 429
Galileo (Mature scientific career) G: 11
Metronome M: 442 *with picture*
Science *picture on* S: 199

Pendulum dial scale
Scale, Weighing (Mechanical scales) S: 169

Peneid [shrimp]
Shrimp (The life of a shrimp) S: 441

Penelope [legendary figure] P: 238
Odyssey (Odysseus returns home) O: 675
Ulysses (The Trojan War) U: 17-18; (Return to Ithaca) U: 17-18

Penetrator [ammunition]
Ammunition A: 435

Penetrator [space probe]
Space exploration (Space probes) So: 708

Penfield, Wilder Graves [Canadian physician] P: 238

P'eng-hu [islands] *See* Pescadores *in this index*

Pengrowth Saddledome [arena]
Calgary (History) C: 34; *picture on* C: 33

Penguin [bird] P: 238 *with pictures*
Animal *pictures on* A: 484, A: 499
Antarctica (Animal life) A: 534-535 *with pictures*
Bird (Birds of the ocean and the Antarctic) B: 344 *with picture*
Life (The physical environment) L: 275 *with picture*

Penguin [boat]
Sailing (Catboats and sloops) S: 24

Penguin Books
Book (Modern books) B: 468

Penguin Island [book by France]
France, Anatole F: 480

Penguins, Pittsburgh
Hockey (table: National Hockey League) H: 281

Penicillin [medication] P: 240 *with pictures*
Ampicillin A: 443
Antibiotic (Allergic reactions) A: 551;
(Prevention of cell wall formation) A: 550;
(History) A: 552 *with picture*
Cephalosporin C: 359
Chemotherapy C: 407
Erythromycin E: 356
Fleming, Sir Alexander F: 232
Fungi (The importance of fungi) F: 559-560
Medicine (The medical revolution) M: 376 *with picture*
Tyndall, John T: 536

Penicillin G [medication]
Antibiotic (table) A: 551
Penicillin (Forms of penicillin) P: 240; (Early history) P: 240

Penicillin V [drug]
Penicillin (Forms of penicillin) P: 240

Penicillium [mold]
Fungi (The importance of fungi) F: 559-560 *with picture*
Medicine (The medical revolution) M: 376 *with picture*
Penicillin (Forms of penicillin) P: 240 *with picture*
Tyndall, John T: 536

Penicillium notatum [mold]
Fleming, Sir Alexander F: 233

Peninsula [geography] P: 241 *with map*

Peninsula brown bear
Bear (Brown bears) B: 184

Peninsular Campaign [1862]
Civil War (The peninsular campaign) Ci: 626

Lincoln, Abraham (Building the army) L: 321
McClellan, George Brinton (Military career) M: 332

Peninsular Malaysia [region]
Malaysia M: 98a *with pictures and map*; (Land and climate) M: 99

Peninsular Ranges [mountains, Mexico-U.S.]
California (The Peninsular Ranges) C: 50

Peninsular War [1808-1813]
Continental System Ci: 1023
Napoleon I (The Peninsular War) N: 18
Spain (French conquest) So: 748
Wellington, Duke of (Peninsular War) W: 194

Peninsulares [Mexican history]
Mexico (Spanish rule) M: 470

Penis [anatomy] P: 241
Circumcision Ci: 561
Human body (The reproductive system) H: 425
Impotence I: 94
Reproduction, Human (The human reproductive system) R: 244-245 *with diagram*
Sexuality (Biological factors) S: 337

Penitentiary
Prison (Types of correctional institutions) P: 805; (Early prison reform) P: 807

Penmanship
Handwriting H: 46 *with pictures*; (The 1900's) H: 50

Penn, John [American patriot] P: 241

Penn, Sir William [father of]
Penn, William (Youthful rebel) P: 241-242

Penn, William [American colonial leader] P: 241 *with pictures*
Delaware (English rule) D: 110
Peace (From the 1400's to the 1700's) P: 206
Pennsylvania (Exploration and settlement) P: 264, (Colonial days) P: 264; *picture on* P: 266
Philadelphia P: 358; (Early colonial days) P: 365 *with picture*
Quakers (History) Q: 4
Treaty *picture on* T: 408
United States, History of the (The Middle Colonies) U: 154, *picture on* U: 152

Penn Hills [suburb]
Pittsburgh (The city) P: 500a-500b

Penn State *See* Pennsylvania State University *in this index*

Penn Station
New York City (Transportation) N: 334-335

Pennant [baseball]
Baseball (Play-offs) B: 130

Pennant [flag]
Flag (table) F: 193

Pennell, Joseph [American artist] P: 243

Pennewill, Simeon S. [American political leader]
Delaware (table) D: 109

Penney, James Cash [American businessman] P: 243

Penney Foundation
Penney, James Cash P: 243

Penniman, Richard [American musician] *See* Little Richard *in this index*

Pennine Alps [mountains, Switzerland]
Switzerland (The Swiss Alps) So: 1055-1056

Pennine Chain [mountains, England] P: 243
England (The Pennines) E: 300 *with picture and map*
United Kingdom (The Pennines) U: 59 *with map*

Pennington, William [American political leader]
New Jersey (table) N: 249

Pennington, William S. [American political leader]
New Jersey (table) N: 249

Pennock, Herb [American baseball player]
Baseball (table: Hall of Fame) B: 135

Pennoyer, Sylvester [American political leader]
Oregon (table) O: 845

Penn's Treaty with the Indians [painting by West]
United States, History of the *picture on* U: 152
West, Benjamin W: 198

Pennsylvania P: 244 *with pictures and maps*
Coal *picture on* Ci: 731
Colonial life in America (Development of the Thirteen Colonies) Ci: 789 *with map*
Penn, William P: 241
Pennsylvania Dutch P: 270
Quakers (History) Q: 4
September 11 terrorist attacks S: 310

- United States, History of the (The Middle Colonies) U: 154
 Whiskey rebellion W: 282
Pennsylvania, Bank of [Philadelphia]
 Latrobe, Benjamin Henry L: 117
Pennsylvania, University of P: 270 *with picture*
 Franklin, Benjamin (Civic leader) F: 487-488
Pennsylvania picture on P: 249
 Universities and colleges (The oldest U.S. universities and colleges) U: 210
Pennsylvania Academy of the Fine Arts [Philadelphia]
 Pennsylvania (Museums) P: 249
 Philadelphia (Education) P: 362; (Libraries and museums) P: 364
Pennsylvania Avenue
 Washington, D.C. (North of the Mall) W: 74; *pictures on* W: 84, W: 87
Pennsylvania Avenue National Historic Site [Washington, D.C.]
 National Park System (table: National historic sites) N: 52-53
Pennsylvania Canal
 Pennsylvania (Industrial growth) P: 267
Pennsylvania Chronicle, The [newspaper]
 Goddard, Mary Katherine G: 244
 Goddard, William G: 245
Pennsylvania Dutch [people] P: 270 *with picture*
 Amish A: 433
 Folk art (Folk art collections) F: 319
 Lancaster L: 55
 Mennonites M: 402
 Pennsylvania P: 244; (People) P: 248
Pennsylvania firefly [insect]
 Beetle picture on B: 218
Pennsylvania Fiscal Agency
 Credit Mobilier of America Ci: 1125
Pennsylvania Gazette
 Philadelphia (Communication) P: 365
Pennsylvania Hospital [Philadelphia]
 Franklin, Benjamin (Civic leader) F: 487-488
 Hospital (Early hospitals) H: 373
Pennsylvania Journal [newspaper]
 Bradford, William, III B: 546
Pennsylvania Prison Society
 Prison (Early prison reform) P: 807
Pennsylvania Railroad
 Railroad (Expansion in the United States) R: 115
Pennsylvania rifle [gun]
 Pennsylvania Dutch P: 270
Pennsylvania State University P: 271 *with picture*
Pennsylvania Station [New York City]
 New York City (Transportation) N: 334-335
Pennsylvania System
 Prison (Early prison reform) P: 807
Pennsylvania Turnpike [road] P: 271
 Pennsylvania (Transportation) P: 262
Pennsylvanian Period [geology]
 Earth (table) E: 30
 Reptile (The evolution of reptiles) R: 252
Penny [money] P: 271 *with pictures*
 Cent C: 350
 Denarius D: 130
 Money (United States currency today) M: 709-711 *with pictures*
Penny [unit of measure]
 Nail (Sizes of nails) N: 3 *with picture*
Penny Black [stamp]
 Postal services *picture on* P: 706
Penny dreadful [card]
 Valentine's Day (Commercial valentines) V: 264
Penny-farthing [bicycle]
 Bicycle (Early bicycles) B: 292
Penny icecap
 Icecap I: 19
Penny paper
 Journalism (The growth of U.S. newspapers) J: 174
Penny Post
 Postal services (The creation of the Penny Post) P: 706
"Penny saved is a penny earned, A" [quotation]
 Poor Richard's Almanac P: 659
Pennypacker, Samuel Whiteaker [American political leader]
 Pennsylvania (table) P: 263
Pennyroyal [plant] P: 271
Pennyroyal Region
 Kentucky (Land regions) K: 285
Pennyweight [unit of measure] P: 271
Penobscot Expedition [U.S. history]
 Revere, Paul (Revolutionary soldier) R: 268
Penobscot Indians [people]
 Indian, American (In the United States) I: 179
 Maine (Recent developments) M: 92 *with picture*
Penobscot Marine Museum [Searsport]
 Maine (Places to visit) M: 78
Penobscot River [Maine] P: 271
 Maine (Rivers and lakes) M: 82
Penology
 Criminology (What criminologists study) Ci: 1145
Pensacola [Florida] P: 272
 Florida (The second Spanish period) F: 262
Pensacola Bay [Florida]
 Pensacola P: 272
Pensacola Dam [Neosho River, Oklahoma] P: 272
 Lake O' The Cherokees L: 42 *with map*
Pensacola Naval Air Station [Florida] P: 272 *with picture*
Pensées [book by Pascal]
 French literature (Classical prose) F: 520
 Pascal, Blaise P: 190
"Penseroso, II" [poem by Milton]
 Milton, John (His early life and works) M: 557
Pension [income] P: 272
 Social security (The Canada Pension Plan) So: 556
 Veterans Affairs, Department of (Benefits and other services) V: 343
See also the list of Related articles in the Pension article
Pension Benefit Guaranty Corporation
 Pension (Trust-fund plans) P: 273
Penstemon [plant]
 Beardtongue B: 188 *with picture*
Penstock [pipeline]
 Turbine (Water turbines) T: 496 *with diagram*
Pentaceratops [dinosaur]
 Dinosaur picture on D: 207
Pentaerythritol tetranitrate [explosive]
 PETN P: 327
Pentagon [geometry] P: 274 *with diagram*
 Pyramid P: 916 *with diagram*
Pentagon Building [Arlington, Virginia] P: 274 *with picture*
See also September 11 terrorist attacks *in this index*
 Bush, George Walker (Bush's administration) B: 722f
 Hijacking H: 230
 September 11 terrorist attacks S: 310 *with picture*
 United States, History of the (Recent events) U: 195-196
 Washington, D.C. (The Pentagon) W: 78;
 (Government changes) W: 87-88
Pentagon Papers
 Freedom of the press (In the United States) F: 507-508
 Vietnam War (Growing protest) V: 376
Pentameter [poetry]
 Greek literature (Lyric poetry) G: 377
 Poetry (table) P: 594
Pentane
 Natural gas liquids N: 64
Pentateuch [Old Testament] P: 274
See also Torah *in this index*
 Bible (Books of the Hebrew Bible) B: 279-280;
 (Development of the Hebrew Bible) B: 281
 Deuteronomy D: 172
 Moses M: 828
 Old Testament (Contents) O: 740-741
 Septuagint S: 310b
Pentathlon [sports]
 Olympic Games (The ancient games) O: 750
Pentathlon, Modern [sports] P: 275
 Olympic Games (Summer Olympic Games) O: 746-747
 Track and field (The decathlon, heptathlon, and pentathlon) T: 356
Pentecost [religion] P: 275
 Christianity (Resurrection and Pentecost) C: 525
 Easter (Religious observances of Easter) E: 42;
 (The end of the Easter season) E: 43
Pentecostal churches [religious group] P: 275
 Assemblies of God A: 817
 Churches of God C: 543
 Faith healing F: 12
 Latin America (Religion) L: 99-100
Pentecostalism
 Protestantism (The Methodist movement [the 1700's]) P: 835
 Religion (Religion today) R: 223
Pentelic marble
 Parthenon P: 183
Penthesilea [legendary figure]
 Amazons A: 404
 Trojan War (The siege of Troy) T: 449
Pentjak silat [sport] *See* Pencak silat *in this index*
Pentland Firth [strait, Scotland]
 Orkney Islands O: 856
Pentlandite [mineral]
 Nickel (Mining nickel) N: 404
Pentode
 Vacuum tube (Kinds of vacuum tubes) V: 258-259; (Development of the vacuum tube) V: 259
Pentolite [explosive]
 Ammunition (Artillery ammunition) A: 435-436
 Explosive (High explosives) E: 454
 PETN P: 327
Pentothal [drug]
 Thiopental T: 258
Penumbra [light] P: 276 *with diagram*
 Shadow S: 341 *with diagram*
 Sunspot So: 992
Penutian [language group]
 Indian, American (Language groups) I: 150
Penwork [decoration]
 Furniture (The Regency style) F: 580
Penzias, Arno Allan [American physicist]
 Astronomy (Advances in astrophysics) A: 848-849
 Big bang B: 297
 Galaxy (Origin of galaxies) G: 8b
 Nobel Prizes (Physics: 1978) N: 441
Peonage [labor] P: 276
 Plantation ("Free"-labor plantations) P: 550
Peony [plant] P: 276 *with picture*
 Flower (Garden perennials) F: 278 *with picture*
Peony Pavilion [play by Tang Xianzu]
 Chinese literature (Drama and fiction) C: 512
People
 Human being H: 412
People [magazine]
 Magazine (table) M: 45
People Behave Like Ballads [poem by Coffin]
 Coffin, Robert Peter Tristram Ci: 756
People for the Ethical Treatment of Animals [organization] P: 277
 Animal rights movement A: 510
People Meter [machine]
 Television (The national networks) T: 114
People mover [vehicle]
 Airport (Terminal designs) A: 248-249
 Transportation *picture on* T: 398
"People of God, The" [Roman Catholicism]
 Vatican Council II (The work of the council) V: 289
People of Seldwyla, The [stories by Keller]
 Keller, Gottfried K: 254
People of the Abyss, The [essays by London]
 London, Jack L: 444
People of the Deer [book by Mowat]
 Mowat, Farley M: 903
People of the Goddess Danu [Irish clan]
 Mythology (The Irish cycles) M: 983
People United to Save Humanity [organization]
 Jackson, Jesse Louis J: 15
People, Yes, The [poems by Sandburg]
 Sandburg, Carl (His poetry) S: 108
People's Action Party
 Singapore (History) S: 471
People's Assembly [legislature]
 Egypt (National government) E: 121
People's Budget [British history]
 Lloyd George, David (Early career) L: 402-403
People's committee [government]
 Vietnam (Local level) V: 365
People's committees [Spanish history]
 Spanish Civil War (Rebellion leads to civil war) So: 756a
People's Consultative Assembly [government]
 Indonesia (Government) I: 226 *with picture*
People's Council [government]
 Vietnam (Local level) V: 365
People's courts
 Russia (Courts) R: 532
 Vietnam (Courts) V: 365
People's Democratic Party of Uzbekistan
 Uzbekistan (Government) U: 253

People's Democratic Republic of Yemen
Yemen (Formation of Yemen (Aden)) Y: 563-564

People's Front See Popular Front *in this index*

People's Liberation Army

China (The armed forces) C: 481

People's National Movement [political party]
Trinidad and Tobago (Government) T: 445-446;
(History) T: 446

People's Organs of Control [government]
Vietnam (Courts) V: 365

People's Party [U.S. history]

Populism (The People's Party) P: 674

People's Republic of China See China *in this index*

People's Supreme Court

Cuba (Courts) Ci: 1169

People's Temple [cult]

Cult (Modern cults) Ci: 1185

Guyana (History) G: 446-447

People's United Party [political party]

Belize (History) B: 238

People's Will [Russian history]

Russia (Alexander II) R: 551

Peoria [Illinois] P: 277

Pep pill See Amphetamine *in this index*

Pepin of Herstal [Frankish nobleman]

France (The Carolingian dynasty) F: 471

Pepin the Short [king of the Franks] P: 277

Charlemagne (Military conquests) C: 378

France (The Carolingian dynasty) F: 471

Italy (The Middle Ages) I: 513

Lombards L: 427

Merovingian dynasty M: 418

Middle Ages (The Carolingian Empire) M: 524

Papal States P: 132

Pepo [botany]

Fruit (Simple fruits) F: 548

Pepper [plant] P: 277 *with picture*

Pepper [spice] P: 277 *with pictures*

Pepper tree See Peppertree *in this index*

Pepperdine University P: 278

Peppered moth

Heredity (Heredity and natural selection)

H: 203

Pepperell, William [American general]

Maine (French and Indian wars) M: 89

Peppergrass [plant]

Cress Ci: 1127

Pepperidge [plant]

Tupelo T: 492

Peppermint [plant] P: 278 *with picture*

Menthol M: 411

Peppertree P: 279 *with picture*

Pepsin [enzyme] P: 279

Digestive system (From mouth to stomach)

D: 202-203

Stomach (The stomach's work) So: 907

Ulcer U: 15

Peptic ulcer [disorder]

Antacid A: 529

Stomach (Peptic ulcers) So: 908

Ulcer U: 15 *with picture*

Peptide [physiology]

Endorphin E: 272

Immune response (The cell-mediated immune

response) I: 88a

Protein (The structure of proteins) P: 832

Peptide-MHC complex [physiology]

Immune system (The cell-mediated immune

response) I: 88a; *diagram on I: 88b*

Peptone

Pepsin P: 279

Pepys, Samuel [English author] P: 279 *with por-*

trait

Diary D: 184

English literature (Restoration prose) E: 318

Pequod [ship]

Melville, Herman (His literary career) M: 390

Pequonnock River [Connecticut]

Bridgeport B: 606

Pequot Indians [American Indians]

Indian wars (The Pequot War) I: 191

Connecticut (Early days) Ci: 968; (The Pequot

War) Ci: 968

Mohegan Indians M: 688

Pequot War [1637]

Indian wars (The Pequot War) I: 191

Connecticut (The Pequot War) Ci: 968

Mohegan Indians M: 688

Per cent [mathematics] See Percentage *in this index*

Peralta, Luis Maria [Spanish soldier]

Oakland (Government and history) O: 637

Peralta, Pedro de [Spanish colonial leader]
New Mexico (Exploration and settlement)
N: 273

Peramelemorphia [zoology]

Mammal (table) M: 128 *with picture*

Percale [fabric] P: 279

Percé Rock [island, Quebec]

Quebec (Places to visit) Q: 20; *picture on*
Q: 10

Percentage [mathematics] P: 280 *with pictures*
Ratio R: 147

Percentile rank

College entrance examination (Scores) Ci: 775

Perception [psychology] P: 282 *with pictures*

Color (How we see color) Ci: 818 *with pic-*

tures

Ear (The sense of hearing) E: 9 *with pictures*

Eye (How we see) E: 462 *with pictures*

Hume, David (Hume's thought) H: 432

Learning disabilities (Types) L: 165

Leibniz, Gottfried Wilhelm L: 186

Optical illusion O: 812 *with pictures*

Pestalozzi, Johann Heinrich P: 318

Psychology (Major fields of psychology) P: 848

Reading (How we read) R: 156

See also the list of Related articles in the

Perception article, and Senses in this

index

Perceptual context

Perception (Principles of perception) P: 284

Perceptual disorder

Learning disabilities (Types) L: 165

Perceval [legendary figure]

Holy Grail (The search for the Grail) H: 298

Knights and knighthood *picture on K: 348*

Perceval, Spencer [British political leader]

United Kingdom (table: British prime minis-

ters) U: 72

Perch [fish] P: 284

Climbing perch Ci: 680 *with picture*

Fish *picture on F: 158; diagrams on F: 161,*

F: 162, F: 163

Skeleton *diagram on S: 481*

Percheron

Horse (table: Some types and breeds of hors-

es) H: 343; *picture on H: 347*

Perching duck

Duck (Perching ducks) D: 376; *picture on*

D: 375

Percussion instrument [music]

Drum D: 367

Music (Percussion instruments) M: 950; *pic-*

tures on M: 949

Orchestra O: 820 *with pictures*

Rhythm band R: 320

Percussion section [music]

Orchestra (The musicians) O: 820

Percussive martial arts

Martial arts M: 233

Percy, Henry [literary figure]

Shakespeare, William (Henry IV) S: 359

Percy, Thomas [British scholar]

Ballad (Ballads and literature) B: 43

Percy, Walker [American author]

American literature (Southern fiction) A: 424

Perdita [literary figure]

Shakespeare, William (*The Winter's Tale*)

S: 365

Perdix [Greek mythology]

Daedalus D: 3

Père David's deer

Deer (table) D: 85; (Asian and European deer)

D: 86

Père Noël

Christmas (In France) C: 530

Santa Claus (How the Santa Claus legend

began) S: 113

Pereda, José María de [Spanish author]

Spanish literature (The 1800's) So: 761-762

Peregrine falcon [bird] P: 284

Animal *pictures on A: 489, A: 505*

Bird *picture on B: 329*

Falcon (The peregrine falcon) F: 14; *picture on*

F: 14

Peregrine Fund World Center for Birds of

Prey

Idaho (Places to visit) I: 34

Peregrine-gyrfalcon hybrid [bird]

Falcon *picture on F: 14*

Peregrinus, Petrus [French physicist]

Magnetism (Early discoveries) M: 61

Pereira, Aristides [Guinea-Bissau political

leader]

Guinea-Bissau (History) G: 434

Pereira da Sousa, Washington Luís [Brazilian

political leader]

Brazil (Birth of the republic) B: 585

Perekop, Isthmus of [region, Ukraine]

Crimea Ci: 1142 *with map*

Perelman, S. J. [American author] P: 284

Perelmuth, Jacob Pincus [American singer]

See Pearce, Jan *in this index*

Peremptory challenge [law]

Jury (Petit juries) J: 202

Perennial [botany] P: 285

Flower (Garden flowers) F: 275; (Garden

perennials) F: 278 *with pictures*; (Garden

perennials) F: 281 *with pictures*

Gardening (Planning the garden) G: 31-32

Plant (Germination) P: 536

Weed (How weeds grow) W: 179

Perennial allergic rhinitis [disorder]

Allergy A: 373

Hay fever (Treatment) H: 116

Perennial ragweed [plant]

Ragweed R: 103

Peres, Shimon [Israeli political leader] P: 285

with portrait

Israel (Unity government) I: 489

Nobel Prizes (Peace: 1994) N: 449

Shamir, Yitzhak S: 371

Perestrello Moniz, Felipa [wife of]

Columbus, Christopher (Young adulthood)

Ci: 857-858

Perestroika [Soviet history]

Communism (The Soviet Union under

Gorbachev) Ci: 895-896

Europe (The breakup of Communism) E: 416

Gorbachev, Mikhail Sergeyevich (Domestic

policies) G: 272

Union of Soviet Socialist Republics (Economy)

U: 33; (Gorbachev's reforms) U: 40

Peretti, Felice See Sixtus V *in this index*

Peretz, Isaac Leib [Polish author]

Yiddish literature Y: 566

Perey, Marguerite [French chemist]

Francium F: 482

Pérez, Carlos Andrés [Venezuelan political

leader]

Venezuela (Recent developments) V: 305

Pérez, Juan [Spanish explorer]

British Columbia (European contact) B: 628

Vancouver Island (History) V: 278

Perez, Tony [American baseball player]

Baseball (table: Hall of Fame) B: 135

Pérez Balladares, Ernesto [Panamanian political

leader]

Panama (Recent developments) P: 121

Pérez de Ayala, Ramón [Spanish author]

Spanish literature (The Generation of 1898)

So: 762

Pérez de Cuéllar, Javier [Peruvian diplomat]

P: 285

United Nations (The secretary-general) U: 83

with portrait

Pérez Esquivel, Adolfo [Argentine activist]

Nobel Prizes (Peace: 1980) N: 448

Pérez Jiménez, Marcos [Venezuelan political

leader]

Venezuela (The road to democracy) V: 305

"Perfect Day, A" [song by Bond]

Bond, Carrie Jacobs B: 455

Perfect participle [grammar]

Participle P: 184

Perfect tense [grammar]

Tense T: 170

Perfume P: 286

Ambergris A: 405
 Civet Ci: 604
 Flower (Other uses) F: 274 *with picture*
 Frankincense F: 485
 Herb H: 196
 Musk M: 961
 Patchouli P: 194

Pergamon Museum

Berlin (Libraries and museums) B: 262

Pergamum [ancient city]

Library (Ancient libraries of animal skins) L: 259

Pergolesi, Giovanni Battista [Italian composer]

P: 287
 Classical music (Neoclassicism) Ci: 649
 Opera (Opera seria and opera buffa) O: 797-798

Perham, Sidney [American political leader]

Maine (table) M: 87

Peri, Jacopo [Italian composer]

Opera (The development of opera) O: 797

Pericarditis [disorder]

Heart (Inflammatory heart disease) H: 142

Pericardium [anatomy]

Heart (Outer lining and muscle) H: 133;
 (Inflammatory heart disease) H: 142
 Membrane (Serous membranes) M: 391

Pericarp [botany]

Fruit (How botanists classify fruits) F: 546-548

Pericles [Greek military leader] P: 287

Athens (The Golden Age) A: 857
 Greece, Ancient *picture on* G: 370
 Oratory (Classical orators) O: 819

Pericles [play by Shakespeare]

Shakespeare, William (*Pericles*) S: 364

Pericles, Age of See Golden Age of Athens *in this index***Pericycle** [botany]

Root (The core) R: 474 *with diagram*

Periderm [botany]

Potato (The potato plant) P: 712 *with picture*

Peridot [gem] P: 287

Gem *picture on* G: 78
 Olivine O: 745

Peridotite [rock]

Mars (Physical features of Mars) M: 225
 Mantle M: 168

Peridural anesthesia

Anesthesia (Local anesthesia) A: 459

Perigee [astronomy]

Orbit O: 819
 Month M: 767
 Moon (Rotation and orbit) M: 783
 Space exploration (Kinds of earth orbits) *diagram on* So: 697

Périgord truffle [fungus]

Truffle T: 465

Perihelion [astronomy] P: 288**Peril** [insurance]

Insurance (Property and liability insurance) I: 312-313

Perimeter [mathematics]

Algebra (Writing formulas) A: 353
 Triangle (Properties and relationships of triangles) T: 438

Period [astronomy]

Comet (Orbits) Ci: 868
 Hogg, Helen Sawyer H: 288
 Kepler, Johannes K: 305
 Planet (How planets move) P: 508-509

Period [geology]

Earth (Age of Earth) E: 26
 Prehistoric animal (The world of prehistoric animals) P: 736

Period [punctuation]

Punctuation (The period) P: 902

Period, Menstrual See Menstrual period *in this index***Period-luminosity relation** [astronomy]

Leavitt, Henrietta Swan L: 170

Period of oscillation [physics]

Pendulum P: 236 *with diagram*

Periodic kiln [industry]

Brick (Firing bricks) B: 598

Periodic law

Chemistry (Formation of the periodic table) C: 402

Mendeleev, Dmitri Ivanovich M: 398

Periodic table [chemistry]

Chemistry (Formation of the periodic table) C: 402
 Element, Chemical (The periodic table of the elements) E: 219

Mendeleev, Dmitri Ivanovich M: 398

Meyer, Julius Lothar M: 479

Moseley, Henry Gwyn-Jeffreys M: 828

Science (Classifying data) S: 194

Periodic tenancy [law]

Tenant T: 132

Periodical [magazine]

Magazine M: 42

Postal Service, United States (Classes of mail) P: 699

Trade publication T: 364

Periodical cicada [insect]

Cicada (Types of cicadas) Ci: 551

Insect *picture on* I: 281

Periodontal disease

Teeth (Periodontal diseases) T: 85 *with picture*

Periodontal ligament

Teeth (Parts of a tooth) T: 80; (Periodontal ligament) T: 81 *with diagram*

Periodontics

Dentistry (Periodontics) D: 144

Periodontitis [disease] P: 288

Teeth (Periodontal diseases) T: 85 *with picture*

Perioeci [people]

Sparta (The people) So: 766

Periosteum [anatomy]

Bone (Structure of the bones) B: 456 *with diagram*

Membrane (Fibrous membranes) M: 391

Periostracum [biology]

Shell (How shells are formed) S: 385

Periot, Henri-Jules [French author]

Daniel-Rops, Henri D: 34

Peripatetic philosophy P: 288

Aristotle (Aristotle's life) A: 663
 Lyceum L: 532

Peripatologist [occupation]

Blindness (Education and training) B: 403

Peripheral [machine]

Computer (Parts of computers) Ci: 911-912 *with picture*

Peripheral nervous system [anatomy]

Human body (The peripheral nervous system) H: 426

Leprosy L: 203

Nervous system (The peripheral nervous system) N: 133 *with diagram*

Paralysis (Paralysis of peripheral nervous system origin) P: 152

Peripheral vision

Eye (The retina) E: 462

Periscope [instrument] P: 288

Prism P: 805

Perissodactyla [zoology]

Mammal (table) M: 128-129 *with picture*

Peristalsis [physiology]

Stomach (The stomach's work) So: 907
 Alimentary canal A: 368

Peristaltic waves See Peristalsis *in this index***Peristome** [botany]

Moss (How mosses live) M: 834-835

Peristyle [architecture]

Architecture *picture on* A: 616
 Rome, Ancient (Food, clothing, and shelter) R: 438-439 *with picture*

Peritoneum [anatomy]

Abdomen A: 9

Membrane (Serous membranes) M: 391

Peritonitis P: 288

Peritonitis [disorder] P: 288

Diverticulitis D: 241

Periwig

Clothing (The 1600's) Ci: 701 *with picture*
 Hairdressing (The 1600's) H: 12; *picture on*

H: 11

Wig W: 299

Periwinkle [plant]

Myrtle M: 972

Periwinkle [sea animal] P: 288**Perjury** [crime] P: 289

Clinton, Bill (Domestic events) Ci: 682f

Oath O: 639

Trial (Presenting evidence) T: 437

United States, History of the (Impeachment) U: 195

Witness W: 374

Perkin, Sir William Henry [British chemist]

Chemistry (Growth of industrial chemistry) C: 405 *with picture*

Coal tar Ci: 733

Dye (History) D: 396

Mauve M: 318

Perkins, Edward J. [American diplomat]

United Nations (table) U: 86

Perkins, Frances [American political leader] P: 289

Roosevelt, Franklin Delano (The "Hundred Days") R: 457

Truman, Harry S. (table) T: 469

Women's movements (Decline after 1920) W: 385

Perkins, George C. [American political leader]

California (table) C: 59

Perkins, Jacob [American engineer]

Refrigeration (Mechanical refrigeration) R: 201

Perkins, Maxwell [American editor]

Wolfe, Thomas Clayton W: 377

Perkins, Simon [American banker]

Akron (History) A: 254

Perkins School for the Blind [Boston]

Howe, Samuel Gridley H: 401

Perkins Vocational Education Act [1935]

Vocational education (The 1900's) V: 435

Perl, Martin Lewis [American physicist]

Nobel Prizes (Physics: 1995) N: 442

Perlite [rock]

Lava (Properties of lava) L: 127-128

Plaster P: 552

Perlman, Itzhak [Israeli violinist] P: 289**Perls, Frederick S.** [German psychiatrist]

Psychotherapy (Other forms of psychotherapy) P: 852

Perm-36 [concentration camp]

Concentration camp (Other concentration camps) Ci: 927

Permafrost P: 289 *with map*

Alaska (The Arctic Coastal Plain) A: 294

Arctic (Soil) A: 637

Russia (Land regions) R: 539

Tundra T: 486

Permalloy [metal] P: 289**Permanent committee** See Standing committee *in this index***Permanent Court of Arbitration** [world history]

International Court of Justice I: 339

Peace (The 1800's and early 1900's) P: 206

Permanent Court of International Justice

[world history]

International Court of Justice I: 339

International law (Courts and arbitration) I: 341

Root, Elihu R: 475

Permanent magnet

Cobalt (Uses) C: 741

Permanent mold

Cast and casting (Types of molds) C: 278

Permanent teeth

Teeth (Permanent teeth) T: 79 *with pictures*

Permanent tissue [botany]

Tissue (Plant tissues) T: 299

Permanent wave [grooming]

Hairdressing (The 1900's) H: 12

Perrman Period [geology]

Earth (The Paleozoic Era) E: 27; (table) E: 30

Prehistoric animal (table) P: 738 *with picture*

Permineralization [geology]

Fossil (The action of minerals) F: 425

Permissible explosive

Dynamite (Kinds of dynamite) D: 397

Permit [fish]

Pompano P: 653

Permutations and combinations [mathematics] P: 290**Pernambuco** [tree]

Brazilwood B: 587

Violin (The bow) V: 389

Pernicious anemia [disorder]

See also Anemia *in this index*

Anemia (Insufficient production of red blood cells) A: 458

Gastritis G: 67

Hodgkin, Dorothy Crowfoot H: 283

Pernštejn Castle

Moravia *picture on* M: 800

Perón, Eva Duarte de [Argentine political leader]

leader] P: 292 *with portrait*

Perón, Juan Domingo P: 292

Argentina (Military dictatorships) A: 658 *with picture*

Perón, Isabel Martínez de [Argentine political leader]

Argentina (New political problems) A: 658-659

Perón, Juan Domingo P: 292

Perón, Juan Domingo [Argentine political leader]

leader] P: 292 *with portrait*
 Argentina (Military dictatorships) A: 658 *with picture*

Perón, Eva Duarte de P: 292

Peronist Party

- Argentina (Politics) A: 647
Peronistas [political group]
 Argentina (New political problems) A: 658
 Perón, Juan Domingo P: 292
Perot, Ross [American businessman] P: 292
with portrait
 Bush, George Herbert Walker (The 1992 election) B: 722a
 Clinton, Bill (The 1992 election) Ci: 682d; (The 1996 election) Ci: 682f
 Reform Party R: 195
Pérotin [French composer]
 Classical music (Church music) Ci: 645
Peroxide of hydrogen [chemical]
 Bleach B: 399
Peroxyacetyl nitrate [chemical]
 Smog (Photochemical smog) S: 519-520
Perpendicular line [mathematics]
 Geometry (Some basic geometric constructions) G: 103 *with picture*
Perpendicular style [architecture]
 Tracery T: 353
 Gothic art (Gothic architecture in England) G: 278
Perpetual calendar
 Calendar C: 30
Perpetual canon [music]
 Canon C: 182
Perpetual Covenant [Swiss history]
 Switzerland (The struggle for freedom) So: 1059
Perpetual Emigrating Fund [U.S. history]
 Utah (The Mormons) U: 246
Perpetual Motion [music by Paganini]
 Paganini, Niccolò P: 20
Perpetual motion machine P: 293 *with diagrams*
 Machine (Efficiency) M: 14
Perpetual rose
 Rose R: 477
Perpetuity [law]
 Foundations (How foundations are organized) F: 429
Perpich, Rudy [American political leader]
 Minnesota (table) M: 602
Perrault, Charles [French author] P: 293
 Fairy (Fairies in literature) F: 11
 Literature for children (Mother Goose) L: 361
 Mother Goose (The history of Mother Goose literature) M: 842
Perrault, Claude [French architect]
 Louvre L: 507
 Perrault, Charles P: 293
Perrier, Carlo [Italian physicist]
 Technetium T: 73
Perrin, Jean Baptiste [French physicist]
 Nobel Prizes (Physics) 1926) N: 440
Perrot, Jules [French choreographer]
 Ballet (Romantic ballet) B: 51
Perrot, Nicholas [French explorer]
 Iowa (Exploration and early settlement) I: 393
Perry [drink]
 Pear (Uses) P: 216
Perry, Benjamin F. [American political leader]
 South Carolina (table) So: 658
Perry, Edward A. [American political leader]
 Florida (table) F: 260
Perry, Gaylord [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Perry, Madison S. [American political leader]
 Florida (table) F: 260
Perry, Matthew Calbraith [American military leader] P: 294
 Asia (The age of colonialism) A: 806
 Fillmore, Millard (Accomplishments) F: 102
 Japan (Renewed relations with the West) J: 56; *picture on* J: 55
 Tokyo (Western influence) T: 319
 Yokohama Y: 567
Perry, Oliver Hazard [American military leader]
 P: 294 *with picture*
 Flag *picture on* F: 210
 Ohio O: 702; *picture on* O: 700
 War of 1812 (Lake Erie) W: 32
Perry, Rick [American political leader]
 Texas (table) T: 203; (Recent developments) T: 208
Perry, William James [American government official] P: 295
Perryman, George [American rancher]
 Tulsa (History) T: 483
Perryman, Lewis [American businessman]
 Tulsa (History) T: 483
Perry's Victory and International Peace Memorial [Ohio]
 National Park System (table: National memorials) N: 54
 Ohio (Places to visit) O: 690
Perryville, Battle of [1862]
 Civil War (table) Ci: 624; (Battle of Perryville) Ci: 629
 Kentucky (The Civil War) K: 293 *with picture*
Persecution [psychology]
 Delusion D: 118
Persephone P: 295
 Adonis A: 65
 Ceres C: 362
 Demeter D: 119
 Orpheus O: 858
 Pomegranate P: 652
Persepolis [ancient city] P: 295
 Persia, Ancient *picture on* P: 297
 Alexander the Great (Victory over Darius) A: 343
 Architecture (Mesopotamian architecture) A: 611
 Sculpture (India) S: 236
Perseus [constellation] P: 295
Perseus [Greek mythology] P: 295
 Andromeda A: 457
 Gorgons G: 275
 Medusa M: 383
 Sculpture *picture on* S: 253
Perseus [sculpture by Canova]
 Canova, Antonio C: 183
Perseus [sculpture by Cellini]
 Cellini, Benvenuto C: 339
 Sculpture (Michelangelo) S: 252-253 *with picture*
Perseveration [disorder]
 Learning disabilities (Types) L: 165
Pershing, John Joseph [American general]
 P: 295 *with picture*
 Marshall, George Catlett (His early career) M: 228-229
 Mexico (The Constitution of 1917) M: 472-473
 Missouri (Progress as a state) M: 671
 Villa, Pancho V: 384
 World War I (The United States enters the war) W: 462-463
Pershing missile
 Army, United States (Missiles) A: 735
 Rocket (High-altitude rockets) R: 390-391
Persia See Iran in this index
Persia, Ancient P: 296 *with pictures and map*
 Afghanistan (Early invasions) A: 95
 Alexander the Great (Invasion of Asia) A: 342
 Architecture (Mesopotamian architecture) A: 611
 Armenia (History) A: 718b
 Asia (The Tigris-Euphrates Valley) A: 804-805
 Azerbaijan (History) A: 997
 Clothing (Ancient times) Ci: 696-697
 Cuneiform Ci: 1192
 Fire (Fire in legend and religion) F: 122
 Islamic art (Pottery) I: 470; *picture on* I: 468
 Marathon M: 191
 Painting (Islamic painting) P: 48
 Postal services (Ancient times) P: 703
 Sculpture (Middle Eastern) S: 233
 Scythians S: 262
 Tajikistan (History) T: 18b
 Thermistocles T: 251
 Thermopylae T: 255
 Turkey (History) T: 509
 World, History of the (Civilizations of southwest Asia) W: 426-428; (The Islamic empires) W: 441-442
 See also the list of Related Articles in the Persia, Ancient, article
Persian art
 See also Islamic art in this index
 Bihzad, Kamal ad-Din *picture on* B: 299
Persian cat
 Cat (Long-haired breeds) C: 292; *picture on* C: 289
Persian Gulf [Arabian peninsula] P: 300 *with map*
 Persian Gulf War (Consequences of the war) P: 300d-301
 Reagan, Ronald Wilson (Persian Gulf conflicts) R: 170
Persian Gulf War [1991] P: 300a *with pictures and maps*
 Air force (Air forces in limited wars) A: 186-187
 Air Force, United States (Fighters) A: 191; (The Persian Gulf War) A: 196
 Arabs (Since independence) A: 589
 Army (Armies in the nuclear age) A: 728-729; *picture on* A: 724
 Army, United States (The Persian Gulf War) A: 740 *with picture*
 Bahrain (History) B: 30-31
 Bush, George Herbert Walker (International affairs) B: 721
 Camouflage *picture on* C: 87
 Canada, History of (The Persian Gulf War) C: 154
 Egypt (Recent developments) E: 133-134
 Fahd F: 6
 Gas mask G: 60
 Guided missile G: 423; (Ballistic missiles) G: 425
 Gulf Cooperation Council G: 436
 Gulf War syndrome G: 438
 Hussein, Saddam H: 457
 International law (After World War II) I: 342
 International relations (The Persian Gulf War) I: 346
 Iraq (The Persian Gulf War) I: 414
 Jordan (Recent developments) J: 165-166
 Kurds K: 393
 Kuwait (History) K: 396-397 *with picture*
 Middle East (More conflict) M: 534
 Mulroney, Brian (The Persian Gulf War) M: 918
 Navy, United States (The Persian Gulf War [1991]) N: 89
 Ocean (Marine pollution) O: 664-665
 Oman (History) O: 759
 Prisoner of war P: 808a
 Qatar (History) Q: 3
 Red Cross (In the United States) R: 187-188
 Saudi Arabia (The Persian Gulf War) S: 162
 Schwarzkopf, H. Norman S: 189
 Syria (Recent developments) So: 1076
 Tank (History) T: 28
 United Nations (Military actions) U: 91-92
 United States, History of the (The Persian Gulf War) U: 195
 War (Conflicts over resources) W: 24, (table) W: 25
 War correspondent W: 27
 War crime (The Persian Gulf War) W: 27
Persian knot
 Rugs and carpets (Oriental rugs) R: 516 *with diagram*
Persian lamb
 Fur (table) F: 561
 Karakul K: 245
Persian language
 Iran (Language) I: 401
Persian Letters [book by Montesquieu]
 Montesquieu M: 764a
 French literature (The Age of Reason) F: 520
Persian rug
 Iran (The arts) I: 402-403
 Islamic art (Rugs) I: 469 *with picture*
 Rugs and carpets (Oriental rugs) R: 516-517 *with pictures*
Persian walnut See English walnut in this index
Persian Wers [ancient Greece]
 Greece, Ancient (The Persian wars) G: 373
 Herodotus H: 213
 Phoenicia (Decline) P: 395
 Thermistocles T: 251
Persiles and Sigismunda [book by Cervantes]
 Cervantes, Miguel de (His literary career) C: 363-364
Persimmon [tree] P: 301 *with picture*
 Ebony E: 48
 Tree *pictures on* T: 423
Persis [ancient region]
 Iran (Early days) I: 405
Persistence of Memory [painting by Dalí]
 Dalí, Salvador D: 10
 Painting (Surrealism) P: 81-82 *with picture*
Persistence of vision [physiology]
 Motion picture (How motion pictures work) M: 857
Persistent organic pollutant
 Environmental pollution (Government action) E: 335-336
Persky, Shimon [former name] See Peres, Shimon in this index
Persol [grammar] P: 301
Person, Place and Thing [book by Shapiro]
 Shapiro, Karl Jay S: 373
"Person to Person" [television show]
 Murrow, Edward R. M: 932
Personal computer [machine]
 Computer (Kinds of computers) Ci: 909; (The personal computer) Ci: 924c *with pictures*

- Computerized instruction (The personal computer) Ci: 925
 Desktop publishing D: 158
 Fax machine (Multifunction fax machines) F: 57-58
 Map M: 176
 United States, History of the (Advances in the development of computers) U: 194
 Word processing W: 403
- Personal digital assistant** [computer]
 Computer (Personal computers) Ci: 909-910
 Electronics *picture on* E: 217
- Personal essay** [literature]
 Essay E: 359
- Personal finance company** [economics]
 Loan company L: 404
- Personal flotation device**
 Life jacket (Boating regulations) L: 281
- Personal foul** [sports]
 Basketball (Fouls) B: 147 *with diagram*
 Lacrosse (Men's lacrosse) L: 24
- Personal identification number**
 Automated teller machine A: 944
 Bank (Electronic banking) B: 89-90
- Personal identity** [psychology] *See* Identity *in this index*
- Personal income**
 Income (Types of income) I: 100; (Uses of personal income) I: 101
- Personal letter**
 Letter writing (Personal letters) L: 212
- Personal liberty**
 Habeas corpus H: 2
 Civil rights Ci: 608
 Communism (Restrictions on personal freedom) Ci: 891-892
 Government (Individual rights) G: 286
- Personal liberty law** [U.S. history]
 Fugitive slave laws F: 553
- Personal pronoun** [grammar]
 Antecedent A: 541
 Gender (Personal pronouns) G: 80
 Pronoun P: 819
- Personal property** [law] P: 302
 Property P: 827
 Property tax P: 827
 Real estate R: 171
- Personal radio**
 Radio (Broadcasting today) R: 94
- Personal Recollections of Joan of Arc** [book by Twain]
 Twain, Mark (Later works) T: 529-530
- Personal reference**
 Careers (Writing a résumé) C: 217
- Personal Responsibility and Work Opportunity Reconciliation Act** [1996]
 Welfare (Since 1960) W: 191-192
- Personal selling** *See* Sales *in this index*
- Personal services**
 Careers (Personal services) C: 228 *with picture*
- Personal-social guidance**
 Guidance (Personal-social guidance) G: 422
- Personality** [psychology] P: 302
See also Behavior *in this index*
 Aggression A: 141
 Baby (Growth and development) B: 6
 Careers (Interests) C: 215
 Clothing (Communication) Ci: 688-689
 Graphology G: 323
 Linton, Ralph L: 339
 Mental illness (Personality disorders) M: 406
 Psychology (Major fields of psychology) P: 848
 Sexuality (Psychological factors) S: 338
 Sullivan, Harry Stack So: 969
 Testing (Kinds of tests) T: 181-182
- Personality test**
 Testing (Kinds of tests) T: 181-182
- Personhood**
 Abortion (Arguments for abortion) A: 15
- Personification** [language]
 Capitalization C: 196
 Figure of speech F: 97
- Personnel management** [business] P: 304
See also Industrial relations *in this index*
 Careers (Management) C: 227-228
- Personnel Management, Office of** [U.S.]
 Civil service (Federal civil service) Ci: 612-613
 Government (Obtaining a government job) G: 291
 Washington, D.C. *map on* W: 76
- Personnel psychology** *See* Industrial psychology *in this index*
- Persons, Gordon** [American political leader]
- Alabama (table) A: 274
- Perspective** [art] P: 304 *with pictures*
 Alberti, Leon Battista A: 332
 Drama (The Italian stage) D: 330 *with picture*
 Leonardo da Vinci (Paintings) L: 200b
 Painting (Roman painting) P: 42-43; (The Renaissance) P: 51-52
- Perspiration** P: 304
 Elimination E: 236
 Skin (Hair, nails, and glands) S: 489
- Persuasion**
 Sales (Persuasion) S: 63
 Public speaking (Approach to a speech) P: 865
- Persuasion** [book by Austen]
 Austen, Jane A: 892
- Perth** [city, Australia] P: 305
 Australia *picture on* A: 901
 Western Australia W: 231
- Perthite** [mineral]
 Feldspar F: 68
- Pertinax** [Roman emperor]
 Rome, Ancient (table) R: 447
- Pertussis** [disease]
 Whooping cough W: 296
- Peru** P: 306 *with pictures and maps*
 Bolívar, Simón B: 441
 Crown *picture on* C: 1158
 El Niño E: 245
 Flag *picture on* F: 201
 Indian, American (Indians of the Andes) I: 173; (Indians of the Tropical forest) I: 175
 Latin America (Border disputes) L: 108
 Moche M: 683
 Money *picture on* M: 705
 Mummy *picture on* M: 925
 Sculpture (Early sculpture) S: 242 *with picture*
 World War II (table: The Allies) W: 471
See also the list of Related Articles in the Peru article
- Peru Current** [Pacific] P: 317
 Ocean (Circulation) O: 658
 Pacific Ocean (Currents) P: 15
 Peru (Climate) P: 312
 South America (Climate) So: 630-631
- Perugino** [Italian painter]
 Raphael (His life) R: 142
- Perutz, Max Ferdinand** [British biologist] P: 317
 Kendrew, Sir John Cowdery K: 259
- Peruvian tortoise beetle**
 Beetle *picture on* B: 218
- Peruvian Traditions** [book by Palma]
 Latin-American literature (Romanticism) L: 112
- Pervasive developmental disorder**
 Autism A: 941
- Pesah** [religion] *See* Passover *in this index*
- Pescadores** [islands, Taiwan] P: 317
- Pescara, Pateras** [Spanish engineer]
 Free-piston engine F: 499
- Pesci, Joe** [American actor]
 Motion picture (Best performance by an actor in a supporting role: 1990) M: 863
- Peseta** [money] P: 317 *with pictures*
- Peshkov, Alexey Maximovich** [Russian author]
See Gorki, Maxim *in this index*
- Peshtigo fire** [1871]
 Wisconsin (Statehood) W: 366 *with picture*
- Peso** [money] P: 317 *with pictures*
 Argentina (Recent developments) A: 659
 Dollar D: 294
- Pest** [former city, Hungary]
 Budapest B: 666
- Pest control** P: 317
 Environmental pollution (Agriculture) E: 337
 Farm and farming (Pest control) F: 34
 Fumigation F: 556
 Insect (Insect control) I: 284
 Insecticide I: 302 *with picture*
 Rat (Rats and people) R: 146-147
- Pestalozzi, Johann Heinrich** [Swiss educator] P: 318
 Herbart, Johann Friedrich H: 197
- Pesticide**
 Cancer (Genes damaged by substances in the environment) C: 170
 Environmental pollution (Soil pollution) E: 334; (Hazardous waste) E: 334-335; (Agriculture) E: 337; *picture on* E: 332
 Farm and farming (Pest control) F: 34
 Fruit (Caring for the crop) F: 545
 Gulf War syndrome G: 438
 Insecticide I: 302
 Invasive species (Managing invasive species) I: 354k
 Neem tree N: 118
- Peregrine falcon P: 284
 Pest control P: 317; (Pesticides) P: 318
 Plant (Control of diseases and pests) P: 545
 Pure food and drug laws (Food additives) P: 907-908
- Pet P: 319 with pictures**
See also the list of Related articles in the Pet article
- PET** [medicine] *See* Positron emission tomography *in this index*
- PET** [plastic] *See* Polyethylene terephthalate *in this index*
- PET scan** [medicine]
 Positron emission tomography P: 698 *with pictures*
- PETA** [organization] *See* People for the Ethical Treatment of Animals *in this index*
- Peta** [prefix]
 Metric system (Metric prefixes) M: 439
- Pétain, Henri Philippe** [French general] P: 323 *with portrait*
 De Gaulle, Charles André Joseph Marie (Leader of the Free French) D: 90
 France (World War II) F: 475
 World War I (The Battle of Verdun) W: 458; (Allied failures) W: 461
 World War II (The fall of France) W: 474
- Petal** [botany]
 Flower (The corolla) F: 293 *with picture*
- Petatus** [hat]
 Clothing (Ancient times) Ci: 696-697
 Hat *picture on* H: 84
- Petate** [bed] P: 323
- Petawatt** [laser]
 Laser (Solid-state lasers) L: 85
- Peter I** [king of Serbia] P: 323
 Yugoslavia (A new nation) Y: 579
- Peter I, the Great** [czar of Russia] P: 323 *with portrait*
 Moscow (History) M: 826-827
 Romanov R: 426
 Russia (Architecture) R: 536; (Peter the Great) R: 549 *with picture*; (table: Czars and empresses) R: 549
 Russian literature (Western influences) R: 559
 Russo-Turkish wars R: 566
 Saint Petersburg [Russia] (History) S: 55
- Peter II** [czar of Russia]
 Russia (table: Czars and empresses) R: 549
- Peter II** [king of Yugoslavia] P: 324
 Yugoslavia (World War II) Y: 579; (A new nation) Y: 579
- Peter III** [czar of Russia]
 Russia (table: Czars and empresses) R: 549
 Seven Years' War (In Europe) S: 328
- Peter, Daniel** [Swiss businessman]
 Chocolate (History) C: 519
- Peter, Epistles of** [New Testament] P: 324
 Peter, Saint (Later years) P: 325
- Peter, Saint** [apostle] P: 324
 Christianity (The first Christians) C: 525 *with picture*
 Leo I, Saint L: 197
 Pope P: 660; (table) P: 666; *picture on* P: 663
 Roman Catholic Church (The first 300 years) R: 406
 Vatican City (History) V: 288-289
- Peter and John** [book by De Maupassant]
 De Maupassant, Guy D: 119
- Peter Pan** [literary figure] P: 325
 Barrie, J. M. B: 118
 London *picture on* L: 429; (Parks) L: 435-436
- Peter Pan** [play by Barrie]
 Barrie, J. M. B: 118
 Fairy (Fairies in literature) F: 11
 Peter Pan P: 325
- Peter, Paul, and Mary** [musical group]
 Rock music (Expanding styles and sounds) R: 378
- "Peter Piper"**
 Nursery rhyme (Tongue twisters) N: 614
- Peter Rabbit, The Tale of** [book by Potter]
 Potter, Beatrix P: 715
- Peter the First** [book by Tolstoy]
 Tolstoy, Alexei T: 322
- Peter the Great** *See* Peter I, the Great *in this index*
- Peter the Hermit** [French religious leader] P: 325
 Crusades (The First Crusade) Ci: 1160
- Peterborough** [New Hampshire]
 Library (Libraries in the United States) L: 261
- Peters, Arthur** [Canadian political leader]
 Prince Edward Island (table) P: 791

- Peters, Frederick** [Canadian political leader]
Prince Edward Island (table) P: 791
- Peters, John S.** [American political leader]
Connecticut (table) Ci: 967
- Peters, Samuel** [British author]
Blue laws 8: 420
- Petersburg** [Virginia] P: 325
- Petersburg, Siege of** [1864-1865]
Civil War (table) Ci: 624; (Siege of Petersburg)
Ci: 631
Lee, Robert Edward (Final engagements)
L: 178
- Petersburg National Battlefield** [Virginia]
National Park System (table: National battle-
fields) N: 55
- Petersen, Hjalmar** [American political leader]
Minnesota (table) M: 602
- Petersen House** [Washington, D.C.]
Washington, D.C. (Ford's Theatre) W: 75
- Petersham, Maud Fuller** [American artist]
Caldecott Medal (table: 1946) C: 26
- Petersham, Miska** [American artist]
Caldecott Medal (table: 1946) C: 26
- Peterson, David** [Canadian political leader]
Ontario (table) O: 783
- Peterson, Oscar** [American musician] P: 325
- Peterson, Peter G.** [American government offi-
cial]
Commerce, Department of (table) Ci: 871
- Peterson, Roger Tory** [American artist] P: 325
- Peterson, Russell W.** [American political leader]
Delaware (table) D: 109
- Peterson, Val** [American political leader]
Nebraska (table) N: 110
- Peterson, Walter R., Jr.** [American political
leader]
New Hampshire (table) N: 223
- Peterson Air Force Base** [Colorado]
NORAD N: 453
- Peterson Field Guide Series** [books by
Peterson]
Peterson, Roger Tory P: 326
- Petillo, Kelly** [American race driver]
Automobile racing (table: Indianapolis 500 win-
ners) A: 980
- Petiole** [botany]
Leaf (The petiole) L: 154; *picture on* L: 153
Plant (Leaves) P: 530 *with picture*
Vegetable (Leaves) V: 292
- Pétion, Alexandre** [Haitian general]
Haiti (History) H: 15-16
- Petipa, Marius** [French choreographer] P: 326
Ballet (Ballet in Russia) B: 52
- Petit, Roland** [French dancer] P: 326
- Petit basset griffon vendéen** [dog] P: 326 *with
picture*
- Petit Caporal, Le**
Napoleon I N: 15
- Petit Gulf** [cotton]
Mississippi (Statehood) M: 642
- Petit jury** [law]
Jury (Petit juries) J: 202
- Petit larceny** [crime]
Larceny L: 75
- Petit mal seizure** [disease]
Epilepsy E: 343
- Petit point** [handicraft] P: 326 *with picture*
Needlepoint N: 118
- Petit Testament, Le** [poem by Villon]
Villon, François V: 385
- Petit Trianon** [palace, Versailles]
Marie Antoinette M: 200
Versailles, Palace of V: 339
- Petitcodiac River** [Canada]
Moncton M: 702
- Petitgrain bigarade** [oil]
Petitgrain oil P: 327
- Petitgrain oil** P: 327
- Petition** [law] P: 327
Freedom of assembly (History) F: 504
- Petition for Naturalization**
Naturalization (Naturalization in the United
States) N: 66
- Petition of Right** [English history] P: 327
Democracy (Democracy in England) D: 123
England (The first Stuarts) E: 308
- Petits Poèmes en prose** [poems by Baudelaire]
Baudelaire, Charles B: 173
- Petits Violons, Les** [string ensemble]
Lully, Jean-Baptiste L: 516
- PETN** [explosive] P: 327
Ammunition (Artillery ammunition) A: 435-436
- Peto** [fish]
Wahoo W: 6 *with picture*
- Petőfi, Sándor** [Hungarian poet]
Hungary (The arts) H: 442
- Petoskey stone** [mineral] P: 327
Gem *picture on* G: 78
- Petra** [ancient city] P: 327
Arabs (The Arabs before Islam) A: 588
Jordan J: 160 *with picture*; (Early days) J: 164
- Petrarch** [Italian poet] P: 327
Italian literature (Humanism and the
Renaissance) I: 494
Renaissance (Humanism) R: 233-234
- Petrarchan sonnet**
Poetry (Forms) P: 595
- Petrel** [bird] P: 328
Bird (Birds of the ocean and the Antarctic)
B: 344 *with picture*
- Petrie, Sir Flinders** [British archaeologist]
Archaeology (The 1800's) A: 599
- Petrifaction** [geology]
Fossil (The action of minerals) F: 425 *with pic-
ture, picture on* F: 426
Petrified forest P: 328 *with picture*
- Petrified forest** [geology] P: 328 *with picture*
Tree (Fossil trees) T: 415 *with picture*
- Petrified Forest** [Mississippi]
Mississippi (Places to visit) M: 632
- Petrified Forest, The** [film]
Bogart, Humphrey B: 436
- Petrified Forest, The** [play by Sherwood]
Sherwood, Robert Emmet S: 398
- Petrified Forest National Park** [Arizona] P: 328
with picture
Arizona (Visitor's guide) A: 678
National Park System (table: National parks)
N: 48
Tree *picture on* T: 415
- Petrified wood** [rock]
Petrified forest P: 328 *with picture*
Fossil *picture on* F: 426
Quartz (Types) Q: 8
- Petrillo, James Caesar** [American labor leader]
P: 329
- Petrine theory** [religion]
Leo I, Saint L: 197
- Petro-Canada Centre**
Calgary (The city) C: 33
- Petrochemicals** P: 329
Gas [fuel] (Gas products) G: 52
Hydrocarbon H: 465
Natural gas liquids N: 64
Petroleum (table) P: 331; (Petroleum as a raw
material) P: 332
Textile (Manufactured fibers) T: 213
- Petrodvorets** [suburb]
Saint Petersburg [Russia] (The city) S: 54-55
with picture
- Petroglyph National Monument** [Mew
Mexico]
National Park System (table: National monu-
ments) N: 51
- Petrograd** [former name]
Saint Petersburg [Russia] S: 54; (History)
S: 55
- Petrographer** [career]
Geology (Areas of specialization) G: 100-101
- Petrol** [fuel]
Gasoline G: 61
- Petrolatum** [medication] P: 329
Mineral oil M: 572
Wax (Mineral wax) W: 153
- Petroleum** P: 330 *with pictures*
See also Gasoline *in this index*
Industrial processes
Petroleum (Refining petroleum) P: 343-345
with diagram
Distillation (Rectification) D: 239
International aspects
Arabs (Economy) A: 587 *with picture*; (The
Arabs today) A: 590
Bush, George Herbert Walker (Persian Gulf
War) B: 721
International Energy Agency I: 340
Iraq (Economy) I: 412; (The Persian Gulf
War) I: 414
Libya (Strained relations with the United
States) L: 268 *with picture*
Nationalization N: 63
Organization of the Petroleum Exporting
Countries O: 854
Persian Gulf War (Background to the war)
P: 300b
Saudi Arabia (Continued progress) S: 161-
162
- United States, History of the (Pollution and
conservation) U: 193
- Mining**
Atlantic Ocean (Ocean resources) A: 866-
867
Canada (Energy sources) C: 125
Indonesia (Mining) I: 235
Iran (Mining) I: 405 *with picture*
Kuwait (Economy) K: 395
Malaysia *picture on* M: 100
Middle East (Mining) M: 532 *with picture*
Netherlands *picture on* N: 147
North Dakota *picture on* N: 497
Northwest Territories (Mining) N: 532 *with
picture*
Ocean (Sources of energy) O: 654; (Marine
pollution) O: 664 *with picture*
Oil shale O: 708
Oklahoma (Mining) O: 729 *with picture*
Paleontology P: 103
Persian Gulf P: 300
Saudi Arabia (Economy) S: 159
Seismograph (Searching for oil) S: 288
United Arab Emirates (Economy) U: 44 *with
picture*
United Kingdom *picture on* U: 66
- Transportation**
Pipeline P: 490
Ship (Tankers) S: 420
Transportation (Related industries) T: 396;
(Problems of modern transportation)
T: 397
- Uses**
Asphalt (Asphalt production) A: 815
Automobile (The lubrication system) A: 952
Energy supply (Fossil fuels) E: 277;
(Depletion of fuel reserves) E: 281
Fuel (Petroleum) F: 550
Heating (Oil) H: 160
Saccharin S: 4
Wax (Mineral wax) W: 153
*See also the list of Related articles in the
Petroleum article*
- Petroleum coke** [by-product] P: 350
- Petroleum engineering** [career]
Engineering (Other specialized fields) E: 287
- Petroleum Exporting the Countries,
Organization of the** *See* Organization of
the Petroleum Exporting Countries *in this
index*
- Petroleum fraction** [chemistry]
Paraffin P: 143
- Petroleum geologist** [career]
Geology (Areas of specialization) G: 100; *pic-
ture on* G: 99
- Petroleum Institute, American**
Petroleum (Career opportunities) P: 349
- Petroleum jelly**
Petrolatum P: 329
Wax (Mineral wax) W: 153
- Petrolia** [Ontario]
London L: 444
- Petrology** [geology] P: 350
- Petronas** [company]
Petronas Towers P: 350
- Petronas Towers** [Kuala Lumpur, Malaysia]
P: 350
Asia *picture on* A: 812
Malaysia (City life) M: 98c-98d; *picture on*
M: 98a
Skyscraper (table) S: 498 *with picture*
- Petronius** [Roman author] P: 351
Latin literature (The Imperial Period) L: 116
Novel (Ancient Greek and Roman narratives)
N: 572
- Petronius Maximus** [Roman emperor]
Rome, Ancient (table) R: 447
- Petropavlovsk-Kamchatskiy** [city, Russia]
Kamchatka Peninsula K: 212
- Petrosian, Tigran** [Russian chess player]
Chess (World chess champions) C: 414
- Petrouchka** [ballet]
Stravinsky, Igor (Early works) So: 922
- Petrovac** [town, Montenegro]
Montenegro *picture on* M: 764
- Petrović, Djordje** [Serbian political leader]
Serbia (History) S: 314
- Petrozavodsk** [city, Russia]
Karelia K: 247
- Petruchio** [literary figure]
Shakespeare, William (*The Taming of the
Shrew*) S: 356
- Petta** [area, Bangalore]
Bangalore B: 76

- Pettee, S. E.** [American inventor]
Paper bag P: 138
- Petticoat** [clothing]
Clothing (The 1600's) Ci: 701; (The 1800's) Ci: 702 *with picture*
- Pettus, John J.** [American political leader]
Mississippi (table) M: 640
- Petty, Lee** [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1954, 1958, 1959) A: 981
- Petty, Richard** [American race driver] P: 351
Automobile racing (table: NASCAR Winston Cup champions, 1964, 1971-72, 1974-75, 1979) A: 981
- Petty, Sir William** [English economist]
Econometrics E: 57
- Petty-Fitzmaurice, Henry Charles Keith** [Canadian statesman] *See* Lansdowne, Marquess of *in this index*
- Petty jury** *See* Petit jury *in this index*
- Petty larceny** [crime]
Larceny L: 75
- Petty officer** [rank]
Navy, United States (Training a sailor) N: 83
Rank, Military (table) R: 140
- Pettygrove, Francis W.** [American settler]
Portland (Oregon) P: 683
- Petunia** [plant] P: 351
Flower (Garden annuals) F: 276 *with picture*
Nightshade N: 421
- Petuntse** [earth]
Porcelain P: 675
- Petzval, Josef M.** [Hungarian mathematician]
Photography (Early developments) P: 425-426
- Peugeot** [company]
Automobile (Major producing countries and companies) A: 955-956; (The birth of the automobile industry) A: 963
Manufacturing (table) M: 170
- Peul** [people] *See* Fulani *in this index*
- Pevsner, Antoine** [Russian-French artist] P: 351 *with picture*
- Pew** [literary figure]
Stevenson, Robert Louis (Novels) So: 898
- Pew, Joseph N.** [American businessman]
Pew Charitable Trusts P: 351
- Pew Charitable Trusts** P: 351
Foundations (table) F: 430
- Pewee** [bird] P: 352 *with picture*
- Pewter** [metal] P: 352 *with picture*
Alloy (Costly and ornamental alloys) A: 378
Antique (Metalwork) A: 558
Colonial life in America (Furnishings) Ci: 797; (Decorative arts) Ci: 807 *with picture*
- Peyote** [plant]
Mescaline M: 421
- Peyto Lake** [Alberta]
Banff National Park B: 76
- Peytral**
Armor *picture on* A: 720
- Pfaff, Judy** [American sculptor]
Sculpture S: 260 *with picture*
- PFD**
Life jacket L: 281
- Pfiesteria** [organism] P: 353
- PG** [rating]
Motion picture (Censorship and self-regulation) M: 861
- PG-13** [rating]
Motion picture (Censorship and self-regulation) M: 861
- PGA** [organization] *See* Professional Golfers' Association *in this index*
- pH** [chemistry] P: 353
- Phädon** [book by Mendelssohn]
Mendelssohn, Moses M: 400
- Phaeacians** [legendary people]
Odyssey (The Odyssey begins) O: 675
- Phaëdo** [book by Plato]
Plato (The dialogues) P: 567
Socrates (Socrates' life) So: 567-568
- Phaedrus** [Greek scholar]
Aesop's fables A: 90
- Phaedrus** [book by Plato]
Plato (The dialogues) P: 567
- Phaëthon** [legendary figure] P: 353
- Phagocyte** [physiology]
Blood (Protecting against disease) B: 410
Disease (Immune responses) D: 231-232
Echinacea E: 49
Immune system (Other white blood cells) I: 88
Metchnikoff, Élie M: 431
- Phagocytosis** [physiology]
Blood (Protecting against disease) B: 410; *diagram on* B: 409
Immune system (Antigen-presenting cells) I: 88
- Phalange** [anatomy]
Foot (The bones) F: 352 *with diagram*
Hand (Parts of the hand) H: 40 *with diagram*
Human body *diagram on* H: 422
Wrist *diagram on* W: 510
- Phalanx** [anatomy]
Frog *picture on* F: 537
- Phalanx** [warfare]
Army (Ancient armies) A: 726
Greece, Ancient (Military forces) G: 372
Spear So: 768
- Phalarope** [bird] P: 353
Bird (Birds of the Arctic) B: 343 *with picture*
- Phalera** [decoration]
Medals, decorations, and orders (History) M: 359
- Phellic phase** [human development]
Psychoanalysis (Psychoanalytic theory) P: 846
- Phan Si Pan** [mountain] *See* Fan Si Pan *in this index*
- Phanariots** [Romanian history]
Romania (Ottoman rule) R: 423
- Phanerozoic Eon** [geology]
Earth (Age of Earth) E: 26
Prehistoric animal (The world of prehistoric animals) P: 736
- Phantom color**
Color (Surprising color-vision effects) Ci: 819 *with diagram*
- Phantom Menace, The** [film by Lucas] *See* Star Wars *in this index*
- Phantom of the Opera, The** [musical by Lloyd-Webber]
Lloyd-Webber, Andrew L: 403
- Phantom Ranch** [Arizona]
Grand Canyon National Park (Recreational activities) G: 307-308
- Pheraoh** [title] P: 353
Valley of the Kings V: 266
- Pharaoh hound** [dog] P: 354 *with picture*
- Pharaoh's ant**
Ant (The importance of ants) A: 528
- Phares** [Biblical figure]
Judah J: 178
- Pharisees** [religious group] P: 354
Jews (The Hellenistic period) J: 121-122
Sadducees S: 8
Sanhedrin S: 110
- Pharmacist** [career]
Pharmacy P: 354
Medicine (Other health-care professionals) M: 366
World, History of the *picture on* W: 435
- Pharmacodynamics** [science]
Pharmacology P: 354
- Pharmacokinetics** [science]
Pharmacology P: 354
- Pharmacology** [chemistry] P: 354
Pharmacy (Training and careers in pharmacy) P: 354-355
- Pharmacy** P: 354
Hospital (Professional services departments) H: 371
- Pharnaces II** [king of Pontus]
Caesar, Julius (Last victories) C: 13
Mithridates VI M: 679
- Pharos of Alexandria** [lighthouse]
Lighthouse (History) L: 295
Seven Wonders of the Ancient World (The Lighthouse of Alexandria) S: 325; *picture on* S: 327
- Pharsalia** [poem by Lucan]
Latin literature (The Imperial Period) L: 116
- Pharsalus, Battle of** [48 B.C.]
Caesar, Julius (Civil war) C: 13
- Pharyngeal tonsils** [anatomy] *See* Adenoids *in this index*
- Pharynx** [anatomy] P: 355
Alimentary canal A: 368 *with diagram*
Diphtheria (Cause, symptoms, and complications) D: 215
Human body (The air passages) H: 420-421; *diagram on* H: 422
Mouth M: 903 *with diagram*
Respiration (Structures of breathing) R: 260
Throat T: 271
- Phase** [astronomy]
Mercury (Phases) M: 415
- Phase** [physics]
Waves (Interference) W: 153
- Phase, of matter** [physics]
Matter (States of matter) M: 311
- Phase-change recording** [electronics]
Compact disc (CD-RW) Ci: 902a
- Phase contrast microscope**
Microscope (Using an optical microscope) M: 519
- Phase modulation** [electronics]
Wireless communication (How wireless communication works) W: 345
- Phase rule**
Chemistry (Development of physical chemistry) C: 404
Gibbs, Josiah Willard G: 186
- Phase shifter**
Radar (Continued progress) R: 72
- Phased array radar**
Guided missile (The flight of an advanced missile) G: 426
Radar (Continued progress) R: 72-73
- Phases of the moon**
Astronomy (How the moon moves) A: 835
Moon (Phases) M: 783; (Simulating the phases of the moon) M: 793 *with pictures*
- Phasmatodea** [entomology]
Insect (table) I: 300
- Ph.D.** [degree]
Caps and gowns (Doctor's degree) C: 199 *with picture*
Degree, College (table) D: 92
- Pheasant** [bird] P: 355 *with pictures*
Bird (In the air) B: 352-353 *with picture*
Poultry P: 720
- Pheasant's-eye** [plant]
Adonis A: 66 *with picture*
- Phèdre** [play by Racine]
Romanticism (The qualities of romanticism) R: 427
- Pheidippides** [Greek runner]
Marathon (The battle) M: 191
- Phelloderm** [botany]
Bark (Inner bark) B: 110
Stem (Woody stems) So: 887-888 *with diagram*
- Phellogen** [botany] *See* Phloem *in this index*
- Phelps, John S.** [American political leader]
Missouri (table) M: 668
- Phenacetin** [medication]
Acetaminophen A: 25
- Phenakistoscope** [device]
Animation (Early animation) A: 514
- Phenobarbital** [drug]
Anticonvulsant A: 553
Barbiturate (Medical uses) B: 107
- Phenol** [chemical]
Disinfectant D: 235
Phenolic P: 356
- Phenolic P: 356**
Plastics (table) P: 556
- Phenolic resin**
Plastics (The invention of Bakelite) P: 559-560
- Phenology** [biology] P: 356
- Phenolphthalein** [chemical] P: 356
Laxative L: 148
- Phenomena** [philosophy]
Phenomenology P: 356
- Phenomena of Life Common to Animals and Plants** [book by Bernard]
Bernard, Claude B: 270
- Phenomenology** [philosophy] P: 356
Existentialism E: 436
Personality (Ratings and self-reports) P: 302
Philosophy (Modern philosophy) P: 387-390
- Phenomenology of Spirit** [book by Hegel]
Hegel, G. W. F. (Hegel's writings) H: 165
- Phenotype** [genetics]
Heredity (Heredity and environment) H: 205
Races, Human (How human populations develop and change) R: 57
- Phenylalanine** [amino acid]
Brain (Genetic disorders) B: 557-558
Phenylketonuria P: 357
- Phenylglycine** [chemical]
Indigo I: 223
- Phenylketonuria** [birth defect] P: 357
Brain (Genetic disorders) B: 557-558
Cell (Metabolic diseases) C: 336
Heredity (table) H: 204
Mental retardation (Causes) M: 410
- Phenylthiocarbamide** [chemical]
Heredity (Patterns of heredity) H: 202
- Phenytol** [drug]
Anticonvulsant A: 553
- Pheromone** [zoology] P: 357

Ant (Communication) A: 525
 Butterfly (The life cycle of butterflies) B: 739-740
 Codling moth Ci: 752
 Gland (Exocrine glands) G: 208
 Moth (The head) M: 837-838
Phi Beta Kappa P: 357 *with picture*
 Fraternity F: 495
 Virginia (Interesting facts) V: 399
 William and Mary, College of W: 309
Phibun Songkham [Thai political leader]
 Thailand (Changes in government) T: 227
Phidias [Greek sculptor] P: 357
 Classicism (Greece) Ci: 653
 Greece, Ancient *picture on* G: 371
 Seven Wonders of the Ancient World (The statue of Zeus) S: 325
Philadelphia [Pennsylvania] P: 358 *with pictures and maps*
 American literature (Colonial literature [1608-1764]) A: 414-415
 City planning *pictures on* Ci: 600
 Colonial life in America (Geographic divisions) Ci: 789
 Franklin, Benjamin (Civic leader) F: 487-488
 Pennsylvania (Places to visit) P: 254; (table: Average monthly weather) P: 259; *picture on* P: 248
 United States, History of the (The Middle Colonies) U: 154
 United States capitals U: 199
See also the list of Related Articles in the Philadelphia article
Philadelphia [ancient Greece] P: 368
Philadelphia [frigate]
 Decatur, Stephen D: 67
Philadelphia, Here I Come! [play by Friel]
 Friel, Brian F: 533
Philadelphia Eagles
 Football (National Football League) F: 364
Philadelphia Evening Post and Daily Advertiser
 Philadelphia (Communication) P: 365
Philadelphia Female Anti-Slavery Society
 Mott, Lucretia Coffin M: 880
Philadelphia Flyers
 Hockey (table: National Hockey League) H: 281
Philadelphia Free Library
 Pennsylvania (Libraries) P: 248-249
Philadelphia Museum of Art
 Philadelphia (Libraries and museums) P: 364
Philadelphia Naval Base [Pennsylvania] P: 368
Philadelphia Orchestra
 Philadelphia (The arts) P: 363
Philadelphia Phillies
 Baseball (table) B: 130
Philadelphia 76ers
 Basketball (table) B: 150
Philadelphia Society for Alleviating the Miseries of Public Prisons
 Prison (Early prison reform) P: 807
Philadelphia Stock Exchange
 Pennsylvania *picture on* P: 245
Philadelphia Story, The [play by Barry]
 Barry, Philip B: 119
Philadelphia Tribune [newspaper]
 Pennsylvania (Communication) P: 262
Philadelphia Zoo [Pennsylvania]
 Philadelphia (Recreation) P: 364
 Zoo (The evolution of zoos) Z: 609
Philanthropist [newspaper]
 Ohio (Communication) O: 698
Philanthropy P: 368
 Foundations F: 429
For a list of famous philanthropists, see the list of Related Articles in the Philanthropy article
Philately [hobby]
 Stamp collecting So: 829
Philbrook Museum of Art
 Oklahoma (Museums) O: 717 *with picture*
Philaas Fogg [literary figure]
 Verne, Jules V: 338
Philemon, Epistle to [New Testament] P: 368
Philidor [French chess player]
 Chess (History) C: 415
Philiike Hetairia [organization]
 Greece (Ottoman rule) G: 361
Philip [antipope]
 Pope (table) P: 666
Philip [archduke of Austria]
 Maximilian I M: 319
Philip I [king of France]

France (table) F: 471
Philip II [king of France] P: 368 *with portrait*
 Crusades (The Third Crusade) Ci: 1160 *with map*
 France (Growth of royal power) F: 472-473
 Louvre L: 507
 Paris (Early years) P: 166
Philip II [king of Macedonia] P: 368 *with portrait*
 Alexander the Great (His youth) A: 342
 Demosthenes D: 129
 Greece, Ancient (The rivalry between Athens and Sparta) G: 373-374
 Olympias O: 746
 Thebes T: 251
 Thessaly T: 258
Philip II [king of Spain] P: 369
 Austria (The Habsburgs) A: 937-938
 Belgium (Habsburg rule) B: 233
 Drake, Sir Francis (Expeditions against Spain) D: 322
 Elizabeth I (Problems at home and abroad) E: 238-239
 Escorial E: 357
 Henry IV [of France] H: 186
 Madrid (History) M: 40
 Mary I M: 239
 Netherlands (Freedom from Spain) N: 148
 Spain (The Spanish Empire) So: 747
 Spanish Armada (Background to battle) So: 755; (The two fleets) So: 755
 William I, Prince of Orange W: 308
Philip III [king of France]
 France (table) F: 471
Philip III Arrhidæus [king of Macedonia]
 Alexander the Great (His death) A: 343
Philip IV [king of France] P: 369 *with picture*
 France (Growth of royal power) F: 472-473
 Knights Templars K: 353
 Salic law S: 66
Philip IV [king of Spain]
 Painting (The Spanish masters) P: 64 *with picture*
 Velázquez, Diego V: 296
Philip V [king of France]
 France (table) F: 471
Philip V [king of Macedonia]
 Antigonid dynasty A: 555
Philip V [king of Spain] P: 370 *with picture*
 Spain (The Spanish decline) So: 747-748
 Succession wars (The War of the Spanish Succession) So: 950
 Utrecht, Peace of U: 252
Philip VI [king of France] P: 370
 Crécy, Battle of Ci: 1124
 Dauphin D: 44
Philip, King [American Indian chief] P: 370 *with picture*
 Indian wars (King Philip's War) I: 191
 Massachusetts (King Philip's War) M: 291
 Massasoit M: 296
 Plymouth Colony (Later years) P: 584
 Rhode Island (King Philip's War) R: 312-313
Philip, Prince [husband of Elizabeth II] P: 371 *with picture*
 Battenberg B: 167
 Charles, Prince C: 382
 Elizabeth II (Marriage and succession to the throne) E: 240
Philip Augustus *See* Philip II [king of France] *in this index*
Philip Morris, Inc.
 Manufacturing (table) M: 170
Philip Nolan [literary figure]
 Hale, Edward Everett H: 18
Philip of Anjou *See* Philip V [king of Spain] *in this index*
Philip of Bethsaida, Saint [apostle] P: 371
Philip Sparrow [poem by Skelton]
 Skelton, John S: 481
Philip the Evangelist [Biblical figure] P: 371
Philip the Fair *See* Philip IV [of France] *in this index*
Philipp, Emanuel L. [American political leader]
 Wisconsin (table) W: 365
Philippeion [ancient Greece]
 Olympia O: 745
Philippi [ancient city] P: 371
Philippi, Battle of [42 B.C.]
 Philippi P: 371
Philippi, Battle of [1861]
 West Virginia (The Civil War and statehood) W: 227-228
Philippians, Epistle to the [New Testament] P: 371

Philippics [speeches]
 Cicero, Marcus Tullius (His works) Ci: 552
 Demosthenes D: 129
 Philip II [of Macedonia] P: 369
Philippine eagle [bird]
 Eagle (Other kinds of eagles) E: 5
Philippine mahogany [wood]
 Mahogany M: 66
Philippine Republic [Philippine history]
 Aguinaldo, Emilio A: 163
Philippine Sea, Battle of the [1944]
 Spruance, Raymond Ames So: 809
 World War II (Island hopping in the Central Pacific) W: 488-489
Philippine Trench [Pacific Ocean]
 Philippines (Land and climate) P: 376
Philippines P: 372 *with pictures and maps*
 Asian Americans (History of Asian immigration) A: 812d-812e *with picture*
 Christmas (In Asia) C: 533
 Corregidor Ci: 1071
 Easter *picture on* E: 43
 Exploration (Magellan's globe-circling expedition) E: 445
 Flag *picture on* F: 204
 Guerrilla warfare (History) G: 420-421
 Independence Day I: 107
 Line of Demarcation L: 333
 MacArthur, Douglas (World War II) M: 3
 Magellan, Ferdinand (Sailing across the Pacific) M: 47
 Martial law M: 234
 McKinley, William (America becomes a world power) M: 341
 Rizal, José R: 357
 Standard of living (table) So: 834
 Taft, William Howard (Governor of the Philippines) T: 10
 World War II (The liberation of the Philippines) W: 489
Philippines, University of the
 Manila (Education and cultural life) M: 142
Philippus [Roman emperor]
 Rome, Ancient (table) R: 447
Philips Electronics *See* Royal Philips Electronics *in this index*
Philipse, Frederick [Dutch businessman]
 Yonkers Y: 568
Philistia [ancient region]
 Palestine (Early history and settlement) P: 104
Philistines [ancient people] P: 382
 Ark of the Covenant A: 693 *with picture*
 David (Early life) D: 45
 Palestine (Early history and settlement) P: 104
 Palestinians P: 107
 Samson S: 82
Phillies, Philadelphia *See* Philadelphia Phillies *in this index*
Phillip, Arthur [British colonial leader]
 Australia (Early settlement) A: 922
 New South Wales (History) N: 286
 Sydney So: 1063
Phillips, Alonzo Dwight [American inventor]
 Match (The first matches) M: 300-300a
Phillips, Caryl [Caribbean-born author]
 English literature (Recent English fiction) E: 323
Phillips, Pauline Esther Friedman [American journalist] *See* Van Buren, Abigail *in this index*
Phillips, Jeanne [American journalist]
 Van Buren, Abigail V: 269
Phillips, John C. [American political leader]
 Arizona (table) A: 687
Phillips, Leon C. [American political leader]
 Oklahoma (table) O: 730
Phillips, Sam [American businessman]
 Presley, Elvis P: 772
Phillips, Simon [British musician]
 Who, The W: 296
Phillips, Thomas [British painter]
 Byron, Lord *picture on* B: 748
Phillips, Wendall [American social reformer]
 P: 382
Phillips, William Daniel [American physicist]
 Nobel Prizes (Physics: 1997) N: 442
Phillips Collection
 Washington, D.C. (Other Washington museums) W: 75
Philo [Jewish philosopher]
 Plato (Plato's place in Western thought) P: 569
Philoctetes [legendary figure]
 Paris P: 159
Philoctetes [play by Sophocles]

Sophocles So: 595
Philodendron [botany] P: 382 *with picture*
 Gardening (Some popular house plants) G: 37 *with picture*
Philography [hobby]
 Autograph (Collecting autographs) A: 943
Philology
 Linguistics L: 335
 Renaissance (Humanism) R: 233-234
Philosopher's stone
 Alchemy A: 334
Philosophes [philosophy] P: 382
 Age of Reason (Influence of the Age of Reason) A: 139
 French Revolution (Background) F: 524-525
 History (Antiquarian research and the philosophes) H: 262
 Pope (The 1700's and 1800's) P: 665
Philosophiae Naturalis Principia Mathematica
 [book by Newton] See *Principia Mathematica in this index*
Philosophical analysis [movement]
 Philosophy (Philosophy in the 1900's) P: 390
Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful [essay by Burke]
 English literature (The Johnson circle) E: 319
Philosophical Letters [book by Voltaire]
 Voltaire (Exile and return to France) V: 446
Philosophical rationalism [philosophy]
 Rationalism R: 148
Philosophical Society, American See *American Philosophical Society in this index*
Philosophy P: 383
 Age of Reason A: 138
 Ethics E: 365
 Greek literature (Philosophical literature) G: 378
 Idealism I: 46
 Mathematics (Philosophies of mathematics) M: 307
 Political science (Political theory and philosophy) P: 638
 Pre-Socratic philosophy P: 772
 Psychology (Beginnings) P: 849
 Romanticism (Romanticism and society) R: 427
 Science (To philosophical thought) S: 192
 See also *the list of Related Articles in the Philosophy article*
Philosophy, Doctor of
 Degree, College (The doctor's degree) D: 92
Philosophy in the Bedroom [book by Sade]
 Age of Reason (The orderliness of nature) A: 139
 Sade, Marquis de S: 8
Philosophy of Civilization, The [book by Schweitzer]
 Schweitzer, Albert (His books) S: 190
"Philosophy of Composition, The" [essay by Poe]
 Poe, Edgar Allan (Poe's life) P: 589; (Poetry and poetic theory) P: 589
Philosophy of Right [book by Hegel]
 Hegel, G. W. F. (Hegel's writings) H: 165
Philosophy of the Short-Story, The [book by Matthews]
 Short story S: 434
Phimosis [disorder]
 Circumcision Ci: 561
Phineus [legendary figure]
 Harpy H: 67
Phippes, James [patient of]
 Jenner, Edward (Jenner's work) J: 91 *with picture*
Phipps Conservatory and Botanical Gardens
 Pittsburgh (Recreation) P: 500d
Phips, Sir William [British colonial official]
 Massachusetts (Troubles with England) M: 291
 Nova Scotia (The struggle in Acadia) N: 568
 Quebec (Early days) Q: 36
Phlebitis [disease] P: 391
 Vein V: 295
Phlebotomy [medicine]
 Bloodletting B: 417
Phlegethon [Greek mythology]
 Tartarus T: 48
Phloem [botany]
 Bark (Inner bark) B: 110 *with diagram*
 Plant (Parts of plants) P: 529
 Root (The core) R: 474 *with diagrams*
 Sap (Vascular sap) S: 121 *with diagram*
 Stem (Herbaceous stems) So: 887

Tissue (Plant tissues) T: 299
 Tree (Trunk and branches) T: 416 *with diagram*
Phloem necrosis [plant disease]
 Elm (Diseases) E: 245
Phlogiston theory
 Chemistry (The phlogiston theory) C: 401
Phlogopite [mineral]
 Mica M: 482
Phlox [plant] P: 391
 Flower (Garden perennials) F: 278 *with picture*; F: 301 *with picture*
Phnom Penh [city, Cambodia] P: 391
 Cambodia C: 72; (Economy) C: 72
Pho [soup]
 Vietnam (Food and drink) V: 366
Phobia [psychology] P: 392
 Anxiety A: 562
 Mental illness (Anxiety disorders) M: 405-406
 Personality (Emotional reactions) P: 303
Phobos [moon]
 Mars (Satellites) M: 226b
Phocomelia [disorder]
 Thalidomide T: 229
Phoebe [bird] P: 392 *with picture*
Phoebe [satellite]
 Satellite (Inert satellites) S: 150a-150c
Phoebus Apollo [Greek mythology]
 Apollo A: 566
Phoenicia [ancient country] P: 392 *with pictures and map*
 Alphabet (The Phoenicians) A: 382
 Canaanites C: 97
 Carthage (History) C: 260
 Colonialism (Ancient colonialism) Ci: 813
 David (King of Israel) D: 45
 Exploration (The Phoenicians) E: 441 *with map*
 Mediterranean Sea (History of the Mediterranean) M: 382
 Ship (Phoenician and Greek ships) S: 405 *with picture*
 Spain (Early days) So: 746
 Transportation (The first great civilizations) T: 386
 Tyre T: 541
 Utica U: 251
 World, History of the (Civilizations of southwest Asia) W: 426-428
Phoenician [ancient language]
 Alphabet (The Phoenicians) A: 382 *with pictures*
Phoenicians [people]
 Phoenix (The people) P: 396
Phoenix [Arizona] P: 395 *with pictures and map*
 Arizona A: 671 *with picture*; (Population) A: 674; (table: Average monthly weather) A: 682
Phoenix [Greek mythology]
 Phoenix P: 395 P: 399
Phoenix [ship]
 Ship (Oceangoing steamships) S: 412
 Stevens, John So: 896
Phoenix [weapon]
 Guided missile *picture* on G: 425
Phoenix, Project
 SETI Institute S: 323
"Phoenix and the Turtle, The" [poem by Shakespeare]
 Shakespeare, William ("The Phoenix and the Turtle") S: 366
Phoenix Coyotes [hockey team]
 Hockey (table: National Hockey League) H: 281
Phoenix Islands [Pacific]
 Kiribati K: 335
Phoenix Park
 Dublin (The city) D: 370-371
Phoenix Sky Harbor International Airport
 [Phoenix]
 Phoenix (Transportation and communication) P: 398
Phoenix South Mountain Park [Phoenix]
 Phoenix (Recreation) P: 397
Phoenix Suns
 Basketball (table) B: 150
Phoenix Too Frequent, A [play by Fry]
 Fry, Christopher F: 549
Pholidota [zoology]
 Mammal (table) M: 129 *with picture*
Phon [unit of measure]
 Sound (Intensity and loudness) So: 600-601
Phonation [sound]
 Dolphin (Group life) D: 299
 Speech So: 773
 Whale (Group life) W: 261

Phone See *Telephone in this index*
Phoneme [linguistics]
 Reading (Phonics instruction) R: 159
Phonetic alphabet
 Linguistics L: 335
 Phonetics (An international phonetic alphabet) P: 400
Phonetic compound [writing]
 Chinese language (Written Chinese) C: 510 *with picture*
Phonetic ideal
 Phonetics (Phonetics and spelling) P: 400
Phonetic sign
 Chinese language (Development) C: 511
Phonetics [speech] P: 399
Phonetization [language principle]
 Writing (Phonetization) W: 513
Phonics [language] P: 400
 Reading (Comprehending what is perceived) R: 157; (Phonics instruction) R: 159
Phonogram [language]
 Hieroglyphics (Development of hieroglyphic writing) H: 225
Phonograph P: 400 *with pictures*
 Communication (The 1800's) Ci: 881-883 *with picture*
 Edison, Thomas Alva (The Wizard of Menlo Park) E: 78-79; *picture* on E: 77
 Invention *picture* on I: 360
 Stereophonic sound system (Parts of a stereo system) So: 892
 Popular music (The recording era) P: 671
Phonograph needle See *Stylus in this index*
Phonograph record
 Audio-visual materials (Audio materials) A: 883
 Berliner, Emile B: 267
 Copyright (How to obtain a copyright) Ci: 1048
 Edison, Thomas Alva (The Wizard of Menlo Park) E: 78-79; (Phonograph developments) E: 81
 Phonograph P: 400 *with pictures*
Phonology [grammar]
 Linguistics (The components of a grammar) L: 336
Phony war
 World War II (The Phony War) W: 473
Phorcys [Greek mythology]
 Gorgons G: 275
Phosphate [chemistry] P: 402
 Baking powder B: 33
 Bonderizing B: 455
 Cell (DNA—the wondrous molecule) C: 334-335 *with diagram*
 Detergent and soap (The development of detergents) D: 165-166
 DNA D: 258
 Fertilizer (Inorganic fertilizers) F: 79
 Heredity (The structure of DNA) H: 205
 Nauru (History) N: 69
 Phosphorus P: 403
 RNA R: 357
 Sewage S: 329
 Tennessee Valley Authority (The valley) T: 158
Phosphate rock [mineral]
 Phosphate P: 402
 Phosphorus P: 403
 Rock (Chemical sediments) R: 372
Phospholipid [biology]
 Lipid (Kinds of lipids) L: 345
 Cell (Inside a living cell) C: 328
 Life (Lipids) L: 278
Phosphor [chemical]
 Electric light (Fluorescent lamps) E: 174
 Fluorescent lamp F: 305 *with diagram*
 Phosphorescence P: 403 *with picture*
 Television (The picture tube) T: 124 *with diagram*
Phosphorescence [light] P: 402 *with picture*
 Luminescence L: 522
 Phosphorus P: 403
Phosphorescent light
 Phosphorescence P: 402
Phosphoric acid [chemical] P: 403
Phosphoric candle
 Match (Early fire-making devices) M: 300
Phosphorite [mineral]
 Phosphorus P: 403
Phosphorus [astronomy]
 Venus V: 310
Phosphorus [element] P: 403
 Fertilizer (Inorganic fertilizers) F: 79
 Isotope *diagrams* on I: 476, I: 477
 Match (The first matches) M: 300-300a
 Nutrition (Minerals) N: 625-626

- Phosphorus cycle **P**: 404
 Semiconductor (Doped crystals) **S**: 291
Phosphorus cycle [biology] **P**: 404 *with diagram*
 Ecology (Cycling of materials) **E**: 55
Phossy jaw [disorder]
 Match (The first matches) **M**: 300a
Photic zone [oceanography]
 Ocean (Life in the ocean) **O**: 655
Photius [Byzantine scholar] **P**: 404
 Eastern Orthodox Churches (History) **E**: 45-46
 Roman Catholic Church (Split with the East)
R: 407
Photo-Secession [art]
 Painting (Steiglitz and "291") **P**: 82
 Photography (The photographic revolution)
P: 427
Photocathode [electronics]
 Image orthicon **I**: 79
 Photomultiplier tube **P**: 430
Photocell [electricity]
 Electric eye (How electric eyes work) **E**: 169
with diagram
 Smoke alarm **S**: 520
Photochemical glass
 Glass (Specialty glasses) **G**: 212-213; (table)
G: 218
Photochemical smog
 Smog (Photochemical smog) **S**: 519
 Ozone **O**: 894
Photochemistry **P**: 404
Photochromic glass
 Glass (Specialty glasses) **G**: 212-213; (table)
G: 218; (Modern glassmaking) **G**: 222-223
Photocomposition [printing] **P**: 405 *with pictures*
 Communication (The digital age) **Ci**: 885
 Linotype **L**: 338
 Monotype **M**: 733
 Newspaper (Making up the pages) **N**: 383
 Printing (Typesetting) **P**: 797
 Type **T**: 536
Photoconductive cell [electricity]
 Electric eye (How electric eyes work) **E**: 169
with diagram
Photoconductive effect [physics]
 Light (Photoelectric and photoconductive effects) **L**: 290
Photocopying
See also Copying machine *in this index*
 Copyright (Users' rights) **Ci**: 1047
 Library (Photocopying) **L**: 239
Photodegradable plastics
 Plastics (Plastics and the environment) **P**: 560-561
Photodetector [electronic device]
 Microscope (Using an optical microscope)
M: 519
Photodiode [electronic component]
 Electronics (Light-sensing devices) **E**: 213
Photoelectric cell [electronics]
 Electric eye (How electric eyes work) **E**: 169
with diagram
 Electronics (The vacuum tube era) **E**: 215
Photoelectric detection
 Smoke detector **S**: 520
Photoelectric effect [physics]
 Einstein, Albert (Famous theories) **E**: 146-146a
 Light (Photoelectric and photoconductive effects) **L**: 290 *with diagram*
 Photon **P**: 430
 Radiation (The quantum theory) **R**: 81
Photoelectrochemical cell
 Solar energy (Other solar cells) **So**: 578
Photoelectrochemistry
 Electrochemistry **E**: 200
Photoengraving and photolithography [printing] **P**: 405 *with pictures*
 Cartoon (Producing the finished cartoon)
C: 267
 Newspaper (Printing the newspaper) **N**: 385
 Printing (Offset printing plates) **P**: 798
Photoflash bomb [weapon]
 Bomb (Other conventional bombs) **B**: 450-451
Photoflood lamp
 Photography (Artificial lighting devices) **P**: 419
Photogrammetrist [career]
 Photogrammetry **P**: 407 *with picture*
Photogrammetry [cartography] **P**: 407 *with pictures*
 Mountain (Measuring mountains) **M**: 896
Photographic memory
 Memory (Exceptionally good memory) **M**: 393
Photographic model [occupation]
 Modeling (Physical requirements for modeling)
M: 685 *with picture*
Photographic type [printing] *See* Cold type *in this index*
Photography **P**: 408 *with pictures*
 Astronomy (Optical astronomy) **A**: 838-840
 Ballistics (Terminal ballistics) **B**: 56 *with picture*
 Blueprint **B**: 424
 Communication (The 1800's) **Ci**: 881 *with picture*
 Compact disc (CD-ROM's) **Ci**: 902
 Copying machine (Projection copying) **Ci**: 1046
 Daguerreotype **D**: 5
 Encyclopedia (Basic steps in the preparation of a World Book article) **E**: 268 *with picture*
 Industrial arts (Industrial arts courses) **I**: 242-243
 Kirlian photography **K**: 336 *with picture*
 Modeling **M**: 684
 Newspaper (Making up the pages) **N**: 383
 Painting (New visual sources) **P**: 72
 Particle detector (Photographic films and plates) **P**: 186
 Photochemistry **P**: 404
 Photocomposition **P**: 405 *with diagram*
 Photoengraving and photolithography **P**: 405 *with pictures*
 Photogrammetry **P**: 407 *with pictures*
 Police (Investigations of crimes) **P**: 621
 Pulitzer Prizes (Pulitzer Prizes in journalism)
P: 887-892
 Telescope (Detecting faint objects) **T**: 103
 Type **T**: 536
Equipment
 Photography (Photographic equipment)
P: 417 *with pictures*
 Camera **C**: 80
 Polarized light (How light is polarized)
P: 617-618 *with pictures*
 Stereoscope **So**: 893
History
 Photography (History) **P**: 425-428 *with pictures*
 Eastman, George **E**: 47
Photographs
 Cartier-Bresson, Henri **C**: 262
 Photography (Taking photographs) **P**: 412 *with pictures*
 Radar picture on **R**: 68
 Storm picture on **So**: 912
Processing
 Photography (Developing and printing)
P: 420-423 *with pictures*
 Baekeland, Leo Hendrik **B**: 25
 Silver nitrate **S**: 465
 Talbotype **T**: 19
See also the list of Related articles in the Photography article
Photography, Director of
 Motion picture (Assembling the production team) **M**: 850 *with picture*; (Shooting the movie) **M**: 853-854
Photoimagesetter [machine]
 Printing (Electronic imagesetting) **P**: 797
Photoimagesetting *See* Photocomposition *in this index*
Photojournalism
 Photography (The photographic revolution)
P: 427 *with picture*; (Careers) **P**: 429
 Riis, Jacob August **R**: 340
Photolithography *See* Photoengraving and photolithography *in this index*
Photomicrography [photography]
 Cell pictures on **C**: 326
Photomultiplier tube [electronics] **P**: 430
 Spectrometer **So**: 772 *with diagram*
Photon [atomic particle] **P**: 430
 Astronomy (Electromagnetic radiation) **A**: 838
 Atom (Electron energy levels) **A**: 873 *with diagram*
 Boson **B**: 494
 Electronics (Electronics today) **E**: 216-217
 Laser (Producing laser light) **L**: 83-84 *with diagram*
 Light (Sources of light) **L**: 283; (Photons) **L**: 284
 Photochemistry **P**: 404
 Physics (Quantum theory) **P**: 441
 Quantum field theory **Q**: 6
 Quantum mechanics (Quantum nature of light)
Q: 6
 Radiation (Electromagnetic radiation) **R**: 75;
 (Causes of radiation) **R**: 78-79; (The quantum theory) **R**: 81
 Spectrum **So**: 772
 Subatomic particle (Elementary particles)
So: 937
 Sun (Sun terms) **So**: 976
Photonics [engineering]
 Electronics (Electronics today) **E**: 216-217
Photoperiod [biology]
 Plant (Factors affecting plant growth) **P**: 538-539
Photoperiodism [biology] **P**: 430
Photophobia [disorder]
 Iritis **I**: 434
Photophore [anatomy]
 Lanternfish **L**: 69
Photopolymer plastic plate [printing]
 Photoengraving and photolithography (Plates for relief printing) **P**: 407
Photoresist [film]
 Compact disc (Manufacturing) **Ci**: 901
 Photoengraving and photolithography
 (Nonprinting applications) **P**: 407
Photosensitive glass
 Glass (Specialty glasses) **G**: 212-213; (table)
G: 218
Photosphere
 Sun (Zones of the sun) **So**: 979-980 *with diagram*; (Sun terms) **So**: 976
Photostat machine
 Copying machine (Projection copying) **Ci**: 1046
Photosynthesis [botany] **P**: 430
 Air (Origin of the atmosphere) **A**: 173
 Archaea **A**: 593
 Biochemistry (Biochemical research) **B**: 310
 Biophysics **B**: 326
 Botany (The importance of botany) **B**: 508
 Carbohydrate **C**: 203
 Cell (Producing energy) **C**: 332-333
 Cellulose (Biological importance) **C**: 341
 Chlorophyll **C**: 517
 Coral (Stony corals) **Ci**: 1048
 Coral reef (Where coral reefs exist) **Ci**: 1048b
 Deep sea (The deep-sea environment)
D: 82
 Ecology (Energy flow) **E**: 54
 Forest (The flow of energy) **F**: 396
 Global warming (Causes of global warming)
G: 232
 Leaf (Photosynthesis) **L**: 155 *with diagram*
 Lichen (How lichens grow) **L**: 269
 Life (Metabolism) **L**: 275
 Manganese **M**: 139
 Ocean (Life in the ocean) **O**: 655
 Plankton **P**: 515
 Plant **P**: 517; (Photosynthesis) **P**: 538, *diagram*
on **P**: 536
 Respiration (Respiration in plants) **R**: 261
 Sap (Vascular sap) **S**: 121
 Starch **So**: 855
Photosynthetic bacteria
 Bacteria (How bacteria obtain food) **B**: 21
Phototropism [botany]
 Plant (Factors affecting plant growth) **P**: 538-539 *with picture*
 Tropism **T**: 452
Phototube [electronics]
 Electric eye (How electric eyes work) **E**: 169
Phototypesetting *See* Photocomposition *in this index*
Photovoltaic cell
 Energy supply (Solar energy) **E**: 278
Photovoltaic conversion
 Solar energy **So**: 577 *with pictures*
Photovoltaic effect
 Solar energy (Photovoltaic conversion) **So**: 577
Phrase [grammar]
 Grammar **G**: 303; (Subordination) **G**: 304
 Preposition **P**: 756
Phratry [ancient Greece]
 Athens (Democracy) **A**: 857
Phrenic nerve [anatomy]
 Diaphragm **D**: 184
Phrenology [pseudoscience] **P**: 430
Phronesis [philosophy]
 Ethics (Aristotle) **E**: 366
Phrygia [ancient country] **P**: 431
PHS *See* Public Health Service *in this index*
Phthalocyanine [pigment]
 Ink **I**: 272
Phyfe, Duncan [American furniture designer]
P: 431
 Furniture picture on **F**: 569
Phylloxera [insect] **P**: 431 *with picture*
Phylogenetic system
 Botany (Later developments) **B**: 509

Phylogeny [biology]

Biogenesis B: 312

Phylum [biology]

Animal (A classification of the animal kingdom)

A: 506

Classification, Scientific (Groups in classification) Ci: 654-655

Physiatrics [medicine]

Disabled (Rehabilitation medicine) D: 220

Medicine (table) M: 369

Physical anthropologyAnthropology (Physical anthropology) A: 546
with picture

Races, Human R: 53

Physical bond

Materials (The role of bonds) M: 301

Physical capital

Capital C: 192

Developing country D: 173

Physical change [chemistry] P: 431**Physical chemistry** P: 431

Chemistry (Development of physical chemistry) C: 404

Physical culturePhysical education (During the 1800's)
P: 433**Physical cycle**

Biorhythm B: 326

Physical disabilitySee also *Disabled in this index*

Occupational therapy (Helping people with physical disabilities) O: 648

Reading (Reading problems) R: 161-162

Physical education P: 431 with picture

Gymnasium G: 447

Physical fitness (Developing physical fitness)
P: 435 with pictures**Physical environment**

Life (The physical environment) L: 275

Physical examination

Medicine (Diagnosis) M: 364

Physical fitness P: 433 with pictures

Bicycle (Bicycle riding today) B: 293

Health (Exercise) H: 125

Jogging J: 130

Weight control (Physical inactivity) W: 181

Physical geography

Geography (Physical geography) G: 93

Physical geology

Geology G: 97

Physical manifestation medium

Spiritualism (The medium) So: 796

Physical metallurgy

Metallurgy (Physical metallurgy) M: 427

Physical meteorologist

Weather (Careers in weather) W: 170

Physical oceanography

Ocean (Careers in oceanography) O: 666

Physical optics [Physics]

Optics O: 813

Physics (Light) P: 437

Physical quantity

Metric system (Kinds of metric units) M: 436

Physical scienceCareers (Life, physical, and social sciences)
C: 225Science (The physical sciences) S: 193 with
picture; (Scientific advances of the
1800's) S: 200**Physical therapy** [medicine] P: 435

Careers picture on C: 224

Cerebral palsy (Treatment) C: 362

Disabled (Rehabilitation medicine) D: 220 with
pictureHospital (Professional services departments)
H: 371

Hydrotherapy H: 472 with picture

Medicine (Other careers in medicine) M: 371

Poliomyelitis (Treatment of poliomyelitis)
P: 626-627

Stroke (Rehabilitation) So: 930

Physical training

Physical education (During the 1800's) P: 433

Physical weathering [geology]

Soil (Kinds of parent material) So: 573

Physician [medicine]See also *Medicine in this index*

Address, Forms of (Other forms) A: 54

Careers (Health care) C: 223

Colonial life in America (Health and medicine)
Ci: 809

Emergency room E: 258

Hospital (The professional services staff)
H: 371

Managed care plans (In the United States)

M: 131; (In other countries) M: 131

Medicine M: 363 with pictures

Suicide (Physician-assisted suicide) So: 964

Physician assistant

Careers (Health care) C: 223-224

Medicine (Other careers in medicine) M: 371

Physician-assisted suicide

Death (The right to die) D: 61

Euthanasia (Self-induced euthanasia) E: 421

Palliative care P: 108

Suicide (Physician-assisted suicide) So: 964

Physician expense benefits [insurance]Insurance (Basic types of health insurance)
I: 312**Physicians for the Prevention of Nuclear War,
International**

Nobel Prizes (Peace: 1985) N: 449

Physics P: 436 with pictures

Astrophysics A: 850

Atom (The forces within an atom) A: 873

Careers (Life, physical, and social sciences)
C: 225-226

Electronics E: 206

Energy E: 273

Quantum mechanics Q: 6

Relativity R: 209

Science (The physical sciences) S: 193 with
picture; (Science in the early 1900's)
S: 201 with pictureSee also the list of *Related Articles in the
Physics article***Physics** [book by Aristotle]

Aristotle (Philosophy of nature) A: 664

Physiocrats [economics] P: 444Capitalism (The development of capitalism)
C: 195

Du Pont de Nemours, Pierre Samuel D: 387

Economics (Early theories) E: 64

Laissez faire L: 31

Quesnay, François Q: 40

Physiologic jaundice [disorder]

Jaundice J: 66

Physiological chemistry

Biochemistry B: 310

Physiological Researches on Life and Death

[book by Bichat]

Bichat, Marie François Xavier B: 289

Physiology P: 445

Anatomy A: 448b

Biochemistry B: 310

Biology B: 316; (Materialistic physiology and
the cell theory) B: 319

Botany (How plants function) B: 508

Science (The life sciences) S: 193

Zoology (What zoologists study) Z: 610

Physiosorption [physics]

Absorption and adsorption (Adsorption) A: 18

Physostigmine [drug]

Julian, Percy Lavon J: 187

Phytochemical [biology]

Cancer (Nutrition) C: 171

Phytogeography [botany]

Geography (Physical geography) G: 93

Phytohormone [botany]

Gall G: 13

Phytomedicinal See *Herbal medicine in this
index***Phytoplankton** [botany]Atlantic Ocean (Ocean life) A: 866; (Pollution)
A: 867

Indian Ocean I: 185

Marine biology (Biological oceanographers)
M: 205Ocean (The plankton) O: 655; (The food cycle)
O: 655 with pictures

Pacific Ocean (Ocean life) P: 15

Plankton P: 515

Pi [mathematics] P: 445

Archimedes (His mathematics) A: 605

Circle (The use of pi) Ci: 558

Decimal system (Decimals and fractions)
D: 72

Mathematics (The Greeks) M: 306

Proportion P: 828

Rational number R: 148

Series (Working with infinite series) S: 317

Pi meson [atomic particle] See *Pion in this index***Pi Sheng** See *Bi Sheng in this index***Pia mater** [anatomy]

Brain (How the brain is protected) B: 552

Piaf, Edith [French singer] P: 445 with portrait**Piaffe**

Horse (Dressage) H: 357

Piaget, Jean [Swiss psychologist] P: 445Developmental psychology (Cognitive theory)
D: 174**Pianissimo**Music (table) M: 954; (Indicating expression)
M: 955**Piankashaw Indians** [American Indians]

Miami Indians M: 482

Piano [music term]

Music (table) M: 954

Piano [musical instrument] P: 445 with picturesClassical music (The Classical period) Ci: 647-
648

Clavichord C: 657

Jazz (The piano) J: 69 with picture

Spinnet So: 793

Steinway, Henry Engelhard So: 886

Tone T: 327

See also the list of *Related articles in the
Piano article***Piano Lesson, The** [play by Wilson]

Wilson, August W: 316

Piano organ [musical instrument]

Hand organ H: 41

Piano quintet

Classical music (Chamber music) Ci: 644

Piano rag [music]

Ragtime R: 103

Pianoforte

Piano (History) P: 447; picture on P: 448

Piast dynasty [Polish history]

Poland (The early Polish state) P: 611

Piatigorsky, Gregor [Russian-American cellist]
P: 448**Piave, Francesco Maria** [Italian librettist]Opera (*Rigoletto*) O: 806; (*Traviata, La*)
O: 807-808**Piazza Colonna**

Rome R: 429

Piazza della Signoria

Florence (The city) F: 239 with picture

Piazza Navona [Rome]

Rome picture on R: 430

Piazzi, Giuseppe [Italian astronomer]

Ceres C: 362

Pibroch [music]

Scotland (The arts) S: 215-217

Pica [unit of measure]

Type (Sizes of type) T: 537

Picabia, Francis [French painter]

Dadaism D: 2

Picadillo [food]

Cuba (Food and drink) Ci: 1171

PicadorBullfighting (The order of the bullfight) B: 695-
696 with picture**Picara Justina, La** [book by López de Ubeda]

Spanish literature (The 1600's) So: 759

Picaresque novel

Novel (Early novels) N: 572

Spanish literature (The 1500's) So: 758-759;
(The 1600's) So: 759**Picasso, Pablo** [Spanish painter] P: 448 with pic-
turesChicago (Places to visit) C: 430-431 with pic-
ture

Color picture on Ci: 817

Cubism Ci: 1181 with picture

Painting (Color) P: 35; (Cubism) P: 77

Sculpture (Cubism and futurism) S: 257 with
picture

Spain (Painting) So: 739

Spanish Civil War (Progress of the war)
So: 756a

Stein, Gertrude So: 884

Picasso Museum [France]

Paris (Museums and art galleries) P: 164

Piccadilly Circus [London]

England picture on E: 292

London (Central London) L: 429-430 with map

Piccalilli [food] P: 449**Piccard, Augusta** [Swiss physicist] P: 450Balloon (Balloon explorations of the upper
atmosphere) B: 61 with picture

Bathyscaph B: 165

Diving, Underwater (History) D: 247

Exploration (Deep-sea exploration) E: 451

Piccard, Bertrand [Swiss balloonist]

Balloon (Long-distance balloon flights) B: 62

Piccard, Jacques [Swiss oceanographer]
P: 450

Exploration (Deep-sea exploration) E: 451

Pacific Ocean (Scientific research) P: 15

Piccard, Jean [Swiss engineer] P: 450

- Balloon (Balloon explorations of the upper atmosphere) **B**: 61-62
- Piccard, Jeannette** [American balloonist]
Balloon (Balloon explorations of the upper atmosphere) **B**: 61-62
- Piccolo** [musical instrument] **P**: 450 *with pictures*
Flute **F**: 307
Music (Wind instruments) **M**: 949 *with picture*
- Pichincha** [volcano, Ecuador] **P**: 450
- Pichincha, Battle of** [1822]
Ecuador (Spanish rule) **E**: 73
Pichincha **P**: 450
Sucre, Antonio José de **So**: 951
- Pichon, Louis** [French diplomat]
Louisiana Purchase (Trouble begins) **L**: 502
- Pick**
Basketball (Offensive strategies) **B**: 146
- Pick-Sloan Missouri Basin Program**
Missouri River (History) **M**: 675-676
Nebraska (The mid-1900's) **N**: 114
South Dakota (The mid-1900's) **So**: 684
- Pickaroon**
Pirate **P**: 494
- Pickens, Andrew** [American general]
Revolutionary War in America (Savannah and Charleston) **R**: 283-284
South Carolina (The Revolutionary War) **So**: 659-660
- Pickens, Andrew** [American political leader]
South Carolina (table) **So**: 658
- Pickens, Francis W.** [American political leader]
South Carolina (table) **So**: 658
- Pickens, Israel** [American political leader]
Alabama (table) **A**: 274
- Pickereel** [fish] **P**: 450 *with picture*
Pike **P**: 461
- Pickering, John** [American jurist]
Impeachment (History) **I**: 91-92
Jefferson, Thomas (The courts) **J**: 84
- Pickering, Thomas R.** [American diplomat]
United Nations (table) **U**: 86
- Pickering, Timothy** [American political leader]
P: 451
Adams, John (table) **A**: 38
Washington, George (table) **W**: 102
- Pickersgill, Mary** [American public figure]
Baltimore (Other interesting places to visit) **B**: 69
- Picket** [labor]
Labor movement (Handling labor disputes) **L**: 6-7 *with picture*
Strike (Strike tactics) **So**: 928
- Pickett, Bill** [American cowboy] **P**: 451
- Pickett, George Edward** [Confederate general]
P: 451 *with portrait*
Civil War (Battle of Gettysburg) **Ci**: 628
Gettysburg, Battle of **G**: 176
- Pickett, Joseph** [American painter] **P**: 451
- Pickett's charge** [1863]
Pickett, George Edward **P**: 451
Civil War (Battle of Gettysburg) **Ci**: 628
Gettysburg, Battle of **G**: 176
- Pickford, Mary** [American actress] **P**: 451 *with portrait*
Fairbanks, Douglas, Sr. **F**: 9 *with picture*
Motion picture (Best performance by an actress: 1928-29) **M**: 862
New Jersey (The early 1900's) **N**: 253 *with picture*
- Picking machine** [cotton] See Cotton picker in *this index*
- Pickle** [food] **P**: 451
Cucumber **Ci**: 1183
Dill **D**: 204
- Pickling** [food processing]
Fishing industry (Methods of processing) **F**: 186
Vinegar (Uses of vinegar) **V**: 386-387
- Pickling** [industrial process]
Iron and steel (Rolling) **I**: 447
- Pickling spices** [food]
Pickle **P**: 452
- Pickmore, Sir Francis** [British colonial official]
Newfoundland and Labrador (Representation and independence) **N**: 377
- Pickup arm**
Phonograph (Parts of a phonograph) **P**: 400-401
- Pickup cover**
Recreational vehicle *picture on R*: 183
- Pickup truck**
Truck **T**: 456; (Kinds of trucks) **T**: 457, *picture on T*: 459
- Pickwick Papers** [book by Dickens]
Dickens, Charles (Literary success) **D**: 187
- Picnic** [play by Inge]
Inge, William **I**: 270
- Pico** [prefix]
Metric system (Metric prefixes) **M**: 439
- Pico, Pio** [Californian patriot]
California (Mexican rule) **C**: 60
- Pico da Neblina** [mountain, Brazil]
Brazil (The Amazon Region) **B**: 577 *with map*
- Pico de Aneto** [mountain, Spain]
Pyrenees **P**: 919
- Pico de Orizaba** [mountain, Mexico] See Orizaba, Pico de *in this index*
- Pico de Teide** [mountain, Canary Islands]
Canary Islands **C**: 165
- Pico Mogotón** [mountain, Nicaragua]
Nicaragua (The Central Highlands) **N**: 397
- Pico Ruivo** [mountain, Madeira]
Madeira Islands (The island of Madeira) **M**: 29
- Pico Turquino** [mountain, Cuba]
Cuba (The land) **Ci**: 1172 *with map*
- Picofarad** [unit of measure]
Capacitor (Capacitance) **C**: 186
Farad **F**: 28
- Picot stitch**
Crochet **Ci**: 1148d
- Picotte, Susan La Flesche** [American doctor]
P: 452
- Picquart, Georges** [French military leader]
Dreyfus, Alfred (Efforts to clear Dreyfus's name) **D**: 347
- Pictograph** [writing] **P**: 452
Alphabet (The earliest alphabets) **A**: 382
Asia (The Huang He and Yangtze valleys) **A**: 805
Aztec (Language) **A**: 1002 *with picture*
Chinese language (Written Chinese) **C**: 510 *with picture*
Communication (Prehistoric times) **Ci**: 879
Cortés, Hernando *picture on Ci*: 1074
Cuneiform **Ci**: 1192
Handwriting (Early forms of writing) **H**: 49-50
Hieroglyphics (Development of hieroglyphic writing) **H**: 225
Indian, American (Writing) **I**: 150
Indus Valley civilization (Indus culture) **I**: 241-242
- Pictorial photography** [art]
Photography (The photographic revolution) **P**: 427
- Pictou** [Nova Scotia] **P**: 452
- Picts** [ancient people] **P**: 452
Caledonia **C**: 28
England (The Germanic invasions) **E**: 304
Scotland (The Roman invasion) **S**: 219
- Picture book**
Literature for children (Picture books) **L**: 363 *with picture*
- Picture Builder** [painting by Salle]
Painting (Post-modernism) **P**: 88-89 *with picture*
- Picture button**
Button (History) **B**: 745
- Picture compact disc** [recording medium]
Compact disc (CD-ROM's) **Ci**: 902
- Picture element** [electronics] See Pixel in *this index*
- Picture graph**
Graph (Picture graphs) **G**: 322 *with picture*
- Picture of Dorian Gray** [book by Wilde]
Wilde, Oscar **W**: 302
- Picture Province** [nickname]
New Brunswick **N**: 181
- Picture stone**
Vikings (Cultural life and recreation) **V**: 381 *with picture*
- Picture tube**
Television (Receiving television signals) **T**: 123-124 *with diagram*
- Picture writing** See Pictograph in *this index*
- Pictured Rocks National Lakeshore** [Michigan]
Lake Superior (Description) **L**: 45
Michigan (Places to visit) **M**: 498 *with picture*
National Park System (table: National lakeshores) **N**: 58
- Pictures at an Exhibition** [music by Mussorgsky]
Mussorgsky, Modest **M**: 968
Ravel, Maurice **R**: 151
- Picunche Indians** [American Indians]
Araucanian Indians **A**: 592
- PID** [disease] See Pelvic inflammatory disease in *this index*
- Pidal, Ramón Menéndez** [Spanish author]
Spanish literature (The Generation of 1898) **So**: 762
- Pidgeon process** [chemistry]
Magnesium (How magnesium is obtained) **M**: 54
- Pidgin English** [language] **P**: 452
Language (Unusual languages) **L**: 66
Pacific Islands (Languages) **P**: 5
Papua New Guinea (People) **P**: 140
- Pie** [food]
Pastry **P**: 194
- PIE** [language] See Proto-Indo-European language in *this index*
- Pie chart**
Graph (Circle graphs) **G**: 322 *with picture*
- Piece**
Chess (The board and the men) **C**: 412 *with diagram*; (The moves) **C**: 413
- Piece dyeing**
Dye (Dyeing textiles) **D**: 396
Wool (Making fabric) **W**: 401
- Piece of eight** [money] **P**: 452 *with pictures*
Money (History of United States currency) **M**: 707; *picture on M*: 708
- Piecemeal approach**
Television (Producing television programs) **T**: 110c; (Other production methods) **T**: 113
- Pied avocet** [bird]
Avocet **A**: 994
- Pied Piper of Hamelin** [legendary figure] **P**: 452 *with picture*
- Piedmont** [region, Argentina]
Argentina (The Andine) **A**: 653-654
- Piedmont** [region, Italy] **P**: 453
- Piedmont Region** [U.S.] **P**: 453 *with map*
Alabama (Land and climate) **A**: 268 *with map*
Charlotte (Economy) **C**: 385
Georgia (Land regions) **G**: 124
Maryland (Land regions) **M**: 250
North Carolina (Land regions) **N**: 484
Pennsylvania (Land regions) **P**: 256
South Carolina (Land regions) **So**: 652; (Natural resources) **So**: 655
United States (The Coastal Lowlands) **U**: 121
Virginia (Land regions) **V**: 410
- Piegán Indians** [American Indians]
Blackfeet Indians **B**: 393
- Pieplant** [plant]
Rhubarb **R**: 319 *with picture*
- Pier** [engineering] **P**: 453
Architecture (table) **A**: 608-609; (Romanesque architecture) **A**: 618
Building construction (Foundations) **B**: 682
Romanesque architecture **R**: 415
- Pier** [shipping]
Pier **P**: 453
- Pier, The** [area]
Saint Petersburg [Florida] (Description) **S**: 56
- Pier plan** [aviation]
Airport (Terminal designs) **A**: 248 *with diagram*
- Pierce, Barbara** [wife of George W. Bush] See Bush, Barbara Pierce in *this index*
- Pierce, Benjamin** [American political leader]
New Hampshire (table) **N**: 223
Pierce, Franklin (Early life) **P**: 454
- Pierce, E. D.** [American prospector]
Idaho (Exploration and early settlement) **I**: 42
- Pierce, Franklin** [U.S. President] **P**: 454 *with pictures*
Kansas-Nebraska Act **K**: 244
- Pierce, Jane Appleton** [wife of Franklin Pierce]
First ladies (table) **F**: 142
Pierce, Franklin (Pierce's family) **P**: 455; (Life in the White House) **P**: 456 *with picture*
- Pierce, Samuel Riley, Jr.** [American government official] **P**: 457
- Pierce, Walter M.** [American political leader]
Oregon (table) **O**: 845
- Pierced Hemisphere (Telstar)** [sculpture by Hepworth]
Hepworth, Barbara *picture on H*: 193
- Piero da Vinci, Ser** [father of]
Leonardo da Vinci (Early career) **L**: 199
- Piero della Francesca** [Italian painter] **P**: 457
Easter *picture on E*: 43
Jesus Christ *picture on J*: 105
Painting (Composition) **P**: 35
- Piérrola, Nicolás de** [Peruvian political leader]
Peru (The growth of U.S. influence) **P**: 315
- Pierpont, Francis Harrison** [American political leader] **P**: 457
Virginia (table) **V**: 417

Pierpont Morgan Library [New York City]

- P**: 458
New York N: 296
- Pierre** [South Dakota] P: 458
South Dakota So: 665; (Statehood) So: 683
- Pierrepont, Edwards** [American government official]
Justice, Department of (table) J: 203
- Piers Plowman** See Vision of Piers Plowman, The in this index
- Pierson, Abraham** [American educator]
Yale University (History) Y: 549
- Pietà** [sculpture by Meštrović]
Meštrović, Ivan M: 424
- Pietà** [sculpture by Michelangelo]
Michelangelo (Early life) M: 483; picture on M: 486
Saint Peter's Basilica (The interior) S: 53
- Pietermaritzburg** [city, South Africa] P: 458
- Pietists** [religious group]
Brethren B: 593
Christianity (Rationalism and pietism) C: 527
Moravian Church M: 801
Pennsylvania Dutch P: 270
Protestantism (The Methodist movement [the 1700's]) P: 835
- Pietrain** [hog]
Hog (Other breeds) H: 286; (table) H: 286
- Pietri, Dorando** [Italian athlete]
Olympic Games (The modern games) O: 750-751
- Piezoelectric crystals** [physics]
Electricity (Sources of current) E: 194
Microphone (Crystal and ceramic microphones) M: 516 with diagram
Piezoelectricity P: 458
Transducer T: 371
- Piezoelectricity** [physics] P: 458
Materials (Smart materials) M: 301
Quartz (Properties and uses) Q: 8
- Pig** [animal] See Hog in this index
- Pig iron**
Iron and steel (Kinds of iron and steel) I: 437; (Making iron products) I: 441
Smelting S: 515
- Pigafetta, Antonio** [Italian sailor]
Magellan, Ferdinand (Results of the voyage) M: 47
- Pigeon** [bird] P: 458 with pictures
Bird (In nature) B: 330; pictures on B: 362, B: 364, B: 366
Passenger pigeon P: 190
Poultry P: 720
- Pigeon Feathers** [book by Updike]
Updike, John U: 213
- Pigeon guillemot** [bird]
Guillemot G: 429
- Pigeon racing** [sport]
Homing pigeon (Pigeon racing) H: 305
- Pigeonberry** [plant]
Pokeweed P: 603 with picture
- Pigeon's blood** [color]
Ruby R: 508
- Pigeon's milk** [zoology]
Dove D: 314
Pigeon (Life history) P: 460
- Pigfish** [fish]
Grunt G: 407 with picture
- Piggott, Lester** [British jockey]
Horse racing (History) H: 366
- Piggyback booster**
Rocket (Space travel) R: 386-387
- Piggyback service** [shipping]
Railroad (Freight service) R: 106; (Rolling stock) R: 107-108 with picture
- Piglet** [literary figure]
Milne, A. A. M: 556
- Pigment** [color] P: 461
Albino A: 332
Color (Mixing colorants) Ci: 819-820 with diagrams
Fish (Skin and color) F: 160
Hair (Color and texture) H: 10
Ink I: 272
Paint P: 23
Painting (Materials and techniques) P: 36 with picture
Plastics (Making synthetic resins) P: 556-557
Skin (Epidermis) S: 489
Wald, George W: 7
- Pigment figure**
Wood (Wood figure) W: 390
- Pigmy shark**
Dogfish D: 284

- Pignut hickory** [tree]
Hickory H: 224 with pictures
- Pig's Eye** [former name, St. Paul]
Saint Paul S: 52
- Pigskin**
Hog (Other uses) H: 286
- Pigtailed macaque** [animal]
Macaque M: 3
- Pigweed** [plant] P: 461
Lamb's-quarters L: 51
- Pijper, Willem** [Dutch composer]
Netherlands (Arts) N: 142-144
- Pika** [animal] P: 461 with picture
Animal picture on A: 474
- Pike** [fish] P: 461 with picture
- Pike** [weapon]
Army (Armies in the Middle Ages) A: 727
Spear So: 768
- Pike, Albert** [Confederate military leader]
Oklahoma (The Civil War) O: 731
- Pike, James Albert** [American religious leader]
P: 461
- Pike, Zebulon Montgomery** [American explorer] P: 462
Colorado (Exploration and settlement) Ci: 845
Iowa (Territorial days) I: 393
Minnesota (The Louisiana Purchase) M: 603
Pikes Peak P: 462
Rocky Mountains (History) R: 396
Westward movement in America (Exploration) W: 248
- Pike perch** See Walleye in this index
- Pike pole** [tool]
Fire department picture on F: 127
- Pike position**
Diving (Kinds of dives) D: 243; picture on D: 244
- Pikes Peak** [mountain, Colorado] P: 462
Colorado (Places to visit) Ci: 836; (Exploration and settlement) Ci: 845 with picture
Gold rush (Gold rushes of the United States) G: 254
Mountain (table) M: 894 with diagram
Pike, Zebulon Montgomery P: 462
Rocky Mountains (History) R: 396
- "Pikes Peak or bust"** [slogan]
Colorado (The gold rush) Ci: 845
Western frontier life in America (The search for gold and silver) W: 233-234
- Pilate, Pontius** [Roman government official]
P: 462 with picture
Barabbas B: 102
Jesus Christ (The trial) J: 108 with picture
- Pilâtre de Rozier, Jean François** [French balloonist]
Airplane (First human flights) A: 230
Balloon (History) B: 60
Montgolfier brothers M: 766
- Pilau** [food]
Pakistan (Food and drink) P: 96
- Pilchard** [fish]
Sardine S: 124 with picture
- Pilcher, Percy S.** [British aviator]
Airplane (First human flights) A: 230
Glider (Early days) G: 230
- Pilcomayo River**
Paraguay (The land and climate) P: 147
- Pile** [construction] P: 462
Breakwater B: 589
Building construction (Foundations) B: 682
- Pile** [weaving]
Rugs and carpets (Materials used in rugs and carpets) R: 513-514
Velvet V: 297
- Pile, Atomic** See Nuclear reactor in this index
- Pile driver** [machines]
Building construction (Foundations) B: 682
- Pile o' Bones**
Saskatchewan (Interesting facts) S: 129 with picture
- Pile weave**
Weaving (Fancy weaves) W: 174
- Pileated woodpecker** [bird]
Woodpecker (Kinds) W: 394 with picture
- Piles** [disorder] See Hemorrhoids in this index
- Pilgrim Holiness Church** [religious group]
Wesleyan Church W: 198
- Pilgrimage**
Architecture (Romanesque architecture) A: 618
Islam (The Five Pillars of Islam) I: 463-464 with picture
Religion (Religious rituals) R: 217 with picture
- Pilgrims** [U.S. history] P: 463 with pictures

- Bradford, William [1590-1657] B: 545
Colonial life in America (Religious and political reasons) Ci: 788; (Plymouth Colony) Ci: 789
Congregationalists Ci: 940f
Indian, American (After European contact) I: 156
Massachusetts (The Pilgrims) M: 289
Mayflower M: 327
Mayflower Compact M: 327
Plymouth Colony P: 582 with picture
Thanksgiving Day (The first Thanksgiving in New England) T: 230
United States, History of the (New England) U: 153
- Pilgrims Going to Church** [painting by Boughton]
Pilgrims picture on P: 463
- Pilgrim's Progress, The** [book by Bunyan]
Bunyan, John B: 700
English literature (Restoration prose) E: 318
- Pilipino** [language] See Filipino in this index
- Pill** [medication]
Drug pictures on D: 350
- Pillar** [architecture]
Column Ci: 865
- Pillar** [harp]
Harp H: 65 with picture
- Pillar of Fire** [ballet]
Ballet (Ballet in the United States) B: 53-54
- Pillars of Faith** [Islam]
Ramadan R: 132
- Pillars of Hercules**
Gibraltar, Strait of G: 187
- Pillory** [punishment] P: 464 with picture
Colonial life in America (Crime and punishment) Ci: 795
- Pillow lava** [geology]
Basalt B: 123
- Pillsbury, Harry Nelson** [American chess player]
Chess (United States chess champions) C: 414
- Pillsbury, John Sargent** [American political leader]
Minnesota (table) M: 602
- Pilos** [hat]
Clothing (Ancient times) Ci: 696-697
- Pilot** [career]
See also Astronaut; Piloting in this index
Air Force, United States (History) A: 194
Airplane (Principles of flight) A: 220-221; (Flying an airplane) A: 222; (Air navigation) A: 226; (History) A: 229-231
Aviation (Careers in aviation) A: 992
Balloon B: 57; (How balloons are used) B: 59
Careers (Transportation) C: 235
Glider G: 228; (Flying a glider) G: 229
Helicopter (Piloting a helicopter) H: 171
Radio (Navigation) R: 85 with picture
Test pilot T: 181
Women's movements picture on W: 388
- Pilot, The** [book by Cooper]
Cooper, James Fenimore Ci: 1035
- Pilot astronaut**
Astronaut A: 828; (Selecting the astronauts) A: 831
- Pilot certificate**
Airplane (Learning to fly) A: 226
- Pilot episode**
Television (The national networks) T: 114
- Pilot flag**
Flag (Flags of the sea) F: 208
- Pilot International** [organization] P: 464
- Pilot light**
Range (Gas ranges) R: 138
- Pilot whale** [sea animal] P: 464
Dolphin (Other species) D: 297 with picture; picture on D: 298
Whale picture on W: 257
- Pilotage** See Piloting in this index
- Pilotfish** P: 464 with picture
- Piloting** [navigation]
Airplane (Flying an airplane) A: 222; (Air navigation) A: 226
Flag (Flags of the sea) F: 208
Navigation (Piloting) N: 71
Ship (Navigating a ship) S: 423
- Pilotis** [architecture]
Architecture (Le Corbusier) A: 631; picture on A: 632
- Pilotweed** [plant]
Compass plant Ci: 903 with picture
- Pilsen** [Czech Republic] See Plzeň in this index

- Pilsner beer** [drink]
Beer B: 211
- Piłsudski, Józef** [Polish patriot] P: 465
Poland (The struggle against foreign rule) P: 612
- Piltown hoax** [anthropology] P: 465
- Pima cotton**
Cotton (New World cotton) Ci: 1088
- Pima Indians** [American Indians] P: 465
Indian, American (Indians of the Southwest) I: 166-167
- Pimento** [spice]
Pimento P: 465
- Pimento** [tree] P: 465 *with picture*
- Pimento pepper**
Pepper P: 278
Pimento P: 465
- Pimp**
Prostitution P: 830
- Pimpernel** [plant] P: 466
- Pimple** P: 466
Abscess A: 17
Acne A: 28 *with diagram*
- PIN** [banking] See Personal identification number *in this index*
- Pin** [bowling]
Bowling (Aiming) B: 522; (The pins) B: 523 *with pictures*; (Canadian fivepins) B: 524
- Pin** [fastener] P: 466 *with pictures*
- Pin** [jewelry]
Jewelry J: 116
Shell *picture on* S: 390
- Pin** [wrestling]
Wrestling W: 504 *with picture*
- Pin-back button**
Button B: 744-745 *with picture*
- Pin-lever watch**
Watch (Mechanical watches) W: 114
- Pin money**
New Year's Day (Early customs) N: 289
- Pin screen animation** [photography]
Animation (Pin screen animation) A: 514
- Pin-tumbler lock**
Lock (Mechanical locks) L: 411 *with picture*
- Pin-wale corduroy** [fabric]
Corduroy Ci: 1052
- Piña cloth** [fabric]
Pineapple (Cultivation and production) P: 472-473
- Pinacoteca** [museum, Italy]
Bologna B: 448
- Piñata** [custom]
Christmas (In Latin America) C: 532 *with picture*
Mexico (Holidays) M: 457
- Pinatubo, Mount** [volcano] See Mount Pinatubo *in this index*
- Pinch pot** [pottery]
Pottery (Shaping the clay) P: 716
- Pinchback, P. B. S.** [American political leader] P: 466
Louisiana (table) L: 496
- Pinching back**
Gardening (Caring for the garden) G: 35-36 *with picture*
- Pinchingbug** [insect]
Stag beetle So: 821
- Pinchot, Gifford** [American political leader] P: 467
Conservation Ci: 975; (The rise of the conservation movement) Ci: 985
Pennsylvania (table) P: 263
Taft, William Howard (Legislative defeats) T: 10-11
- Pinckney, Charles** [American political leader] P: 467
Monroe, James (Diplomat under Jefferson) M: 736
South Carolina (table) So: 658
- Pinckney, Charles** [husband of]
Pinckney, Elizabeth Lucas P: 467
- Pinckney, Charles Cotesworth** [American political leader] P: 467
Pinckney, Elizabeth Lucas P: 467
XYZ Affair X: 546
- Pinckney, Elizabeth Lucas** [American colonial leader] P: 467
- Pinckney, Thomas** [American political leader] P: 467
Pinckney, Elizabeth Lucas P: 467
South Carolina (table) So: 658
United States, History of the (Foreign affairs) U: 162-163
- Pinckney Treaty** [1795] P: 467
- Alabama (Territorial days) A: 275
Pinckney, Thomas P: 467
United States, History of the (Foreign affairs) U: 162-163
Westward movement in America (The Northwest Ordinance) W: 247
- Pindar** [Greek poet] P: 468
Greek literature (Lyric poetry) G: 377
Poetry (Ancient poetry) P: 595-596
- Pindaric ode** [poetry]
Ode O: 673
Pindar P: 468
Poetry (Lyric poetry) P: 591
- Pindling, Lynden O.** [Bahamian political leader]
Bahamas (History) B: 29
- Pindus Mountains**
Greece (The land) G: 357; *picture on* G: 358
- Pine** [tree] P: 468 *with pictures*
Cell *picture on* C: 327
Conifer Ci: 950
Forest (Forest succession) F: 397 *with picture*
Leaf *picture on* L: 151
Maine (Natural resources) M: 84
Tree (Needleleaf trees) T: 414; *pictures on* T: 417, T: 425, T: 427
See also the list of Related Articles in the Pine article
- Pine, Robert E.** [American painter]
United States, History of the *picture on* U: 159
- Pine, Theodore** [American painter]
Lee, Robert Edward *picture on* L: 177
- Pine cone**
Pine P: 468 *with pictures*
- Pine crab**
Crab *picture on* Ci: 1115
- Pine grosbeak** [bird]
Grosbeak G: 398
- Pine marten** [animal]
Marten M: 233
Sable S: 3
- Pine Mountains** [mountains, U.S.]
Kentucky (Land regions) K: 285
- Pine needle**
Cell *picture on* C: 327
Pine P: 468 *with pictures*
- Pine nut** [food]
Piñon P: 474
- Pine oil disinfectant**
Disinfectant D: 235
- Pine Ridge**
Nebraska (Land regions) N: 104-106 *with picture*
- Pine Ridge Indian Reservation** [South Dakota]
Wounded Knee W: 502
- Pine siskin** [bird] P: 471 *with picture*
- Pine snake**
Snake *picture on* S: 530
- Pine Tree Ceremonial Dance** [painting by Toledo]
Indian, American *picture on* I: 147
- Pine tree dance** [custom]
Indian, American *picture on* I: 147
- Pine-tree shilling** [money] P: 471 *with pictures*
Coin collecting *picture on* Ci: 758
Money (History of United States currency) M: 707
- Pine Tree State**
Maine M: 68
- Pineal gland** [anatomy] P: 471 *with picture*
Gland (table) G: 208
Psychology (Beginnings) P: 849
- Pineapple** [plant] P: 472 *with picture*
Hawaii (Agriculture) H: 103-104
Puerto Rico (Agriculture) P: 882 *with picture*
- Piñeda, Alonso Alvarez de** [Spanish explorer]
Alabama (Exploration and settlement) A: 275
Texas (Spanish exploration) T: 204
- Pinehurst** [North Carolina]
North Carolina (Places to visit) N: 482
- Pinel, Philippe** [French physician]
Mental illness (Humane treatment) M: 408 *with picture*
- Pinero, Arthur Wing** [British dramatist] P: 473
- Piñero, Jesús Toribio** [Puerto Rican political leader]
Puerto Rico (Building a democracy) P: 883
- Pines, Cathedral of the** [memorial]
New Hampshire (Places to visit) N: 216
- Pines of Rome, The** [music by Respighi]
Respighi, Ottorino R: 259
- Pinewood Derby**
Automobile, Model A: 974
- Piney Woods**
Mississippi *picture on* M: 636
- Ping-pong** See Table tennis *in this index*
- Pingree, Hazen S.** [American political leader]
Michigan (table) M: 507
- Pingree, Samuel E.** [American political leader]
Vermont (table) V: 333
- Pinheiros River** [Brazil]
São Paulo (The city) S: 117
- Pinhole aperture** [photography]
Camera *diagram on* C: 81
- Pinhole projector**
Eclipse (Solar eclipses) E: 51
- Pinion gear** [mechanics]
Gear G: 75
Starter (Automobile starters) So: 857 *with diagram*
- Pinl** [plant] P: 473
Carnation C: 241
Flower F: 301 *with picture*
- Pink bollworm** [insect] P: 473 *with pictures*
- Pink conch**
Conch Ci: 928
- Pink flamingo** [plant]
Anthurium A: 550
- Pink Floyd** [musical group]
Rock music (New directions and old) R: 380
- Pink salmon** [fish]
Salmon (Kinds of salmon) S: 70; *picture on* S: 69
- Pinkerton** [opera character]
Opera (*Madama Butterfly*) O: 804
- Pinkerton, Allan** [American detective] P: 474
Espionage (History) E: 358
- Pinkerton man** [detective]
Pinkerton, Allan P: 474
- Pinkeye** [disorder]
Conjunctivitis Ci: 951
Eye (Diseases of the outer parts) E: 466
- Pinking shears**
Scissors S: 208 *with picture*
Sewing (Seams) S: 332-333
- Pinkney, Andrea** [American author]
Literature for children (Children's literature today) L: 365
- Pinkney, Gloria Jean** [American author]
Literature for children (Bibliography) *picture on* L: 370
- Pinkney, William** [American government official]
Justice, Department of (table) J: 203
- Pinnacles National Monument** [California]
National Park System (table: National monuments) N: 51
- Pinnate leaf** [botany]
Leaf (The blade) L: 153-154 *with picture*
- Pinnipedia** [zoology]
Seal S: 265
- Pinocchio** [book by Collodi]
Fairy (Fairies in literature) F: 11
- Pinocchio** [film]
Disney, Walt (Full-length movies) D: 236
- Pinocchio** [literary figure]
Collodi, Carlo Ci: 776
- Pinochet Ugarte, Augusto** [Chilean military leader]
Chile (Marxism and military rule) C: 470, (Crisis and democracy) C: 470; (Recent developments) C: 470
- Pinochle** [game] P: 474
- Piñon** [tree] P: 474
- Piñones** [seeds]
Monkey puzzle tree M: 730
- Pinpoint bombing**
World War II (The air war) W: 481
- Pinscher** [dog]
Doberman pinscher D: 259
Dog *pictures on* D: 274
Miniature pinscher M: 573
- Pinsky, Robert** [American poet]
Poet laureate (table: Poets laureate of the United States) P: 590
- Pint** [unit of measure] P: 475
- Pinta** [ship]
Caravel C: 202
Columbus, Christopher (First voyage westward) Ci: 859 *with picture*
Exploration (Columbus reaches America) E: 444
- Pintail** [bird] P: 475 *with picture*
- Pinter, Harold** [British dramatist] P: 475
Drama (Later British drama) D: 340
English literature (Literature after World War II) E: 322-323
- Pinto** [horse]
Horse (Coat and skin) H: 348-349 *with picture*

Pinworm [animal] P: 475

Pinyin [linguistics]

China (Languages) C: 481-482

Chinese language (Development) C: 511

Pinyon [tree]

Piñon P: 474

Pinyon jay [bird]

Jay J: 66

Pinzón, Martín Alonso [Spanish explorer]

Columbus, Christopher (Ships and crews)

Ci: 859

Pinzón, Vicente Yáñez [Spanish explorer]

Amazon River (History) A: 404

Columbus, Christopher (Ships and crews)

Ci: 859

Exploration (Exploring the New World) E: 444

Piocha [Nevada]

Nevada (Places to visit) N: 164

Pion [atomic particle]

Hadron H: 5

Meson M: 421

Subatomic particle (Composite particles)

So: 937

Pioneer [railroad car]

Pullman, George Mortimer P: 897

Pioneer [space probes]

Space exploration (Solar probes) So: 710

Pioneer 10 [space probe]

Heliosphere (Probing the heliosphere) H: 175

Jupiter (Flights to Jupiter) J: 201

Space exploration (Probes to Jupiter and

beyond) So: 710

Pioneer 11 [space probe]

Heliosphere (Probing the heliosphere) H: 175

Space exploration (Probes to Jupiter and

beyond) So: 710

Pioneer, The [magazine]

Lovell, James Russell (Early career) L: 510

Pioneer Center [community]

Brasília (The city) B: 565

Pioneer Clubs [organization] P: 475

Pioneer life in America P: 476 *with pictures*

and map

See also Western frontier life in America;

Westward movement in America *in this*

index

Family (Early Western families in America)

F: 22

Lincoln, Abraham (Boyhood) L: 312 *with pic-*

ture

Log cabin L: 422 *with picture*

United States, History of the (The pioneers)

U: 166 *with pictures*

See also the list of Related articles in the

Pioneer life in America article

Pioneer-Saturn [space probe]

Jupiter (Flights to Jupiter) J: 201

Saturn (Flights to Saturn) S: 153

Space exploration (Probes to Jupiter and

beyond) So: 710

Pioneer Venus 1 [space probe]

Space exploration (Probes to Venus) So: 710

Venus (Flights to Venus) V: 313 *with picture*

Pioneer Venus 2 [space probe]

Space exploration (Probes to Venus) So: 710

Venus (Flights to Venus) V: 313

Pioneers, The [book by Cooper]

Cooper, James Fenimore Ci: 1034

Pip [literary figure]

Dickens, Charles (The second phase) D: 188-

189

Pipe [musical instrument]

Music (Chinese music) M: 956

Pipe [musical instrument] P: 488

Pipe [plumbing] P: 488

Plumbing P: 577

Pipe [tobacco] P: 489 *with picture*

Brier B: 608

Indian, American *pictures on* I: 138, I: 160

Meerschaum M: 383

Peace pipe P: 209

Sculpture (The European impact) S: 244

Smoking S: 520

Pipe of peace See Peace pipe *in this index*

Pipe organ [musical instrument]

Organ (Pipe organs) O: 851 *with diagram*

Mormons *picture on* M: 808

Pipe snake

Snake (The pipe snake) S: 535

Pipe Spring National Monument [Arizona]

P: 489

National Park System (table: National monu-

ments) N: 51

Pipe tobacco

Tobacco T: 305

Pipe tomahawk [weapon]

Tomahawk T: 325 *with picture*

Pipefish [fish] P: 489 *with picture*

Seahorse S: 265

Pipeline P: 490 *with pictures*

Coal (Shipping coal) Ci: 727

Gas [fuel] G: 50; (Transmitting and distributing

gas) G: 53; (Development of the natural

gas industry) G: 58; *picture on* G: 54

Petroleum (Transporting petroleum) P: 343

with picture

Russia *picture on* R: 545

Transportation (Land transportation) T: 383-384

Piper, Aubrey [literary figure]

Kelly, George Edward K: 256

Piper Cherokee [airplane]

Airplane *picture on* A: 214

Piper Cub [airplane]

Airplane *picture on* A: 234

Piperacillin [drug]

Penicillin (Forms of penicillin) P: 240

Piperine [substance]

Pepper P: 278

Pipes, William T. [Canadian political leader]

Nova Scotia (table) N: 567

Pipestone National Monument [Minnesota]

Minnesota (Places to visit) M: 594

National Park System (table: National monu-

ments) N: 51

Pipil Indians [people]

El Salvador (Ancestry) E: 249; (History) E: 252

Piping plover [bird]

Plover P: 574

Pipit [bird] P: 492 *with picture*

Pippa Passes [play by Browning]

Browning, Robert B: 646

Pippin, Horace [American artist] P: 492 *with pic-*

ture

Piqua, Battle of [1780]

Ohio (Exploration and settlement) O: 700

Piquet, Nelson [Brazilian race driver]

Automobile racing (table: Grand Prix world

champions) A: 980

Piracy [history] See Pirate *in this index*

Piracy [law]

Internet (Legal issues) I: 350e

Pireus [Greece] P: 493

Pirandello, Luigi [Italian author] P: 493

Drama (Italian drama) D: 339

Italian literature (The 1900's) I: 495

Piranesi, Giovanni Battista [Italian artist] P: 493

with picture

Piranha [fish] P: 493 *with picture*

Fish (Harmful fish) F: 147; *picture on* F: 157

Pacu P: 19

Pirate P: 494 *with pictures*

Barbarossa B: 105

Barbary States B: 105

Blackbeard B: 391

Bonnet, Stede B: 462

Drake, Sir Francis D: 320

Haiti (History) H: 15-16

Kidd, William K: 311

Laffite, Jean L: 28

Morgan, Sir Henry M: 803

Privateer P: 808b

Pirate [ship]

Korean War (Naval warfare) K: 382

Pirate spider

Spider (Enemies) So: 791

Pirated recording

Recording industry (Releasing the recording)

R: 182

Pirates, Pittsburgh [team] See Pittsburgh

Pirates *in this index*

Pirates of Penzance, The [operetta by Gilbert

and Sullivan]

Gilbert and Sullivan G: 189

Pire, Dominique Georges [Belgian religious

leader]

Nobel Prizes (Peace: 1958) N: 448

Pirelli Building [Milan]

Milan (The city) M: 540

Pirogue [canoe] P: 496

Pirouette

Ballet (table) B: 45 *with picture*

Horse (Dressage) H: 357

Pisa [city, Italy] P: 496

Pisa, Council of [1409]

Pope (The troubles of the papacy) P: 664

Pisa, Leaning Tower of See Leaning Tower of

Pisa *in this index*

Pisano, Giovanni [Italian sculptor] P: 496

Sculpture (Italian Renaissance sculpture)

S: 251 *with picture*

Pisano, Nicola [Italian sculptor] P: 496

Relief *picture on* R: 213

Sculpture (Italian Renaissance sculpture)

S: 251

Piscataqua River

New Hampshire (Rivers and lakes) N: 220

Piscataway Park [Maryland]

National Park System (table: National park-

ways and other national parklands) N: 56

Piscator [literary figure]

Walton, Izaak W: 21

Pisces [astrology] P: 496 *with picture*

Zodiac (The zodiac in astrology) Z: 601 *with*

picture

Pisgah, Mount See Mount Pisgah *in this index*

Pishon River [Old Testament]

Eden E: 76

Pishpek [former name] See Bishkek *in this*

index

Pisiform bone

Hand (Parts of the hand) H: 40

Wrist *diagram on* W: 510

Pisistratus [Greek ruler] P: 496

Athens (Earliest times) A: 857

Library (Ancient libraries of papyrus) L: 258

Solon S: 586

Pissarro, Camille [French painter] P: 496 *with*

picture

Cézanne, Paul C: 365

Impressionism (French impressionism) I: 94-

95

Painting (Edouard Manet and the impression-

ists) P: 71

Pissis [mountain, Argentina]

Andes Mountains (Physical features) A: 452

Pistachio nut P: 497 *with picture*

Pistil [botany]

Angiosperm A: 462 *with picture*

Flower (The parts of a flower) F: 293 *with pic-*

ture; (The pistils) F: 294

Plant (Flowers) P: 531 *with picture*; (In seed

plants) P: 532

Pollen P: 644

Seed (Seed development in angiosperms)

S: 281-282

Pistillate flower

Flower (Variations in flower structure) F: 294

Pistol [gun]

Handgun (Types of handguns) H: 43

Pistola [money]

Doubloon D: 312

Piston [machine]

Free-piston engine F: 499

Gasoline engine (Pistons and connecting rods)

G: 64 *with pictures*

Machine *diagram on* M: 13

Steam engine (Reciprocating steam engines)

So: 880 *with diagrams*

Stirling engine So: 902 *with diagrams*

Piston, Walter [American composer] P: 497

Piston engine

Airplane (Reciprocating engines) A: 217

Gasoline engine *pictures on* G: 63

Pistons, Detroit

Basketball (table) B

- Pitcairn, John** [British soldier]
Salem, Peter S: 61
- Pitcairn Island** [Pacific] P: 498
Norfolk Island N: 454
- Pitch** [building material] P: 498
Petroleum (History of the use of petroleum)
P: 347
- Pitch** [measurement]
Airplane (Basic movements and controls)
A: 222 *with diagrams*
Helicopter (Piloting a helicopter) H: 171 *with diagrams*
Propeller (Airplane propellers) P: 826
Ship (The chief parts of a ship) S: 424
- Pitch** [sound] P: 498
Doppler effect D: 309
Music (Indicating pitch) M: 953 *with diagrams*
Singing (How people sing) S: 472
Sound (Frequency and pitch) So: 599 *with diagram*; (table) So: 599
Tuning fork T: 487
- Pitch** [sports]
Climbing (Technical climbing) Ci: 680
Cricket (The field) Ci: 1131
- Pitch Lake** [Trinidad]
Asphalt (Asphalt production) A: 815
Trinidad and Tobago (Economy) T: 446
- Pitch pine** [tree]
Pine (Eastern pines) P: 468
- Pitchblende** [mineral] P: 498
Curie, Marie Skłodowska Ci: 1194
Great Bear Lake G: 337
Uranium (Sources of uranium) U: 214
- Pitcher** [container]
Brass *picture on* B: 566
Pewter *pictures on* P: 352
- Pitcher** [sports]
Baseball (Player positions) B: 127; (Pitching)
B: 127; (Rule changes) B: 133; (table:
Modern major league records) B: 137
Softball (Types of softball) So: 571 *with picture*
- Pitcher, Molly** [American patriot] P: 498
- Pitcher, Nathaniel** [American political leader]
New York (table) N: 313
- Pitcher plant** P: 499
Carnivorous plant C: 243
Endangered species (table) E: 270
Plant (Insect-eating plants) P: 542 *with picture*
- Pitcher's rubber**
Baseball (The infield) B: 126 *with diagram*
- Pitching wedge**
Golf (Golf clubs) G: 262 *with picture*
- Pitchout** [sports]
Football *picture on* F: 360
- Pith** [botany]
Potato (The potato plant) P: 712 *with picture*
Stem (Herbaceous stems) So: 887
- Pith helmet**
Helmet H: 178
- Pithecanthropus erectus*** [hominid]
Dubois, Eugène D: 372
- Pithecanthropus Erectus*** [recording]
Mingus, Charles M: 573
- Pithias** [wife of]
Aristotle (Aristotle's life) A: 663
- Pitkin, Frederick W.** [American political leader]
Colorado (table) Ci: 844
- Pitman, Sir Isaac** [British educator]
Shorthand (Pitman shorthand) S: 435
- Pitman shorthand**
Shorthand (Pitman shorthand) S: 435 *with diagrams*
- Pitney, Mahlon** [American jurist]
Supreme Court of the United States (table)
So: 1000
- Pitohui** [bird] P: 499 *with picture*
Animal *picture on* A: 469
- Pitot tube** [measuring device]
Log (The pitot-static log) L: 421
- Pitt, William** [British political leader] P: 499 *with portrait*
Franklin, Benjamin (Other studies) F: 489
Seven Years' War (In Europe) S: 328
- Pitt, William, the Younger** [British political leader] P: 500 *with portrait*
Ireland (Union with Britain) I: 426
- Pitt diamond** [gem]
Diamond (Famous diamonds) D: 182
- Pittman, Vail M.** [American political leader]
Nevada (table) N: 173
- Pitts, Hiram** [American inventor]
Agriculture (The invention of new farm equipment) A: 157-158
- Threshing machine T: 270
- Pitts, John** [American inventor]
Agriculture (The invention of new farm equipment) A: 157-158
Threshing machine T: 270
Wheat (The mechanization of wheat farming)
W: 276
- Pittsburg Landing, Battle of** *See* Shiloh, Battle of *in this index*
- Pittsburgh** [Pennsylvania] P: 500a *with pictures and map*
City *picture on* Ci: 587
Pennsylvania (Places to visit) P: 254; (table:
Average monthly weather) P: 259, *picture on* P: 245
- Pittsburgh, University of** P: 502
- Pittsburgh Penguins**
Hockey (table: National Hockey League)
H: 281
- Pittsburgh Pirates**
Baseball (table) B: 130
Massachusetts (Interesting facts) M: 271
- Pittsburgh Reduction Company**
Aluminum (The growth of the aluminum industry) A: 397
Alcoa Inc. A: 398
- Pittsburgh Steelers**
Football (National Football League) F: 364
- Pittsburgh's Renaissance I and II** [programs]
Pittsburgh (Urban renewal) P: 501
- Pituitary gland** [anatomy] P: 502 *with diagram*
ACTH A: 30
Brain (The brain stem) B: 551; (In regulating body processes) B: 554-555; *diagram on* B: 553
Egg (Development of the bird's egg) E: 117
Giant G: 183
Gland (Endocrine glands) G: 207; (table)
G: 208
Human body (The endocrine system) H: 425; *diagram on* H: 422
Hypothalamus H: 481
Stress (How stress affects the body) So: 926-927
- Più** [music]
Music (table) M: 954
- Pius IV** [pope] P: 502
Trent, Council of T: 435
- Pius V, Saint** [pope] P: 502
- Pius VII** [pope] P: 502
Rome (Under Napoleon) R: 434-435
- Pius IX** [pope] P: 503
Christianity (The rise of nationalism) C: 527
Immaculate Conception I: 79
Papal States P: 132
Rome (Republic of Rome) R: 435
Vatican City (History) V: 288-289
Vatican Council I V: 289
- Pius X, Saint** [pope] P: 503
Roman Catholic Church (Pius X) R: 410
- Pius XI** [pope] P: 503
- Pius XII** [pope] P: 503
Pope *picture on* P: 664
Roman Catholic Church (Facing opposition)
R: 410
Vatican City (History) V: 288-289
Vulgate V: 453
- Pius, Order of**
Medals, decorations, and orders (table) M: 359
- Pivot joint** [anatomy]
Joint J: 155 *with diagram*
- Pivot Rock** [Arkansas]
Arkansas (Interesting facts about Arkansas)
A: 695 *with picture*
- Pixel** [electronics]
Charge-coupled device C: 378
Computer graphics (How a computer creates images) Ci: 924g
Television (The television camera) T: 121-122
- Pixie** [imaginary creature]
Fairy F: 9
- Pixii, Hippolyte** [French inventor]
Electric motor (History) E: 181
Invention (The Industrial Revolution) I: 361
- Pixilation** [photography]
Animation (Pixilation) A: 514
- Pizarro** [play by Sheridan]
Sheridan, Richard Brinsley S: 397
- Pizarro, Francisco** [Spanish explorer] P: 504 *with pictures*
Conquistadors Ci: 973
Exploration *map on* E: 443; (Spain's conquests in the New World) E: 445
Inca (The Spanish conquest) I: 99
- Indian, American (After European contact)
I: 175; *picture on* I: 143
- Latin America (The conquest of the Indians)
L: 106 *with map*
- Panama (The Spanish colonial period) P: 120
- Peru (Spanish conquest and rule) P: 314
- Pizza** [food] P: 504
Food (Interesting facts about food) F: 329
Naples (Way of life) N: 13-14
- Pizzicato** [music]
Music (Stringed instruments) M: 948-949
Violin (Playing the violin) V: 389-390
- "Pizzicato Polka"** [music by Strauss]
Strauss, Johann, Jr. So: 921
- PKU** *See* Phenylketonuria *in this index*
- PLA** [military]
China (The armed forces) C: 481
- Place** [gambling]
Horse racing (Betting) H: 365
- Place, Francis** [English artist]
Penn, William *picture on* P: 242
- Place Bonaventure**
Montreal (Trade and finance) M: 776
- Place Charles de Gaulle** [Paris]
Paris (Gardens, squares, and parks) P: 162
- Place de la Concorde**
Paris (Gardens, squares, and parks) P: 162 *with picture and map*
- Place de l'Étoile** [Paris]
Paris (Gardens, squares, and parks) P: 162
- Place des Arts**
Montreal (The arts) M: 773; *picture on* M: 774
- Place hitting**
Baseball (Batting) B: 128
- Place kick**
Football (The kickoff) F: 359-360 *with picture*; *picture on* F: 362
Rugby football (Rugby Union) R: 510
- Place value** [mathematics]
Numeration systems (The decimal system)
N: 605
Decimal system D: 70
- Placebo** [medicine] P: 505
Statistics (Collecting the data) So: 868
- Placement counselor** [career]
Employment agency E: 263
- Placement office** *See* Employment office *in this index*
Careers (Finding job opportunities) C: 217-218
- Placenta** [anatomy] P: 505
Baby (The developing baby) B: 4-5 *with diagram*
Childbirth (The birth process) C: 456
Gland (table) G: 209
Human body (The reproductive system)
H: 425
Mammal (Reproduction) M: 123-124
Ovary O: 881
Preeclampsia P: 734
Pregnancy (Confirming pregnancy) P: 734a
Prehistoric animal (Mammals) P: 739-740
Reproduction, Human (The first days of pregnancy) R: 246-247 *with diagram*
Umbilical cord U: 18
Uterus U: 251
- Placental barrier** [pregnancy]
Reproduction, Human (Nourishing the embryo)
R: 247
- Placental mammal**
Mammal (Reproduction) M: 123 *with picture*
Prehistoric animal (Mammals) P: 739; (The development of placentals) P: 741; (The distribution of mammals) P: 741
- Placenticia** [Newfoundland and Labrador] P: 505
Newfoundland and Labrador (Places to visit)
N: 368; (War with France) N: 375
- Placer**
Gold (Types of deposits) G: 252
Mining (Surface mining methods) M: 574
Sand S: 106
- Placid, Lake**
Lake Placid L: 44
- Placidia, Mausoleum of** [Ravenna, Italy]
Ravenna R: 151
- Placoderm** [zoology]
Fish (The first fish) F: 171
- Placoid scale** [zoology]
Fish (Scales) F: 160 *with picture*
Shark (Teeth and scales) S: 374-375 *with picture*
- Placuna oyster** [sea animal]
Shell (Uses of shells) S: 389-390
- Plagal cadence** [music]
Music (Harmony) M: 951-952 *with diagram*

Plagiarism P: 505

Plagioclase [mineralogy]

Basalt B: 123

Feldspar F: 68

Granite G: 311

Plague [disease] P: 505

Cat (History) C: 296

Disease (Spread of infectious diseases) D: 228

London (War, plague, and fire) L: 441

Medicine (During the Middle Ages) M: 373

Middle Ages (A halt in progress) M: 528

Races, Human (The clinal approach) R: 55-56

Rat R: 146

Plague, Bubonic See Bubonic plague in this index

Plague, The [book by Camus]

Camus, Albert C: 97

Plague of Ashdod [European history]

Plague (History of plague) P: 506

Plague of locusts

Joel, Book of J: 130

Locust L: 419

Plagues of Egypt

Moses (The Exodus) M: 828-829

Plaice [fish]

Flounder F: 267

Plaid [design]

Tartan T: 47

Scotland picture on S: 214

Plain [natural feature] P: 506 with picture

Great Plains G: 346

Mars (Surface features) M: 225

Ocean (The land at the bottom of the sea)

O: 659 with map

Plain, The [French history]

French Revolution (The National Convention)

F: 526

Plain bearing [machine]

Bearing (Plain bearings) B: 188 with diagram

Plain Dealer, The [play by Wycherley]

Wycherley, William W: 514

Plain of Esdraelon [region, Israel]

Israel (The Coastal Plain) I: 482

Plain of Jars [region, Laos]

Laos (History) L: 71

Plain of Sharon [region, Israel]

Israel (The Coastal Plain) I: 482

Plain People

Pennsylvania P: 244

Pennsylvania Dutch P: 270

Plain Tales from the Hills [book by Kipling]

Kipling, Rudyard (Early literary success) K: 334

Plain weave

Basket making (Methods) B: 141 with pictures

Textile (Woven fabrics) T: 214

Weaving (The plain weave) W: 173 with picture

Plainchant [music] See Chant in this index

Plainclothes officer

Police (Investigations of crimes) P: 621

Plains Cree Indians [American Indians]

Cree Indians Ci: 1125

Manitoba (Indian days) M: 160

Plains Indians [American Indians]

Indian, American (Indians of the Plains) I: 158

with pictures and map

Indian wars (Death on the Plains) I: 194

Iowa (Indian days) I: 393

Pioneer life in America (Indians on the Plains)

P: 487

Saskatchewan (Places to visit) S: 136

Sculpture (The European impact) S: 244

Sun dance So: 987

Tepee T: 172

Western frontier life in America

(Homesteading on the Great Plains)

W: 234-235

Wyoming (The great trails) W: 533-534

Plains of Abraham [plateau]

Quebec, Battle of Q: 37

Plainsawing

Wood (Wood figure) W: 390 with picture

Plainsong [music] See Chant in this index

Plaintext

Codes and ciphers Ci: 749; (Communications

security) Ci: 749

Plaintiff [law]

Class action Ci: 642

Court (How civil courts work) Ci: 1102

Libel L: 226

Trial T: 437

Plaisted, Frederick W. [American political

leader]

Maine (table) M: 87

Plaisted, Harris M. [American political leader]

Maine (table) M: 87

Plaiting [weaving]

Basket making (Methods) B: 141-142 with pictures

Plaka [district]

Athens (Landmarks) A: 854-855 with map

Plan de Ayala [Mexican history]

Zapata, Emiliano Z: 590

Plan of Iguala [Mexican history]

Iturbide, Agustín de I: 520

Plan of San Luis Potosí [Mexican history]

Madero, Francisco Indalecio M: 30

Plan of Union [U.S. history] See Albany Plan of Union in this index

Plan position indicator [radar]

Radar (The display) R: 71

Planar crystal

Snow (How snow forms) S: 539 with picture

Planarian [animal] P: 506 with picture

Animal pictures on A: 497, A: 506

Heredity (Sex cells and reproduction) H: 201

Worm (Flatworms) W: 500 with picture

Planchette

Spiritualism (The medium) So: 796

Planck, Max Karl Ernst Ludwig [German physi-

cist] P: 507

Light (Quantum mechanics) L: 292

Photon P: 430

Physics (Quantum theory) P: 441

Quantum mechanics (Emission of quanta) Q: 6

Radiation (The quantum theory) R: 81

Science (Science in the early 1900's) S: 201;

picture on S: 202

Planck's constant [physics]

Planck, Max Karl Ernst Ludwig P: 507

Plane See Airplane in this index

Plane [geometry]

Geometry G: 101; (Terms) G: 102; (Non-

Euclidean geometry) G: 104

Plane [tool]

Woodworking (Cutting) W: 397 with picture

Plane [tree]

Tree picture on T: 427

Plane geometry [mathematics]

Geometry (Euclidean geometry) G: 103

Mathematics (Branches of mathematics)

M: 303

Plane mirror [optics]

Mirror (Plane mirrors) M: 616 with diagram

Plane of symmetry

Symmetry So: 1066

Plane survey [measurement]

Surveying (Types of surveys) So: 1010

Plane table [surveying]

Surveying (Early tools) So: 1011-1012

Plane trigonometry

Trigonometry T: 442

Planer [machine]

Industrial Revolution (The steam engine) I: 249

Planet P: 507 with pictures

Solar system (Planets) So: 580 with diagram

Astronomy (How the planets move) A: 835;

(Finding new planets) A: 848

Bode's law B: 434

Earth (Earth as a planet) E: 16; (Earth's size

and shape) E: 18

Galileo (Early scientific interests) G: 11

Geology (Geology of the solar system) G: 100

Magnetism (The magnetism of other astro-

nomical bodies) M: 60c

Planetarium P: 514

Relativity (General relativity) R: 211

Satellite S: 150

Space exploration (Space between the plan-

ets) So: 696; (Space probes) So: 708

See also the list of Related Articles in the

Planet article

Planet [astrology]

Astrology (The planets) A: 827

Horoscope (Parts of a horoscope) H: 341

Planet gear [mechanics]

Transmission (Planetary gears) T: 377 with diagrams

Planetarium [machine] P: 514 with pictures

Astronomy (Careers) A: 849

Planetary exploration

Geophysics G: 106

Planetary gears

Gear G: 75

Transmission (Planetary gears) T: 377 with diagrams

Planetary geology

Geology (Geology of the solar system) G: 100

Planetary motion, Laws of [astronomy]

Kepler, Johannes K: 305

Astronomy (Sun-centered theories) A: 835

Planet (How planets move) P: 508-509 with diagram

Planetary nebula [astronomy]

Nebula (Planetary nebulae) N: 116

Star (White dwarf phase) So: 849, picture on So: 841

Planetary probe

Rocket (Launching probes and satellites)

R: 386

Planetary-scale systems

Weather (Weather systems) W: 158

Planetesimal [geology]

Planet (How the planets formed) P: 513

Solar system (Comets) So: 581; (Formation of

our solar system) So: 581

Planetoid [astronomy] See Asteroid in this index

Planets, The [music by Holst]

Holst, Gustav H: 297

Plangman, Mary Patricia [American author]

See Highsmith, Patricia in this index

Planing hull

Motorboat racing (Hull designs) M: 876

Planing mill

Lumber (Planing) L: 519

Plank [construction]

Lumber (table) L: 518

Plank, Ed [American baseball player]

Baseball (table: Hall of Fame) B: 135

Plank sled

Inuit (Transportation) I: 354c; picture on I: 354d

Plankton [biology] P: 515 with picture

Animal (Filtering mechanisms) A: 490

Arctic Ocean (Ocean life) A: 643

Atlantic Ocean (Ocean life) A: 866

Copepod Ci: 1039

Diatom D: 185

Dinoflagellate D: 205

Fish (Fish in the balance of nature) F: 147

Gas [fuel] (How natural gas was formed) G: 57

Grand Banks G: 306

Ocean (The plankton) O: 655; O: 656 with pictures

Ooze O: 788

Oyster (The life of an oyster) O: 891

Pacific Ocean (El Niño) P: 14

Seashore S: 269

Planned community

Housing (New towns) H: 390

Planned economy [economics]

Capitalism C: 193

Communism (The centrally planned economy)

Ci: 891; (Under Stalin) Ci: 892; (The

decline of Communism) Ci: 895

Economics (Variations among countries) E: 59

Price P: 774

Trade (Trade in the United States) T: 363

Union of Soviet Socialist Republics (Economy)

U: 33

Planned obsolescence [marketing]

Automobile (Changes at the top) A: 966

Planned parenthood

See also Birth control in this index

Birth control B: 378

Planned Parenthood Federation of America

P: 515

Planned Parenthood Federation of America

[organization] P: 515

Sanger, Margaret S: 110

Planned Parenthood of Eastern Pennsylvania

v. Casey [U.S. history]

Abortion (Abortion in the United States) A: 15-

16

Planning, City See City planning in this index

Plano Carpiní, John of [Italian explorer]

Exploration (European exploration) E: 442

- Embryo E: 257
 Endangered species E: 269
 Europe (Plant and animal life) E: 400 *with map*
 Evolution E: 426
 Fruit F: 544
 Fungi (How a fungus lives) F: 559
 Gardening G: 30 *with pictures*
 Genetic engineering (Concerns about genetic engineering) G: 85
 Global warming (Limiting global warming) G: 232a
 Grassland G: 329 *with picture*
 Herbicide H: 198
 Hormone (Plant hormones) H: 337
 Invasive species I: 354j
 Life L: 274 *with picture*
 Materials (Biological materials) M: 300d
 Mendel, Gregor Johann (His work) M: 398
 Nitrogen (Nitrogen and life) N: 425
 Nitrogen cycle N: 426
 Nursery N: 613
 Ocean (Life in the ocean) O: 655 *with pictures*
 Paleobotany P: 102
 Perfume (Plant substances) P: 286
 Photoperiodism P: 430
 Photosynthesis P: 430
 Rain forest R: 126 *with pictures*
 Reproduction R: 242; (How reproduction has evolved) R: 243
 Respiration (Respiration in plants) R: 261
 Soil (Plant and animal matter) So: 573
 Tropism T: 452
 Wildlife conservation W: 303
 See also Botany, Flower, Gardening, and Photosynthesis in this index and the list of Related Articles in the Plant article
- Plant, Aquatic** See Water plant in this index
- Plant, Henry B.** (American businessman)
 Tampa (History) T: 23
- Plant, The** (book by King)
 Book (Modern books) B: 468
- Plant breeding** (botany)
 Breeding (Plant breeding) B: 592
 Fruit (Developing new varieties of fruit) F: 546
 Grafting (Uses of grafting) G: 298
 Hybrid (Producing hybrid plants) H: 461
 See also the list of Related Articles on Plant growing in the Plant article
- Plant disease**
 Botany (The importance of botany) B: 508-509
 Cotton (Care during growth) Ci: 1090
 Famine (Plant diseases and pests) F: 26
 Fungicide F: 560
 Gardening (Caring for the garden) G: 35-36
 Insect (Harmful insects) I: 284 *with picture*
 Parasite (Parasites that feed on plants) P: 155
 Plant (Plant enemies) P: 543 *with pictures*
 Potato (Diseases and insect pests) P: 713
 Virus (Virus diseases in plants) V: 427
 See also the Plant Diseases and Pests section of the Related Articles in the Plant article
- Plant ecology**
 Botany (Plant habitats) B: 508
- Plant geography**
 Botany (Plant habitats) B: 508; (Later developments) B: 509
 Geography (Physical geography) G: 93
- Plant louse**
 See also Aphid in this index
 Ant (Dairying ants) A: 527
 Aphid A: 565
 Phylloxera P: 431 *with picture*
- Plant nema** (worm) See Eelworm in this index
- Plant patent** (law)
 Patent P: 194
- Plant protein**
 Food supply (Protein) F: 346
- Plant quarantine** (law) P: 550
 Plant (Control of diseases and pests) P: 545
 Quarantine Q: 7
- Plantae** (biology)
 Kingdom K: 328
- Plantagenet** (English history) P: 550
 England (table) E: 308
- Plantagenet, Geoffrey** (French nobleman) See Geoffrey, Count of Anjou in this index
- Plantagenet, Henry** See Henry II (of England) in this index
- Plantain** (plant) P: 550 *with picture*
 Banana B: 72
 Lawn picture on L: 143
- Plantar arch** (anatomy)
 Foot (The arches) F: 352 *with diagram*
- Plantar wart**
 Skin (Tumors) S: 491
- Plantation** (agriculture) P: 550
 Agriculture (Colonial agriculture) A: 156
 Brazil picture on B: 584
 Colonial life in America (Colonists at home) Ci: 796-797
 Latin America (Rural life) L: 97
 Mississippi picture on M: 642
 Slavery (Modern times) S: 502; (Slavery in the United States) S: 502
 United States, History of the picture on U: 155; picture on U: 168
- Plantation** (political unit)
 Maine (Local government) M: 88
- Plantation Act** [1740]
 Naturalization (History) N: 67
- Plantation of Ireland** [Irish history]
 Great Irish Famine G: 343
 Ireland (The conquest of Ireland) I: 426
- Planté, Gaston** [French physicist]
 Battery (History) B: 171
- Planter** (machine)
 Farm and farming [Drill] F: 36
- Planter** (ship)
 Smalls, Robert S: 513
- Planter** (U.S. history)
 London Company L: 445
- Planthopper** (insect)
 Coconut palm (Growing coconut palms) Ci: 747
- Plantin, Christophe** [French printer]
 Antwerp (Chief buildings) A: 561-562
- Plantin-Moretus** (museum)
 Antwerp (Chief buildings) A: 561-562
- Planting** (agriculture)
 Cotton (Planting) Ci: 1090
 Farm and farming (Planting) F: 35 *with picture*
 Fruit (Planting) F: 545
 Gardening (Starting the garden) G: 34-35
 Transplanting T: 381 *with pictures*
 Tree (Planting the tree) T: 431 *with pictures*
 Vegetable (Planting) V: 293
- Planting gun** (tool)
 Forestry picture on F: 404
- Plantlet** (botany)
 Plant (Vegetative propagation) P: 535
- Plaque** (physiology)
 Alzheimer's disease (Diagnosis) A: 398-399
 Angiography A: 461
 Angioplasty A: 461 *with picture*
 Fat (Fats and disease) F: 53
 Heart (Causes) H: 137 *with picture; diagram*
 on H: 140
 Multiple sclerosis M: 920
 Teeth (Cleaning the teeth) T: 81; (Periodontal diseases) T: 85
- Plasma** (physics) P: 552
 Alfvén, Hannes Olof Gösta A: 349
 Electricity (Conductors) E: 193
 Gas (physics) G: 48
 Ion (Ions in gases) I: 371
 Magnetohydrodynamics M: 62
 Matter (States of matter) M: 311
 Nuclear energy (Nuclear fusion) N: 583
 Physics (Fluid and plasma physics) P: 438
 Sun (Sun terms) So: 976; (Composition) So: 975
- Plasma** (physiology) P: 551 *with pictures*
 Blood (The composition of blood) B: 407; (How the body maintains its blood supply) B: 410
 Blood transfusion B: 416
 Circulatory system (The blood) Ci: 559
 Drew, Charles Richard D: 347
 Gamma globulin G: 23
 Globulin G: 234
 Human body (The blood) H: 421-424 *with picture*
 Lymphatic system (Lymph) L: 534
 Serum S: 319
- Plasma arc welding**
 Welding (Arc welding) W: 189
- Plasma cell** (physiology)
 Immune system (Parts of the immune system) I: 87
- Plasma display** (electronics)
 Electronics (Electronics today) E: 216-217
 Television (Flat-panel, large-screen television) T: 128
- Plasma membrane** (biology)
 Cell (Inside a living cell) C: 328
 Life (Cells) L: 276
- Plasmapheresis** (medicine)
 Myasthenia gravis M: 970f
- Plasma (Uses in medicine) P: 551-552
- Plasmid** (biology)
 Microbiology (Microorganisms) M: 513
- Plasmodium** (botany)
 Slime mold S: 508
- Plasmodium** (protozoan)
 Malaria M: 96 *with pictures*
 Parasite picture on P: 154
- Plassey, Battle of** [1757]
 Clive, Robert Ci: 682i
 India (The rise of the East India Company) I: 130
- Plaster** (building material) P: 552 *with pictures*
 House (Interior construction) H: 382
 Islamic art (Carved and molded plaster) I: 470
 Painting (Fresco painting) P: 38
- Plaster of Paris** P: 553
 Gypsum G: 451
- Plasterboard**
 Wallboard W: 17
- Plastering** (construction)
 Building trade (Career opportunities) B: 686
- Plastic** [material] See Plastics in this index
- Plastic explosive** P: 553
 Explosive (High explosives) E: 454
- Plastic foam**
 Plastics (How plastics are used) P: 554-555; (Making plastic products) P: 558
- Plastic plate** (printing)
 Photoengraving and photolithography (Plates for relief printing) P: 407
- Plastic surgery** (medicine) P: 553
 Medicine (table) M: 369
 Skin grafting S: 494
 Surgery (Plastic surgery) So: 1007
- Plastic worm** (lure)
 Fishing picture on F: 177
- Plastic wrap**
 Plastics (To replace paper) P: 555
- Plasticity** (physical property)
 Mechanics M: 354
- Plasticization** (industrial process)
 Rubber (Plasticization) R: 504
- Plasticizer**
 Alcohol (Other alcohols) A: 335
 Explosive (High explosives) E: 454
 Plastics (Making synthetic resins) P: 556-557
- Plastics** P: 554 *with pictures*
 Clothing (Clothing materials) Ci: 704
 Composite materials Ci: 904
 Forest products (Cellulose products) F: 402
 Industrial arts (Industrial arts courses) I: 242-243
 Manufacturing (How science helps manufacturing) M: 171
 Materials (Plastics) M: 300d
 Ocean (Marine pollution) O: 664
 Phonograph (How phonograph records are made) P: 401
 Recycling R: 184
 Sculpture (Modern International sculpture) S: 256-257
 See also the list of Related articles in the Plastics article
- Plastid** (biology)
 Chloroplast C: 518
- Plastron** (zoology)
 Turtle (Shell) T: 520-521 *with picture*
- Plat** [map]
 Map (General reference maps) M: 177
- Plata, Río de la** See Río de la Plata in this index
- Plataea** (ancient city)
 Thebes T: 251
- Plataea, Battle of** (ancient Greece)
 Thebes T: 251
 Xerxes I X: 544
- Plate** (building construction)
 House (The frame) H: 382 *with diagram*
- Plate** (industry)
 Iron and steel (Rolling) I: 447
- Plate** (printing)
 Etching E: 364 *with pictures*
 Newspaper (Printing the newspaper) N: 385; (Making up the pages) N: 383 *with picture*
 Printing (Electronic imagesetting) P: 797; (Platemaking) P: 798 *with diagram*; (Offset lithography) P: 798; (Relief printing) P: 799
- Plate** (zoology)
 Reptile (Skin) R: 251 *with picture*
- Plate armor**
 Armor (During the Middle Ages) A: 720
- Plate block**

648 Plate clutch

Stamp collecting *picture on So*: 832

Plate clutch [engine]

Transmission (Clutches) T: 377

Plate cylinder [printing]

Printing (Offset presses) P: 798 *with diagram*

Plate freezer

Food preservation (Freezing) F: 342

Plate girder bridge

Bridge (Girder bridges) B: 600-601

Plate tectonics [geology] P: 561 *with diagrams*

Atlantic Ocean (The Mid-Atlantic Ridge) A: 864

Earth (Earth's crust) E: 23; (The shaping of the continents) E: 24 *with diagrams*

Earthquake (Where and why earthquakes occur) E: 36 *with map*

Fossil (Recording changes in the earth) F: 424

Geology (Experimental geology) G: 99-100

Geomorphology G: 106

Geophysics G: 106

Great Rift Valley G: 347

Hot spot H: 374a

Indian Ocean (Ocean floor) I: 186-187

Island (Tectonically formed islands) I: 472

Mantle M: 168

Mediterranean Sea (The seabed) M: 381

Mountain (How mountains are formed) M: 892

Ocean (How the sea floor was formed) O: 662

Ring of Fire R: 342

San Andreas Fault S: 83

Satellite (Formation of satellites) S: 150;

(Recently active satellites) S: 150a

Seven Natural Wonders of the World (Mount Everest) S: 324

Volcano V: 441 *with map*; (Why volcanoes occur in certain places) V: 442

Plate tracery [architecture]

Tracery T: 353

Plateau [geography] P: 565

See also specific plateaus, such as Columbia Plateau, in this index

Mesa M: 420

Plateau, Joseph Antoine [Belgian scientist]

Animation (Early animation) A: 514

Plateau Indians

Indian, American (Indians of the Plateau) I: 165

with picture and map

Platelet [physiology]

Blood (The composition of blood) B: 407-408

with picture; (How the body maintains its blood supply) B: 410-411; (Bleeding disorders) B: 414

Blood transfusion B: 416

Human body (The blood) H: 421-424 *with picture*

Osler, Sir William O: 863

Smoking (Why smoking is dangerous) S: 520

Plateletphoresis [medical procedure]

Blood transfusion (How blood is collected) B: 416-417

Platelike snow crystals

Snow (How snow forms) S: 539 *with picture*

Platemaking *See* Photoengraving and photolithography *in this index*

Platen

Typewriter (How a typewriter works) T: 538

Platen press [machine]

Printing (Letterpress printing) P: 799-800

Plateosaurus [dinosaur] P: 565

Dinosaur (True dinosaurs) D: 206b-208; *picture on D: 206d*

Plater, George [American political leader]

Maryland (table) M: 255

Plateresque style [sculpture]

Latin America (Sculpture) L: 102

Platero and I [book by Jiménez]

Jiménez, Juan Ramón J: 127

Platform [device]

Inertial guidance (Gyroscopic systems) I: 263

Platform, Political

Political convention P: 628

Platform distribution

Motion picture (Distribution) M: 860

Platform diving

Diving (Types of diving) D: 242

Platform spider

Spider (table) So: 790; *picture on So: 788*

Platform tennis [sport] P: 565 *with picture*

Platform truck

Truck (On-highway trucks) T: 457; *picture on T: 459*

Plath, Sylvia [American poet] P: 566

American literature ("Confessional" poetry) A: 423

Hughes, Ted H: 409

Plating [industrial process]

Electroplating E: 218 *with diagram*

Platinum [metal] P: 566

Palladium P: 108

Thermometer (Resistance thermometers) T: 255

Platinum record

Recording industry (Recording industry awards) R: 182

Platinum resistance thermometer

Liquid air (Properties) L: 346

Plato [Greek philosopher] P: 567 *with picture*

Aristotle A: 663

Atlantis A: 868

Communism (Early communism) Ci: 890

Ethics (Ancient ethics) E: 366

Geometry (Greek geometry) G: 105

Government (Modern times) G: 290-291

Humanism (Work of the humanists) H: 431

Neoplatonism N: 124

Peripatetic philosophy P: 288

Philosophy (Ancient philosophy) P: 386

Plotinus P: 574

Political science (The development of political science) P: 639

Socrates (The Socratic problem) So: 567

Sophists So: 595

PLATO [software]

Computerized instruction (Early teaching machines) Ci: 925

Platonic Academy [Italy]

Plato (Plato's place in Western thought) P: 569

Platonic love

Neoplatonism N: 124

Platonic solid [geometry]

Polyhedron P: 650 *with diagrams*

Platoon [film]

Motion picture (Best picture: 1986) M: 861

Stone, Oliver So: 908

Platoon [military]

Army, United States (table) A: 737

Platoon school [education]

Indiana (Schools) I: 200-201

Platt, Thomas C. [American political leader]

Arthur, Chester Alan (Opposition to Garfield) A: 756

Roosevelt, Theodore (Governor of New York) R: 467

Platt Amendment [1901]

Cuba (History) Ci: 1175-1176

McKinley, William (McKinley's second Administration [1901]) M: 341

Roosevelt, Franklin Delano (Good Neighbor Policy) R: 458

Root, Elihu R: 475

Plattdeutsch *See* Low German *in this index*

Platte Bridge Station [Wyoming]

Casper C: 274

Platte River [Nebraska] P: 569

Nebraska (Rivers and lakes) N: 106

Plattist Republic [Cuban history]

Cuba (The Platt Amendment) Ci: 1177

Platyhelminth *See* Flatworm *in this index*

Platypus [animal] P: 569 *with picture*

Animal picture on A: 469

Australia (Native animals) A: 914 *with picture*;

picture on A: 916

Mammal (Reproduction) M: 123-124 *with picture*;

picture on M: 119

Plautus [Roman dramatist] P: 570

Drama (Comedy) D: 328; (Medieval drama) D: 328

Latin literature (Early Latin literature) L: 115

Play [bridge]

Bridge B: 604; (The play) B: 604 *with diagram*

Play [drama]

Drama D: 324

Theater T: 232

Writing (Scriptwriting) W: 512

Play [recreation] P: 570 *with pictures*

Animal (Learning and play) A: 500

Dog (Exercise and play) D: 279

Kindergarten (Equipment) K: 318

Playground P: 571

See also the list of Related Articles in the Play article

Play bow

Dog (Exercise and play) D: 279

Play of Giants, A [play by Soyinka]

Soyinka, Wole So: 693

Play of the Wise Men, The [play]

Spain (Literature) So: 738

Spanish literature (Early medieval literature) So: 757-758

Play-offs

Baseball (Play-offs) B: 130

Play on words

Humor (Puns) H: 435

Play therapy [psychology]

Mental illness (Psychotherapy) M: 407-408

Psychiatry (Psychotherapy) P: 845

Playa [geology]

Australia (Lakes) A: 911

Basin B: 141

Playboy [magazine]

Magazine (table) M: 45

Playboy of the Western World, The [play by Synge]

Synge, John Millington So: 1067

Player

Game theory G: 22

Player, Gary [South African golfer]

Golf (PGA Championship) G: 265; *picture on G: 266*

Player piano

Piano (Player pianos) P: 447 *with picture*

Player Piano [book by Vonnegut]

Vonnegut, Kurt V: 448

Playfair, John [Scottish mathematician]

Geology (The rock dispute) G: 98-99

Playfair algorithm [cryptology]

Codes and ciphers (Substitution) Ci: 750

Playground P: 571 *with pictures*

Playhouse Square Center [Cleveland]

Cleveland (The arts) Ci: 665-666

Playing cards

Card game (Playing cards) C: 208-209 *with picture*

Communication (The rise of printing) Ci: 879

Playing cards [money]

Money (The development of paper money) M: 706 *with picture*

Playwright *See* Dramatist *in this index*

Playwrights Theater [theater company]

Glaspell, Susan G: 210

Plaza [public square]

Latin America (Rural life) L: 97

Mexico (City life) M: 451-454

Plaza de Armas [Peru]

Lima (The city) L: 305 *with picture*

Plaza de Mayo

Argentina *picture on A: 647*

Buenos Aires (The city) B: 672

Plaza de toros

Bullfighting B: 695

Plaza de Toros Monumental [Mexico City]

Bullfighting (The bullring) B: 695

Plaza del Rey

Barcelona B: 108

Plaza Lasso, Gato [Ecuadorian political leader]

Ecuador (The 1900's) E: 73

Plaza Murillo [La Paz]

La Paz L: 73

Plaza of the Republic [Brazil]

São Paulo (The city) S: 117-118 *with picture*

Plaza San Martín

Lima (The city) L: 305

Plaza—State of Puebla [photograph by Strand]

Strand, Paul *picture on So: 918*

Plaza Suite [play by Simon]

Simon, Neil S: 467

Plea bargaining [law] P: 571

Criminal justice system (Pretrial procedures) Ci: 1143; (Problems in the courts) Ci: 1144

Law enforcement (Trial) L: 141

Trial (The criminal defendant's rights) T: 437-438

Pleadings [law]

Court (How civil courts work) Ci: 1102

Pleasant, Ruffin G. [American political leader]

Louisiana (table) L: 496

Pleasant Hill

Kentucky (Places to visit) K: 282

Pleasants, James [American political leader]

Virginia (table) V: 417

Pleasure

Bentham, Jeremy B: 254

Epicurus E: 342

Hedonism H: 165

Locke, John (His philosophy) L: 413

Utilitarianism U: 251

Pleasure boating

Boating B: 428 *with pictures*; (The development of pleasure boating) B:

- Plebiscite** [political science] P: 572
- Plecoptera** [entomology] P: 572
Insect (table) I: 299
- Plectrum** [music]
Banjo B: 87 *with picture*
Guitar G: 436
Harpichord H: 66
Mandolin M: 137
- Pledge** [fraternity]
Fraternity (Membership) F: 496
- Pledge** [promise]
Oath O: 639
- Pledge** [ship]
Korean War (Naval warfare) K: 382
- Pledge of Allegiance** P: 572
Flag (Saluting the flag) F: 219-222
- Pléiade** [French literature]
French literature (The Renaissance) F: 519
Du Bellay, Joachim D: 370
Ronsard, Pierre de R: 450
- Pleistocene Epoch** [geology] P: 572
See also Ice age *in this index*
Climate (Changes in the earth's orbit) Ci: 677-678
Earth (The Cenozoic Era) E: 28-29; (table) E: 30
Ice age I: 6
Prehistoric animal (table) P: 740; (The ice ages) P: 741
River (Estuaries) R: 352
- Plekhanov, Georgi Valentinovich** [Russian philosopher] P: 572
- Plenipotentiary** [diplomat]
Diplomacy (Diplomatic representatives) D: 216
- Plenzendorf, Ulrich** [German author]
German literature (German literature after 1945) G: 142
- Pleochroism**
Tourmaline T: 348
- Plesiadapiiform** [animal]
Primate (The evolution of primates) P: 778b
- Plesianthropus** [anthropology]
Broom, Robert B: 641
- Plesiosaur** [extinct animal]
Prehistoric animal (Other reptiles) P: 737
- Plessis, Armand Jean du** *See* Richelieu, Cardinal *in this index*
- Plessy, Homer A.** [American public figure]
Plessy v. Ferguson P: 573
- Plessy v. Ferguson** [U.S. history] P: 572
African Americans (During the late 1800's) A: 136i
Brown v. Board of Education of Topeka B: 645
National Association for the Advancement of Colored People (History) N: 29
Segregation (Jim Crow laws) S: 285
Supreme Court of the United States (Civil rights) So: 1001; (table) So: 1002
- Pleura** [anatomy] P: 573
Lung (Parts of the lungs) L: 523
Membrane (Serous membranes) M: 391
Pleurisy P: 573
Pneumothorax P: 587
- Pleural effusion** [disorder]
Pleurisy P: 573
- Pleurisy** [disorder] P: 573
Pleura P: 573
- Plexus** [anatomy] P: 573
- Plié**
Ballet (table) B: 45 *with picture*; (A ballet class) B: 46
- Plimoth Plantation**
Colonial life in America (Places to visit) Ci: 801 *with picture*
Massachusetts (Places to visit) M: 280 *with picture*
- Plimoth Plantation, Inc.** [organization]
Plymouth Colony P: 582
- Plymouth Colony** *See* Plymouth Colony *in this index*
- Plimsoll, Samuel** [British businessman]
Plimsoll mark P: 573
Ship (Safety at sea) S: 424
- Plimsoll mark** [shipping] P: 573 *with picture*
Ship (Safety at sea) S: 424
- Pliny the Elder** [Roman author] P: 573
Biology (Beginnings) B: 317-318
Botany (The history of botany) B: 509
Encyclopedia (The first reference works) E: 268a
Geology (The Romans) G: 98
Pompeii (The eruption of Mount Vesuvius) P: 654
Science (Ancient Rome) S: 197
- Pliny the Younger** [Roman author] P: 574
Latin literature (The Imperial Period) L: 116
Pompeii (The eruption of Mount Vesuvius) P: 654
- Pliocene Epoch** [geology]
Earth (The Cenozoic Era) E: 28-29; (table) E: 30
Prehistoric animal (table) P: 740
- Plique-à-jour** [art]
Enamel (Techniques) E: 265
- PLO** *See* Palestine Liberation Organization *in this index*
- Plomin, Robert** [American psychologist]
Intelligence (The roles of heredity and environment) I: 318
- Plot** [literature]
Drama (The structure of drama) D: 325
Literature (Plot) L: 353
- Plotinus** [Greek philosopher] P: 574
Neoplatonism N: 124
Philosophy (Ancient philosophy) P: 386-387
Plato (Plato's place in Western thought) P: 569
Porphry P: 679
- Plott hound** [dog]
Dog (Kinds of dogs) D: 265-266
- Plotter** [electronic device]
Computer (Plotters) Ci: 916
Map (Production and reproduction) M: 180-181
Mechanical drawing (Creating a drawing) M: 354 *with picture*
- Plough and the Stars, The** [play by O'Casey]
Irish literature (The Irish literary revival) I: 431-432
O'Casey, Sean O: 646
- Plovdiv** [Bulgaria] P: 574
Bulgaria pictures on B: 691, B: 692
- Plover** [bird] P: 574 *with picture*
Animal picture on A: 485
Bird (Birds of the seacoasts) B: 342 *with pictures*
Killdeer K: 316
Upland sandpiper U: 213 *with picture*
- Plow** [tool] P: 574 *with pictures*
Agriculture (The invention of new farm equipment) A: 157-158
Colonial life in America (Farming) Ci: 809
Deere, John D: 87
Farm and farming (Preparing the soil) F: 35 *with pictures*
Indian, American picture on I: 139
- Plowman of Bohemia, The** [book by Saaz]
German literature (The Renaissance) G: 139
- Plowshare**
Plow (The moldboard plow bottom) P: 575
- PLP** [political party]
Bahamas (History) B: 29
- Płszów** [Poland]
Schindler, Oskar S: 175
- Plug** [lock]
Lock (Mechanical locks) L: 411 *with picture*
- Plug lure**
Fishing (Bait) F: 177-178, *pictures on* F: 177
- Plug fuse**
Fuse F: 589 *with diagram*
- Plugging** [sports]
Baseball (Rounders) B: 131-132
- Plum** [tree] P: 576 *with pictures*
Prune P: 841
- Plum curculio** [insect]
Weevil W: 180
- Plum-leaved spiraea** [shrub]
Spiraea S: 795
- Plumb bob** [tool]
Surveying (Early tools) So: 1011
- Plumb line** [tool]
Surveying (Early tools) So: 1011
Tool (Woodworking tools) T: 330
- Plumbago** [plant] P: 577
- Plumbing** P: 577 *with pictures*
Building trade (Career opportunities) B: 686
House (Plumbing) H: 382
Skyscraper (Service areas) S: 498
- Plumbing and Pipe Fitting Industry of the U.S. and Canada, United Association of Journeymen and Apprentices of the**
Labor movement (table) L: 8
- Plume** [feather]
Bird (Feathers) B: 362
- Plume** [geology]
Hot spot H: 374b
Volcano (Why volcanoes occur in certain places) V: 442
- Plumed Knight** [nickname]
- Blaine, James Gillespie B: 396
- Plumed Serpent, The** [book by Lawrence]
Lawrence, D. H. L: 145
- Plumer, William** [American political leader]
Monroe, James (Reelection) M: 738
New Hampshire (table) N: 223
- Plummer, Henry** [American settler]
Montana (The gold rush) M: 758
- Plumule** [botany]
Cotyledon Ci: 1095
Plant (Germination) P: 536 *with picture*
Seed (How seeds sprout) S: 283
- PLUNA** [airline]
Uruguay (Transportation and communication) U: 227
- Plunkett, Edward John Moreton Drax** [Irish author] *See* Dunsany, Lord *in this index*
- Plunkett, Jim** [American football player]
Football (table) F: 363
- Plunkett, Roy J.** [American chemist]
Teflon T: 87
- Plurabelle, Anne Livia** [literary figure]
Joyce, James J: 177
- Plural** [grammar]
Case (Nouns) C: 272
Number N: 604
- Pluralism** [political science]
Government (Pluralism) G: 285
- Plurality**
Electoral College E: 163
Democracy D: 120
Majority rule M: 94
Parliamentary procedure (Electing officers) P: 175
- Plurality opinion** [law]
Supreme Court of the United States (Written opinions) So: 999
- Plurality rule**
Government (Party systems) G: 288-290
- Plus sign**
Addition (Writing addition) A: 49
- Plush rug**
Rugs and carpets (Kinds of rugs and carpets) R: 514-515 *with picture*
- Plutarch** [Greek author] P: 580
Biography (Early biographies) B: 312
Moon (Ancient ideas) M: 791-792
- Plutarch's Lives** [book by Plutarch]
Biography (Early biographies) B: 312
Greek literature (The Greco-Roman Age) G: 378
Plutarch P: 580
- Pluto** [god] P: 581
See also Hades *in this index*
Ceres C: 362
Mythology (table) M: 980
- Pluto** [nymph]
Tantalus T: 29
- Pluto** [planet] P: 580 *with pictures*
Astronomy (Finding new planets) A: 848
Kuiper belt K: 392
Planet P: 507 *with pictures*
Satellite (table: Satellites of the solar system) S: 150b; (Geologic history unknown) S: 150c; (History of satellite study) S: 150c-150d
Solar system (Our solar system) So: 580
Space exploration (Probes to Jupiter and beyond) So: 710
- Pluto-Kuiper Express** [space probe]
Planet (Pluto) P: 511-512
- Plutonic rock**
Earth (Igneous rocks) E: 21
- Plutonist**
Geology (The rock dispute) G: 98-99
- Plutonium** [element] P: 581
Atom A: 870
Nuclear energy (Advanced fission reactors) N: 594
Seaborg, Glenn Theodore S: 264
Transuranium element T: 401
- Ply**
Textile (Making the yarn) T: 215-216
Thread T: 269 *with picture*
Tire T: 296 *with pictures*
- Plymouth** [England] P: 582
Plymouth (Massachusetts) P: 582
Pilgrims P: 463
Plymouth Colony (The landing at Plymouth) P: 582
- Plymouth** [city, West Indies]
Montserrat M: 780
- Plymouth Colony** [U.S. history] P: 582 *with picture and map*

650 Plymouth Company

- Bradford, William [1590-1657] B: 545
Colonial life in America (Plymouth Colony) Ci: 789
- Massachusetts (The Pilgrims) M: 289
Mayflower Compact M: 327
Pilgrims P: 463 *with pictures*
Samoset S: 80b
Squanto So: 811
Thanksgiving Day (The first Thanksgiving in New England) T: 230
United States, History of the (New England) U: 153
See also the list of Related Articles in the Plymouth Colony article
- Plymouth Company** [U.S. history] P: 584
Colonial life in America (Early English settlements) Ci: 788
- Plymouth Notch Historic District** [Vermont] Vermont (Places to visit) V: 326
- Plymouth Plantation, History of** [book by Bradford] Bradford, William [1590-1657] B: 545
- Plymouth Rock** [U.S. history] P: 585 *with picture*
- Plymouth Rock chicken**
Chicken (table) C: 443; *picture on* C: 442
- Plywood** [building material] P: 585 *with picture*
Forest products (Plywood) F: 401; *picture on* F: 403
Laminating L: 52
Lumber (Composite lumber) L: 518
Woodworking (Wood for woodworking) W: 398
- Plzeň** [Czech Republic]
Czech Republic (The Bohemian-Moravian Highlands) Ci: 1211
- Pm** [symbol]
Promethium P: 818
- P.M.** [time]
Hour H: 379
- PMS** *See* Premenstrual syndrome *in this index*
- Pneuma** [physiology]
Galen G: 9
- Pneumatic caisson** [construction]
Air lock A: 196
Caisson C: 18 *with diagram*
- Pneumatic hammer**
Riveting R: 356
- Pneumatic tire**
Tire T: 296 *with pictures*; (History) T: 298
Automobile (The gasoline car) A: 963
Dunlop, John Boyd D: 385
- Pneumatic tool** P: 586
- Pneumatic tube system** [communication]
Pentagon Building P: 274
- Pneumoconiosis** [disease]
Black lung B: 389
Coal (Mine safety) Ci: 729
- Pneumocystis carinii pneumonia** [disease]
AIDS (Opportunistic illnesses) A: 163
Pneumonia (How pneumonia develops) P: 586-587
- Pneumonectomy**
Surgery (Some common surgical operations) So: 1006
- Pneumonia** [disease] P: 586
AIDS (Opportunistic illnesses) A: 163
Disease (Death rates from diseases in the United States) D: 233
- Pneumonic plague** [disease]
Plague (Forms of plague) P: 506
- Pneumonitis** [disorder] *See* Pneumonia *in this index*
- Pneumothorax** [disorder] P: 587
Pleura P: 573
- P.N.I.** [political party]
Sukarno So: 965
- PNP transistor**
Transistor (How transistors work) T: 373
- Po** [symbol]
Polonium P: 649
- Po Chū-i** [Chinese poet] *See* Bo Juyi *in this index*
- Po River** [Italy] P: 587
- Po Valley** [Italy]
Italy (The Po Valley) I: 506-507 *with map*
- Poaching** [cooking]
Cooking (table) Ci: 1029
- Poaching** [law] P: 587 *with picture*
Adamson, Joy A: 45
Conservation (Africa) Ci: 990
Endangered species (Wildlife trade) E: 269
National park (Development of park resources) N: 42h *with picture*
- Rhinoceros (Protecting the rhinoceros) R: 295
- Poás Volcano** [volcano, Costa Rica]
Lake picture on L: 33
- Pobedy, Peak** [mountain, Asia]
Tian Shan T: 275
- Pocahontas** [American Indian] P: 588 *with portrait*
Colonial life in America (Jamestown) Ci: 788-789
Jamestown J: 28
Powhatan P: 728
Rolfe, John R: 402
Smith, John S: 517
- Pocasset** [former name, Portsmouth]
Rhode Island (Settlement) R: 312
- Pocatello** [Idaho] P: 588
- Pochard duck**
Duck (Food) D: 375 *with picture*; (Kinds of ducks) D: 376
- Pochteca**
Aztec (Trade and transportation) A: 1002-1003
- Pocket beach**
Beach B: 178
- Pocket Books** [publisher]
Book (Modern books) B: 468
- Pocket borough** [government]
Borough B: 491
- Pocket calculator**
Calculator C: 22 *with picture*
- Pocket compass**
Compass *picture on* Ci: 902b
- Pocket gopher** [animal]
Gopher G: 271 *with picture*
- Pocket mouse**
Animal *picture on* A: 482
Kangaroo rat K: 215
- Pocket veto**
Congress of the U.S. (From bill to law) Ci: 945-946
Constitution of the United States (Article I, Section 7) Ci: 1006
United States, Government of the (Action by the President) U: 144
Veto (Vetoing a bill) V: 346
- Pocket watch**
Watch (History) W: 115 *with picture*
- Poco** [musical group]
Rock music (Rock goes pop) R: 379
- Pocomoke River**
Maryland *picture on* M: 250
- Pocomoke Swamp**
Maryland (Land regions) M: 250
- Pod** [botany]
Cacao *picture on* C: 9
Ivory palm *picture on* I: 522
Milkweed M: 551
- Pod** [entomology]
Grasshopper (Young) G: 328
- Pod** [zoology]
Killer whale K: 316
Whale (Group life) W: 261
- Podgorica** [city, Montenegro] P: 588
Montenegro M: 763
- Podiatric Medical Association, American**
Podiatry P: 588
- Podiatry** [medicine] P: 588
- Podocarpus** [botany]
Tree (Needleleaf trees) T: 414-415
- Podophyllum resin** [drug]
Mayapple M: 326
- Poe, Edgar Allan** [American author] P: 589
American literature (The romance) A: 418 *with portrait*; (Poetry) A: 418-419
Baudelaire, Charles B: 173
Detective story (History) D: 163
Fort Moultrie F: 415
Science fiction (The first science fiction) S: 205
Short story S: 434
- Poe House**
Baltimore (Other interesting places to visit) B: 69
- Poe lock**
Soo Canals (The American canals) So: 595 *with map*
- Poe Museum**
Richmond (Other interesting places to visit) R: 332 *with picture*
- Poem** *See* Poetry *in this index*
- Poem for a Pickle: Funnybone Verses, A** [book by Merriam]
Literature for children (The middle and late 1900's) L: 364
- Poem of the Cid, The** [poem]
- Spain (Literature) So: 738
Spanish literature (Early medieval literature) So: 757-758
- Poem on Natural Law** [poem by Voltaire]
Voltaire (Later years) V: 446-447
- Poems** [book by Emerson]
Emerson, Ralph Waldo (His poetry) E: 259
- Poems on Various Subjects, Religious and Moral** [book by Wheatley]
Colonial life in America (Literature) Ci: 806-807
Wheatley, Phillis W: 278
- "Poet, The"** [essay by Emerson]
Emerson, Ralph Waldo (His prose works) E: 259
- Poet laureate** [title] P: 590
- Poetic Edda** [poems]
Edda E: 74
Scandinavian literature (Beginnings) S: 171
- Poetic Meditations** [poems by Lamartine]
Lamartine, Alphonse de L: 50
French literature (Romantic poetry) F: 521
- "Poetic Principle, The"** [essay by Poe]
Poe, Edgar Allan (Poetry and poetic theory) P: 589-590
- Poetical Sketches** [poems by Blake]
Blake, William B: 397
- Poetics** [book by Aristotle]
Aristotle (Literary criticism) A: 664
Drama (The structure of drama) D: 325
Greek literature (Philosophical literature) G: 378
Italian literature (Humanism and the Renaissance) I: 494
- Poetry** P: 591 *with pictures*
American literature (Colonial literature [1608-1764]) A: 414; (The Era of Expansion [1831-1870]) A: 415-418; (The world wars and depression [1914-1945]) A: 420-421; (Literature since 1945) A: 423
Arabic literature (Poetry) A: 583
Canadian literature (Poetry: 1850-1918) C: 157; (Modern Canadian poets) C: 160
Colonial life in America (Literature) Ci: 806-807
English literature (Old English poetry) E: 314; (Elizabethan poetry) E: 316; (Metaphysical and Cavalier poets) E: 317; (Romantic poetry) E: 320; (Poetry between the wars) E: 322
Greek literature (Early Greek literature) G: 377
Irish literature (Early Irish literature) I: 430; (The Golden Age) I: 430
Literature for children (Poetry) L: 356; (Masterpieces of poetry) L: 362; (The poetry revival) L: 364
Meter M: 433
Prose P: 828
Pulitzer Prizes (table) P: 895
Rhyme R: 320
Rubaiyat R: 499
Symbolism So: 1066
Writing (Fiction) W: 511-512
See also the list of Related Articles in the Poetry article
- Poetry: A Magazine of Verse** [magazine]
Monroe, Harriet M: 733
- Poetry and Experience** [book by MacLeish]
MacLeish, Archibald M: 24
- Poetry of Moonlight, The** [painting by Blakelock]
Blakelock, Ralph Albert *picture on* B: 397
- Poets' Corner** [London]
Westminster Abbey W: 243
- Poet's narcissus** [plant]
Narcissus N: 20 *with picture*
- Poggenpuhl Family, The** [book by Fontane]
Fontane, Theodor F: 327
- Pogo** [airplane] *See* XF-1 *in this index*
- Pogrom** [persecution]
Genocide G: 90
Anti-Semitism A: 559
Holocaust (Before the Holocaust) H: 296
Jews (The growth of anti-Semitism) J: 123
Zionism (Movement to Palestine) Z: 599
- Pogue, George** [American settler]
Indianapolis (History) I: 222
- Pogy** [fish]
Menhaden M: 400
- Pohnpei** [island, Pacific]
Caroline Islands C: 244
Micronesia, Federated States of (Government) M: 515
Pacific Islands, Trust Territory of the P: 13
- Pohutukawa** [tree]
Tree *picture on* T: 427

- Poi** [food]
Hawaii (Food) H: 94
- Poikilothermic animal**
Cold-blooded animal Ci: 761
- Poincaré, Jules Henri** [French scientist]
Mathematics (In the 1800's) M: 307
- Poincaré, Raymond** [French political leader]
P: 599
- Poinciana** [tree] P: 600 *with picture*
- Poindexter, George** [American political leader]
Mississippi (table) M: 640
- Poindexter, John M.** [American government official]
Iran-contra affair (Charges and court actions) I: 407
Reagan, Ronald Wilson (The Iran-contra affair) R: 170
- Poinsett, Joel R.** [American diplomat]
Van Buren, Martin (table) V: 273
Poinsettia P: 600
- Poinsettia** [plant] P: 600
Flower *picture on* F: 271
Leaf *picture on* L: 157
- Point** [archery]
Archery (Arrows) A: 602 *with diagrams*
Indian, American (The first Americans) I: 151
- Point** [economics]
Mortgage M: 821
- Point** [geography]
Cape C: 186
- Point** [geometry]
Geometry (Terms) G: 102 *with picture*
- Point** [hunting]
Setter S: 323
- Point** [navigation]
Compass Ci: 902b
- Point** [printing]
Type (Sizes of type) T: 537 *with picture*
Weights and measures (Miscellaneous weights and measures) W: 184
- Point** [region]
Pittsburgh (The city) P: 500a *with picture*
- Point aberration** [optics]
Aberration A: 10 *with diagram*
- Point-and-shoot camera**
Camera (Point-and-shoot cameras) C: 82
Photography (Direct vision cameras) P: 417
- Point Barrow**
Alaska A: 282
- Point Clark Lighthouse** [Ontario]
Canada (table: National historic sites) C: 114
- Point count method**
Bridge (Evaluating the hand) B: 604
- Point Counter Point** [book by Huxley]
Huxley, Aldous Leonard H: 459
- Point Defiance Park** [Tacoma]
Washington (Places to visit) W: 56 *with picture*
- Point Four Program** [U.S. history]
Foreign aid (Economic development and mutual security) F: 383
Technical assistance T: 73
Truman, Harry S. (Foreign affairs) T: 471
- Point guard** [sports]
Basketball (The players) B: 144
- Point mutation** [genetics]
Heredity (Mutation) H: 203
- Point of No Return** [book by Marquand]
Marquand, John Phillips M: 217
- Point of order**
Parliamentary procedure (table) P: 176
- Point-of-purchase display**
Advertising (Other ways of advertising) A: 75; *picture on* A: 73
- Point-of-sale system** [electronics]
Bank (Electronic banking) B: 89-90
Cash register C: 273
- Point of view**
Literature (Style) L: 353
Novel N: 571
- Point Pelee National Park** [Ontario]
Canada (table: National parks and national park reserves) C: 113
- Point Pleasant, Battle of** [1774]
Cornstalk Ci: 1066
Shawnee Indians S: 379
West Virginia *picture on* W: 227
- Point rationing**
Rationing R: 148
- Point Reyes National Seashore** [California]
National Park System (table: National seashores) N: 57
- Point source pollution**
Environmental pollution E: 330
- Point State Park**
Pittsburgh (The city) P: 500a *with picture*
- Point system** [sports]
Boxing (Scoring a fight) B: 528-529
- Point work** [dancing]
Ballet (Point work) B: 47
- Pointe-au-Père Lighthouse** [Ontario]
Canada (table: National historic sites) C: 114
- Pointer** [dog] P: 600
Dog (Sporting dogs) D: 268 *with pictures*
Hunting (Kinds of hunting) H: 450
- Pointers, The** [painting by Thomson]
Canada *picture on* C: 110
- Pointillism** [art]
Gauguin, Paul (Early career) G: 69
Painting (Postimpressionism) P: 75-76 *with picture*
Postimpressionism *picture on* P: 709
Seurat, Georges S: 324
Vermeer, Jan V: 317
- Pointing dog**
Hunting (Kinds of hunting) H: 450
- Pointing stick** [electronic device]
Computer (A pointing stick) Ci: 914
- Poirot, Hercule** [literary figure]
Christie, Agatha C: 527
- Poison** P: 600
First aid (Treatment for poisoning) F: 137; (Snakebite) F: 141
Fish (Harmful fish) F: 147
Frog (Skin) F: 536
Insecticide (Dangers of insecticides) I: 303
Pharmacology P: 354
Pitohui P: 499
Plant (How plants protect themselves) P: 544 *with picture*
Safety (In the bathroom) S: 10
Snakebite S: 536
See also the list of Related articles in the
Poison article
- Poison elder** [shrub]
Elder E: 158
Sumac So: 972
- Poison gas**
Chemical-biological-radiological warfare (Chemical) C: 396
Fumigation F: 556
Gas mask G: 60
Iraq (War with Iran) I: 414
Poison (Kinds of poisons) P: 601
World War I (Trench warfare) W: 457-458 *with picture*
- Poison hemlock** [plant]
Hemlock H: 181 *with pictures*
- Poison ivy** [plant] P: 601 *with picture*
Eczema E: 74
Ivy I: 522
Plant *picture on* P: 544
Poison oak P: 602
- Poison oak** [plant] P: 602 *with picture*
Eczema E: 74
Poison ivy P: 601
- Poison sumac** [shrub]
Sumac So: 972
- Poisoning** *See* Poison *in this index*
- Poisonous lizard** [reptile]
Lizard (Defenses) L: 400
- Poisonous plant** P: 602
See also the list of Related articles in the
Poisonous plant article
- Poisson, Jeanne-Antoinette** *See* Pompadour, Marquise de *in this index*
- Poittevin, Alphonse Louis** [French inventor]
Printing (Developments in platemaking) P: 803-804
- Poitier, Sidney** [American actor] P: 603 *with portrait*
Motion picture (Best performance by an actor: 1973) M: 862-863
- Poitiers, Battle of** [1356] P: 603
England (The Hundred Years' War) E: 306
Feudalism (The decline of feudalism) F: 83
Hundred Years' War H: 437
- Poke bonnet** [hat]
Hat *picture on* H: 84
- Poker** [game] P: 603
- Pokeweed** [plant] P: 603 *with picture*
- Pol Pot** [Cambodian political leader]
Cambodian (History) C: 72-73
- Poland** P: 604 *with pictures and maps*
Belarus (History) B: 224b-224c
Christmas (In Poland) C: 531
Cold War (Unrest in Eastern Europe) Ci: 765; (The Cold War in the 1970's) Ci: 769
Communism (In Eastern Europe) Ci: 896
Cossacks Ci: 1079
Flag *picture on* F: 207
Hitler, Adolf (The road to war) H: 268
Jews (Eastern European religious movements) J: 123
Katyn Massacre K: 249
Lithuania (History) L: 389
North Atlantic Treaty Organization (History) N: 471
Prussia (Decline of Prussia) P: 843
Russia (World War II) R: 554
Ukraine (Lithuanian and Polish rule) U: 12
Union of Soviet Socialist Republics (Civil war) U: 36
Warsaw Pact W: 39
Walesa, Lech W: 13
World War II (table: The Allies) W: 471; (The invasion of Poland) W: 472; (The Soviet advance) W: 484; (table: Military casualties) W: 497
- Poland China** [hog]
Hog (Kinds of hogs) H: 285 *with picture*; (table) H: 286
- Polanie** [people]
Poland P: 604
- Polanski, Roman** [Polish director]
Motion picture (Movies in the 1960's) M: 871
- Polanyi, John Charles** [Canadian chemist]
Nobel Prizes (Chemistry: 1986) N: 443
- Polar air mass** [meteorology]
Weather (Synoptic-scale systems) W: 159 *with diagram*
- Polar anticyclone** [weather]
Calms, Regions of (Subpolar regions) C: 69
- Polar bear** [animal] P: 616 *with pictures*
Animal *picture on* A: 484
Bear (Polar bears) B: 185; *picture on* B: 186
Inuit (Hunting and fishing) I: 354d-354e
Manitoba (Interesting facts) M: 145 *with picture*
Nunavut *picture on* N: 612
Zoo (Interesting facts about zoo animals) Z: 605
- Polar cap**
Mars (Polar deposits) M: 226a
- Polar covalent bond** [chemistry]
Bond (A covalent bond) B: 454
- Polar easterly** [weather]
Weather (Planetary-scale systems) W: 158-159
Wind (General circulation) W: 329 *with diagram*
- Polar Express, The** [book by Van Allsburg]
Van Allsburg, Chris V: 269
- Polar front** [meteorology]
Climate (Atmospheric circulation) Ci: 676a
Southern Ocean So: 688
Weather (Planetary-scale systems) W: 158-159
- Polar ice mass** [geography]
Arctic Ocean (Ice) A: 643
- Polar jet** [wind]
Jet stream J: 115 *with map*
Ozone hole O: 894
- Polar molecule** [chemistry]
Ion (Ions in liquids) I: 371
- Polar night jet** [wind]
Jet stream J: 115
- Polar nucleus** [botany]
Plant (Sexual reproduction) P: 532-534
Pollen (Fertilization) P: 646
Seed (Seed development in angiosperms) S: 281-282
- Polar orbit**
Space exploration (Kinds of earth orbits) *diagrams on* So: 697
Satellite, Artificial (Satellite orbits) S: 150d-150e *with picture*
- Polar-orbiting weather satellite**
Weather (Weather satellites) W: 163-164
- Polar plume** [astronomy]
Corona Ci: 1067
- Polar regions**
Animal (Animals of the polar regions) A: 484 *with pictures and maps*
Rain (Rainfall distribution) R: 124-125
- Polaris** [star] *See* North Star *in this index*
- Polaris** [weapon]
Rocket (High-altitude rockets) R: 390-391
- Polariscope** [instrument]
Polarized light (Uses of polarized light) P: 618
- Polarization** [physics]
Polarized light P: 617

652 Polarized glass

Nervous system (The beginning of an impulse)
N: 135 *with diagram*

Polarized glass
Glass (table) G: 218

Polarized light [physics] P: 617 *with pictures*
Light (Polarization) L: 290

Polarizing filter
Land, Edwin Herbert L: 56
Photography (Filters) P: 419
Polarized light (How light is polarized) P: 617
with diagrams

Polaroid Land camera
Land, Edwin Herbert L: 56

Polder [geography]
Belgium (The Coastal and Interior Lowlands)
B: 230
Netherlands N: 138; (The land) N: 144 *with picture and map*

Pole [biology]
Cell (Mitosis) C: 330

Pole [geography] P: 618
Climate (The role of latitude) Ci: 676
Earth (Earth's size and shape) E: 18
Latitude L: 116
North Pole N: 517
South Pole So: 686

Pole [magnetism]
Pole P: 618
Magnetism (Magnetic poles) M: 59

Pole spear
Spearfishing So: 769 *with picture*

Pole Star See North Star *in this index*

Pole vault [sport] P: 618 *with diagram*
Track and field (Jumping events) T: 355-356;
(World track and field records) T: 358

Polecat [animal] P: 619
Ferret F: 76

Polemonium
Flower *picture on F: 289*

Poles [people]
Poland (People) P: 605 *with pictures*
Holocaust H: 296
Russia (The Time of Troubles) R: 549

Polestar See North Star *in this index*

Poletti, Charles [American political leader]
New York (table) N: 313

Police P: 620 *with pictures*
Crime laboratory (Collecting the evidence)
Ci: 1140
Criminal justice system Ci: 1143; (Problems of the police) Ci: 1144
Law enforcement L: 141
Radio (In public safety) R: 84 *with picture*
Royal Canadian Mounted Police R: 495 *with pictures*
Texas Rangers T: 211 *with picture*
See also the list of Related articles in the Police article

Police, International
Interpol I: 350f

Police action
International law (After World War II) I: 342

Police brutality
Police (In the United States since the mid-1900's) P: 624

Police dog [dog] P: 626
Doberman pinscher D: 259
German shepherd dog G: 143

Police Motu [language]
Papua New Guinea (People) P: 140

Police patrol [law]
Criminal justice system (Problems of the police) Ci: 1144

Police revolver [gun]
Handgun (Double-action revolvers) H: 43 *with picture*

Police state [political science] P: 626
Communism (Restrictions on personal freedom) Ci: 891-892
Hitler, Adolf (The New Order) H: 267

Policy
Insurance I: 309

Policy and Programs, Bureau of
United States Information Agency U: 200

Policy committee [government]
Senate (The leaders of the senate) S: 294-295

Policy Development, Office of [U.S.]
President of the United States (The executive branch) P: 764

Policyholder
Insurance I: 309

Polifemo and Galatea [poem by Góngora]
Góngora, Luis de G: 268
Spanish literature (The 1600's) So: 759-760

Poling [industrial process]
Copper (Smelting) Ci: 1043

Poling [sport]
Canoeing (Poling and sailing) C: 181

Polio See Poliomyelitis *in this index*

Poliomyelitis [disease] P: 626 *with picture*
Disease (table) D: 226
Enders, John Franklin E: 272
Iron lung I: 453
Kenny, Elizabeth K: 271
Nervous system (Disorders of the nervous system) N: 136
Sabin, Albert Bruce S: 3
Salk, Jonas Edward S: 68
Virus *picture on V: 427*

Polisario Front
Hassan II H: 82
Mauritania (History) M: 315
Morocco (Dispute over Western Sahara)
M: 815
Western Sahara W: 241

Polish [breed]
Chicken (Other classes) C: 441

Polish Corridor [region, Poland] P: 627 *with map*
Prussia (Decline of Prussia) P: 843

Polish lowland sheepdog P: 627
Dog *picture on D: 276*

Polish Peasant Party [political party]
Poland (Politics) P: 605; (Free elections)
P: 614-615

Polish Succession, War of the See Succession
Wars in this index

Polishing [industrial process]
Diamond (How diamonds are cut to make jewels) D: 182
Gem (Cutting and polishing) G: 79
Grinding and polishing (Polishing) G: 395

Polistes wasp
Wasp (Nests) W: 111 *with picture*

Politburo [Communist Party] P: 627
China (The Communist Party) C: 477
Communism (Communist Party structure)
Ci: 891
Khrushchev, Nikita Sergeyevich (Rise as a Communist) K: 308b
Union of Soviet Socialist Republics
(Government) U: 29

Politeness
Etiquette E: 373

Politi, Leo [American artist]
Regina Medal (table: 1966) R: 206

Political action committee P: 627
Congress of Industrial Organizations Ci: 941
Congress of the United States (Congressional ethics) Ci: 948
Election campaign (Campaign funds) E: 160
Political party (Raising funds) P: 633

Political anthropology
Anthropology (Social anthropology) A: 547

Political behavior
Political science (Political behavior) P: 638

Political campaign See Election campaign *in this index*

Political candidate See Candidate *in this index*

Political cartoon
Cartoon (Editorial cartoons) C: 263-265 *with picture*

Political convention P: 628 *with picture*
Election campaign (Winning the nomination)
E: 160
Political party (Selecting candidates) P: 631;
(National conventions and committees)
P: 634
Vice President of the United States
(Nomination) V: 350

Political crime
Crime (Political crime) Ci: 1137

Political culture
City (Political culture) Ci: 593

Political democracy [political science]
Government (Democracy) G: 285

Political economy
See also Economics *in this index*
Communication (Communication and politics)
Ci: 888

Political freedom [law]
Freedom (Kinds of freedom) F: 501; (Limits on political freedom) F: 502

Political geography
Geography (Human geography) G: 94

Political machine
Graft G: 298
United States, History of the (Government and the people) U: 180

Political map
Map (General reference maps) M: 177

Political party P: 631 *with picture*
Caucus C: 317
City government (Influencing city government)
Ci: 597
Constitution of the United States (Ratifying the Constitution) Ci: 1001
Democracy (Political parties) D: 121
Government (Party systems) G: 288
Political convention P: 628
United States, Government of the
(Representative democracy) U: 137-138;
(Party leadership) U: 138
United States, History of the (Establishing political parties) U: 163
Washington, George (Rise of political parties)
W: 104
See also the list of Related articles in the Political party article

Political prisoner P: 637

Political science P: 638
See also Government; International relations
in this index
Aristotle (Ethics and politics) A: 664
Careers (Life, physical, and social sciences)
C: 225-226
Plato (Psychology and politics) P: 568
Science (The social sciences) S: 194

Political theory
Geopolitics G: 106
Political science (Political theory and philosophy) P: 638
Radicalism R: 82

Political treaty
Treaty (Kinds of treaties) T: 408-409

Political unit
World (table) W: 408-412

"Politics" [essay by Emerson]
Emerson, Ralph Waldo (His prose works)
E: 259

Politics of God [book by Quevedo]
Quevedo, Francisco de Q: 41

Polity [government]
Government (Aristotle's categories) G: 285

Politzer, H. David [American physicist]
Gluon G: 236

Poliziano, Angelo [Italian author]
Italian literature (Humanism and the Renaissance) I: 494

Polk, Charles [American political leader]
Delaware (table) D: 109

Polk, James Knox [U.S. President] P: 640 *with pictures*
Dallas, George Mifflin D: 16
Mexican War (Background of the war)
M: 445
Oregon (Exploration and settlement) O: 846
Taylor, Zachary (Mexican War) T: 58-59
Tennessee (Places to visit) T: 144; (table)
T: 152; (Building the state) T: 153
United States, History of the (Manifest destiny) U: 167
Washington (Settlement) W: 66

Polk, Jane Knox [mother of]
Polk, James Knox (Childhood) P: 640

Polk, Leonidas [Confederate general] P: 644

Polk, Samuel [father of]
Polk, James Knox (Childhood) P: 640

Polk, Sarah Childress [wife of James Knox Polk]
First ladies (table) F: 142
Polk, James Knox (Polk's family) P: 641; (Life in the White House) P: 642 *with picture*

Polk, Trusten [American political leader]
Missouri (table) M: 668

Polk Doctrine [U.S. history]
Polk, James Knox ("The Polk Doctrine")
P: 643

Polk Place [estate]
Polk, James Knox (Retirement) P: 643

Poll [statistics]
Public opinion poll P: 861

Poll [voting]
Election (Election procedures) E: 159

Poll book [voting]
Political party (Local organizations) P: 635

Poll tax P: 644
Constitution of the United States (Amendment 24) Ci: 1016
Hispanic Americans (Political developments)
H: 255
Reconstruction (Effects of Reconstruction)
R: 179-180

Poll watchers

Election (Election procedures) E: 158-159

Pollack [fish] See *Pollock in this index***Pollack, Sydney** [American director]

Motion picture (Best achievement in directing: 1985) M: 862

Pollaiuolo, Antonio del [Italian artist] P: 644

Renaissance picture on R: 237

Sculpture (Early Renaissance) S: 252

Pollard, John Garland [American political leader]

Virginia (table) V: 417

Polled cattle

Cattle (Horns) C: 307

Polled Hereford [animal]

Cattle (Hereford) C: 309

Polled Shorthorn [animal]

Cattle (Other beef cattle) C: 309

Pollen [botany] P: 644 *with pictures*

Bee (Finding food) B: 204

Bumble bee (Importance of bumble bees) B: 698

Climate (Pollen) Ci: 679

Corn (How the plant reproduces) Ci: 1058

Date palm (The tree) D: 42

Electron microscope picture on E: 205

Flower F: 271; (The role of flowers in reproduction) F: 295

Fruit (Developing new varieties of fruit) F: 546

Hay fever H: 116

Honeyeater H: 315

Insect (Beneficial insects) I: 284 *with picture*

Plant (Flowers) P: 531; (Sexual reproduction)

P: 532-534 *with diagrams*

Ragweed R: 103

Seed (How seeds develop) S: 281-282

Tree (How trees reproduce) T: 419 *with pictures*

Pollen basket [entomology]

Bee (Legs) B: 201-202 *with picture*

Pollen cone [botany]

Plant (In seed plants) P: 532-534 *with diagrams*

Seed (Seed development in gymnosperms) S: 282

Pollen index

Hay fever (Causes and prevention) H: 116

Pollen tube [botany]

Flower (Fertilization) F: 296

Plant (Sexual reproduction) P: 532-534 *with picture*

Seed (Seed development in angiosperms) S: 281-282

Pollera [clothing]

Panama (Clothing) P: 118 *with picture*

Pollination See *Pollen in this index***Polling place** [voting]

Flag (Displaying the flag) F: 218

Voting (Voting districts) V: 450

Pollinosis See *Hay fever in this index***Polliwog** See *Tadpole in this index***Pollock** [fish] P: 646 *with picture***Pollock, Jackson** [American painter] P: 646

Abstract expressionism A: 19

Painting (Abstract expressionism) P: 84-85

United States picture on U: 116

Pollock, James [American political leader]

Pennsylvania (table) P: 263

Pollock, Sharon [Canadian dramatist]

Canadian literature (Modern Canadian drama) C: 161

Polls [voting]

Voting (Voting districts) V: 450

Pollster

Public opinion poll (Conducting a poll) P: 862

Pollution See *Environmental pollution in this index***Pollux** [Greek mythology]

Castor and Pollux C: 282

Polo [sport] P: 646 *with pictures***Polo, Gaspar Gil** [Spanish author]

Spanish literature (The 1500's) So: 758-759

Polo, Maffeo [Italian explorer]

Exploration (European exploration) E: 442

Polo, Marco (Early life) P: 648 *with map*

Polo, Marco [Italian explorer] P: 648 *with map*

Exploration (European exploration) E: 442

Geography (Era of exploration) G: 95

Glasses G: 224

Money (The development of paper money) M: 706

Mongol Empire (European contacts) M: 721

Trade (The expansion of trade) T: 363

Polo, Nicolò [Italian explorer]

Exploration (European exploration) E: 442

Polo, Marco (Early life) P: 648 *with map*

Polo, Water [sport] See *Water polo in this index***Polo pony**

Polo (The horses) P: 647 *with picture*

Polonium [element] P: 649

Curie, Marie Skłodowska Ci: 1194

Polonius [literary figure]

Shakespeare, William (*Hamlet*) S: 361-362

Polotsky, Simeon [Russian author]

Russian literature (Western influences) R: 559

"Polovtsian Dances" [ballet]

Borodin, Alexander B: 490

Polovtsians [people]

Russian literature (Nonreligious literature)

R: 559

Poltava, Battle of [1709]

Charles XII C: 382

Sweden (The age of expansion) So: 1033

Poltergeist [ghost]

Ghost G: 182

Poltoratsk [former name]

Ashgabat A: 769

Polyakov, Valery [Russian cosmonaut]

Astronaut (Achievements in space) A: 829-

830, (table) A: 830

Space exploration (Docking with Mir) So: 726

Polyalphabetic substitution

Codes and ciphers (Substitution) Ci: 750

Polyamid [fiber] See *Nylon in this index***Polyandry** [marriage]

Marriage (Marriage in other cultures) M: 222

Family (Varieties of families) F: 20-21

Nepal (People) N: 125

Polygamy P: 650

Polyantha [plant]

Rose R: 477

Polybus [Greek mythology]

Oedipus O: 676

Polycarbonate

Plastics (table) P: 556

Polychaete worm

Worm (Segmented worms) W: 501

Polychlorinated biphenyl [chemical] P: 649

Water pollution (Human illness) W: 138

Polycyclic aromatic hydrocarbon [chemical]

Smoking (Why smoking is dangerous) S: 520

Polycythemia [disorder]

Bloodletting B: 417

Polydectes [Greek mythology]

Perseus P: 295

Polyester P: 649

Ester E: 360

Fiber (Synthetic fibers) F: 87

Interior design (Choosing patterns and textures) I: 332

Plastics (Growth of the plastics industry)

P: 560; *picture on* P: 554

Rope (Synthetic-fiber rope) R: 476

Rugs and carpets (Materials used in rugs and carpets) R: 513-514

Textile (Manufactured fibers) T: 213; (The age of modern textiles) T: 219

Polyestrous mammal [zoology]

Mammal (Mating) M: 122

Polyetheretherketone [plastic]

Plastics (Recent developments) P: 560

Polyetherimide [plastic]

Plastics (Recent developments) P: 560

Polyethylene [synthetic material] P: 649

Plastics (table) P: 556; *pictures on* P: 557;

(Growth of the plastics industry) P: 560

Polymer P: 651

Polyethylene terephthalate

Bottle B: 513

Plastics (table) P: 556

Polyester P: 649

Polyeucte [play by Corneille]

French literature (Classical drama) F: 520

Polygamy [marriage] P: 650

Family (Varieties of families) F: 20-21

Freedom of religion (In the United States)

F: 505

Marriage (Marriage in other cultures) M: 222

with picture

Mormons (Church doctrines) M: 806-807; (The

Mormons in Utah) M: 809

Oneida Community O: 762

Smith, Joseph (Life at Nauvoo) S: 518

Polygenic trait [genetics]

Heredity (Patterns of heredity) H: 202

Polygon [geometry] P: 650 *with diagram*

Octagon O: 669 *with diagram*

Pyramid P: 916

Polygraph See *Lie detector in this index***Polygraph** [copier]

Jefferson, Thomas (The sage of Monticello) J: 86

Polygraph Association, American

Lie detector L: 271

Polygraphic substitution

Codes and ciphers (Substitution) Ci: 750

Polygyny [marriage]

Africa (Marriage and the family) A: 108;

(Marriage and the family) A: 113

Family (Varieties of families) F: 20-21;

(Development of the family) F: 21-22

Marriage (Marriage in other cultures) M: 222

Nepal (People) N: 125

Polygamy P: 650

Xhosa X: 544

Zulu Z: 612

Polyhedron [geometry] P: 650 *with diagrams*

Archimedean solid A: 604

Octahedron O: 669 *with diagram*

Polyhymnia [Greek mythology]

Muses M: 937

Polymer [chemistry] P: 650

Cellulose (Biological importance) C: 341

Composite materials (Polymer composites) Ci: 904

Hydrocarbon (Aliphatic hydrocarbons) H: 465

Monomer M: 731

Phenolic P: 356

Plastics P: 554; (The chemistry of plastics)

P: 556

Polyethylene P: 649

Polypropylene P: 651 *with diagram*

Polystyrene P: 651 *with diagram*

Polyvinyl chloride P: 652 *with diagram*

Resin, Synthetic R: 259

Rubber (The chemistry of rubber) R: 501

Teflon T: 87

Viscosity V: 428

Polymer gesso

Painting (Grounds) P: 36

Polymeric alloy

Plastics (The chemistry of plastics) P: 556

Polymerization [chemistry]

Nylon (How nylon is made) N: 632-633

Petroleum (Conversion) P: 345

Plastics (Making synthetic resins) P: 556

Polymer P: 650

Polyvinyl chloride P: 652

Resin, Synthetic R: 259

Synthetics So: 1068

Polymorphic mineral

Mineral (Mineral composition and structure) M: 570-571

Polymorphism [biology] P: 651**Polynesia** [islands, Pacific]

Pacific Islands (Polynesia) P: 3; (People) P: 4 *with picture*; (Climate) P: 8; (The first settlers) P: 11

Mythology (Pacific Islands divinities) M: 982

Sculpture (Pacific Islands sculpture) S: 241 *with picture*

Polynesian Cultural Center

Hawaii H: 88; (Places to visit) H: 98 *with picture*

Honolulu (Cultural life) H: 321

Polynesian race [theory]

Races, Human (The geographical-race theory) R: 54

Polynesians [people]

Hawaii (Early days) H: 106 *with picture*

New Zealand (History) N: 354

Samoa (People) S: 80a; *picture on* S: 80b

Polynices [literary figure]

Antigone A: 554

Polynomial

Algebra (Other definitions) A: 354

Poly nucleotide

DNA D: 258

RNA R: 357

Poly-Olbion [poem by Drayton]

Drayton, Michael D: 344

Polyp [disorder]

Colon cancer Ci: 785

Gastroscope G: 67

Hay fever (Symptoms) H: 116

Polyp [sea animal]

Cnidarian Ci: 715

Coral Ci: 1048

Coral reef (How coral reefs form) Ci: 1048b

Great Barrier Reef G: 336

Jellyfish J: 90</

654 Polypedon

- Seven Natural Wonders of the World (The Great Barrier Reef) S: 324b
- Polypedon** [soil]
Soil So: 573
- Polypeptide** [chemical]
Cell (Producing proteins) C: 333
Heredity (The flow of genetic information) H: 205
Life (Proteins) L: 278
Protein (The structure of proteins) P: 832
- Polyphase alloy**
Alloy (Characteristics of alloys) A: 377
- Polyphase current**
Electric current (Direct and alternating current) E: 168
- Polyphase motor**
Tesla, Nikola (The alternating-current system) T: 180
- Polyphemus** [legendary figure]
Cyclops Ci: 1204
Poseidon P: 697
Ulysses (Return to Ithaca) U: 17-18
- Polyphemus moth** [insect]
Moth picture on M: 840
- Polyphenylene sulfide** [plastic]
Plastics (Recent developments) P: 560
- Polyphony** [music]
Classical music (Songs) Ci: 644; (Church music) Ci: 645
Counterpoint Ci: 1097
Palestrina, Giovanni P: 107
Song So: 592
- Polyplody** [genetics]
Colchicum Ci: 760
Evolution (Evolution of new species) E: 429-430
- Polypropylene** [plastic] P: 651 *with diagram*
Plastics (table) P: 556
Rope (Synthetic-fiber rope) R: 476
- Polysaccharide** [chemistry]
Carbohydrate (Kinds of carbohydrates) C: 203-204 *with diagram*
Life (Carbohydrates) L: 277
Saccharides S: 4
- Polysemy** [semantic relation]
Semantics S: 290
- Polystyrene** [plastic] P: 651 *with diagram*
Plastics (Making synthetic resins) P: 556; (table) P: 556; (Growth of the plastics industry) P: 560
- Polystyrene foam**
Polystyrene P: 651
- Polysulfone** [plastic]
Plastics (Recent developments) P: 560
- Polytetrafluoroethylene**
Plastics (table) P: 556
Teflon T: 87
- Polytheism** [religion] P: 651
Egypt, Ancient (Religion) E: 137
Religion (Belief in a deity) R: 215
- Polyunsaturated fats**
Fat (Structure) F: 52
Margarine M: 198
Nutrition (Fats) N: 625
- Polyurethane**
Plastics (table) P: 556
Rubber (Special-purpose rubbers) R: 504
Spandex So: 753
- Polyvinyl acetate** [paint]
Paint (Household paints) P: 23
- Polyvinyl chloride** [plastic] P: 652 *with diagram*
Plastics (table) P: 556; (Growth of the plastics industry) P: 560
Pipe (Kinds of pipe) P: 489
- Polyvinylidene chloride**
Plastics (table) P: 556
- Pözl, Klara** [mother of]
Hitler, Adolf (Boyhood) H: 265
- Pomace fly** [insect]
Fruit fly F: 549
- Pome** [botany]
Fruit (Simple fruits) F: 548; *pictures on* F: 547
Loquat L: 453
- Pomegranate** [tree] P: 652 *with picture*
- Pomelo** [tree]
Tangelo T: 26
- Pomeranian** [dog] P: 652
Dog picture on D: 274
- Pommel** [riding equipment]
Saddle S: 8 *with picture*
- Pomo Indians** [American Indians] P: 652
California (Early days) C: 60
Indian, American (Shelter) I: 136d, (Basketry) I: 145 *with picture*
- Pomology** [agriculture]
Fruit (Growing fruit) F: 545
Horticulture H: 370
- Pomona** [ship]
Shipwreck (table; Major shipwrecks) S: 428
- Pomona glass**
Glass (Types of art glass) G: 221
- Pomp and Circumstance March No. 1** [music by Elgar]
Elgar, Sir Edward William E: 235
- Pompadour** [grooming]
Clothing (The 1700's) Ci: 701-702
- Pompadour, Marquise de** [French public figure] P: 653
Louis XV L: 476
- Pompano** [fish] P: 653 *with picture*
Fish picture on F: 153
- Pompeii** [ancient city] P: 653 *with picture*
Architecture (Neoclassical architecture) A: 623; *picture on* A: 616
Atrium picture on A: 877
Clothing (Ancient times) Ci: 696
Painting (Roman painting) P: 42-43; (Neoclassicism) P: 66
- Pompeian style** [art]
Painting (Roman painting) P: 42-43 *with picture*
- Pompey the Great** [Roman political leader] P: 655
Caesar, Julius (Alliance with Pompey) C: 12-13; (Civil war) C: 13; (Last victories) C: 13
Cato, Marcus Porcius, the Younger C: 305
Jerusalem (Roman rule) J: 101
Mithridates VI M: 679
Rome, Ancient (Breakdown of the republic) R: 446
- Pompey the Younger** [Roman military leader]
Augustus (Rise to power) A: 889
- Pompey's Pillar** [Montana]
Montana picture on M: 759
- Pompidou, Georges Jean Raymond** [French political leader]
France (France after de Gaulle) F: 477
- Pompidou Center** [Paris]
Paris (Museums and art galleries) P: 164 *with picture*
- Ponape** [island, Pacific] See Pohnpei *in this index*
- Ponce Art Museum** [Puerto Rico]
Puerto Rico (Places to visit) P: 877
- Ponce de León, Juan** [Spanish explorer] P: 655 *with picture and map*
Dry Tortugas National Park D: 369
Exploration map on E: 443; (Spain's conquests in the New World) E: 445-446
Florida (Exploration and Spanish settlement) F: 261
Puerto Rico (Spanish rule) P: 883 *with picture*
Saint Augustine S: 30
- Ponce Enriquez, Camilo** [Ecuadorian political leader]
Ecuador (The 1900's) E: 73
- Poncho** [clothing]
Bolivia (Clothing) B: 444
Camping (Clothing) C: 94
Inca picture on I: 98
Latin America (Clothing) L: 98
Mexico (Clothing) M: 456
- Pond** [geography] P: 656 *with diagrams*
Lake L: 32
Plant picture on P: 528
- Pond, Charles H.** [American political leader]
Connecticut (table) Ci: 967
- Pond, Peter** [American frontiersman]
Alberta (The fur trade) A: 328-329
- Pond lily** See Water lily *in this index*
- Pond mosquito** [insect]
Mosquito (Egg) M: 833
- Pond pine** [tree]
Pine (Southeastern pines) P: 468-469
- Ponder, James** [American political leader]
Delaware (table) D: 109
- Ponderosa pine** [tree]
Oregon (Natural resources) O: 841
Pine (Western pines) P: 469 *with picture; picture on* P: 470
Tree pictures on T: 425
- Pong** [video game]
Video game (History) V: 359
- Ponomarev, Ruslan** [Ukrainian chess player]
Chess (World chess champions) C: 414
- Pons** [anatomy]
Brain (The brain stem) B: 551; *diagrams on* B: 553
- Human body *diagram on* H: 422
- Ponsonby, Vere Brabazon** [British statesman]
See Bessborough, Earl of *in this index*
- Pont-Aven school** [art]
Gauguin, Paul (Early career) G: 69
- Pont du Gard** [aqueduct]
World, History of the picture on W: 429
- Ponta Delgada** [city, Azores]
Azores A: 998
- Pontalba Buildings**
New Orleans (Downtown New Orleans) N: 279
- Pontchartrain** [locomotive]
Railroad (Developments in the United States) R: 115
- Pontchartrain, Lake** [Louisiana] See Lake Pontchartrain *in this index*
- Pontchartrain Railroad**
Louisiana (Transportation) L: 495
- Ponte, Lorenzo da** [Italian librettist]
Opera (*Don Giovanni*) O: 803; (*Marriage of Figaro*, *The*) O: 805-806
- Ponte Vecchio** [bridge]
Florence (The city) F: 239-240 *with picture*
- Pontiac** [American Indian chief] P: 657 *with portrait*
Illinois (French and British control) I: 72
Indian wars (Pontiac's War) I: 192
Michigan (British control) M: 508
Pennsylvania (Colonial wars) P: 264-265
- Pontiac's War** [1763]
Indian wars (Pontiac's War) I: 192 *with map*
Michigan (British control) M: 508
Pontiac P: 657
- Pontianus, Saint** [pope]
Pope (table) P: 666
- Pontiff** [title] See Pope *in this index*
- Pontifical College Josephinum**
Columbus (Education) Ci: 855
- Pontifical Swiss Guard**
Swiss Guard So: 1049
- Pontil** [tool]
Glass (Glass terms) G: 222
- Pontius Pilate** See Pilate, Pontius *in this index*
- Pontoon bridge** P: 657
Ford F: 371
Washington (Transportation) W: 64
- Pontoppidan, Henrik** [Danish author]
Nobel Prizes (Literature: 1917) N: 446
- Pontorno, Jacopo** [Italian painter]
Mannerism picture on M: 165
Painting (Space) P: 35
- Pontus** [ancient region]
Mithridates VI M: 679
- Pony** [horse]
Horse (Kinds of horses) H: 343; (table: Some types and breeds of horses) H: 343; (Ponies) H: 347 *with pictures*
Shetland pony S: 398
- Pony express** [U.S. history] P: 657 *with picture*
Missouri picture on M: 670
Postal Service, United States (During the 1800's and early 1900's) P: 700-701 *with picture*
Sacramento (History) S: 6
Western frontier life in America (Communication) W: 238
- Pony Express Stables** (Saint Joseph)
Missouri (Places to visit) M: 660
- Pony Penning**
Virginia (Visitor's guide) V: 408 *with picture*
- Pony Tracks** [book by Remington]
Remington, Frederic R: 230
- Poodle** [dog] P: 658 *with picture*
Dog picture on D: 275
- Pooh** [literary figure]
Milne, A. A. M: 556
- Pool** [game]
Billiards (Pool) B: 306 *with picture*
- Pool, Swimming** See Swimming pool *in this index*
- Poole, Elijah** See Muhammad, Elijah *in this index*
- Poola, William Frederick** [American librarian]
Library (Libraries in the United States) L: 261-262
- Poole's Index to Periodical Literature**
Library (Libraries in the United States) L: 261-262
- Poona** [game]
Badminton B: 24
- Poop deck**
Galleon G: 15
Ship (Nautical terms) S: 416 *with diagram*;

- (General cargo ships) S: 417-418
- Poopó, Lake** [Bolivia]
Andes Mountains (Glaciers, lakes, and rivers) A: 453
- Poor Bitos** [play by Anouilh]
Anouilh, Jean A: 519
- Poor Clares, Order of** [religious group]
Franciscans F: 482
- Poor Folk** [book by Dostoevsky]
Dostoevsky, Fyodor D: 311
- Poor Henry** [poem by Hartmann von Aue]
German literature (Epic poetry) G: 139
Hartmann von Aue H: 79
- "Poor Liza"** [story by Karamzin]
Russian literature (Sentimentalism) R: 560
- Poor-man's-weatherglass** [plant]
Pimpernel P: 466
- Poor men of Lyon** [religious group]
Waldenses W: 7
- Poor People's March** [U.S. history]
Abernathy, Ralph David A: 10
- Poor Richard's Almanac** [book by Franklin]
P: 658 *with picture*
Almanac A: 379
Franklin, Benjamin (Publisher) F: 487; *picture on* F: 488
Proverb P: 839
- Poor Robin's Almanac** [book]
April (Quotations) A: 577
- Poorhouse**
Welfare (Early welfare laws) W: 191
- Poorwill** [bird] See *Whippoorwill in this index*
- Pop** [drink] See *Soft drink in this index*
- POP** See *Persistent organic pollutant in this index*
- Pop art** P: 659 *with picture*
Dine, Jim D: 204
Lichtenstein, Roy L: 269
Lindner, Richard L: 332
Painting (Pop art) P: 86 *with picture*
Rosenquist, James Albert R: 481
Warhol, Andy W: 36 *with picture*
- Pop culture**
Collectibles Ci: 774
Culture Ci: 1186
- Pop music** See *Popular music in this index*
- Pop safety valve**
Safety valve S: 17 *with diagram*
- Pop-up**
Baseball (Outs by batters) B: 128-129
- Pop Warner League**
Football (Football competition) F: 364
- Popcorn** [food] P: 659
Corn (Kinds of corn) Ci: 1058-1059
- Popé** [American Indian leader] P: 659
Indian, American (Prophets) I: 148
Indian wars (The Pueblo revolt) I: 191
- Pope** [title] P: 660 *with pictures*
Cardinal C: 210
Christianity (The Middle Ages) C: 526; (Decline of papal authority) C: 526
Gelasius I, Saint G: 76
Middle Ages (The Carolingian Empire) M: 524; (Troubles in the church) M: 528
Peter, Saint P: 324
Ring R: 342 *with picture*
Roman Catholic Church (The pope) R: 405
San Marino [country] (History) S: 104
Swiss Guard S: 1049
- Pope, Alexander** [English poet] P: 667
English literature (Swift and Pope) E: 318
Essay (Formal essays) E: 359
Poetry (Neoclassical poetry) P: 597
- Pope, James C.** [Canadian statesman]
Prince Edward Island (table) P: 791; (Member of the union) P: 791
- Pope, John** [Union general]
Civil War (The peninsular campaign) Ci: 626-627; (Second Battle of Bull Run) Ci: 627
Lincoln, Abraham (Building the army) L: 321-322
Porter, Fitz-John P: 682
- Pope, John Russell** [American architect]
Jefferson Memorial J: 88
- Pope, Nathaniel** [American political leader]
Illinois (Early statehood) I: 74
- Pope, William Henry** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935 *with picture*
- Pope's Creek Farm**
Washington, George (Boyhood) W: 92 *with picture*
- Popaya** [fish]
Goldfish *picture on* G: 258
- Popham, Sir John** [English jurist]
Maine (Exploration and settlements) M: 89
- Poplar** [tree] P: 667 *with picture*
Tree *pictures on* T: 424
- Pople, John Anthony** [British chemist]
Nobel Prizes (Chemistry: 1998) N: 443
- Popliteal artery** [anatomy]
Leg (Blood and nerve supply) L: 182
- Popocatepetl** [volcano, Mexico] P: 668
Mountain (table) M: 894 *with diagram*
- Popolo, Il** [newspaper]
Rome (Economy) R: 430
- Popolo d'Italia, Il** [newspaper]
Mussolini, Benito (Early life) M: 967
- Popova, Liubov** [Russian artist]
Painting (Nonobjective painting in Russia) P: 79
- Popper, Karl Raimund** [Austrian-born philosopher] P: 668
- Poppet valve**
Gasoline engine (Valves) G: 64 *with pictures*
- Poppet crease** [sports]
Cricket (The field) Ci: 1131
- Poppy** [plant] P: 668
Asia (Plants) A: 798-799
Flower (Garden perennials) F: 278 *with picture*; (Flowers of the Arctic tundra) F: 283 *with picture*; *pictures on* F: 277, F: 301
Opium O: 811 *with picture*
- Poppy Day** [custom]
Memorial Day (Observance) M: 392
- Poppy seed**
Poppy P: 668
- Popular biography**
Biography (Forms of biography) B: 312
- Popular culture** See *Pop culture in this index*
- Popular Front** [Latvian political party]
Latvia (History) L: 119-120
- Popular Front** [Spanish history]
Spanish Civil War (Background to the war) So: 756-756a
- Popular Movement for the Liberation of Angola** [political party]
Angola (History) A: 465
- Popular music** P: 669
Country music Ci: 1098
Music (Western music) M: 955
Rap music R: 141
Rock music (Rock goes pop) R: 379
Song So: 592
See also *the list of Related articles in the Popular music article*
- Popular National Congress** [political party]
Sudan (Recent developments) So: 956
- Popular Party** [Italy]
Italy (Political changes) I: 519
- Popular Party** [Spain]
Spain (Political parties) So: 733
- Popular Rhymes and Nursery Tales** [book by Halliwell]
Nursery rhyme (History) H: 615
- Popular sovereignty** [U.S. history] P: 672
Buchanan, James (The struggle over slavery) B: 660
Douglas, Stephen Arnold D: 312
Kansas (The struggle over slavery) K: 235
Kansas-Nebraska Act K: 243
Mexican War (Results of the war) M: 447
United States, History of the (The irrepressible conflict) U: 172
- Population P: 672**
Animal (Human population growth) A: 505
Baby boom generation B: 11
Birth and death rates B: 377
Birth control B: 378
Census C: 346
City Ci: 574; (The 100 largest urban centers in the world) Ci: 576; (Population growth) Ci: 578; (Future cities) Ci: 593
Colonial life in America (Population growth) Ci: 790
Conservation (To meet demands for resources) Ci: 975
Demography D: 129
Environmental pollution (Effect of population growth) E: 339
Food supply (Increased demand for food) F: 348
Genetics (Population genetics) G: 87
Immigration (Effects of immigration) I: 80-81
Industrial Revolution (The middle and upper classes) I: 252
Local government (Population changes) L: 407
- Malthus, Thomas Robert M: 115
Natural resources (Conservation and development) N: 64
Races, Human (The population approach) R: 57 *with map*
Sociology (Population characteristics) So: 564
Vital statistics V: 429
War (Waging war) W: 24
World (People of the world) W: 413 *with map*
World, History of the (The world since 1900) W: 445
For *population figures*, see *the World article*, and *the Facts in brief table and map index in each continent, country, state or province, and large city article*
- Population** [biology]
Balance of nature B: 34
Ecology (Populations) E: 53
Elephant (Elephant families) E: 229
Evolution (Causes of evolutionary change) E: 427
Hereditry (Heredity and natural selection) H: 203
Life (The biological environment) L: 275
- Population** [statistics]
Public opinion poll (Defining the goals) P: 862
Statistics (Collecting the data) So: 868
- Population I star** [astronomy]
Star (Supernovae) So: 850
Sun (Comparison with other stars) So: 978-979
- Population II star** [astronomy]
Star (Supernovae) So: 850
Sun (Comparison with other stars) So: 978-979
- Population III star**
Star (Supernovae) So: 850
Sun (Comparison with other stars) So: 978-979
- Population, Census of**
Census (Kinds of censuses) C: 346-347
- Population, Center of** [geography]
United States *map on* U: 109
- Population Bomb, The** [book by Ehrlich]
Ehrlich, Paul Ralph E: 145
- Population density**
Population (table: Population density of the continents) P: 673
World (Population) W: 413 *with diagram*; (table) W: 411
- Population density map**
Map (Types of maps) M: 177-178 *with picture*
- Population displosion** [sociology]
City (Social problems) Ci: 591
- Population explosion** [sociology]
City (Population growth) Ci: 578; (Metropolitan cities) Ci: 588
India (City life) I: 115-116
Population (The population explosion) P: 673
- Population genetics**
Genetics (Population genetics) G: 87
- Population geography**
Geography (Human geography) G: 94
- Population inversion** [physics]
Laser (Producing laser light) L: 83-84
- Population of the Valley of Teotihuacán, The** [book by Gamio]
Gamio, Manuel G: 23
- Populism** [U.S. history] P: 674
Donnelly, Ignatius D: 308
Free silver F: 499
Gay Nineties (Industrial growth) G: 72-73
Harrison, Benjamin (Bid for reelection) H: 73
Kansas (Spirit of reform) K: 237
Nebraska (Growth of agriculture) N: 112-114
Political party (Third parties) P: 636
United States, History of the (The Progressive Era) U: 181-182
Watson, Thomas Edward W: 148
- Populist Party** [U.S. history]
Populism (The People's Party) P: 674
- Poquelin, Jean Baptiste** [French author] See *Molière in this index*
- Porcelain** P: 675 *with pictures*
Antique (Ceramic antiques) A: 557
Böttger, Johann Friedrich B: 512
China (Sculpture and pottery) C: 489; *picture on* C: 490
Doll (Rivalry in the doll industry) D: 291
Dresden china D: 347 *with picture*
Germany *picture on* G: 154
Invention (China) I: 359
Kaolin K: 244
Ming dynasty M: 573

Pottery (Porcelain) P: 716 *with pictures*
Wedgwood ware W: 179 *with picture*

Porcelain doll
Doll (Porcelain dolls) D: 290

Porcelain enamel
Ceramics (Kinds of ceramic products) C: 359

Porcupine [animal] P: 677 *with picture*
Animal pictures on A: 479, A: 494
Mammal picture on M: 119

Porcupine Mountains
Michigan (Land regions) M: 500; *picture on* M: 488

Porcupinefish P: 678 *with picture*
Fish picture on F: 145

Pore [anatomy] P: 678
Acne A: 28
Pimple P: 466

Pore [astronomy]
Sunspot So: 992

Pore space
Soil (Composition of soils) So: 573

Porgy [book by Heyward]
Heyward, DuBose H: 220
Opera (*Porgy and Bess*) O: 806

Porgy [fish] P: 679 *with picture*

Porgy and Bess [opera by Gershwin]
Gershwin, George G: 174
Gershwin, Ira G: 175
Heyward, DuBose H: 220
Opera (American opera) O: 800; (*Porgy and Bess*) O: 806

Porifera [zoology] See *Sponge in this index*

Pork [food] P: 679
Hog (Food) H: 286
Meat (Kinds of meat) M: 347 *with pictures*
Trichina T: 441

Pork barrel [politics] P: 679
Congress of the United States (Legislative bargaining) Ci: 944

Pork producer [farmer]
Hog H: 284

Porkfish [fish]
Fish picture on F: 155

Pornography
Comstock Law Ci: 926
Obscenity and pornography O: 643

Porosity [physical property] P: 679

Porous-pointed pen
Pen (Soft-tip pens) P: 234 *with picture*

Porphyria [disorder]
George III G: 108

Porphyry [Greek philosopher] P: 679
Neoplatonism N: 124

Porpoise [sea animal] P: 679 *with picture*
Dolphin D: 297 *with pictures*
Whale (Dolphins and porpoises) W: 258

Porsche [automobile]
Sports car (History) So: 803 *with picture*

Porsche, Ferdinand [Austrian engineer]
Volkswagen V: 444

Port [electronics]
Computer (Parts of computers) Ci: 911-912 *with picture*

Port [nautical term]
Boating (Boating regulations) B: 429
Ship (Nautical terms) S: 416

Port [shipping] P: 680
International trade picture on I: 348
New York City (Trade) N: 333
Port of entry P: 681
Ship (Modernization of ports) S: 420

Port [wine]
Portugal (Agriculture and fishing) P: 691
Wine (Types of wine) W: 336; (Wine styles from other countries) W: 337

Port Arthur [city, China]
Lüshun L: 526

Port Arthur [city, Ontario]
Thunder Bay T: 273

Port au Choix National Historic Park
[Newfoundland]
Canada (table: National historic sites) C: 114

Port-au-Prince [Haiti] P: 680
Haiti H: 14 *with picture and map*; *picture on* H: 16
West Indies picture on W: 202

Port Authority of New York and New Jersey
P: 680
Metropolitan area (Special districts) M: 444
New York City (Trade) N: 333-334

Port Borden [city, Canada]
Borden B: 482

Port Clarence [former name]
Malabo M: 95

Port Colborne [Ontario]
Welland Ship Canal W: 193 *with map*

Port Dalhousie [Ontario]
Welland Ship Canal W: 193 *with map*

Port de bras [movement]
Ballet (table) B: 45; (A ballet class) B: 46-47

Port de Grave [region, Newfoundland and Labrador]
Newfoundland and Labrador (Places to visit) N: 368 *with picture*

Port du Salut [cheese]
Cheese (Semisoft cheese) C: 392 *with picture*

Port Elizabeth [South Africa] P: 680

Port Gibson [Mississippi]
Mississippi (Libraries) M: 627

Port Hudson [Louisiana]
African Americans (The Civil War) A: 136g-136h

Port Jackson [harbor]
Sydney So: 1063

Port Lawrence [former settlement]
Toledo (Government and history) T: 321

Port Louis [city, Mauritius] P: 680
Mauritius M: 316

Port Macquarie [town, Australia]
Australia picture on A: 902

Port Mann Bridge [British Columbia]
Bridge (table: Steel arch) B: 603

Port Moresby [Papua New Guinea] P: 681
New Guinea (Political units) N: 206 *with picture and map*
Papua New Guinea picture on P: 140

Port Newark [New Jersey]
Newark (Economy) N: 357; (History) N: 358

Port of Boston
Boston (Trade) B: 502

Port of entry [shipping] P: 681
Customs Service, United States Ci: 1201
Free trade zone F: 500

Port of Houston
Houston (Commercial city) H: 398 *with picture*

Port of London
London (Trade) L: 438

Port of Los Angeles
Los Angeles (The Port of Los Angeles) L: 461; (Trade) L: 464 *with picture*

Port of Philadelphia
Pennsylvania (Service industries) P: 259-260 *with picture*

Port-of-Spain [Trinidad] P: 681
Trinidad and Tobago T: 445 *with picture and map*

Port of Yokohama
Tokyo (Trade) T: 317-318

Port-Orford-cedar [tree]
Cedar (Scale-leaved cedars) C: 324 *with picture*

Port Phillip Bay [Australia]
Victoria (Land) V: 356

Port Richmond [district]
New York City (Statens Island) N: 330

Port Robinson [Ontario]
Welland Ship Canal W: 193 *with map*

Port Royal [Canadian history]
Annapolis Royal A: 516
Champlain, Samuel de (Early life) C: 373
Nova Scotia (Exploration and settlement) N: 568; (The struggle in Acadia) N: 568; *picture on* N: 569
Poutrincourt, Jean de Biencourt de P: 722

Port Royal [Jamaica]
Kingston K: 332

Port Royal National Historic Site [Nova Scotia]
Canada (table: National historic sites) C: 114

Port Said [Egypt] P: 681 *with picture*

Port Sudan [Sudan] P: 681

Port-Vila [city, Vanuatu]
Vanuatu V: 284

Port Walter [Alaska]
Alaska (Climate) A: 296

Port Weller [Ontario]
Welland Ship Canal W: 193 *with map*

Port-wine stain
Birthmark B: 380

Porte, Giacomo della See Della Porta, Giacomo

in this index

Portable radio
Radio (Broadcasting today) R: 94

Portable system [electronics]
Stereophonic sound system (Types of systems) So: 892 *with picture*

Portable telephone
Cellular telephone C: 341

Portage [shipping]

Portage P: 681

Portage [travel] P: 681
Canoeing (Portaging a canoe) C: 181

Portage la Prairie [Manitoba] P: 681

Portal vein [anatomy]
Liver (Structure of the liver) L: 393

Portales Palazuelos, Diego [Chilean political leader]
Chile (Building the nation) C: 468

Portcullis [defense]
Castle (Structure) C: 280

Porteños [people]
Argentina (City life) A: 650
Buenos Aires (The people) B: 672

Porter [drink]
Beer B: 211

Porter, Albert G. [American political leader]
Indiana (table) I: 214

Porter, Cole [American composer] P: 681

Porter, David [American naval officer] P: 682
Farragut, David Glasgow F: 47

Porter, David Dixon [American naval officer]
P: 682
Farragut, David Glasgow F: 47

Porter, David Rittenhouse [American political leader]
Pennsylvania (table) P: 263

Porter, Edwin S. [American director]
Motion picture (Early motion pictures) M: 864 *with picture*

Porter, Fitz-John [American soldier] P: 682

Porter, Sir George [British chemist]
Nobel Prizes (Chemistry: 1967) N: 443

Porter, James D. [American political leader]
Tennessee (table) T: 152

Porter, James Madison [American government official]
Tyler, John (table) T: 534

Porter, Katherine Anne [American author]
P: 682

Porter, Peter B. [American government official]
Adams, John Quincy (table) A: 43

Porter, Rodney Robert [British physiologist]
Nobel Prizes (Physiology or medicine: 1972) N: 445

Porter, William Sydney See Henry, O. *in this index*

Portfolio
Modeling (Careers) M: 685

Portia [literary figure]
Shakespeare, William (*The Merchant of Venice*) S: 358-359

Portico
Architecture (Classical Greek architecture) A: 615-616

Portillo [city, Chile]
Chile (Recreation) C: 462 *with picture*

Portillo Cabrera, Alfonso [Guatemalan political leader]
Guatemala (Political developments) G: 417

Portinari, Beatrice [Italian public figure]
Dante Alighieri (His life) D: 34
Divine Comedy D: 242

Portinari, Cândido [Brazilian painter]
Brazil (The arts) B: 576-577 *with picture*

Portland [Maine] P: 682
Maine M: 68 *with picture*; (table: Average monthly weather) M: 83

Portland [Oregon] P: 683 *with pictures*
Oregon (table: Average monthly weather) O: 841; *pictures on* O: 827, O: 830, O: 831

Portland, Duke of [British political leader]
United Kingdom (table: British prime ministers) U: 72

Portland Art Museum
Oregon (Museums) O: 831

Portland Building
Architecture picture on A: 633
Graves, Michael G: 330

Portland Canal [waterway, Kentucky]
Louisville (History) L: 506

Portland cement [building material]
Cement and concrete C: 342; (Raw materials) C: 344; (History) C: 345
Edison, Thomas Alva (Cement manufacture) E: 80

Portland cement concrete [material]
Road (Paving) R: 359

Portland Head Light [lighthouse]
Maine (Places to visit) M: 78; *picture on* M: 68
Portland [Maine] P: 683

Portland Museum of Art
Maine M: 73 *with picture*

Portland Trail Blazers

Basketball (table) B: 150
Portland (Education and cultural life) P: 683-684

Portland Vase

Glass G: 219

Portnoy's Complaint [book by Roth]

Roth, Philip R: 487

Porto [city, Portugal] P: 685

Portugal (Population and ancestry) P: 687

Pôrto Alegre [city, Brazil] P: 685**Porto-Novo** [city, Benin] P: 685**Porto Santo Island**

Madeira Islands M: 29

Portobelo [town, Panama] P: 685

Morgan, Sir Henry (Early career) M: 803

Portoferraio [Italy]

Elba E: 157

Portolá, Gaspar de [Spanish explorer]

California (Spanish and Russian settlement) C: 60
Los Angeles (Exploration) L: 469

Portolan charts

Map (Maps in the Middle Ages) M: 182-183

Portrait button

Button (History) B: 745

Portrait doll

Doll (After the war) D: 292

Portrait Gallery, National [Washington, D.C.]

Washington, D.C. (Smithsonian museums) W: 71-73; *map on* W: 76

Portrait of a Lady, The [book by James]

American literature (Mark Twain and Henry James) A: 420

James, Henry (His works) J: 26

Portrait of a Marriage [book by Nicolson]

Sackville-West, Victoria Mary S: 5

Portrait of Charles I Hunting [painting by Van Dyck]

Painting (Baroque) P: 58-61 *with picture*
Van Dyck, Sir Anthony V: 281

Portrait of Isaac Royall and His Family [painting by Fekel]

Colonial life in America *picture on* Ci: 807
Fekel, Robert F: 68

Portrait of Isabella Brant [drawing by Rubens]

Drawing *picture on* D: 343

Portrait of Lady Guilford [painting by Holbein]

Clothing *picture on* Ci: 700

Portrait of Lucius Verus [sculpture]

Sculpture (Roman sculpture) S: 247 *with picture*

Portrait of Madame Matisse [painting by Matisse]

Matisse, Henri *picture on* M: 310

Portrait of Madame Récamier [painting by David]

David, Jacques Louis *picture on* D: 46

Portrait of Madame Seriziat [painting by David]

Clothing *picture on* Ci: 702

Portrait of Marchesa Doria [painting by Van Dyck]

Clothing *picture on* Ci: 700

Portrait of Pope Clement VII [painting by Sebastiano del Piombo]

Painting (The Renaissance in Venice) P: 55-56 *with picture*

Portrait of the Artist [painting by Largillière]

Clothing *picture on* Ci: 701

Portrait of the Artist as a Young Dog [book by Thomas]

Thomas, Dylan T: 261

Portrait of the Artist as a Young Man, A [book by Joyce]

Joyce, James J: 176

Irish literature (James Joyce) I: 432

Novel (New directions in the novel) N: 573-574

Portrait of the Assassin [book by Ford and Stiles]

Ford, Gerald Rudolph (Rise to power) F: 375

Portraiture [art]

Painting (People) P: 31 *with picture*; (Baroque) P: 58-61
Photography (Artistic advances) P: 426;
(Portraiture) P: 429

Portrula [device]

Telegraph (The Morse telegraph) T: 90

Ports and Waterways Safety Act [1972]

Coast Guard, United States (The Coast Guard since World War II) Ci: 738

Ports of Call [music by Ibert]

Ibert, Jacques I: 2

Portsmouth [city, England] P: 685**Portsmouth** [city, New Hampshire] P: 685**Portsmouth** [Rhode Island]

Rhode Island (Settlement) R: 312

Portsmouth, Treaty of [1905]

Russo-Japanese War (Treaty of Portsmouth) R: 566

Portsmouth Area Project [U.S.]

Ohio (The mid-1900's) O: 703

Portsmouth Naval Shipyard [New Hampshire] P: 685**Portugal** P: 686 *with pictures and maps*

Angola (History) A: 465

Brazil (History) B: 583

Colonialism (Early European colonialism)

Ci: 813; (Later colonialism) Ci: 814

Columbus, Christopher (Early years) Ci: 857-

858; (The plan to sail westward) Ci: 858;

(Return to Spain) Ci: 861

East Timor E: 40; (History) E: 41

Euro E: 378

Exploration (The great age of European exploration) E: 443 *with map*

Flag *picture on* F: 207

India (India in the 1950's and early 1960's)

I: 133

Indonesia (The coming of the Europeans)

I: 237

Latin America (European discovery and exploration) L: 104; (The beginnings of colonial

unrest) L: 106-107 *with diagram*

Line of Demarcation L: 333 *with map*

Macao M: 2

Palmares P: 110

Portuguese language P: 695

Rio de Janeiro (History) R: 346

São Tomé and Príncipe (History) S: 120

United States, History of the (The Spanish and

Portuguese) U: 151

See also the list of Related articles in the

Portugal article

Portuguese East Africa

Mozambique (History) M: 905

Portuguese East India Company

East India Company E: 40

Portuguese Guinea *See* Guinea-Bissau *in this index***Portuguese language** P: 695

Portugal (Language) P: 689

Portuguese man-of-war [sea animal] P: 696 *with picture***Portuguese Timor**

Portugal (End of the empire) P: 695

Portuguese water dog [dog] P: 696 *with picture***Portulaca** [plant] P: 696 *with picture***Portus Cale**

Portugal (Roman rule) P: 692

POS system [electronics] *See* Point-of-sale system *in this index***Posadas, Las** [custom]

Christmas (In Latin America) C: 532

Hispanic Americans (In Mexico) H: 247;

(Holidays) H: 249-250 *with picture*

Mexico (Holidays) M: 457

Poseidon [Greek mythology] P: 697

See also Neptune *in this index*

Andromeda A: 457

Isthmian Games I: 492

Mythology (Greek mythology) M: 978; (table)

M: 980

Sculpture (The importance of sculpture) S: 228 *with picture*

Ulysses (Return to Ithaca) U: 17-18

Poseidon [weapon]

Guided missile *picture on* G: 423

Poseidon, Temple of [Italy]

World, History of the *picture on* W: 426

Posey ring

Ring R: 342

Positano [Italy]

Italy *picture on* I: 497

Position [ballet]

Ballet *pictures on* B: 48

Position light

Airplane (The wing) A: 213-214

Position paper

Election campaign (Planning campaign strategy) E: 160

Positional nystagmus [disorder]

Nystagmus N: 633

Positive [photography]

Photoengraving and photolithography

(Transferring the image) P: 406

Photography *picture on* P: 411

Positive acceleration [physics]

Velocity (Acceleration) V: 297

Positive charge

Electricity (Electric charge) E: 191

Vacuum tube (How a vacuum tube works) V: 258

Positive degree [grammar]

Adjective (Comparison of adjectives) A: 57
Comparison (The three degrees of comparison) Ci: 902b

Positive ion [physics]

Bond (An ionic bond) B: 454

Radiation (Effects of radiation) R: 79

Sun (Sun terms) So: 976

Positive lens [optics]

Lens (Lens shapes) L: 196; (Viewed through a positive lens) L: 196b *with diagram*

Positive method [philosophy]

Positivism (Comte's positivism) P: 697

Positive number

Algebra (Positive and negative numbers) A: 352

Positive transfer [psychology]

Learning (Transfer of training) L: 164

Positive tropism [botany]

Auxin A: 982

Positive-working offset plate [printing]

Photoengraving and photolithography

(Transferring the image) P: 406

Printing (Offset printing plates) P: 798

Positivism [philosophy] P: 697

Comte, Auguste C: 926

Empiricism E: 263

Metaphysics (Opinions about metaphysics)

M: 430

Science (Scientific advances of the 1800's)

S: 200-201

Positron [atomic particle]

Anderson, Carl David A: 451

Antimatter A: 556

Cosmic rays (Galactic cosmic rays) Ci: 1076

Dirac, Paul Adrien Maurice D: 217

Gamma rays G: 23

Joliot-Curie, Irène J: 156

Matter (Unusual forms of matter) M: 311

Nuclear physics N: 596

Particle accelerator (How accelerators work) P: 184-185

Positron emission tomography P: 698

Radiation (Beta particles) R: 76

Star (Hydrogen fusion) So: 846-847

Transmutation of elements T: 379

Subatomic particle So: 936

Positron emission tomography [medicine]

P: 697 *with pictures*

Brain (The work of the brain) B: 552-553; *picture on* B: 555

Mental illness (Recent developments) M: 409

Possessed, The [book by Dostoevsky]

Dostoevsky, Fyodor D: 311

Possession [law]

Title T: 302

Possession, Demonic

Exorcism E: 438

Possessive case [grammar]

Case (Nouns) C: 272; (Pronouns) C: 272

Declension D: 80

Grammar (Inflection) G: 303

Possum [animal] P: 698 *with picture*

See also Opossum *in this index*

Cuscus Ci: 1199 *with picture*

Glider [animal] G: 231 *with picture*

Marsupial (Kinds of marsupials) M: 232

Post, Charles W. [American businessman]

Michigan (Interesting facts) M: 489

Post, Emily Price [American author] P: 698

Etiquette (Books on etiquette) E: 374

Post, Wiley [American aviator] P: 698 *with portrait*

Airplane (Fliers of the golden age) A: 237

Automatic flight control system (History)

A: 944

Post and Intel

Architecture (table) A: 608-609 *with picture*

Post-chariot [vehicle]

Chariot C: 378

Post-Dispatch

Pulitzer, Joseph (His career) P: 887

Post Electronic Courier Service

Postal Service, United States (Electronic services) P: 700

Post exchange [store] P: 699**Post flag** [U.S. Army]

Flag (table) F: 193

Post-hallucinogenic perceptual disorder

Hallucinogenic drug H: 26

Post mortem examination See Autopsy in this index**Post oak** [tree]

Oak (White oaks) O: 635

Post officePostal services P: 702 *with pictures*

Colonial life in America (Communication) Ci: 806

Communication (The 1700's) Ci: 880-881 *with picture*

Franklin, Benjamin (Civic leader) F: 487;

(Organizing the new nation) F: 490

Massachusetts (Interesting facts) M: 271

Parcel post P: 155

Pony express P: 657

United Kingdom (Communication) U: 66

See also the list of Related Articles in the Postal services article

Post-office box

Postal Service, United States (Other services) P: 700

Post Office Department See Postal Service, United States in this index**Post Office Reform** [pamphlet by Hill]

Postal services (The creation of the Penny Post) P: 706

Post Office Tower

London (Rebuilding) L: 442

Post rider [occupation]

Colonial life in America (Communication) Ci: 806

Post road [route]

Colonial life in America (Communication) Ci: 806

Postage meter [machine]

Postal Service, United States (Other services) P: 700

Postage stampPostal Service, United States (Stamps and other mailing materials) P: 699; *pictures on P: 701*Postal services (Collection) P: 702; (The creation of the Penny Post) P: 706 *with picture*Stamp collecting So: 829 *with pictures***Postal card** [mail]

Postal Service, United States (Stamps and other mailing materials) P: 699

Postal clerk

Postal services (Sorting) P: 703

Postal money order

Postal Service, United States (Other services) P: 700

Postal orderMoney order M: 719 *with pictures***Postal Rate Commission** [U.S.]

Postal Service, United States (Organization) P: 700

Postal Service, United States P: 699 *with pictures*

Civil service (Federal civil service) Ci: 612

Commonstock Law Ci: 926

Nixon, Richard Milhous (The national scene) N: 433-434

Postal services P: 702

Washington, D.C. *map on W: 76*

ZIP Code Z: 600

Postal services P: 702 *with pictures***Postal Telegraph Company**

Mackay, John William M: 20

Postal Union, Universal [UN] P: 708

Postal services (The creation of the Penny Post) P: 706

Treaty (Kinds of treaties) T: 408-409

Postal Workers Union, American

Labor movement (table) L: 8

Poster [communications]

Advertising (Outdoor signs) A: 75

China (Communication) C: 499 *with picture*Poland *picture on P: 609***Poster board**

Cardboard C: 209

Posterior vena cava [zoology]Frog *picture on F: 537***Posthouse**

Postal services (Ancient times) P: 703

Posthumous [literary figure]

Shakespeare, William (Cymbeline) S: 365

Posthumous Papers of the Pickwick Club, The See Pickwick Papers in this index**Postimpressionism** [art] P: 708 *with picture*

France (Painting) F: 462

Painting (Postimpressionism) P: 75 *with pictures***Posting** [riding]

Horse (Gaits) H: 353-354

Postman Always Rings Twice, The [book by Cain]

Cain, James M. C: 15

Postmaster general [office]

Postal Service, United States (Organization) P: 700

Postmillennialism [religion]

Millennium M: 553

Postmodernism [arts] P: 709Architecture (Architecture today) A: 632-633 *with picture*Furniture (Postmodern design) F: 585 *with pictures*

Graves, Michael G: 330

Jahn, Helmut J: 21 *with picture*

Johnson, Philip Cortelyou J: 153

McLuhan, Marshall M: 343

Painting (Postmodernism) P: 88 *with picture*Venturi, Robert V: 310 *with picture***Postmodernism** [social theory]

Postmodernism P: 709

Postmortem [book by Cornwell]

Cornwell, Patricia Ci: 1066

Postneonatal death

Infant mortality I: 264

Postpartum depression

Depression D: 151

Post-polio syndrome [disorder]

Poliomyelitis (Kinds of poliomyelitis) P: 626

Post-productionMotion picture (Post-production) M: 854 *with pictures***Postsale service**

Sales (Persuasion) S: 63-64

PostScript [programming language]

Desktop publishing D: 158

Postsynaptic potential [physiology]

Nervous system (Transmission across synapses) N: 135

Post-traumatic stress disorder [psychology] P: 709**Postulant** [religion]

Religious life R: 226

Postulate

Axiom A: 994

Geometry (Axiomatic organization) G: 102

Posture P: 710**Pot** [fishing]Lobster (Lobster fishing) L: 406 *with picture***Pot** [nickname]

Marijuana M: 201

Pot barley

Barley (Uses of barley) B: 113

Pot roastMeat *pictures on M: 349***Pot still**

Distilling D: 239

Potala Palace [Tibet]Tibet (Cities) T: 277; *picture on T: 278***Potash** [chemical] P: 710

Detergent and soap (Early soap) D: 165

Israel (Mining) I: 486 *with picture*

Potassium P: 710

Saskatchewan (Mining) S: 142-143 *with picture*; (Economic changes) S: 147; *picture on S: 145***Potassium** [element] P: 710

Fertilizer (Inorganic fertilizers) F: 79

Glauconite G: 226

Potassium-argon dating

Archaeology (Dating) A: 598

Prehistoric people (Placing prehistoric people in time) P: 754

Potassium bromide [chemical]

Bromide B: 636

Potassium carbonate [chemical]

Potash P: 710

Potassium P: 710

Potassium chloride [chemical]

Fertilizer (Raw materials) F: 80

Potash P: 710

Potassium P: 710

Potassium cyanide [chemical]

Cyanide Ci: 1202

Prussic acid P: 843

Potassium feldspar [mineral]Mineral *picture on M: 569***Potassium ferrocyanide** [chemical]

Invisible ink I: 369

Potassium hydroxide [chemical]

Detergent and soap (How soap is made) D: 164

Potassium iodide [chemical]Iodine (Uses of iodine) I: 370 *with picture***Potassium nitrate** See Saltpeter in this index**Potassium oxide equivalent**

Potash P: 710

Potassium permanganate [chemical]

Deodorizer D: 148

Manganese (Industrial uses) M: 139

Potato [plant] P: 711 *with pictures*

Great Irish Famine G: 343

Idaho (Agriculture) I: 40 *with picture*Maine (Agriculture) M: 85-86 *with picture*Nightshade N: 421 *with picture*

Nutrition (Carbohydrates) N: 625

Plant (Vegetative propagation) P: 535

Poisonous plant (Some poisonous plants) P: 602

Potato beetle P: 714

Tuber T: 477

Potato beetle [insect] P: 714 *with pictures*

Beetle (Leaf beetles) B: 217

Potato (Diseases and insect pests) P: 713

Potato Famine [1845-1848] See Great Irish Famine in this index**Potato flea beetle** [insect]Beetle *picture on B: 218***Potato late blight** [plant disease]

Rot R: 485

Potato psyllid [insect]

Potato (Diseases and insect pests) P: 713

Potato starch

Starch (Industrial uses) So: 855

Potato tuber worm [insect]

Potato (Diseases and insect pests) P: 713

Potato War [European history]

Succession wars (The War of the Bavarian Succession) So: 950

Potawatomi Indians [American Indians] P: 714

Chicago (History) C: 433

Indiana (Indian days) I: 215

Potbelly stoveRange *picture on R: 138***Potemkin** [film] See Battleship Potemkin, The in this index**Potemkin Steps** [stairway]

Odessa O: 674

Potential energy [physics]Energy E: 273 (Potential energy of a raised object) E: 275 *with diagram***Potential hydrogen** See pH in this index**Potentiometer** [instrument] P: 714**Pothier, Aram J.** [American political leader] Rhode Island (table) R: 311**Potion**

Witchcraft (Witchcraft as sorcery) W: 371

Potiphar [Biblical figure]

Joseph (A slave in Egypt) J: 167

Potlatch [custom]

Haida Indians H: 7

Indian, American (Before European contact) I: 162 *with picture*

Kwakiutl Indians K: 397

Totem T: 344

Tsimshian Indians T: 475

Potomac Heritage National Scenic Trail

National Park System (table: National parkways and other national parklands)

N: 56

Potomac River [U.S.] P: 714 *with picture*Jefferson Memorial J: 88 *with picture*

Maryland (Rivers and lakes) M: 252

Virginia (Rivers and lakes) V: 412

Washington, D.C. (The city) W: 78

Potoroo [animal]

Kangaroo (Other macropods) K: 215

Potowmack Guardian and Berkeley Advertiser [newspaper]

West Virginia (Communication) W: 224

Potowski, Ernestine [American social reformer]

See Rose, Ernestine Potowski in this index

Potsdam [city, Germany] P: 715**Potsdam Conference** [1945] P: 715

Cold War (The alliance breaks up) Ci: 763

Germany (Occupied Germany) G: 169

Truman, Harry S. (The end of World War II) T: 469 *with picture*

World War II (Peace with Germany) W: 497

PotsherdArchaeology (Recording and preserving evidence) A: 597 *with picture***Potted plant**Gardening (Kinds of indoor gardens) G: 36 *with pictures; picture on G: 31*

- Potter** [career]
Pottery P: 715
- Potter, Beatrix** [British author] P: 715
Literature for children (Picture books) L: 363
with picture
- Potter, Harry** [literary figure] P: 715
Literature for children (Fantasy and science fiction) L: 359; picture on L: 377
Rowling, J. K. R: 494
- Potter, Mary** [wife of]
Longfellow, Henry Wadsworth (Professor and family man) L: 449
- Potter's field** [cemetery] P: 715
- Potter's wheel** [machine]
Pottery (Shaping the clay) P: 716-717; pictures on P: 719
Handicraft picture on H: 45
- Pottery** P: 715 with pictures
Anasazi (Way of life) A: 448a-448b
Antique (Ceramic antiques) A: 557
Ceramics (History) C: 360
China C: 489 with pictures
Inca (Arts and crafts) I: 97 with picture
Indian, American (Pottery) I: 145 with picture; pictures on I: 167, I: 172, I: 173, I: 175, I: 176
Islamic art (Pottery) I: 470; picture on I: 469
Majolica picture on M: 94
Painting (Greek painting) P: 42 with picture
Prehistoric people (The end of prehistoric times) P: 753
Pueblo Indians picture on P: 871
Stoneware So: 911 with picture
Tang dynasty picture on T: 26
See also Ceramics and Porcelain in this index, and the list of Related Articles in the Pottery article
- Potting soil**
Gardening (Caring for the garden) G: 38
- Pottinger, Charlotte** [mother of]
Thompson, Sir John Sparrow David (Early life) T: 263
- Potto** [animal] P: 719 with picture
- Pouched mammal** See Marsupial in this index
Mammal (Reproduction) M: 123-124
- Pouke** [literary figure]
Puck P: 870
- Poulaines**
Clothing (The Renaissance) Ci: 700
- Poulenc, Francis** [French composer] P: 720
- Poulsen, Valdemar** [Danish engineer]
Tape recorder (History) T: 38
- Poult** [bird]
Turkey T: 513
- Poulter's Measure** [poetry]
Limerick L: 307
- Poultry** [agriculture] P: 720 with picture
Bird (As a source of food and raw materials) B: 330 with pictures
Farm and farming (Specialized livestock farms) F: 31-32 with picture
Food (Food from animals) F: 330
Food, Frozen (Preparing foods for freezing) F: 338-339 with picture
Livestock L: 396 with picture
See also the list of Related Articles in the Poultry article
- Poultry feed**
Poultry (Raising poultry) P: 720
- Pound** [money] P: 721 with pictures
Money picture on M: 704
- Pound** [unit of measure] P: 721
Apothecaries' weight A: 567
Avoirdupois A: 994
Mass M: 268
- Pound, Ezra Loomis** [American poet] P: 721
American literature (Modernist poetry) A: 421
Eliot, T. S. (His life) E: 237
Lost Generation L: 472
- Pound, Roscoe** [American jurist] P: 722
- Pound key**
Telephone (The dialing mechanism) T: 94
- Pound sterling** [money]
Pound P: 721
- Poundage** [English history]
Tariff (The first tariffs) T: 44
- Poundal** [unit of measure]
Dyne D: 398
- Poundmaker** [American Indian chief] P: 722
with portrait
- Poupée** [dolls]
Doll (Porcelain dolls) D: 290
- Pournella, Jerry** [American author]
Science fiction (Growing popularity) S: 205-206
- Poussin, Nicolas** [French painter] P: 722 with picture
Classicism (The qualities of classicism) Ci: 653
Mythology picture on M: 987
Painting (Classicism) P: 61 with picture; (Rococo painting) P: 65; (Neoclassicism) P: 66
- Poussinists** [art history]
Painting (Rococo painting) P: 65
- Poutrincourt, Jean de Biencourt de** [French colonist] P: 722
Monts, Sieur de M: 780
- Poverty** [economics] P: 723 with picture
Brazil (City life) B: 573
City (The people) Ci: 589; (Economic problems) Ci: 592
Crime (Social conditions and crime) Ci: 1138-1139
Ford Foundation (Programs) F: 382
Gay Nineties (The despair of poverty) G: 72
Ghetto G: 181
Great Society G: 349
Hispanic Americans (Employment) H: 257
Homelessness (Current causes and conditions) H: 302
Housing (Low-income and assisted housing) H: 391
Industrial Revolution (The working class) I: 251
Juvenile delinquency (What causes delinquency?) J: 206
Liberation theology L: 228
Mexico picture on M: 456
United States, History of the (Poverty and discrimination) U: 191
Welfare W: 190
Women's movements (In developing nations) W: 387
World, History of the (The interdependence of nations) W: 448
See also the list of Related articles in the Poverty article
- Poverty Is No Crime** [play by Ostrovsky]
Russian literature (Early realism) R: 562
- Poverty line** [income]
Poverty (Measuring poverty) P: 723
Welfare (Welfare in the United States) W: 190
- Poverty Point mound** [Louisiana]
Mound builders (Other mound builders) M: 883
- Poverty Point National Monument** [Louisiana]
National Park System (table: National monuments) N: 51
- POW** See Prisoner of war in this index
- Powder horn** [ammunition] P: 725
- Powder Keg of Europe** [nickname]
Balkans B: 41
- Powder metallurgy** [industrial process] P: 725
Aluminum (Other shaping processes) A: 396
- Powder River** [river, Montana-Wyoming]
Wyoming (The mid-1900's) W: 536
- Powderly, Terence V.** [American labor leader]
Knights of Labor K: 352
Labor movement (The first nationwide labor organizations) L: 9-10
- Powdery mildew** [fungus]
Grape (Diseases and pests) G: 320
Mildew M: 541
- Powell, Adam Clayton, Jr.** [American political leader] P: 725 with portrait
- Powell, Anthony** [British author] P: 726
English literature (Literature after World War II) E: 322-323
- Powell, Bud** [American pianist]
Jazz (Bebop) J: 72
- Powell, Cecil Frank** [British physicist]
Meson M: 421
Nobel Prizes (Physics: 1950) N: 440
- Powell, Clifford R.** [American political leader]
New Jersey (table) N: 249
- Powell, Colin Luther** [American government official] P: 726 with portrait
African Americans picture on A: 136p
State, Department of (table) So: 860
- Powell, James R.** [American engineer]
Magnetic levitation train (Electrodynamics maglev) M: 55
- Powell, John Wesley** [American geologist] P: 726
Grand Canyon (History) G: 307
- Powell, Lake** See Lake Powell in this index
- Powell, Lazarus W.** [American political leader]
Kentucky (table) K: 290
- Powell, Lewis Franklin, Jr.** [American jurist] P: 726
Bakke case B: 33
Nixon, Richard Milhous (The national scene) N: 433-434
- Powell, Mary** (wife of)
Milton, John (Middle years) M: 557
- Powell, Wesley** [American political leader]
New Hampshire (table) N: 223
- Powell, William H.** [American painter]
De Soto, Hernando picture on D: 161
- Powell v. Alabama** [U.S. history]
Scottsboro Case S: 223
- Power** [arithmetic] P: 728
Binomial theorem B: 310
Logarithms (Raising a number to a power) L: 424
Numeration systems (The decimal system) N: 605-606
Scientific notation S: 207
- Power** [physics] P: 726 with diagrams
Dam (What does a dam do?) D: 17
Energy (Energy and power) E: 275
Horsepower H: 367
Metric system (Mechanics) M: 437-440
Power plant P: 728
Star (Magnitude and luminosity) So: 842-843
Transmission T: 375
Water power W: 139
Work W: 405
- Power** [sociology] P: 727
Balance of power B: 36
War (Struggles over power) W: 24
- Power, Henry** [English chemist]
Gas [physics] (Gas laws) G: 48
- Power and the Glory, The** [book by Greene]
English literature (Fiction between the wars) E: 322
- Power-assisted brake**
Brake (Hydraulic brakes) B: 560-562
- Power Authority of the State of New York**
Saint Lawrence Seaway (The hydroelectric power project) S: 44
- Power brake**
Automobile (The brake system) A: 954
- Power district**
Electric power (In the United States) E: 186
- Power drill**
Drill D: 348
- Power elite** [sociology]
Power (Systems of power) P: 727-728
- Power failure**
Electric power (Providing reliable service) E: 185
- Power function** [mathematics]
Calculus (Derivatives) C: 23
- Power loom** [machine]
Cartwright, Edmund C: 268
Textile (The Industrial Revolution) T: 219
Weaving (Kinds of looms) W: 174
Wool picture on W: 401
- Power of attorney** [law] P: 728
Euthanasia (Active and passive euthanasia) E: 421
- Power of Darkness, The** [play by Tolstoy]
Tolstoy, Leo (Later works) T: 323
- Power pack**
Railroad, Model (Locomotives) R: 120
- Power plant** P: 728
Coal (Electric power production) Ci: 719 with picture
Edison, Thomas Alva (The Wizard of Menlo Park) E: 78-79
Electric power E: 182 with pictures
Solar energy picture on So: 579
- Power pool**
Electric power (Providing reliable service) E: 185
- Power saw** [tool]
Fire department (Fire trucks) F: 125-126 with picture
Saw (Power saws) S: 167 with pictures
- Power series** [mathematics]
Series S: 316
- Power station**
Power plant P: 728
- Power steering**
Automobile (The steering system) A: 953-954
- Power stroke**
Automobile (The engine) A: 949
- Power structure** [sociology]
Government (Law enforcement) G: 283
Power (Systems of power) P: 727-728

Power take-off

Tractor (Parts of a tractor) T: 360
Truck (Industrial uses) T: 456

Power tool

Safety (Safety with electricity) S: 11
Tool (History of tools) T: 331
Woodworking (Steps in woodworking)
W: 396-397 *with pictures*

Power train See Drive train in *this index***Powered balloon**

Balloon B: 57

Powerlifting [sport]

Weightlifting W: 183

Powers, Abigail [wife of Millard Fillmore] See

Fillmore, Abigail Powers in *this index*

Powers, Francis Gary [American pilot]

Cold War (The U-2 incident) Ci: 766

Powers, Hiram [American sculptor] P: 728

Sculpture (American sculpture) S: 255

Powers, Llewellyn [American political leader]

Maine (table) M: 87

Powers, Ridgely C. [American political leader]

Mississippi (table) M: 640

Powhatan [American Indian chief] P: 728

Colonial life in America (Jamestown) Ci: 788-789

Jamestown J: 28

Pocahontas P: 588

Powhatan Indians P: 728

Powhatan Confederacy [American Indians]

Powhatan P: 728

Powhatan Indians P: 728

Richmond (History) R: 333

Powhatan Indians [American Indians] P: 728**Powwow** [meeting]

Indian, American (Bands) I: 143; *picture on*
I: 136a

Pox [disease] See Smallpox in *this index***Poynter, Sir Edward** [British artist]

Painting (Later neoclassicism) P: 67-68

Poynter, William A. [American political leader]

Nebraska (table) N: 110

Poznań [city, Poland] P: 728**Pozzuolana** [building material]

Aqueduct (Ancient aqueducts) A: 581

Cement and concrete (History) C: 345

PPFA [organization] See Planned Parenthood

Federation of America in *this index*

PPG Place [buildings, Pittsburgh]

Johnson, Philip Cortelyou J: 153

PPI radar

Radar (The display) R: 71

PPO [health care] See Preferred provider organization in *this index***PQ** See Parti Québécois in *this index***PR** [abbreviation] See Public relations in *this index***Pr** [symbol]

Praseodymium P: 733

Practical nurse

Nursing N: 617; (Practical nurses) N: 619;
(Practical nursing courses) N: 620

Hospital (The professional services staff)
H: 371

Prado [museum]

Madrid (Education and cultural life) M: 39

Spain (Museums and libraries) So: 738

Prado, Diego de [Spanish explorer]

Torres, Luis Vaez de T: 340d *with picture*

Prado, Manuel [Peruvian political leader]

Peru (The rise of APRA) P: 315

Praetor [Ancient Rome] P: 729

Law (Ancient Roman law) L: 133

Praetorian Guard [Roman Empire] P: 729

Augustus (Achievements) A: 889-890

Rome, Ancient *picture on* R: 445

Pragmatic sanction [European history] P: 729

Austria (Wars in the 1700's and 1800's) A: 938

Maria Theresa M: 199

Pragmatism [philosophy] P: 729

Dewey, John D: 176

James, William J: 27

Peirce, Charles Sanders P: 230

Philosophy (Terms used in philosophy) P: 384;
(Philosophy in the 1900's) P: 390

Prague [Czech Republic] P: 729 *with picture*

Czech Republic Ci: 1209 *with picture*

Prague, Treaty of [1866]

Seven Weeks' War S: 325

Prague Castle [Czechoslovakia]

Prague (The city) P: 730

Prague Spring [Czech history]

Czech Republic (The 1960's) Ci: 1214

Czechoslovakia (The 1960's) Ci: 1216

Prague (History) P: 730

Praha [Czech Republic] See Prague in *this index***Praia** [city, Cape Verde]

Cape Verde C: 189 *with map*

Prairie [geography] P: 730 *with picture and map*

Flower (Flowers of prairies and dry plains)

F: 286 *with pictures*

Grassland G: 329 *with picture*

Plant (Grasslands) P: 525; *picture on* P: 527

Prairie, The [book by Cooper]

Cooper, James Fenimore Ci: 1034

Prairie-chicken [bird] P: 731

Bird (Birds of grasslands) B: 336 *with picture*

Prairie dog [animal] P: 732 *with pictures*

Animal *picture on* A: 477

Prairie falcon [bird]

Falcon (Other North American falcons) F: 14

Prairie Hills

South Dakota (Land regions) So: 674

"Prairie Home Companion, A" [radio show]

Keillor, Garrison K: 254

Prairie pothole [wetland]

Conservation (Canada) Ci: 988

Prairie Provinces [region, Canada] P: 733

Canada (The Prairie Provinces) C: 101

Prairie ringneck snake

Snake *picture on* S: 532

Prairie rose [plant]

Flower *picture on* F: 287

Prairie Scene: Mirage [painting by Miller]

United States, History of the *picture on* U: 166

Prairie schooner [vehicle]

Pioneer life in America (The wagon train)

P: 486

Wagon W: 5

Prairie State [nickname]

Illinois I: 52

Prairie States Forestry Project [U.S. history]

Shelterbelt S: 394

Prairie style [architecture]

Architecture (Frank Lloyd Wright) A: 629; *pic-*

ture on A: 631

Chicago (Architecture) C: 428

House *picture on* H: 381

United States *picture on* U: 117

Wright, Frank Lloyd (Early career) W: 507

Prairie sunflower [plant]

Evolution (Direct observation of evolution)

E: 431-432

Prairie View A&M University

Texas A&M University T: 210

Prairie wolf

Coyote Ci: 1114 *with picture*

"Prairies, The" [poem by Bryant]

Bryant, William Cullen (His early works)

B: 655-656

Praise of Folly, The [book by Erasmus]

Erasmus, Desiderius E: 349

Humanism (The spread of humanism) H: 431

Renaissance (Christian humanism) R: 237-238

Prajadhipok [king of Thailand]

Thailand (Changes in government) T: 227

Prajna [religion]

Yoga Y: 566

Prakrit [language]

Sanskrit language S: 111

Prakrti [religion]

Yoga Y: 566

Prall, Horace G. [American political leader]

New Jersey (table) N: 249

Pram [boat]

Sailing S: 23

Prambanan [temples, Indonesia]

Indonesia (The arts) I: 232-233

Pramoedya Ananta Tuar [Indonesian author]

Indonesia (The arts) I: 232-233

Prang, Louis [American artist]

Valentine's Day *picture on* V: 262

Praseodymium [element] P: 733**Praslin** [island]

Seychelles S: 339

Prasutagus [king of the Iceni]

Boadicea B: 427

Prater [park, Vienna]

Vienna (The city) V: 362

Prather, Victor A., Jr. [American balloonist]

Balloon (Balloon explorations of the upper
atmosphere) B: 61-62 *with picture*

Pratique [law]

Bill of health B: 301

Pratt, E. J. [Canadian poet] P: 733**Pratt, Enoch** [American businessman]

Maryland (Libraries) M: 244

Pratt, Thomas G. [American political leader]

Maryland (table) M: 255

Pratt, William Henry See Karloff, Boris in *this index***Pratt and Whitney Company**

Aviation (Aviation progress) A: 988-989

Pravda [newspaper]

Lenin, V. I. (Outcast) L: 193

Stalin, Joseph (Young revolutionist) So: 825-826

Prawn [sea animal]

Crustacean *picture on* Ci: 1164

Shrimp S: 441

Praxiteles [Greek sculptor] P: 734 *with picture*

Classicism (Greece) Ci: 653

Sculpture (Classical sculpture) S: 245-246

Prayer [religion] P: 734

Faith healing F: 12

Islam (The Five Pillars of Islam) I: 463

Lord's Prayer L: 454

Meditation M: 380

Religion (Religious rituals) R: 217

School prayer S: 186

Prayer for Owen Meany, A [book by Irving]

Irving, John I: 459

"Prayer in the Prospect of Death, A" [poem

by Burns]

Burns, Robert (Burns's works) B: 710

Prayer rug

Rugs and carpets (Oriental rugs) R: 516-517

Prayer wheel [religion]

Meditation M: 380

Praying Hands [painting by Dürer]

Dürer, Albrecht D: 388

Praying mantis [insect]

Mantid M: 167

Eye *picture on* E: 468

Praziquantel [drug]

Schistosomiasis S: 176

Preacher bird

Vireo V: 391

Preachers, Order of See Dominicans in *this index***Preaching Friars** See Dominicans in *this index***Preadolescence** [psychology]

Child (The preteen-age years) C: 450

Preakness Stakes

Maryland (Visitor's guide) M: 248 *with picture*

Preamble

Constitution of the United States (Preamble)

Ci: 1004

Government (The U.S. Constitution) G: 286

Preamplifier [electronics]

Microphone (Capacitor microphones) M: 517

Precambrian Time [geology]

Earth (Life on Earth) E: 27; (table) E: 30; *pic-*
tures on E: 28

Precaution [book by Cooper]

Cooper, James Fenimore Ci: 1035

"Precaution" [poem by Frost]

Frost, Robert Lee (His poems) F: 543

Precedent [law]

Law (Common law systems) L: 132

Preceptorial System [education]

Wilson, Woodrow (University president)

W: 320-321

Precession [physics]

Ballistics (Exterior ballistics) B: 56

Gyroscope (Gyroscopic properties) G: 453-454
with diagram

North Star N: 518

Precession of the equinoxes [astronomy]

Climate (Changes in the earth's orbit) Ci: 677

with diagram

Equinox E: 348

Hipparchus H: 239

Precinct [voting]

Election (Election procedures) E: 159

Voting (Voting districts) V: 450

Precinct captain [office]

Political party (Local organizations) P: 635

Precious coral

Coral (Other kinds of corals) Ci: 1048a

Precious stone See Gem in *this index***Precipitation** [weather]

See also Rain in *this index*

Precipitator

Air cleaner (Types of air cleaners) A: 175-176
 Aluminum (Refining the bauxite) A: 393
 Mining (Pumping methods) M: 576-577

Precision [measurement]

Weights and measures (Conversion factors) W: 184-185

Precision casting [manufacturing]

Cast and casting (Other types of casting) C: 278 *with pictures*

Precisionism [art]

Painting (Precisionism) P: 82 *with picture*

Preclinical training

Medicine (A career as a doctor) M: 370

Precocial bird

Bird (Caring for the young) B: 359

Precognition [telepathy]

Clairvoyance Ci: 637
 Extrasensory perception (What parapsychologists study) E: 458
 Telepathy T: 93

Precursor cell

Blood (Formation of new blood components) B: 411
 Stem cell So: 889

Predator [zoology]

Balance of nature (Predators) B: 35; (Upsetting the balance) B: 35 *with picture*
 Insect (Beneficial insects) I: 284 *with picture*
 Mammal (Group life) M: 125; (Methods of attack and defense) M: 126

Predators, Nashville

Hockey (table: National Hockey League) H: 281

Predestination [religion] P: 734

Armenius, Jacobus A: 719
 Calvin, John (Calvinism) C: 71
 Edwards, Jonathan E: 114

Fatalism F: 54

Foreordination F: 389

Presbyterians (Teaching and worship) P: 756a

Predicate [grammar]

Sentence (Subject and predicate) S: 303

Predicate adjective [grammar]

Adjective (The position of adjectives) A: 57

Predigestion

Spider (Mouth) So: 784

Prednisone [drug]

Transplant (Preventing rejection) T: 380-381

Preeclampsia [disorder] P: 734

Pregnancy (Complications) P: 735

Pre-emption [U.S. history] P: 734a

Tyler, John (Tyler's accomplishments) T: 534

Pre-emption Act [1841]

Squatter So: 814

Preening [bird]

Bird (Feather care) B: 354

Prefabrication [construction]

Building construction (Prefabricated construction) B: 684 *with picture*
 House (Building materials) H: 380
 Shelter (Building methods and materials) S: 392-393

Preface

Book (Inside a book) B: 464-465

Prefaces to Shakespeare [book by Granville-Barker]

Granville-Barker, Harley G: 319
 Shakespeare, William (Modern critics) S: 369

Prefecture [Japanese government]

Japan (Local government) J: 35

Preferential tariff

Tariff T: 43

Preferred provider organization

Insurance (How private health insurance is provided) I: 311-312
 Managed care plans (In the United States) M: 131
 Medicine (The United States) M: 367-368

Preferred spelling

Spelling (Adding new words) So: 777

Preferred stock [economics]

Investment (Stocks) I: 368
 Stock, Capital (Kinds of stock) So: 903

Prefix [language]

Metric system (Metric prefixes) M: 439
 Spelling (Spelling rules) So: 776

Pre-Flight School [Florida]

Pensacola Naval Air Station P: 272

Pregerminated seed

Vegetable (Planting) V: 293

Pregl, Fritz [Austrian chemist]

Nobel Prizes (Chemistry: 1923) N: 442

Pregnancy P: 734a

See also Reproduction, Human in this index

Abortion A: 14

Adolescent (Pregnancy) A: 63

AIDS (How HIV is transmitted) A: 163-164

Amniocentesis A: 438

Baby (The expectant mother) B: 5

Birth control B: 378

Birth defect B: 380

Cerebral palsy (Causes) C: 361

Chlamydia C: 516

DES D: 153

Disease (Environmental and occupational diseases) D: 230

Growth (Early development) G: 404-405

Heart (Birth defects) H: 140

Infertility (Treatment) I: 265

Lactation L: 25

Listeria L: 349

Miscarriage M: 617

Nutrition (Eat a balanced diet) N: 626-628

Obstetrics and gynecology O: 646

Pelvic inflammatory disease P: 233

Placenta P: 505

Preeclampsia P: 734

Premature birth P: 755

Progesterone P: 811

Reproduction, Human R: 244; (Fertilization)

R: 246; (The first days of pregnancy)

R: 246 *with pictures*

Rubella R: 506

Smoking (Why smoking is dangerous) S: 520

Syphilis So: 1069

Thalidomide T: 229

Toxoplasmosis T: 351

Ultrasound pictures on U: 17

Preheat fluorescent lamp

Fluorescent lamp F: 305 *with diagram*

Prehensile tail

Mammal (In trees) M: 122

Prehistoric animal P: 736 *with pictures*

Evolution (The fossil record) E: 430

Extinct animal (Prehistoric extinctions) E: 457

See also the list of Related articles in the Prehistoric animal article

Prehistoric art

See also Cave painting in this index

Painting (Prehistoric painting) P: 40

Petrified Forest National Park picture on P: 329

Prehistoric people (The appearance of art)

P: 750 *with pictures*

Sculpture (Prehistoric sculpture) S: 233 *with pictures*

Prehistoric people P: 743 *with pictures and map*

Archaeology A: 594

Arrowhead A: 743 *with pictures*

Clothing Ci: 686; (Clothing through the ages) Ci: 696

England (History) E: 303

Europe (Prehistoric times) E: 408

Evolution (Contributions from other scientific fields) E: 433

Food (Prehistoric times) F: 336

Hairdressing (Hairdressing through the ages) H: 11

Heidelberg jaw H: 166

Human being (Early human beings) H: 415

Invention (Prehistoric times) I: 357

Kenya (Early days) K: 303

Leakey, Louis Seymour Bazett L: 161

Leakey, Mary Douglas L: 161

Leakey, Meave Gillian L: 161

Leakey, Richard Erskine Frere L: 161

Medicine (History) M: 371

Neanderthals N: 93

Paint (The history of paint) P: 26

Painting (Prehistoric painting) P: 40

Races, Human R: 52

Religion (The origin of religion) R: 218-219 *with picture*

Sculpture S: 228

Stone Age So: 909

Tool (History of tools) T: 331

Transportation (Prehistoric times) T: 385

World, History of the W: 420

Prehistory

Prehistoric people P: 743

Preignition [engine]

Gasoline (Gasoline octane ratings) G: 61

Preinvasive neoplasia [disorder]

Cervical cancer C: 364

Prejudice P: 755

Ethnocentrism E: 372

Hate crime H: 85

Races, Human (Race and discrimination) R: 59

Racism R: 62

Stereotyping So: 893

Prejudices [essays by Mencken]

American literature (Satirists) A: 422

Mencken, H. L. M: 398

Prekindergarten program See Nursery school in this index**Preliminary bouts**

Boxing (Financing) B: 530

Preliminary hearing [law]

Law enforcement (Trial) L: 141

Preliminary Scholastic Assessment Test

College entrance examination (The College

Entrance Examination Board) Ci: 775

Scholarship (Merit scholarships) S: 178

Pregol, Vladimir [Swiss chemist]

Nobel Prizes (Chemistry: 1975) N: 443

Prelude [music]

Classical music (Free form) Ci: 645

Overture O: 882

Prelude, The [poem by Wordsworth]

Wordsworth, William W: 404; (Later career)

W: 404

Prelude to "The Afternoon of a Faun" [music by Debussy]

Debussy, Claude D: 66

Prem Tinsulanonda [Thai political leader]

Thailand (Democracy gains strength) T: 227-228

Premadasa, Ranasinghe [Sri Lankan political leader]

Sri Lanka (History) So: 819

Premature birth P: 755

Baby (The developing baby) B: 4-5

Cerebral palsy (Causes) C: 361; (Prevention) C: 362

Eye (Diseases of the retina) E: 467-468

Hospital picture on H: 373

Hyaline membrane disease H: 460

Incubator (Incubators for babies) I: 106

Neonatology N: 124

Pregnancy (Premature birth) P: 735

Premedical education

Medicine (A career as a doctor) M: 370

Premenstrual syndrome [physiology] P: 755

Menstruation (Effects of menstruation) M: 404

Premier [office]

See also Prime minister in this index

Address, Forms of (Officials of the

Commonwealth of Nations) A: 53

Premier Development League

Soccer (In North America) So: 548

Premier mine [South Africa]

Diamond (Famous diamonds) D: 182

Premillennialism [religion]

Millennium M: 553

Premise

Deductive method D: 81

Logic L: 425

Philosophy (Logic) P: 384

Premium [economics]

Insurance I: 309; (How premiums are figured) I: 310

Investment (table) I: 366

Trading stamps T: 366

Premium channel

Television (Cable and satellite systems) T: 115-116

Premium score [cards]

Bridge (Scoring) B: 605

Premolar [anatomy]

Dog (Body structure) D: 264-265

Teeth (Permanent teeth) T: 79-80 *with pictures*

Prenatal care

Baby (The expectant mother) B: 5-6

Pregnancy (Prenatal care) P: 734b

Prendergast, Maurice Brazil [American painter]

P: 756 *with picture*

Ashcan School A: 768

Preoperational period [psychology]

Piaget, Jean P: 445

Preparation plant

Coal (Cleaning coal) Ci: 726

Preparator [career]

Museum (Exhibition and care of materials)

M: 939

Preparatory Committee for the Tibetan Autonomous Region [Tibetan history]

Tibet (History and government) T: 277-278

Preparatory Meditations [book by Taylor]

Taylor, Edward T: 56

Preparatory school [education]
 School (High schools) **S:** 181-182

Prepared piano [musical instrument]
 Cage, John **C:** 14
 Classical music (Experimental music) **Ci:** 650

Preposition [grammar] **P:** 756
 Grammar **G:** 303

Prepositional phrase [grammar]
 Preposition **P:** 756

Preproduction
 Motion picture (Preproduction) **M:** 849-852
with pictures

Prepuce [anatomy]
 Circumcision **Ci:** 561
 Penis **P:** 241

Pre-Raphaelite Brotherhood **P:** 756 *with picture*
 Burne-Jones, Sir Edward **B:** 708
 Millais, Sir John Everett **M:** 552
 Painting (The Pre-Raphaelite Brotherhood)
P: 71 *with picture*
 Rossetti, Dante Gabriel **R:** 484

Prerecorded sound
 Radio (From sound waves to electric waves)
R: 86

Preromanticism
 Russian literature (Preromanticism) **R:** 560

Présages, Les [ballet]
 Massine, Léonide **M:** 296

Presbycusis [disorder]
 Ear (Diseases) **E:** 12
 Deafness (Aging) **D:** 57-58

Presbyopia [disorder]
 Eye (Farsightedness) **E:** 464
 Glasses (Prescription glasses) **G:** 224

Presbyter [religion]
 Presbyterians **P:** 756a

Presbytère [museum]
 New Orleans (Downtown New Orleans)
N: 279

Presbyterian Church (U.S.A.) [religious group]
P: 756a

Presbyterian Ministers' Fund
 Insurance (The growth of insurance) **I:** 316

Presbyterians [religious group] **P:** 756a
 Calvin, John (Calvinism) **C:** 71
 Covenanters **Ci:** 1106
 Presbyterian Church (U.S.A.) **P:** 756a
 Protestantism (The conservative reform movements [the 1500's]) **P:** 834
 Scotland (Religion) **S:** 215
 Tennent, William **T:** 133

Presbytery [religion]
 Presbyterian Church (U.S.A.) **P:** 756a
 Presbyterians **P:** 756a

Preschool education *See* Early childhood education *in this index*

Preschooler
 Child (The preschool years) **C:** 449

Prescott, Benjamin F. [American political leader]
 New Hampshire (table) **N:** 223

Prescott, Samuel [American patriot] **P:** 756a
 Dawes, William **D:** 51
 Revere, Paul (Paul Revere's ride) **R:** 267

Prescott, William [American military leader]
P: 756b
 Bunker Hill, Battle of **B:** 699

Prescribed burning
 Conservation (Conservation of grazing lands)
Ci: 981 *with picture*; (Forest conservation)
Ci: 981
 Forestry (Fire and forests) **F:** 407

Prescription [European history]
 Villein **V:** 385

Prescription [medicine]
 Drug (Prescription drugs) **D:** 356
 Drug abuse (Prescription drugs) **D:** 361
 Herbal medicine **H:** 196
 Pharmacy (Duties of a pharmacist) **P:** 354
 Pure food and drug laws (Drugs and devices)
P: 908
 Rx **R:** 46

Presence and Immortality [book by Marcell]
 Marcell, Gabriel **M:** 193

Present at the Creation [book by Acheson]
 Acheson, Dean Gooderham **A:** 26

Present participle [grammar]
 Participle **P:** 184

Present perfect tense [grammar]
 Tense **T:** 170

Present tense [grammar]
 Tense **T:** 170

Presentation
 Sales (Presentation) **S:** 63

Presentation software [electronics]
 Computer (Graphics programs) **Ci:** 918-919

Presentation tool [computing]
 Computer (Spreadsheet programs) **Ci:** 917-918

Presepio [Nativity]
 Christmas (In Italy) **C:** 531

Prešeren, France [Slovenian poet]
 Slovenia (People) **S:** 511

Preservation, Food *See* Food preservation *in this index*

Preservation and Perpetuation of Storytelling, National Association for the [organization]
 Storytelling (The 1900's) **So:** 914

Preservation Hall
 Louisiana *picture on* **L:** 489
 New Orleans (The arts) **N:** 281-282 *with picture*

Preservative
 Food additive (Kinds of additives) **F:** 339
 Food preservation (Additives) **F:** 343
 Health food (Types of health foods) **H:** 129

Preserves *See* Jelly and jam *in this index*

Preset guidance
 Guided missile (Preset guidance) **G:** 426 *with diagram*

Preshrinking
 Wool (Making fabric) **W:** 401

Presidency [Yugoslav government]
 Yugoslavia (Communist rule) **Y:** 580

President [ship]
 Decatur, Stephen **D:** 67

President [title] **P:** 756b
 Address, Forms of (Officials of the Commonwealth of Nations) **A:** 53-54
 Government (Presidential government) **G:** 288
 Parliamentary procedure (Officers) **P:** 175
 Universities and colleges (Administration)
U: 208

President of the Senate [title]
 Congress of the United States (The Senate)
Ci: 942
 Vice President of the United States **V:** 349;
 (President of the Senate) **V:** 352

President of the Union of Soviet Socialist Republics [office]
 Union of Soviet Socialist Republics
 (Gorbachev's reforms) **U:** 40

President of the United States **P:** 758 *with pictures*
 Address, Forms of (Officials of the United States) **A:** 53
 Alien and Sedition Acts **A:** 367
 Atchison, David Rice **A:** 853
 Checks and balances **C:** 392
 Congress of the United States (From bill to law) **Ci:** 945-946; (Handling presidential election results) **Ci:** 946; (History of Congress) **Ci:** 947
 Constitution of the United States (Article II)
Ci: 1008; (Amendment 12) **Ci:** 1013;
 (Amendment 22) **Ci:** 1015
 Election campaign **E:** 159
 Electoral College **E:** 161
 Executive order **E:** 436
 First ladies **F:** 142
 Flag *picture on* **F:** 211
 Homeland Security, Office of **H:** 301
 Political convention **P:** 628
 Political party (Organizing the government)
P: 632
 Presidential libraries **P:** 771
 Presidential succession **P:** 771
 Republican Party **R:** 253
 Secret Service, United States **S:** 278
 State, Department of (Relationship with the president and Congress) **So:** 859
 Supreme Court of the United States (table)
So: 1002
 Treaty (Negotiation) **T:** 409
 United States, Government of the (The presidency) **U:** 140; (Action by the President)
U: 144; (Current issues in U.S. government) **U:** 146
 Veto **V:** 346
 Woodhull, Victoria Claflin **W:** 393
See also the list of Related Articles in the President of the United States article

President pro tempore [title]
 Congress of the United States (The Senate)
Ci: 942
 Senate (Organization of the U.S. Senate)
S: 294

Presidential assistant [government official]
P: 770

Presidential Citizens Medal
 Medals, decorations, and orders (table)
M: 357; (Civilian awards) **M:** 355-357

Presidential debates
 Kennedy, John Fitzgerald (The 1960 campaign)
K: 263 *with picture*

Presidential election
 Advertising (Political effects) **A:** 79 *with picture*
 Bush v. Gore **B:** 723
 Constitution of the United States (Amendment 12) **Ci:** 1013
 Election Day **E:** 161
 Election of 2000 **E:** 161
 Political convention **P:** 628
 President of the United States (The presidential election) **P:** 762 *with diagram*
 Primary election (The presidential primary)
P: 777

Presidential government
 Government (Presidential government) **G:** 288

Presidential libraries **P:** 771

Presidential Medal of Freedom [award]
 Medals, decorations, and orders (table) **M:** 357
with picture; (Civilian awards) **M:** 355-358

Presidential press secretary
 Presidential assistant **P:** 770

Presidential Problems [book by Cleveland]
 Cleveland, Grover (Later years) **Ci:** 673

Presidential Range [mountains, New Hampshire]
 Mount Washington **M:** 890
 New Hampshire (Mountains) **N:** 220
 White Mountains **W:** 291

Presidential succession [U.S.] **P:** 771
 Constitution of the United States (Amendment 20) **Ci:** 1015; (Amendment 25) **Ci:** 1016
 President of the United States (Other roads to the White House) **P:** 763; *diagram on*
P: 762

Presidential Succession Act [1947]
 Presidential succession **P:** 771

Presidential unit citation pennant [U.S.]
 Flag *picture on* **F:** 194

President's Award for Distinguished Federal Civilian Service
 Medals, decorations, and orders (table) **M:** 357

President's Committee on Employment of People with Disabilities [U.S.]
 Disabled (table) **D:** 222

President's Cottage [building]
 White Sulphur Springs **W:** 292

President's Council on Physical Fitness and Sports
 Physical fitness (Developing physical fitness)
P: 435

Presidents' Day [holiday] **P:** 771
 Washington's Birthday **W:** 110

Presiding Bishopric
 Mormons (Church organization) **M:** 807

Presidio [fort, California]
 Monterey **M:** 764

Presidio of San Francisco [California]
 San Francisco (Residential districts) **S:** 93-94
with map; (Settlement by Europeans)
S: 97

Presidium *See* Politburo *in this index*

Presidium of the Supreme Soviet
 Union of Soviet Socialist Republics (National government) **U:** 29

Presley, Elvis [American singer] **P:** 772 *with portrait*
 Graceland **G:** 296
 Memphis (The city) **M:** 394
 Mississippi (Places to visit) **M:** 632 *with picture*
 Rock music (The emergence of rock 'n' roll)
R: 377 *with picture*
 Tennessee (Places to visit) **T:** 144 *with picture*
 United States *picture on* **U:** 118

Pre-Socratic philosophy **P:** 772
 Philosophy (Ancient philosophy) **P:** 386
See also the list of Related articles in the Pre-Socratic philosophy article

Presorting [service]
 Postal services (Competition and privatization)
P: 707

Press [journalism] *See* Journalism *in this index*

Press [printing] *See* Printing press *in this index*

Press [sports]
 Basketball (Defensive strategies) **B:** 147

Press, Freedom of the *See* Freedom of the press *in this index*

- Press agent** [career]
Public relations (Methods) P: 864
- Press association** See *News service in this index*
- Press brake**
Machine tool picture on M: 17; (Metal forming operations) M: 19
- Press forging**
Forging (Machine forging) F: 409 *with picture*
Machine tool M: 19
- Press pool** [journalism]
War correspondent W: 27
- Press secretary, Presidential**
Presidential assistant P: 770
- Pressburg** [Slovakia] See *Bratislava in this index*
- Pressburg, Treaty of** [1805]
Austerlitz, Battle of A: 892
- Pressed glass**
Antique (Glass) A: 558
- Pressing** [industrial process]
Ceramics (Making ceramics) C: 360
Glass (Pressing) G: 215 *with diagram*
- Pressure** [physics] P: 773
Aerodynamics (Principles of aerodynamics) A: 85
Boiling point B: 439
Bridgman, Percy Williams B: 607
Gas [physics] (How gases behave) G: 48
Metric system (Mechanics) M: 437-440
Pascal's law P: 190
- Pressure altimeter** [instrument]
Altimeter A: 390
- Pressure cooker**
Cooking (Other methods) Ci: 1029
- Pressure gauge** [instrument]
Gauge (Pressure gauges) G: 69
- Pressure group** [political science]
Propaganda (Organizations) P: 824
- Pressure hull**
Submarine So: 939
- Pressure mine**
Mine warfare (Naval mines) M: 565
- Pressure plate** [mechanical device]
Transmission (The clutch) T: 378
- Pressure point** [anatomy]
Bleeding (First aid for bleeding) B: 399
- Pressure sore**
Bed sore B: 199
- Pressure suit**
Balloon (Gas balloons) B: 58-59
- Pressurized cabin**
Airplane (Engineering improvements) A: 237-238
- Pressurized Mating Adapter** [machine]
International Space Station (History) I: 346b
- Pressurized water reactor**
Nuclear energy (Steam production) N: 587 *with diagram*
- Prester John** [legendary figure] P: 773
- Prestes, Júlio** [Brazilian political leader]
Brazil (Birth of the republic) B: 585
- Prestdigitation** [magic]
Magician (Sleight of hand) M: 51 *with picture*
- Prestissimo**
Music (table) M: 954
- Prasto**
Music (table) M: 954
- Preston, James Patton** [American political leader]
Virginia (table) V: 417
- Preston, Thomas** [British military leader]
Adams, John (In New England) A: 35-36
Boston Massacre B: 505
- Preston, Thomas J., Jr.** [American educator]
Cleveland, Grover (Cleveland's family) Ci: 671
- Preston, William B.** [American government official]
Taylor, Zachary (table) T: 60
- Prestwick** [Scotland]
Scotland (Transportation) S: 218
- Presumed consent**
Organ donation O: 852
Transplant (Sources of donor organs) T: 380
- Presumption** [law]
Evidence (Presumptions) E: 426
- Presupposition** [semantic relation]
Semantics S: 290
- Pretoria** [city, South Africa] P: 773
- Pretreatment of waste**
Water pollution (Pretreatment of wastes) W: 138
- Pretrial intervention** [law]
Criminal justice system (Problems in the courts) Ci: 1144
- "Pretty Girl Is Like a Melody, A"** [song by Berlin]
Berlin, Irving B: 266
- Pretzel** [food] P: 773
Easter (Other foods) E: 44
Food (Interesting facts about food) F: 329
- Preus, Jacob A. O.** [American political leader]
Minnesota (table) M: 602
- Preussen** [ship]
Ship (Sailing ships in the 1900's) S: 411
- Prevailing westerly** [weather] P: 773
Atlantic Ocean (Winds) A: 866
Cyclone Ci: 1203
Pacific Ocean (Winds) P: 14
Southern Ocean (Winds) So: 688a
Wind (General circulation) W: 329 *with diagram*
- Prevailing wind** [weather]
Wind (General circulation) W: 329 *with diagram*
- Préval, René** [Haitian political leader]
Haiti (History) H: 15-17
- Prevent defanse** [sports]
Football (table) F: 356
- Prevention** [magazine]
Magazine (table) M: 45
- Prevention of Cruelty to Animals, Society for the** See *Society for the Prevention of Cruelty to Animals in this index*
- Preventive detention**
Bail B: 31
- Preventive medicine**
Disease (Preventing disease) D: 233
Holistic medicine H: 292
Medicine (Prevention) M: 364; (table) M: 369
Occupational medicine O: 647
Prophylaxis P: 827
Public health (Providing preventive health care services) P: 856
- Prévert, Jacques** [French poet] P: 774
- Preview**
Motion picture (Distribution) M: 860
- Previn, André** [American musician] P: 774
- Prévost, Abbé** [French author]
French literature (The Age of Reason) F: 520
- Prevost, Sir George** [British general]
War of 1812 (Lake Champlain) W: 32
- Prez** [nickname]
Young, Lester Willis Y: 572
- PRI** [political party] See *Partido Revolucionario Institucional in this index*
- Priam** [legendary figure] P: 774
Hector H: 164
Iliad I: 51
Paris P: 159
- Pribilof, Gerasim Loginovich** [Russian explorer]
Pribilof Islands P: 774
- Pribilof Islands** [islands, Bering Sea] P: 774
Alaska (Coastline) A: 294
Bering Sea controversy B: 258
Seal (Hunting of seals) S: 267-268
- Price** [economics] P: 774
See also *Price control in this index*
Deflation D: 88
Economics (Markets, prices, and competition) E: 60
Inflation I: 266
Marketing (Pricing) M: 214
Supply and demand So: 996
Tariff (Higher prices) T: 43
Trade (The use of money) T: 362
- Price, George C.** [Belize political leader]
Belize (History) B: 238
- Price, Hugh Bernard** [American social reformer]
P: 775
- Price, James H.** [American political leader]
Virginia (table) V: 417
- Price, Leontyne** [American singer] P: 775
- Price, Nick** [South African golfer]
Golf (British Open) G: 264; (PGA Championship) G: 265
- Price, Rodman M.** [American political leader]
New Jersey (table) N: 249
- Price, Sterling** [Confederate general]
Missouri (table) M: 668; (The Civil War) M: 671
- Price ceiling** [economics]
Price (Government intervention) P: 775
- Price control** [economics] P: 775
Inflation (Wage and price controls) I: 268a
Nixon, Richard Milhous (The national scene) N: 433-434
Price (Government intervention) P: 775
Rationing R: 148
- Price fixing** [economics]
- Antitrust laws A: 560
Consumerism (The right to choose) Ci: 1019
- Price floor** [economics]
Price (Government intervention) P: 775
- Price freeze** [economics]
Price (Government intervention) P: 775
- Price support** [economics]
Agriculture (Recent developments) A: 160
Farm and farming (Federal farm programs) F: 44
Milk (Marketing) M: 547
Price (Government intervention) P: 775
Wheat (Controlling wheat production) W: 274-275
- Prickle** [botany]
Leaf (Protective leaves) L: 156
Plant (How plants protect themselves) P: 544
- Prickly-ash** [tree] P: 775
- Prickly heat** [disorder] P: 776
- Prickly pear** [plant] P: 776
Cactus (Kinds of cactuses) C: 10 *with picture*
Flower (Flowers of prairies and dry plains) F: 286-287 *with picture*
Plant picture on P: 519
- Pride** [zoology]
Lion (The life of a lion) L: 341 *with picture*
- Pride, Thomas** [English military leader]
Long Parliament L: 448
Rump Parliament R: 520
- Pride and Prejudice** [book by Austen]
Austen, Jane A: 892
English literature (Romantic prose) E: 320
Literature (Judging literature) L: 352-353
Novel (Britain) N: 573
- Pride's Purge** [English history]
Long Parliament L: 448
Rump Parliament R: 520
- Pridi Phanomyong** [Thai political leader]
Thailand (Changes in government) T: 227
- Priene** [ancient city]
City picture on Ci: 579
- Priest** [religion] P: 776
Address, Forms of (Members of the clergy) A: 54
Augar A: 885
Druids D: 367
Careers picture on C: 221
Eastern Orthodox Churches (Clergy) E: 46
Egypt, Ancient (Religion) E: 137
Indian, American (Priests) I: 148
Leviticus L: 219
Taoism (Taoism as a religion) T: 36
- Priestley, John Boynton** [British author] P: 776
- Priestley, Joseph** [British chemist] P: 776
Air (The study of air) A: 174
Chemistry (The phlogiston theory) C: 401
Electricity (Experiments with electric charge) E: 196-197
Nitrous oxide N: 427
Oxygen (History) O: 890
Rubber (First uses) R: 500-501
- Prigione Superbo, Il** [opera by Pergolesi]
Pergolesi, Giovanni Battista P: 287
- Prigogine, Ilya** [Belgian chemist]
Nobel Prizes (Chemistry: 1977) N: 443
- Primacy** [religion]
Gregory I, Saint G: 387
Roman Catholic Church (The recognition of Christianity) R: 406; (Vatican Council I) R: 410
- Primakov, Yevgeny Maksimovich** [Russian political leader] P: 776
Russia (The new nation) R: 555
Yeltsin, Boris Nikolayevich Y: 561
- Primaquine** [medication]
Malaria (Treatment and prevention) M: 96
Quinine Q: 42
- Primary Association** [organization]
Mormons (Church organization) M: 807-808
- Primary battery**
Battery (Types of batteries) B: 168
- Primary body site** [medicine]
Cancer (Major types of cancer) C: 167
- Primary boycott**
Boycott B: 541
- Primary care**
Medicine (Primary care) M: 366; *picture on* M: 363
- Primary Chronicle** [book]
Russia (Early days) R: 547
- Primary color**
Color (Mixing colorants) Ci: 819-821 *with diagram*;
(Mixing colored lights) Ci: 821-822 *with diagram*

Primary consumer [ecology]
Ecology (Energy flow) E: 54
Forest (The flow of energy) F: 396

Primary cosmic rays
Astronomy (Cosmic-ray astronomy) A: 845
Cosmic rays (Primary cosmic rays) Ci: 1076
with diagram

Primary data
Market research M: 214

Primary election [voting] P: 777
Election (Nomination of candidates) E: 159
Election campaign (Winning the nomination) E: 160
Political convention (Delegate selection) P: 628-629
Political party (Selecting candidates) P: 631

Primary headache
Headache H: 124

Primary highway
Road (Primary highways) R: 358

Primary industry
Industry (Other systems of classification) I: 261

Primary lead [metal]
Lead L: 149

Primary lymphoid organ [physiology]
Immune system (Lymphocytes) I: 87-88

Primary mirror [optics]
Telescope (Reflecting telescopes) T: 104

Primary party organization [Soviet history]
Union of Soviet Socialist Republics (The Communist Party) U: 29

Primary processor [electronics]
Computer (Personal computers) Ci: 909

Primary producer [ecology]
Ecology (Energy flow) E: 54
Forest (The flow of energy) F: 396

Primary rainbow
Rainbow (How to find a rainbow) R: 127

Primary recovery
Petroleum (table) P: 331; (Recovering petroleum) P: 341-342 with picture

Primary root [botany]
Plant (Roots) P: 529 with pictures
Root (Kinds of roots) R: 473 with diagram
Seed (The parts of a seed) S: 281

Primary school [education] See Elementary school in this index

Primary source
History (The evidence) H: 260

Primary succession [biology]
Ecology (Changes in communities) E: 54

Primary teeth
Teeth (Deciduous teeth) T: 79 with picture

Primary tissue [botany]
Root (Secondary tissues) R: 474
Stem (Herbaceous stems) So: 887

Primary wave [physics]
Earthquake (Body waves) E: 34

Primary winding [electricity]
Transformer T: 371 with diagram

Primate [zoology] P: 777 with pictures
Anthropology (Physical anthropology) A: 546
Human being (Scientific classification) H: 413
Mammal (table) M: 128 with picture

Primateology
Primate (The study of nonhuman primates) P: 778c

Primavera, La [painting by Botticelli]
Botticelli, Sandro *picture on* B: 513
Graces G: 296 with picture

Prime factor [mathematics]
Factor (Prime factors) F: 4

Prime meat
Beef (Grades of beef) B: 209

Prime Meridian See Greenwich Meridian in this index

Prime minister [title] P: 778c
Address, Forms of (Officials of the Commonwealth of Nations) A: 53
Australia (The federal government) A: 895
Cabinet (The cabinet system of government) C: 4
England (Government) E: 292-293
Parliament P: 172
President (Types of presidential government) P: 756b
United Kingdom (Government) U: 49; *picture on* U: 50

Prime minister of Canada P: 778c with pictures
Canada, Government of (The prime minister) C: 132

Prime mover [engineering]
Electric generator (Basic principles) E: 170

Prime number [mathematics]
Codes and ciphers (Public-key systems) Ci: 750
Factor F: 4
Number theory N: 605
Sieve of Eratosthenes S: 452

Prime of Life, The [book by Beauvoir]
Beauvoir, Simone de B: 191

Prime of Miss Jean Brodie, The [book by Spark]
Spark, Muriel So: 764

Prime rate
Interest (The prime rate) I: 322

Prime time [television]
Advertising (Television) A: 73-74
Television (Commercial stations) T: 114

Primer [ammunition]
Ammunition (Small-arms ammunition) A: 435 with diagrams; (The primer) A: 435 with diagrams
Artillery (Parts of a gun) A: 762
Firearm (Mechanism) F: 132-133
Rifle (How a rifle works) R: 338

Primer [paint]
Paint (Household paints) P: 23-24; (Industrial paints) P: 24

Primeval history
Genesis G: 83

Priming [agriculture]
Tobacco (Harvesting tobacco) T: 306

Priming charge [explosives]
Detonator D: 167

Primitive blind snake
Snake (Primitive blind snakes) S: 535

Primitive Methodists [religious group]
Methodists (Social change and division) M: 435

Primo de Rivera, José Antonio [Spanish political leader]
Falange Española F: 12

Primo de Rivera, Miguel [Spanish political leader]
Alfonso XIII A: 348
Falange Española F: 12
Spain (The reign of Alfonso XIII) So: 749-750
Spanish Civil War (Background to the war) So: 756

Primogeniture [law] P: 780
Feudalism (The principles of feudalism) F: 82
Jefferson, Thomas (Virginia lawmaker) J: 79

Primordial fireball [astronomy]
Universe (Changing views of the universe) U: 205-206

Primrose [plant] P: 781 with pictures
Flower (Garden perennials) F: 278 with picture; F: 301 with picture

Primrose, William [British violinist] P: 781

Prince [title] P: 781
Address, Forms of (Officials of the Commonwealth of Nations) A: 53

Prince, Morton [American doctor]
Hypnotism (Scientific studies) H: 479-480

Prince, The [book by Machiavelli]
Borgia, Cesare B: 487
Italian literature (Humanism and the Renaissance) I: 494
Machiavelli, Niccolò M: 13

Prince Albert [Saskatchewan] P: 781

Prince Albert National Park [Saskatchewan]
Canada (table: National parks and national park reserves) C: 113
Saskatchewan (Places to visit) S: 136 with picture

Prince Albert Winter Festival [Saskatchewan]
Saskatchewan *picture on* S: 137

Prince Arthur's Landing [former name]
Thunder Bay T: 272

Prince Charles [dog]
English toy spaniel E: 325

Prince Charles [prince of Wales] See Charles, Prince in this index

Prince Charles Foreland [island, Arctic]
Svalbard So: 1013

Prince consort [title] P: 781
Albert, Prince A: 311
Philip, Prince P: 371

Prince Edward Island P: 782 with pictures and maps
Acadia A: 21
Atlantic Provinces A: 868
Canada, Government of *picture on* C: 133
Nova Scotia (The struggle in Acadia) N: 568
See also the list of Related Articles in the Prince Edward Island article

Prince Edward Island, University of
Prince Edward Island (Schools) P: 786

Prince Edward Island National Park
Canada (table: National parks and national park reserves) C: 113

Prince George [city, British Columbia] P: 793 with picture
British Columbia (table: Average monthly weather) B: 624

Prince Hal [literary figure]
Shakespeare, William (*Henry IV*) S: 359

Prince Hall Freemasonry
Masonry (History) M: 267-268

Prince Igor [opera by Borodin]
Borodin, Alexander B: 490

Prince John [literary figure]
Shakespeare, William (*Henry IV*) S: 359

Prince of the United Kingdom [title]
Philip, Prince P: 371

Prince of Wales [title] P: 794
Charles, Prince C: 382
Edward II E: 112
England (The beginnings of Parliament) E: 306
Prince P: 781

Prince of Wales College
Prince Edward Island (Schools) P: 786

Prince of Wales Fort [Manitoba]
Canada (table: National historic sites) C: 114

Prince of Wales Island [Alaska]
Alaska (Coastline) A: 294

Prince of Wales Island
Torres Strait Islands T: 341

Prince Rupert [city, British Columbia] P: 794 with picture

Prince William Forest Park [Virginia]
National Park System (table: National parks and other national parklands) N: 56

Prince William Henry [ship]
Wake Island W: 6

Prince William Sound
Alaska (Coastline) A: 294
Coast Guard, United States (The Coast Guard since World War II) Ci: 738-739

Princely Pleasures at Kenilworth Castle, The [work by Gascoigne]
Gascoigne, George G: 60

Princely states [government]
India (British India) I: 130

Princes Street
Edinburgh E: 77
Scotland *picture on* S: 212

Princess [title]
Address, Forms of (Officials of the Commonwealth of Nations) A: 53
Prince P: 781

Princess Alice [ship]
Shipwreck (table: Major shipwrecks) S: 428

Princess of Clèves, The [book by La Fayette]
French literature (Classical prose) F: 520
La Fayette, Madame de L: 27

Princess of Mars, A [book by Burroughs]
Burroughs, Edgar Rice B: 711

Princess Royal [title]
Prince P: 781

Princess shows [musicals]
Kern, Jerome K: 306
Musical comedy (Musical comedy matures) M: 960

Princeton [New Jersey]
New Jersey (The Revolutionary War) N: 250-251
United States capitals U: 199

Princeton [ship]
Ericsson, John E: 351
Tyler, John (Life in the White House) T: 534

Princeton, Battle of [1777]
Princeton University (Campus buildings) P: 795
Revolutionary War in America (table) R: 276; (Trenton and Princeton) R: 281 with picture and map

Princeton University P: 794 with picture
Football (The history of football) F: 365
New Jersey *picture on* N: 235
Universities and colleges (The oldest U.S. universities and colleges) U: 210
Wilson, Woodrow (University president) W: 320-321

Princip, Gavriilo [Serbian assassin]
Austria-Hungary A: 941
Serbia (History) S: 314
World War I (Beginning of the war) W: 455

Principal [economics]
Bond B: 454

- Interest (Types of interest) I: 321
Mortgage M: 820
- Principal** [law]
See also Trust fund *in this index*
Agent A: 140
Guaranty G: 411
- Principal, School**
High school (High schools in the United States) H: 228
School (Public school districts) S: 182-183; (Public school operation) S: 183
- Principal meridian** [surveying]
Public lands (Management of public lands) P: 858
- Principal Mutual Life Insurance Company**
Insurance (table) I: 315
- Principe Island** [island, Gulf of Guinea]
São Tomé and Príncipe S: 119 *with map*
- Principi, Anthony J.** [American government official]
Bush, George Walker (table) B: 723
Veterans Affairs, Department of (History) V: 344
- Principia Ethica** [book by Moore]
Moore, G. E. M: 796
- Principia Mathematica** [book by Newton]
Châtelet, Marquise Du C: 387
Newton, Sir Isaac (The Principia) N: 389
Physics (Newton) P: 439
Relativity (Inertial frames) R: 210; (General relativity) R: 211
- Principia Mathematica** [book by Russell and Whitehead]
Mathematics (Philosophies of mathematics) M: 307
Russell, Bertrand R: 523
- Principle of ...**
Principles appear under their key words, as in Indeterminacy, Principle of
- Principles and Practice of Medicine** [book by Osler]
Osler, Sir William (His writings) O: 863
- Principles of Economics** [book by Marshall]
Marshall, Alfred M: 228
- Principles of Geology** [book by Lyell]
Evolution (Darwin's theory) E: 432
Geology (Experimental geology) G: 99
Lyell, Sir Charles L: 533
- Principles of Literary Criticism** [book by Richards]
Richards, I. A. R: 329
- Principles of Mathematics** [book by Russell]
Russell, Bertrand R: 523
- Principles of Orchestration** [book by Rimsky-Korsakov]
Rimsky-Korsakov, Nikolai R: 342
- Principles of Philosophy** [book by Descartes]
Descartes, René D: 154
- Principles of Political Economy** [book by Mill]
Mill, John Stuart M: 552
Mill, Harriet Taylor M: 552
- Principles of Political Economy and Taxation** [book by Ricardo]
Ricardo, David R: 321
- Principles of Psychology, The** [book by James]
American literature (Nonfiction writers) A: 420
James, William (Early career) J: 27
Psychology (Psychology becomes a science) P: 849
- Principles of Quantum Mechanics** [book by Dirac]
Dirac, Paul Adrien Maurice D: 217
- Principles of Rational Medicine** [book by Hahnemann]
Hahnemann, Samuel H: 7
- Prins Alexander Polder**
Netherlands (The Polders) N: 144
- Prins Johan Willem Friso** [ship]
Saint Lawrence Seaway (Construction of the seaway) S: 45
- Prinsenhof** [museum, Netherlands]
Delft D: 115
- Print** [art]
Intaglio I: 317
Japanese print J: 62 *with pictures*
World, History of the *picture on* W: 435
- Print** [butter]
Butter (Packaging) B: 730
- Print** [photography] *See* Printing [photography] *in this index*
- Print server** [computer]
Computer (Local area networks [LAN's]) Ci: 922
- Printed circuit** [electronics]
Electronics (Types of electronic circuits) E: 209-210
- Printer** [electronic device] P: 795
Audio-visual materials (Projectors) A: 882
Computer (Printers) Ci: 916 *with picture*
Desktop publishing D: 158
Ink (Printing inks) I: 273
Inkjet printer I: 273
Mechanical drawing (Creating a drawing) M: 354
Printing (Digital printing) P: 801
- Printing** [industry] P: 796 *with pictures*
Advertising (The impact of printing) A: 79
Block printing B: 405 *with pictures*
Book (The development of printed books) B: 466
Careers (Production) C: 229
Caxton, William C: 322
Communication (The rise of printing) Ci: 879-880; (The 1700's) Ci: 880-881 *with picture*; (The 1800's) Ci: 881; *picture on* Ci: 884
Desktop publishing D: 158
Education (The invention of printing) E: 100
Encyclopedia E: 268 *with picture*
English literature (The beginning of Modern English) E: 316
Engraving (Printing the engraving) E: 325
Graphic arts G: 323
Invention (The Renaissance) I: 360
Journalism (Journalism today) J: 175
Korea (Early years) K: 375-376
Library (Paper, printing, and libraries) L: 260
Linotype L: 338
Lithography (How lithography works) L: 387 *with pictures*
Magazine (Editing and assembling an issue) M: 43
Money (Printing paper money) M: 714 *with pictures*
Monotype M: 733
New York (Manufacturing) N: 310
New York City (Industry) N: 333
Newspaper (Printing the newspaper) N: 385 *with picture*
Photoengraving and photolithography P: 405
Publishing (Designing and printing) P: 869
Textile (Finishing the fabric) T: 217 *with picture*
Type T: 536 *with picture*
World, History of the (China) W: 435 *with picture*
See also the list of Related articles in the Printing (industry) article
- Printing** [photography]
Photography (Making a print) P: 411 *with pictures*; (Developing and printing) P: 419 *with pictures*; (Printing black-and-white photographs) P: 421 *with pictures*; (How color prints are made) P: 423 *with pictures*; (Printing color photographs) P: 424 *with pictures*
- Printing** [writing]
Handwriting (Manuscript writing) H: 47; (Learning manuscript writing) H: 47
- Printing, Bureau of Engraving and** *See* Engraving and Printing, Bureau of *in this index*
- Printing House for the Blind** *See* American Printing House for the Blind *in this index*
- Printing paper**
Photography (Printing black-and-white photographs) P: 421
- Printing press**
English literature (The beginning of Modern English) E: 316
Gutenberg, Johannes G: 444 *with picture*
Newspaper (Printing the newspaper) N: 385 *with picture*
Printing (Methods of printing) P: 798 *with diagrams*; (Process color printing) P: 802
Technology (Technological advances) T: 75
- Printz Award**
Literature for children (Awards) L: 366
- Prio Socarrás, Carlos** [Cuban political leader]
Batista y Zaldivar, Fulgencio B: 166
Cuba (The Batista era) Ci: 1177-1178
- Prion** [particle] P: 804
Microbiology (Microorganisms) M: 513
- Prion diseases**
Creutzfeldt-Jakob disease Ci: 1128
Mad cow disease M: 26
- Prior, Edward C.** [Canadian political leader]
British Columbia (table) B: 627
- Prior restraint** [law]
- Journalism (Restrictions on freedom of the press) J: 173
- Priority Mail**
Postal Service, United States (First-Class Mail service) P: 699
- Pripyat Marshes** [swamp]
Belarus (Land) B: 224b
- Priroda earth observatory** [space exploration]
Mir M: 614 *with picture*
- Prism** [geometry] P: 804 *with picture*
Binoculars B: 309 *with diagram*
Color (The relation between color and light) Ci: 817
Light (Electromagnetic waves) L: 285 *with diagram*
Lighthouse (How lighthouses work) L: 294
Rainbow (How rainbows appear) R: 128
Science *picture on* S: 200
Spectrometer So: 772 *with diagram*
- Prismatic layer** [zoology]
Shell (How shells are formed) S: 385
- Prison P: 805** *with pictures*
Criminal justice system (Problems in the correctional system) Ci: 1144
Fry, Elizabeth Gurney F: 549
Howard, John H: 400
Law enforcement (Imprisonment) L: 141
Parole P: 178
Prisons, Federal Bureau of P: 808a
Probation P: 809
State government (Issues confronting state governments) So: 865
See also the list of Related articles in the Prison article
- Prison camp** *See* Concentration camp *in this index*
- Prison guard**
Prison (The prison staff) P: 806
- Prison of Love, The** [book by San Pedro]
Spanish literature (The 1400's) So: 758
- Prisoner for God** [book by Bonhoeffer]
Bonhoeffer, Dietrich B: 459
- Prisoner of Grace** [book by Cary]
Cary, Joyce C: 270
- Prisoner of Second Avenue, The** [play by Simon]
Simon, Neil S: 466
- Prisoner of war P: 808**
Geneva Conventions G: 88
International law (The laws of war) I: 341
Korean War (The truce talks) K: 382; (Prisoner exchange) K: 383
Slavery (The Middle Ages) S: 501
War (The basic rules of warfare) W: 24
- Prisoner's Dilemma**
Game theory G: 22
- Prisons** [etchings by Piranesi]
Piranesi, Giovanni Battista P: 493 *with picture*
- Prisons, Federal Bureau of** [U.S.] P: 808a
Fort Dix F: 412
Prison P: 805
- Prius** [automobile]
Automobile *picture on* A: 973
- Privacy, Right of** [law] P: 808a
Abortion (Abortion in the United States) A: 15
Computer (Computer security) Ci: 924
Roe v. Wade R: 399
- Private** [rank]
Rank, Military (table) R: 140
- Private adoption**
Adoption (The adoption process) A: 66
- Private bill** [legislation]
Congress of the United States (Proposing new laws) Ci: 944
- Private branch exchange** [switch]
Telephone (Business services) T: 98
- Private carrier** [transportation]
Truck (Industrial uses) T: 456
- Private corporation**
Corporation (Business corporations) Ci: 1070
- Private-duty nurse**
Nursing (Private-duty nurses) N: 618
- Private education** *See* Private school *in this index*
- Private enterprise** [economics] *See* Capitalism; Free enterprise system *in this index*
- Private eye** [fiction]
Detective story (History) D: 163
- Private health insurance**
Health insurance, National H: 129
- Private land mobile radio service**
Walkie-talkie W: 15
- Private law**

Law (Branches of law) L: 130; (Law since 1900) L: 136
 Supreme Court of Canada (Authority) So: 996
 United States, Government of the (Functions) U: 138

Private line service
 Telephone (Business services) T: 98

Private Lives [play by Coward]
 Coward, Noël Ci: 1107

Private ownership
 Conservatism (Political conservatism) Ci: 991

Private Papers of Henry Ryecroft, The [book by Gissing]
 Gissing, George Robert G: 202

Private school [education] P: 808a
 Education (Control and support of U.S. education) E: 91; (Control and support of U.S. education) E: 91-92
 Elementary school (Kinds of elementary schools) E: 224
 Parochial school P: 177
 Religious education (Private education) R: 225
 School (Private school operation) S: 183; (Financial support) S: 183

Private theater [English history]
 Shakespeare, William (Theater buildings) S: 352

Privateer [sea raider]
 Kidd, William K: 311
 Pirate P: 494; (Pirates and privateers of the Mediterranean) P: 495

Privateer [ship] P: 808b
 Revolutionary War in America (The fighting forces) R: 278-279

Privatization [economics] P: 808b
 Nationalization N: 63
 Postal services (Competition and privatization) P: 707
 Prison (Reforms in the 1900's) P: 808

Privet [shrub] P: 808b
 Henna H: 185

Privilege [law]
 Evidence (Privilege) E: 426

Privileges, Charter of [1701]
 Pennsylvania (Colonial days) P: 264

Privy Council [British government] P: 808b

Prix Italia [award]
 Television (International television awards) T: 117

Priyadarsika [play by Harsha]
 Harsha H: 77

Prizefighting [sport] See *Boxing in this index*

PRO [organization]
 Hospital H: 371

Pro-choice movement
 Abortion (Abortion methods) A: 14-15

Pro Football Hall of Fame [Ohio]
 Canton C: 184
 Hall of fame (Sports halls of fame) H: 22
 Ohio (Places to visit) O: 690 *with picture*

Pro-life movement
 Abortion (Abortion methods) A: 14-15

Pro-rally
 Automobile racing (Other kinds of racing) A: 979

Pro Stock car
 Automobile racing (Drag racing) A: 978

Proactive interference [psychology]
 Memory (Interference) M: 393

Probability [mathematics] P: 808b
 Fermat, Pierre de F: 73
 Inductive method I: 240
 Insurance I: 309
 Mathematics (Branches of mathematics) M: 303
 Pascal, Blaise P: 189
 Permutations and combinations P: 290
 Ratio R: 148
 Statistics (Analyzing the data) So: 868; (Probability) So: 868-869 *with diagrams*

Probability sampling [statistics]
 Public opinion poll (History) P: 863

Probable cause [law]
 Court (How courts work) Ci: 1101

Probainognathus [extinct animal]
 Evolution *picture on* E: 429

Probate [law] P: 809
 Executor E: 436

Probate court [law]
 Probate P: 809

Probation [law] P: 809
 Criminal justice system (The trial) Ci: 1143-1144
 Law enforcement (Imprisonment) L: 141
 Parole P: 178

Probation officer [official]
 Probation P: 809

Probe [instrument]
 Thermometer (Resistance thermometers) T: 255 *with diagram*

Probe [tool]
 Inuit (Hunting and fishing) I: 354d

Probe, Space See *Space probe in this index*

Probenecid [drug]
 Gout G: 281

"Problem, The" [poem by Emerson]
 Emerson, Ralph Waldo (His poetry) E: 259

Problem play [drama]
 French literature (Realism) F: 521-522

Problem solving
 Artificial intelligence (Planning and problem solving) A: 760
 Dewey, John D: 176
 Education (How people learn) E: 96
 Statistics (Using statistics to study problems) So: 868
 Thorndike, Edward Lee T: 267

Problems of Lasting Peace, The [book by Hoover]
 Hoover, Herbert Clark (Elder statesman) H: 330

Proboscidea [zoology]
 Elephant (Protecting elephants) E: 231
 Mammal (table) M: 128 *with picture*

Proboscis [zoology]
 Insect (Mouthparts) I: 286-287 *with diagram*
 Butterfly (The head) B: 738 *with diagram; picture on* B: 732
 Fly (Head) F: 309 *with diagram*
 Gnat G: 237
 Mosquito (The body of a mosquito) M: 831-832 *with diagram*
 Moth (The head) M: 837-838 *with diagram*
 Ribbon worm R: 321

Proboscis monkey [animal] P: 809 *with picture*
 Monkey *picture on* M: 728

Proboscis worm See *Ribbon worm in this index*

Probus [Roman emperor]
 Rome, Ancient (table) R: 447

Procaine [medication] P: 809
 Benzocaine B: 255

Procardia [drug]
 Calcium channel blocker C: 21

Procaryotic cell
 Life (Cells) L: 276-277

Procedural due process [law]
 Due process of law D: 378

Proceeds [economics]
 Discount (Bank discount) D: 224

Process [equipment]
 Automation (How automation works) A: 945

Process and Reality [book by Whitehead]
 Whitehead, Alfred North W: 293

Process cheese
 Cheese (Process cheese) C: 394

Process color printing
 Printing (Process color printing) P: 802 *with pictures*

Processed meats
 Pork P: 679

Processing-catcher vessel [ship]
 Fishing industry (How fish are caught) F: 183

Procession of Boats with Distant Smoke, Venice [painting by Turner]
 Turner, J. M. W. *picture on* T: 515

Processional Street [Babylon]
 Babylon (The New Babylonian Empire) B: 12

Processor [electronics]
 See also *Microprocessor in this index*
 Computer (Parts of computers) Ci: 911
 Electronics (Digital circuits) E: 213-214

Prochain episode [book by Aquin]
 Canadian literature (Modern literature: 1945 to the present) C: 160

Proclamation [government] P: 810

Proclamation of Amnesty and Reconstruction [1865]
 Lee, Robert Edward (Last years) L: 178

Proclamation of 1763 [U.S. history]
 Colonial life in America (The struggle for land) Ci: 791-792
 Pioneer life in America (Pioneers and Indians) P: 485
 Revolutionary War in America (The Proclamation of 1763) R: 272
 Westward movement in America (The Proclamation of 1763) W: 246

Proclus [Greek philosopher]
 Euclid E: 376
 Neoplatonism N: 124

Procompsognathus [extinct animal]
 Dinosaur *picture on* D: 206d

Procter & Gamble Company
 Manufacturing (table) M: 170

Proctology
 Surgery (Other specialty fields) So: 1007

Proctor [Vermont]
 Vermont (Places to visit) V: 326

Proctor, Fletcher D. [American political leader]
 Vermont (table) V: 333

Proctor, Henry A. [British general]
 War of 1812 (Thames River) W: 33

Proctor, Mortimer R. [American political leader]
 Vermont (table) V: 333

Proctor, Redfield [American political leader]
 Harrison, Benjamin (table) H: 72
 Vermont (table) V: 333

Proctor, Richard A. [British astronomer]
 Moon (Determining the origin of craters) M: 793-794

Procynosuchus [extinct animal]
 Evolution *picture on* E: 429

Procyon [star]
 Star (table: The 10 brightest stars as seen from Earth) So: 842

Produce [agriculture]
 Truck farming T: 458

Producer [career]
 Motion picture (How motion pictures are made) M: 848; (Development) M: 848; (Preproduction) M: 849-851; (The rough and fine cuts) M: 855-856; (Distribution) M: 860
 Recording industry (In a recording studio) R: 181
 Television (Planning and preparation) T: 110c-110d
 Theater (The producer) T: 235

Producer-director [occupation]
 Television (Producing television programs) T: 110c-110d

Producer gas [fuel]
 Carbon monoxide C: 207
 Gas [fuel] (How gas is manufactured) G: 57

Producer goods See *Capital goods in this index*

Producer Price Index [economics]
 Inflation (Measuring inflation) I: 267

Product
 Algebra (Multiplication) A: 355
 Arithmetic (Multiplication) A: 667
 Multiplication (Writing multiplication) M: 921

Product character [symbol]
 Advertising (Product characters) A: 76a

Product development
 Marketing (Product development) M: 214

Product liability insurance
 Insurance (Other kinds of property and liability insurance) I: 313-314

Product liability suit [law] P: 810
 Consumerism (The right to safety) Ci: 1018

Product pipeline
 Pipeline (Liquid pipelines) P: 490-491

Product safety
 Consumerism (The right to safety) Ci: 1018

Production [economics] P: 810
 Business (Specialized departments) B: 725-726
 Communism (The centrally planned economy) Ci: 891
 Economics E: 57; (Economic problems) E: 58
 Food (Production) F: 334
 Manufacturing (Kinds of manufacturing) M: 169
 Marx, Karl (*Das Kapital*) M: 237
 Trade (Trade and specialization) T: 361

Production, Mass See *Mass production in this index*

Production, Means of [economics] See *Means of production in this index*

Production brigade [political unit]
 China (Rural life) C: 483

Production car
 Automobile racing A: 975 *with picture*

Production control [industry]
 Manufacturing (Making products) M: 170-171

Production coordinator See *Production manager in this index*

Production Credit Association [U.S.]
 Farm Credit System (Organization) F: 45

Production line [industry] See *Assembly line in this index*

Production manager [career]
 Motion picture (Assembling the production team) M: 850

- Television (Producing television programs)
T: 110c-110d
- Production well**
Well (Oil and natural gas wells) W: 193
- Production worker**
Careers (Production) C: 229 *with picture*
- Productive resources**
Economics (Making the economy grow) E: 59
with picture
Industry (What industry needs for production)
I: 256-257
- Productivity** [economics] P: 810
Industry (Labor productivity) I: 259
Taxation (Productivity) T: 54
- Profane Prose** [book by Dario]
Dario, Rubén D: 36
- Profession** [religion]
Religious life R: 226
- Profession, Choice of** See *Careers in this index*
- Professional Bowlers Association**
Bowling (Professional bowling) B: 524
- Professional Chess Association**
Chess (History) C: 415
Kasparov, Garry K: 248
- Professional fraternity** [organization]
Fraternity (Professional fraternities) F: 496
- Professional Golfers' Association**
Golf (Tournaments) G: 264; (PGA
Championship) G: 265; (The rise of pro-
fessional golf) G: 266
- Professional leave**
Teaching (Rewards of teaching) T: 69
- Professional liability insurance**
Insurance (Other kinds of property and liability
insurance) I: 313-314
- Professional nurse**
Nursing N: 617
- Professional profit** [religion]
Prophet P: 827
- Professional school**
Careers (Professional and graduate schools)
C: 217
- Professional Ski Instructors of America**
Skiing (Ski instruction) S: 486
- Professional Sports Car Racing, Inc.**
Automobile racing (Racing organizations)
A: 976
- Professional standards review organizations**
Hospital H: 371
- Professional theater**
Theater (Theater in the United States) T: 244
with pictures
- Professional Women's Bowling Association**
Bowling (Professional bowling) B: 524
- Professor**
Address, Forms of (Other forms) A: 54
Universities and colleges (Faculty) U: 208
- Professor, The** [book by Brontë]
Brontë sisters (Their works) B: 637
- Proficiency pay**
Rank, Military (Rank and pay) R: 140
- Profile Mountain**
New Hampshire (Places to visit) N: 216;
(Mountains) N: 220
White Mountains W: 291
- Profiles in Courage** [book by Kennedy]
Kennedy, John Fitzgerald (Senator Kennedy)
K: 262-263
- Profit** [economics] P: 810
Business (Profits) B: 724
Capitalism (Capitalism in its ideal form) C: 194
Economics (Business and profits) E: 60
Investment (Kinds of investments) I: 366
Percentage (Profits) P: 282
- Profit motive**
Business (Profits) B: 724
- Profit sharing** [economics] P: 811
Bonus B: 463
Pension (Private pension plans) P: 273
- Progeria** [disease] P: 811
- Progesterone** [hormone] P: 811
Hormone (Growth and sex hormones) H: 336
Hormone replacement therapy H: 338
Julian, Percy Lavon J: 187
Menstruation (Luteal phase) *diagram on*
M: 403; (The menstrual cycle) M: 404
Miscarriage M: 617
Ovary O: 881
Pregnancy (How pregnancy affects women)
P: 734b
Reproduction, Human (The human reproduc-
tive system) R: 244-245
Steroid (The sex steroids) So: 894
- Prograde motion** [astronomy]
Planet (How planets move) P: 508
- Program** [computer]
Calculator C: 22
Computer Ci: 909; (Programming a computer)
Ci: 923
Computer graphics Ci: 924f
Computerized instruction (How computerized
instruction works) Ci: 924h
Database D: 41
Desktop publishing D: 158
Interactive program I: 320
Teaching (Guiding and assisting student learn-
ing) T: 66
- Program director** [career]
Radio (Careers) R: 91
- Program mode**
Camera (Automatic controls) C: 80-81
- Program music**
Berlioz, Hector B: 267
Classical music (The Romantic era) Ci: 648-
649
- Program signal**
Radio (From electric waves to radio waves)
R: 86
- Program symphony** [music]
Classical music (The Romantic era) Ci: 648-
649
- Programmable calculator**
Calculator C: 22
- Programmable decision**
Management information systems M: 132
- Programmable machine control**
Machine tool (Numerical control of machine
tools) M: 19-20
- Programmed cell death** [biology] See
Apoptosis in this index
- Programmed instruction** [education]
Computerized instruction (Development of
computerized instruction) Ci: 925
Skinner, B. F. S: 495
- Programmed Logic for Automatic Teaching
Operations** [software] See *PLATO in this
index*
- Programmer** [occupation]
Careers (Technical and mathematical occupa-
tions) C: 232 *with picture*
Computer (Programming a computer) Ci: 923;
(Careers) Ci: 924a
- Programming** [computer]
Computer (Programming a computer) Ci: 923
Hopper, Grace Murray H: 334
- Programming** [television]
Television (Producing television programs)
T: 110c
- Programming language** See *Computer lan-
guage in this index*
- Programming service**
Television (Cable and satellite systems) T: 115
- Progress** [space station]
Mir M: 613 *with picture*
Space exploration (Salyut and Skylab) So: 721
- Progress and Poverty** [book by George]
George, Henry G: 108
- Progress of Love, The** [painting by Fragonard]
Fragonard, Jean Honoré F: 451
- "Progress of Poesy, The"** [poem by Gray]
Gray, Thomas G: 335
- Progress Party** [Denmark]
Denmark (Politics) D: 133-135
- Progression** [mathematics] P: 811
- Progressive Conservative Party** [political party]
P: 812
Campbell, Kim C: 90b
Canada, Government of (Political parties)
C: 138
Charest, Jean C: 378
Clark, Joe Ci: 639
Diefenbaker, John George (Member of
Parliament) D: 197
Mulroney, Brian M: 916
Saskatchewan (Economic changes) S: 147
- Progressive education** P: 812 *with picture*
Education (Development of U.S. education)
E: 102-104 *with picture*
Winnetka Plan W: 339
- Progressive Era** [U.S. history]
United States, History of the (Reform) U: 181
with picture
- Progressive form** [grammar]
Conjugation Ci: 951
Tense T: 171
- Progressive income tax**
Income tax (Effects on the economy) I: 104
Recession (Fighting recession) R: 175
- Progressive Liberal Party** [political party]
Bahamas (History) B: 29
- Progressive movement** [U.S. history] P: 813
with picture
United States, History of the (Reform) U: 181
- Progressive Party** [Canada]
Political party (Other parties) P: 636
- Progressive Party** [U.S. history] P: 814
Political party (Third parties) P: 636
Bull Moose Party
Progressive Party (The "Bull Moose" Party)
P: 814
Republican Party (The party splits) R: 256
Roosevelt, Theodore ("Bull Moose" candi-
date) R: 471-472
Taft, William Howard (Election of 1912)
T: 12
United States, History of the (The
Progressive Era) U: 181-182
- La Follette Progressives**
Progressive Party (The La Follette
Progressives) P: 814
Coolidge, Calvin ("Keep Cool with
Coolidge") Ci: 1033
La Follette, Robert Marion, Sr. L: 29
La Follette, Robert Marion, Jr. L: 29
- Progressive Party of 1948**
Progressive Party (The Progressive Party of
1948) P: 814
Truman, Harry S. (Election of 1948) T: 470
Wallace, Henry Agard W: 16
- Progressive Republicans** [U.S. history]
Kansas (Spirit of reform) K: 237
- Progressive rock** [music]
Rock music (Expanding styles and sounds)
R: 378-379
- Progressive scanning** [electronics]
Television (Digital television) T: 126-127
- Progressive tax**
Income tax (Types of income taxes) I: 102
Taxation (Equity) T: 54
- Progressive wave**
Waves (How waves move) W: 152
- Progressivism** [political science]
La Follette, Robert Marion, Sr. L: 29
Progressive movement P: 813
Wisconsin W: 346; (History) W: 365-366
- Prohibition** [Canadian history]
Prohibition (Prohibition in Canada) P: 816
- Prohibition** [U.S. history] P: 814 *with picture*
Chicago (The Roaring Twenties) C: 436
Constitution of the United States (Amendment
18) Ci: 1014; (Amendment 21) Ci: 1015
Hoover, Herbert Clark (Election of 1928) H: 329
Illinois (Prohibition and the Great Depression)
I: 75 *with picture*
Local option L: 409
Maryland (The early 1900's) M: 259
Nassau N: 24
Nation, Carry Amelia Moore N: 26
Ness, Eliot N: 136
Roaring Twenties (Changing attitudes) R: 363
United States, History of the (Change and
problems) U: 185
Volstead Act V: 445
Woman's Christian Temperance Union W: 381
- Prohibition Party** [political party] P: 816
Political party (Third parties) P: 636
Prohibition (Prohibition in the United States)
P: 815
- Project ...**
*Projects appear under their key words, as in
HOPE, Project*
- Project factory** See *Job factory in this index*
- Project for Perpetual Peace** [book by Saint-
Pierre]
Peace (From the 1400's to the 1700's) P: 206
- Projectile** [physics]
Ballistics (Interior ballistics) B: 56 *with picture*
Ammunition A: 434
Rocket R: 384
Torpedo T: 340b *with diagram*
- Projection** [cartography] See *Map projection in
this index*
- Projection copying**
Copying machine (Projection copying) Ci: 1046
- Projection printing**
Photography (Printing black-and-white pho-
tographs) P: 421-422
- Projection screen** P: 816
- Projection television system**
Television (Projection television systems)
T: 124; (Technological advances) T: 125-
126 *with picture*

Projective test [psychology]

Psychology (Systematic assessment) P: 848
 Graphology G: 323

Projector [machine] P: 816 *with pictures*

Audio-visual materials (Projectors) A: 882
 Edison, Thomas Alva (Motion pictures) E: 80
 Motion picture (The projector) M: 859 *with pictures*
 Planetarium (Modern planetariums) P: 514a
with picture

Prokaryote [biology] P: 817

Algae A: 349
 Animal A: 468
 Archaea A: 593
 Bacteria B: 19
 Classification, Scientific (Groups in classification) Ci: 654-655
 Kingdom K: 328
 Plant P: 516
 Protist P: 836

Prokaryotic cell [biology]

Cell (table) C: 327

Prokhorov, Alexander Mikhailovich [Russian physicist] P: 817

Basov, Nikolai Gennadiyevich B: 155
 Laser (History) L: 86

Prokofiev, Sergei Sergeyevich [Russian composer] P: 817**Prolactin** [hormone]

Hormone (Endocrine control hormones) H: 336

Prolate spheroid [geometry]

Spheroid So: 780

Proleg [zoology]

Butterfly (The larva) B: 740-741 *with diagram*
 Caterpillar (Appearance) C: 300

Proletarian literature

Russian literature (From 1917 to 1920) R: 564

Proletariat [sociology]

Communism (The ideas of Marx) Ci: 890
 Lenin, V. I. (Beginnings of revolution) L: 192
 Marx, Karl (*Das Kapital*) M: 237

Prologue [literature] P: 817**Prometheus** [Greek mythology] P: 817 *with picture*

Deucalion D: 171
 Hercules (Other adventures) H: 199
 Pandora P: 130

Prometheus Unbound [poem by Shelley]

English literature (Romantic poetry) E: 320
 Shelley, Percy Bysshe (His writings) S: 391

Promethium [element] P: 818**Prominace** [astronomy]

Sun (Solar activity) So: 980-981 *with picture; pictures on* So: 985

Promise, Breach of [law]

Breach of promise B: 587

Promise, Scout See Scout Promise in this index**Promissory note** [economics]

Note N: 550
 Bill (In bookkeeping) B: 300
 Commercial paper Ci: 872
 Negotiable instrument (Forms) N: 119

Promontory [geography]

Cape C: 186

Promontory [Utah]

Railroad (The first transcontinental rail lines) R: 116 *with picture*

Promoter

Boxing (Financing) B: 530
 Blue-sky laws B: 421

Promotion

Careers (Chances for advancement) C: 216
 Rank, Military (Promotion) R: 140

Promotion [chess]

Chess (The moves) C: 413

Promotion [selling]

Marketing (Promotion) M: 214
 Sales S: 62

Promptbook

Shakespeare, William (Folios) S: 368

Prompter

Opera picture on O: 796

Pronghorn [animal] P: 818 *with picture*

Animal picture on A: 476
 Horn H: 338

Pronoun [grammar] P: 819

Antecedent A: 541
 Case (Pronouns) C: 272
 Declension D: 80
 Gender (Personal pronouns) G: 80
 Person P: 301
 A Guide to Writing Skills Research Guide: 9

Prontosil [medication]

Dornagk, Gerhard D: 300

Drug (The drug revolution) D: 359

Sulfa drug (Development of sulfa drugs) So: 965-966

Pronunciation [speech] P: 820

Accent A: 22
 Dictionary (What a dictionary tells you) D: 193
 English language (Pronunciation and spelling) E: 312
 Liping L: 349
 Phonics P: 400

Pronzini, Bill [American author]

Muller, Marcia M: 915

Proof [alcohol]

Alcoholic beverage (Distilled beverages) A: 336

Proof [mathematics]

Geometry (Axiomatic organization) G: 102
 Mathematics (The Greeks) M: 306

Proof [printing]

Magazine (Editing and assembling an issue) M: 43

Printing (Typesetting) P: 797

Proofreading P: 822

Publishing (Designing and printing) P: 869

Proof coin

Coin collecting (Collecting United States coins) Ci: 757-758

Proofreaders' marks [printing]

Proofreading P: 822 *with pictures*

Proofreading [printing] P: 822

Encyclopedia (Basic steps in the preparation of a World Book article) E: 268 *with picture*

Printing (Typesetting) P: 797

Prop

Theater (Properties and set dressing) T: 240
 Television (Planning and preparation) T: 110c-110d

Prop root [botany]

Corn (How the plant develops) Ci: 1057-1058 *with picture*

Root (Kinds of roots) R: 473-474 *with diagram*

Propaganda P: 823 *with pictures*

Central Intelligence Agency C: 356
 Communication (Communications and politics) Ci: 888
 Guerrilla warfare (Modern guerrilla techniques) G: 420
 Psychological warfare P: 846
 Public opinion (Public opinion and government) P: 861
 World War II (Propaganda) W: 493 *with picture*

Propagation [biology]

See also Breeding in this index
 Grape (Planting and cultivating) G: 320
 Plant (Vegetative propagation) P: 535 *with diagrams*

Propagation of the Faith, Congregation for the [organization]

Missionary (Organization) M: 621
 Propaganda (History) P: 824

Propagation of the Faith, Society for the [organization]

Sheen, Fulton John S: 379

Propalladia [book by Torres Naharro]

Spanish literature (The 1500's) So: 758-759

Propane [fuel]

Balloon (Hot-air balloons) B: 57
 Butane and propane B: 728
 Natural gas liquids N: 64

Propanol [chemical]

Alcohol (Propanol) A: 335

Propecia [drug] See Finasteride in this index**Propellant** [ammunition]

Ammunition (Small-arms ammunition) A: 435 *with diagrams*; A: 435 *with diagrams*

Propellant [fuel]

Aerosol A: 89
 Guided missile (The engine) G: 424 *with diagrams*
 Rocket (Rocket propellant) R: 385; R: 388 *with diagrams*

Space exploration (Getting into space and back) So: 698

Propeller P: 826 *with pictures*

See also Airplane propeller in this index
 Ducted propeller D: 377
 Motorboat racing (Engine designs) M: 876
 Ship (Development of the ship propeller) S: 412; (The chief parts of a ship) S: 424-425

Proper adjective [grammar]

Adjective (Classifying adjectives) A: 57

Proper fraction [mathematics]

Fraction (Improper fractions) F: 449

Proper lunar month

Month M: 767

Proper noun [grammar]

Capitalization C: 196
 Noun (Proper and common nouns) N: 553

Propertius [Roman author]

Latin literature (The Augustan Age) L: 116

Property [film]

Motion picture (Developing the story) M: 848-849

Property [law] P: 826

See also Real estate in this index

Abandonment A: 4
 Colonial life in America (Economic reasons) Ci: 787; (The struggle for land) Ci: 791; (Voting and other rights) Ci: 794-795
 Davis, Paulina Wright D: 49
 Divorce (Divorce provisions) D: 253
 Eminent domain E: 260
 Law (Private law) L: 130; (Beginnings of U.S. law) L: 136

Lease L: 166

Marx, Karl M: 236

Torrens system T: 340d

Trespass T: 436

Vandalism V: 278

Women's movements (The beginnings of women's movements) W: 385

See also the list of Related Articles in the Property article

Property, Personal

Personal property [Personal property] P: 302

Property insurance

Insurance (Property and liability insurance) I: 312; *diagram on* I: 310

Property interest [law]

Property P: 827

Property manager [career]

Television (Producing television programs) T: 110c-110d

Property tax P: 827

California (The late 1900's) C: 63
 Education (Control and support of U.S. education) E: 91-92; (How should education be financed?) E: 108
 Metropolitan area (Finances and taxation) M: 443

Taxation (Property taxes) T: 52

Prophase [biology]

Cell (Mitosis) C: 330

Prophet [religion] P: 827

Indian, American (Prophets) I: 148
 Islam (Teachings and practices) I: 463
 Jews (The divided kingdom) J: 121
 Religion (Judaism) R: 219

Prophet, The [book by Gibran]

Gibran, Khalil G: 187

Prophète, Le [opera by Meyerbeer]

Meyerbeer, Giacomo M: 479

Prophets, The [books, Old Testament]

Bible (Books of the Hebrew Bible) B: 279-280; (Development of the Hebrew Bible) B: 281

Old Testament (Contents) O: 740-741

Prophet's Camel Bell, The [book by Laurence]

Laurence, Margaret L: 122

Prophylaxis [medicine] P: 827**Propionibacterium acnes** [bacteria]

Acne A: 28

Propiipithecoid [animal]

Primate (The evolution of primates) P: 778b

Propontis

Marmara, Sea of M: 216

Proportion [mathematics] P: 827

Geometry (Similarity) G: 102-103

Proportional control thermostat

Thermostat (How thermostats work) T: 256

Proportional divider [instrument]

Divider D: 241

Proportional representation [government]

P: 828

Democracy D: 120

Proportional spacing

Typewriter (How a typewriter works) T: 538-539

Proportional tax

Income tax (Types of income taxes) I: 102

Proposition [logic]

Debate (Propositions) D: 63
 Deductive method D: 81
 Truth table T: 475

Proposition 13

- California (The late 1900's) C: 63
Local government (Financial difficulties) L: 408
- Proposition 187**
California (The late 1900's) C: 63-64
- Proposition 209**
Affirmative action A: 91
- Propositional function** [logic]
Truth table T: 475
- Propranolol** [drug]
Beta-blocker B: 274
- Proprietary colony** [U.S. history]
Colonial life in America (Changes in colonial control) Ci: 790
South Carolina (Colonial days) So: 659
United States, History of the (The thirteen colonies) U: 152
- Proprietary hospital**
Hospital (Type of ownership) H: 371
- Proprietary material**
Public domain P: 855
- Proprietary school**
Adult education (Proprietary schools) A: 69
School (Other kinds of schools) S: 182
Vocational education (Proprietary schools) V: 434
- Proprietorship**
Business (Single proprietorships) B: 725
- Propyl alcohol** See Propanol in *this index*
- Propylaea** [building, Athens]
Athens (The Acropolis and its buildings) A: 856
- Propylene** [chemical]
Glycerol (Production) G: 237
- Prosaurolophus** [dinosaur]
Dinosaur (True dinosaurs) D: 206b-206c
- Proscenium** [theater]
Theater (The stage) T: 233 *with picture*
Drama (The Italian stage) D: 330-331
- Prose** [literature] P: 828
English literature (Prose writings) E: 317;
(Restoration prose) E: 318; (Romantic prose) E: 320
Greek literature (Historical literature) G: 377;
(The Greco-Roman Age) G: 378
Irish literature (Heroic tales, romances, and sagas) I: 430
See also the list of *Related Articles in the Prose article*
- Prose Edda** [book by Snorri]
Edda E: 74
- Prose poem** [literary form]
Baudelaire, Charles B: 173
- Prosecuting attorney**
Court (How courts work) Ci: 1101
District attorney D: 240
Law enforcement (Trial) L: 141
Trial T: 437
- Prosecutor-general** [office]
Russia (Courts) R: 532
- Proserpina** [mythology] See Persephone in *this index*
- Prosimian** [zoology]
Primate P: 777; (Kinds of primates) P: 777 *with pictures*
- Proslavery movement** [U.S. history] P: 828
Slavery (Views of slavery) S: 502-503
- Prosligion** [book by Anselm]
Anselm, Saint A: 519
- Proso millet** [grain]
Millet M: 555
- Prosoma** [biology]
Horseshoe crab H: 368
- Prosopopéia** [book by Teixeira Pinto]
Latin-American literature (Colonial literature) L: 111
- Prospect Creek** [Alaska]
United States (Climate) U: 126 *with picture*
- Prospect Park** [park]
New York City (Brooklyn) N: 326-328
- Prospecting** P: 829
Gold (Gold deposits) G: 252
Gold rush G: 254 *with picture*
Western frontier life in America (Life in the country) W: 237
Westward movement in America (California) W: 249 *with picture*
- Prospecting** [sales]
Sales (Prospecting) S: 62
- Prospectus** [report]
Initial public offering I: 271
- Prospero** [literary figure]
Shakespeare, William (*The Tempest*) S: 365 *with picture*
- Prosser, Gabriel** [American slave revolt leader]
See Gabriel in *this index*
- Prost, Alain** [French race driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Prostaglandin** [physiology] P: 829
Abortion (Abortion methods) A: 14-15
Aspirin A: 816
Fever F: 83
Ulcer U: 15
- Prostate cancer** [disorder] P: 829
Cancer (Classification by primary body site) C: 167-168; (table) C: 170
- Prostate gland** [anatomy] P: 830
Gland (table) G: 209
Human body *diagram on H: 422*
Incontinence I: 106
Prostate cancer P: 829
Reproduction, Human (The human reproductive system) R: 244-245 *with diagram*
Vasectomy V: 287
- Prostate-specific antigen** [protein]
Prostate cancer P: 829
- Prosthesis** [medicine]
Artificial limb A: 760 *with picture*
Prosthetics P: 830 *with picture*
- Prosthetic group** [physiology]
Enzyme (Structure) E: 341
- Prosthetics** [medicine] P: 830 *with picture*
- Prosthodontics** [medicine]
Dentistry (Prosthodontics) D: 144
- Prostitution** P: 830
Bath (History) B: 164
- Prostrate spurge** [plant]
Spurge So: 810
- Protectinium** [element] P: 831
- Protagoras** [Greek philosopher]
Oratory (Beginnings) O: 818
Sophists So: 595
- Protagoras** [book by Plato]
Plato (The dialogues) P: 567
- Protea** [tree] P: 831 *with picture*
- Protease inhibitor** [drug]
AIDS (Treatments) A: 164
- Protection**
Animal (How animals protect themselves) A: 493 *with pictures*; (Providing protection) A: 500; (How human beings protect animals) A: 505 *with picture*
Clothing (Protection) Ci: 688 *with picture*
Free trade F: 499
- Protection from abuse order** [law]
Restraining order R: 263
- Protection of wildlife**
Wildlife conservation W: 303
- Protective order** [law]
Restraining order R: 263
- Protection piece**
Climbing (Technical climbing) Ci: 680
- Protectionism** [trade policy]
International trade (Government trade policies) I: 348
- Protectionists** [Australian history]
Australia (The birth of a new nation) A: 924
- Protective clothing**
Army *picture on A: 725*
Hockey (Equipment) H: 276 *with pictures*
- Protective coloration** [biology] P: 831 *with pictures*
See also *Mimicry in this index*
Animal (Camouflage) A: 493 *with pictures*
Bird (Protection against enemies) B: 355
Butterfly (How butterflies protect themselves) B: 742 *with picture*
Fish (Skin and color) F: 160; (How fish protect themselves) F: 165-166 *with picture*
Flounder F: 267 *with picture*
Grasshopper *picture on G: 327*
Hummingbird (The ruby-throated hummingbird) H: 435
Insect (Protection from enemies) I: 297 *with picture*
Lizard (Defenses) L: 400
Mammal (Methods of attack and defense) M: 126 *with picture*
Moth *picture on M: 837*
Plant *picture on P: 545*
Reptile (Protection) R: 252
- Protective resemblance** See *Mimicry in this index*
- Protective tariff** [economics]
Tariff (Main kinds of tariffs) T: 43
Republican Party (Political inactivity) R: 255
- Protectorate, The** [English history]
England (table) E: 308; (The Civil War) E: 308-309
- Protein P: 832 with diagram**
Amino acid A: 432
Cell (The nucleus) C: 328; (Producing proteins) C: 333 *with diagrams*
Decay D: 67
Enzyme E: 340
Fat substitute F: 53
Food (Building and repairing tissues) F: 331
Food supply (Protein) F: 346
Hereditry H: 200; (The flow of genetic information) H: 205
Human body (Chemical elements and molecules) H: 417
Kwashiorkor K: 398
Life (Proteins) L: 278
Lymphatic system (Absorption of fats) L: 535
Metabolism (Anabolism) M: 424
Milk (Proteins) M: 546
Molecular biology (The beginning of molecular biology) M: 691-692
Nitrogen (Nitrogen and life) N: 425
Nutrition (Kinds of nutrients) N: 625; (Deficiency diseases) N: 630
Pellagra P: 232
Prion P: 804
RNA R: 357
Soybean So: 689; (Soy meal) So: 690
Vegetarianism V: 295
- Protein-calorie malnutrition** See Protein-energy malnutrition in *this index*
- Protein-energy malnutrition**
Food supply (Basic human food needs) F: 346
Malnutrition M: 111
Nutrition (Deficiency diseases) N: 630
- Proterozoic Eon** [geology]
Earth (Age of Earth) E: 26
- Protest** See Social protest in *this index*
- Protest** [legal document]
Note (Liability of the maker) N: 550
- Protest song** [music]
Rock music (Expanding styles and sounds) R: 378
- Protestant Episcopal Church** [religious group]
Episcopal Church E: 344
- Protestant ethic** [ethics] P: 833
Reformation (Political and social influences) R: 198
- "Protestant Ethic and the Spirit of Capitalism, The"** [essay by Weber]
Protestant ethic P: 833
Weber, Max W: 176
- Protestant Old Order Amish** [sect]
Evolution (Genetic drift) E: 429
- Protestant Reformation** See Reformation in *this index*
- Protestantism** [religion] P: 833
Arminius, Jacobus A: 719
Augsburg Confession A: 885
Calvin, John C: 70
Christianity (The Reformation) C: 526
Congregationalists Ci: 940f
Counter Reformation (Counteracting Protestantism) Ci: 1096
Divorce (The divorce rate) D: 254-255
England (The English Reformation) E: 307
Evangelicalism E: 422
Family (Development of the Western family) F: 22
Fundamentalism F: 557
Grace G: 296
Hus, John H: 456
Knox, John K: 358
Latin America (Religion) L: 99
Luther, Martin L: 527
Melancthon, Philipp M: 388
Minister M: 578
Missionary (Organization) M: 621
National Council of Churches N: 32
Northern Ireland N: 521; (Protestant settlement) N: 524
Old Testament (Contents) O: 740
Orange Order O: 817
Parochial school P: 178
Protestant ethic P: 833
Reformation R: 195
Religion (How the major religions are organized) R: 218; (Christianity) R: 222
Religious life (Religious life in the 1500's and 1600's) R: 227; (Religious life in the 1700's and 1800's) R: 227
Wesley, John W: 197

- Women's movements (From the Renaissance to the 1800's) **W**: 384
 Wycliffe, John **W**: 515
 Zwingli, Huldreich **Z**: 614
See also the list of Related Articles in the Protestantism article
- Proteus** [Greek mythology]
 Helen of Troy **H**: 168
 Poseidon **P**: 697
- Proteus** [literary figure]
 Shakespeare, William (*The Two Gentlemen of Verona*) **S**: 357
- Proteus syndrome** [disorder]
 Neurofibromatosis **N**: 152
- Prothallium** [botany]
 Fern (Life cycle of a fern) **F**: 75
- Prothrombin**
 Anticoagulant **A**: 553
- Protist** [organism] **P**: 836
 Algae **A**: 349
 Animal **A**: 468
 Classification, Scientific (Groups in classification) **Ci**: 654-655
 Kingdom **K**: 328
 Plant **P**: 516
- Protium** [isotope]
 Atom (The mass number) **A**: 871-872 *with diagram*
 Hydrogen (Properties) **H**: 469
- Proto-Indo-European** [language]
 English language (Origins) **E**: 313
 Etymology (Etymons and cognates) **E**: 375
 Linguistics (Comparative and historical research) **L**: 337
- Protoceratops** [dinosaur]
 Dinosaur (True dinosaurs) **D**: 206b-208
- Protocol** [computing]
 Computer (Internet software) **Ci**: 922
 Internet (History of the Internet) **I**: 350e
- Protocol** [document] **P**: 836
- Protocol** [etiquette]
 Etiquette **E**: 373
- Protolanguage**
 Language (The science of language) **L**: 66-67
 Linguistics (Comparative reconstruction) **L**: 336
- Proton** [atomic particle] **P**: 836
 Alpha particle **A**: 381
 Atom (The parts of an atom) **A**: 870 *with diagrams*; (The properties of atoms) **A**: 871 *with diagrams*; (Forces in the nucleus) **A**: 873
 Baryon **B**: 122
 Cosmic rays (Galactic cosmic rays) **Ci**: 1076
 Electricity (Electric charge) **E**: 191 *with diagram*
 Electron **E**: 204
 Electronics (How a circuit works) **E**: 208
 Element, Chemical (The periodic table of the protons) **E**: 219
 Force (Kinds of force) **F**: 370
 Gluon **G**: 236
 Kendall, Henry Way **K**: 258
 Matter (Structure of matter) **M**: 310
 Nuclear energy (Atoms and nuclei) **N**: 581 *with diagram*; (Nuclear fission) **N**: 582
 Nuclear physics **N**: 595
 Particle accelerator (Uses of accelerators) **P**: 184
 Physics (Uncovering the secrets of the atom) **P**: 442
 Quark **Q**: 7
 Radiation (Radiation and radioactivity) **R**: 75; (Particle radiation) **R**: 76
 Relativity (General relativity) **R**: 211
 Rutherford, Ernest **R**: 569
 Star (Fusion in stars) **So**: 846
 Subatomic particle **So**: 936
- Proton** [spacecraft]
 Space exploration *picture on* **So**: 699
- Proton-proton chain** [physics]
 Astronomy (Advances in astrophysics) **A**: 848
 Star (Hydrogen fusion) **So**: 846
 Sun (Nuclear fusion) **So**: 978
- Protonema** [botany]
 Moss (How mosses live) **M**: 834-835
- Proto-oncogene** [gene]
 Cancer (How damaged genes cause cancer) **C**: 169
- Protoplanetary disk** [astronomy]
 Planet (How the planets formed) **P**: 513
- Protoplasm** [biology] **P**: 836
 Cell **C**: 326
- Protostar**
 Star (Fusion in stars) **So**: 846; (Evolution of stars) **So**: 848
- Protostellar wind**
 Star (Intermediate-mass stars) **So**: 848
- Prototype** [engineering]
 Airplane (Design and testing) **A**: 228
 Automobile (Product engineering) **A**: 957
 Industrial design (How an industrial designer works) **I**: 244
 Manufacturing (Design and engineering) **M**: 170
- Protozoan** **P**: 836 *with pictures*
 Ameba **A**: 406 *with diagrams*
 Antibiotic (Other kinds of antibiotics) **A**: 550
 Disease (Other infectious diseases) **D**: 227; *picture on* **D**: 229
 Heredity *picture on* **H**: 200
 Malaria **M**: 96 *with pictures*
 Paramecium **P**: 152 *with picture*
 Parasite (Parasites that feed on people and animals) **P**: 154
 Spore (Protozoan spores) **So**: 802 *with diagram*
- Protractor** [measuring device] **P**: 838 *with picture*
 Angle **A**: 463
 Tool (Woodworking tools) **T**: 330
- Protura** [entomology]
 Insect (table) **I**: 299
- Proudhon, Pierre Joseph** [French author]
P: 838
 Anarchism **A**: 448
 Marx, Karl (Early development) **M**: 237
 Socialism (Early socialist ideas) **So**: 560
- Proust, Joseph Louis** [French chemist] **P**: 838
- Proust, Marcel** [French author] **P**: 838
 French literature (The four masters) **F**: 522
 Merrill, James **M**: 418
 Novel (New directions in the novel) **N**: 573-574
- Prouty, George H.** [American political leader]
 Vermont (table) **V**: 333
- Proved recoverable reserves** [mining]
 Coal (World coal reserves) **Ci**: 718
- Provençal** [language]
 French language (Old French) **F**: 517
 Mistral, Frédéric **M**: 676
 Romance languages **R**: 415
 Spanish literature (Early medieval literature) **So**: 757-758
 Troubadour **T**: 453
- Provence** [region, France]
 Gaul **G**: 70
- Provence, Count of** *See* Louis XVIII *in this index*
- Provinsen, Alice** [American author]
 Caldecott Medal (table: 1984) **C**: 26
 Literature for children *picture on* **L**: 382
- Provinsen, Martin** [American author]
 Caldecott Medal (table: 1984) **C**: 26
 Literature for children *picture on* **L**: 382
- Proverb** [expression] **P**: 839
 Fable **F**: 2
- Proverbs, Book of** [Old Testament] **P**: 839
 Proverb **P**: 839
- Proverbs of Solomon** [Old Testament]
 Proverbs, Book of **P**: 839
- Providence** [Rhode Island] **P**: 839 *with picture*
 Rhode Island (table: Average monthly weather) **R**: 308; (Settlement) **R**: 312; *picture on* **R**: 297
 Williams, Roger (In Massachusetts) **W**: 311
- Providence Canyon State Park**
 Georgia *picture on* **G**: 124
- Providence Gazette, The** [newspaper]
 Goddard, Mary Katherine **G**: 244
 Goddard, William **G**: 245
- Providence Plantations** [U.S. history]
 Rhode Island **R**: 296
- Providence River**
 Rhode Island (Rivers and lakes) **R**: 306
- Provident Hospital** [Chicago]
 Williams, Daniel Hale **W**: 310
- Province** [political unit] **P**: 840
 Canada, Government of (The constitution) **C**: 131; (The ten provinces) **C**: 138
 South Africa (Provincial government) **So**: 609
- Province House National Historic Site** [Prince Edward Island]
 Canada (table: National historic sites) **C**: 114
 Prince Edward Island (Places to visit) **P**: 788
- Province of the Heart, The** [essays by McGinley]
 McGinley, Phyllis **M**: 336
- Provincetown** [Massachusetts]
 Cape Cod **C**: 188 *with map*
 Massachusetts *picture on* **M**: 271
- Provincetown Players** [theater company]
 Gaspell, Susan **G**: 210
- Provincial Academy of Arts and Sciences**
 New Brunswick, University of **N**: 200
- Provincial bird**
 Bird (table: State and provincial birds) **B**: 332
- Provincial court**
 Canada, Government of (The courts) **C**: 138
- Provincial Extension Service** [Canada]
 4-H (Organization) **F**: 435
- Provincial Letters** [book by Pascal]
 Pascal, Blaise **P**: 189
- Provincial Museum of Newfoundland and Labrador** [St. John's]
 Newfoundland and Labrador (Libraries and museums) **N**: 364
- Proving** [remedy]
 Homeopathy **H**: 302
- Proving ground** [engineering]
 Automobile (Product engineering) **A**: 957
- Provisional government** **P**: 840
- Provisional IRA** [Irish history]
 Irish Republican Army (Another split) **I**: 433-434
- Provisions of Oxford** [English history]
 Henry III **H**: 186
- Provitamin**
 Vitamin (Vitamin A) **V**: 430
- Provo** [Utah] **P**: 840
- Provoost, Samuel** [American religious leader]
 Anglicans (Episcopalians) **A**: 463-464
- Proxemics**
 Communication (The study of communication) **Ci**: 887
- Proxima Centauri** [star]
 Alpha Centauri **A**: 381
 Star **So**: 840; (table: The 10 known stars nearest Earth) **So**: 843
- Proximity fuse**
 Ammunition (How shells explode) **A**: 436
 Bomb **B**: 450
 Warship (Warships in the two world wars) **W**: 41-42
- Proxmire, William** [American political leader]
P: 840
- Proxy** **P**: 841
 Marriage (Laws concerning marriage) **M**: 220
- Prozac** [drug] *See* Fluoxetine *in this index*
- Prudence** [philosophy]
 Ethics (Aristotle) **E**: 366
- Prudential Building**
 Buffalo (The city) **B**: 676
- Prudential Center** [Boston]
 Boston (Back Bay) **B**: 497
- Prudential Insurance Company of America**
 Insurance (table) **I**: 315
- Prudhoe Bay** [Alaska]
 Alaska (Mining) **A**: 297; (The discovery of oil) **A**: 304 *with picture*
- Prudhomme, Manuel** [American frontiersman]
 Hot Springs **H**: 374b
- Prudhomme, René François Armand** *See* Sully
Prudhomme in this index
- Prune** [fruit] **P**: 841
 Plum (Kinds of plums) **P**: 577
- Prune plum** [fruit]
 Prune **P**: 841
- Pruning** [gardening] **P**: 841 *with pictures*
 Fruit (Caring for the crop) **F**: 545
 Tree (Caring for the tree) **T**: 431
 Tree surgery **T**: 434
- Prusiner, Stanley Ben** [American physiologist]
 Nobel Prizes (Physiology or medicine: 1997) **N**: 445
- Prussia** [former country] **P**: 842 *with picture and map*
 Army (The rise of modern armies) **A**: 727-728
 Berlin (Prussian capital) **B**: 264
 Draft, Military (Military drafts throughout history) **D**: 318
 Education (The rise of universal public schools) **E**: 101
 Germany (The rise of Prussia) **G**: 164
 Marx, Karl (Marx's life) **M**: 236
 Poland (The partitions) **P**: 612 *with maps*
 Seven Weeks' War **S**: 324b
 Seven Years' War **S**: 328
 Warsaw (History) **W**: 38
See also the list of Related Articles in the Prussia article
- Prussian blue** [chemical] **P**: 843

Prussic acid [chemical] P: 843

Almond A: 380
Tapioca T: 41

Prynne, Hester [literary figure]

Hawthorne, Nathaniel (His novels) H: 115

Pryor, David H. [American political leader]
Arkansas (table) A: 712

Przewalski, Nikolai M. [Russian explorer]
Przewalski's horse P: 844

Przewalski's horse P: 844
Horse (Wild horses) H: 348 *with picture; picture on* H: 360

PSA test [medicine]

Prostate cancer P: 829

Psalms [Old Testament]

Metaphor M: 429

Psalms, Book of [Old Testament] P: 844

Bible (Development of the Hebrew Bible)
B: 281-282; (The Bible in worship)
B: 287

Illuminated manuscript I: 78

Psalmus hungaricus [music by Kodály]

Kodály, Zoltán K: 360

Psalter *See* Psalms, Book of *in this index*

PSAT [test] *See* Preliminary Scholastic

Assessment Test *in this index*

Pseudocoelomate [biology]

Coelom C: 753

Pseudomonas [bacteria]

Antibiotic (Resistance to antibiotics) A: 551

Pseudomonas mallei [bacteria]

Glanders G: 210

Pseudonym [name] P: 844

Name (Pseudonyms) N: 7

Pen name P: 234

Pseudopod [biology]

Ameba A: 406

Pseudoscience

Alchemy A: 333

Fortunetelling F: 419

Graphology G: 323

Numerology N: 607

Palmistry P: 111

Phrenology P: 430

Psi particle [nuclear particle] P: 844

Physics (Advances in the mid-1900's) P: 442

Psilocybin [drug]

Brain (How drugs affect brain chemistry)

B: 556

Psilopsid [botany]

Plant (Classification of plants) P: 547 *with picture*

Psittacosaurus [dinosaur]

Dinosaur (True dinosaurs) D: 206b-208

Psittacosis [disease] P: 844

Parrot (Parrots and people) P: 179-181

Veterinary medicine V: 345

PSLV [spacecraft]

Space exploration (Today's launch vehicles)

So: 699 *with picture*

Psocoptera [entomology]

Insect (table) I: 300

Psoralen [drug]

Vitiligo V: 433

Psoriasis [disorder] P: 844

Skin (Other skin disorders) S: 491

PSR B1257+12 [astronomy]

Planet (The first discoveries) P: 512

Pulsar P: 898

PSRO [organization]

Hospital H: 371

Psyche [mythology] P: 845

Butterfly B: 732

Cupid C: 1193

Psyche [philosophy]

Psychology (Beginnings) P: 849

Psychedelic drug

Hallucinogenic drug H: 26

Psychiatric illness *See* Mental illness *in this index*

Psychiatric social worker

Psychotherapy P: 851

Psychiatric unit

Hospital (Hospital units) H: 372

Psychiatrist [career]

Psychoanalysis P: 846

Psychotherapy P: 851

Psychiatry P: 845

Barbiturate (Medical uses) B: 107

Medicine (table) M: 369

Mental illness (Treatment of mental illness)

M: 407

Psychology (Psychology and other sciences)

P: 847

Psychic

Fortunetelling F: 419

Psychical research [psychology] P: 846

See also Extrasensory perception *in this index*

Psychoanalysis [psychiatry] P: 846

See also Freudian theory *in this index*

Abnormal psychology (Theories of abnormal psychology) A: 12

Biography (Modern biography) B: 314

Catharsis C: 301

Developmental psychology (Psychoanalytic theory) D: 174

Dream (The meanings of dreams) D: 345

Freud, Sigmund (His life) F: 530

Jung, Carl Gustav J: 194

Libido L: 233

Mental illness (Psychotherapy) M: 407

Personality (Personality change) P: 303

Psychiatry (Psychotherapy) P: 845

Psychology (Psychoanalysis) P: 850

Psychotherapy (Analytic psychotherapy) P: 852

Sartre, Jean-Paul S: 127

Unconscious U: 20

See also the list of Related Articles in the
Psychoanalysis article

Psychoanalyst [career]

Psychoanalysis P: 846

Psychodrama [psychology]

Role playing R: 402

Psychogenic amnesia [psychology]

Memory (Memory disorders) M: 394

Psychogenic fugue [disorder]

Amnesia A: 437

Mental illness (Dissociative disorders) M: 406

Psychographics [sociology]

Magazine (Other magazines) M: 42-43

Psychokinesis [psychology]

Extrasensory perception (What parapsychologists study) E: 458

Psycholinguistic disability

Learning disabilities (Types) L: 165

Psycholinguistics

Sapir, Edward S: 122

Psychological anthropology

Anthropology (Cultural anthropology) A: 547

Sapir, Edward S: 121

Psychological Association, American

Educational psychology (Careers in educational psychology) E: 111

Psychological stress evaluator

Lie detector L: 271

Psychological warfare P: 846

Propaganda P: 823

Psychologist [career]

Careers (Life, physical, and social sciences)

C: 225-226

Psychology (Careers in psychology) P: 850

Psychotherapy P: 851

Psychology P: 847 *with pictures*

Clinical psychology Ci: 681

Comparative psychology Ci: 902a

Ego E: 119

Emotion E: 260

Gestalt psychology G: 175

Graphology G: 323

Habit (How we learn habits) H: 2

Learning L: 162

Mental illness (Treatment of mental illness)

M: 407

Motivation M: 875

Personality P: 302

Phobia P: 392

Plato (Psychology and politics) P: 568

Psychiatry P: 845

Psychoanalysis P: 846

Psychosomatic medicine P: 851

Science (The social sciences) S: 194

Unconscious U: 20

See also the list of Related Articles in the

Psychology article

Psychomotor epilepsy

Epilepsy E: 343

Psychopathology *See* Abnormal psychology *in this index*

Psychophysical reaction

Emotion (Early theories about emotions)

E: 261

Psychophysics [psychology]

Perception (Types of perception) P: 283-284

Psychophysiological disorder

Hypnotism (Uses of hypnotism) H: 478

Psychosexual development

Psychoanalysis (Psychoanalytic theory) P: 846

Psychosis [psychiatry] P: 851

Abnormal psychology (Theories of abnormal psychology) A: 12

Clinical psychology (Psychotherapy and consultation) Ci: 681

Cocaine (Physical and psychological effects) Ci: 742-743

Mental illness M: 404

Psychiatry (Psychiatric disorders) P: 845

Tranquilizer T: 370

Psychosomatic disease

Biofeedback (Biofeedback in medicine and psychology) B: 312

Psychosomatic medicine [psychology] P: 851

Biofeedback B: 311

Psychotherapy [psychiatry] P: 851

Catharsis C: 301

Clinical psychology (Psychotherapy and consultation) Ci: 681

Depression D: 151

Disease (Medical treatment) D: 232-233

Hypnotism (Uses of hypnotism) H: 478

Mental illness (Psychotherapy) M: 407

Psychiatry (Treatment) P: 845

Psychoanalysis P: 846

Social work (Mental health) So: 558

Psychrometer [instrument]

Hygrometer (The psychrometer) H: 473

Psyllium [plant] P: 852 *with picture*

Pt [symbol]

Platinum P: 566

PT boat P: 853 *with picture*

PTA [organization]

National Congress of Parents and Teachers
N: 31

Parent-teacher organizations (Parent-Teacher Associations) P: 158

Ptah [Egyptian god]

Egypt, Ancient (Religion) E: 137; *picture on*
E: 140

Mythology (Other Egyptian divinities) M: 977
with picture

Ptarmigan [bird] P: 853

Animal *pictures on* A: 484, A: 495

Bird (Birds of the Arctic) B: 343 *with picture; pictures on* B: 329

Protective coloration *picture on* P: 831

PTC [chemical] *See* Phenylthiocarbamide *in this index*

Pteranodon [extinct animal]

Pterosaur P: 854 *with picture*

Pteridophyte [botany] P: 853

See also Fern *in this index*

Pterodactyl [extinct animal]

Pterosaur P: 854 *with picture*

Fossil *picture on* F: 423

Pterosaur [extinct animal] P: 854 *with picture*

Dinosaur D: 206a

Fossil (Understanding ancient plants and animals) F: 423 *with picture*

Prehistoric animal (Other reptiles) P: 737

Pteryla

Feather (Kinds and parts of feathers) F: 59

PTF boat

PT boat P: 853

Ptolemaic dynasty [Egyptian]

Egypt, Ancient (The Ptolemies) E: 144 *with picture*

Ptolemy [Greek astronomer] P: 854

Antarctica (Human activities) A: 535

Astronomy (Earth-centered theories) A: 835;
(History) A: 846-847 *with diagram*

Atlas (History) A: 868

Circle (History) Ci: 558

Columbus, Christopher (The plan to sail westward) Ci: 858

Copernicus, Nicolaus Ci: 1039

Galileo (Early scientific interests) G: 11

Map (Ancient maps) M: 181-182; *picture on*
M: 184

Mathematics (The Greeks) M: 306

Moon (Ancient ideas) M: 791-792

Physics (The Greeks) P: 438

Planet (How planets move) P: 508

Trigonometry T: 442

Ptolemy I [king of ancient Egypt] P: 855

Alexandria (History) A: 344

Cleopatra Ci: 662a

Library (Ancient libraries of papyrus) L: 258

Ptolemy II [king of ancient Egypt]

Library (Ancient libraries of papyrus) L: 258

Ptolemy V [king of ancient Egypt]

Rosetta stone R: 481

Ptolemy XIV [king of ancient Egypt]
Cleopatra (Cleopatra and Caesar) Ci: 662a

Ptolemy XV [king of ancient Egypt] *See*
Caesarion *in this index*

Ptolemy Philadelphos [son of]
Cleopatra (Cleopatra and Mark Antony)
Ci: 662a-662b

PTSA [organization]
Parent-teacher organizations (Parent-Teacher-
Student Associations) P: 158

PTSD [psychology] *See* Post-traumatic stress
disorder *in this index*

Ptyalin [enzyme]
Digestive system (From mouth to stomach)
D: 202-203

Maltose M: 115
Mastication M: 298
Saliva S: 67

Pu [symbol]
Plutonium P: 581

Pu-239 [isotope]
Nuclear energy (Wastes and waste disposal)
N: 588

Pu Yi [emperor of China] P: 855

Pub
England (Recreation) *picture on* E: 294-296
Ireland (Way of life) I: 420
London (Recreation) L: 434 *with picture*

Puberty [human development]
Adolescent A: 60
Child (The preteen-age years) C: 450
Hormone (Growth and sex hormones)
H: 336
Middle school M: 535
Reproduction, Human (The human reproduc-
tive system) R: 244
Sex education (How sex education is taught)
S: 336
Sexuality (Biological factors) S: 337
Testosterone T: 182

Pubis [anatomy]
Dinosaur *picture on* D: 206c
Human body *diagram on* H: 422
Pelvis P: 233 *with diagram*

Public [people]
Public relations P: 864

Public accountant [career]
Accounting (Fields of accounting) A: 23
Certified public accountant C: 363

Public administration [government]
Political science (Public administration) P: 638

Public administrator [law]
Administrator A: 58

Public Against Violence [political party]
Czechoslovakia (The Velvet Revolution)
Ci: 1216

Public aquarium *See* Aquarium, Public *in this*
index

Public assistance
See also Welfare *in this index*
Poverty (Social welfare programs) P: 725
Social security So: 553
Welfare W: 190

Public bath
Bath (History) B: 164 *with picture*
Rome (Baths) R: 433

Public bill [legislation]
Congress of the United States (Proposing new
laws) Ci: 944

Public Broadcasting, Corporation for *See*
Corporation for Public Broadcasting *in this*
index

Public Broadcasting System
Television (Public stations) T: 115

Public Citizen [organization]
Consumerism (Growth of the movement)
Ci: 1019

Public corporation
Corporation (Business corporations) Ci: 1070
Nationalization (Forms of nationalization) N: 63

Public defender [law] P: 855
Court (How courts work) Ci: 1101

Public domain [law] P: 855

Public-domain lands

Public lands P: 858
Public education
Colonial life in America (Education) Ci: 803
Creationism (The 1900's) Ci: 1123
Education (Control and support of U.S. educa-
tion) E: 91
Elementary school (Kinds of elementary
schools) E: 224
Germany (Education) G: 151 *with picture*

Local government (Functions of local govern-
ment) L: 407

Reconstruction (New state programs and poli-
cies) R: 179

Religious education (Public schools) R: 225
School (Public school districts) S: 182 *with pic-
ture*; (History of Canadian schools) S: 185
Teaching (Employment practices) T: 68
United States, History of the (Education
reform) U: 171

Public Enemy [musical group]
Rock music (New directions and old) R: 380

Public enemy [law]

Common carrier Ci: 874
Public Enemy, The [film]
Cagney, James C: 14
Motion picture (Movies in the 1930's) M: 868

Public figure [law]

Libel L: 226
Public Garden (Boston)

Boston (Downtown Boston) B: 496-497

Public goods [economics]
Capitalism (Protecting the public interest)
C: 194-195
Public health P: 855 *with pictures*
Disease (Governments) D: 234
Epidemic E: 343
Global warming (Threats to human health)
G: 232a

Health (Public health) H: 127
Immunization (Immunization and public health)
I: 90

Medical ethics M: 361
Medicine (Prevention) M: 364
Nursing (Community health nurses) N: 618
Prophylaxis P: 827
Sanitation S: 111
State government (Health) So: 864
See also the list of Related Articles in the
Public Health article

Public Health, School of Hygiene and
Johns Hopkins University J: 135

Public health nursing
Nursing (Community health nurses) N: 618

Public Health Service [U.S.] P: 857
Health (Public health) H: 127
Health, Board of H: 127
Health and Human Services, Department of
(Organization) H: 128
Sanitation (Food processing and distribution)
S: 111

Public house *See* Pub *in this index*

Public housing
England (City life) E: 296
Housing (Public housing) H: 391
Housing and Urban Development, Department
of (Functions) H: 393
Welfare (Other welfare programs) W: 191

Public Information, Committee on [U.S. histo-
ry]
Propaganda (During World War II) P: 825

Public Information, Office of
United Nations (Publications and information
services) U: 86-87

Public institution
Hospital H: 371

Public instruction, Superintendent of [office]
State government (Other officers) So: 862

Public-key cryptosystem [computing]
Computer (Computer security) Ci: 924

Public-key system [cryptology]
Codes and ciphers Ci: 749; (Public-key sys-
tems) Ci: 750; (Later developments)
Ci: 751

Public lands P: 858
Conservation (The rise of the conservation
movement) Ci: 985
Homestead Act H: 304
Public domain P: 855

Public law
Law (Branches of law) L: 130; (Law since
1900) L: 136-137
United States, Government of the (Functions)
U: 138

Public Law 600 [1950]
Puerto Rico (Building a democracy) P: 883-884

Public Libraries Act [1850]
Library (Libraries of the 1600's and 1700's)
L: 260

Public library
Library (Active community service) L: 237;
(Public libraries) L: 240 *with pictures*;
(Western Europe) L: 252; (Libraries in the
United States) L: 261 *with picture*

Public official bond
Bonding B: 456

Public opinion P: 859 *with picture*
Foreign policy (Public opinion) F: 387
Journalism (Influencing public opinion) J: 172
Public opinion poll P: 861

Public Opinion, American Institute of
Gallup, George Horace G: 16

Public opinion poll P: 861 *with picture*
Political convention (Measuring convention
success) P: 630
Psychology (Systematic assessment) P: 848
Sociology (Surveys) So: 565

Public ownership *See* Government ownership
in this index

Public policy medical ethics
Medical ethics M: 361

Public printer [office]
Government Printing Office G: 293

Public relations P: 864

Public revenue [economics]
Income tax I: 102
Local government (Financial difficulties) L: 408
State government (State finances) So: 865
Taxation T: 52

Public Safety, Committee of [French history]
French Revolution (Terror and equality) F: 526-
527

Robespierre (Revolutionary leader) R: 366

Public school [England]
Education (The rise of universal public
schools) E: 101

England (Education) E: 297
London (Education) L: 433
Private school P: 808a
United Kingdom (Education) U: 56-57

Public school [United States]
See also Public education *in this index*
Charter school C: 386
High school (High schools in the United
States) H: 228

Public service
Careers (Community and social services)
C: 221 *with picture*
Economics (Public services) E: 62

Public service announcement
Radio (Information) R: 86
Television (Commercial stations) T: 114-115

Public Service Commission of Canada
Civil service (Civil service in other lands)
Ci: 613

Public speaking P: 865 *with picture*
Oratory O: 818
A Guide to Speaking Skills Research
Guide: 20

Public Square
Cleveland (Downtown Cleveland) Ci: 663

Public television
Corporation for Public Broadcasting Ci: 1070
Television (Public television) T: 110a; (Public
stations) T: 115

Public theater [English history]
Shakespeare, William (Theater buildings)
S: 352 *with picture*

Public transportation
Safety (Safety in transportation) S: 14
Transit T: 374
Transportation (Public transportation) T: 392-
393 *with picture*; (Improvements in public
transportation) T: 398

Public utility P: 867
Economics (Public utilities) E: 62
Franchise (Public franchises) F: 480

Public works
National debt (Causes of national debt) N: 32-
33
State government (State services) So: 864
United States, History of the (Roosevelt,
recovery, and reform) U: 189

Public Works Administration [U.S. history]
Housing (Housing since 1900) H: 391-392
New Deal (table) N: 201; (Helping the needy)
N: 201 *with picture*

Public works and government services,
Minister of [office]
Canada, Government of (The Cabinet) C: 132;
diagram on C: 137

Publicity
Political convention (Attracting publicity) P: 630
Public relations (Methods) P: 864

Publick Occurrences Both Forreign and
Domestick [newspaper]
Harris, Benjamin H: 68
Journalism (Early American journalism) J: 174

- Newspaper (Development of U.S. newspapers) N: 386
- Publicly traded investment fund**
Mutual fund M: 969
- Publicola**
Adams, John Quincy (Lawyer and writer) A: 40-41
- Publisher** [occupation]
Newspaper (The staff of a newspaper) N: 381
- Publishing** [communications] P: 868
Book B: 464
Communication (The digital age) Ci: 885
Computer (Publishing programs) Ci: 919
Copyright (How to obtain a copyright) Ci: 1048
Desktop publishing D: 158 *with picture*
Internet (Publishing) I: 350a
Magazine M: 42
New York (Manufacturing) N: 310
New York City (Industry) N: 333
Newspaper N: 380
Printing P: 796
Writing (Free-lance markets) W: 511
- Publius** [pen name]
Federalist, The F: 67
- Publius Ovidius Naso** *See* Ovid *in this index*
- Puccini, Giacomo** [Italian composer] P: 869
Belasco, David B: 224d
Opera (Giacomo Puccini) O: 799; (*Bohème, La*) O: 801; (*Madama Butterfly*) O: 804 *with picture*; (*Tosca*) O: 807; *picture on* O: 802
- Puccoon** [plant]
Bloodroot B: 418
- Puchero** [food]
Argentina (Food and drink) A: 651
Paraguay (Food and drink) P: 146
- Puck** [electronic device]
Computer (A digitizing tablet) Ci: 914
- Puck** [hockey]
Hockey H: 274
- Puck** [legendary figure] P: 870 *with picture*
Fairy (Fairies in literature) F: 11
Shakespeare, William (A *Midsummer Night's Dream*) S: 357
- Puckett, Kirby** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Pudding stone** [rock] P: 870
- Pudding** [agriculture]
Rice (Preparing the ground) R: 325 *with pictures*
- Pudding furnace**
Industrial Revolution (The revolution in iron-making) I: 249-250
- Pudong area** [district]
Shanghai (History) S: 372 *with picture*
- Pudu** [animal]
Deer (table) D: 85; (Central and South American deer) D: 85; *picture on* D: 84
- Puebla** [city, Mexico] P: 870
- Puebla** [state, Mexico] P: 870
Mixtec Indians M: 680
- Puebla, Battle of** [1862]
Cinco de Mayo Ci: 557
- Pueblo** [Colorado] P: 870
- Pueblo** [dwelling]
Anasazi (History) A: 448a
New Mexico *picture on* N: 257
- Pueblo** [ship]
Korea (North-South relations) K: 378
- Pueblo Bonito**
Chaco Culture National Historical Park C: 365
New Mexico (Indian days) N: 272
- Pueblo de Los Angeles**
Los Angeles (Downtown Los Angeles) L: 458
- Pueblo Indians** [American Indians] P: 870 *with pictures*
Indian, American (Weaving) I: 146;
(Ceremonies) I: 148; (Indians of the Southwest) I: 166; *pictures on* I: 147, I: 180
Indian wars (The Pueblo revolt) I: 191
Doll (Doll festivals and customs) D: 287
Hopi Indians H: 333
Mission life in America (Western missions) M: 618-619
Nevada (Indian days) N: 173
Sculpture (As a record of history) S: 228-229;
(The European impact) S: 244 *with picture*
- Pueblo joven**
Peru (Housing) P: 309-310 *with picture*
- Pueblo Revolt** [1680-1692]
Indian wars (The Pueblo revolt) I: 191
- Puerperal fever** [disease]
Holmes, Oliver Wendell (His life) H: 294
- Semmelweis, Ignaz Philipp S: 293
- Puerta del Sol** [plaza]
Madrid (The city) M: 38
- Puerto Cortés** [Honduras]
Honduras (The Northern Coast) H: 309 *with map*
- Puerto Montt** [Chile]
Chile (Climate) C: 465
- Puerto Rican cherry** [fruit]
Acerola A: 24 *with picture*
- Puerto Rican Day Parade** [New York City]
Hispanic Americans *picture on* H: 249
- Puerto Rican parrot** [bird]
Parrot (Kinds of parrots) P: 179
- Puerto Ricans** [people]
See also Hispanic Americans *in this index*
Hispanic Americans H: 244 *with pictures*;
(Puerto Rican migration) H: 253 *with picture*
Minority group (Hispanic Americans) M: 610
New York City (Ethnic groups) N: 331-332
- Puerto Rico** [commonwealth, U.S.] P: 872 *with pictures and maps*
Flag *picture on* F: 213
Hispanic Americans (In Puerto Rico and Cuba) H: 246; (Stricter immigration laws) H: 254-255
Naturalization N: 66
See also the list of Related Articles in the
Puerto Rico article
- Puerto Rico, University of**
Puerto Rico *picture on* P: 876
- Puerto Rico Trench**
Atlantic Ocean (The Mid-Atlantic Ridge) A: 864
Deep D: 81
Ocean (Depth) O: 651-652
West Indies (Land and climate) W: 204
- Pueyrredón, Prilidiano** [Argentine painter]
Argentina (The arts) A: 651
- Puff adder** [snake]
Adder A: 46
Snake *picture on* S: 529
Viper V: 391
- Puffball** [fungus] P: 885
Mushroom (Mushroomlike fungi) M: 945
- Puffer** [fish] P: 885 *with pictures*
Fish (Other useful fish) F: 146-147
- Puffin** [bird] P: 886 *with picture*
Auk A: 890
- Pug** [dog] P: 886
Dog *picture on* D: 274
- Pugachev, Emelian** [Russian soldier]
Russia (Catherine the Great) R: 550
- Puget, Peter** [British admiral] P: 886
Washington (Discovery and exploration) W: 66
- Puget Island** [Washington]
Puget, Peter P: 886
- Puget Sound** [Washington] P: 886 *with map*
Washington W: 58
- Pugin, A. W. N.** [British architect]
Architecture (The Gothic Revival) A: 626
- Pugmill mixer** [machine]
Asphalt (Paving with asphalt) A: 815
- Pugsley, William** [Canadian political leader]
New Brunswick (table) N: 196
- Pugwash Conferences on Science and World Affairs** [organization]
Nobel Prizes (Peace: 1995) N: 449
- Puig, Manuel** [Argentine author]
Novel (The novel today) N: 575
- Puisne judge** [office]
Supreme Court of Canada (Organization) S: 996 *with pictures*
- Puissance** [competition]
Horse (Jumping) H: 357
- Pukaskwa National Park** [Ontario]
Canada (table: National parks and national park reserves) C: 113
- Pukhtu** [language] *See* Pashto *in this index*
- Pukhtuns** [people] *See* Pashtuns *in this index*
- Pulaski, Casimir** [Polish general] P: 887 *with portrait*
- Pulaski's Legion** [U.S. history]
Pulaski, Casimir P: 887
- Pulci, Luigi** [Italian poet]
Italian literature (Humanism and the Renaissance) I: 494
- Pulcinella** [literary figure]
Punch and Judy P: 901
- Pulcinella** [ballet by Stravinsky]
Classical music (Neoclassicism) Ci: 649
Stravinsky, Igor (Neoclassical works) So: 922
- Pulenu'u** [government official]
Samoa (Government) S: 80-80a
- Puletasi** [garment]
Samoa (People) S: 80a
- Puli** [dog] P: 887
Dog *picture on* D: 262
- Pulitzer, Joseph** [American publisher] P: 887
Hearst, William Randolph H: 131
Pulitzer Prizes P: 887
Spanish-American War (American intervention) So: 753
- Pulitzer Prizes** [awards] P: 887
Pulitzer, Joseph P: 887
- Pulitzer Trophy race**
Airplane (The golden age) A: 235-237
- Pulka** [sled]
Sled dog S: 506
- Pulled wool**
Wool (Types of wool) W: 399
- Pulley** [machine] P: 897 *with diagram*
Archimedes (His discoveries) A: 605
Block and tackle B: 405
Machine (Pulley) M: 15 *with pictures*
- Pulling Down the Statue of George III** [*picture by McCrae*]
Declaration of Independence *picture on* D: 78
- Pulling the goalie**
Hockey (Hockey terms) H: 275
- Pullis, Joe M.** [American educator]
Speedwriting So: 775
- Pullman** [former town]
Pullman, George Mortimer P: 897
- Pullman, George Mortimer** [American businessman] P: 897
Railroad (Engineering improvements) R: 117-118
- Pullman Company**
See also Pullman Strike *in this index*
Pullman, George Mortimer P: 897
- Pullman Palace Car Company**
Pullman, George Mortimer P: 897
- Pullman sleeping car** *See* Sleeping car *in this index*
- Pullman Strike** [1894] P: 897
Cleveland, Grover (Labor unrest) Ci: 672
Darrow, Clarence Seward D: 38
Debs, Eugene Victor D: 65
Labor movement (Opposition to unions) L: 10 *with picture*
- Pulmonary artery** [anatomy]
Artery (Principal arteries) A: 751
Circulatory system (In respiration) Ci: 559-560
Heart (Blood vessels) H: 135 *with picture*;
(The work of the heart) H: 135
Human body (The blood vessels) H: 421; *diagram on* H: 422
Lung (Gas exchange in the lungs) L: 523-524 *with diagram*
- Pulmonary capillary** [anatomy]
Emphysema (How emphysema affects breathing) E: 262
Lung (Parts of the lungs) L: 523
- Pulmonary circulation** [physiology]
Circulatory system (In respiration) Ci: 559 *with picture*
Lung (Parts of the lungs) L: 523
- Pulmonary edema** [disorder]
Edema E: 75
- Pulmonary pleura** [anatomy]
Pleura P: 573
- Pulmonary surfactant** [physiology]
Hyaline membrane disease H: 460
- Pulmonary syndrome hantavirus** [virus]
Hantavirus H: 54
- Pulmonary tuberculosis** [disease]
Tuberculosis (The disease) T: 478
- Pulmonary vascular disease**
Lung (Diseases of the lungs) L: 524-525
- Pulmonary vein** [anatomy]
Circulatory system (In respiration) Ci: 559-560
Heart (Blood vessels) H: 135 *with picture*
Human body (The blood vessels) H: 421; *diagram on* H: 422
Lung (Gas exchange in the lungs) L: 523-524 *with diagram*
- Pulmonic circulation** [physiology]
Heart (Birds and mammals) H: 146
- Pulmonic valve** [anatomy]
Heart (Chambers, valves, and inner lining) H: 133-135; (Blockage of blood flow) H: 141
- Pulp**
Paper (Raw materials) P: 134 *with diagram*
- Pulp, Dental** *See* Dental pulp *in this index*
- Pulp, Wood** *See* Wood pulp *in this index*
- Pulp chamber** [dentistry]

Teeth (Pulp) T: 80 *with picture*

Pulp magazine
Science fiction (The early 1900's) S: 205

Pulper [machine]
Paper (How paper is made) P: 134

Pulping [industrial process]
Coffee (Preparation for market) Ci: 754

Pulpwood
Paper (How paper is made) P: 134 *with picture*

Pulque [drink]
Century plant C: 359
Maguey M: 64

Pulque agave [plant]
Maguey M: 64

Pulsar [astronomy] P: 898
Arecibo Observatory A: 644
Astronomy (Finding quasars and pulsars) A: 849
Bell Burnell, Jocelyn Bell B: 242
Binary star B: 308
Jodrell Bank Observatory J: 130
Lick Observatory L: 270
Neutron star N: 155
Planet (The first discoveries) P: 512
Star (Names of stars) So: 842, (Neutron stars) So: 851
Supernova So: 994
Telescope (Radio telescopes) T: 106

Pulse [physiology] P: 898

Pulse-combustion drying
Food preservation (Drying) F: 342-343

Pulse dialing
Telephone (The dialing mechanism) T: 94-95

Pulse radar
Radar (Pulse radar) R: 68; *diagram on* R: 70

Pulsed laser
Laser (Kinds of lasers) L: 85

Pulverized coal
Coke Ci: 759

Pulvillus [entomology]
Fly (Thorax) F: 309 *with diagram*

Puma [wild cat]
Mountain lion M: 898 *with pictures*

Pumice [rock] P: 898
Rock (table) R: 373 *with picture*; (Extrusive rock) R: 371
Volcano (Benefits of volcanoes) V: 443

Pummelo [tree]
Grapefruit (History) G: 321

Pump P: 898 *with diagrams*
Fire department (Firefighting) F: 123; (Fire trucks) F: 125-126
Invention (Ancient Greece) I: 358
Ship (The chief parts of a ship) S: 424-425

Pump [shoe]
Shoe (Kinds of shoes) S: 431 *with picture*

Pump, implantable [medicine]
Drug (Entrance into the body) D: 353

Pump-action rifle [gun]
Rifle (Slide-action rifles) R: 339

Pump-generator [machine]
Grand Coulee Dam G: 308

Pumper [truck]
Fire department *picture on* F: 129

Pumping
Laser (Parts of a laser) L: 83

Pumping centers [physiology]
Circulatory system (Invertebrates) Ci: 561

Pumpkin [plant] P: 900 *with picture*
Jack-o'-lantern J: 2

Pumpkinseed [fish]
Fish *picture on* F: 159
Sunfish So: 990

Pun [humor] P: 901
Humor (The humor of words) H: 435
Riddle R: 335
Shakespeare, William (Rhetoric) S: 367

Puna [region, Argentina]
Argentina (The Andine) A: 653-654

Puncak Jaya [mountain, New Guinea]
Indonesia (Irian Jaya) I: 234
New Guinea (Land and climate) N: 206

Punch [sports]
Boxing (Boxing skills) B: 530

Punch [magazine]
Tenniel, Sir John T: 160

Punch and Judy [puppets] P: 901 *with picture*
Puppet (Hand puppets) P: 904-905

Punch-card ballot
Ballot (In the United States) B: 63

Punch press
Machine tool *picture on* M: 17; (Metal forming operations) M: 19

Punched-card computer
Computer (Early punched-card computing devices) Ci: 924a *with picture*

Puncheon [construction]
Pioneer life in America (A pioneer settlement) P: 479-480

Punctuated equilibrium [biology]
Evolution (Main ideas of evolutionary theory) E: 426-427
Gould, Stephen Jay G: 281

Punctuation [grammar] P: 901
Sentence S: 302

Punic [language]
Phoenicia (Language) P: 393

Punic Wars [European history] P: 903
Carthage (History) C: 260-261
Fabius Maximus, Quintus F: 2
Hannibal Barca H: 29
Hannibal H: 51 *with picture*
Numidia N: 608
Regulus, Marcus Atilius R: 207
Rome, Ancient (Expansion overseas) R: 445-446
Spain (Roman conquest) So: 746; (ancient city) U: 251
War (Superior force and resources) W: 25

Punishment
Capital punishment C: 193
Child abuse C: 454
Colonial life in America (Crime and punishment) Ci: 795
Crime (Crime prevention) Ci: 1139
Criminal justice system (The trial) Ci: 1143
Criminology (What criminologists study) Ci: 1145
Learning (Motivation) L: 164
Penal colony P: 235

Punitive damages [law]
Damages D: 22

Punjab [province, Pakistan] P: 903
Lahore L: 31
Pakistan (Land and climate) P: 96 *with map*

Punjab [region, India] P: 903
India (India under Indira Gandhi) I: 133-134
Ranjit Singh R: 139
Sikhism S: 455

Punjabi [language]
India (Languages) I: 114
Pakistan (Cultural groups and languages) P: 93

Punjabis [people]
Pakistan (Cultural groups and languages) P: 93

Punk rock
Popular music (New forms of rock) P: 671
Rock music (Disco and punk) R: 380

Punk the Penguin [cartoon character]
Oliphant, Patrick Bruce O: 743

Punkie [insect]
Gnat G: 237

Punt [ancient history]
Exploration (Ancient exploration) E: 440-441

Punt [sports]
Football (Advancing the ball) F: 360-362 *with picture*

Punta del Este, Charter of [1961]
Alliance for Progress A: 374

Punty [tool]
Glass (Glass terms) G: 222

Pup
Dog (The life of a dog) D: 266 *with picture*
Fox (Young) F: 439 *with picture*
Rat (The life of a rat) R: 146
Seal (Birth) S: 266 *with picture*
Wolf (Young) W: 376; *picture on* W: 375

Pupa [entomology] P: 903 *with picture*
Insect (Complete metamorphosis) I: 293 *with picture*
Ant (Reproduction) A: 524-525 *with picture*
Beetle (The life cycle of beetles) B: 216 *with diagram*
Butterfly (The pupa) B: 741 *with picture*
Chrysalis C: 539
Cocoon Ci: 747
Fly (Pupa) F: 310 *with picture*
Metamorphosis (The pupa) M: 428-429 *with picture*
Moth (The life cycle of moths) M: 838-839 *with pictures*

Puparium [entomology]
Fly (Pupa) F: 310
Pupa P: 904

Pupfish [fish] P: 904 *with pictures*
Endangered species (table) E: 270

Pupienus [Roman emperor]
Rome, Ancient (table) R: 447

Pupil [anatomy]
Eye (The uveal tract) E: 460-461 *with picture*

Reptile (Sense organs) R: 251 *with pictures*

Pupin, Michael Idvorsky [Serbian-American engineer] P: 904

Puppen reform [art movement]
Doll (The early 1900's) D: 291

Puppet P: 904 *with pictures*
See also Doll *in this index*
Drama (Japan) D: 336-337
Indonesia (The arts) I: 232
Japan (Theater) J: 43
Japanese literature (The Tokugawa period) J: 62
Punch and Judy P: 901 *with picture*
Ventriloquism V: 309 *with picture*

Puppet animation
Animation (Other kinds of animation) A: 513 *with picture*

Puppeteer
Puppet P: 904
Henson, Jim H: 191

Puppeteers of America [organization]
Puppet (Organizations for puppeteers) P: 906

Puppy
Dog (The life of a dog) D: 266 *with picture*

Pupusa [food]
El Salvador (Food) E: 249

Puranas [stories]
Hinduism (Sacred writings) H: 236

Purcell, Edward Mills [American physicist] P: 907

Purcell, Henry [English composer] P: 907
Classical music (The Baroque period) Ci: 647

Purchasing [manufacturing]
Manufacturing (The main steps in manufacturing) M: 170

Purchasing cooperative [economics]
Cooperative (Supply, or purchasing, cooperatives) Ci: 1036
Farm and farming (Managing production costs) F: 42

Purchasing power [economics]
Depreciation D: 149
Income (Types of income) I: 100
Inflation I: 266
Money (The value of money) M: 714

Purdue, John [American philanthropist]
Purdue University P: 907

Purdue University P: 907 *with picture*
Indiana *picture on* I: 201
Indiana University I: 220

Purdy, Al [Canadian poet]
Canadian literature (Modern Canadian poets) C: 160

Pure competition [economics]
Monopoly and competition (Kinds of monopoly and competition) M: 731

Pure democracy [political science]
See also Direct democracy *in this index*
Town meeting T: 350

Pure-dye silk
Silk (Boiling off and weighting) S: 460

Pure food and drug laws P: 907 *with picture*
Sanitation (Food processing and distribution) S: 111
United States, History of the (The Progressive Era) U: 181-182

Pure mathematics
Mathematics (The importance of mathematics) M: 302; (The Greeks) M: 306; (The Renaissance) M: 306

Pure Monday
Lent L: 196b

Pure risk
Insurance I: 309

Pure substance
Melting point M: 389

Purebred
American Kennel Club A: 412
Cat (Breeds of cats) C: 290
Cattle C: 306
Dog (Kinds of dogs) D: 265; (Choosing a dog) D: 277-278
Horse (table: Horse terms) H: 343; (Breeding horses) H: 358
Pet (Choosing a pet) P: 320
United Kennel Club U: 47

Purée
Cooking (table) Ci: 1029

Purgation
Spiritualism (Beliefs) So: 796

Purgatorio [work by Dante]
Divine Comedy D: 242

- Purgatorius** [animal]
Primate (The evolution of primates) P: 778b
- Purgatory** [religion] P: 909
Divine Comedy D: 242
- Purge** [Soviet history] See Great Purge in *this index*
- Puri** [India]
Juggernaut *picture on* J: 185
- Purim** [religion] P: 909
Esther, Book of E: 361
Judaism (Other holidays) J: 181
March M: 195
- Purine** [compound]
Gout G: 281
- Purísima Concepción, La** [mission]
Mission life in America (A visitor's guide) M: 620
- Puritan Revolution** [English history]
Puritans (History) P: 910
- Puritani, I** [opera by Bellini]
Bellini, Vincenzo B: 244
- Puritans** [English history] P: 909 *with picture*
American literature (New England) A: 414
Bath (History) B: 164
Calvin, John (Calvinism) C: 71
Clothing (The 1600's) Ci: 701
Colonial life in America (Religion) Ci: 804
Congregationalists Ci: 940f
Defoe, Daniel (His writings) D: 89
English literature (The early and middle 1600's) E: 317
Hairdressing (The 1600's) H: 12
Laud, William L: 121
Literature for children (The Puritans) L: 361 *with picture*
Massachusetts (Massachusetts Bay Colony) M: 289
Massachusetts Bay Colony M: 295
Milton, John (Middle years) M: 557
Pilgrims P: 463 *with picture*
Protestantism (The conservative reform movements [the 1500's]) P: 834; (The free church movements [the 1500's and 1600's]) P: 835
Restoration R: 263
Theocracy T: 252
United States, History of the (New England) U: 153
- Purkinje, Johannes** [Czechoslovak physiologist]
Protoplasm P: 836
- Purkinje cell**
Autism (Causes) A: 942
- Purl** [stitch]
Knitting (Knitting the fabric) K: 354
Textile (Knitted fabrics) T: 214
- Purlin** [construction]
Building construction (Beams, girders, and columns) B: 682-683
- "Purloined Letter, The"** [story by Poe]
Detective story (History) D: 163
- Purple** [color]
Color *diagram on* Ci: 821
- Purple amaranth** [plant]
Amaranth A: 400
- Purple coneflower**
Echinacea E: 49
- Purple Dust** [play by O'Casey]
Irish literature (The Irish literary revival) I: 431-432
- Purple Heart**
Medals, decorations, and orders (Military awards) M: 355 *with picture*
- Purple Land, The** [book by Hudson]
Hudson, William Henry H: 405
- Purple loosestrife** [plant]
Loosestrife L: 453
- Purple martin** [bird]
Martin M: 234 *with pictures*
Swallow So: 1014
- Purple of Cessius**
Gold (Other uses) G: 251-252
- Purple tube** [sea animal]
Sponge *picture on* So: 799
- Purpure** [purple]
Heraldry *picture on* H: 195
- Purpurisæe** [nickname]
Madeira Islands (History) M: 30
- Purse** [prize]
Horse racing (Types of horse races) H: 364
- Purse line** [tackle]
Fishing industry (Nets) F: 183 *with diagram*
- Purse seine** [net]
Fishing industry (Nets) F: 183 *with diagram*
Tuna T: 485 *with picture*
- Purse-web spider**
Spider (table) So: 790; *picture on* So: 783
- Purslane** [plant] P: 911 *with picture*
- Pursuit**
Bicycle racing (Track races) B: 293
- "Pursuit of Diarmuid and Grainne, The"** [story]
Mythology (The Irish cycles) M: 983-984
- Purus River** [Brazil-Peru]
Amazon River (The course of the Amazon) A: 403
- Purusha** [religion]
Yoga Y: 566
- Purva-mimamsa** [philosophy]
Hinduism (The six schools of philosophy) H: 236
- Purvis, Robert** [American abolitionist]
Philadelphia (Industrial beginnings) P: 366-367
- Pus** [physiology]
Abscess A: 17
Acne A: 28 *with pictures*
Boil B: 438 *with pictures*
- Pusan** [Korea] P: 911
Asia *picture on* A: 789
Korea (Population) K: 368
- Pusan Perimeter**
Korean War (The Pusan Perimeter) K: 381 *with map*
- Pusey, Edward Bouverie** [British religious leader]
Oxford Movement O: 887
- Pusey, Joshua** [American lawyer]
Match (The invention of book matches) M: 300a
- Pusey, Nathan Marsh** [American educator]
Harvard University (History) H: 80-81
- PUSH** [organization]
Jackson, Jesse Louis J: 15
- Push technology**
Internet (Push technology) I: 350b
- Pusher** [transportation]
Tokyo (Transportation) T: 318
City *picture on* Ci: 591
- Pusher unit**
Locomotive (Diesel locomotives) L: 414-415
- Pushing Hands** [exercise]
Tai chi chuan T: 14
- Pushkin, Alexander** [Russian poet] P: 911
Glinka, Mikhail Ivanovich G: 231
Russian literature (Early romanticism) R: 560-561
- Pushmataha** [Indian chief]
Mississippi (Territorial days) M: 641-642
- Pushmi-Pullyu** [fictional animal]
Lofting, Hugh *picture on* L: 420
- Pushto** [language] See Pashto in *this index*
- Pushtuns** [people] See Pashtuns in *this index*
- Pussy** See Cat in *this index*
- Pussy willow** [tree] P: 912 *with picture*
Willow W: 315
- Pustule**
Smallpox S: 513
Soybean (Diseases and pests) So: 692
- Put option** [investment]
Commodity exchange (Options contracts) Ci: 874
- Putin, Vladimir Vladimirovich** [Russian political leader] P: 912 *with portrait*
Russia (Politics) R: 531-532; (Recent developments) R: 555
Yeltsin, Boris Nikolayevich Y: 561
- Putnam, Grace Storey** [American sculptor]
Doll (The early 1900's) D: 291-292 *with picture*
- Putnam, Herbert** [American librarian] P: 913
- Putnam, Israel** [American general] P: 913
- Putnam, James** [American lawyer]
Adams, John (Education) A: 34
- Putnam, Rufus** [American general] P: 913
Ohio (Exploration and settlement) O: 700
Ohio Company (The second Ohio Company) O: 705
- Putonghua** [language]
China (Languages) C: 481
Hong Kong (Languages) H: 317
Mandarin M: 135
- Putrejeaya** [Malaysia] P: 913
Malaysia (Recent developments) M: 102-103
- Putrefaction** [decay]
Decay D: 67
Decomposition D: 80
- Putrid Lake**
Azov, Sea of A: 998
- Putsch** [German history]
Hitler, Adolf (The Beer Hall Putsch) H: 266
- Putt** [sports]
Golf (The green) G: 261
- Putty** [building material] P: 913
- P'u-t'ung hua** [language]
Chinese language (Spoken Chinese) C: 510
- Pu'uhonua o Honaunau National Historical Park**
Hawaii (Places to visit) H: 98
National Park System (table: National historical parks) N: 56-57
- Puukohola Heiau National Historic Site** [Hawaii]
National Park System (table: National historic sites) N: 52-53
- Puyallup Indians**
Tacoma T: 5
- Puyé Cliff Dwellings**
New Mexico (Places to visit) N: 264
- Puzo, Mario** [American author] P: 913
- PVC** [plastics] See Polyvinyl chloride in *this index*
- PWA** [U.S. history] See Public Works Administration in *this index*
- Pwe** [drama]
Myanmar (Recreation) M: 970a-970c
- PX** [store] See Post exchange in *this index*
- Pye, Henry James** [British poet]
Poet laureate (table: Poets laureate of the United Kingdom) P: 590
- Pyelonephritis** [disease]
Kidney (Kidney diseases) K: 312
- Pygmalion** [legendary figure] P: 914
Dido D: 195
- Pygmalion** [play by Shaw]
Campbell, Mrs. Patrick C: 91
Pygmalion P: 914
Shaw, George Bernard (Mature period) S: 378
- Pygmies** [people] P: 914 *with picture*
Africa (Peoples of Africa) A: 104 *with picture*
Burundi (People) B: 713
Congo (Kinshasa) (Ancestry) Ci: 940
Gabon (People) G: 3
Negritos N: 120
Rain forest (Africa) R: 126b-126c
Rwanda (People) R: 571
- Pygmy blue** [insect]
Butterfly B: 732 *with picture*
- Pygmy chimpanzee** [animal] See Bonobo in *this index*
- Pygmy glider** [animal]
Glider [animal] G: 231
- Pygmy goat**
Goat (Domestic goats) G: 239
- Pygmy hippopotamus** [animal]
Hippopotamus (The pygmy hippopotamus) H: 241 *with picture*
- Pygmy marmoset** [animal]
Marmoset M: 216 *with picture*
- Pygmy mouse lemur** [animal]
Lemur L: 189
- Pygmy nuthatch** [bird]
Nuthatch N: 623
- Pygmy parrot** [bird]
Parrot (Kinds of parrots) P: 179
- Pygmy possum** [possum]
Possum P: 698
- Pygmy rattlesnake**
Snake *picture on* S: 533
- Pygmy right whale** [sea animal]
Whale (Right whales) W: 255
- Pygmy shrew** [animal]
Shrew S: 440
- Pygmy sunfish**
Sunfish So: 990
- Pyhä Falls**
Finland (Rivers) F: 114
- Pyle, Ernie** [American journalist] P: 914 *with portrait*
Foreign correspondent F: 385
War correspondent W: 27
- Pyle, Howard** [American artist] P: 914
Witchcraft *picture on* W: 373
- Pyle, J. Howard** [American political leader]
Arizona (table) A: 687
- Pylon** [architecture]
Architecture (Egyptian architecture) A: 612
- Pylon** [aviation]
Bomber B: 453
- Pyloric sphincter** [anatomy]
Stomach (The stomach's work) So: 907 *with diagram*
- Pym, John** [English political leader] P: 915
- Pynchon, Thomas** [American author] P: 915
American literature (Experimental styles) A: 424
Novel (The novel today) N: 575

Pynchon, William [American businessman]
Springfield (Government and history)
[Massachusetts] So: 808

Pyeongyang [Korea] P: 915 *with picture*
Korea (City life) K: 370 *with picture; picture on*
K: 366

Pyorrhea [disease]
Periodontitis P: 288
Teeth (Periodontal diseases) T: 85

Pyramid [geometry] P: 916 *with diagrams*
Geometry *picture on* G: 104

Pyramid Age
Egypt, Ancient (The Old Kingdom) E: 142

Pyramid Lake [Nevada]
Nevada (Rivers and lakes) N: 166-168
Paiute Indians P: 91

Pyramid of biomass
Ecology (Energy flow) E: 54-55

Pyramid of energy
Ecology (Energy flow) E: 54-55

Pyramid of numbers
Elton, Charles Sutherland E: 253

Pyramid of the Sun [Mexico]
Pyramids (American pyramids) P: 917 *with picture*

Pyramiding [economics]
Holding company H: 290

Pyramids [architecture] P: 916 *with pictures*
Architecture (Egyptian architecture) A: 612;
(Pre-Columbian architecture) A: 614 *with picture*
Aztec *picture on* A: 1004
Egypt (Tourism) E: 129 *with picture*
Egypt, Ancient (Arts and sciences) E: 139; *picture on* E: 140
Maya (Religion) M: 322-323
Memphis M: 394
Mythology (The Great Ennead) M: 976
Seven Wonders of the Ancient World (The pyramids of Egypt) S: 325; *picture on* S: 326

Pyramids, Battle of the [1798]
Egypt (Ottoman and French control) E: 130
Napoleon I (Egypt invaded) N: 16 *with map*

Pyramus and Thisbe [poem by Góngora]
Góngora, Luis de G: 268

Pyramus and Thisbe [Roman legend] P: 919

Pyrenean oak [tree]
Oak (Other oaks) O: 636

Pyrenees (mountains, France-Spain) P: 919
France (The land) F: 464-466 *with map*

Pyrethrum [insecticide]
Insecticide (Botanical insecticides) I: 302
Pyrethrum P: 920

Pyrethrum [medication]
Pyrethrum P: 920

Pyrethrum [plant] P: 920

Pyrex
Glass (Borosilicate glass) G: 213; (table) G: 218

Pyridostigmine bromide [drug]
Gulf War syndrome G: 438

Pyridoxine
Nutrition (Vitamins) N: 626

Pyrilampes [stepfather of]
Plato (Plato's life) P: 567

Pyrite [mineral] P: 920
Crystal (Classifying crystals) Ci: 1166 *with picture*
Iron and steel (Kinds of iron ore) I: 438
Mineral *picture on* M: 568

Pyroceram [glass]
Glass (table) G: 218

Pyrolysis
Combustion Ci: 867
Synthetic fuel So: 1068

Pyromania [psychology] P: 920

Pyrometer [thermometer]
Thermometer (Radiation thermometers) T: 255

Pyrope [gem]
Garnet G: 45

Pyrosis [disorder]
Heartburn H: 147

Pyrotechnics P: 920
Fireworks F: 135

Pyroxene [geology] P: 920
Basalt B: 123
Diopside D: 215

Pyroxylin [chemical]
Painting (Synthetic resins) P: 40
Plastics (The invention of Celluloid) P: 559

Pyrrha [Greek mythology]
Deucalion D: 171

Pyrrhic victory
Pyrrhus P: 920

Pyrrho of Elis [Greek philosopher] P: 920
Philosophy (Ancient philosophy) P: 386-387
Skepticism S: 481

Pyrrhonian Skepticism [philosophy]
Skepticism S: 481

Pyrrhotite
Mineral *picture on* M: 568

Pyrrhus [Greek general] P: 920

Pyruvic acid [biochemistry]
Cell (Producing energy) C: 332-333 *with diagram*
Metabolism (Catabolism) M: 424
Respiration (Cellular respiration) R: 261

Pysanka [folk art]
Alberta (Interesting facts) A: 313 *with picture*
Ukraine (The arts) U: 9 *with picture*

Pythagoras [Greek mathematician] P: 921
Geometry (Greek geometry) G: 105
Mathematics (The Greeks) M: 306
Pre-Socratic philosophy (The first pre-Socratics) P: 772
Series (Working with odd numbers) S: 317-318
Sound (Early ideas about sound) So: 605
Triangle (Properties and relationships of triangles) T: 438

Pythagorean theorem [geometry] P: 921 *with diagrams*
Mathematics (Chinese mathematics) M: 306
Pythagoras P: 921
Triangle (Properties and relationships of triangles) T: 438

Pythaeas [Greek explorer] P: 922
Arctic (Arctic exploration) A: 639
Arctic Ocean A: 641
Exploration (The Greeks) E: 441 *with map*
Ultima Thule U: 16

Pythia [Greek prophetess]
Apollo A: 566
Delphi D: 118
Oracle O: 814

Pythian games [ancient Greece]
Delphi D: 118
Olympic Games (The ancient games) O: 750

Pythian Sisters [organization]
Knights of Pythias K: 352

Pythias [legendary figure]
Daemon and Pythias D: 23

Pythias, Knights of [organization]
Knights of Pythias K: 352

Pythios [Greek architect]
Seven Wonders of the Ancient World (The Mausoleum at Halicarnassus) S: 325

Python [snake] P: 922 *with picture*
Animal (Incubation) A: 498-500
Reptile R: 250 *with picture*
Snake (Pythons) S: 535 *with picture; pictures on* S: 525, S: 526

Pyu [people]
Myanmar (Early days) M: 970d

Q

Q [letter] Q: 1 *with pictures*

Q-BOP [industrial process]
Iron and steel (The basic oxygen process [BOP]) I: 443 *with diagram*

Q fever [disease]
Rickettsia R: 335

Q signal [communications]
Radio, Amateur R: 95

Qaboos bin Said [sultan of Oman]
Oman (History) O: 759

Qadhafi, Muammar Muhammad al- [Libyan political leader] Q: 2 *with portrait*
Chad (History) C: 367
Libya (Government) L: 264; (Independence) L: 268

Qadi [judge]
Saudi Arabia (Courts) S: 156

Qa'eda, Al- [organization] See Qa'ida, Al- *in this index*

Qafzeh [archaeological site]
Prehistoric people (The single origin theory) P: 747

Qa'ida, Al- [organization] Q: 2
Afghanistan (Recent developments) A: 97
September 11 terrorist attacks S: 310
Terrorism (History of terrorism) T: 179

Qajar dynasty
Iran (The Qajar dynasty) I: 406

Qandahar [Afghanistan] See Kandahar *in this index*

Qanun [musical instrument]
Music (Arab music) M: 956

Qasim, Abdul Karim [Iraqi political leader]
Iraq (The republic) I: 413-414

Qat [plant] See Khat *in this index*

Qatar Q: 2 *with picture and map*
Flag *picture on* F: 204

Qatar Petroleum Company
Qatar (History) Q: 3

Qayt Bey Mosque
Cairo (The city) C: 15-16

QCD [physics] See Quantum chromodynamics *in this index*

QED [physics] See Quantum electrodynamics *in this index*

Qiana [fiber]
Nylon (History) N: 633

Qin [musical instrument]
Music (Chinese music) M: 956

Qin dynasty [Chinese history] Q: 3
Asia (The Huang He and Yangtze valleys) A: 805 *with map*
China C: 474; (Beginnings of Chinese civilization) C: 500-501 *with map*
Great Wall of China (History) G: 350
World, History of the (The unification of China) W: 431

Qin Ling Mountains
China (The Central Uplands) C: 493 *with map*

Qing dynasty [Chinese history]
China (The early rule of the Manchus) C: 502 *with map*
Manchus M: 135
Painting (Chinese painting) P: 44-46
Porcelain (Oriental porcelain) P: 676

Qingdao [China]
Yellow Sea Y: 557

Qinghai [province, China]
Asia (Way of life in Central Asia) A: 790-791

Qishon River
Israel (The Coastal Plain) I: 482

Qizilbash [Turkic warriors]
Abbas I A: 4
Safavid dynasty S: 8

Qom [city, Iran] Q: 4

Qu Yuan [Chinese poet]
Chinese literature (Beginnings) C: 511

Quabbin Reservoir
Massachusetts (Rivers and lakes) M: 284-285

Quad-Cities [Illinois-Iowa]
Davenport D: 44

Quad Plan [education]
Wilson, Woodrow (University president) W: 320-321

Quadrant [instrument]
Exploration (The great age of European exploration) E: 442-443

Quadratic equation
Algebra (Quadratic equations in one unknown) A: 358

Quadriceps femoris [anatomy]
Leg (The thigh) L: 181-182

Quadrilateral [geometry]
Geometry (Deductive reasoning) G: 101

Quadriplegia [disorder]
Paralysis (Paralysis of central nervous system origin) P: 152

Quadrivium [European history]
Education (Christian education in the Middle Ages) E: 99

Quadroon [people]
Mulatto M: 912

Quadros, Jânio [Brazilian political leader]
Brazil (Return to constitutional government) B: 585-586

Quadruped [zoology]
Skeleton (Animal skeletons) S: 480

Quadruple Alliance [European history]
Holy Alliance H: 298

Quadruplets
Multiple birth M: 919

Quadruplex telegraphy
Telegraph (Service expansion and improvement) T: 91-92
Edison, Thomas Alva (Telegraphic innovator) E: 78
Western Union W: 241

Quaestiones Naturales [book by Seneca]
Geology (The Romans) G: 98

- Quagga** [animal]
Zebra Z: 591
- Quail** [bird] Q: 4
Bird (Birds of the desert) B: 339 *with picture*
Partridge P: 188
- Quaker City** [nickname]
Philadelphia P: 358
- Quaker-ladies** [plant]
Bluet B: 425
- Quaker Poet** [nickname]
Whittier, John Greenleaf W: 295
- Quaker State** [nickname]
Pennsylvania P: 245
- Quakers** [religious group] Q: 4
American Friends Service Committee A: 411
Conscientious objector Ci: 974
Dyer, Mary D: 397
Fox, George F: 441
Hicks, Edward H: 224
Marriage (Wedding ceremonies and customs) M: 221
New Jersey (English control) N: 250
Oath (Affirmation) Q: 639
Pacifism P: 18
Pastorius, Francis Daniel P: 193
Peace (From the 1400's to the 1700's) P: 206
Penn, William P: 241
Pennsylvania (Colonial days) P: 264; *picture on* P: 265
Philadelphia (Ethnic groups) P: 362
Prison (Early prison reform) P: 807
- Quaking aspen** [tree]
Aspen A: 815
Tree *pictures on* T: 420
- Quaking bog** [geography]
Bog *diagram on* B: 436
- Quality control**
Deming, W. Edwards D: 119
Manufacturing (Making products) M: 170-171
- Quality grade**
Beef (Grades of beef) B: 209
- Quality of life**
Conservation (To maintain the quality of life) Ci: 976
- Quannah** [American Indian chief] Q: 5
- Quantico Marine Corps Combat Development Command** [Virginia] Q: 5
- Quantity theory** [economics]
Inflation (Theories about the causes of inflation) I: 268
- Quantrill, William Clarke** [Confederate military leader] Q: 5
Kansas (Statehood) K: 237 *with picture*
- Quantum** [physics]
Quantum mechanics Q: 6
String theory So: 929
- Quantum chromodynamics**
Gluon G: 236
Subatomic particle (The Standard Model) So: 938
- Quantum electrodynamics** [physics]
Subatomic particle (The Standard Model) So: 938
Feynman, Richard Phillips F: 84
- Quantum field theory** [physics] Q: 5
- Quantum mechanics** [physics] Q: 6
Atom (The forces within an atom) A: 873
Dirac, Paul Adrien Maurice D: 217
Einstein, Albert (Famous theories) E: 146-146a; (Further scientific work) E: 146b
Hawking, Stephen William H: 113
Heisenberg, Werner H: 167
Jordan, Ernst Pascual J: 166
Light (Quantum mechanics) L: 292
Magnetism (The magnetic properties of materials) M: 61
Photon P: 430
Physics (Quantum theory) P: 441
Planck, Max Karl Ernst Ludwig P: 507
Quantum field theory Q: 5
Schrödinger, Erwin S: 187
Science (Science in the early 1900's) S: 201
Solid-state physics So: 583
String theory So: 929
Subatomic particle So: 936
- Quantum optics** [Physics]
Optics O: 813
- Quantum state** [physics] See Energy level in *this index*
- Quantum theory** [physics]
Atom (The forces within an atom) A: 873
Physics (Quantum theory) P: 441
- Planck, Max Karl Ernst Ludwig P: 507
Quantum mechanics (Quantized orbits) Q: 6
Radiation (The quantum theory) R: 81
String theory So: 929
- Qu'Appelle River**
Saskatchewan (Rivers and lakes) S: 138
- Quarantine** Q: 7
Bill of health B: 301
Insect (Insect control) I: 284-285
Plant quarantine P: 550
Zoo (Medical care) Z: 607
- Quare Fellow, The** [play by Behan]
Behan, Brendan B: 220
Irish literature (Drama) I: 432
- Quark** [physics] Q: 7
Atom (The nucleus) A: 871; (Recent discoveries) A: 876
Baryon B: 122
Electricity (Electric charge) E: 191
Fermion F: 74
Gluon G: 236
Hadron H: 4
Kendall, Henry Way K: 258
Matter (Structure of matter) M: 310; (Quark-gluon plasmas) M: 311
Meson M: 421
Neutron N: 155
Physics (Advances in the mid-1900's) P: 442; (Physics today) P: 442-443
Proton P: 836
Psi particle P: 844
Subatomic particle (Kinds of subatomic particles) So: 937; (Theories of forces) So: 937-938
- Quark-gluon plasma** [physics]
Matter (States of matter) M: 311
- Quarles, Benjamin Arthur** [American historian] Q: 7
- Quarrel of the Ancients and the Moderns, The** [literature]
Perrault, Charles P: 293
- Quarry**
Marble *picture on* M: 192
Quarrying Q: 7
- Quarrying** [industry] Q: 7
Mining (Surface mining methods) M: 574-575
Vermont (Places to visit) V: 326; (Mining) V: 332 *with picture*
- Quart** [unit of measure] Q: 7
Liter L: 350
Weights and measures (Comparison of measurement systems) W: 185
- Quarter** [district]
City (The people) Ci: 582
- Quarter** [money] Q: 7
Money *picture on* M: 704; (United States currency today) M: 709-711 *with pictures*
- Quarter horse**
Horse (Kinds of horses) H: 343; (table: Some types and breeds of horses) H: 343; (Saddle horses) H: 343-344 *with picture*
- Quarter midget** [automobile]
Automobile racing (Other kinds of racing) A: 979
- Quarter system** [education]
Universities and colleges (The calendar) U: 209
- Quarterback** [sports]
Football (The offensive team) F: 356 *with diagrams*
- Quarterdeck** [sailing]
Galleon G: 15
Ship (Nautical terms) S: 416
- Quartering Act** [1765]
Revolutionary War in America (The Quartering and Stamp acts) R: 272
United States, History of the (British policy changes) U: 156-157
- Quartermaine's Terms** [play by Gray]
Gray, Simon G: 334
- Quartermaster**
Army (Armies in the Middle Ages) A: 727
- Quartersawing**
Wood (Wood figure) W: 390 *with picture*
- Quartet** [music]
Barbershop quartet singing B: 107
Jazz *picture on* J: 68
- Quartet for the End of Time** [music by Messiaen]
Messiaen, Olivier M: 423
- Quarto** [publishing]
Folio F: 315
- Shakespeare, William (Publishing history) S: 368
- Quartz** [mineral] Q: 8
Crystal (Classifying crystals) Ci: 1166-1167 *with picture*
Electricity (Sources of current) E: 194
Gem (Hardness) G: 77
Granite G: 311
Mineral *pictures on* M: 566, M: 569
Rock (Metamorphic rock) R: 372-373
Silica S: 457
- Quartz-based clock**
Clock (Electric clocks) Ci: 683
Watch (Electronic watches) W: 114 *with pictures*
- Quartz heater**
Heating (Room heaters) H: 160-161
- Quartz Mountain State Park** [Oklahoma]
Oklahoma *picture on* O: 712
- Quartzite** [mineral] Q: 8
Rock (table) R: 373 *with picture*; (Metamorphic rock) R: 372-373
- Quasar** [astronomy] Q: 8
Astronomy (Finding quasars and pulsars) A: 849
Galaxy (Emissions from galaxies) G: 8b
Telescope (Radio telescopes) T: 106
Universe (Size of the universe) U: 205
- Quasicrystal** [solid] Q: 9 *with picture*
- Quasimodo** [literary figure]
Hugo, Victor Marie (His works) H: 410
- Quasimodo, Salvatore** [Italian poet] Q: 9
Italian literature (The 1900's) I: 495
- Quasi-public corporation**
Corporation (Other corporations) Ci: 1070
- Quasi-stellar object** See Quasar in *this index*
- Quasi-stellar radio source** [astronomy] See Quasar in *this index*
- Quaternary ammonium compound** [chemical]
Disinfectant D: 235
- Quaternary Period** [geology]
Earth (table) E: 30
- Quatrain** [verse]
Poetry (table) P: 594
- Quatrefoil** [design]
Ghiberti, Lorenzo G: 182
- Quattro Pezzi Sacri** [music by Verdi]
Verdi, Giuseppe V: 316
- Quattrocento** [history]
Painting (The 1400's) P: 52
- Quayle, Dan** [American political leader] Q: 9 *with portrait*
Bush, George Herbert Walker (Election as president) B: 719; *picture on* B: 720
Vice President of the United States (table) V: 351; (Growth of the vice presidency) V: 353-354
- Quebec** [province] Q: 10 *with pictures and maps*
Canada (Quebec) C: 101; *picture on* C: 108
Labrador L: 17
Parti Québécois P: 183
Quebec Q: 10
School (History of Canadian schools) S: 185
Trudeau, Pierre Elliott (Later years) T: 465
Wisconsin (Struggle for control) W: 366
- Government**
Canada, Government of *picture on* C: 133
Chrétien, Jean (Political career) C: 522b
Law (The development of Canadian law) L: 136
Mulroney, Brian M: 916; (The constitutional crisis) M: 918
- History**
Acadia A: 21
Canada, History of (The United Empire Loyalists) C: 144 *with map*
Lévesque, René L: 218
Trudeau, Pierre Elliott (Entry into public life) T: 462
- Transportation**
See also the list of Related Articles in the Quebec article
- Quebec** [city, Quebec] Q: 34 *with picture and map*
Canada *picture on* C: 99
Champlain, Samuel de (The founding of Quebec) C: 373
Exploration (The French and English in North America) E: 446
French and Indian wars (The French and Indian War) F: 512-513
Fur trade (The early fur trade) F: 564

- New France (Colonial life) N: 204-205 *with picture*
 Quebec Q: 10; (Places to visit) Q: 20 *with picture*; (table: Average monthly weather) Q: 25
 Quebec, Battle of Q: 37
Quebec, Battle of [1759] Q: 37
 Canada, History of *picture on C: 144*
 French and Indian wars (The French and Indian War) F: 512-513 *with picture*
 Montcalm, Marquis de M: 762
 Murray, James M: 931
 Quebec (The 1700's) Q: 36
 Wolfe, James W: 377
Quebec, Battle of [1775]
 Quebec Act Q: 38
 Revolutionary War in America (The invasion of Canada) R: 275; (table) R: 276
Quebec, School of [poetry]
 Canadian literature (Poetry: 1850-1918) C: 157
Quebec, University of Q: 38
Quebec Act [1774] Q: 38
 Canada, History of (The Quebec Act) C: 143-144; (The United Empire Loyalists) C: 144
 Law (The development of Canadian law) L: 136
 Wisconsin (Struggle for control) W: 366
Quebec Bridge [St. Lawrence River]
 Bridge (table: Cantilever) B: 603
Quebec Chronicle-Telegraph [newspaper]
 Quebec (Communication) Q: 28
Quebec Conference [1864] Q: 38
 Canada, History of (Confederation) C: 146
 Confederation of Canada (Moves toward confederation) Ci: 933-934
 Macdonald, Sir John Alexander (Forming the Dominion) M: 7 *with picture*
 Taché, Sir Étienne-Paschal T: 4
 Tupper, Sir Charles (Confederation) T: 494
Quebec, North Shore, and Labrador Railway
 Labrador (People and economy) L: 18
Quebec Party See Parti Québécois *in this index*
Quebec Pension Plan
 Social security (The Canada Pension Plan) So: 556
Quebec Resolutions [1864]
 Confederation of Canada (Moves toward confederation) Ci: 933-934
Quebec separatist movement
 Bloc Québécois B: 404
 Canada, History of (The Quebec separatist movement) C: 152; (The separatist threat) C: 153
 Canadian literature (Modern Canadian poets) C: 160-161
 Lévesque, René L: 218
 Montreal (The separatist movement) M: 779
 Quebec (The mid-1900's) Q: 32; (Recent developments) Q: 32
 Trudeau, Pierre Elliott (Entry into public life) T: 462; (The national scene) T: 464
Quebec Winter Carnival [Quebec City]
 Quebec *picture on Q: 21*
Québécois [people]
 Canada (Languages) C: 106
Québécois, Bloc See Bloc Québécois *in this index*
Québécois literature
 Canadian literature C: 157
Quebracho [tree] Q: 38
 Argentina (Northern Argentina) A: 652-653
 Paraguay (The land and climate) P: 147; (Agriculture and forestry) P: 148
Quechan Indians [American Indians] Q: 38
 California (Early days) C: 60
 Indian, American (Indians of the Southwest) I: 166-167
 Yuma Y: 586
Quechua [language]
 Bolivia (Language) B: 443
 Ecuador (People) E: 68-69
 Inca (Communication and learning) I: 97; (The Inca heritage) I: 99
 Indian, American (After European contact) I: 175
 Peru (Languages) P: 307-309
Quechua Indians [American Indians]
 Races, Human (Evolutionary theory) R: 53-54
Queen [cat]
 Cat (Reproduction) C: 293
Queen [chess]
 Chess (The board and the men) C: 412 *with diagram*; (The moves) C: 413

- Queen** [entomology]
 Ant (Life in an ant colony) A: 523; (The bodies of ants) A: 521 *with picture*
 Bee (The honey bee colony) B: 201 *with picture*; (Sting) B: 202; (Life of the honey bee) B: 202 *with picture*
 Hornet H: 340
 Insect (Family life) I: 294-295 *with picture*
 Termite (Life and habits) T: 173
 Wasp (Group life) W: 111
Queen [title] Q: 39
 Address, Forms of (Officials of the Commonwealth of Nations) A: 53
 See also *individual queens in this index*, such as Elizabeth II
Queen, Ellery [pen name] Q: 39
Queen Alexandra's birdwing [insect]
 Butterfly B: 732 *with picture*
Queen angelfish
 Fish *picture on F: 154*
Queen Anne style
 Furniture (The Queen Anne style) F: 579; *picture on F: 577*
 House *picture on H: 381*
Queen Anne's lace [plant]
 Wild carrot W: 301 *with picture*
Queen Anne's Revenge [ship]
 Blackbeard B: 391
Queen Anne's War [1702-1713]
 Canada, History of (The colonial wars) C: 143
 French and Indian wars (Queen Anne's War) F: 512
 South Carolina (Colonial days) So: 659
 Succession wars (The War of the Spanish Succession) So: 950
 Utrecht, Peace of U: 252
Queen butterfly
 Butterfly (Milkweed butterflies) B: 738
Queen Charlotte Islands [Pacific] Q: 39
 British Columbia (Land regions) B: 622
Queen City of the Plains
 Regina R: 204
Queen City of the West [nickname]
 Cincinnati Ci: 554
Queen conch
 Conch Ci: 928 *with picture*
Queen consort [title]
 Queen Q: 39
Queen dowager [title]
 Queen Q: 39
Queen Elizabeth [ship]
 Ship (Ocean liners) S: 415-417
Queen Elizabeth 2 [ship]
 Ship (Ocean liners) S: 415-417 *with pictures*
Queen Elizabeth Park
 Park *picture on P: 168*
Queen Emma's Summer Palace [Honolulu]
 Honolulu (Cultural life) H: 321
Queen Guenevere See Guenevere *in this index*
Queen Mab [legendary figure]
 Fairy (Where fairies live) F: 10-11
Queen Mab [poem by Shelley]
 Shelley, Percy Bysshe (His life) S: 391
Queen Mary [ship]
 Long Beach (Economy) L: 447
 Ship (Ocean liners) S: 415-417
Queen Mave [legendary figure]
 Irish literature (Heroic tales, romances, and sagas) I: 430-431
Queen mother [title]
 Queen Q: 39
Queen of Hearts [literary figure]
 Carroll, Lewis (The Alice books) C: 249 *with picture*
 Nursery rhyme (Verse stories) N: 614
Queen of Sheba [Biblical figure] See Sheba, Queen of *in this index*
Queen of Soul [nickname]
 Franklin, Aretha F: 485
Queen of Spades, The [opera by Tchaikovsky]
 Tchaikovsky, Peter Ilich (His music) T: 61-62
"Queen of Spades, The" [story by Pushkin]
 Russian literature (Early romanticism) R: 560-561
Queen of the Adriatic [nickname]
 Venice V: 306
Queen of the Night [opera character]
 Opera (Magic Flute, The) O: 805
Queen parrotfish [fish]
 Parrotfish P: 181 *with picture*
Queen regnant [title]
 Queen Q: 39

- Queen Street** [Cardiff]
 Wales *picture on W: 11*
Queen Victoria Park
 Niagara Falls (History) N: 392-393
Queening the pawn
 Chess (The moves) C: 413
Queens [borough, New York City] Q: 39
 New York City (The city) N: 323; (Queens) N: 329 *with picture*
Queen's College [former name]
 Rutgers, The State University of New Jersey R: 568
Queen's County [Irish history]
 Ireland (The conquest of Ireland) I: 426
Queen's Day [holiday]
 Netherlands (Holidays and recreation) N: 141 *with picture*
Queen's Gallery
 Buckingham Palace B: 664
Queen's House [Greenwich, England]
 England (The arts) E: 298-299
Queen's Plate [race]
 Horse racing (Stakes races) H: 364-365
Queen's Privy Council for Canada, President of the, and minister of intergovernmental affairs [office]
 Canada, Government of (The Cabinet) C: 132; *diagram on C: 137*
Queen's Road
 Pennsylvania (Transportation) P: 262
Queen's standard [flag]
 Flag (Flags of individuals) F: 195 *with picture*
Queen's Theatre [London]
 Vanbrugh, Sir John V: 269
Queen's University of Belfast
 Northern Ireland (Education) N: 522
Queen's Ware [china]
 Wedgwood ware W: 179 *with picture*
Queensberry, Marquess of [British sportsman] Q: 39
 Queensberry Rules Q: 39
 Boxing (From bare knuckles to gloves) B: 533
Queensberry Rules [boxing] Q: 39
 Queensberry, Marquess of Q: 39
 Boxing (From bare knuckles to gloves) B: 533
Queensboro Bridge
 New York City (Queens) N: 329
Queensland [state, Australia] Q: 39 *with map*
Queensland blue heeler [dog]
 Australian cattle dog A: 927
Queensland heeler [dog]
 Australian cattle dog A: 927
Queensland nut See Macadamia nut *in this index*
Queensland University
 Queensland (Education) Q: 40
Queenston Heights, Battle of [1812]
 War of 1812 (Queenston Heights) W: 33
Queenston Heights National Historic Site [Ontario]
 Canada (table: National historic sites) C: 114
Queets Corridor [region, Washington]
 Olympic National Park Q: 756
Queirós, Pedro Fernandez de [Portuguese explorer]
 Torres, Luis Vaez de T: 340d
 Tuamotu Islands T: 476
Queloz, Didier [Swiss astronomer]
 Planet (The first discoveries) P: 512
Quemoy [islands, Formosa Strait] Q: 40
 Cold War (The death of Stalin) Ci: 764-765; (The Far East) Ci: 766
 Taiwan (History) T: 18
Quentin McAdam [painting by Raeburn]
 Raeburn, Sir Henry *picture on R: 101*
Querétaro [state, Mexico] Q: 40
 Maximilian M: 319
Querétaro, Protocol of [U.S. history]
 Hispanic Americans (Conflict) H: 251
Quern [tool]
 Pioneer life in America (Tools) P: 483
Query letter [publishing]
 Writing (Preparing and submitting a manuscript) W: 512
Quesnay, François [French economist] Q: 40
 Physiocrats P: 444
Question answering
 Information retrieval (Research) I: 269
Question mark
 Punctuation (The question mark) P: 902
Questionnaire
 Census C: 346

- Public opinion poll (Designing the questionnaire) P: 863
- Questions of Travel** [poetry by Bishop]
American literature (Poetry) A: 423
- Quetico Provincial Park** [Atikokan]
Ontario *picture on* Q: 778
- Quetzal** [bird] Q: 40
Bird (Birds of Central and South America)
B: 345 *with picture*
- Quetzal** [bird]
Bird (Birds of Central and South America)
B: 345 *with picture*
- Quetzalcóatl** [Aztec god]
Aztec (Religion) A: 1000
Chichén Itzá C: 439
Mexico (The Toltec and the Aztec) M: 468
Montezuma II M: 764b
Mythology (American Indian mythology)
M: 985-986 *with picture*
Orozco, José Clemente *picture on* Q: 858
Toltec Indians T: 323
- Quevedo, Francisco de** [Spanish philosopher]
Q: 41
Spanish literature (The 1600's) So: 759
- Quezon City** [Philippines] Q: 41
- Quezon y Molina, Manuel Luis** [Filipino political leader]
Philippines (American rule) P: 380
Quezon City Q: 41
- Quick bread** [food]
Bread (Kinds of bread) B: 588 *with pictures*
- Quick-cooking rice**
Rice (Food) R: 323
- Quick-freezing** [food processing]
Food, Frozen F: 338
- Quick-kill trap** *See* Conibear *in this index*
- Quick printing**
Printing (The electronic age) P: 804
- Quickening** [pregnancy]
Abortion (Abortion in the United States) A: 15
- Quickie strike**
Labor movement (Handling labor disputes)
L: 6-7
- Quicklime** [chemical]
Lime L: 306
- Quicksand** Q: 41
- Quicksilver** *See* Mercury *in this index*
- Quickstep** [dance]
Ballroom dancing B: 63
- Quid pro quo** [law]
Sexual harassment S: 337
- Quidde, Ludwig** [German statesman]
Nobel Prizes (Peace: 1927) N: 447
- Quie, Albert H.** [American political leader]
Minnesota (table) M: 602
- Quiescent prominence** [astronomy]
Sun (Prominences) So: 981 *with picture*
- Quiet Don, The** [book by Sholokhov]
Russian literature (The period of socialist realism) R: 564
Sholokhov, Mikhail S: 433
- Quiet Man, The** [film]
Ford, John F: 381
- Quiet Revolution** [political movement]
Canada, History of (The Quebec separatist movement) C: 152
Canadian literature (Modern Canadian poets)
C: 160
- Quietism** [philosophy]
Fénelon, François de Salignac de la Mothe-
F: 71
- Quill**
Animal *picture on* A: 494
Feather (Kinds and parts of feathers) F: 59
with diagram
Hair H: 9
Pen (History) P: 234
Porcupine P: 677 *with picture*
- Quill Lake**
Saskatchewan (Rivers and lakes) S: 138
- Quillwork** [handicraft]
Indian, American *pictures on* I: 145, I: 156
- Quillwort** [plant]
Plant (Lycopsids) P: 520 *with picture*
- Quilt** [handicraft] Q: 41 *with picture*
- Quilting bee**
Quilt Q: 41
- Quimby, Phineas** [American religious leader]
Eddy, Mary Baker E: 75
New Thought N: 288
- Quinault Indians**
Salish Indians (The Coast Salish) S: 67
- Quinby, Henry B.** [American political leader]
New Hampshire (table) N: 223
- Quince** [tree] Q: 42 *with picture*
- Quincy, Josiah** [American lawyer]
Boston Massacre B: 505
- Quincy Grammar School** [Boston]
School (Improvements in school design)
S: 184
- Quiney, Richard** [friend of]
Shakespeare, William (His last years) S: 349
- Quiney, Thomas** [son-in-law of]
Shakespeare, William (His last years) S: 349
- Quinidine** [medication]
Quinine Q: 42
- Quinine** [medication] Q: 42
Colonial life in America (Health and medicine)
C: 809
Malaria (Treatment and prevention) M: 96
Plant (Medicines) P: 518
Sydenham, Thomas So: 1063
Tree (Other tree products) T: 412
- Quinn, Anthony** [American actor]
Motion picture (Best performance by an actor
in a supporting role: 1952, 1956) M: 863
- Quinn, Robert E.** [American political leader]
Rhode Island (table) R: 311
- Quinn, William F.** [American political leader]
Hawaii (table) H: 105
- Quinnat** *See* Chinook salmon *in this index*
- Quinoa** [grain] Q: 42
Bolivia (Food) B: 444; (Agriculture) B: 446
- Quinolone** [drug] Q: 42
- Quinsigamond**
Worcester W: 403
- Quint** [truck]
Fire department (Fire trucks) F: 125-126
- Quintain** [sport]
Knights and knighthood *picture on* K: 349
- Quintana, Manuel José** [Spanish poet]
Spanish literature (The 1800's) So: 761
- Quintessence of Ibsenism, The** [essay by Shaw]
Shaw, George Bernard (Early life) S: 378
- Quintilian** [Roman educator] Q: 43
Latin literature (The Imperial Period) L: 116
Oratory (Classical orators) O: 819
- Quintilianus, Marcus Fabius** *See* Quintilian *in this index*
- Quintilis** [Roman calendar]
July J: 188
- Quintuplets** Q: 43
Multiple birth M: 919
- Quipu** [communications]
Inca (Communication and learning) I: 97
Indian, American (Writing) I: 150; *picture on*
I: 140
- Quirinal Hill** [Rome] Q: 43
Rome R: 429
- Quirinal Palace** [Rome]
Rome (Churches, palaces, and fountains)
R: 429
- Quirinus** [Roman mythology]
Mythology (Roman divinities) M: 981
Quirinal Hill Q: 43
- Quiroga, Horacio** [Uruguayan author]
Uruguay (The arts) U: 225
- Quiroga Ramírez, Jorge** [Bolivian political leader]
Bolivia (Recent developments) B: 447
- Quisling** [traitor]
Quisling, Vidkun Abraham Lauritz Q: 43
- Quisling, Vidkun Abraham Lauritz** [Norwegian traitor] Q: 43
Norway (World War II) N: 546
- Quit India Movement** [history of India]
India (World War II (1939-1945)) I: 132
- Quitclaim deed** [real estate]
Deed D: 81
- Quite** [bullfighting]
Bullfighting (The order of the bullfight) B: 695-696
- Quitman, John A.** [American political leader]
Mississippi (table) M: 640
- Quito** [city, Ecuador] Q: 43 *with picture*
Ecuador E: 67; *picture on* E: 68
Equator (The equatorial climate) E: 346
Latin America *picture on* L: 101
- Quitos** [people]
Quito Q: 43
- Quiver**
Archery (Arrows) A: 602 *with diagram*
- Quivire** [legendary city]
- Coronado, Francisco Vázquez de C: 1068
- Quixote, Don** *See* Don Quixote *in this index*
- Qum** [Iran] *See* Qom *in this index*
- Qumran** [region, Israel]
Dead Sea Scrolls D: 56
- Quo Vadis?** [book by Sienkiewicz]
Sienkiewicz, Henryk S: 450
- Quoll** [animal] Q: 43 *with picture*
- Quonset hut** [dwelling]
Rhode Island (Interesting facts) R: 297 *with picture*
- Quonset Point Naval Air Station** [Rhode Island]
Rhode Island (Interesting facts) R: 297 *with picture*; (The mid-1900's) R: 315
- Quorum** [parliamentary procedure]
Parliamentary procedure (Holding meetings)
P: 176
- Quota**
Affirmative action A: 91
Canada (Communication) C: 126-127
Immigration (The third wave) I: 82
International trade (Government trade policies)
I: 348
- Quota International** [organization] Q: 44
- Quotation**
Dictionary (What a dictionary tells you) D: 193
- Quotation mark**
Punctuation (Quotation marks) P: 902
- Quote machine** [electronic device]
Stock ticker So: 904
- Quotient** [mathematics]
Arithmetic (Division) A: 668
Division (Writing division) D: 248
- Quqon, Khanate of** [Asian history]
Kyrgyzstan (History) K: 400
- Quran** [religious book] Q: 44
Arabic literature A: 583
Arabs (Literature and the arts) A: 587
'Id al-Adha I: 25
Islam I: 463
Muslims (Muhammad) M: 964-964a
Ottoman Empire (People) O: 877
Painting (Islamic painting) P: 48
Ramadan R: 132
Saudi Arabia (National government) S: 155
Shari'a S: 373
- Quranic school**
Niger (People) N: 407-408
- Quraysh** [people]
Muslims (Muhammad) M: 964
- Qurnat as Sawda** [mountain, Lebanon]
Lebanon (Land and climate) L: 172
- Qutb, Sayyid** [Egyptian religious leader] Q: 44
- Qutb ud-din Aybak** [Muslim general]
India (Period of invasions) I: 129
- Quttinirpaq National park** [Nunavut]
Canada (table: National parks and national park reserves) C: 113
Nunavut (Economy) N: 609-610
- q.v.**
Cross-reference C: 1155
- QWERTY keyboard**
Keyboard K: 308 *with picture*
Typewriter (History) T: 539
- Qwest Communications International Inc.**
Telephone (In the United States) T: 99

R

- R** [letter] R: 45 *with pictures*
- R** [mathematics]
Division (Short division) D: 251
- R** [rating]
Motion picture (Censorship and self-regulation) M: 861
- Rx** [symbol] R: 46
- R. Caldecott's Picture Book No. 1** [book]
Literature for children *picture on* L: 362
- R. E. Lee** [book by Freeman]
Freeman, Douglas Southall F: 508
- R-value**
Insulation (In buildings) I: 306
- R-34**
Airship (Between world wars) A: 252
- Ra** [Egyptian god] *See* Re *in this index*
- Ra** [symbol]
Radium (Properties) R: 100
- Ra-2** [boat]
Heyerdahl, Thor H: 220

Rabat [Morocco] **R**: 46
Morocco **M**: 810 *with picture*

Rabaul [New Britain]
Bismarck Archipelago **B**: 383
New Britain **N**: 179
World War II (The South Pacific) **W**: 487-488

Rabbath Ammon [ancient city]
Amman **A**: 433

Rabbi [religion] **R**: 46
Address, Forms of (Members of the clergy) **A**: 54
Judaism (The rabbi) **J**: 180

Rabbinical Assembly of America
Synagogue Council of America **So**: 1067

Rabbinical Council of America
Synagogue Council of America **So**: 1067

Rabbit [animal] **R**: 46 *with pictures*
Animal (Introduction of new species) **A**: 505; *picture on A*: 483
Conservation (Australia) **Ci**: 989-990
Easter (Easter symbols) **E**: 43-44
Fur (table) **F**: 561
Hare **H**: 60
Tularemia **T**: 482

Rabbit at Rest [book by Updike]
Updike, John **U**: 213

Rabbit deer See *Pudu in this index*

Rabbit ears
Antenna (Receiving antennas) **A**: 544
Television (Receiving equipment) **T**: 123

Rabbit-eye blueberry
Blueberry **B**: 422

Rabbit fever See *Tularemia in this index*

Rabbit Hill [book by Lawson]
Lawson, Robert **L**: 147

Rabbit, Run [book by Updike]
Updike, John **U**: 213

Rabbitry
Rabbit (Domestic rabbits) **R**: 46

Rabe, David [American dramatist]
American literature (Drama) **A**: 425
Drama (Later United States drama) **D**: 340-341

Rabelais, François [French author] **R**: 49
French literature (The Renaissance) **F**: 519
Humanism (The spread of humanism) **H**: 431

Rabi, Isidor Isaac [American physicist]
Nobel Prizes (Physics: 1944) **N**: 440

Rabi I [month]
Calendar (The Islamic calendar) **C**: 29

Rabi II [month]
Calendar (The Islamic calendar) **C**: 29

Rabies [disease] **R**: 49
Cat (Veterinary care) **C**: 295
Dog (Medical care) **D**: 279
Pasteur, Louis (His work in medicine) **P**: 193
Veterinary medicine **V**: 345

Rabin, Yitzhak [Israeli political leader] **R**: 50 *with portrait*
Israel (The Yom Kippur War) **I**: 488; (Recent developments) **I**: 489 *with picture*
Middle East *picture on M*: 534
Nobel Prizes (Peace: 1994) **N**: 449
Shamir, Yitzhak **S**: 371

Rabinowitz, Sholem See *Sholem Aleichem in this index*

Rabuka, Sitiveni [Fijian political leader]
Fiji (History) **F**: 98-99

Rabula [Syrian painter]
Bible *picture on B*: 283

Rabun, William [American political leader]
Georgia (table) **G**: 130

Rabushka, Alvin [American economist]
Flat tax **F**: 228

Raccoon [animal] **R**: 50 *with pictures*
Animal *picture on A*: 479
Fur (table) **F**: 561

Raccoon butterflyfish [fish]
Animal *picture on A*: 487

Raccoon coat
Roaring Twenties *picture on R*: 363

Raccoon dog
Fox (Raccoon dogs) **F**: 441

Race See *Race relations; Races, Human in this index*

Race [botany]
Corn (The corn plant) **Ci**: 1057

Race [marking]
Horse (Coat and skin) **H**: 348-349

Race horse
Horse racing **H**: 363 *with pictures*
Kentucky *picture on K*: 276

Race relations
See also *Discrimination; Segregation in this index*

African Americans **A**: 136b
Los Angeles (Recent developments) **L**: 470
Minority group **M**: 608
Races, Human (The social significance of race) **R**: 59
Riot (Major riots in the United States) **R**: 348
Segregation **S**: 285
South Africa **So**: 608
United States, History of the (Poverty and discrimination) **U**: 191

Race runner [lizard]
Lizard *picture on L*: 400

Race to the Sea [1914]
World War I (The Western Front) **W**: 455-456

Race track
Hippodrome **H**: 240
Horse racing (At the races) **H**: 365

Race Track or Death on a Pale Horse, The [painting by Ryder]
Ryder, Albert Pinkham *picture on R*: 573

Race-walking
Walking **W**: 15

Raceme [botany] **R**: 51
Inflorescence **I**: 268a *with picture*

Racer [snake] **R**: 51
Snake *picture on S*: 532

Races, Human **R**: 52 *with pictures and map*
Adoption (Interracial adoptions) **A**: 66
Blood (The significance of blood groups) **B**: 412
Minority group **M**: 608
Prehistoric people (The development of *Homo sapiens*) **P**: 746
Racism **R**: 62
World **W**: 407
See also *the list of Related articles in the Races, Human article and Race relations in this index*

Rachel [Biblical figure] **R**: 60
Jacob **J**: 19
Jews (Beginnings) **J**: 120
Joseph (The prime minister) **J**: 167-168

Rachels, Stuart [American chess player]
Chess (United States chess champions) **C**: 414

Rachis [biology]
Feather (Kinds and parts of feathers) **F**: 59 *with diagram*
Leaf (The blade) **L**: 153-154

Rachmaninoff, Sergei Vassilievich [Russian composer] **R**: 60

Racial discrimination See *Discrimination [sociology] in this index*

Racial minority [sociology]
Minority group **M**: 608

Racial profiling [law enforcement] **R**: 61
Racism (Types of racism) **R**: 62

Racial segregation See *Segregation in this index*

Racial stratification
Minority group (Racial or ethnic stratification) **M**: 609

Racicot, Marc [American political leader]
Montana (table) **M**: 757

Racine, Jean [French dramatist] **R**: 61
Drama (Neoclassical playwrights) **D**: 333-334
French literature (Classical drama) **F**: 520

Racing **R**: 61
Airplane (The golden age) **A**: 235-236
Canoeing (Canoe racing) **C**: 181 *with picture*
Swimming *picture on So*: 1042

Racing bike
Bicycle (Road bikes) **B**: 290 *with picture*

Racing car
Automobile racing **A**: 975

Racing spur
Horse (Spurs) **H**: 351

Racism **R**: 62
See also *Discrimination in this index*
Hate crime **H**: 85
Indian, American (Current issues) **I**: 182-183
Prejudice **P**: 755
Stereotyping **So**: 893

Rack [barn]
Horse (Food) **H**: 355

Rack [gait]
Horse (Gaits) **H**: 353-354

Rack-and-pinion gear
Gear **G**: 75
Automobile (Control systems) **A**: 953 *with diagram*

Rack system [electronics]
Stereophonic sound system (Types of systems) **So**: 892 *with picture*

Racket [sports]
Badminton (Playing) **B**: 24 *with picture*
Squash **So**: 813 *with picture*
Table tennis **T**: 3 *with picture*
Tennis (Tennis rackets) **T**: 162 *with picture*

Racket toss
Tennis (How tennis is played) **T**: 162

Racketeer Influenced and Corrupt Organizations Act [1970]
Racketeering **R**: 63

Racketeering [crime] **R**: 63

Rackham, Arthur [British artist] **R**: 63 *with picture*
Literature for children *picture on L*: 359

Rackham, Jack [English pirate]
Pirate (Pirates of the Caribbean and other areas) **P**: 495

Racking room [brewing]
Brewing *picture on B*: 595

Racquet [sports] See *Racket in this index*

Racquetball [sport] **R**: 63 *with diagram*

Rad [unit of measure]
Ion (Producing ions) **I**: 372
Radiation (Dose) **R**: 79

Radama I [king of Madagascar]
Madagascar (History) **M**: 28-29

Radames [opera character]
Opera (*Aida*) **O**: 801

Radar [electronics] **R**: 64 *with pictures and map*
Airplane (Safety) **A**: 227-228
Guided missile (The flight of an advanced missile) **G**: 426
Navigation (Electronic navigation) **N**: 71-73
Radio (Navigation) **R**: 85
Rain (Measuring rainfall) **R**: 125
Range finder **R**: 139
Remote sensing **R**: 231
Ship (Navigating a ship) **S**: 423
Shipwreck **S**: 429
Sonar **So**: 591
Warship (Aircraft carriers) **W**: 39
Watson-Watt, Sir Robert Alexander **W**: 148
Weather (Weather radar) **W**: 162 *with pictures*

Radar altimeter [instrument]
Altimeter **A**: 390
Mountain (Measuring mountains) **M**: 896
Radar (In aviation) **R**: 65

Radar astronomy
Radar (In scientific research) **R**: 67-68

Radar echo
Weather (Weather radar) **W**: 162 *with picture*

Radar map
Radar (In scientific research) **R**: 67-68 *with picture*; (Pulse radar) **R**: 68-69 *with picture*
Weather *picture on W*: 166

Radar transponder [navigation]
Airplane (Safety) **A**: 227

Radbourn, Charlie [American baseball player]
Baseball (Early strategy and stars) **B**: 133; (table: Hall of Fame) **B**: 135

Radcliffe, Ann [British author]
Gothic novel **G**: 279

Radcliffe-Brown, A. R. [British anthropologist] **R**: 73

Radcliffe College **R**: 73
Harvard University (History) **H**: 80-81

"Radetzky March" [music by Strauss]
Strauss, Johann, Sr. **So**: 921

Radford, Arthur William [American admiral] **R**: 73

Radha [ballet]
Saint Denis, Ruth **S**: 33

Radial [signal]
Airplane *diagram on A*: 226

Radial artery
Human body *diagram on H*: 422
Pulse **P**: 898

Radial design prison
Prison (Prison buildings) **P**: 806

Radial engine
Gasoline engine (Cylinder arrangement) **G**: 64 *with picture*

Radial keratotomy [medicine]
Nearsightedness **N**: 93

Radial nerve [anatomy]
Human body *diagram on H*: 422

Radial symmetry [biology]
Echinoderm **E**: 49
Flower (The parts of a flower) **F**: 293

Radial tire
Tire (Types of tires and tread patterns) **T**: 297

Radian [unit of measure] **R**: 73 *with diagram*

Radiant energy [physics]
Electromagnetic waves (History) **E**: 203

- Light L: 282
- Radiant heating**
Heating (Steam and hot-water heating systems) H: 159 *with diagrams*; (Room heaters) H: 160-161
- Radiant Way, The** [book by Drabble]
Drabble, Margaret D: 317
- Radiation** [physics] R: 74 *with pictures*
Effects
Aerospace medicine (Space medicine) A: 89
Cancer (Genes damaged by substances in the environment) C: 170; (Radiation therapy) C: 172
Cosmic rays (Effects of cosmic rays) Ci: 1077
Dew D: 176
Environmental pollution (Hazardous waste) E: 334-335
Fallout F: 18 *with picture and map*
Lead (Uses) L: 149
Nuclear weapon (Thermal radiation) N: 598
Radiation sickness R: 81
History
Bohr, Niels B: 438
Pauling, Linus Carl P: 202
Planck, Max Karl Ernst Ludwig P: 507
Universe (Changing views of the universe) U: 205-206
Sources
Nuclear energy (Hazards and safeguards) N: 587
Quasar Q: 8
Sun (Energy output) So: 976
Uses
Food preservation (Irradiation) F: 343
Heat (How heat travels) H: 151 *with diagram*
Heating (Steam and hot-water heating systems) H: 159
Insulation (Insulation to control heat flow) I: 306
Technology (Emerging technologies) T: 75-76
Testicular cancer T: 181
Thallium T: 229
See also the list of Related Articles in the Radiation article and Irradiation, Radioactivity, and X Rays in this index
- Radiation-absorbing glass**
Glass (Specialty glasses) G: 212-213
- Radiation budget** [meteorology]
Weather satellite W: 171
- Radiation counter** [instrument]
Radiocarbon (Radiocarbon dating) R: 97-98 *with diagram*
- Radiation detector**
Geiger counter G: 76 *with pictures*
- Radiation fog**
Fog F: 314 *with diagram*
- Radiation sickness** R: 81
Fallout (The fallout hazard) F: 19
Ion (Producing ions) I: 372
Radiation (Dose) R: 79-80
- Radiation therapy** *See* Radiotherapy *in this index*
- Radiation-transmitting glass**
Glass (Specialty glasses) G: 212-213
- Radiative zone**
Sun (Zones of the sun) So: 979 *with diagram*
- Radiator** R: 82
Automobile (The cooling system) A: 952
Heating (Room heaters) H: 160-161
- Radical** (chemistry) R: 82
- Radical Chic & Mau Mauing the Flak Catchers** [book by Wolfe]
Wolfe, Tom W: 378
- Radical Civic Union** [political party]
Argentina (Politics) [Radical Party] A: 647
- Radical hysterectomy** [surgery]
Cervical cancer C: 364
Hysterectomy H: 482
- Radical mastectomy** [surgery]
Mastectomy M: 296
- Radical modern design**
Furniture (Radical modern design) F: 585
- Radical Party** [political party]
Argentina (Politics) A: 647; (Reform movements) A: 658
- Radical Republican** [U.S. history]
African Americans (Temporary gains) A: 136
Civil War (Government and politics) Ci: 622-623
Grant, Ulysses S. (National hero) G: 315
Reconstruction (The Radicals and the Moderates) R: 178
Republican Party (The Radical Republicans and Reconstruction) R: 254
Tennessee (Reconstruction) T: 154
- Radical sign** [mathematics]
Root R: 473
Square root So: 812
- Radicalism** [political science] R: 82
Left wing L: 181
- Radicals** [Texas history]
Texas (The Civil War and Reconstruction) T: 207
- Radicle** [botany]
Germination G: 173
- Radiculopathy** [disorder]
Neuralgia N: 152
- Radio** [communications] R: 83 *with pictures*
Advertising (Radio) A: 75; (The rise of radio and television) A: 80
Antenna A: 543-544 *with pictures*
Cellular telephone C: 340
Citizens band radio Ci: 568
Communication (The development of electronics) Ci: 883 *with picture*
Country music (History) Ci: 1098a-1098b
De Forest, Lee D: 89
Electronics (The development of electronics) E: 215
Federal Communications Commission F: 63
Frequency modulation F: 528
Global Positioning System G: 231
Ionosphere I: 373
Journalism (Radio) J: 171; (Radio journalism) J: 175
Marconi, Guglielmo M: 196
Pager P: 20
Public opinion (Radio and television) P: 860
Quartz (Properties and uses) Q: 8
Radio, Amateur R: 95 *with picture*
Railroad (Other train controls) R: 112
Remote control (The parts of a remote control system) R: 230
Roaring Twenties (Rising prosperity) R: 363
Rock music (Growing popularity) R: 377
Satellite, Artificial (Performing the mission) S: 150g
Soap opera So: 543
Space exploration (Communicating with the earth) So: 704
Static So: 867
Telephone (Telephones that use radio) T: 97
Television (Effects on society) T: 117-118
Tesla, Nikola (Other inventions) T: 180
Voice of America V: 437
Walkie-talkie W: 15
See also the list of Related Articles in the Radio article
- Radio, Amateur** R: 95 *with picture*
- Radio announcer**
Radio (Careers) R: 91
- Radio astronomy**
Arecibo Observatory A: 644
Astronomy (Radio astronomy) A: 843
Jansky, Karl Guthe J: 29
Jodrell Bank Observatory J: 130
National Radio Astronomy Observatory N: 59
- Radio beacon** [navigation]
Beacon B: 179
- Radio City Music Hall** [New York City]
New York (Interesting facts) N: 291 *with picture*
New York City (Manhattan) N: 323-325; (Rockefeller Center) N: 338
- Radio control**
Airplane, Model (Radio control models) A: 241 *with picture*
Automobile, Model A: 974 *with pictures*
Remote control (The parts of a remote control system) R: 230
- Radio Corporation of America**
Communication (The development of electronics) Ci: 883-884
Radio (The start of broadcasting) R: 92
Television (The start of broadcasting) T: 118-119
- Radio data system**
Radio (Radio data system (RDS) receivers) R: 90
- Radio detection and ranging**
Radar R: 64
- Radio direction finder**
Navigation (Electronic navigation) N: 71-73
- Radio Free Europe/Radio Liberty** R: 97
Propaganda (After World War II) P: 825
- Radio-frequency catheter ablation** [medicine]
Heart (Progress in treatment and prevention) H: 145
- Radio-frequency wave**
Radio (From electric waves to radio waves) R: 86
- Radio interferometer** [astronomy]
Telescope (Types of radio telescopes) T: 106-107 *with picture*
- Radio Liberty** *See* Radio Free Europe/Radio Liberty *in this index*
- Radio Marti**
Voice of America V: 437
- Radio modem** [electronics]
Radio, Amateur (Uses of amateur radio) R: 95-96
- Radio navigation**
Airplane (Radio navigation) A: 227
- Radio pulsar** *See* Pulsar *in this index*
- Radio Relay League, American**
Radio, Amateur (Amateur radio organizations) R: 96
- Radio remote control units**
Locomotive (Diesel locomotives) L: 414-415
- Radio station**
Radio (Broadcasting) R: 84; (Radio stations) R: 86; (Stations and networks) R: 90
- Radio technician**
Radio (Careers) R: 91
- Radio telescope**
Astronomy (Radio astronomy) A: 843
Green Bank Telescope G: 380
Lovell, Sir Bernard L: 509
National Radio Astronomy Observatory N: 59
Observatory (Ground-based observatories) O: 644-645
Telescope (Radio telescopes) T: 106 *with pictures*
- Radio-ulna** [zoology]
Frog picture on F: 372
- Radio wave**
Electromagnetic waves (The electromagnetic spectrum) E: 202, *diagram on* E: 202
Astronomy (The electromagnetic spectrum) A: 839; (Radio astronomy) A: 843
Cellular telephone C: 340 *with diagram*
Communications satellite Ci: 888a
Cosmology (Radio waves in space) Ci: 1078
Jupiter (Radio waves) J: 200
Light (Electromagnetic waves) L: 285
Magnetic resonance imaging M: 57
Microwave M: 520
Physics (Developments in the 1800's) P: 440
Radiation (In communication) R: 74-75; (Electromagnetic radiation) R: 75-76 *with picture*
Radio R: 83; (Transmitting radio waves) R: 87 *with diagrams*
Telecommunications T: 89
Telescope (What telescopes do) T: 102-103; (Radio telescopes) T: 106
Sun (Energy output) So: 976
Waves W: 152
Wireless communication W: 344
- Radioactive decay**
Alpha particle A: 381
Element, Chemical (The periodic table of the elements) E: 219
Isotope (Radioactive isotopes) I: 476
Plate tectonics (Maintaining tectonic activity) P: 564
Radiation (Radiation and radioactivity) R: 75
Radium (How radium forms and breaks down) R: 100
Transmutation of elements T: 378
Transuranium element T: 401
- Radioactive decay series** [physics]
Radiation (Naturally radioactive substances) R: 77; *diagram on* R: 79
- Radioactive fallout** *See* Fallout *in this index*
- Radioactive isotope**
Atom (Radioactivity) A: 873
Biochemistry (Investigative methods) B: 310-311
Fallout F: 18
Fossil (Dating fossils) F: 427
Isotope (Radioactive isotopes) I: 476 *with diagrams*
Lawrencium L: 147
Prehistoric people (Placing prehistoric people in time) P: 754
Satellite (Formation of satellites) S: 150
- Radioactive waste**
Electric power (Nuclear power plants) E: 184

682 Radioactivity

- Environmental pollution (Hazardous waste)
E: 334-335
Hazardous wastes H: 122
Nuclear energy (Wastes and waste disposal)
N: 588
Technology (Using technology safely) T: 77
- Radioactivity**
Atom (Radioactivity) A: 873
Curie Ci: 1194
Curie, Marie Skłodowska Ci: 1194
Curie, Pierre Ci: 1194
Fallout F: 18 *with picture and map*
Geiger counter G: 76
Isotope I: 476
Mars (Mantle) M: 225
Nuclear energy (Radioactive decay) N: 582;
(Hazards and safeguards) N: 587
Nuclear physics N: 595
Physics (The beginning of modern physics)
P: 440-441; (Physics today) P: 442-443
Radiation (Radiation and radioactivity) R: 75;
(Sources of radiation) R: 77; (Discovery of
radioactivity) R: 80
Radiocarbon R: 97
Radiochemistry R: 98
Radiogeology R: 98
Radium R: 99
Relativity (Time dilation) R: 211
Transuranium element T: 401
Uranium (Properties of, uranium) U: 214
- Radiocarbon** [isotope] R: 97 *with diagrams*
Archaeology (Dating) A: 598
Cosmic rays (Effects of cosmic rays) Ci: 1077
Radiogeology R: 98
- Radiocarbon dating**
Radiocarbon (Radiocarbon dating) R: 97 *with
diagrams*
Archaeology (Dating) A: 598
Prehistoric people (Placing prehistoric people
in time) P: 754
Radioactivity (In science) R: 75
Radiogeology R: 98
- Radiochemistry** R: 98
- Radiogeology** R: 98
Earth (Age of Earth) E: 26
- Radiograph**
Radiology R: 98
X rays (Uses of X rays) X: 540 *with pictures*
- Radiography** [x-ray]
Ballistics (Terminal ballistics) B: 56
- Radioisotope** [physics]
Fallout F: 18
Isotope (Radioactive isotopes) I: 476
Nuclear physics N: 595
Radiochemistry R: 98
Radiogeology R: 98
- Radiolaria** [zoology]
Protozoan (Sarcodines) P: 837
Ooze O: 788
- Radiologic technologist** [medicine]
Medicine (Other careers in medicine) M: 371
- Radiological dispersion device** [weapon] See
Dirty bomb in this index
- Radiological warfare**
Chemical-biological-radiological warfare
(Radiological) C: 397
- Radiologist**
Radiology R: 98 *with picture*
- Radiology** [medicine] R: 98 *with picture*
Hospital (Professional services departments)
H: 371; *picture on* H: 372
Medicine (table) M: 369
X rays X: 540 *with pictures*
- Radiometer** [instrument]
Crookes, Sir William Ci: 1153
- Radionuclide** [physics] See *Radioisotope in this
index*
- Radionuclide imaging** [medicine]
Heart (Symptoms and diagnosis) H: 137
- Radiosonde** [instrument] R: 99
Balloon (Scientific uses) B: 59
Weather (Weather balloons, airplanes, and
ships) W: 163 *with picture*
- Radiotelephone** [communications]
Cellular telephone C: 340
- Radiotherapy** [medicine]
Cancer (Radiation therapy) C: 172
Cervical cancer C: 364
Disease (Medical treatment) D: 232-233
Mastectomy M: 297
- Radish** R: 99 *with pictures*
- Radisson, Pierre Esprit** [French explorer] R: 99
Grosjeans, Sieur des G: 398
Minnesota (Exploration) M: 603
Wisconsin (Exploration and settlement) W: 365
- Radium** [element] R: 99
Curie, Marie Skłodowska Ci: 1194
Northwest Territories (The early and middle
1900's) N: 533
Pitchblende P: 498
Radon R: 100
- Radius** [anatomy]
Arm A: 717 *with diagram*
Elbow E: 157 *with diagrams*
Human body *diagram on* H: 422
Wrist W: 510 *with diagram*
- Radius** [geometry]
Circle (Parts of a circle) Ci: 558 *with diagram*
Diameter D: 180
Polygon P: 650 *with diagram*
Sphere S: 779 *with diagram*
- Radnitzky, Emmanuel** [American artist] See
Ray, Man *in this index*
- Radon** [element] R: 100
Environmental pollution (Air pollution) E: 331-
334
- Radon Abatement Act, Indoor** [1988]
Radon (Protection against radon) R: 100
- Radula** [zoology]
Limpet L: 308
Mollusk (Gastropods) M: 695
- Rae, Bob** [Canadian political leader]
Ontario (table) O: 783
- Rae, Saul** [Canadian diplomat]
United Nations (table) U: 86
- Raeburn, Sir Henry** [Scottish painter] R: 100
with picture
- RAF** See *Royal Air force in this index*
- Raffarin, Jean-Pierre** [French political leader]
France (Recent developments) F: 478
- Raffia** [fiber] R: 101 *with picture*
- Raffia palm** [tree]
Leaf L: 151
Palm (The leaves) P: 109
- Raffles, Sir Thomas Stamford** [British mer-
chant] R: 101
Singapore (History) S: 471
- Rafflesia** [plant] R: 101 *with picture*
Flower *picture on* F: 271
Plant (Photosynthesis) P: 538
Rain forest (Asia) R: 126b *with picture*
- Rafsanjani, Ali Akbar Hashemi** [Iranian political
leader] R: 102 *with portrait*
Iran (The death of Khomeini) I: 406b
- Raft** [boat] R: 102 *with picture*
Rafting R: 102 *with picture*
Ship (History) S: 403
Transportation (Water transportation) T: 384
- Raft foundation** [engineering]
Building construction (Foundations) B: 682
- Raft of El Dorado, The** [sculpture]
Colombia *picture on* Ci: 781
- Raft of the Medusa, The** [painting by Géricault]
Painting (Romanticism) P: 68-69 *with picture*
Géricault, Théodore G: 137
- Rafter**
House (The roof) H: 382 *with diagram*
- Rafting** R: 102 *with picture*
- Rag paper**
Paper (Raw materials) P: 134
- Rag rug**
Rugs and carpets (History) R: 517
- Raga**
India (Music and dance) I: 120
Music (Indian music) M: 956
Sitar S: 477
- Ragamala** [art]
Painting (Indian painting) P: 44 *with picture*
- Ragdoll cat**
Cat (Long-haired breeds) C: 292
- Ragged Dick** (books by Alger)
Alger, Horatio A: 359
- Raggedy Andy**
Doll (The early 1900's) D: 291-292
- Raggedy Ann**
Doll (The early 1900's) D: 291-292
- Raggedy Ann Stories** (book by Gruelle)
Doll (The early 1900's) D: 291-292
- Raging Bull** [film]
De Niro, Robert D: 131
Scorsese, Martin S: 210
- Raglan, Lord** [British scholar]
Mythology (The ritualist theory) M: 987
- Ragnarok** [Norse mythology]
Balder B: 38
Mythology (The end of the world) M: 985
Odin O: 674
Thor T: 265
- Ragtime** [book by Doctorow]
Doctorow, E. L. D: 260
- Ragtime** [music] R: 102
Jazz (The roots of jazz) J: 70
Johnson, James P. J: 143
Joplin, Scott J: 160
Popular music (Ragtime, jazz, and blues)
P: 670
- Ragtime** [musical]
United States *picture on* U: 119
- Ragusa** [region]
Sicily (Economy) S: 448
- Ragweed** [plant] R: 103 *with picture*
Hay fever (Causes and prevention) H: 116
- Rahal, Bobby** [race driver]
Automobile racing (table: Indianapolis 500 win-
ners) A: 980
- Rahmonov, Emomali** [Tajik political leader]
Tajikistan (Recent developments) T: 18b
- Rahula** [son of]
Buddha (Early life) B: 667
- Raiatea** [island, Pacific]
Society Islands So: 563
- Raider** [business]
Business (Recent developments) B: 726
Merger M: 418
- Raiders, Oakland** See *Oakland Raiders in this
index*
- Raiders of the Lost Ark** [film]
Lucas, George L: 513
Spielberg, Steven So: 792
- Raikes, Robert** [British educator] R: 103
- Rail** [bird] R: 103 *with picture*
- Rail** [transportation]
Locomotive (Electric locomotives) L: 416
Freight F: 510
Railroad (What makes up a railroad) R: 106-
107
- Railcar** [train]
Railroad (Rolling stock) R: 107-108
- Railroad** [sports]
Bowling (table) B: 521
- Railroad** [transportation] R: 104 *with pictures
and map*
See also *Monorail in this index*
Air conditioning (Air conditioners for vehicles)
A: 179
Asia *picture on* A: 804
Careers (Transportation) C: 235
Channel Tunnel C: 375
Chicago (Growth as a city) C: 435
Coal (Shipping coal) Ci: 727 *with picture*
Electric railroad E: 187 *with pictures*
Industrial Revolution (Railroads) I: 251; *pic-
tures on* I: 253
Interstate commerce (The Interstate
Commerce Act) I: 351
Locomotive L: 414 *with pictures*
Magnetic levitation train M: 55 *with picture*
Postal Service, United States *picture on* P: 701
Russia (Transportation and communication)
R: 546 *with picture*
Seattle (Railroads and growth) S: 276
Telegraph (Uses for the telegraph) T: 91
Transit T: 374
Transportation (Land transportation) T: 383-384
with picture; (Transportation today) T: 392-
393 *with picture*
Truck farming (History) T: 460
Tunnel (Railroad tunnels) T: 491
United States, History of the (Expansion and
the economy) U: 168-169 *with pictures*;
(Distribution, sales, and communication)
U: 178
Westward movement in America (Cattle fron-
tiers) W: 251
Transportation *pictures on* T: 383, T: 393,
T: 398
See also *the list of Related Articles in the
Railroad article and the Transportation
sections of the country, state, and
province articles*
- Railroad, Elevated** See *Elevated railroad in this
index*
- Railroad, Model** R: 119 *with pictures*
- Railroad rail**
Iron and steel (Rolling) I: 447 *with diagram*
- Railroad Reorganization Act** [1973]
Railroad (Economic recovery-and decline)
R: 118
- Railroad retirement**
Pension (Railroad pensions) P: 273
Railroad Retirement Board R: 121
- Railroad Retirement Act** [1935]

Railroad Retirement Board R: 122
Railroad Retirement Board [U.S.] R: 121
Railroad Safety Appliance Act [1893]
 Railroad (Engineering improvements) R: 117-118
Railroad time
 Time (Time zones in the United States and Canada) T: 289
Railroad Trainmen, Brotherhood of
 Railway brotherhoods R: 122
Railroad worm [beetle]
 Insect *picture on* I: 279
Railroad worm [fly] See Apple maggot *in this index*
Railroads, Association of American
 Railroad (Railroad systems) R: 112-113
Railsplitter
 Lincoln, Abraham (Election of 1860) L: 318
with picture
Railway See Railroad *in this index*
Railway brotherhoods [labor unions] R: 122
Railway Conductors and Brakemen, Order of
 Railway brotherhoods R: 122
Railway Exchange Building [Chicago]
 Burnham, Daniel Hudson *picture on* B: 709
Railway Labor Act [1926] R: 122
 National Mediation Board N: 40
 Railroad (Railroad systems) R: 112-113; (The 1920's and the Great Depression) R: 118
 Strike (Kinds of strikes) So: 928
Railway Union, American
 Debs, Eugene Victor D: 65
Rain R: 122 *with pictures and map*
 Acid rain A: 27
 Cloud (How clouds form) Ci: 711
 Cloudburst Ci: 712
 Drought D: 349
 Famine (Too much rainfall) F: 26
 India (The rainy season) I: 124 *with picture and map*
 Irrigation I: 456
 Rainmaking R: 129
 Water (World distribution of water) W: 122
with picture and map
 Weather (Synoptic-scale systems) W: 159-160
See also See also the list of Related Articles in the Rain article in this index
Rain [book by Stojic]
 Literature for children *picture on* L: 367
Rain dance R: 125
 Indian, American (Ceremonies) I: 148
Rain forest R: 126 *with pictures and map*
 Amazon rain forest A: 401
 Animal (Animals of the tropical forests) A: 480
with pictures and map; (Destruction of habitat) A: 504 *with picture*
 Biome (table) B: 323 *with map*
 Brazil (The Amazon Region) B: 577
 Climate (Tropical wet climates) Ci: 676a *with picture*
 Congo (Kinshasa) (The tropical rain forest) Ci: 940b
 Conservation (Latin America) Ci: 988
 Endangered species (Loss of habitat) E: 269
 Forest *picture on* F: 390; (Tropical rain forests) F: 392 *with map*; *map on* F: 395
 Gaia G: 6
 Indian, American (Indians of the Tropical Forest) I: 175
 Indonesia (Irian Jaya) I: 234 *with picture*
 Jungle J: 195
 Malaysia *picture on* M: 99
 Mexico *picture on* M: 463
 National park (Changes in the environment) N: 42h
 Olympic National Park O: 756
 Plant (Tropical rain forests) P: 523; *picture on* P: 525
 Tropics T: 452
 Zoo *picture on* Z: 607
Rain gauge [measuring device] R: 127
 Rain (Measuring rainfall) R: 125
 Weather (Land-based observation stations) W: 162
Rain Man [film]
 Motion picture (Best picture: 1988) M: 861
Rain shadow [weather]
 Climate (The role of topography) Ci: 676a
 Desert (How deserts develop and change) D: 156
Rain Shower on Ohashi Bridge [print by Hiroshige]
 Hiroshige *picture on* H: 242
Rain tree R: 127

Rainband [meteorology]
 Hurricane (Hurricane) H: 454 *with diagram*
Rainbow R: 127 *with pictures*
 Spectrum So: 772
Rainbow [ship]
 Clipper ship Ci: 682h
Rainbow, The [book by Lawrence]
 Lawrence, D. H. L: 145
Rainbow Bridge National Monument [Utah]
 R: 128
 National Park System (table: National monuments) N: 51
 Utah (Interesting facts) U: 231; *picture on* U: 239
Rainbow darter [fish]
 Darter D: 38
 Fish *picture on* F: 158
Rainbow for Girls [organization] R: 128
Rainbow Forest [Arizona]
 Petrified Forest National Park P: 328
Rainbow lorikeet
 Parrot *picture on* P: 180
Rainbow Shabbat [picture by Chicago]
 United States *picture on* U: 117
Rainbow smelt [fish]
 Smelt S: 514 *with picture*
Rainbow trout
 Fish *pictures on* F: 159
 Invasive species (How invasive species affect habitats) I: 354j
 Trout (True trout) T: 453 *with picture*
Rainbow Warrior [ship]
 Greenpeace G: 386
 New Zealand (International tensions) N: 356
Rainbow water snake
 Snake *picture on* S: 526
Raincoat
 Rubber (The rubber industry begins) R: 501
Raindrop
 Rain (Characteristics of rain) R: 122
 Rainbow (How rainbows appear) R: 128 *with diagram*
Raindrop horse See Appaloosa *in this index*
Rainer, Luise [Austrian actress]
 Motion picture (Best performance by an actress: 1936, 1937) M: 862
Rainfall
 Climate (Kinds of climates) Ci: 676a
 Rain (Measuring rainfall) R: 125
 Rain gauge R: 127
 Rain forest (Environmental value) R: 126c
Rainier III [prince of Monaco] R: 129
 Kelly, Grace K: 256
 Monaco (History) M: 700
Rainmaking [meteorology] R: 129 *with diagram*
 Rain (The ice-crystal process) R: 124
 Weather (How people affect the weather) W: 170
Rainwater, James [American physicist]
 Nobel Prizes (Physics: 1975) N: 441
Rainy Lake [Minnesota-Ontario] R: 129
Rainy Night [painting by Burchfield]
 Burchfield, Charles Ephraim *picture on* B: 702
Rainy River [Minnesota-Ontario]
 Rainy Lake R: 130
Raisa, Rosa [Polish singer] R: 130
Raise [mining]
 Mining (Mining terms) M: 577
"Raise High the Roof Beam, Carpenters"
 [book by Salinger]
 Salinger, J. D. S: 66
Raised relief map
 Map (Production and reproduction) M: 180-181
Raisin [food] R: 130
 Fresno F: 529
 Grape (European grapes) G: 319-320
Raisin in the Sun, A [play by Hansberry]
 American literature (Drama) A: 425
 Drama (Later United States drama) D: 340
 Hansberry, Lorraine H: 54
Raisin River, Battle of [1813]
 War of 1812 (Raisin River) W: 33
Raj Bhavan
 Kolkata (The city) K: 362
Rajab [month]
 Calendar (The Islamic calendar) C: 29
Rajah [title] R: 130
Rajah Brooke iris [plant]
 Iris *picture on* I: 429
Rajang River
 Borneo (The land and its resources) B: 489
Rajghat [shrine]
 Delhi (The city) D: 115

Rajput courts [Indian history]
 Painting (Indian painting) P: 44
Rajya Sabha [government]
 India (Central government) I: 109
Raka [religion]
 Islam (The Five Pillars of Islam) I: 463-464
Rake [tool] R: 130 *with picture*
Rake's Progress, A [paintings by Hogarth]
 Hogarth, William H: 288
Rake's Progress, The [opera by Stravinsky]
 Stravinsky, Igor (Neoclassical works) So: 922
 Auden, W. H. A: 881
Raketa [hydrofoil]
 Hydrofoil (Modern hydrofoil development) H: 468
Rákóczi, Francis II [Hungarian nobleman]
 Hungary (Habsburg rule) H: 445
Rákosi, Matthias [Hungarian political leader]
 Hungary (Communist Hungary) H: 447
Raleigh, Sir Walter See Raleigh, Sir Walter *in this index*
Raleigh [North Carolina] R: 131
Raleigh, Sir Walter [English explorer] R: 131
with picture
 Gilbert, Sir Humphrey G: 189
 Lost Colony L: 472
 Virginia V: 398; (Early days) V: 418
Raleigh Tavern [Williamsburg, Virginia]
 Jefferson, Thomas (Revolutionary leader) J: 78-79
Raleighvallen-Voltzberg National Park
 [Suriname]
 National park (table) N: 42g
Rallentando
 Music (table) M: 954
Rallis, George [Greek political leader]
 Greece (The restoration of democracy) G: 365
Rally [race]
 Automobile racing (Other kinds of racing) A: 979
 Balloon *picture on* B: 57
Rally [tennis]
 Tennis (The ball in play) T: 163
Rally for the Republic [political party]
 France (Politics) F: 455; (Socialists win power) F: 478
Rally of the French People [French political party]
 De Gaulle, Charles André Joseph Marie (Peacetime leader) D: 90
Raloxifene [hormone]
 Hormone replacement therapy H: 338
Ralston, Alexander [American architect]
 Indianapolis (The city) I: 220
Ralston, Samuel M. [American political leader]
 Indiana (table) I: 214
Ram [animal]
 Sheep (The body of the sheep) S: 380
RAM [computing] See Random-access memory *in this index*
Ram [tool]
 Extrusion E: 459 *with diagram*
Ram [weapon]
 Battering ram B: 167 *with picture*
 Galley G: 15
 Ship (Phoenician and Greek ships) S: 405
Ram, Hydraulic
 Elevator (How elevators work) E: 234
Rama [Hindu god] R: 132
 India (Hinduism) I: 116; (Religious and ethnic unrest) I: 134
 Ramayana R: 133
 Vishnu V: 429
Rama I [king of Thailand]
 Bangkok (History) B: 77
 Thailand (The Bangkok era) T: 227
Rama V [king of Thailand]
 Thailand (Modernization) T: 227
Rama VI [king of Thailand]
 Thailand (Modernization) T: 227
Rama VII [king of Thailand]
 Thailand (Modernization) T: 227
Rama VIII [king of Thailand]
 Thailand (Changes in government) T: 227
Rama IX [king of Thailand] See Bhumibol Adulyadej *in this index*
Rama Road
 Nicaragua (The Somoza period) N: 400
Ramadan [month] R: 132
 Calendar (The Islamic calendar) C: 29
 Fast F: 52
 Feasts and festivals (In Islam) F: 58
 Food (Religious reasons) F: 332
 'Id al-Fitr I: 25

Islam (The Five Pillars of Islam) I: 463-464
Ramadan War [1973]
 Arab-Israeli conflict (The 1973 war) A: 582a
Ramakrishna Mission [religious group]
 Monasticism (The influence of monasticism today) M: 701
Raman, Sir Chandrasekhara Venkata [Indian physicist] R: 132
Raman effect [physics]
 Raman, Sir Chandrasekhara Venkata R: 132
Ramapithecus [anthropology]
 Human being (Prehuman ancestors) H: 415
Ramat Polin [housing development]
 Jerusalem *picture on* J: 99
Ramayana [religious book] R: 133
 Dance (Asian theatrical dance) D: 30
 Hinduism (Sacred writings) H: 236
 India (Literature) I: 120
 Rama R: 132
 Sanskrit literature (The Epic period) S: 112
 Vishnu V: 429
Ramayana Ballet
 Indonesia *picture on* I: 233
Ramble [bird sanctuary]
 New York City (Parks) N: 338
Rambler [automobile]
 Automobile (World War II and the postwar years) A: 968-970
Rambler, The [essays by Johnson]
 Johnson, Samuel (Later years) J: 153
Rambouillet
 Sheep (Fine-wooled sheep) S: 381-382
Rameau, Jean-Philippe [French composer]
 R: 133
Rameau's Nephew [book by Diderot]
 Diderot, Denis D: 195
Rameses II See *Ramses II in this index*
Ramezay, Claude de [Canadian political leader]
 Quebec (Museums) Q: 15
Ramezay, Jean-Baptiste [French general]
 Quebec, Battle of (The attack on Quebec) Q: 37
Ramgoolam, Navinchandra [Mauritian political leader]
 Mauritius (History) M: 317
Ramie [plant] R: 133
Ramírez Vázquez, Pedro [Mexican architect]
 Mexico (Architecture) M: 459 *with picture*
Ramjet [engine]
 Jet propulsion J: 112 *with diagram*; (Ramjet) J: 114
Ramkhamhaeng [Sukothai king]
 Thailand (Early kingdoms) T: 226
Ramlee, P. [Malaysian actor]
 Malaysia (The arts) M: 99
Ramna [district]
 Dhaka D: 178
Ramón y Cajal, Santiago [Spanish physiologist]
 Nobel Prizes (Physiology or medicine: 1906) N: 444
Ramona [book by Jackson]
 Jackson, Helen Hunt J: 15
Ramos, Fidel Valdez [Filipino political leader]
 Philippines (Recovering democracy) P: 381
Ramos, Graciliano [Brazilian author]
 Latin-American literature (The early 1900's) L: 113
Ramos-Horta, José [Timorese political leader]
 East Timor (History) E: 41
 Nobel Prizes (Peace: 1996) N: 449
Ramoth-Gilead [ancient city]
 Cities of refuge Ci: 568
Ramp [highway]
 Road (Primary highways) R: 358
Ramp [plant] R: 133
Ramp agent [occupation]
 Airport (Airline passenger services) A: 246
Ramparts [region, Alaska]
 Yukon River (Upper Yukon) Y: 582
Rampolla, Mariano Cardinal [Italian religious leader] R: 133
Rampton, Calvin L. [American political leader]
 Utah (table) U: 245
Rams, Saint Louis See *Saint Louis Rams in this index*
Ramsay, Allan [Scottish painter]
 Scotland (The arts) S: 215-217
Ramsay, Sir William [British chemist] R: 133
 Helium H: 176
 Krypton K: 389
 Neon N: 123
 Noble gas N: 451
Ramsdell, George A. [American political leader]
 New Hampshire (table) N: 223

Ramses II [king of ancient Egypt] R: 134 *with picture*
 Abu Simbel, Temples of A: 19
 Embalming (Ancient embalming) E: 255
 Hittites (History) H: 269
 Sculpture (Egyptian) S: 234
Ramses III [king of ancient Egypt]
 Hieroglyphics *pictures on* H: 225
Ramsey, Alexander [American political leader]
 Hayes, Rutherford Birchard (table) H: 121
 Minnesota (table) M: 602; (Territorial days) M: 604
Ramsey, Norman Foster [American physicist]
 Nobel Prizes (Physics: 1989) N: 441
Ran [film]
 Kurosawa, Akira K: 393
Rana [Nepalese history]
 Nepal (History) N: 126-127
Ranavalona I [queen of Madagascar]
 Madagascar (History) M: 28-29
Rance River [France]
 Electric power (Growth of the electric power industry) E: 186
Ranch See *Ranching in this index*
Ranch house
 House *picture on* H: 381
 Western frontier life in America (Life in the country) W: 237
Ranchero [title]
 California (The California missions) C: 60
Ranching R: 134 with pictures
 Cattle C: 306
 Farm and farming (Specialized livestock farms) F: 31 *with picture*
 Western frontier life in America (Life in the country) W: 237
Rancho [agriculture]
 California (The California missions) C: 60
Rancho [housing]
 Paraguay (Way of life) P: 145-146
 Venezuela (Ways of life) V: 299 *with picture*
Ranchos de Taos [district]
 Taos T: 36
Rand, Ayn [American author] R: 136 *with portrait*
Rand Corporation R: 136
Rand McNally building [Chicago]
 Root, John Wellborn R: 475
Randall, Alexander W. [American political leader]
 Wisconsin (table) W: 365
Randalls Island [New York]
 New York City (Small islands) N: 330
Randolph, A. Philip [American labor leader]
 R: 136 *with portrait*
 African Americans (World War II [1939-1945]) A: 1361
Randolph, Beverley [American political leader]
 Virginia (table) V: 417
Randolph, Edmund [American political leader]
 R: 137
 Constitution of the United States (The Constitutional Convention) Ci: 999-1000
 United States, History of the *picture on* U: 163
 Virginia (table) V: 417; (*The Mother of Presidents*) V: 421
 Washington, George (Cabinet scandal) W: 106; (Cabinet) W: 102 *with picture*
Randolph, Edward [English colonial official]
 R: 137
Randolph, John [American political leader]
 R: 137
 Duel D: 378
Randolph, Martha Jefferson [daughter of]
 Jefferson, Thomas (Jefferson's family) J: 78;
 (Congressman) J: 80; (Life in the White House) J: 82-83 *with picture*
 White House hostesses W: 291
Randolph, Peyton [American political leader]
 R: 137 *with portrait*
 Continental Congress (The First Continental Congress) Ci: 1021; (Second Continental Congress) Ci: 1022
 Virginia (table) V: 417
Randolph, Theodore F. [American political leader]
 New Jersey (table) N: 249
Randolph, Thomas Mann [American political leader]
 Virginia (table) V: 417
Randolph Institute [organization]
 Rustin, Bayard R: 568
Randolph of Roanoke, John See *Randolph, John in this index*

Random-access memory [electronics]
 Computer (Memory chips) Ci: 912 *with picture*
 Computer chip (Memory chips) Ci: 924f
 Electronics (Digital circuits) E: 213
Random digit dialing
 Public opinion poll (Selecting the sample) P: 862
Random fractal [geometry]
 Fractal F: 443
Random House Book of Mother Goose, The
 [book by Lobell]
 Literature for children *picture on* L: 370
Random motion [physics]
 Ion (Behavior of ions) I: 371-372
Random sample [statistics]
 Public opinion poll (Selecting the sample) P: 862
 Statistics (Sampling) So: 869
Random sound
 Noise N: 451
Randomized controlled experiment
 Statistics (Collecting the data) So: 868
Randomness
 Entropy E: 328
Rendori [competition]
 Judo (Judo contests) J: 185
Raney nickel [metal]
 Hydrogenation H: 470
Range [cooking] R: 137 *with pictures*
Range [distance]
 Ballistics (Exterior ballistics) B: 56
Range [mathematics]
 Algebra (Working with equations) A: 356
Range [music]
 Singing (Training the voice) S: 472
Range [surveying]
 Public lands (Management of public lands) P: 858
Range [zoology]
 Bird (The distribution of birds) B: 332
Range finder [instrument] R: 139
 Laser (Measuring) L: 83
 Photography (Direct vision cameras) P: 417
Range instrumentation radar
 Radar (In the military) R: 65-66
Range war [U.S. history]
 Ranching (History) R: 135
 Western frontier life in America (The cattle boom) W: 234; (Life in the country) W: 237
Ranger [aircraft carrier]
 Aircraft carrier (History) A: 207
Ranger [ship]
 Flag (First United States flags) F: 208-210
 Jones, John Paul (Navy commission) J: 158
Rangers [military] R: 139
 Commando Ci: 870
 Hale, Nathan (The Revolutionary War) H: 18
 Rogers's Rangers R: 401
Rangers [scouts]
 Girl Scouts (Senior Branches) G: 199
Ranger Russet
 Potato P: 712
Rangers, New York
 Hockey (table: National Hockey League) H: 281
 New York City (Sports) N: 338
Rangers, Texas See *Texas Rangers in this index*
Rangi [legendary figure]
 Mythology (Creation myths) M: 982
Rangoon [Myanmar] See *Yangon in this index*
Ranji Trophy
 Cricket (History) Ci: 1134-1135
Ranjit Singh [Indian ruler] R: 139
Rank [chess]
 Chess (The board and the men) C: 412 *with diagram*
Rank [sociology]
 Nobility N: 450
 Social class (How people are ranked) So: 550
Rank, Military R: 139
 Admiral A: 58
 Commission, Military Ci: 872
 General G: 82
Ranke, Leopold von [German historian] R: 140
 History (History in the universities) H: 262
Rankin, Jeannette [American political leader]
 R: 140 *with portrait*
 Montana (Progress as a state) M: 760; *picture on* M: 759
Rankine scale [temperature]
 Absolute zero A: 17
Ranking
 Information retrieval (How information retrieval

- works) I: 268b
- Ranomafana National Park** [Madagascar]
National park (table) N: 42f
- Ransom**
Kidnapping K: 311
- Ransom, Epaphroditus** [American political leader]
Michigan (table) M: 507
- Ransom, John Crowe** [American author] R: 140
American literature (Modernist poetry) A: 421
- Ransome, Arthur** [British author] R: 141
- Ranthambhore National Park** [India]
National park (Other interesting national parks) N: 42e-42h
- Renula** [disorder]
Cyst Ci: 1208
- Ranvier, Node of** [anatomy]
Nervous system (Conduction along the axon) N: 135 *with diagrams*
- Rao, P. V. Narasimha** [Indian political leader]
R: 141
India (Religious and ethnic unrest) I: 134
- Rao, Pamulaparti Venkata Narasimha** See Rao, P. V. Narasimha *in this index*
- Rap music** R: 141
African Americans (Achievements) A: 136p-136q
Popular music (The rise of rap) P: 671
Rock music R: 381 *with picture*
- Rapa Nui National Park** [Easter Island]
National park (table) N: 42g
- Rapanui** [language]
Easter Island E: 44
- Rape** [crime] R: 141
Abortion (Arguments for abortion) A: 15
- Rape** [plant] R: 142 *with picture*
Canola oil C: 182
- Rape of Europa, The** [painting by Reni]
Europe picture on E: 379
- Rape of Ganymede** [painting by Rembrandt]
Rembrandt (Early Amsterdam years) R: 229
- Rape of Lucrece, The** [poem by Shakespeare]
Shakespeare, William (His first poems) S: 347-348; (The narrative poems) S: 366
- Rape of the Lock, The** [poem by Pope]
Pope, Alexander P: 667
English literature (Swift and Pope) E: 318
- Rapeseed** [plant]
Rape [plant] R: 142
- Raphael** [Italian painter] R: 142 *with pictures*
Classicism (The qualities of classicism) Ci: 653
Europe picture on E: 393
Madonna and Child (Painters of the Madonna) M: 37-38 *with picture*
Painting (The High Renaissance) P: 54-55 *with picture*
Plato picture on P: 567
Renaissance (The fine arts) R: 235-236 *with pictures*
Tapestry (History) T: 40
- Raphia ruffia** [tree]
Raffia R: 101
- Raphia taedigere** [tree]
Raffia R: 101
- Rapid City** [South Dakota] R: 144
South Dakota (table: Average monthly weather) So: 676
- Rapid Creek** [South Dakota]
Rapid City R: 144
- Rapid eye movement** [sleep]
Dream (The biology of dreams) D: 344
Narcolepsy N: 21
- Rapid-start lamp**
Fluorescent lamp F: 305
- Rapide Blanc** [falls]
Quebec (Rivers, waterfalls, and lakes) Q: 24
- Rapide des Quinze** [falls]
Quebec (Rivers, waterfalls, and lakes) Q: 24
- Rapids** [geography]
River (Waterfalls and rapids) R: 352 *with diagram*
Waterfall W: 141
- Rapier** [weapon]
Sword So: 1061 *with picture*
- Repp, George** [American religious leader]
New Harmony N: 228 *with picture*
- "Rappaccini's Daughter"** [story by Hawthorne]
Hawthorne, Nathaniel (His stories and sketches) H: 114
- Rappahenock River** [Virginia] R: 144
Virginia (Rivers and lakes) V: 412 *with picture*
- Reppelling** [technique]
Climbing (Technical climbing) Ci: 680
Mountain climbing (Basic mountaineering equipment and methods) M: 897
- "Rapper's Delight"** [song]
Rap music R: 141
- Raptors, Toronto** See Toronto Raptors *in this index*
- Rare book**
Book collecting (Specimen collections) B: 469
- Rare earth** [chemistry] R: 144
- Rare earth oxides**
Fluorescent lamp F: 305
- Rare species**
Animal (How human beings protect animals) A: 505
Endangered species E: 269
Wildlife conservation (Classifications of scarce wildlife) W: 304
- Rarefaction** [physics]
Anaximenes A: 449
Sound (table) So: 599; (The nature of sound) So: 599 *with diagram*; (Beats) So: 604 *with diagram*
- Raritan River** [New Jersey]
New Jersey (Rivers and lakes) N: 244
- Rarotonga** [island, Pacific]
Cook Islands Ci: 1026
- Ras al Khaymah** [state]
United Arab Emirates U: 43; (History) U: 45
- Ras Dashen** [mountain]
Ethiopia (The Ethiopian Plateau) E: 370
- Ras Tafari** See Haile Selassie I *in this index*
- Ras Tafari** [religious group]
Jamaica (People) J: 23-24
Rastafarians R: 145
- Ras Tanura** [city, Saudi Arabia]
Saudi Arabia (Transportation and communication) S: 160 *with picture*
- Rasa** [Sanskrit literature]
Drama (India) D: 336
- Raschel knit** [fabric]
Textile (Knitted fabrics) T: 214-215
- Rash** [disorder]
Dermatology D: 153
Lupus L: 526
Measles M: 345
Syphilis So: 1069
- Rashomon** [film]
Kurosawa, Akira K: 393
Motion picture picture on M: 847
- Raskin, Ellen** [American author] R: 144
- Raskob, John J.** [American businessman]
Roaring Twenties (Rising prosperity) R: 363
- Rasle, Sebastian** [American religious leader]
Maine (Schools) M: 72
- Raspberry** [plant] R: 144 *with picture*
- Raspberry tongue**
Scarlet fever (Symptoms) S: 173
- Respe, Rudolph Erich** [German author]
Munchausen, Baron M: 927
- Rasputin, Grigori Efimovich** [Russian public figure] R: 145 *with portrait*
Russia (The February Revolution) R: 553
- Rasputin, Valentin** [Russian author]
Russian literature (Modern Soviet literature) R: 564-565
- Rasselas, Prince of Abyssinia** [book by Johnson]
English literature (Samuel Johnson) E: 319
Johnson, Samuel (Later years) J: 153
- Rassemblement, Le** [organization]
Trudeau, Pierre Elliott (Entry into public life) T: 462
- Rassemblement pour l'Indépendance Nationale** [organization]
Montreal (The separatist movement) M: 779
- Rastafarians** [religious group] R: 145
Jamaica (People) J: 23-24
- Rastatt, Treaty of** [1714]
Succession wars (The War of the Spanish Succession) So: 950
- Rester** [electronics]
Type T: 536
- Raster image processor** [machine]
Type T: 536
- Rasul** [religion]
Islam (Prophets) I: 463
- Rat** [animal] R: 145 *with pictures*
Cell picture on C: 327
- Rat-kangaroo** [animal]
Kangaroo (Other macropods) K: 215
- Rat snake**
Snake picture on S: 532
- Ratapoil** [sculpture by Daumier]
Bronze picture on B: 638
Daumier, Honoré D: 44
- Ratchet** [tool] R: 147
- Rate** [mathematics]
Fraction F: 444
Vital statistics (Using vital statistics) V: 429
- Rate of change** [mathematics]
Calculus (Rate of change of a function) C: 23
- Rate of exchange** See Exchange rate *in this index*
- Rate of interest** See Interest *in this index*
- Ratel** [animal] R: 147 *with picture*
- Rathbone, Justus Henry** [American founder]
Knights of Pythias K: 352
- Rethman, Peggy** [American artist]
Caldecott Medal (table: 1996) C: 26
- Rathmann, Jim** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Ratification** [law]
Constitution of the United States (Ratifying the Constitution) Ci: 1001; (Article V) Ci: 1010
Treaty T: 408
United States, History of the (Adopting the Constitution) U: 161
- Rating** [television]
Television (The national networks) T: 114; (Program ratings) T: 118
- Ratio** [mathematics] R: 147
Fraction F: 444
Proportion P: 827
Trigonometry (Right triangles) T: 443
- Ration** See Rationing *in this index*
- Ration stamp**
Stamp So: 829
- Rational number** [mathematics] R: 148
Decimal system (Decimals and fractions) D: 72
Fraction F: 444
- Rational will**
Age of Reason (The worship of reason) A: 139
- "Rationale of Verse, The"** [essay by Poe]
Poe, Edgar Allan (Poetry and poetic theory) P: 589-590
- Rationalism** [philosophy] R: 148
Christianity (Rationalism and pietism) C: 527
French literature F: 518
Philosophy (Terms used in philosophy) P: 384; (Modern philosophy) P: 387
- Retionalism, Age of** See Age of Reason *in this index*
- Rationalization** [psychology]
Child (The early school years) C: 450
- Rationing** [economics] R: 148
Black market B: 389
World War II (In the United States and Canada) W: 494-495 *with picture*
- Ratkiller, The** [etching by Rembrandt]
Rembrandt picture on R: 229
- Retline hitch**
Knots, hitches, and splices (Two half hitches) K: 357 *with diagram*
- Ratner, Payne** [American political leader]
Kansas (table) K: 234
- RATO** [aviation]
Airplane (Rocket engines) A: 220
- Ratsiraka, Didier** [Madagascar military leader]
Madagascar (History) M: 28-29
- Rattail** [fish]
Deep sea (Fish) D: 82b-82c
Fish picture on F: 156
- Rattan** [tree product] R: 148
- Rattan palm**
Palm (Products of palms) P: 109
- Ratti, Ambrogio Damiano Achille**
Pius XI P: 503
- Rattle** [musical instrument]
Indian, American pictures on I: 156, I: 167
- Rattle** [zoology]
Rattlesnake R: 149 *with picture*
- Rattle watch**
Fire department (Fire protection in North America) F: 128
- Rattler** See Rattlesnake *in this index*
- Rattlesnake** R: 149 *with pictures*
Animal (Adaptations for sensing the environment) A: 492-493; picture on A: 494
Snake pictures on S: 525, S: 533
Snake dance S: 536
Viper V: 391
- Rattlesnake master** [plant]
Flower (Flowers of prairies and dry plains) F: 286-287 *with picture*
- Rattner, Abraham** [American painter] R: 150 *with picture*

Rauschenberg, Robert [American artist] R: 150
with picture
 Painting (The revival of subject matter) P: 86
with picture
Rauschenberg Overseas Cultural Exchange
 [program]
 Rauschenberg, Robert R: 150
Rauwolfia serpentina [shrub]
 Reserpine R: 257
Ravalomanana, Marc [Madagascar political leader]
 Madagascar (History) M: 28-29
Ravana [legendary figure]
 Rama R: 132
Ramayana R: 133
Rave
 Ecstasy E: 66
 Hallucinogenic drug H: 26
Ravel, Maurice [French composer] R: 150
 Bolero B: 440
 Impressionism (Music, literature, and sculpture) I: 95
Ravelstein [book by Bellow]
 Bellow, Saul B: 244
Raven R: 151 *with picture*
 Animal picture on A: 501
"Raven, The" [poem by Poe]
 Poe, Edgar Allan (Poetry and poetic theory) P: 589
Ravenna [Italy] R: 151
 Architecture *picture on A*: 617
Ravens, Baltimore
 Football (National Football League) F: 364
Ravensbrück [concentration camp]
 Concentration camp *picture on Ci*: 927
Ravenscroft, George [English glassmaker]
 Glass (The Middle Ages) G: 218-219
Ravenswood, Edgardo di [opera character]
 Opera (*Lucia di Lammermoor*) O: 804
Ravine [geology]
 Canyon C: 185
Ravioli [food]
 Pasta P: 192
Raw milk
 Milk (At a dairy farm) M: 546-547
Raw sugar
 Sugar (Making cane sugar) So: 960 *with diagram*
Raw umber [pigment]
 Umber U: 18
Rawinsonde [instrument]
 Weather (Weather balloons, airplanes, and ships) W: 163
Rawlings, Jerry John [Ghanaian political leader]
 R: 151
 Ghana (History) G: 179-180
Rawlings, Marjorie Kinnan [American author]
 R: 152
Rawlins, John A. [American government official]
 Grant, Ulysses S. (Return to the Army) G: 314; (table) G: 316
Rawlinson, Sir Henry [British archaeologist]
 Cuneiform Ci: 1192
Ray [fish] R: 152
 Animal picture on A: 507
 Electric ray E: 189
 Fish (Sharks, rays, and chimaeras) F: 148 *with picture*
 Skate S: 479
 Stingray So: 901
Ray [moon]
 Moon [Ray, Crater] M: 789
Ray [zoology]
 Fish (Fins) F: 160
Ray, Dixy Lee [American political leader] R: 152
 Washington (table) W: 65
Ray, Gloria [American social reformer]
 Spingarn Medal (table: 1958) So: 793
Ray, James B. [American political leader]
 Indiana (table) I: 214
Ray, James Earl [American assassin]
 King, Martin Luther, Jr. (King's death) K: 323
 Memphis (The people) M: 394-395
 Tennessee (The mid-1900's) T: 156-157
Ray, John [English biologist]
 August A: 887
 Classification, Scientific (Development of classification) Ci: 656
Ray, Man [American artist] R: 152 *with picture*
 Photography (The photographic revolution) P: 427
Ray, Robert D. [American political leader]
 Iowa (table) I: 391

Ray, Robert W. [American attorney]
 Clinton, Bill (Domestic events) Ci: 682f-682g
Ray, Satyajit [Indian director] R: 152
 India (Motion pictures) I: 121
Ray-finned fish
 Prehistoric animal (The first animals with backbones) P: 737
Ray flower [botany]
 Composite family Ci: 904
Rayburn, Sam [American political leader] R: 152
with portrait
Rayburn House Office Building [Washington, D.C.]
 Washington, D.C. *map on W*: 76
Rayleigh, Baron [British physicist]
 Argon A: 660
 Earthquake (Surface waves) E: 34
 Nobel Prizes (Physics: 1904) N: 440
 Noble gas N: 451
 Sound (Modern acoustics) So: 606
Rayleigh wave [physics]
 Earthquake (Surface waves) E: 34 *with diagram*
Raymond, Henry Jarvis [American journalist]
 R: 153
Raymond of Toulouse [Christian crusader]
 Crusades (The First Crusade) Ci: 1160 *with map*
Rayograph [art]
 Ray, Man R: 152 *with picture*
Rayon [fiber] R: 153 *with pictures*
 Air conditioning (In business and industry) A: 176-177
 Fiber (Regenerated fibers) F: 87
 Textile (Manufactured fibers) T: 213; (The age of modern textiles) T: 219
Rayonism [art]
 Painting (Nonobjective painting in Russia) P: 79
Rayonnant [architecture]
 Gothic art (High Gothic architecture) G: 278
Raza Unida, La [political party]
 Gutiérrez, José Angel G: 445
 Hispanic Americans (Political developments) H: 255-256
Razaf, Andy [American lyricist]
 Waller, Fats W: 18
Razor [tool] R: 153
 Barber B: 106
Razor-backed musk turtle
 Turtle (Mud and musk turtles) T: 522
Razor fish
 Animal picture on A: 495
Razorback
 Hog (Wild hogs) H: 286
Rb [symbol]
 Rubidium R: 507
RBC transfusion
 Blood transfusion (Types of transfusion) B: 417
RBI See Runs batted in *in this index*
RCA Building
 New York City (Manhattan) N: 323-325; (Rockefeller Center) N: 338
RCA Corporation See Radio Corporation of America *in this index*
RCA Victor Records
 Atkins, Chet A: 858
 Presley, Elvis P: 772
RCC [political organization] See Revolutionary Command Council *in this index*
RCM See Regional county municipality *in this index*
RCMP See Royal Canadian Mounted Police *in this index*
RDA See Recommended Dietary Allowances *in this index*
RDS See Radio data system *in this index*
RDX [explosive] R: 154
 Ammunition (Artillery ammunition) A: 435-436
 Plastic explosive P: 553
Re [Egyptian god] R: 154
 Egypt, Ancient (Religion) E: 137; (The New Kingdom) E: 143; *picture on E*: 140
 Mythology (The Great Ennead) M: 976; (Other Egyptian divinities) M: 977 *with picture*
Re [symbol]
 Rhenium R: 290
Re-Harakhte (Egyptian god)
 Egypt, Ancient (Painting and sculpture) E: 139
REA See Rural Electrification Administration *in this index*
Reach [marketing]
 Advertising (Media selection) A: 76b

Reaching [sailing]
 Sailing (Basic sailing maneuvers) S: 26 *with diagram*
Reaction [physics]
 Motion (The third law) M: 845
 Rocket R: 385
Reaction center
 Biophysics B: 326
Reaction turbine
 Turbine (Kinds of turbines) T: 496 *with picture*
Reactionary [philosophy]
 Conservatism (History) Ci: 991-992
Reactive hypoglycemia [disorder]
 Hypoglycemia H: 481
Reactor, Nuclear See Nuclear reactor *in this index*
Reactor vessel
 Nuclear energy (Power reactors) N: 584 *with picture*
Read, Albert C. [American aviator]
 Curtiss, Glenn Hammond Ci: 1199
Read, Deborah [wife of]
 Franklin, Benjamin (Printer) F: 487
Read, George [American patriot] R: 154
 Delaware (table) D: 109
Read, Mary [English pirate]
 Pirate (Pirates of the Caribbean and other areas) P: 495
Read-only memory [electronics]
 Compact disc (CD-ROM's) Ci: 902
 Computer (Memory chips) Ci: 912
 Computer chip (Memory chips) Ci: 924f
 Electronics (Digital circuits) E: 213
Read/write head [electronic device]
 Computer (Hard drives) Ci: 915
Readability
 Reading (Readability) R: 157
Reader
 Fortunetelling F: 419
Reader [religion]
 Eastern Orthodox Churches (Clergy) E: 46
Reader-response theory [literature]
 Criticism (History of literary criticism) Ci: 1146-1147
Reader's Digest
 Magazine (table) M: 45
Readers' Guide to Periodical Literature [reference]
 Library (Libraries in the United States) L: 261-262
 A Guide to Research Skills Research Guide: 30-31
Readiness
 Handwriting (Writing readiness) H: 47
 Learning (Readiness to learn) L: 164
 Reading (Developing good readers) R: 159
Reading [Pennsylvania] R: 154
Reading [skill] R: 155 *with pictures*
 Child (Poor performance in school) C: 452
 Dyslexia D: 398
 Literacy L: 350
 Phonics P: 400
 Speed reading So: 774
 Storytelling So: 912
 A Guide to Writing Skills Research Guide: 12-13
See also the list of Related Articles in the Reading article
Reading disability
 Dyslexia D: 398
 Reading (Reading problems) R: 161
Reading Is Fundamental [organization]
 Reading picture on R: 162
Reading readiness
 Reading (Developing good readers) R: 159
Readjuster Party [American political party]
 Virginia (The Civil War and Reconstruction) V: 421-422
Ready and Easy Way to Establish a Free Commonwealth, The [pamphlet by Milton]
 Milton, John (Middle years) M: 557
Ready-made [art]
 Duchamp, Marcel D: 373
 Ray, Man R: 152
Ready Reserve [military]
 Air Force, United States (Air Force reserves) A: 194
 Marine Corps, United States (Reserves) M: 208
 Navy, United States (Regulars and reserves) N: 85
Ready-to-eat cereal
 Cereal C: 361
Ready-to-wear [industry]

- Clothing (The 1800's) **Ci**: 702; (The 1900's) **Ci**: 703; (Ready-to-wear clothes) **Ci**: 704-705 *with picture*
- Fashion (The fashion industry) **F**: 51
- Reagan, John E.** [father of]
Reagan, Ronald Wilson (Boyhood) **R**: 164
- Reagan, John Neil** [brother of]
Reagan, Ronald Wilson (Boyhood) **R**: 164
- Reagan, Nancy Davis** [wife of Ronald Reagan]
Bush, George Herbert Walker *picture on*
B: 719
- First ladies **F**: 143; (table) **F**: 142
- Reagan, Ronald Wilson (Family life) **R**: 166; *picture on* **R**: 170
- Reagan, Nelle Wilson** [mother of]
Reagan, Ronald Wilson (Boyhood) **R**: 164
- Reagan, Ronald Wilson** [U.S. President] **R**: 164 *with pictures*
Autograph *picture on* **A**: 943
- Baker, James Addison, III **B**: 32
- Bush, George Herbert Walker (Vice president)
B: 719 *with picture*
- California (table) **C**: 59
- Cold War (The Cold War after 1980) **Ci**: 770
- Grenada (History and government) **G**: 389-390
- Hispanic Americans (Cuban immigration)
H: 253-254
- Iran-contra affair (Background) **I**: 407
- Kirkpatrick, Jeane Jordan **K**: 336
- Republican Party (Victories in the 1980's)
R: 257
- Union of Soviet Socialist Republics (The collapse of détente) **U**: 40
- Reaganomics** [economic policy]
Reagan, Ronald Wilson (Events at home)
R: 167
- Real estate** **R**: 171
See also Property *in this index*
Appraisal **A**: 575
- Deed **D**: 81
- Dower **D**: 316
- Indian, American (The destruction of Indian America) **I**: 177-178
- Investment (Direct investments) **I**: 367
- Joint tenancy **J**: 156
- Property tax **P**: 827
- Torrens system **T**: 340d
- Real estate agent**
Careers (Sales) **C**: 229 *with picture*
- Sales (Other types of selling) **S**: 62; (Steps in selling) **S**: 62-63
- Real estate broker**
Real estate **R**: 171
- Real image**
Lens (Creating an image) **L**: 196 *with diagram*
- Magnifying glass **M**: 62
- Mirror (Concave mirrors) **M**: 617
- Real income**
Income (Types of income) **I**: 100; (Income growth) **I**: 102
- Real IRA** [group]
Irish Republican Army (Peace agreement)
I: 434
- Real line**
Photography (Line) **P**: 412
- Real McCoy** [expression]
McCoy, Elijah **M**: 334
- Real national income**
National income (Determining national income) **N**: 37-38
- Real number** [mathematics]
Cube root **Ci**: 1180
- Real property**
Personal property **P**: 302
- Property **P**: 827
- Real wages**
Wages and hours (Wages) **W**: 2
- Reeles Staats-und-Zeitungs-Lexicon** [book]
Encyclopedia (An age of experiment) **E**: 268a
- Realia**
Library (School libraries) **L**: 244 *with picture*
- Realism** [art]
Caravaggio, Michelangelo Merisi da **C**: 202
- Courbet, Gustave **Ci**: 1100
- Doll (The early 1900's) **D**: 291
- Europe (Art since the Renaissance) **E**: 393
- Painting (The Renaissance) **P**: 51-52; (Realism)
P: 70 *with picture*; (Painting outside France) **P**: 72
- Photography (The photographic revolution)
P: 427-428 *with pictures*; (Photography today) **P**: 428
- Realism (In painting) **R**: 172 *with picture*
- Realism** [literature] **R**: 171
- American literature (The Age of Realism [1871-1913]) **A**: 419; (Realist poetry)
A: 421; (Realist fiction) **A**: 422
- Drama (Early realism) **D**: 338
- France (Literature) **F**: 461-462
- French literature (Realism) **F**: 521
- German literature (The realists) **G**: 142
- Italian literature (Romanticism) **I**: 495
- Latin-American literature (Realism) **L**: 112
- Naturalism (Theory of naturalism) **N**: 65
- Novel **N**: 571; (The 1800's) **N**: 572-573
- Russian literature (The age of realism) **R**: 562
- Scandinavian literature (The Golden Age)
S: 171
- Spanish literature (The 1800's) **So**: 761-762
- Realism** [philosophy]
Idealism **I**: 46
- Metaphysics (Universals and particulars)
M: 430
- Realists, The** [book by Snow]
Snow, C. P. **S**: 540
- Reality** [philosophy]
Parmenides **P**: 177
- Philosophy (Metaphysics) **P**: 383
- Reality, Virtual** [computer graphics] *See* Virtual reality *in this index*
- Reality therapy**
Psychotherapy (Other forms of psychotherapy) **P**: 852
- Realtor**
Real estate **R**: 171
- Realtors, National Association of**
Real estate **R**: 171
- Ream, Vinnie** [American artist]
Wisconsin (Interesting facts) **W**: 347
- Reaming** [industrial process]
Machine tool (Metal removal) **M**: 17-18
- Reaney, James** [Canadian poet] **R**: 173
- Reaper R**: 173
Agriculture (The invention of new farm equipment) **A**: 157-158 *with picture*
- McCormick, Cyrus Hall **M**: 334
- Reapportionment** [political science]
Apportionment **A**: 574
- House of Representatives (Size) **H**: 385
- Illinois (The mid-1900's) **I**: 75-76
- Rear admiral** [rank]
Admiral **A**: 58
- Rank, Military (table) **R**: 140
- Rear swing arm**
Motorcycle (The parts of a motorcycle)
M: 878-879 *with picture*
- Rear-wheel drive**
Automobile (The drive system) **A**: 953
- Transmission (Transmissions and drives)
T: 375
- Reason** [psychology] **R**: 173
Age of Reason **A**: 138
- Artificial intelligence (Knowledge representation) **A**: 760
- Hume, David (Hume's thought) **H**: 432
- Metaphysics **M**: 430
- Philosophy (Logic) **P**: 384; (Modern philosophy) **P**: 387-388
- Rationalism **R**: 148
- Scholasticism **S**: 179
- Reason, Age of** *See* Age of Reason *in this index*
- Reasonable and customary charge**
Insurance (How private health insurance is provided) **I**: 311
- Rebab** [musical instrument]
Indonesia (The arts) **I**: 232-233
- Rebate** [economics] **R**: 173
Roosevelt, Theodore (Domestic problems)
R: 470
- Rebecca** [Biblical figure]
Isaac **I**: 461
- Jews (Beginnings) **J**: 120
- Rebecca** [book by Du Maurier]
Du Maurier, Daphne **D**: 382
- Rebecca** [film]
Hitchcock, Alfred **H**: 263
- Motion picture (Best picture: 1940) **M**: 861
- Olivier, Laurence **O**: 744 *with picture*
- Rebecca of Sunnybrook Farm** [book by Wiggan]
Wiggan, Kate Douglas **W**: 300
- Rebekah lodges** [organization]
Odd Fellows, Independent Order of (Purpose and organization) **O**: 673
- Rebel, The** [essay by Camus]
Camus, Albert **C**: 97
- Rebel Angels, The** [book by Davies]
Davies, Robertson **D**: 46
- Rebellion** [political science]
Revolution (Kinds of revolution) **R**: 269
- Rebellion in the Backlands** [book by Cunha]
Latin-American literature (The early 1900's)
L: 113
- Rebellions of 1837** [Canadian history] **R**: 173
Canada, History of (The uprisings of 1837)
C: 146
- Cartier, Sir George Étienne **C**: 261
- Macdonal, Sir John Alexander (Lawyer) **M**: 6
- Mackenzie, William Lyon **M**: 23
- Ontario (Political unrest) **O**: 786; *picture on*
O: 785
- Papineau, Louis Joseph **P**: 139
- Reber, Grote** [American inventor]
Radio, Amateur (History) **R**: 96
- Telescope (Radio telescopes) **T**: 106
- Rebound** [sports]
Basketball (Basketball terms) **B**: 145; (Playing the game) **B**: 146 *with picture*
- Rebound headache**
Headache (Primary headache) **H**: 124
- Rebozo** [clothing]
Mexico (Clothing) **M**: 456
- Paraguay (Clothing) **P**: 146
- Rebreather**
Diving, Underwater (Ambient diving) **D**: 245
- Rebus** [game] **R**: 174 *with picture*
Alphabet (The earliest writing) **A**: 381-382
- Rebuttal**
Debate (Rebuttal) **D**: 64
- Recall** [merchandising]
Consumerism (The right to safety) **Ci**: 1018
- Pure food and drug laws (Enforcement)
P: 908-909
- Toy (History) **T**: 352
- Recall** [political science] **R**: 174
Initiative and referendum (History) **I**: 272
- Progressive movement (Political reforms)
P: 814
- Recall** [psychology]
Memory (Measuring memory) **M**: 392
- Recapitulation** [biology]
Evolution (Embryology) **E**: 431
- Recapitulation** [music]
Classical music (Sonata) **Ci**: 645
- Recapitulation of Christ** [religion]
Irenaeus, Saint **I**: 429
- Recapitulation theory** [biology]
Biogenesis **B**: 312
- Haeckel, Ernst Heinrich **H**: 5
- Recapping**
Tire (Retreading tires) **T**: 297
- Receipt** [economics] **R**: 174
- Receiver** [communications]
Radar (The receiver) **R**: 71 *with diagram*
- Radio **R**: 83; (How radio programs are received) **R**: 88
- Telephone (The receiver) **T**: 95
- Television (Receiving television signals) **T**: 123
- Wireless communication (How wireless communication works) **W**: 345
- Receiver** [law] **R**: 174
Bankruptcy (In the United States) **B**: 97
- Receiving antenna** [communications]
Antenna (Receiving antennas) **A**: 543-544 *with pictures*
- Receptacle** [botany]
Blackberry **B**: 392
- Plant (Flowers) **P**: 531 *with picture*
- Receptor** [anatomy]
Antidepressant **A**: 553
- Brain (The brain's chemical messengers)
B: 556
- Hormone (How hormones work) **H**: 337
- Human body (The peripheral nervous system)
H: 426
- Nervous system (How the nervous system works) **N**: 132 *with diagram*
- Pain (How the body feels pain) **P**: 21
- Perception (The nervous system) **P**: 283
- Reflex action (How reflex action occurs)
R: 195
- Senses **S**: 301 *with diagrams*
- Smell (How odors are detected) **S**: 514
- Taste **T**: 50 *with diagram*
- Virus (How a virus infects an organism) **V**: 426
- Receptor theory**
Drug (Action in the body) **D**: 353-354 *with diagram*
- Recess printing**
Printing **P**: 800 *with diagram*; (Printing in color)
P: 801
- Recession** [astronomy]

Galaxy (Origin of galaxies) G: 8b-9

Recession [economics] R: 175

Deflation D: 88

Depression D: 150

Economics (table) E: 58; (Economic stability) E: 63

Ford, Gerald Rudolph (The national scene) F: 376-377

Nationalization (Advantages and disadvantages) N: 63

Reagan, Ronald Wilson (Events at home) R: 167

September 11 terrorist attacks (Weakened economy) S: 310a

Recessive disease

Genetic testing (Genes associated with disease) G: 85

Recessive gene

Heredity (Patterns of heredity) H: 202

Recessive gene abnormality

Muscular dystrophy M: 936

Rechargeable battery

Electricity (Sources of current) E: 194

See also Secondary battery in this index

Recherche du temps perdu, À la [book by Proust] See *Remembrance of Things Past* in this index

Recife [Brazil] R: 175

Reciprocal trade agreement [international relations] R: 175

McKinley, William (Revised policies) M: 341

Reciprocal Trade Agreements Act [1934]

Reciprocal trade agreement R: 176

Tariff (The 1900's) T: 45

Reciprocating engine

Airplane (Reciprocating engines) A: 217

Hydraulic engine H: 462

Steam engine (Reciprocating steam engines) So: 880

Stirling engine So: 902 with diagrams

Reciprocating motion [mechanics]

Pneumatic tool P: 586

Reciprocating pump

Pump (Reciprocating pumps) P: 900

Récit [French literature]

Gide, André G: 188

Recitative [music]

Handel, George Frideric (His work) H: 42

Opera (table) O: 791; (Recitative and arias)

O: 792; (Early baroque opera) O: 797

Reckless [horse]

Horse (table: Famous horses in history and legend) H: 361

Reclamation, Bureau of [U.S.] R: 176

Grand Coulee Dam G: 308

Irrigation (History) I: 459

Reclamation Act [1902]

Irrigation (History) I: 459

Roosevelt, Theodore (Conservation) R: 469

Reclamation of land [conservation]

Coal (Strip mining) Ci: 721-722; picture on Ci: 730

Reclining Figure [sculpture by Moore]

Moore, Henry M: 797

Sculpture (Henry Moore) S: 258 with picture

Recognition [political science]

Nation N: 26

Recognition [psychology]

Memory (Measuring memory) M: 392

Perception (Types of perception) P: 283

Recognition society

Fraternity (Honor and recognition societies) F: 496

Recognizance [law]

Bail B: 31

Recoil system

Machine gun (Operation) M: 15-16

Recoilless rifle

Artillery (Kinds of artillery) A: 762

Recollections of Solferino [book by Dunant]

Dunant, Jean Henri D: 383

Recombinant DNA

Cell (The 1900's) C: 337-338

Clone Ci: 684

Genetic engineering (How genes are reintroduced into cells) G: 84a with diagram

Drug (The drug revolution) D: 359

Heredity (The era of genetic engineering) H: 209

Recombination [genetics]

Evolution (Mutation) E: 427-428

Heredity (Genetic recombination) H: 203

Recommended Dietary Allowances

Health (Nutrition) H: 125

Nutrition (Eat a balanced diet) N: 626; (table) N: 628

Vitamin V: 430

Recompression chamber

Diving, Underwater (Dangers of underwater diving) D: 246-247

Reconnaissance [defense]

Air force (The role of air forces) A: 182

Aircraft, Military (Reconnaissance aircraft) A: 203 with picture

Reconnaissance aircraft

Air force (Aircraft and missiles) A: 183

Air Force, United States (Other aircraft) A: 191

Reconstruction [U.S. history] R: 176 with pictures

African Americans (The first years of freedom) A: 136h with picture; (Temporary gains) A: 136i

Carpetbaggers C: 247

Civil rights (The struggle for the rights of blacks) Ci: 609

Democratic Party (After the Civil War) D: 125

Grant, Ulysses S. (Reconstruction policies) G: 315

Hayes, Rutherford Birchard (The election dispute) H: 120; (The end of Reconstruction) H: 120

Johnson, Andrew (Johnson's Administration) J: 139

Ku Klux Klan (Birth of the Klan) K: 389

Radicalism (In the United States) R: 82

Republican Party (The Radical Republicans and Reconstruction) R: 254

Scalwags S: 169

Stevens, Thaddeus So: 896

United States, History of the (Reconstruction) U: 175 with picture

Virginia (The Civil War and Reconstruction) V: 421

Reconstruction Acts [1867]

Reconstruction (The Reconstruction Acts) R: 178

Reconstruction Finance Corporation [U.S. history]

Great Depression (Hoover's policies) G: 341

Hoover, Herbert Clark (Anti-depression action) H: 329

Reconstructive surgery

Plastic surgery P: 553

Record [information]

Database D: 41 with picture

Record, Phonograph See *Phonograph record* in this index

Record player See *Phonograph in this index*

Recorder [musical instrument] R: 180 with picture

Recording industry R: 180 with picture

Country music (History) Ci: 1098a-1098b

Popular music (The recording era) P: 671

Recording Industry Association of America

Recording industry (Recording industry awards) R: 182

Recording machine

Dictating machine D: 191

Tape recorder T: 36 with pictures

Recording secretary

Parliamentary procedure (Officers) P: 175

Recording studio

Recording industry (In a recording studio) R: 181 with picture

Recovery unit

Hospital (Hospital units) H: 372

Recreation R: 182

Camping C: 92 with pictures

Colonial life in America (Recreation) Ci: 802 with picture

Forestry (Recreation areas) F: 407 with picture

Game G: 21 with picture

Indian, American (Recreation) I: 142 with picture

Library (Providing materials) L: 235-236

Park P: 168

Pioneer life in America (Social activities) P: 485

Play P: 570

Radio (The Golden Age of Broadcasting) R: 92-93

Reading (Recreational reading) R: 156

Safety (Safety in recreation) S: 12

Space exploration (Meeting basic needs in space) So: 703 with picture

State government (State services) So: 864

United States (Recreation) U: 114 with pictures

Western frontier life in America (Amusements) W: 236

See also the list of Related Articles in the Recreation article

Recreation trail

National Trails System N: 61

Recreational therapist [medicine]

Medicine (Other careers in medicine) M: 371

Recreational vehicle R: 183 with pictures

Camping (Recreational vehicle camping) C: 92 with picture

Recruit [military]

Rank, Military (table) R: 140

Recruiting Officer, The [play by Farquhar]

Farquhar, George F: 47

Theater picture on T: 242

Recrystallization

Forging F: 409

Marble (Properties) M: 192

Metamorphic rock M: 428

Rectangle [geometry]

Golden section G: 256

Rectification

Distillation D: 238

Rectifier [electronics]

Electric current (Direct and alternating current) E: 168

Electric generator (Uses of DC generators) E: 173-174

Electronics (Diodes) E: 210-212

Locomotive (Diesel locomotives) L: 414-415

Radio (How radio programs are received) R: 88

Vacuum tube (Kinds of vacuum tubes) V: 258

Rectilinear motion

Amphisbaenian A: 443

Motion M: 844

Recto

Book (Inside a book) B: 464

Rector, Henry Massey [American political leader]

Arkansas (table) A: 712

Rector of Justin, The [book by Auchincloss]

Auchincloss, Louis A: 880

Rectum [anatomy]

Alimentary canal A: 368 with diagram

Cancer (Classification by primary body site) C: 167-168; (table) C: 170

Colon Ci: 785

Colon cancer Ci: 785

Colostomy Ci: 850

Frog picture on F: 537

Hemorrhoids H: 183

Human body diagram on H: 422

Inflammatory bowel disease I: 266

Intestine (The large intestine) I: 353 with diagrams

Prostate cancer P: 829

Recuerda, José Martín [Spanish dramatist]

Spanish literature (Spanish literature today) So: 763

Recumbent bicycle

Bicycle (Specialty bicycles) B: 290

Recurrent education

Adult education (In the 1900's) A: 69-70

Recurrent nova [astronomy]

Nova N: 553

Recurve bow

Archery (Archery equipment) A: 601 with picture

Recuyell of the Histories of Troye

Book (The spread of printed books) B: 467

Recyclable resource

Conservation Ci: 974

Recycled wool

Wool (Types of wool) W: 399

Recycling R: 184

Aluminum (Recycling) A: 396

Conservation (Minerals recycled in the United States) Ci: 982; (Mineral conservation) Ci: 982-983 with picture

Environmental pollution (Business and industry) E: 336-337 with picture; (Individual efforts) E: 338

Glass (Modern glassmaking) G: 222-223 with picture

Industry picture on I: 260

Plastics (Plastics and the environment) P: 560

Polyester P: 649

Technology (Using technology safely) T: 77 with picture

Waste disposal (Recycling and waste reduction) W: 112

Red [color]

Color (The relation between color and light) Ci: 817-818 with diagram; diagrams on Ci: 821

- Symbol (Symbols with different meanings)
So: 1066
- Red algae**
Algae (Red algae) A: 349
Ocean (Medicines) O: 654
Seaweed (Kinds) S: 276 *with pictures*
- Red and the Black, The** [book by Stendhal]
French literature (Romantic fiction) F: 521
Novel (France) N: 573
Stendhal So: 889
- Red Army**
Leningrad, Siege of L: 195
Union of Soviet Socialist Republics (History)
U: 35-36
- Red Army Faction** [Germany]
Terrorism (Terrorism in the 1900's) T: 179
- Red ash** [tree]
Ash A: 767
- Red-backed salamander**
Animal *picture on A: 478*
- Red Badge of Courage, The** [book by Crane]
Crane, Stephen Ci: 1120
- Red Baron** [German aviator]
Ace A: 24
- Red bat** [animal]
Bat (Some kinds of bats) B: 161-162
- Red Beard** *See* Frederick I *in this index*
- Red Beds Plains** [Oklahoma]
Oklahoma (Land regions) O: 724-726
- Red-billed tropicbird**
Tropicbird T: 451
- Red birch** [tree]
Birch (River birch) B: 327
- Red blood cell**
Anemia A: 458
Blood (The composition of blood) B: 407-408
with picture; (How the body maintains its
blood supply) B: 410; (Blood groups)
B: 412
Blood doping B: 415
Blood transfusion (Types of transfusion)
B: 417
Cell (Death of a cell) C: 332
Hemoglobin H: 182
Human body (The blood) H: 421-424 *with pic-
ture*
Leeuwenhoek, Anton van L: 181
Respiration (Gas transport between the lungs
and tissues) R: 261
Rh factor R: 289
Sickle cell anemia S: 448
- Red bone marrow**
Bone (Structure of the bones) B: 456
- Red Book** [recording standard]
Compact disc (Audio CD's) Ci: 901
- Red-breasted merganser** [duck]
Merganser M: 417
Duck *picture on D: 375*
- Red-breasted nuthatch** [bird]
Nuthatch N: 623 *with picture*
- Red Brigades** [terrorist organization]
Italy (Social problems) I: 518
Terrorism (Terrorism in the 1900's) T: 179
- Red bug** [animal]
Mite M: 678
- Red Carpet for the Sun, A** [poems by Layton]
Layton, Irving L: 148
- Red Cavalry** [book by Babel]
Russian literature (The period of rebirth)
R: 564
- Red cedar** [tree] *See* Redcedar *in this index*
- Red China** *See* China *in this index*
- Red clay**
Ooze O: 788
- Red Cloud** [American Indian chief] R: 185 *with
portrait*
South Dakota (Territorial days) So: 681
Wyoming (Indian and settler conflicts) W: 534
- Red Cloud's War** [1866-1868]
South Dakota (Territorial days) So: 681
- Red clover**
Clover (Red clover) Ci: 712 *with picture*
Shamrock S: 371
- Red colobus** [monkey]
Monkey *picture on M: 728*
- Red Crescent** [organization]
Flag *picture on F: 216*
Red Cross R: 185
- Red-crested toureco** [bird]
Touacoo *picture on T: 346*
- Red Cross** [organization] R: 185 *with picture*
Barton, Clara (The Red Cross) B: 121
Dunant, Jean Henri D: 383
Flag *picture on F: 216*
- Food supply *picture on F: 351*
Nobel Prizes (Peace: 1917, 1944) N: 447;
(Peace: 1963) N: 448
- Red Cross Train** [painting by Severini]
Futurism *picture on F: 590*
- Red Data Book**
Conservation (International problems) Ci: 990
Wildlife conservation (International coopera-
tion) W: 305
- Red deer** R: 188
Animal *picture on A: 479*
Deer (Asian and European deer) D: 86; *picture
on D: 84*
- Red Deer River**
Alberta (Land regions) A: 322 *with map*
- Red Desert**
Wyoming (Land regions) W: 526
- Red Dog Mine**
Alaska *picture on A: 297*
- Red drum** [fish]
Drum D: 367
Redfish R: 191
- Red dwarf** [star]
Brown dwarf B: 644
- Red Eagle** [American Indian chief]
Alabama (Territorial days) A: 275
- Red Ensign** [flag]
Canada, History of (The return of the Liberals)
C: 152
Flag (History of the Canadian flag) F: 215 *with
picture*; *picture on F: 195*
- Red-Eyed Tree Frog** [book by Cowley]
Literature for children *picture on L: 380*
- Red-eyed vireo** [bird]
Bird (Birds of forests and woodlands) B: 334
with picture
Vireo V: 391
- Red-figure style**
Painting (Greek painting) P: 42
- Red Flag Law** [1865]
Automobile (The steam car) A: 962
- Red Fork** [Oklahoma]
Tulsa (History) T: 483
- Red Fort** [India]
Delhi (The city) D: 115
- Red fox** [animal]
Fox F: 438; (The life of a fox) F: 439-440;
(Kinds of foxes) F: 440 *with picture*
Mammal diagram on M: 121
- Red giant star**
Cosmology (Star ages) Ci: 1078
Star (Red-giant phase) So: 848
Sun So: 975; (Evolution of the sun) So: 982
White dwarf W: 285
- Red Globe onion**
Onion *picture on O: 763*
- Red grouper** [fish]
Grouper G: 403 *with picture*
- Red Guard** [Chinese history]
China (The Cultural Revolution) C: 506
Shanghai (History) S: 372
- Red Guard** [Finnish history]
Finland (The new republic) F: 117
- Red gum** [tree]
Sweet gum So: 1036 *with picture*
Tree *pictures on T: 423*
Wood *picture on W: 389*
- Red Hat Order of Lamas** [religious group]
Bhutan (People) B: 277
- Red haw** *See* Hawthorn *in this index*
- Red Heart, The** [book by Reaney]
Reaney, James R: 173
- Red hot**
Sausage S: 163
- Red Hot Peppers** [jazz band]
Morton, Jelly Roll M: 821
- Red-hot poker**
Flower *picture on F: 271*
- Red imported fire ant** [insect]
Fire ant F: 122
- Red Jacket** [American Indian leader] R: 188 *with
portrait*
- Red Jacket** [tent colony]
West Virginia *picture on W: 228*
- Red Jacket Monument**
Buffalo (Other interesting places to visit)
B: 678
- Red Jamaica**
Banana B: 72
- Red juniper**
Tree *pictures on T: 425*
- Red kangaroo**
Australia *picture on A: 916*
Kangaroo K: 213
- Red king crab**
Crab Ci: 1115
Horseshoe crab H: 368
- Red Knight** [German aviator]
Ace A: 24
- Red Lake** [Minnesota]
Minnesota (Lakes, rivers, and waterfalls) M: 598
- Red Land**
Egypt, Ancient (The land) E: 135
- Red LaSoda**
Potato P: 712; *picture on P: 711*
- "Red Laugh, The"** [book by Andreyev]
Andreyev, Leonid A: 456
- Red-legged kittiwake** [bird]
Kittiwake K: 341
- Red line speed** [aviation]
Airplane (Measuring flying speed) A: 225-226
- Red maple** [tree]
Maple (Red maple) M: 187
Tree *pictures on T: 422*
- Red meat**
Meat M: 346
- Red milk snake**
Snake *picture on S: 532*
- Red mulberry** [plant]
Mulberry M: 913
- Red mullet** [fish]
Mullet M: 915
- Red oak** [tree]
Oak (Red oaks) O: 635
Tree *pictures on T: 423*
- Red ocher** [mineral]
Hematite H: 180
- Red-osier dogwood** [tree]
Osier O: 863
- Red panda** [animal]
Panda (The red panda) P: 129 *with picture*
- Red pepper**
Cayenne pepper C: 323
Pepper P: 278
- Red Petals** [sculpture by Calder]
Sculpture (Form and treatment) S: 230-231
with picture
- Red phosphorus**
Phosphorus P: 403
- Red pine** [tree]
Pine (Eastern pines) P: 468
Tree *pictures on T: 413*
- Red Poll** [cattle]
Cattle (Dual-purpose cattle) C: 311
- Red Pontiac**
Potato P: 712; *picture on P: 711*
- Red puccoon** [plant]
Bloodroot B: 418 *with picture*
- "Red, Red Rose, A"** [song]
Burns, Robert (Burns's works) B: 710
- Red River** [U.S.] R: 188
Oklahoma (Rivers and lakes) O: 727
Ross, Alexander R: 483
- Red River** [Vietnam]
Vietnam (Northern Vietnam) V: 368
- Red River Colony** [Canadian history]
Canada, History of (Exploration of the West)
C: 145
Manitoba (The Red River Colony) M: 160
Métis M: 435
- Red River of the North** [Canada-U.S.] R: 188
with map
Lake Agassiz L: 35
- Red River Rebellion** [1869-1870] R: 189
Canada, History of (New provinces) C: 147
Macdonald, Sir John Alexander (Completing
the Dominion) M: 8
Manitoba (The Red River Rebellion) M: 160
Métis M: 435
Riel, Louis R: 337
- Red River Valley**
North Dakota (Land regions) N: 506 *with pic-
ture*
Red River of the North R: 188
Red River Rebellion R: 189
- Red River War** [1874]
Indian wars (The Southern Plains) I: 194
- Red Robe, The** [play by Brieux]
Brieux, Eugène B: 608
- Red robin** [plant]
Geranium G: 136
- Red Rock Canyon**
Nevada *picture on N: 156*
- Red Rocks Amphitheater** [Colorado]
Colorado (Places to visit) Ci: 836
- Red Room**
White House (Public rooms) W: 286 *with pic-
ture*; *picture on W: 288*

Red Room, The [book by Strindberg]
Strindberg, August So: 929

Red Roses for Me [play by O'Casey]
Irish literature (The Irish literary revival) I: 431-432

Red salamander
Salamander picture on S: 59

Red salmon See Sockeye salmon in *this index*

Red Scare [U.S. history]
Roaring Twenties (Changing attitudes) R: 363

Red Sea R: 189 with map
Plate tectonics (Plate interactions) P: 562

Red sea anemone [animal]
Ocean picture on O: 656

Red-shafted flicker [bird]
Flicker F: 234 with picture

Red Shield of David
Flag picture on F: 216

Red shift [physics] See Redshift in *this index*

Red Shirts [Italian history]
Garibaldi, Giuseppe G: 43
Italy (Italy united) I: 515-516 with picture

Red-shouldered hawk [bird]
Buzzard B: 746
Hawk (North American hawks) H: 111

Red Sindhi [breed]
Cattle (Other dairy cattle) C: 311

Red snapper [fish]
Snapper picture on S: 537

Red Sokoto [animal]
Goat (Domestic goats) G: 239

Red sorrel [plant]
Sorrel So: 597 with picture

Red Sox, Boston [baseball team] See Boston Red Sox in *this index*

Red-spotted newt [animal]
Newt N: 388 with picture

Red spruce
Spruce (Kinds) So: 809

Red Square [Moscow]
Lenin, V. I. (Death) L: 195 with picture
Moscow (Famous landmarks) M: 823-824 with picture and map; picture on M: 823
Russia pictures on R: 525, R: 533
Union of Soviet Socialist Republics picture on U: 31

Red squill [plant]
Squill So: 814

Red squirrel
Classification, Scientific picture on Ci: 654
Invasive species (How invasive species affect habitats) I: 354j
Squirrel (Tree squirrels) So: 815 with picture

Red Star Line
Ship (Packet ships) S: 409-410

Red-stem filaree [plant]
Geranium G: 136

Red Stockings, Cincinnati
Baseball (Professional baseball) B: 133
Ohio picture on O: 701

Red supergiant star
Star (High-mass stars) So: 849-850

Red-tailed hawk [bird]
Buzzard B: 746
Eye picture on E: 468
Hawk picture on H: 112; picture on H: 112

Red-Tailed Hawk [painting by Naringhai]
Indian, American picture on I: 182

Red-tailed tropicbird
Tropicbird T: 451

Red tape [expression] R: 190

Red-throated loon [bird]
Loon L: 453

Red tide [oceanography] R: 190
Ocean (Phytoplankton) O: 655
Pacific Ocean (Offshore pollution) P: 17

Red uakari [animal]
Monkey picture on M: 728

Red Volta [river, Burkina Faso]
Burkina Faso (Land) B: 706

Red ware [china]
Wedgwood ware W: 179

Red widow [spider]
Black widow B: 391
Spider So: 782

Red wine
Wine (Types of wine) W: 336; (How wine is made) W: 337-338

Red-winged blackbird
Blackbird B: 392 with picture

Red Wings, Detroit
Detroit (Sports) D: 170
Hockey (table: National Hockey League) H: 281

Red wolf
Wolf W: 375
Endangered species (table) E: 270

Redbelly dace [fish]
Fish picture on F: 158

Redbird R: 190
Cardinal C: 211 with picture

Redbook Magazine
Magazine (table) M: 45

Redbreast [bird]
Robin R: 366 with picture

Redbud [tree] R: 190 with pictures
Tree pictures on T: 423

Redburn [book by Melville]
Melville, Herman (His early life) M: 390

Redcap [chicken]
Chicken (English class chickens) C: 441; (table) C: 443

Redcap [railroad]
Townsend, Willard Saxby T: 350

Redcedar [tree]
Juniper J: 196 with picture

Redcoat [U.S. history]
Revolutionary War in America (The beginning of the war) R: 274

Redd [nest]
Trout (The life of a trout) T: 454

Redding, Otis [American musician]
Rock music (Expanding styles and sounds) R: 378-379

Reddish egret [bird]
Egret (Kinds) E: 119 with picture

Redeemer, Feast of the [custom]
Venice (The people) V: 307

Redeemer, Order of the [award]
Medals, decorations, and orders (table) M: 359

Redemption [trade]
Trading stamps T: 366

Redemptioner [U.S. history]
Colonial life in America (The lower class) Ci: 793

Redemptorists [religious group]
Religious life (table) R: 227
Alphonsus Liguori, Saint A: 384

Redeye [weapon]
Guided missile (Surface-to-air missiles) G: 426; (Homing guidance) G: 426

Redeye bass [fish]
Bass (Black bass) B: 156-157

Redfield, William C. [American government official]
Commerce, Department of (table) Ci: 871

Redfin pickerel [fish]
Pike P: 461

Redfish R: 191

Redford, Robert [American actor] R: 191 with portrait
Motion picture (Best achievement in directing: 1980) M: 862

Redgrave, Michael [British actor] R: 191

Redgrave, Vanessa [British actress]
Motion picture (Best performance by an actress in a supporting role: 1977) M: 863

Redhead [bird]
Canvasback C: 185

Redheaded woodpecker
Woodpecker (Kinds) W: 394-395

Redi, Francesco [Italian scientist]
Life (The theory of spontaneous generation) L: 278
Spontaneous generation So: 801

Redistricting See Apportionment in *this index*

Redlining
Housing H: 389

Redonda [island, West Indies]
Antigua and Barbuda A: 555

Redoubling [cards]
Bridge (Bidding) B: 604

Redox process [chemistry]
Oxidation O: 888
Reduction R: 192

Redpoll [bird] R: 191 with picture

Redroot pigweed [plant]
Pigweed P: 461

Reds [Soviet history]
Lenin, V. I. (Civil war) L: 194
Union of Soviet Socialist Republics (History) U: 35-36

Reds, Cincinnati See Cincinnati Reds in *this index*

Redshift [physics] R: 191 with picture
Astronomy (Optical astronomy) A: 838-841; (Radio astronomy) A: 843 with picture
Cosmology (Movement of galaxies) Ci: 1078

Galaxy (Origin of galaxies) G: 8b-9
Quasar Q: 8
Telescope (Analyzing spectra) T: 105-106
Universe (Size of the universe) U: 205

Redskins, Washington See Washington Redskins in *this index*

Redstart [bird] R: 192
Animal picture on A: 478
Bird (Birds of forests and woodlands) B: 334 with picture

Redstone [rocket]
Rocket (The space age) R: 391

Redstone Arsenal [Alabama] R: 192
Alabama (Population) A: 260; (The mid-1900's) A: 278; picture on A: 277
Huntsville H: 451

Redtop [grass]
Bentgrass B: 254

Reduced-fat milk
Milk (table) M: 547

Reduced hemoglobin [physiology]
Cyanosis Ci: 1202

Reduced tillage [agriculture]
Farm and farming (Preparing the soil) F: 35

Reducing agent [chemistry]
Hydrogen (Uses) H: 469
Iron and steel (Raw materials) I: 440; (Running a blast furnace) I: 441

Reducing fractions [mathematics]
Fraction (Equivalent fractions) F: 446-447 with diagram

Reducing lathe [machine]
Money (Minting coins) M: 713 with picture

Reduction [chemistry] R: 192
Corrosion Ci: 1072
Electrolysis (How electrolysis works) E: 200-201
Hydrogen (Uses) H: 469
Magnesium (Properties) M: 54
Oxidation O: 888

Reduction [mechanics]
Transmission (Gears) T: 376 with diagram

Reduction gear [mechanics]
Elevator (How elevators work) E: 234

Redwood [tree] R: 192 with pictures
Bark (Outer bark) B: 110
California (Visitor's guide) C: 46 with picture; (Natural resources) C: 53
Conifer Ci: 950
Sequoia (The redwood) S: 310b
Tree (Interesting facts about trees) T: 411; pictures on T: 425

Redwood Highway
California (Places to visit) C: 46

Redwood Library [Newport]
Rhode Island (Libraries) R: 300

Redwood National Park [California] R: 193
National Park System (table: National parks) N: 48; picture on N: 47

Reed [plant] R: 193

Reed [weaving]
Weaving (How a loom works) W: 174

Reed, Sir Carol [British director]
Motion picture (Best achievement in directing: 1968) M: 862

Reed, Clyde M. [American political leader]
Kansas (table) K: 234

Reed, D. E. [American publisher]
Nebraska (Communication) N: 109

Reed, Donna [American actress]
Motion picture (Best performance by an actress in a supporting role: 1953) M: 863

Reed, Harrison [American political leader]
Florida (table) F: 260

Reed, Ishmael [American author]
American literature (Experimental styles) A: 424

Reed, Jim [American bandit]
Starr, Belle So: 856

Reed, John [American journalist] R: 194

Reed, John H. [American political leader]
Maine (table) M: 87

Reed, Joseph [American political leader]
Pennsylvania (table) P: 263

Reed, Ralph [American social reformer]
Christian Coalition C: 523

Reed, Stanley F. [American jurist]
Supreme Court of the United States (table) So: 1000

Reed, Thomas Brackett [American political leader] R: 194

Reed, Walter [American doctor] R: 194 with portrait

Reed boat

- Bolivia picture on B: 445
Ship picture on S: 404
- Reed instrument**
Jazz (The reeds) J: 69
Music (Wind instruments) M: 949 with pictures
Reed R: 194
- Reed organ** [musical instrument]
Harmonium H: 62
- Reed pipe** [musical instrument]
Organ (Pipe organs) O: 851-852
Pipe P: 488
- Reed-Sternberg cell** [physiology]
Hodgkin's disease H: 283
- Reed tachometer** [instrument]
Tachometer T: 4
- Reeding** [coins]
Money (United States currency today) M: 709-711
- Reed's Rules** [U.S. history]
Reed, Thomas Brackett R: 194
- Reef** See Coral reef in this index
- Reef-building coral**
Coral picture on Ci: 1048a
- Reefer truck**
Truck (On-highway trucks) T: 457
- Reel** [fishing]
Fishing (Reels) F: 176 with pictures
- Reel-to-reel tape recorder**
Tape recorder (Kinds of tape recorders) T: 38 with picture
- Reeling**
Silk (Reeling) S: 460
- Reese, Pee Wee** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Reeve**
Flag (table) F: 193
- Reeve** [bird]
Ruff R: 509
- Reeve** [English history]
Police (Early law enforcement in England) P: 624
Sheriff S: 397
- Reeve, Tapping** [American jurist]
Connecticut (Schools) Ci: 956
- Reeves, Orlando** [American settler]
Orlando O: 857
- Reeves pheasant**
Pheasant (Kinds of pheasants) P: 355-356
- Referee** [sports]
Basketball (The officials) B: 145
Boxing (Fight officials) B: 528
Football (The officials) F: 362
Hockey (The officials) H: 279
Rugby football (Rugby Union) R: 510
Soccer (The officials) So: 545 with diagram
- Referee's position**
Wrestling picture on W: 506
- Reference** [business]
Careers (Writing a résumé) C: 217
- Reference** [psychology]
Delusion D: 118
- Reference beam** [holography]
Holography H: 297
- Reference biography**
Biography (Forms of biography) B: 312
- Reference book**
Library L: 234
A Guide to Research Skills Research Guide: 30, 36
See also specific reference books, such as Encyclopedia in this index
- Reference collection**
Rock (Identifying rocks) R: 373
- Reference service**
Library (Assisting patrons) L: 236; (The work of librarians) L: 255
- Referendum** [government]
Initiative and referendum I: 271
Law (By direct action of the people) L: 132
Progressive movement (Political reforms) P: 814
- Referendum by petition** [government]
Initiative and referendum (The referendum) I: 272
- Refining** [industrial process]
Gold (Refining) G: 253; diagram on G: 250
Iron and steel (Special refining processes) I: 445
Lead (Production) L: 149-150
Metallurgy (Extractive metallurgy) M: 426
Petroleum (Refining petroleum) P: 343-345 with diagram
- Reflected light meter**
Photography (Exposure meters) P: 418-419
- Reflecting Pool** [Washington, D.C.]
Washington, D.C. map on W: 76
- Reflecting telescope**
Hubble Space Telescope H: 403
Keck Observatory K: 254
Palomar Observatory P: 112
Telescope (Reflecting telescopes) T: 104 with diagrams
- Reflection** [physics] R: 194
Acoustics (Architectural acoustics) A: 29
Echo E: 49 with diagrams
Light (Reflection, refraction, and absorption) L: 286 with pictures
Mirror M: 616 with diagrams
Prism P: 805 with picture
Rainbow (How rainbows appear) R: 128
Sound (Reflection) So: 602
Waves (Refraction and reflection) W: 152; diagram on W: 151
- Reflection, Angle of** See Angle of reflection in this index
- Reflection Lake** [California]
Lassen Volcanic National Park L: 87
- Reflection nebula** [astronomy]
Nebula (Diffuse nebulae) N: 116
- Reflection seismology**
Gas [fuel] (Exploring for gas) G: 53
- Reflectional symmetry** [geometry]
Symmetry So: 1066
- Reflections in a Golden Eye** (book by McCullers)
McCullers, Carson M: 335
- Reflections of a Public Man** (book by Wright)
Wright, James Claude, Jr. W: 508
- Reflections on the Revolution in France** (book by Burke)
Burke, Edmund B: 705
- Reflective insulation**
Insulation (In buildings) I: 306
- Reflectivity mode**
Weather (Weather radar) W: 162
- Reflector**
Lamp (Fat or oil lamps) L: 52 with picture
- Reflector** [electronics]
Radar (The antenna) R: 71
- Reflector** [telescope] See Reflecting telescope in this index
- Reflex action** [physiology] R: 194 with diagram
Anesthesia (General anesthesia) A: 459
Behavior (Types of behavior) B: 221
Brain (In controlling movement) B: 553
Instinct (How instinctive behavior works) I: 305
Nervous system (Simple pathways) N: 134
Yawning Y: 553
- Reflex camera**
Camera (Types of cameras) C: 82 with diagram
Photography (Single-lens reflex cameras) P: 417; (Twin-lens reflex cameras) P: 417
- Reflexive pronoun** [grammar]
Pronoun P: 819
- Reforestation**
Forestry (Planting) F: 405; picture on F: 406
- Reform Act** [1832]
Industrial Revolution (The working class) I: 251-252
United Kingdom (The era of reform) U: 68
William IV W: 309
- Reform Act** [1867]
Conservative Party Ci: 992
Disraeli, Benjamin D: 237
Gladstone, William Ewart G: 207
Industrial Revolution (The working class) I: 251-252
Parliament (Parliament gains strength) P: 174
- Reform Act** [1884]
Parliament (Parliament gains strength) P: 174
United Kingdom (Gladstone and Disraeli) U: 69
- Reform Judaism** [religion]
Judaism (Reform Judaism) J: 180; (Worship) J: 181
Religion (Judaism) R: 219-220
Wise, Isaac Mayer W: 370
- Reform Laws** [1859]
Mexico (Reform) M: 472
- Reform Party** [Canada] R: 195
Alberta (Recent developments) A: 331
Campbell, Kim (The 1993 election) C: 90d
Canadian Alliance C: 156
Chrétien, Jean (The 1993 election) C: 522c; (Prime minister) C: 522c-522d
Harper, Stephen Joseph H: 65
- Manning, Preston M: 165
Political party (Other parties) P: 636-637
- Reform Party** [United States] R: 195
Perot, Ross P: 292
- Reform school**
Reformatory R: 199
- Reformation** [European history] R: 195 with pictures
Christianity (The Reformation) C: 526
Church and state (The Reformation) C: 542
Classical music (The Reformation) Ci: 646
Communication (The rise of printing) Ci: 879-880
Counter Reformation Ci: 1096
Cromwell, Thomas C: 1152
Democracy (The Renaissance and the Reformation) D: 123
Education (The Reformation) E: 100
Europe (The Reformation) E: 411
Freedom (The Renaissance and the Reformation) F: 502
Freedom of religion (History) F: 506
Germany (The Reformation) G: 164
Hymn (History) H: 474
Luther, Martin L: 527
Melancthon, Philipp M: 388
Netherlands (Freedom from Spain) N: 148
Painting (Baroque) P: 58
Pope (Renaissance and Reformation) P: 664
Protestantism P: 833; (History) P: 834
Religion (Christianity) R: 222
Religious life (Religious life in the 1500's and 1600's) R: 227
Roman Catholic Church (The Reformation) R: 408
Saint (Christian saints) S: 29
Tetzel, Johann T: 183
Thirty-Nine Articles T: 259
Trent, Council of T: 435
Women's movements (From the Renaissance to the 1800's) W: 384
See also list of Related Articles in the Reformation article
- Reformatory** [prison] R: 199
- Reformed church** [religion]
Presbyterians P: 756a
Protestantism (The conservative reform movements [the 1500's]) P: 834
- Reformed Church in America** [religious group] R: 199
- Reformed spelling** [language]
Phonetics (Phonetics and spelling) P: 398-400
- Reforming** [industrial process]
Petroleum (Conversion) P: 345
- Refracting telescope**
Telescope (Refracting telescopes) T: 103 with diagram
Galileo G: 11 with picture
- Refraction** [physics] R: 199 with pictures
Astronomy (Locating objects in space) A: 837-839
Eye (Focusing) E: 462
Gem (Index of refraction) G: 77
Lens (Creating an image) L: 196
Light (Reflection, refraction, and absorption) L: 286 with pictures
Mirage M: 615 with pictures
Prism P: 805
Rainbow (How rainbows appear) R: 128
Sound (Refraction) So: 602 with diagrams
Waves (Refraction and reflection) W: 152
- Refraction, Index of** [physics]
Gem (Index of refraction) G: 77
Materials (Optical properties) M: 300c
- Refractive index** [physics] See Index of refraction in this index
- Refractor** [telescope] See Refracting telescope in this index
- Refractory R: 200**
Brick (Refractory bricks) B: 597
Ceramics (Kinds of ceramic products) C: 359
Furnace F: 567
- Refractory pot**
Glass (Melting) G: 215
- Refrigerant**
Ammonia (Properties of ammonia) A: 434
Heat pump H: 156
- Refrigerant-control device**
Refrigeration (The electric refrigerator) R: 201 with diagram; diagram on R: 202
- Refrigeration R: 200 with pictures**
Air conditioning (Controlling the temperature) A: 178
Ammonia (Properties of ammonia) A: 434

Cold storage Ci: 761
 Dry ice D: 369
 Food (Transportation) F: 335
 Food, Frozen F: 338
 Food preservation (Cold storage) F: 342
 Heat (Refrigeration) H: 154
 Heat pump H: 157
Refrigerator See Refrigeration in this index
Refrigerator car [railroad]
 Railroad pictures on R: 105, R: 108
Refrigerator ship
 Ship (Specialized types of vessels) S: 422
Refuge [conservation] See Wildlife refuge in this index
Refuge, Cities of
 Cities of refuge Ci: 568
Refugee [migration] R: 203
 Berlin (The Berlin Wall) B: 265
 Ford, Gerald Rudolph (Foreign affairs) F: 378
 Germany (West Germany) G: 170; (East Germany) G: 170; (The unification of East and West Germany) G: 171-172
 Haiti (History) H: 15-17
 Immigration I: 80; (The fourth wave) I: 83
 India (Independence and partition) I: 133;
 (India under Indira Gandhi) I: 133-134
 Iraq (Recent developments) I: 415
 Kosovo K: 385
 Mexico (Recent developments) M: 474
 Palestine (World War II and the division of Palestine) P: 105
 Rwanda (History) R: 571-572
 United Nations (Aid to refugees) U: 88
 Vietnam (Postwar Vietnam) V: 371 with picture
 War (Refugees) W: 25
 World War II (Displaced persons) W: 496
Refugee Act [1980]
 Immigration (The fourth wave) I: 83
Refugee camp
 Jordan picture on J: 165
Refugee Relief Act [1953]
 Immigration (A temporary decline—1930-1965) I: 82-83
Refugees, Freedmen, and Abandoned Lands, Bureau of See Freedmen's Bureau in this index
Refugees, International Office for
 Nobel Prizes (Peace) N: 448
Refus global [text]
 Canadian literature (Modern Canadian poets) C: 160
Refusal
 Horse (Jumping) H: 357
Refuse
 Sanitation (Solid waste disposal) S: 111
 Waste disposal W: 112
Regal murex
 Shell picture on S: 386
Regalia [ornament]
 Coronation (The British coronation) Ci: 1068
 Tower of London T: 349
Regan [literary figure]
 Shakespeare, William (*King Lear*) S: 363
Regan, Donald T. [American government official]
 Reagan, Ronald Wilson (table) R: 169
 Treasury, Department of the (table) T: 407
Regan, Gerald [Canadian political leader]
 Nova Scotia (table) N: 567
Regatta [race]
 Rowing (Competition) R: 494
Régence style
 Furniture (French styles) F: 576
Regency Act of 1937 [British history]
 Regent R: 204
Regency period
 Furniture (The Regency style) F: 580
 Heyer, Georgette H: 220
Regency System of Speedwriting
 Speedwriting So: 775
Regenerated fiber
 Fiber (Regenerated fibers) F: 87
Regeneration [biology] R: 203
 Animal (Regeneration) A: 498
 Crustacean (Growth and development) Ci: 1164 with picture
 Liver L: 393
 Lizard (Defenses) L: 400
 Planarian P: 507
 Plant (Vegetative propagation) P: 535
 Sponge (Regeneration) So: 800
 Starfish So: 855
Regeneration [book by Loeb]
 Loeb, Jacques L: 420

Regenerative gas furnace
 Iron and steel (The birth of modern steelmaking) I: 451
Regenerative nodule [disorder]
 Cirrhosis Ci: 566
Regenerator
 Stirling engine So: 902 with diagrams
 Turbine (Gas turbines) T: 497-498
Regent [office] R: 204
Regent diamond
 Diamond (Famous diamonds) D: 182; picture on D: 181
Regenta, La [book by Clarin]
 Spanish literature (The 1800's) So: 761-762
Regents, Board of
 Universities and colleges (Governing boards) U: 208
Regents of the University of California v. Allan Bakke [U.S. history] See Bakke case in this index
Reggae [music] R: 204
 Rastafarians R: 145
 Rock music (Rock goes pop) R: 379-380
Regin [legendary figure]
 Fafnir F: 5
Regina [Saskatchewan] R: 204 with pictures and map
 Saskatchewan (table: Average monthly weather) S: 140; pictures on S: 129, S: 141
Regina [opera by Blitzstein]
 Blitzstein, Marc B: 404
Regina Manifesto [Canadian history]
 Regina (History) R: 206
Regina Medal R: 206
Regiomontanus [German mathematician]
 Mathematics (The Renaissance) M: 306
 Trigonometry T: 442
Region
 Geography (Regional and topical geography) G: 93
Region of elongation [botany]
 Root (The root tip) R: 474 with diagram
Regional airline
 Airport (Commercial service airports) A: 243
Regional county municipality
 Quebec (Local government) Q: 30
Regional enteritis [disorder] See Crohn's disease in this index
Regional fair
 Fair (Agricultural fairs) F: 7
Regional forecaster
 Weather (Careers in weather) W: 170
Regional holding company [business]
 Telephone (Competition in the U.S. telephone industry) T: 101
Regional metamorphism
 Metamorphic rock M: 428
Regional nerve block [medicine]
 Anesthesia (Local anesthesia) A: 459
 Procaine P: 809
Regional Rail Reorganization Act [1973]
 Conrail Ci: 973
Regional railroad
 Railroad (Railroad systems) R: 112-113
Regional Transportation Authority [Illinois]
 Chicago (Transportation) C: 433
Regionalism [art]
 Curry, John Steuart Ci: 1198
 Benton, Thomas Hart B: 254
 Painting (Regionalism) P: 83 with picture
 Wood, Grant V: 390
Regionalists [literature]
 Spanish literature (The 1800's) So: 761-762
Register [computer]
 Computer (The digital logic unit) Ci: 912
 Electronics (Digital circuits) E: 213-214
Register pin
 Motion picture (The camera) M: 857 with diagram
Registered horse
 Horse (Breeding horses) H: 358-359
Registered mail
 Postal Service, United States (Extra protection) P: 700
Registered nurse
 Hospital (The professional services staff) H: 371
 Nursing (Professional and technical nursing education) N: 619-620
Registrar [museum]
 Museum (Acquisition of materials) M: 938-939
Registration [printing]
 Lithography (Color lithography) L: 387
Registration of voters

Voting (Registration) V: 449
Registry, Breed
 Horse (Breeding horses) H: 358
Registry, Nurse's
 Nursing (Private-duty nurses) N: 618
Rego, José Lins do [Brazilian author]
 Latin-American literature (The early 1900's) L: 113
Regolith [astronomy]
 Moon (Origin and evolution of the moon) M: 788
Regressing
 Speed reading So: 774
Regression [psychology] R: 207
Regression [reading]
 Reading (How we read) R: 156-157
Regret [horse]
 Kentucky Derby K: 297
Regrets [poems by Bellay]
 Du Bellay, Joachim D: 370
Regrouping [mathematics]
 Addition (Regrouping) A: 49
 Numeration systems (Decimal addition) N: 606
Regular army
 Army A: 724
Regular fractal [geometry]
 Fractal F: 443 with diagram
Regular hexagon
 Hexagon H: 220 with diagram
Regular octagon
 Octagon O: 669 with diagram
Regular octahedron
 Octahedron O: 669 with diagram
Regular polygon [geometry]
 Polygon P: 650 with diagram
 Polyhedron P: 650
Regular polyhedron [geometry]
 Polyhedron P: 650 with diagrams
Regular pyramid [geometry]
 Pyramid P: 916 with diagram
Regulator [clock]
 Pendulum (Clock pendulums) P: 237
Regulators [U.S. history]
 North Carolina (Revolution and independence) N: 492
 Westward movement in America (Regional conflict) W: 245
Regulatory agency
 President of the United States (The independent agencies) P: 764
 United States, Government of the (Executive departments and agencies) U: 140
Regulatory commission
 United States, Government of the (Executive departments and agencies) U: 140
Regulus, Marcus Atilius [Roman general]
 R: 207
Regurgitation [biology]
 Ant (Internal organs) A: 522
Regurgitation [medicine]
 Heart (Other heart disorders) H: 141
Reh pinscher [dog]
 Miniature pinscher M: 573
Rehabilitation [medicine]
 Disabled (Rehabilitation medicine) D: 220 with picture; (Attitudes toward people with disabilities) D: 221
 Hospital (Professional services departments) H: 371
 Mental illness (Psychotherapy) M: 407-408 with picture
 Physical therapy P: 435
 Stroke (Rehabilitation) So: 930
 Vocational rehabilitation V: 435
Rehabilitation [social reform]
 Crime (Crime prevention) Ci: 1139
 Criminal justice system (The correctional system) Ci: 1144
 Criminology (What criminologists study) Ci: 1145
 Prison (How prisons operate) P: 806 with picture; (Reforms in the 1900's) P: 808
 Sentence S: 304
Rehabilitation Act [1973]
 Disabled (Attitudes toward people with disabilities) D: 221
Rehabilitation engineering
 Biomedical engineering (Specialty areas of biomedical engineering) B: 324-325
Rehabilitation Services Administration
 Disabled (table) D: 222
Rehabilitation therapy
 Disease (Medical treatment) D: 232-233

Rehabilitation through Training, Organization for
Women's American ORT W: 382

Rehearsal
Memory (Other ways to improve memory) M: 393
Opera (Rehearsing a production) O: 796; *picture on O*: 795
Orchestra (The conductor) O: 821
Television (Planning and preparation) T: 110c-111
Theater (Rehearsing) T: 236 *with picture, picture on T*: 240

Rehearsal room
Television (Producing television programs) T: 110c-111

Rehnquist, William Hubbs [American jurist] R: 207
Nixon, Richard Milhous (The national scene) N: 434
Supreme Court of the United States *picture on So*: 999

Rehoboam [Biblical figure]
Solomon So: 584

Rehoboth Beach
Delaware (Interesting facts about Delaware) D: 97 *with picture*

Reich [German history] R: 207

Reich, Ferdinand [German chemist]
Indium I: 224

Reich, Robert B. [American political leader]
Clinton, Bill (table) Ci: 682d
Labor, Department of (table) L: 2

Reich, Steve [American composer]
Classical music (Minimalism) Ci: 651

Reichenstein, Franz Müller von [Romanian scientist]
Tellurium T: 129

Reichsmark [money]
Mark M: 213

Reichstadt, Duke of [son of Napoleon I]
Napoleon II N: 19

Reichstag [German history]
Berlin (Recent developments) B: 265
Germany (The German Empire) G: 166; (The Weimar Republic) G: 167
Hitler, Adolf (The New Order) H: 267

Reichstein, Tadeus [Swiss chemist]
Nobel Prizes (Physiology or medicine: 1950) N: 444

Reid, Bill [Canadian sculptor]
Canada (Painting and sculpture) C: 109-110 *with picture*

Reid, D. S. [American political leader]
North Carolina (table) N: 490

Reid, David B. [British inventor]
Air conditioning (History) A: 180

Reid, George H. [Australian political leader]
Australia (table) A: 925

Reid, Richard G. [Canadian political leader]
Alberta (table) A: 328

Reid, Whitelaw [American political leader] R: 207

Reid, William F. [American political leader]
Virginia (Political changes) V: 422

Reifel, Benjamin [American political leader]
Indian, American (Political gains) I: 182

Reign of Terror [French history]
French Revolution (Terror and equality) F: 526; (The revolution ends) F: 527
Danton, Georges-Jacques D: 35
Jacobins J: 20
Robespierre R: 366
Terrorism (History of terrorism) T: 179

Reims [France] R: 207 *with picture*
City *picture on Ci*: 582
Joan of Arc, Saint (Joan sees the king) J: 128
Vulgate V: 453

Reina Regenta [ship]
Shipwreck (table: Major shipwrecks) S: 428

Reincarnation R: 208
Hinduism (Reincarnation and karma) H: 237
India (Hinduism) I: 116
Plato (Immortality of the soul) P: 568
Pythagoras P: 921
Religion (A doctrine of salvation) R: 216
Theosophy T: 253

Reindeer [animal] R: 208 *with picture*
Inuit (New ways of life) I: 354g-354h
Lapland L: 74
Sami S: 78 *with picture*

Reindeer Island [Canada]
Lake Winnipeg L: 48 *with map*

Reindeer Lake [Canada] R: 208

Reindeer moss R: 209
Lichen (The importance of lichens) L: 269

Reiner, Fritz [American conductor] R: 209 *with portrait*

Reines, Frederick [American physicist]
Neutrino N: 154
Nobel Prizes (Physics: 1995) N: 442

Reinforced concrete
Cement and concrete (Reinforced concrete) C: 343
Earthquake (Reducing earthquake damage) E: 35

Reinforced plastics
Plastics (Making sythetic resins) P: 556-557

Reinforcement [chemistry]
Composite materials Ci: 904

Reinforcement [psychology]
Behavior (Behaviorism) B: 221
Developmental psychology (Learning theory) D: 174
Habit (How we learn habits) H: 2
Learning (Classical conditioning) L: 163; (Instrumental conditioning) L: 163
Psychiatry (Psychotherapy) P: 845

Reinhardt, Django [Belgian guitarist]
Jazz (The spread of jazz) J: 72-73

Reinhardt, Max [Austrian director] R: 209

Reiniger, Lotte [German filmmaker]
Animation (Animation in Europe) A: 514

Reins
Harness H: 63 *with diagram*
Horse (table: Riding equipment) H: 351; (The bridle) H: 352 *with pictures*

Reivers, The [book by Faulkner]
Faulkner, William F: 55

Reizenstein, Elmer Leopold *See Rice, Elmer in this index*

Rej, Mikołaj [Polish poet]
Poland (The arts) P: 607

Rejection [medicine]
Transplant (Preventing rejection) T: 380
Xenotransplant X: 544

Rejewski, Marian [Polish mathematician]
Codes and ciphers (Later developments) Ci: 751

Relapse, The [play by Vanbrugh]
Vanbrugh, Sir John V: 269

Relapsing
Drug abuse (Treatment of substance use disorders) D: 364

Relapsing fever R: 209

Related color scheme [art]
Interior design (Using color) I: 331

Relation [mathematics]
Algebra (Working with equations) A: 356

Relation of ideas [philosophy]
Hume, David (Hume's thought) H: 432

Relational database [software]
Database D: 41

Relationship of the Church to Non-Christian Religions, Declaration on the
Vatican Council II (The work of the council) V: 289-290

Relationship-oriented sales
Sales (Current trends in sales) S: 65

Relative atomic mass
Element, Chemical (The periodic table of the elements) E: 219

Relative dating [archaeology]
Archaeology (Dating) A: 598

Relative humidity
Air (Moisture in the air) A: 167
Heat index H: 155
Heating H: 157
Humidity H: 433
Hygrometer H: 473
Weather (Humidity) W: 158; (Synoptic-scale systems) W: 159-160

Relative molecular mass [chemistry]
Metric system (Chemistry) M: 440

Relative motion
Time (Physical time) T: 292

Relative prime
Factor (Relative primes) F: 4

Relative pronoun
Pronoun P: 819

Relative work skydiving
Skydiving S: 496

Relatives
Family (Family relationships) F: 21

Relativism [philosophy]
Metaphysics (Space and time) M: 430
Philosophy (Ethics) P: 384

Relativistic equation

Energy (Calculating quantities of energy) E: 274

Relativistic Heavy Ion Collider [machine]
Brookhaven National Laboratory B: 639
Particle accelerator (How accelerators work) P: 184-186

Relativity [physics] R: 209
Black hole B: 388
Campbell, William Wallace C: 91
De Sitter, Willem D: 158
Eddington, Sir Arthur Stanley E: 74
Einstein, Albert E: 146
Energy (Calculating quantities of energy) E: 274
Force (Einstein's theory of general relativity) F: 370
Fourth dimension F: 438
Gravitation (Einstein's theory of gravitation) G: 332
Light (Photons) L: 284
Physics (Einstein and relativity) P: 441
String theory So: 929
Subatomic particle (Theories of forces) So: 937-938
Tachyon T: 4
See also the list of Related Articles in the Relativity article

Relaxation
See also Rest in this index
Meditation M: 380
New Age movement N: 178
Recreation R: 182
Sleep (What happens during sleep) S: 506
Stress (Managing stress) So: 927
Transcendental Meditation T: 370

Relaxin [hormone]
Hormone (Other hormones) H: 336

Relay race
Ice skating (Short-track skating) I: 15-16
Skiing (Nordic competitions) S: 487
Swimming (Kinds of races) So: 1044-1046
Track and field (Relays) T: 355; (World track and field records) T: 358

Relay services [telecommunications]
Deafness (Special devices) D: 58-59

Relay station
Telephone (Transmitting the telephone signals) T: 96

Relay system
Postal services (Ancient times) P: 703

Relearning [psychology]
Memory (Measuring memory) M: 392

Release-time instruction
Religious education (Public schools) R: 225

Releasing hormone [physiology]
Hormone (Endocrine control hormones) H: 336
Hypothalamus H: 481

Reliability
Statistics (Sampling) So: 869

Reliance Building [Chicago]
Architecture *picture on A*: 629
Burnham, Daniel Hudson B: 709
Chicago *picture on C*: 421
Root, John Wellborn R: 475

Relic
Saint S: 29

Relief [art] R: 212 *with pictures*
Drama *picture on D*: 327
Greece, Ancient *pictures on G*: 395, G: 397
Ivory (Ivory carving) I: 521 *with picture*
Persia, Ancient *picture on P*: 299
Sculpture (Kinds of sculpture) S: 230; *picture on S*: 247

Relief [welfare] *See Welfare in this index*

Relief Corps, National Woman's
Woman's Relief Corps, National W: 382

Relief map
Map (Production and reproduction) M: 180-181

Relief of the Poor, Act for the [1601]
Welfare (Early welfare laws) W: 191

Relief printing
Photoengraving and photolithography P: 405; (Plates for relief printing) P: 407
Printing (Relief printing) P: 799 *with diagram*; (Printing in color) P: 801
Stamp collecting (Printing) So: 830

Relief valve [mechanics]
Valve V: 267

Religio Laici [poem by Dryden]
Dryden, John D: 370

Religio Medici [book by Browne]
English literature (Prose writings) E: 317

Religion R: 214 with pictures

Animism A: 514b
 Aztec (Religion) A: 1000 *with pictures*
 Celibacy C: 325
 Censorship (Religious censorship) C: 346
 City (The people) Ci: 578-580
 Colonial life in America (Religious and political reasons) Ci: 788; (Religion) Ci: 804 *with picture*; (Literature) Ci: 806
 Communism (Restrictions on personal freedom) Ci: 891-892
 Creationism Ci: 1123
 Dance (Why people dance) D: 25-26
 Evolution (Acceptance of evolution) E: 433
 Existentialism (The influence of existentialism) E: 437
 Fire (Fire in legend and religion) F: 122
 Flag *picture on* F: 216
 Food (Religious reasons) F: 332
 Ghost G: 182
 God G: 243
 Hermit H: 211
 Hume, David (Hume's thought) H: 432
 Indian, American (Religion) I: 146 *with pictures*
 Inuit (Religion) I: 354e
 Kant, Immanuel (Kant's ideas) K: 244
 Kierkegaard, Søren Aabye (His philosophy) K: 313
 Knights and knighthood (Knighting) K: 348 *with picture*
 Meditation M: 380
 Missionary M: 620
 New Age movement N: 178
 New Year's Day (The date of New Year's) N: 289
 Philosophy (Philosophy and religion) P: 385
 Pioneer life in America (Religion) P: 484
 Prejudice P: 755
 Reformation R: 195
 Sacrifice S: 6
 Saint S: 29
 Santayana, George S: 115
 Sculpture (Personal sculpture) S: 241
 Spiritualism (Spiritualism and religion) So: 796
 Stonehenge So: 910
 Theism T: 251
 Union of Soviet Socialist Republics (Personal freedom) U: 31
 United States (Religion) U: 114 *with picture*
 Witchcraft W: 371
 World (Religion) W: 414
 See also the list of Related Articles in the Religion article

Religion, Freedom of See Freedom of religion in this index

Religious art
 See also Islamic art in this index
 Altar *picture on* A: 388
 Cathedral C: 301 *with pictures*
 Germany (Painting and sculpture) G: 155 *with pictures*
 Icon I: 24
 Madonna and Child M: 37 *with picture*
 Middle Ages (Learning and the arts) M: 527
 Painting (Religious subjects) P: 32; (Indian painting) P: 44
 Russia (Painting and sculpture) R: 537 *with picture*
 Sculpture (The 1000's) S: 249 *with pictures*
 Stained glass So: 821 *with pictures*

Religious court
 Israel (Courts) I: 480

Religious discrimination See Discrimination in this index

Religious drama
 Drama (Liturgical drama) D: 328; (Religious plays) D: 333

Religious education R: 225
 School prayer S: 186

Religious festivals
 Feasts and festivals F: 58
 See also the list of Related Articles in the Feasts and Festivals article

Religious freedom See Freedom of Religion in this index

Religious Freedom, Statute of [1786]
 Jefferson, Thomas (Virginia lawmaker) J: 79-80
 Madison, James (Virginia assemblyman) M: 33

Religious institute [organization]
 See also Orders, Religious in this index
 Roman Catholic Church (Religious institutes) R: 405

Religious Liberty, Declaration on
 Vatican Council II (The work of the council) V: 289-290

Religious life R: 226
 See also the list of Related Articles in the Religious Life article

Religious music
 See also Sacred music in this index
 Music (In ceremonies) M: 947

Religious orders See Orders, Religious in this index

Religious Settlement [1559]
 Elizabeth I (Problems at home and abroad) E: 238

Religious Society of Friends See Quakers in this index

Religious tolerance See Freedom of religion in this index

Reliquary [Religion]
 Byzantine art (Other art forms) B: 751

Reliques of Ancient English Poetry [book by Percy]
 Ballad (Ballads and literature) B: 43

Relish [food]
 Pickle P: 451

"Reluctant Dragon, The" [story by Grahame]
 Grahame, Kenneth G: 301

R.E.M. [musical group]
 Rock music (New directions and old) R: 380

Rem [unit of measure]
 Radiation (Dose) R: 79-80
 Radiation sickness R: 82

REM sleep
 Dream (The biology of dreams) D: 344
 Narcolepsy N: 21
 Sleep (What happens during sleep) S: 506

Remainder [mathematics]
 Arithmetic (Division) A: 668
 Division (table) D: 248; (Remainders in division) D: 250

Remains of the Day, The [book by Ishiguro]
 Novel (The novel today) N: 575

Remand centre
 Prison (Juvenile correctional institutions) P: 806

Remarque, Erich Maria [German-American author] R: 228

Rembrandt [Dutch artist] R: 228 *with pictures*
 Aristotle *picture on* A: 663
 Baroque (Baroque painting) B: 117
 Etching (History) E: 365
 Jesus Christ *picture on* J: 105
 Netherlands *picture on* N: 144
 Painting (Light and shade) P: 35; (The Dutch masters) P: 62-63 *with picture*
 World, History of the *picture on* W: 440

Remek, Vladimir [Czechoslovak astronaut]
 Astronaut (table) A: 830

"Remember Goliath!"
 Texas (The Texas revolution) T: 206

"Remember Pearl Harbor!"
 Pearl Harbor P: 218

"Remember the Alamo!"
 Alamo (The siege) A: 280-281
 Texas (The Texas revolution) T: 206; *picture on* T: 205

"Remember the Maine"
 Maine M: 67
 Spanish-American War (American intervention) So: 753

Remembrance Day [holiday] R: 229
 Veterans Day V: 344

Remembrance of Things Past [book by Proust]
 Proust, Marcel P: 838
 French literature (The four masters) F: 522
 Novel (New directions in the novel) N: 573-574

Remington, Frederic [American artist] R: 229 *with picture*
 Cavalry *picture on* C: 318
 Pony express *picture on* P: 658
 Sculpture (American sculpture) S: 255-256 *with picture*
 Spanish-American War *picture on* So: 754
 Western frontier life in America (Art) W: 240; *picture on* W: 233

Remington and Sons [company]
 Typewriter (History) T: 539

Reminiscences [book by MacArthur]
 MacArthur, Douglas (Last years) M: 4

Remission [medicine]
 Leukemia (Acute leukemias) L: 215

Remodeling
 Osteoporosis (Causes) O: 867

Remonstrance [book]
 Arminius, Jacobus A: 719

Remora [fish] R: 230

Fish *picture on* F: 168

Remote control R: 230 *with picture*
 Locomotive (Diesel locomotives) L: 414-415
 Radio (Remote control) R: 85
 Surgery *picture on* So: 1007
 Television (Putting a show on the air) T: 111-112

Remote sensing [electronics] R: 231 *with picture*
 Archaeology (Locating sites) A: 595-596
 Geography (The use of scientific instruments) G: 94
 Map (Mapmaking and modern technology) M: 185

Remote telecast
 Television (Other production methods) T: 113

Remote truck [vehicle]
 Television (Other production methods) T: 113
 Marine biology (Biological oceanographers) M: 205
 Ocean (Submersibles) O: 663

Remote video encoding
 Postal services (Sorting) P: 703

Remotely operated vehicle
 Marine biology (Biological oceanographers) M: 205

Removable storage drive [electronics]
 Computer (Removable storage drives) Ci: 916

Remus [legendary figure]
 Romulus and Remus R: 450

Remus, Uncle
 Harris, Joel Chandler H: 68

Renaissance [European history] R: 232 *with pictures and map*
 Architecture (Renaissance architecture) A: 620 *with pictures*
 Baroque B: 116
 City planning (The Renaissance) Ci: 602
 Classical music (Renaissance) Ci: 646; *picture on* Ci: 648
 Communication (The rise of printing) Ci: 879
 Democracy (The Renaissance and the Reformation) D: 123
 Doll (The Renaissance) D: 288
 Drama (Italian Renaissance drama) D: 330
 Education (The Renaissance) E: 100
 Europe (The Renaissance) E: 411 *with picture*
 Freedom (The Renaissance and the Reformation) F: 502
 Fresco F: 529
 Geology (The Renaissance) G: 98
 Hairdressing (The Renaissance) H: 11
 History (The Humanist movement) H: 262
 Humanism H: 430
 Illuminated manuscript I: 78
 Invention (The Renaissance) I: 360
 Italian literature (Humanism and the Renaissance) I: 494
 Italy (Arts) I: 504; (Rise of the city-states) I: 513-514
 Medicine (The Renaissance) M: 373
 Middle Ages (The late Middle Ages) M: 527
 Painting (The Renaissance) P: 51 *with pictures*
 Philosophy (Modern philosophy) P: 387
 Physics (The Renaissance) P: 438
 Poetry (Renaissance poetry) P: 596
 Pope (Renaissance and Reformation) P: 664
 Roman Catholic Church (The close of the Middle Ages) R: 408
 Sculpture (Italian Renaissance sculpture) S: 251 *with pictures*
 Women's movements (From the Renaissance to the 1800's) W: 384
 World, History of the (The Renaissance) W: 438
 See also the list of Related Articles in the Renaissance article

Renaissance Big Five, New York
 Basketball (The history of professional basketball) B: 153-155

Renaissance Center
 Detroit (The late 1900's) D: 171
 Michigan *picture on* M: 489

Renaissance Festival [Minnesota]
 Minnesota (Places to visit) *picture on* M: 594-595

Renal artery [anatomy]
 Human body *diagram on* H: 422
 Kidney (How the kidneys produce urine) K: 311 *with diagrams*

Renal disease
 Anemia (Anemia of renal disease) A: 458
 Hantavirus H: 54

Renal vein [anatomy]

- Human body *diagram* on H: 422
Kidney (How the kidneys produce urine)
K: 311-312 *with diagrams*
- Renamo** [political organization]
Mozambique (Government) M: 904; (History)
M: 905-906
- Renard, Charles** [French engineer]
Airship (The first airships) A: 251
- Renard, Jean-Claude** [French poet]
French literature (Recent French literature)
F: 523
- "Renaissance"** [poem by Millay]
Millay, Edna St. Vincent M: 553
- Renaud, Madeline** [French actress]
Barrault, Jean-Louis B: 118
- Renault** [company]
Automobile (Major producing countries and
companies) A: 955-956; (The birth of the
automobile industry) A: 963
Manufacturing (table) M: 170
- Renault, Jeanne** [wife of]
Saint Laurent, Louis Stephen (Marriage) S: 39
- Renault, Louis** [French statesman]
Nobel Prizes (Peace: 1907) N: 447
- Rendering** [sketch]
Animation (Computer animation) A: 512
Theater (Costume design) T: 242-243 *with pic-
ture*
- Rendezvous** [fur trade]
Fur trade (The 1800's) F: 565
- Rendezvous site**
Wolf (Young) W: 376
- René, France Albert** [Seychellois political
leader]
Seychelles (History) S: 340
- Renewable resource**
Conservation Ci: 974
Forest products (Wood products) F: 400
- Renewable term life insurance**
Insurance (Main kinds of life insurance) I: 309
- Renewal of Life, The** [book by Mumford]
Mumford, Lewis M: 925
- Renga** [poetry]
Japanese literature (The medieval period)
J: 62
- Reni, Guido** [Italian artist]
Europa *picture* on E: 379
- Renin** [hormone]
Adrenal gland A: 67
Hypertension (Causes) H: 475-476
- Renmin Ribao** [newspaper]
China (Communication) C: 499
Newspaper (In Asia) N: 386
- Rennebohm, Oscar** [American political leader]
Wisconsin (table) W: 365
- Rennet** [animal product]
Cheese (Separating the curd) C: 393
- Rennin** [enzyme]
Casein C: 272
Genetic engineering (Uses of genetic engi-
neering) G: 84a-84b
- Rennutet** [Egyptian goddess]
Egypt, Ancient (Religion) E: 137
- Reno** [Nevada] R: 239
Nevada (Population) N: 160 *with picture*;
(Visitor's guide) N: 164
- Reno, Janet** [American government official]
R: 240 *with portrait*
Justice, Department of (table) J: 203
- Reno, Jesse W.** [American inventor]
Escalator E: 356
- Reno, Marcus Albert** [American military leader]
R: 240
Custer, George Armstrong (The battle)
Ci: 1200
- Renoir, Jean** [French director] R: 240
Motion picture (Movies in the 1930's) M: 868
with picture
- Renoir, Pierre Auguste** [French painter] R: 240
with pictures
Impressionism (French impressionism) I: 94-
95 *with picture*
Painting (Edouard Manet and the impression-
ists) P: 71
Renoir, Jean R: 240
- Rensselaerswyck** [U.S. history]
Patroon system P: 199
Van Rensselaer, Kiliaen V: 284
- Rent** [economics]
Lease L: 166
- Rental**
Motion picture (Exhibition) M: 860
- Renter's insurance**
Insurance (Homeowners' insurance) I: 313
- Renwick, James** [American architect]
Saint Patrick's Cathedral S: 51
- Renwick Gallery** [Washington, D.C.]
Washington, D.C. (Smithsonian museums)
W: 71-73; *map* on W: 76
- Reo** [automobile]
Olds, Ransom Eli O: 742
- Reo Motor Car Company**
Olds, Ransom Eli O: 742
- Reorganization Objectives, Army Division**
Army, United States (The atomic age Army)
A: 739
- Reorganized Church of Jesus Christ of Latter
Day Saints** See Community of Christ *in this
index*
- Repair worker**
Careers (Construction, maintenance, and
repair) C: 221
- Reparations** [policy] R: 241
Dawes Plan D: 51
Germany (World War I) G: 166-167
Versailles, Treaty of (Provisions) V: 340
World War I (Economic consequences) W: 464
World War II W: 469
- Repatriation program** [U.S. history]
Hispanic Americans (Immigration restrictions
and growing discrimination) H: 252
- Repeal** [law] R: 241
Government (Constitutional questions) G: 286
- Repeating decimal fraction**
Decimal system (Decimals and fractions)
D: 72 *with diagram*
Rational number R: 148
- Repeating pistol**
Colt, Samuel Ci: 850
- Repertory theater**
Opera O: 790
- Repetition**
Advertising (Repetition) A: 76a
Classical music (Classical music forms) Ci: 644
Design (Repetition) D: 157 *with picture*
Propaganda (Simplicity and repetition) P: 824
- Repetitive factory**
Factory (Kinds of factories) F: 5
- Repetitive strain injury** R: 242
Disease (Environmental and occupational dis-
eases) D: 230
- Repin, Ilya** [Russian artist]
Painting (Painting outside France) P: 72
- Replacement** [reaction]
Fossil (The action of minerals) F: 425
- Replete** [entomology]
Ant (Honey ants) A: 527
- Replication** [genetics]
Genetics (Molecular genetics) G: 86
Heredity (Replication) H: 206
- "Reply to Lord North"** [pamphlet by Jefferson]
Jefferson, Thomas (Revolutionary leader)
J: 78-79
- Report card**
Grading G: 297
- Report of the Exploring Expedition to the
Rocky Mountains** [book by Frémont]
Frémont, John Charles F: 511
- Report on the Affairs of British North
America**
Durham, Earl of D: 389
- Report on the Geology of Canada, A** [book by
Logan]
Logan, Sir William Edmond L: 423
- Reporter** [career]
Newspaper (Gathering information) N: 382
with picture; (Writing and editing stories)
N: 383
War correspondent W: 27
- Reporting** [news media]
Journalism J: 170 *with pictures*; (The role of
U.S. journalism) J: 172
- Reports of Medical Cases** [book by Bright]
Bright, Richard B: 609
- Repotting**
Gardening (Caring for the garden) G: 38 *with
pictures*
- Repoussé** [decoration]
Embossing E: 256
Statue of Liberty (The statue) So: 873
- Representation** [philosophy]
Schopenhauer, Arthur S: 186
- Representative** [office] R: 242
Congress of the United States (table) Ci: 943;
(Members of Congress at work) Ci: 946
House of Representatives H: 385
- Representative, The** [play by Hochhuth] See
Deputy, *The in this index*
- Representative democracy**
Democracy D: 120
- Representative fraction**
Map (Scale) M: 178
- Representative government**
Apportionment A: 574
Democracy D: 120
Republic R: 253
United States, Government of the
(Representative democracy) U: 137
- Representative Men** [book by Emerson]
Emerson, Ralph Waldo (His prose works)
E: 259
- Representatives, House of** See House of
Representatives *in this index*
- Repression** [psychology]
Hypnotism (Hypnotic phenomena) H: 478
Memory (Motivated forgetting) M: 393
Phobia P: 392
Psychology (Psychoanalysis) P: 850
Psychotherapy (Analytic psychotherapy) P: 852
- Reprive** [law] R: 242
- Reprocessed wool**
Clothing (Protecting the public) Ci: 705
- Reprocessing plan**
Nuclear energy (Wastes and waste disposal)
N: 588-589
- Reproduction** [biology] R: 242 *with pictures*
See also Reproduction, Human *in this index*
Alternation of generations A: 388
Animal (How animals reproduce) A: 496 *with
pictures*
Bacteria (How bacteria reproduce) B: 21 *with
picture*
Butterfly (The internal organs) B: 739 *with dia-
gram*; (The life cycle of butterflies) B: 739-
741 *with pictures*
Cell (Cell division) C: 330 *with diagram*
Estrous cycle E: 364
Evolution (Evolution of new species) E: 429
Fertilization F: 78
Flower (The role of flowers in reproduction)
F: 295
Fruit (Developing new varieties of fruit) F: 546
Fungi (How a fungus lives) F: 559
Heredity (Sex cells and reproduction) H: 201
Insect (Reproduction) I: 292
Life (Reproduction) L: 274
Life cycle L: 280
Mammal (How mammals reproduce) M: 122
with pictures
Migration (Why animals migrate) M: 538-539
Reptile (Reproduction) R: 252
See also the list of Related Articles in the
Reproduction article
- Reproduction, Human** R: 244 *with pictures*
Baby (The developing baby) B: 4 *with dia-
grams*
Cancer (Classification by primary body site)
C: 167-168
Fertilization F: 78
Human body (The reproductive system)
H: 425 *with picture*; *diagram* on H: 422
Infertility I: 265
Medical ethics M: 361
Pelvic inflammatory disease P: 233
Pregnancy P: 734a
Prostaglandin P: 829
Sexuality (Before birth) S: 338
Uterus U: 251
Vagina V: 259
See also the list of related articles in the
Reproduction, Human article
- Reproductive behavior**
Comparative psychology Ci: 902a
- Reproductive Biology Research Foundation**
Masters and Johnson M: 297
- Reproductive caste** [entomology]
Termite (Life and habits) T: 173
- Reproductive isolating factor** [biology]
Evolution (Evolution of new species) E: 429
- Reproductive part** [botany]
Plant (Parts of plants) P: 529; (Flowers) P: 531
with picture
- Reproductive system** See Reproduction,
Human *in this index*
- Repsol YPF** [company]
Manufacturing (table) M: 170
- Reptile** [zoology] R: 250 *with pictures*
Animal (table: Length of life of animals)
A: 473; (A table of animal intelligence)
A: 493
Brain (In vertebrates) B: 559 *with diagram*
Dinosaur D: 206

696 Reptiles, Age of

Evolution (The fossil record) E: 430
 Heart (Amphibians and reptiles) H: 146
 Evolution picture on E: 429
 Prehistoric animal (The move onto land)
 P: 737; (The Age of Reptiles) P: 737 with
 pictures
 Reproduction (How reproduction has evolved)
 R: 243
 See also the list of Related Articles in the
 Reptile article
Reptiles, Age of [geology] See Mesozoic Era in
 this index
Repubblica, La [newspaper]
 Italy (Communication) I: 512
Repubblica Italiana See Italy in this index
Republic [political science] R: 253
 Government (Democracy) G: 285
Republic [ship]
 Radio (Early development) R: 91-92
Republic, Roman See Roman Republic in this
 index
Republic, The [book by Plato]
 Plato (The dialogues) P: 567; (Plato's philoso-
 phy) P: 568
 Communism (Early communism) Ci: 890
 Government (Modern times) G: 290-291
Republic Day [holiday]
 India (Independence and partition) I: 133
Republic of Alabama [U.S. history]
 Alabama (The Civil War and Reconstruction)
 A: 276
Republic of China See Taiwan in this index
Republic of Cyprus
 Cyprus Ci: 1205
Republic of Ireland See Ireland in this index
Republic of Korea See South Korea in this
 index
Republic of Texas [Texas history]
 Houston, Sam H: 399
 Texas (The Republic of Texas) T: 207
Republic of the Congo See Congo (Brazzaville)
 in this index
Republic of the Fiji Islands See Fiji in this index
Republic Square
 Kazakhstan picture on K: 250b
República de Cabo Verde See Cape Verde in
 this index
Republican government
 Democracy D: 120
Republican Palace
 Senaa S: 105
Republican Party [Irish political party] See
 Fianna Fáil in this index
Republican Party [U.S. political party] R: 253
 with picture
 Bush, George Herbert Walker (Republican
 Party chairman) B: 718
 Civil War (Developments in the political party
 system) Ci: 616
 Congress of the United States (How Congress
 is organized) Ci: 942
 Democratic-Republican Party D: 128
 Garfield, James Abram (Congressman) G: 41-
 42
 Hamlin, Hannibal H: 34
 Medill, Joseph M: 380
 Michigan picture on M: 510
 Political convention P: 628
 Political party (The Republican Party) P: 636
 President of the United States (The presiden-
 tial election) P: 762
 Reconstruction (The struggle over
 Reconstruction) R: 178; (The
 Reconstruction governments) R: 179;
 (The end of Reconstruction) R: 179
 Scalawags S: 169
 See also the list of Related Articles in the
 Republican Party article
Republicanism [government]
 Renaissance (The Italian Renaissance) R: 233
Republicans [Spanish history]
 Franco, Francisco F: 483
 Spain (Civil war) So: 750
 Spanish Civil War So: 756 with picture
Requiem [music by Fauré]
 Fauré, Gabriel Urbain F: 56
Requiem [music by Mozart]
 Mozart, Wolfgang Amadeus (Church music)
 M: 907
"Requiem" [poem by Stevenson]
 Stevenson, Robert Louis (The South Seas)
 So: 897-898
Requiem Canticles [music by Stravinsky]
 Stravinsky, Igor (The 12-tone works) So: 323

Requiem for a Nun [book by Faulkner]
 Faulkner, William F: 55
Requiem Mass [music by Verdi]
 Verdi, Giuseppe V: 316
Rerum natura, De [book by Lucretius] See On
 the Nature of Things in this index
Rerum Novarum [papal encyclical, 1891]
 Leo XIII L: 198
Rasaca de la Palma, Battle of [1846]
 Mexican War (Taylor's campaign) M: 446;
 (Principal battles) M: 447
Resale price maintenance laws See Fair-trade
 laws in this index
Resaw [machine]
 Lumber picture on L: 520
Rescinding Act [1796]
 Yazoo Fraud Y: 554
Rescue
 Coast Guard, United States (Safety) Ci: 734
 with pictures
 Drowning (Methods of rescue) D: 349
 Fire department (The work of a fire depart-
 ment) F: 123
 Helicopter (For rescue missions) H: 169; pic-
 ture on H: 170
 Ice skating (Skating safety) I: 10-11
Rescue breathing See Artificial respiration in
 this index
Rescue truck
 Fire department (Fire trucks) F: 125-126
Research
 A Guide to Research Skills Research
 Guide: 26
 Biological research
 Disease (Research) D: 234
 Encyclopedia (Basic steps in the preparation
 of a World Book article) E: 268 with pic-
 ture
 Guinea pig G: 434
 Rhesus monkey R: 291 with picture
 Institutions
 Battelle Memorial Institute B: 167
 Institute for Advanced Study I: 305
 National Academy of Sciences N: 27
 National Bureau of Economic Research
 N: 30
 National laboratory N: 40
 National Research Council N: 60
 National Science Foundation N: 60
 Rand Corporation R: 136
 SRI International So: 817
 United Nations University U: 97
 Universities and colleges (Research and lab-
 oratory work) U: 210
 Sources of research
 Internet (Research) I: 350a
 Laboratory L: 16
 Library (Research libraries) L: 247
 Public opinion poll P: 861
 Radar (In scientific research) R: 67
 Rocket (Atmospheric research) R: 386
 Statistics So: 869
 Universities and colleges (Faculty) U: 208
 Types of research
 Advertising (Research) A: 76a
 Anthropology (How anthropologists work)
 A: 547
 Clinical psychology (Research) Ci: 681
 Food (Food research) F: 335
 Food supply (Research programs) F: 351
 with picture
 History (History in the universities) H: 262
 Invention (Research laboratories) I: 357 with
 picture
 Manufacturing (How science helps manu-
 facturing) M: 171
 Market research M: 213
 Medicine (Medical researchers) M: 369
 Motivation research M: 875
 Psychology (Methods of psychological
 research) P: 847
 Public relations (Methods) P: 864
 Science (How scientists work) S: 194;
 (Recent developments) S: 203
 Sociology (Methods of sociological
 research) So: 565
 Space exploration (Conducting scientific
 observations and research) So: 704;
 (Space stations) So: 721
 Water (Fresh water from the sea) W: 127
Research and development
 Computer (Research and development)
 Ci: 924
 Drug (Research and development) D: 355

Edison, Thomas Alva (The Wizard of Menlo
 Park) E: 78
 Electronics (The electronics industry) E: 214
Research Council, National [U.S.]
 National Academy of Sciences N: 27
 National Research Council N: 60
Research Libraries, Association of
 Library (Research libraries) L: 247
Research library
 Library (Research libraries) L: 247 with pic-
 tures; (Special libraries) L: 250
Research paper
 A Guide to Writing Skills Research Guide: 14
Research ship
 Ocean (Research ships) O: 662
 Ocean Drilling Program O: 667 with picture
Research Triangle Park (North Carolina)
 North Carolina (The mid-1900's) N: 493
Réseau Jean Bernard [cave, France]
 Cave (table) C: 320
Reserpine [medication] R: 257
Reservation See Indian reservation in this index
Reserve [banking]
 Federal Reserve System (Managing the econ-
 omy) F: 65-66
Reserve [geology]
 Coal (Where coal is found) Ci: 718
Reserve [investment]
 Auction A: 881
Reserve [park]
 Elephant (Protecting elephants) E: 231-232
 Lion L: 340
Reserve, Indian See Indian reserve in this index
Reserve Mining Company [Minnesota]
 Minnesota (Recent developments) M: 606
 Taconite T: 5
Reserve Officers Training Corps [military]
 R: 258
 Military training (Military training for civilians)
 M: 544
Reserve requirement [banking]
 Inflation (Monetary policy) I: 268
 Money (The role of the Federal Reserve
 System) M: 716
Reserved powers
 Constitution of the United States (The
 supreme law of the land) Ci: 998
Reserves [military]
 Air Force, United States (Air Force reserves)
 A: 194
 Army A: 724
 Coast Guard, United States (Active-duty and
 reserves) Ci: 736
 Marine Corps, United States (Reserves)
 M: 208
 Navy, United States (Regulars and reserves)
 N: 85
 Reserve Officers Training Corps R: 258
Reservoir [conservation] R: 258
 Dam (What does a dam do?) D: 17
 Irrigation (Surface water) I: 456
 Lake (How lakes are formed) L: 32 with pic-
 ture
Reservoir rock
 Petroleum (How petroleum was formed)
 P: 334-335
Reshevsky, Samuel [American chess player]
 Chess (United States chess champions)
 C: 414
Residence of the Elector [Mannheim]
 Mannheim M: 165
Residency [law]
 Divorce (No-fault divorce) D: 253
Resident [government official]
 India (British India) I: 130-131
Resident [medicine]
 Hospital (The professional services staff) H: 371
Resident alien [law]
 Alien A: 367
Resident bacteria
 Disease (Bacterial diseases) D: 227; (Natural
 barriers) D: 231
Residential hotel
 Hotel (Kinds of hotels) H: 376-377
Residential school
 Children's home C: 457
Residential treatment center
 Foster care F: 428
Residual fuel oil
 Fuel (Petroleum) F: 550
 Petroleum (Petroleum as a fuel) P: 332
Residual magnetism
 Electric generator (Kinds of DC generators)
 E: 173

Resilient floor

Interior design (Choosing patterns and textures) I: 332

Resin [tree product] R: 259

Amber A: 404

Cement and concrete (Air-entrained concrete) C: 343

Fir F: 119

Ink I: 273

Lacquer L: 22

Paint P: 23

Pine P: 468

Rain forest (Asia) R: 126b

Rosin R: 482

Sap (Other saps) S: 121

Tree (Other tree products) T: 412

Varnish (Types of varnish) V: 286; (Making varnish) V: 286

Resin, Synthetic [chemical] R: 259

Furfural F: 566

Painting (Synthetic resins) P: 40 *with picture*

Plastics (How plastics are made) P: 556 *with diagrams*; (The invention of Bakelite) P: 559-560

Varnish (Making varnish) V: 286

Resin bead

Antibiotic *diagram on* A: 552

Resistance [electricity]

Electric circuit (Circuit mathematics) E: 167

Electric current (Conductors and insulators) E: 168

Electricity (Resistance) E: 193

Electronics (How a circuit works) E: 208-209

Ohm's law O: 707

Rheostat R: 290

Thermometer (Resistance thermometers) T: 255

Resistance [medicine]

Allergy (The allergic threshold) A: 374

Antibiotic (Resistance to antibiotics) A: 551; (History) A: 552

Penicillin (Resistance) P: 241

Stress (How stress affects the body) So: 926-927

Resistance [warfare]

France (World War II) F: 475

Guerrilla warfare G: 419

Italy (World War II) I: 517

Maquis M: 189

Underground U: 20

Resistance heating

Heating (Electric power) H: 160; (Electric radiant heating) H: 159-160; (Electric power) H: 160

Resistance thermometer

Thermometer (Resistance thermometers) T: 255

Resistance welding

Welding (Resistance welding) W: 189

Resistance wire

Rheostat R: 290

Resistor [electrical component]

Electricity (Controlling electric current) E: 195

Electronics (Components) E: 212

Resnik, Judith A. [American astronaut]

Astronaut (A look at the astronauts) A: 831

Space exploration (The Challenger disaster) So: 725

Resnik, Regina [American singer]

Opera *picture on* O: 792

Resolution [literature]

Drama (The structure of drama) D: 325

Resolution [optics]

Motion picture (The film) M: 857

Telescope (Producing detailed images) T: 102-103

Type T: 536

Resolution [ship]

Cook, James (Second Pacific voyage)

Ci: 1026; (Final voyage) Ci: 1026

Resolution Trust Corporation [banking]

Bank (The savings and loan crisis) B: 94-95

Resolving power [optics]

Microscope (How an optical microscope works) M: 517-519

Resonance [physics]

Singing (Training the voice) S: 472

Sound (table) So: 599; (Resonance) So: 603 *with diagram*

Resonance condition

Magnetic resonance imaging M: 57

Resonator [physics] *See* Optical cavity *in this index***Resorcinol** [chemical] R: 259**Resort hotel**

Hotel (Kinds of hotels) H: 376-377

Resource board [government]

Northwest Territories (Government) N: 533

Resource center

Library (Variety of contents) L: 235; (High school libraries) L: 245

Resource Conservation and Recovery Act [1976]

Hazardous wastes H: 122

Resource program

Computerized instruction (Types of programs) Ci: 924h

Resource room

Special education So: 770

Resources

War (Conflicts over resources) W: 24; (Waging war) W: 24

Resources, Natural *See* Natural resources *in this index***Respighi, Ottorino** [Italian composer] R: 259**Respiration** [biology]

See also Breathing *in this index* R: 260

Animal (Adaptations for breathing) A: 491

Asphyxiation A: 816

Bird (The respiratory system) B: 365

Butterfly (The internal organs) B: 739 *with diagram*

Cancer (Classification by primary body site) C: 167-168

Circulatory system (In respiration) Ci: 559 *with picture*

Cold, Common Ci: 760

Fish (Respiratory system) F: 161

Helium (Uses) H: 176

Human body (The respiratory system) H: 420 *with picture; diagram on* H: 422

Insect (Respiratory system) I: 289 *with diagram*

Mammal (Internal organ systems) M: 119-120

Photosynthesis P: 430

Oxygen (How oxygen supports life) O: 889

Plant (Respiration) P: 538

Rib R: 321

Spider (Respiratory system) So: 785 *with diagram*

Respirator [machine] R: 261

Intensive care unit I: 320

Iron lung I: 453 *with picture*

Oxygen tent O: 890

Poliomyelitis (Treatment of poliomyelitis) P: 626-627

Respiratory center

Respiration (Control of breathing) R: 261

Respiratory disease

Air pollution (Health) A: 198

Respiratory distress syndrome

Hyaline membrane disease H: 460

Premature birth P: 755

Respiratory system *See* Respiration *in this index***Respiratory therapist** [medicine]

Medicine (Other careers in medicine) M: 371

Respiratory unit [anatomy]

Lung *diagram on* L: 524

Resplendent quetzal [bird]

Bird (Birds of Central and South America) B: 345 *with picture*

Respondent

Public opinion poll (Interviewing the sample) P: 863

Respondent learning

Learning (Classical conditioning) L: 163

Response [psychology]

Behavior (Behaviorism) B: 221

Learning (Classical conditioning) L: 163

Psychology (Behaviorism) P: 849-850

Response to Sor Filotea de la Cruz [book by Juana Inés de la Cruz]

Juana Inés de la Cruz J: 178

Responsibility

Adolescent (Independence and responsibility) A: 62

Responsible government [Canadian history]

Canada, History of (The struggle for responsible government) C: 145-147

Confederation of Canada (Lord Durham's Report) Ci: 933

Responsiveness [biology]

Life (Responsiveness) L: 275

Rest [music]

Music (Indicating time values) M: 953-954

Rest [physiology]

See also Relaxation *in this index*

Fatigue F: 54

Health (Rest and sleep) H: 125

Resta, Dario [American race driver]

Automobile racing (table: Indianapolis 500 winners) A: 980

Restaurant R: 262 *with picture*

Careers (Tourism and hospitality) C: 233-234 *with picture*

Interior design *picture on* I: 334

Restaurant chain

Restaurant (Chains and franchises) R: 262

Restoration style

Furniture (The Biedermeier and Restoration styles) F: 580 *with picture*

Restigouche River [Quebec-New Brunswick]

R: 263

New Brunswick (Rivers and lakes) N: 192

Resting potential

Nervous system (The beginning of an impulse) N: 135

Restitution, Edict of [1629]

Thirty Years' War (The Danish period) T: 260

Reston [Virginia]

Washington, D.C. (Metropolitan area) W: 80-81 *with map*

Restoration [English history] R: 263

Charles II [of England] C: 380

Cromwell, Richard Ci: 1152

England (The Restoration) E: 309

English literature (Restoration literature) E: 318

Monck, George M: 701

Restoration Colonies [U.S. history]

Colonial life in America (English expansion) Ci: 789

Restoration drama

English literature (Restoration drama) E: 318

Restored cereal

Cereal C: 361

Restored Government of Virginia [U.S. history]

Pierpont, Francis Harrison P: 457

Restraining order [law] R: 263

Domestic violence D: 301

Restricted use pesticide

Pest control (Effects of pesticide use) P: 318

Restriction enzyme

Gene mapping G: 81

Genetic engineering (How genes are reintroduced into cells) G: 84a *with diagram*

Heredity (The era of genetic engineering) H: 209

Restrictive appositive [grammar]

Apposition A: 575

Restrictive endorsement

Negotiable instrument (Endorsement) N: 119

Restrictive lung disease

Lung (Diseases of the lungs) L: 524-525

Resultant force [physics]

Force (Concurrent forces) F: 370

Momentum M: 698

Résumé

Careers (Getting a job) C: 217; *pictures on* C: 218

Letter writing (Letters of application) L: 211

Resurfacing

Road (How roads and highways are maintained) R: 360

Resurrection [book by Tolstoy]

Tolstoy, Leo (Later works) T: 323

Resurrection [religion] R: 263 *with picture*

Christianity (Resurrection and Pentecost) C: 525

Easter E: 42 *with picture*

Jesus Christ (The Resurrection) J: 109 *with picture*

Mormons (Church doctrines) M: 806-807

Peter, Saint (Life as an apostle) P: 324

Resurrection, The [painting by El Greco]

Resurrection *picture on* R: 263

Resurrection Egg, The

Fabergé, Peter Carl *picture on* F: 2

Resurrection plant R: 264 *with pictures***Resuscitator** [machine]

Respirator R: 262

Retail Clerks International Union

United Food and Commercial Workers International Union U: 47

Retail store

Department store D: 149

Retail, Wholesale and Department Store Union

Labor movement (table) L: 8

Retailing [economics] R: 264

Bar coding B: 102

Clothing (Ready-to-wear clothes) Ci: 704-705;
(Merchandising) Ci: 706
Food (Marketing) F: 335
Internet (Business transactions) I: 350b
Sales (Retail selling) S: 62
Trade (The use of markets) T: 362 *with picture*

Retainer [law] R: 265

Retardation See Mental retardation *in this index*

Retardation device [aeronautics]

Bomb B: 450

Retarder [mechanism]

Railroad (Freight operations) R: 109-110
Truck (Common features of trucks) T: 458

Retching

Vomiting V: 447

Rétes [food]

Hungary (Food and drink) H: 441

Reticular formation [anatomy]

Brain (The brain stem) B: 551; *diagram on*
B: 553

Reticular tissue [physiology]

Connective tissue Ci: 972

Reticulate python

Python P: 922

Reptile *picture on* R: 250

Reticulum [zoology]

Cattle (Stomach) C: 307 *with diagram*

Ruminant R: 519 *with diagram*

Retina [anatomy]

Diabetes (Complications of diabetes) D: 179
Eye (The retina) E: 462 *with picture*; (Diseases
of the retina) E: 467
Color (The roles of the eyes and brain) Ci: 818
Ophthalmology O: 810
Wald, George W: 7

Retinal detachment [disorder]

Eye (Diseases of the retina) E: 467
Laser (Heating) L: 83

Retinal pigmented epithelium

Eye (Adaptation to light and dark) E: 464

Retinene [chemical]

Wald, George W: 7

Retinitis pigmentosa [disease]

Blindness (Diseases) B: 401-402
Eye (Diseases of the retina) E: 467-468

Retinoblastoma [disease]

Blindness (Diseases) B: 401-402
Cancer (Cancer in children) C: 169
Eye (Diseases of the retina) E: 467-468
Hereditary (table) H: 204

Retinol See Vitamin A *in this index***Retinopathy, Diabetic** [disorder]

Blindness (Diseases) B: 401

Retinopathy of prematurity [disease]

Eye (Diseases of the retina) E: 467-468

Retired Reserve

Marine Corps, United States (Reserves)
M: 208
Navy, United States (Regulars and reserves)
N: 85

Retired Senior Volunteer Program [U.S.]

Old age (Employment and other activities)
O: 739

Retirement

Old age O: 738

Retirement Act [1920]

Civil service (History) Ci: 613

Retirement age

Baby boom generation (Effects of the baby
boom) B: 11
Old age O: 738
Social security (Old-age, survivors, and disabili-
ty insurance) So: 553

Retirement community

Old age (Housing) O: 739

Retirement hotel

Hotel (Kinds of hotels) H: 376-377

Retirement income

Pension (Social security) P: 272
Social security (Old-age, survivors, and disabili-
ty insurance) So: 553

Retirement pension See Pension *in this index***Retiro, The** [park]

Madrid (The city) M: 38

Retort method

Food preservation (Canning) F: 341-342

Retorting [industrial process]

Oil shale *diagram on* O: 708

Retractable landing gear

Airplane (The landing gear) A: 216-217

Retreading

Tire (Retreading tires) T: 297

Retreating longwall system [mining]

Coal (The longwall system) Ci: 725

Retribution

Prison (How prisons operate) P: 806

Retrieval failure [psychology]

Memory (Retrieval failure) M: 393

Retrieval system See Information retrieval *in this index***Retriever** [dog] R: 265

Dog (Sporting dogs) D: 268 *with pictures*

Retro style [design]

Furniture (The retro style) F: 584

Retroactive interference [psychology]

Memory (Interference) M: 393

Retrograde amnesia [psychology]

Memory (Memory disorders) M: 394

Retrograde motion [astronomy]

Astronomy (How the planets move) A: 835;
A: 847 *with diagram*

Planet (How planets move) P: 508

Retrovirus

AIDS (Cause) A: 163

Virus (The structure of a virus) V: 426

Retting [industrial process]

Flax (Growing and processing fiber flax) F: 230
with picture

Hemp H: 184

Linen (Preparing the fibers) L: 334-335

Return, Law of [Israel]

Citizenship (Naturalization) Ci: 570

Immigration (Asia) I: 85

Return crease [sports]

Cricket (The field) Ci: 1131

Return of Christopher Columbus from the New World, The [painting by Delacroix]

Columbus, Christopher *picture on* Ci: 861

Return of the Ambassadors, The [painting by Carpaccio]

World, History of the *picture on* W: 438

Return of the Native, The [book by Hardy]

Hardy, Thomas H: 59

Return of the Prodigal Son, The [painting by Rembrandt]

Painting (The Dutch masters) P: 62-63 *with picture*

Rembrandt (The last years) R: 229

Return of the Soldier, The [book by West]

West, Rebecca W: 199

Return of the Sphinx [book by MacLennan]

MacLennan, Hugh M: 25

Return of Ulysses, The [opera by Monteverdi]

Monteverdi, Claudio M: 764a

Return stroke [lightning]

Lightning (A stroke of lightning) L: 301;
(Strokes) L: 300

Reuben James [ship]

Navy, United States (World War II [1939-
1945]) N: 89

Reuchlin, Johannes [German author]

German literature (The Renaissance) G: 139

Reunion [island, Indian Ocean] R: 265**Reunion** [painting by Guerin]

Lincoln Memorial L: 328

Reunion Tower [Dallas]

Dallas (Landmarks) D: 11-12 *with picture*

Reusable launch vehicle

Airplane (Future developments) A: 239
Space exploration (Plans for the future)
So: 727

Reused wool

Clothing (Protecting the public) Ci: 705

Reuss, Henry S. [American political leader]

Peace Corps (History) P: 208

Reuter, Baron de [German journalist] R: 265

Reuters R: 265

Telegraph (Construction and growth) T: 90-
91

Reuter, Paul Julius See Reuter, Baron de *in this index***Reuters** [news agency] R: 265**Reuther, Walter Philip** [American labor leader]

R: 266 *with portrait*
Labor movement (Reunification of the AFL
and the CIO) L: 13 *with picture*

Revaluation [book by Leavis]

Leavis, F. R. L: 170

Réveillon, Le [custom]

Christmas (In France) C: 530

Revelation [Roman Catholic Church]

Roman Catholic Church (Roman Catholic
beliefs) R: 403

Vatican Council II (The work of the council)
V: 289

Revelation, Book of [New Testament] R: 266

Bible (Books of the New Testament) B: 282-
284

Four Horsemen of the Apocalypse F: 437 *with picture*

Patmos P: 196

Revell, Viljo [Finnish architect]

Toronto *picture on* T: 340

Revelry [book by Adams]

Adams, Samuel Hopkins A: 44

Revels, Hiram Rhodes [American political leader] R: 266 *with portrait***Revenge** [ship]

Bonnet, Stede B: 462

Revenge [ship]

Perry, Oliver Hazard P: 295

"Revenge of Hamish, The" [poem by Lanier]

Lanier, Sidney L: 68

Revenge play [drama]

Kyd, Thomas K: 398

Revent pipe

Plumbing (The drainage system) P: 578

Revenue, Inland

Inland revenue I: 273

Revenue Act [1764]

Revolutionary War in America (The Sugar Act)
R: 272

Revenue Cutter Service

Coast Guard, United States (History) Ci: 737

Revenue sharing R: 266**Revenue stamp**

Stamp So: 829

Revenue tariff

Tariff (Main kinds of tariffs) T: 43

Reverberation [sound]

Acoustics (Architectural acoustics) A: 29

Echo E: 50

Sound (Controlling sound) So: 604-605

Reverberatory furnace

Smelting S: 515

Revere [city, Massachusetts] R: 266**Revere, Anne** [American actress]

Motion picture (Best performance by an
actress in a supporting role: 1945) M: 863

Revere, Paul [American patriot] R: 266 *with pictures*

Boston Massacre *picture on* B: 505

Dawes, William D: 51

Prescott, Samuel P: 756a

Revolutionary War in America (Lexington and
Concord) R: 274

Révérence [movement]

Ballet (table) B: 45; (A ballet class) B: 46-47

Reveries of the Solitary Stroller [book by

Rousseau]

French literature (The Age of Reason) F: 520

Reverse bias [electronics]

Electronics (Diodes) E: 210-211 *with diagram*

Reverse discrimination [sociology]

Civil rights (Major changes in the civil rights
movement) Ci: 610

Reverse extrusion [industrial process]

Extrusion E: 459

Reverse gear

Transmission (The gears) T: 378 *with diagram*;
picture on T: 377

Reverse osmosis [chemistry]

Osmosis (Reverse osmosis) O: 866

Water (Reverse osmosis) W: 128

Reverse transcriptase [enzyme]

AIDS (Treatments) A: 164

Virus (The structure of a virus) V: 426

Reverse transcriptase inhibitor [drug]

AIDS (Treatments) A: 164

Reversible-pitch propeller

Propeller (The airplane propeller) P: 826

Reversing Falls of Saint John [falls, New

Brunswick] R: 268

New Brunswick (Places to visit) N: 188;

(Rivers and lakes) N: 192-193

Saint John (Description) S: 35

Reversing mill [machine]

Iron and steel (Rolling) I: 447

Review [law] See Judicial review *in this index***Review, The** [magazine]

Defoe, Daniel (His life) D: 88

Reviewing [journalism]

Book report B: 469

Book review B: 469

Criticism Ci: 1146

Theater (New York City) T: 244-245

Revillagigedo Island [island, Alaska]

Ketchikan K: 307

Revised Standard Version [Bible]

Bible (Modern English translations) B: 286

Revised Version [Bible]

Bible (The King James Version) B: 286

- Revistigmin** [drug]
Alzheimer's disease (Treatment) A: 399
- Revival meeting** [religion]
Camp meeting C: 90
Colonial life in America (Religion) Ci: 804-805
with picture
- Revivalism** [religion] R: 268
Evangelicalism E: 422
Great Awakening G: 335
Missionary (History) M: 621
Tennent, William T: 133
United States, History of the (Looking backward) U: 186-187 with picture
- Revocable trust**
Trust fund (Kinds of trusts) T: 474
- Revolt in the Desert** [book by Lawrence]
Lawrence, T. E. L: 146
- Revolt of the Angels, The** [book by France]
France, Anatole F: 480
- Revolt of the Masses, The** [book by Ortega y Gasset]
Ortega y Gasset, José O: 859
- Revolution** [political science] R: 269
China (Modern China) C: 503
Communism (Communism in theory) Ci: 890
French Revolution F: 524
Guerrilla warfare G: 419
Latin America (Political unrest) L: 110
Lenin, V. I. L: 191
Marx, Karl M: 236
Revolution of 1848 R: 269
Revolutionary War in America R: 270
Russian literature (Literary revival) R: 563
- Revolution, Russian** See Russian Revolution in this index
- Revolution in military affairs**
Nuclear weapon (Nuclear weapons in military planning) N: 599-600
- Revolution of 1830** [French history] See July Revolution in this index
- Revolution of 1848** [European history]
R: 269
Austria (Metternich and revolution) A: 938
France (The revolutions of 1830 and 1848) F: 474
Germany (The Revolution of 1848) G: 165
Italy (Italy united) I: 515
- Revolution of 1905** [Russian history]
Duma D: 381
Lenin, V. I. (Revolt) L: 192-193
Russia (The Revolution of 1905) R: 552
- Revolutionary Armed Forces of Colombia**
Colombia (Recent developments) Ci: 784
- Revolutionary Command Council** [political organization]
Egypt (Republic) E: 132
Iraq (National government) I: 409
Libya (Independence) L: 268
- Revolutionary Front for an Independent East Timor**
East Timor (History) E: 41
- Revolutionary United Front** [military group]
Sierra Leone (History) S: 452
- Revolutionary war**
War W: 23
- Revolutionary War in America** [1775-1783]
R: 270 with pictures and maps
African Americans (Colonial times) A: 136d-136e with picture
American literature (The revolutionary period [1765-1787]) A: 415
Brother Jonathan B: 642
Cabal C: 2
Canada, History of (The Quebec Act) C: 143-144
Dawes, William D: 51
Declaration of Independence D: 73
Flag (First United States flags) F: 208 with pictures
Galloway, Joseph G: 16
Gálvez, Bernardo de G: 18
Gates, Horatio G: 67
Guerrilla warfare (History) G: 420
Henry, Patrick (Career as governor) H: 190
Indian, American (After European contact) I: 156-157
Jay Treaty J: 67
Lafayette, Marquis de (Service to the United States) L: 27
Lee, Richard Henry L: 176
Ludington, Sybil L: 515
Marion, Francis M: 211
Mazzei, Philip M: 329
North, Lord N: 457
Philadelphia (The Revolutionary War period) P: 366
Prescott, Samuel P: 756a
Revere, Paul R: 267
Sampson, Deborah S: 81
Slavery (Views of slavery) S: 502
Sparks, Jared So: 764
Statue of Liberty (Growth as a symbol) So: 878
United Empire Loyalists U: 47
United Kingdom (The Revolutionary War in America) U: 67
War (table) W: 25
Women's movements (Forces of change) W: 384
World, History of the (The rise of democracy and nationalism) W: 443
"Yankee Doodle" Y: 552
- Background and causes**
Adams, John (In New England) A: 36;
(National politics) A: 36
Adams, Samuel (The patriot) A: 44
Boston Massacre B: 505
Boston Port Act B: 505
Boston Tea Party B: 506
Committees of correspondence Ci: 872
Committees of safety Ci: 873
Hancock, John H: 39
Intolerable Acts I: 353
Jefferson, Thomas (Revolutionary leader) J: 78-79; (The Declaration of Independence) J: 79
Paine, Thomas (American revolutionary) P: 22
- Diplomacy**
Revolutionary War in America (The campaign in New York) R: 280
Adams, John (Diplomat) A: 36
Franklin, Benjamin (A delegate in London) F: 490
State, Department of (Establishment) So: 860
- Military campaigns**
Revolutionary War in America (The beginning of the war) R: 274-277 with pictures and maps; (The war in the North) R: 280-283 with pictures and map; (The war in the West, at sea, and in the South) R: 283-285 with pictures; (Surrender at Yorktown) R: 285
Bunker Hill, Battle of B: 699
Montreal (British settlement) M: 777
Princeton University (Campus buildings) P: 795
United States, History of the (The Revolutionary War begins) U: 158 with picture
Valley Forge V: 266 with picture
Westward movement in America (The Revolutionary War) W: 246
Wyoming Valley Massacre W: 538
- Military leaders**
See the lists of military leaders in the related articles in the Revolutionary War in America article
- Armed forces**
Revolutionary War in America (The fighting forces) R: 278-279; (Weapons and tactics) R: 279 with picture; (War losses) R: 286
Army, United States picture on A: 730
Charles III (king of Spain) C: 381
Espionage (History) E: 358
Hessians H: 219 with picture
Marine Corps, United States (The early Marine Corps) M: 208; picture on M: 207
Militia M: 544
Minutemen M: 613
Navy, United States (The earliest colonial warships) N: 85-88
Privateer P: 808b
- The colonies and the war**
Revolutionary War in America (The Townshend Acts) R: 273
Connecticut (The Revolutionary War) Ci: 970
Georgia (The Revolutionary War) G: 132
Massachusetts (The Revolutionary War) M: 291
New Jersey (The Revolutionary War) N: 250
New York (The Revolutionary War) N: 315
North Carolina (Revolution and independence) N: 492
Pennsylvania (The Revolutionary War) P: 265
Rhode Island (The Revolutionary War) R: 313
South Carolina (The Revolutionary War) So: 659-660
United States, History of the (Background to the revolution) U: 156
Virginia (The course toward independence) V: 420; (Independence and statehood) V: 420
- Revolver**
Handgun (Types of handguns) H: 43
- Revolving charge account**
Interest I: 321
- Revolving stage**
Theater (Changing scenery) T: 240
- Reward** [psychology]
Aggression A: 141
Behavior (Behaviorism) B: 221
Habit (How we learn habits) H: 2
Learning (Motivation) L: 164
- Rewards and Fairies** [book by Kipling]
Puck P: 870
- Rex cat**
Cat (Short-haired breeds) C: 290-291; picture on C: 288
- Rexford, Bill** [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1950) A: 981
- Rexroth, Kenneth** [American poet] R: 288
- Rey, Plaza del**
Barcelona B: 108
- Reye, R. D. K.** [Australian pathologist]
Reye's syndrome R: 288
- Reyes, Neftali** See Neruda, Pablo in this index
- Reye's syndrome** [disease] R: 288
Aspirin A: 816
Chickenpox C: 446
- Reykjavik** [Iceland] R: 288 with picture
Iceland (The lowlands) I: 22 with picture
- Reymont, Władysław** [Polish author]
Nobel Prizes (Literature: 1924) N: 446
Poland (The arts) P: 607-608
- Reynaud, Paul** [French political leader]
World War II (The fall of France) W: 474
- Reynolds, Albert** [Irish political leader]
Ireland (table) I: 428
- Reynolds, John** [American political leader]
Illinois (table) I: 71
- Reynolds, John W.** [American political leader]
Wisconsin (table) W: 365; (Decline of LaFollette Progressivism) W: 368
- Reynolds, Sir Joshua** [British painter] R: 288 with picture
Blackstone, Sir William picture on B: 394
Boswell, James picture on B: 506
Johnson, Samuel J: 153
Kauffmann, Angelica K: 249
- Reynolds, Robert J.** [American political leader]
Delaware (table) D: 109
- Reynolds, Thomas** [American political leader]
Missouri (table) M: 668
- Reynolds Metals Company**
Aluminum (In the United States) A: 396; (The growth of the aluminum industry) A: 397
- Reynolds v. Sims** [U.S. history]
Gerrymander G: 174
Supreme Court of the United States (Election issues) So: 1001; (table) So: 1002
- Reza Shah Pahlavi** [shah of Iran] R: 289
Iran I: 398; (World War I and Reza Shah) I: 406; (The nationalist movement) I: 406a
Mohammad Reza Pahlavi M: 687
- R.F.D.** See Rural delivery in this index
- RFE/RL** See Radio Free Europe/Radio Liberty in this index
- Rh** [symbol]
Rhodium R: 318
- Rh factor** [physiology] R: 289
Blood (Rh blood types) B: 413
Deafness (Birth defects) D: 57
Ear (Birth defects) E: 11
Rhesus monkey R: 291
- Rhabdomyosarcoma** [disease]
Cancer (Cancer in children) C: 169
- Rhabdovirus** [virus]
Rabies (Cause) R: 49
- Rhaeto-Romanic dialect**
Romance languages R: 415
- Rhamphorhynchus** [extinct animal]
Pterosaur P: 854 with picture
- Rhapsody** [music] R: 289
Classical music (Free form) Ci: 645
Liszt, Franz (His works) L: 350

- Rhapsody** [poetry]
Rhapsody R: 290
- Rhapsody in Blue** [music by Gershwin]
Gershwin, George G: 174
Grofé, Ferde G: 397
- Rhazes** [Persian physician]
Medicine (During the Middle Ages) M: 373
- RHC** (business) See Regional holding company
in this index
- Rhea** [bird] R: 290 *with picture*
- Rhea** [Greek mythology] R: 290
Cronus C: 1152
Mythology (The Creation myth) M: 978; (table) M: 980
Titans T: 300
- Rhea** (plant)
Boehmeria B: 435
- Rhea** (satellite)
Saturn (table) S: 152 *with picture*
- Rhea Silvia** [legendary figure]
Romulus and Remus R: 450
- Rhee, Syngman** [Korean political leader] R: 90
Korea (A divided nation) K: 376; (South Korea) K: 377
- Rheims** See Reims *in this index*
- Rhein-Main Air Force Base**
Frankfurt F: 485
- Rheingold, Das** [opera by Wagner]
Opera (*Ring of the Nibelung, The*) O: 806-807
- Rheinische Zeitung** [newspaper]
Marx, Karl (Marx's life) M: 236
- Rheita, Anton M. S. de** [Italian astronomer]
Moon (Early observations with telescopes) M: 792
- Rhenish Palatinate** [German history]
Palatinate P: 101
- Rhenium** [element] R: 290
- Rheostat** [electronics] R: 290
- Rhesus monkey** R: 291 *with picture*
Macaque M: 3
Monkey (Communication) M: 729 *with picture*; *picture on* M: 729
Rh factor R: 289
- Rhetoric** [language]
Greek literature (Philosophical literature) G: 378
Latin literature (Characteristics of Latin literature) L: 114
Liberal arts L: 226
Oratory O: 818
Rome, Ancient (Education) R: 437
Shakespeare, William (Rhetoric) S: 367
- Rhetorica ad Herennium** [book]
Oratory (Classical orators) O: 819
- Rhetorical criticism**
Criticism (Kinds of literary criticism) Ci: 1146
- Rheumatic disease**
Rheumatology R: 291
- Rheumatic fever** [disease] R: 291
Chorea C: 522
Heart (Valve disease) H: 141
Scarlet fever (Complications) S: 173
- Rheumatic heart disease**
Heart (Valve disease) H: 141
Rheumatic fever R: 291
- Rheumatism** R: 291
Rheumatic fever R: 291
- Rheumatoid arthritis**
Arthritis (Rheumatoid arthritis) A: 752 *with diagram*
Disease (Diseases associated with aging) D: 230
- Rheumatologist** [occupation]
Rheumatology R: 291
- Rheumatology** [medicine] R: 291
- Rhine, Confederation of the** [German history]
Napoleon I (Dominates Europe) N: 16-17
- Rhine, J. B.** [American psychologist]
Extrasensory perception (Debate about ESP) E: 458
Parapsychology P: 153
- Rhine Gold, The** See Rheingold, Das *in this index*
- Rhine-Main-Danube Canal** [Germany] See Main-Danube Canal *in this index*
- Rhine River** [Europe] R: 292 *with pictures and map*
Danube River D: 35
France (The land) F: 464 *with map*
Germany (The land) G: 156; *picture on* : 144, G: 158
Netherlands (The Polders) N: 144 *with map*
River (table) R: 352
Wine (Wines from Germany) W: 337
- Rhineland** [region, Europe] R: 293
Hitler, Adolf (The road to war) H: 268
Locarno Conference L: 409
Rhine River (The Rhine in history) R: 293
World War II (Allies) W: 470-471
- Rhineland Security Pact** [1925]
France (Between World Wars) F: 475
Locarno Conference L: 409
- Rhinitis** [disorder] R: 293
Allergy A: 373
- Rhinoceros** [animal] R: 293 *with pictures*
Animal *picture on* A: 477
Endangered species (table) E: 270
Mammal *picture on* M: 117
- Rhinoceros** (play by Ionesco)
Ionesco, Eugène I: 372
- Rhinoceros beetle**
Beetle *picture on* B: 218
- Rhinoceros hornbill** [bird]
Bird (Birds of Europe and Asia) B: 346-347 *with picture*
- Rhinoplasty** [operation]
Plastic surgery (Methods of plastic surgery) P: 553
- Rhizobium** [bacteria]
Gall G: 13
Legume L: 185
- Rhizoctonia** [plant disease]
Potato (Diseases and insect pests) P: 713
- Rhizoid** [botany]
Fungi (Parts of a fungus) F: 558-559 *with diagram*
Hornwort H: 341
Liverwort L: 395
Mold M: 690
Moss (The structure of mosses) M: 834
Plant (Bryophytes) P: 522
- Rhizome** [botany] R: 295
Fern (Parts of a fern) F: 74-75
Grass (The grass plant) G: 324
Larkspur L: 77
Licorice L: 270
- Rhizomorph**
Mushroom (Parts of a mushroom) M: 941
- Rho** [letter]
R R: 45 *with picture*
- Rhode Island** R: 296 *with pictures and maps*
Colonial life in America (Development of the Thirteen Colonies) C: 789 *with map*
Dorr Rebellion D: 310
Narragansett Indians N: 21
Williams, Roger (In Rhode Island) W: 311
See also the list of Related Articles in the Rhode Island article
- Rhode Island, University of** R: 316
Rhode Island (The mid-1900's) R: 315 *with picture*
- Rhode Island and Providence Plantations, Charter of** [1663]
Rhode Island (Settlement) R: 312
- Rhode Island Flag** [U.S. history]
Flag *picture on* F: 210
- Rhode Island Gazette** [newspaper]
Rhode Island (Communication) R: 310
- Rhode Island Red**
Chicken (table) C: 443; *picture on* C: 442
Rhode Island (Interesting facts) R: 297 *with picture*; (Agriculture) R: 310
- Rhode Island School of Design**
Providence (Description) P: 839
- Rhode Island White**
Chicken (table) C: 443
- Rhodes** [island, Aegean Sea] R: 316
Knights Hospitallers K: 351
- Rhodes, Cecil John** [British colonial leader]
R: 317 *with portrait*
Rhodes Scholarship R: 317
South Africa (Discovery of diamonds and gold) S: 618
Zambia (History) Z: 589
Zimbabwe (History) Z: 597
- Rhodes, Colossus of** [ancient Greece]
Seven Wonders of the Ancient World (The Colossus of Rhodes) S: 325; *picture on* S: 327
Rhodes R: 317
- Rhodes, Edgar N.** [Canadian political leader]
Nova Scotia (table) N: 567
- Rhodes, James A.** [American political leader]
Ohio (table) O: 699
- Rhodes, John Jacob** [American political leader]
R: 317
- Rhodes, Knights of** [religious and military order]
See Knights Hospitallers *in this index*
- Rhodes Scholarship** R: 317
Oxford University (Educational program) O: 888
Scholarship (International scholarships) S: 178
- Rhodesia**
Rhodes, Cecil John (Gains Rhodesia) R: 317
Rhodesia and Nyasaland, Federation of R: 318
United Kingdom (Decline of the empire) U: 71
Zambia (History) Z: 589
Zimbabwe (History) Z: 597
- Rhodesia and Nyasaland, Federation of**
[British history] R: 318
Zambia (History) Z: 589-590
Zimbabwe (History) Z: 597
- Rhodesian ridgeback** [dog] R: 318 *with picture*
Dog *picture on* D: 270
- Rhodium** [element] R: 318
- Rhododendron** R: 318 *with pictures*
- Rhodope Mountains**
Bulgaria (The land) B: 691 *with map*
- Rhodopsin** [anatomy]
Eye (The retina) E: 462; (Adaptation to light and dark) E: 464
- "Rhodora, The"** [poem by Emerson]
Emerson, Ralph Waldo (His poetry) E: 259
- Rhombic sulfur**
Sulfur (Forms) So: 966
- Rhombohedral system**
Crystal (Classifying crystals) Ci: 1166-1167 *with picture*
Calcite C: 20
- Rhomboid** [geometry] R: 319
- Rhombus** [geometry] R: 319 *with picture*
- Rhône glacier** [Switzerland]
Rhône River R: 319
- Rhône River** [Switzerland-France] R: 319 *with map*
Lake Geneva L: 38
Lyon L: 536 *with picture*
River R: 351 *with picture*
- Rhubarb** [plant] R: 319 *with picture*
- Rhuddlan, Statute of** [English history]
Wales (Revolts against England) W: 12-13
- Rhumb line** [navigation]
Great-circle route G: 338
- Rhumba** [dance]
Rumba R: 519
- Rhyme** [poetry] R: 320
Slang (Rhyming slang) S: 500
- Rhyme scheme**
Poetry (table) P: 594; (Sounds) P: 594-595
- Rhynchocoela** See Ribbon worm *in this index*
- Rhyniophyte** [plant]
Plant (Early plants) P: 540
- Rhyolite** [rock]
Granite G: 311
- Rhythm** R: 320
Dance (Ritual ethnic dances) D: 27
Design (Rhythm and movement) D: 157 *with picture*
Jazz J: 68
Music (Rhythm) M: 951
Poetry (Rhythm and meter) P: 591
- Rhythm** [birth control]
Birth control (Methods of birth control) B: 378-379
- Rhythm and blues**
Popular music (Other new styles of popular music) P: 671
Rock music (Beginnings of rock music) R: 377
- Rhythm band** R: 320
- Rhythm section** [music]
Jazz (The sound of jazz) J: 68 *with picture*
- Rhythmic gymnastics** [sport]
Gymnastics (Rhythmic gymnastics) G: 450
- Rhytidectomy** [operation]
Plastic surgery (Methods of plastic surgery) P: 553
- Rial** [money] R: 320
- Rib** [anatomy] R: 320 *with diagram*
Diaphragm D: 184 *with diagram*
Human body *diagram on* H: 422
Skeleton (The axial skeleton) S: 479-480 *with diagrams*
- Rib grass** [plant]
Plantain P: 550
- Rib stitch**
Knitting (Knitting the fabric) K: 354
Textile (Knitted fabrics) T: 214
- Ribaut, Jean** [French colonial leader] R: 321
United States, History of the *picture on* U: 150
- Ribavirin** [drug]
Hepatitis (Hepatitis C) H: 192
- Ribbed smoke sheet**

- Rubber (Processing crude rubber) R: 503
- Ribbed vault**
Architecture (Gothic architecture) A: 617-619
with picture
Gothic art (Early Gothic architecture) G: 278
Vault V: 291
- Ribbentrop, Joachim von** [Nazi official] R: 321
Nuremberg Trials (The trials) N: 612-613
Stalin, Joseph *picture on* So: 827
- Ribbon**
Typewriter (How a typewriter works) T: 538
- Ribbon cable** [electronics]
Cable (Cable construction) C: 4-5 with diagram
- Ribbon Falls** [falls, California] R: 321
California (Rivers, waterfalls, and lakes) C: 50-51
Waterfall (table: Famous waterfalls of North America) W: 142 with picture
- Ribbon lightning**
Lightning (Appearance) L: 300
- Ribbon microphone**
Microphone (Ribbon microphones) M: 517
- Ribbon worm** R: 321
Animal (A classification of the animal kingdom) A: 506 with picture
Worm (Ribbon worms) W: 500 with pictures
- Ribera, Josepe de** [Spanish painter] R: 321
Painting (The Spanish masters) P: 64
- Ribicoff, Abraham A.** [American political leader] R: 321
Connecticut (table) Ci: 967
Kennedy, John Fitzgerald (table) K: 266
- Ribnica** [former name]
Podgorica P: 588
- Riboflavin** See Vitamin B₂ in this index
- Ribonuclease** [enzyme]
Enzyme E: 341
- Ribonucleic acid** See RNA in this index
- Ribose** [sugar]
Cell (RNA—the master copy) C: 335-336 with diagram
RNA R: 357
- Ribosomal RNA** [biochemistry]
RNA R: 357
- Ribosome** [biology]
Cell (table) C: 327; (The cytoplasm) C: 329 with diagrams
Heredity (How proteins are made) H: 206-208
RNA R: 357
- Ricardo, David** [British economist] R: 321
Marx, Karl (Early development) M: 237
- Riccio, David** [Italian musician]
Mary, Queen of Scots (Her reign) M: 239
- Riccioli, Giovanni Battista** [Italian astronomer]
Moon (Early observations with telescopes) M: 792
- Rice** R: 322 with pictures
Arkansas *picture on* A: 695
Asia *pictures on* A: 784, A: 801
Food supply (Making farmland more productive) F: 349
Grain G: 301
Grass (Cereals) G: 326
India *picture on* I: 126
Indonesia (Food and drink) I: 229; (Agriculture) I: 235 with picture
Japan *picture on* J: 52
Malaysia (Agriculture) M: 100 with picture
Myanmar *picture on* M: 970d
Philippines (Agriculture) P: 378 with picture
Tanzania *picture on* T: 31
Vietnam V: 364 with picture; (Economy) V: 369
Wild rice W: 301
- Rice, Alexander H.** [American political leader]
Massachusetts (table) M: 288
- Rice, Elmer** [American dramatist] R: 328
American literature (Drama) A: 422-423
- Rice, Grantland** [American journalist] R: 328
- Rice, Henry Mower** [American frontiersman] R: 328
- Rice, Jerry** [American football player] R: 328
- Rice, Sam** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Rice popcorn**
Corn (Popcorn) Ci: 1059
- Rice starch**
Starch (Industrial uses) So: 855
- Rice straw**
Rice (Other uses) R: 323
- Rice weevil** [insect]
Grain weevil G: 302
Weevil W: 180
- Rice wine** [drink]
Rice (Other uses) R: 323
- Ricebird** See Bobolink in this index
- Ricercare** [music]
Classical music (Instrumental music) Ci: 646
- Rich, Adrienne** [American poet] R: 328
American literature ("Confessional" poetry) A: 423
- Rich, John T.** [American political leader]
Michigan (table) M: 507
- Rich, Robert** [English colonial official]
Van Dyck, Sir Anthony *picture on* V: 281
- Rich iron deposits** [Minnesota]
Minnesota *picture on* M: 605
- Richard I** [king of England] R: 328 with portrait
Crusades (The Third Crusade) Ci: 1160 with map
England (Magna Carta) E: 306
Flag *picture on* F: 216
Henry VI [of Germany] H: 187
Philip II [king of France] P: 368
Sergeant at arms S: 316
- Richard II** [king of England] R: 328 with portrait
Wat Tyler's Rebellion W: 113
- Richard II** [play by Shakespeare]
Shakespeare, William (*Richard II*) S: 358; (Imagery) S: 367
- Richard III** [king of England] R: 329 with portrait
Heraldry (Heraldry today) H: 194
- Richard III** [play by Shakespeare]
Olivier, Laurence O: 744
Shakespeare, William (*Richard III*) S: 356
- Richard, Duke of Gloucester** [former name]
See Richard III in this index
- Richard, Duke of York** [brother of Edward V]
Richard III R: 329
Tower of London T: 349
- Richard, Eugene C.** [American engineer]
Buick, David Dunbar B: 681
- Richard, Maurice** [Canadian hockey player] R: 329
- Richard Coeur de Lion** See Richard I in this index
- "Richard Corey"** [poem by Robinson]
Robinson, Edwin Arlington R: 368
- Richard J. Daley Plaza**
Chicago (Places to visit) C: 430-431 with picture
- Richard Nixon Library and Birthplace** [Yorba Linda]
Nixon, Richard Milhous (Later years) N: 437
- Richard the Lion-Hearted** See Richard I in this index
- Richards, Ann** [American political leader]
Bush, George Walker (Governor of Texas) B: 722e
Texas (table) T: 203
- Richards, Charles D.** [Canadian political leader]
New Brunswick (table) N: 196
- Richards, DeForest** [American political leader]
Wyoming (table) W: 532
- Richards, Dickinson Woodruff** [American physician]
Nobel Prizes (Physiology or medicine: 1956) N: 444
- Richards, Ellen** [American chemist]
Home economics (History) H: 300
- Richards, Sir Gordon** [British jockey]
Horse racing (History) H: 366
- Richards, I. A.** [British author] R: 329
- Richards, John G.** [American political leader]
South Carolina (table) So: 658
- Richards, Keith** [British musician]
Rolling Stones R: 403
- Richards, Laura Elizabeth Howe** [American author] R: 329
- Richards, Theodore William** [American chemist]
Nobel Prizes (Chemistry: 1914) N: 442
- Richards, William A.** [American political leader]
Wyoming (table) W: 532
- Richards, Sir William Buell** [Canadian jurist] R: 329
- Richardson, Bill** [American government official] R: 330
Clinton, Bill (Domestic events) Ci: 682f
United Nations (table) U: 86
- Richardson, Elliot Lee** [American government official] R: 330
Watergate (The tape controversy) W: 144
- Richardson, Friend William** [American political leader]
California (table) C: 59
- Richardson, Henry Hobson** [American architect] R: 330 with picture
Architecture (Early modern architecture in America) A: 629
- Richardson, James B.** [American political leader]
South Carolina (table) So: 658
- Richardson, John** [Canadian author]
Canadian literature (Early English-Canadian literature) C: 157; *picture on* C: 159
- Richardson, John P.** [American political leader]
South Carolina (table) So: 658
- Richardson, Sir Owen Willans** [British physicist]
Nobel Prizes (Physics: 1928) N: 440
- Richardson, Robert Coleman** [American physicist]
Nobel Prizes (Physics: 1996) N: 442
- Richardson, Samuel** [English author] R: 330
English literature (The rise of the novel) E: 318-319
Novel (The first English novelists) N: 572
- Richardson, Tony** [British director]
Motion picture (Best achievement in directing: 1963) M: 862
- Richardson, William A.** [American government official]
Treasury, Department of the (table) T: 407
- Richardson, William Blaine** [American government official] See Richardson, Bill in this index
- Richardsonian Romanesque** [architecture]
Richardson, Henry Hobson R: 330 with picture
- Richelieu** [play by Bulwer-Lytton]
Bulwer-Lytton, Edward George Earle Lytton B: 697
- Richelieu, Cardinal** [French statesman] R: 331
Diplomacy (History) D: 216-217
France (The age of absolutism) F: 473
Louis XIII L: 474
Marie de Médicis M: 200
Thirty Years' War (The Swedish-French period) T: 260
- Richelieu, Duc de** [French political leader]
Aix-la-Chapelle, Congress of A: 253
- Richelieu River** [Canada]
Quebec (Rivers, waterfalls, and lakes) Q: 24
- Richet, Charles Robert** [French physiologist]
Nobel Prizes (Physiology or medicine: 1913) N: 444
- Richler, Mordecai** [Canadian author] R: 331
- Richmond** [former name] See Staten Island in this index
- Richmond** [city, Virginia] R: 332 with pictures
United States, History of the *picture on* U: 174
Virginia (The Civil War and Reconstruction) V: 421 with picture; *picture on* V: 399
- Richmond, Earl of** [literary figure]
Shakespeare, William (*Richard III*) S: 356
- Richmond, Mary E.** [American social worker]
Social work (History) So: 559
- Richmond, University of** R: 334
- Richmond College**
Richmond, University of R: 334
- Richmond National Battlefield Park** [Virginia]
National Park System (table: National battlefields) N: 55
- Richmond-San Rafael Bridge**
California (Transportation) C: 57
- Richmond Town** [New York City] R: 334 with picture
- Richter, Burton** [American physicist]
Nobel Prizes (Physics: 1976) N: 441
Physics (Advances in the mid-1900's) P: 442
- Richter, Charles F.** [American seismologist]
Earthquake (Recording, measuring, and locating earthquakes) E: 37
Moment magnitude M: 697
Richter magnitude R: 334
- Richter, Conrad** [American author] R: 334
- Richter, Gerhard** [German artist]
Painting (Recent painting) P: 87-88
- Richter, Hans** [Hungarian-born conductor] R: 334
- Richter, Hieronymus Theodor** [German chemist]
Indium I: 224
- Richter magnitude** [measurement] R: 334
Earthquake (Studying earthquakes) E: 37
Moment magnitude M: 697
- Richter scale** See Richter magnitude in this index
- Richthofen, Manfred von** [German aviator]
Ace A: 24
World War I (The war in the air) W: 460-461
- Rickard, Tex** [American businessman]
Boxing (The golden age of U.S. boxing) B: 533
- Rickards, John E.** [American political leader]
Montana (table) M: 757

Rickenbacher, Edward See Rickenbacher, Eddie *in this index*

Rickenbacher, Eddie [American aviator] R: 335
Ace A: 24

Air Force, United States (World War I) A: 194-195

World War I (The war in the air) W: 460-461

Rickets [disease] R: 335 *with picture*

Bone (Bone disorders) B: 457

Nutrition (Deficiency diseases) N: 630-631

Ricketts, Howard Taylor [American pathologist]
Rickettsia R: 335

Rickett's circus

Circus (History) Ci: 562b

Rickettsia [microorganism] R: 335

Psittacosis P: 844

Rocky Mountain spotted fever R: 394

Typhus T: 540

Rickey, Branch [American baseball player]

Baseball (table: Hall of Fame) B: 135

Rickover, Hyman George [American admiral]
R: 335

Carter, Jimmy (Naval career) C: 253

Ricksha

Jinrikisha J: 127

RICO [law] See Racketeer Influenced and
Corrupt Organizations Act *in this index*

Riddarholm Church [Sweden]

Stockholm picture on So: 905

Riddell, R. G. [Canadian diplomat]

United Nations (table) U: 86

Riddle [humor] R: 335

Nursery rhyme (Rhyming riddles) N: 614

Riddle of the Sphinx [Greek mythology]

Riddle R: 336

Sphinx (The Greek sphinx) So: 781

Riddle of the Universe, The [book by

Haeckel]

Haeckel, Ernst Heinrich H: 5

Riddleberger Act [1882]

Virginia (The Civil War and Reconstruction)
V: 421-422

Ride [sports]

Wrestling picture on W: 506

Ride, Sally Kristen [American astronaut] R: 336
with portrait

Astronaut (Achievements in space) A: 829;
(table) A: 830

Space exploration picture on So: 725

Ride to the Vistula [drawing by Kiefer]

Kiefer, Anselm picture on K: 313

Rideau Canal [waterway, Ontario] R: 336

Ottawa River O: 875

Rideau Falls [Ontario]

Ottawa (Metropolitan Ottawa) O: 871

Rideau Hall

Ottawa (Rideau Hall) O: 872

Rideau River [Ontario]

Ottawa (Metropolitan Ottawa) O: 871

Riders of the Purple Sage [book by Grey]

Grey, Zane G: 391

Riders to the Sea [play by Synge]

Synge, John Millington So: 1068

Ridge, John Rollin [American author]

Murieta, Joaquín M: 930

Ridge, Mid-ocean See Mid-ocean ridge *in this index*

Ridge, Thomas Joseph [American government
official] See Ridge, Tom *in this index*

Ridge, Tom [American government official]
R: 336

Pennsylvania (table) P: 263

September 11 terrorist attacks (The aftermath)
S: 310-310a

Ridge and Valley Region

United States (The Appalachian Highlands)
U: 120-121

Ridge beam [building construction]

House (The roof) H: 382

Ridge culture [agriculture]

Potato (Planting and cultivating) P: 712-713

Ridge-nosed rattlesnake

Rattlesnake R: 149 *with picture*

Ridge-push [geology]

Plate tectonics (Causes of plate movement)
P: 564

Ridgeboard [construction]

House (The roof) H: 382 *with diagram*

Ridgely, Charles Carnan [American political
leader]

Maryland (table) M: 255

Ridgway, Matthew Bunker [American general]
R: 336

Korean War (The Allies retreat) K: 382; (The

"Battle for the Hills") K: 382; (The truce
talks) K: 382

Riding [sport]

Horse (Saddle horses) H: 343; (Riding equip-
ment) H: 351; (How to ride) H: 353 *with pictures*

Riding crop

Horse (The whip) H: 351

Riding equipment

Horse (Riding equipment) H: 351 *with pictures*

Riding Mountain National Park [Manitoba]

Canada (table: National parks and national park
reserves) C: 113

Riding the Bullet [book by King]

Book (Modern books) B: 468

Riding to hounds See Fox hunting *in this index*

Ridley, Nicholas [English religious leader]

R: 337

Ridley sea turtle [animal]

Endangered species (table) E: 270

Turtle (Sea turtles) T: 522

Ridrujo, Dionisio [Spanish poet]

Spanish literature (Spanish literature today)
So: 763

Riel, Louis [Canadian rebel] R: 337 *with portrait*

Canada, History of (New provinces) C: 147;

(The North West Rebellion) C: 148

Dumont, Gabriel D: 383

Macdonald, Sir John Alexander (Threats to

Canadian unity) M: 10; picture on M: 9

Manitoba (The Red River Rebellion) M: 160

North West Rebellion N: 520

Quebec (Early years as a province) Q: 30

Red River Rebellion (The revolt) R: 189

Saskatchewan picture on S: 145

Riel House [Manitoba]

Canada (table: National historic sites) C: 114

Riel Rebellions See Northwest Rebellion; Red
River Rebellion *in this index*

Riemann, Georg Friedrich [German mathemati-
cian]

Geometry (Rise of non-Euclidean geometry)
G: 105

Mathematics (In the 1800's) M: 307

Riemannian geometry

Geometry (Non-Euclidean geometry) G: 104

Riemenschneider, Tilman [German sculptor]

R: 337 *with picture*

Germany (Painting and sculpture) G: 155 *with picture*

Rienzi [opera by Wagner]

Wagner, Richard (Early career) W: 4

Rienzi, Cola di [Italian political leader] See Cola
di Rienzo *in this index*

Rietveld, Gerrit [Dutch architect]

Furniture (De Stijl) F: 582 *with picture*

Rif [mountains]

Morocco (Land regions) M: 813

Rifampin [medication]

Antibiotic (table) A: 551

Leprosy (Treatment) L: 204

Rifle R: 338 *with pictures*

Ballistics (Interior ballistics) B: 56

Civil War (The enlisted men) C: 620

Firearm (History) F: 133 *with picture*

Hunting (Kinds of hunting) H: 450

Revolutionary War in America (Weapons and

tactics) R: 279 *with picture*

See also the list of Related Articles in the Rifle

article

Rifling [gun]

Artillery (Parts of a gun) A: 762; (Rifling)

A: 763

Gun G: 440

Rifle (How a rifle works) R: 338; (History)

R: 339

Rift, Continental [geology]

Plate tectonics (The rifting of continents)

P: 562 *with diagram*

Rift Valley See Great Rift Valley *in this index*

Rift valley [geography]

Valley (How valleys are formed) V: 266

Rig

Boating (Sailboats) B: 429

Ship (Phoenician and Greek ships) S: 405

Rig [derrick]

Petroleum (table) P: 331; (Preparatory mea-
sures) P: 337-338 *with picture*

Rig-Veda [religious book]

Brahman B: 548

Hinduism (Sacred writings) H: 236 *with picture*

Vedas V: 291

Riga [Latvia] R: 340

Latvia L: 118 *with pictures and map*

Riga, Gulf of

Estonia (Land and climate) E: 362 *with map*

Riga, Treaty of [1921]

Curzon Line Ci: 1199

Poland (World War I and independence) P: 612

Rigel [star]

Orion O: 856

Star (Brightness of stars) So: 840;

(Characteristics of stars) So: 842-843 *with picture*; (table: The 10 brightest stars as
seen from Earth) So: 842 *with picture*

Rigging

Sailing (Rigging) S: 24

Riggs, Bobby [American tennis player]

Tennis (Tennis today) T: 168

Right angle

Angle A: 463 *with picture*

Right ascension

Astronomy (Locating objects in space) A: 837-
838 *with diagram*; diagrams on A: 842

Right Bank [district, Paris]

Paris (The city) P: 161-162 *with map*;

(Economy) P: 165

Right circular cylinder [geometry]

Cylinder Ci: 1204

Right-hand rule [physics]

Electric motor (Basic principles) E: 179

Magnetism (Magnetism and electricity)

M: 60a *with diagram*

Right-handed shell [biology]

Shell (Gastropods) S: 385

Right Honourable [title]

Privy Council P: 808b

Right lymphatic duct

Human body (The lymphatic system) H: 424

Lymphatic system (Lymphatic vessels) L: 534
with diagram

Right of assembly See Freedom of assembly *in this index*

Right of blood [law]

Nationality N: 63

Right of deposit [U.S. history]

Louisiana Purchase (Reasons for the pur-
chase) L: 502; (New Orleans closed to
Americans) L: 503

Right of dissent

Civil disobedience (Is civil disobedience ever
justified?) Ci: 607

Right of possession See Title *in this index*

Right of privacy See Privacy, Right of *in this index*

Right of search [international law] R: 340

Right of the place of one's birth [law]

Nationality N: 63

Right of way

Railroad (Tracks) R: 108-109

Road (Planning) R: 358

Right prism

Prism P: 805

Right to die

Death (The right to die) D: 61

Right to life

Abortion (Abortion methods) A: 14-15

Right to Read [project]

Literacy (Illiteracy in the United States) L: 351-
352

Right-to-work law R: 340

Right triangle

Mathematics (Branches of mathematics)

M: 303

Triangle (Kinds of triangles) T: 438 *with dia-*

gram; (Properties and relationships of tri-

angles) T: 438-439

Trigonometry (Right triangles) T: 443 *with dia-*

grams

Right whale

Whale (Right whales) W: 255 *with picture*;

(The early days of whaling) W: 262; *pic-*

tures on W: 256

Right wing [political science] R: 340

See also Conservatism *in this index*

Left wing L: 181

Right You Are (If You Think You Are) [play by

Pirandello]

Pirandello, Luigi P: 493

Rights, Bill of See Bill of rights *in this index*

Rights, Charter of [French history]

Jefferson, Thomas (Minister to France) J: 80

Rights, Civil See Civil rights *in this index*

Rights, Consumer's

Consumerism (The consumer's rights) Ci: 1018

Rights, Declaration of [1774]

Continental Congress (The First Continental

Congress) Ci: 1021

- Rights, Declaration of** [1776]
Mason, George M: 265
Virginia (Independence and statehood) V: 420
- Rights and Freedoms, Canadian Charter of** [1982]
Bill of rights (Canada's Constitution) B: 301;
(Canada's Constitution) B: 301
Civil rights (Civil rights in Canada) Ci: 610
Supreme Court of Canada (History) So: 997
- Rights of Man, Declaration of the** [French history] R: 340
Bill of rights (French Bill of Rights) B: 302
French Revolution (The National Assembly) F: 525
- Rights of Man, The** [book by Paine]
Paine, Thomas (French revolutionary) P: 22
- Rights of personal integrity**
Human rights (Types of human rights) H: 428
- Rigid insulation**
Insulation (In buildings) I: 306
- Rigid truck** [vehicle] See *Straight truck in this index*
- Rigoletto** [opera by Verdi]
Opera (*Rigoletto*) O: 806
- Rigor mortis** [physiology]
Death (Medical aspects of death) D: 61
- Rihla** [book by Ibn Battuta]
Exploration (Muslim exploration) E: 442
Ibn Battuta I: 3
- Riis, Jacob August** [American journalist] R: 340
Photography (The beginnings of modern photography) P: 426-427
Playground P: 571
United States, History of the *picture on* U: 180
Urban renewal (History) U: 220
- Rijksmuseum** [museum]
Netherlands *picture on* N: 144
- Rikers Island** [New York]
New York City (Small islands) N: 330
- Riksdag** [Swedish government]
Sweden (National government) So: 1021;
(Union with Norway and Denmark) So: 1032-1033; (The Age of Liberty) So: 1034
- Riksmål**
Norway (Language) N: 539
- Rikugien Garden** [Tokyo]
Tokyo (Parks and gardens) T: 316
- Riles, Wilson C.** [American educator]
Spingarn Medal (table: 1973) So: 793
- Riley, Bennett** [American general]
Fort Riley F: 415
- Riley, James Whitcomb** [American poet] R: 341
Indiana (Places to visit) I: 206
June (Quotations) J: 193
Nye, Bill N: 632
- Riley, Richard W.** [American political leader]
Clinton, Bill (table) Ci: 682d
Education, Department of (table) E: 111
South Carolina (table) So: 658
- Rilke, Rainer Maria** [German poet] R: 341
- Rill**
River (Tributaries) R: 351; *diagram on* R: 353
"Rill from the Town Pump, A" [story by Hawthorne]
Hawthorne, Nathaniel (His stories and sketches) H: 114-115
- Rille** [astronomy]
Moon (Rilles) M: 790
- Rillieux, Norbert** [American engineer] R: 341
- Rim lock**
Lock (Types of locks) L: 410-411 *with picture*
- Rimbaud, Arthur** [French poet] R: 341
French literature (Symbolism) F: 522
Verlaine, Paul V: 317
- Rime** See *Rhyme in this index*
- "Rime of the Ancient Mariner, The"** [poem by Coleridge]
Coleridge, Samuel Taylor Ci: 771
- Rimes, LeAnn** [American singer]
United States *picture on* U: 118
- Riming** [process]
Snow (How snow forms) S: 539
- Rimland** [geopolitics]
Geopolitics G: 107
- Rimmer, William** [American sculptor]
Sculpture (American sculpture) S: 255
- Rimsky-Korsakov, Nikolai** [Russian composer] R: 341 *with portrait*
Mussorgsky, Modest M: 968
Opera (*Boris Godunov*) O: 801-802
- Rin** [money]
Yen Y: 564
- Rind**
Cheese (Separating the curd) C: 393-394
- Rinderpest** [disease] R: 342
- Rindisbacher, Peter** [American painter]
Indian, American *picture on* I: 141
- Rindt, Jochen** [Austrian race driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Rinehart, Mary Roberts** [American author] R: 342
- Ring** [astronomy]
Cassini C: 276
Cassini, Giovanni Domenico C: 277
Jupiter (Rings) J: 200
Neptune (Satellites and rings) N: 129
Planet (The planets of our solar system) P: 510-511 *with picture*
Saturn S: 151 *with picture*; (Rings) S: 152 *with picture*
Uranus (Rings) U: 219
- Ring** [jewelry] R: 342 *with pictures*
Jewelry J: 116
Marriage (Dating and courtship) M: 219; (Wedding ceremonies and customs) M: 221
- Ring, Boxing**
Boxing (The ring) B: 527 *with picture*
- Ring, Circus**
Circus (At the circus) Ci: 562; (The birth of the circus) Ci: 562b
"Ring-a-Ring O'Roses"
Nursery rhyme (Singing game rhymes) N: 614
- Ring and the Book, The** [book by Browning]
Browning, Robert (Browning's poems) B: 646
English literature (Later Victorian literature) E: 321
- Ring-billed gull** [bird]
Gull (Their homes) G: 439 *with picture*
- Ring laser gyro** [device]
Inertial guidance (Strap-down systems) I: 263
- Ring Nebula** [astronomy]
Lyra L: 537
- Ring-necked pheasant** [bird]
Pheasant (Kinds of pheasants) P: 355 *with picture*
- Ring-necked plover** [bird]
Plover P: 574 *with picture*
- Ring of Fire** [region, Pacific Ocean] R: 342 *with picture*
Earthquake (Predicting earthquakes) E: 38
Volcano (Why volcanoes occur in certain places) V: 442
- Ring of the Löwenskölds, The** [books by Lagerlöf]
Lagerlöf, Selma L: 30
- Ring of the Nibelung, The** [operas by Wagner]
Brunhild B: 652
Classical music *picture on* Ci: 650
Opera (*Ring of the Nibelung, The*) O: 806-807
Siegfried S: 450
Wagner, Richard (Later career) W: 4
- Ring rot** [plant disease]
Potato (Diseases and insect pests) P: 713
- Ring Round the Moon** [play by Anouilh]
Anouilh, Jean A: 519
- Ring silicate**
Silicate S: 458
- Ring-tailed lemur** [animal]
Lemur L: 189; *picture on* L: 190
- Ringe in Julen** [custom]
Christmas (In Denmark, Norway, and Sweden) C: 531-532
- Ringer** [electronics]
Telephone (The ringer) T: 95
- Ringer** [games]
Horseshoe pitching (Scoring) H: 369
Marbles M: 193
- Ringette** [sport] R: 343 *with picture*
- Ringling brothers** [American circus family]
R: 343 *with picture*
Barnum, P. T. B: 115
- Ringling Brothers and Barnum & Bailey Circus**
Barnum, P. T. B: 115
Circus (The Ringling brothers) Ci: 564
Ringling brothers R: 344
- Ringling Museum of the Circus** [Sarasota, Florida]
Circus (Places to visit and annual events) Ci: 566
Florida (Museums) F: 247 *with picture*
- Ringneck snek**
Snake *picture on* S: 532
- Rings** [gymnastics]
Gymnastics (Men's events) G: 448 *with picture*
- Ringstrassen**
Vienna (The city) V: 362
- Ringtail** [animal] R: 344
- Ringuet** [Canadian author]
Canadian literature (Literature between the world wars) C: 159
- Ringwood, Gwen Pharis** [Canadian author]
Canadian literature (Literature between the world wars) C: 159-160
- Ringworm** [disease] R: 344
Athlete's foot A: 858
Cat (Veterinary care) C: 295
Fungicide F: 560
Hair (Disorders of the hair and scalp) H: 10
Skin (Infections) S: 490
- Rink** [sports]
Curling (The rink) Ci: 1196 *with pictures*
Hockey (The rink) H: 274 *with picture*
Lawn bowling L: 144
- Rink** [sports team]
Curling Ci: 1195
- Rinzai** [religion]
Zen Z: 593
- Rio** See *Rio de Janeiro in this index*
- Rio Bravo** See *Rio Grande in this index*
- Rio Camuy Cave Park** [Puerto Rico]
Puerto Rico (Places to visit) P: 877
- Rio de Janeiro** [city, Brazil] R: 344 *with pictures*
Brazil B: 567; (City life) B: 573; *picture on* B: 575
Latin America *picture on* L: 91
South America *picture on* So: 622
- Rio de la Plata** [bay, Argentina-Uruguay] R: 346
Exploration (Spain's conquests in the New World) E: 445
South America (Rivers) So: 628
World *picture on* W: 418
- Rio Grande** [river, Mexico-U.S.] R: 346 *with picture and map*
Mexican War (Background of the war) M: 445 *with map*
New Mexico (Land regions) N: 266-268
Rio Grande Project R: 347
River (table) R: 352
Texas (Rivers and lakes) T: 198; *picture on* T: 184
- Rio Grande Project** [U.S.] R: 347
- Rio Grande Wild and Scenic River** [Texas]
National Park System (table: National parkways and other national parklands) N: 56
- Rio Muni** [territory, Equatorial Guinea]
Equatorial Guinea E: 346 *with map*
- Rio Negro** [river, Brazil-Colombia]
Amazon River (The course of the Amazon) A: 403 *with picture*
Uruguay (The interior lowlands) U: 226
- Rio-Niterói Bridge** [Brazil]
Bridge (table: Plate and box girder) B: 603
- Rio São Francisco** [river, Brazil]
São Francisco, River S: 117
- Rio Teodoro** [river, Brazil]
Madeira River M: 30
- Rio Treaty** [1947] See *Inter-American Treaty of Reciprocal Assistance in this index*
- Riordan, Richard J.** [American political figure]
Los Angeles (Recent developments) L: 470
- Ríos, Juan Antonio** [Chilean political leader]
Chile (Years of progress) C: 469
- Rios Montt, Efraín** [Guatemalan political leader]
Guatemala (Political developments) G: 417
- Riot R: 347** *with picture*
African Americans (The rise of new black leaders) A: 136j; (The black migration to the North) A: 136k; (Unrest in the cities) A: 136o *with picture*; (Disappointments and controversy) A: 136q
Ammunition (Riot control ammunition) A: 435
Asian Americans (Arrivals of the early 1900's) A: 812e
Bush, George Herbert Walker (National affairs) B: 720-721
California (The mid-1900's) C: 62-63
Cleveland (Social problems) Ci: 665
Detroit (The mid-1900's) D: 171
Haymarket Riot H: 121
Local government (Population changes) L: 407-408
Los Angeles (Recent developments) L: 470
Newark (History) N: 358
Police (In the United States since the mid-1900's) P: 624
Prison (Current problems) P: 808
Reconstruction (Violence against blacks) R: 177

704 Riot Act

- Russia (The new nation) **R**: 555
 South Africa (The dismantling of apartheid)
 So: 620
 Tulsa (History) **T**: 483-484
 Union of Soviet Socialist Republics (The
 February Revolution) **U**: 35
 United States, History of the (Urban unrest)
 U: 192
- Riot Act** [England]
 Freedom of assembly (History) **F**: 504
- Rip panel**
 Balloon (Hot-air balloons) **B**: 57 *with diagram*
- Rip Van Winkle** [literary figure] **R**: 349
 American literature (Literature of a young
 nation [1788-1830]) **A**: 415
 Irving, Washington **I**: 460
 Jefferson, Joseph **J**: 75
- Rip Van Winkle** [play by Boucicault]
 Boucicault, Dion **B**: 515
- Ripcord**
 Parachute (Parts of a parachute) **P**: 142-143
 with picture
- Ripening** [food processing]
 Butter (Churning) **B**: 730
 Cheese (Ripening) **C**: 394
- Ripken, Cal, Jr.** [American baseball player]
R: 350
 Baseball (table: Modern major league records)
 B: 137
- Ripley, George** [American author]
 American literature (Nonfiction prose) **A**: 418
 Brook Farm **B**: 639
- Ripley, Robert LeRoy** [American cartoonist]
R: 350
- Ripley, Tom** [fictional character]
 Highsmith, Patricia **H**: 229
- Riposte**
 Fencing (The foil) **F**: 70
- Ripple effect** [ecology]
 Balance of nature (Upsetting the balance)
 B: 35
- Riprap** [engineering]
 Dam (Embankment dams) **D**: 18
- Ripsaw** [tool]
 Saw (Handsaws) **S**: 166 *with picture*
 Woodworking (Cutting) **W**: 397
- Ripuarrians** [people]
 Franks **F**: 494
- Riqueti, Honoré Gabriel Victor** *See* Mirabeau,
 Comte de *in this index*
- Rise of American Civilization, The** [book by
 Charles and Mary Beard]
 Beard, Charles and Mary **B**: 187
- Rise of Silas Lapham, The** [book by Howells]
 Howells, William Dean **H**: 402
 Novel (The United States) **N**: 573
- Risen Christ Between Saint Andrew and
 Saint Longinus, The** [engraving by
 Mantegna]
 Mantegna, Andrea *picture on* **M**: 167
- Riser**
 Parachute (Parts of a parachute) **P**: 142-143
 with picture
- Rising action** [literature]
 Literature (Plot) **L**: 353
- Rising from the committee** [parliamentary pro-
 cedure]
 Committee of the whole **Ci**: 872
- Rising Village, The** [poem by Goldsmith]
 Canadian literature (Early English-Canadian lit-
 erature) **C**: 157
- Risk** [economics]
 Investment (Kinds of investments) **I**: 366
- Risk, Pure**
 Insurance **I**: 309
- Risk factors** [medicine]
 Heart (Risk factors) **H**: 137; (Progress in treat-
 ment and prevention) **H**: 145-146
- Risk management** [economics]
 National Farmers Organization **N**: 35
- Risorgimento** [Italian history]
 Italian literature (Romanticism) **I**: 495
- Risotto** [food]
 Italy (Food and drink) **I**: 502-503
- Riss ice age** [geology]
 Ice age (Evidence of ice ages and their cli-
 mates) **I**: 6-7
- Risso's dolphin** [sea animal]
 Dolphin (Other species) **D**: 297
- Ritalin** [drug] **R**: 350
 Attention deficit disorder **A**: 879
- Ritardando** [music]
 Music (table) **M**: 954
- Ritchie, Albert C.** [American political leader]
 Maryland (table) **M**: 255
- Ritchie, C. S. A.** [Canadian diplomat]
 United Nations (table) **U**: 86
- Rite** [magic]
 Magic (Magic actions) **M**: 49
- Rite** [religion]
 Liturgy **L**: 392
- Rite of passage** **R**: 350
 Funeral customs **F**: 557
- Rite of Spring, The** [ballet]
 Classical music (Igor Stravinsky) **Ci**: 649
 Stravinsky, Igor (Early works) **So**: 922
- Ritner, Joseph** [American political leader]
 Pennsylvania (table) **P**: 263
- Ritonavir** [drug]
 AIDS (Treatments) **A**: 164
- Ritsos, Yannis** [Greek poet]
 Greek literature (Modern Greek literature)
 G: 378-379
- Ritter, Halsted L.** [American jurist]
 Impeachment (History) **I**: 91-92
- Ritter, Joseph Cardinal** [American religious
 leader]
 Cardinal (table: American cardinals) **C**: 211
- Ritter, Karl** [German geographer]
 Geography (The growth of geography) **G**: 95-
 96
- Ritter, Maurice** [American musician]
 Ritter, Tex **R**: 350
- Ritter, Tex** [American musician] **R**: 350
- Ritty, James** [American inventor] **R**: 351
 Cash register **C**: 273
- Ritty, John** [American inventor]
 Ritty, James **R**: 351
- Ritual** [magic]
 Magic (Magic actions) **M**: 49
 Mythology (The ritualist theory) **M**: 987
- Ritual** [religion]
 Education (History) **E**: 97
 Liturgy **L**: 392
- Ritual** [religion]
 Religion (Religious rituals) **R**: 217
 Sculpture (Early medieval sculpture) **S**: 248
- Ritz, The** [play by McNally]
 McNally, Terrence **M**: 344
- Rivadavia, Bernardino** [Argentine political
 leader]
 Argentina (Forming a national government)
 A: 657
- Rivals, The** [play by Sheridan]
 Sheridan, Richard Brinsley **S**: 397
- River R**: 351 *with pictures*
 Estuary **E**: 364
 Ice age (Evidence of ice ages and their cli-
 mates) **I**: 6-7
 Levee **L**: 216
 World (Water) **W**: 418; *map on* **W**: 416
- River birch** [tree]
 Birch (River birch) **B**: 327
- River dolphin** **R**: 354 *with pictures*
 Dolphin **D**: 297
 Whale (River dolphins) **W**: 258
- River Glimpse, A** [painting by Doughty]
 Hudson River School *picture on* **H**: 406
- River hippopotamus** [animal]
 Hippopotamus **H**: 240 *with pictures*
- River Leet** [aqueduct, England]
 Aqueduct (Later aqueducts) **A**: 581
- River Moldau** [music by Smetana]
 Smetana, Bedřich **S**: 515
- River of Canada**
 Saint Lawrence River (History) **S**: 42
- River of No Return** [nickname, Salmon River]
 Idaho (Rivers, waterfalls, springs, and lakes)
 I: 38
- River Queen** [ship]
 Hampton Roads Conference **H**: 37
- River system**
 River **R**: 351
- River War, The** [book by Churchill]
 Churchill, Sir Winston Leonard Spencer
 (Soldier and reporter) **C**: 546
- Rivera, Diego** [Mexican artist] **R**: 355 *with pic-
 ture*
 Aztec *picture on* **A**: 999
 Indian, American *picture on* **I**: 136
 Kahlo, Frida **K**: 209
 Mexico (Painting) **M**: 459
 Painting (Modern Mexican painting) **P**: 83
- Rivera, Fructuoso** [Uruguayan political leader]
 Uruguay (Independence) **U**: 227
- Rivera, José Eustacio** [Colombian author]
 Latin-American literature (The early 1900's)
 L: 113
- Riverboat**
 Mississippi *picture on* **M**: 631
 Ship *picture on* **S**: 404
- Riverboat gambling**
 Iowa (Places to visit) **I**: 384; (The late 1900's)
 I: 396
- Riverchase Galleria** [Birmingham]
 Alabama *picture on* **A**: 257
- Riverdale** [district]
 New York City (The Bronx) **N**: 328
- Riverfront Plaza**
 Louisville **L**: 504 *with picture*
- Riverine ponds**
 Pond (Kinds of ponds) **P**: 656-657
- Rivers, Eurith D.** [American political leader]
 Georgia (table) **G**: 130
- Rivers, Larry** [American painter] **R**: 355 *with pic-
 ture*
- Rivers, William H. R.** [British anthropologist]
 Anthropology (Development of field research)
 A: 548
- Riverside Church**
 New York City (Architecture) **N**: 336-337
 Bell (Famous bells) **B**: 239-240
- Riverside wren** [bird]
 Wren *picture on* **W**: 503
- Rivest, Ronald L.** [American computer scientist]
 Codes and ciphers (Public-key systems)
 Ci: 750
- Rivet**
 Riveting **R**: 355
- Riveting** [construction] **R**: 355
- Riveting hammer**
 Hammer *picture on* **H**: 34
- Riveting machine**
 Riveting **R**: 356
- Riviera** [region, France-Italy] **R**: 356 *with map*
 France (The land) **F**: 464-466 *with picture and
 map*
- Rivière, Marquis de** [French diplomat]
 Venus de Milo **V**: 314
- Rixey, Eppa** [American baseball player]
 Baseball (table: Hall of Fame) **B**: 135
- Riyadh** [Saudi Arabia] **R**: 356 *with picture*
 Saudi Arabia **S**: 154 *with picture*; (The Saud
 dynasty) **S**: 160-161
- Riyal** [money]
 Money *picture on* **M**: 704
- Rizal, José** [Filipino patriot] **R**: 357
 Philippines (The arts) **P**: 375-376; (Revolt
 against the Spaniards) **P**: 379-380
- Rizal, José Mercado y Alonso** [Filipino patriot]
See Rizal, José *in this index*
- Rizal Park** [Manila]
 Manila (Description) **M**: 142
- Rizzuto, Phil** [American baseball player]
 Baseball (table: Hall of Fame) **B**: 135
- RLG** [navigation] *See* Ring laser gyro *in this index*
- RLV** [aircraft] *See* Reusable launch vehicle *in this
 index*
- R.N.** *See* Registered nurse *in this index*
- Rn** [symbol]
 Radon (Chemical properties) **R**: 100
- RNA** [genetics] **R**: 357
 Cell (The nucleus) **C**: 328-329; (Producing pro-
 teins) **C**: 333-334 *with diagrams*; (RNA—
 the master copy) **C**: 335 *with diagrams*
- Enzyme** **E**: 340
 Gene **G**: 81
 Heredity (How proteins are made) **H**: 206-208
 Human body (Chemical elements and mole-
 cules) **H**: 417
 Life **L**: 277; (Nucleic acids) **L**: 278
 Molecular biology (The beginning of molecular
 biology) **M**: 691-692
 Viroid **V**: 425
 Virus (The structure of a virus) **V**: 426
- Ro-ro ship** *See* Roll-on/roll-off ship *in this index*
- Roach** [fish] **R**: 357
- Roach** [insect] *See* Cockroach *in this index*
- ROAD** [military]
 Army, United States (The atomic age Army)
 A: 739
- Road** [transportation] **R**: 357 *with pictures and
 map*
 Asphalt (Paving with asphalt) **A**: 815
 Automobile (Problems of safety) **A**: 948-949
 Colonial life in America (Transportation) **Ci**: 805
 with picture
 Industrial Revolution (Roads) **I**: 251
 Lighting (On streets and highways) **L**: 297
 McAdam, John Loudon **M**: 330
 Traffic **T**: 366
 Transportation (Ancient Rome) **T**: 387; (Private
 transportation) **T**: 392; *picture on* **T**: 382

See also the list of *Related articles* in the *Road* article

Road, The [play by Soyinka]

Soyinka, Wole So: 693

Road Back, The [book by Remarque]

Remarque, Erich Maria R: 228

Road bicycle

Bicycle (Kinds of bikes) B: 290

Road locomotive [train]

Locomotive (Kind of locomotives) L: 414

Railroad (Rolling stock) R: 107 *with picture*

Road map

Map (Navigation maps) M: 177 *with picture*

Road octane number

Gasoline (Gasoline octane ratings) G: 61

Road of a Naturalist, The [book by Peattie]

Peattie, Donald Culross P: 225

Road race

Automobile racing A: 975; *pictures on* A: 976

Bicycle racing (Road races) B: 294 *with picture*

Kart racing K: 248

Road racer [bicycle] See *Racing bike in this index*

Road rally

Automobile racing (Other kinds of racing) A: 979

Road/sport bicycle

Bicycle (Road bikes) B: 290

Road to Calvary [book by Tolstoy]

Tolstoy, Alexei T: 322

Russian literature (The period of rebirth)

R: 564

Road to Rome, The [play by Sherwood]

Sherwood, Robert Emmet S: 398

Road to Wigan Pier, The [book by Orwell]

Orwell, George O: 860

Road Town [city, Virgin Islands]

Virgin Islands, British V: 397

Roadbed

Railroad (Tracks) R: 108-109; (Tracks) R: 108 *with picture*

Roadmenders' Camp, The [paintings by Curry]

Curry, John Stuart *picture on* Ci: 1198

Roadrunner [bird] R: 362

Animal *picture on* A: 482

Bird (Birds of the desert) B: 339 *with picture*

Roads of Freedom, The [books by Sartre]

Sartre, Jean-Paul S: 127

Roadside skipper [insect]

Butterfly (Skippers) B: 733-734 *with picture*

Roadster

Automobile *picture on* A: 967

Roadster horse

Horse (Light harness horses) H: 345

Roadway

Railroad (Tracks) R: 108

Roan [horse]

Horse (Coat and skin) H: 348-349

Roan antelope

Antelope (Kinds of antelope) A: 542-543

Roan Stallion [book by Jeffers]

Jeffers, Robinson J: 75

Roane, Archibald [American political leader]

Tennessee (table) T: 152

Roane, John Seldon [American political leader]

Arkansas (table) A: 712

Roanoke [Virginia] R: 362

Virginia (table: Average monthly weather)

V: 412

Roanoke Island [North Carolina]

Colonial life in America (Early English settlements) Ci: 788

Lost Colony L: 472

Raleigh, Sir Walter (His expeditions) R: 131

Roanoke River [North Carolina-Virginia]

North Carolina (Rivers, waterfalls, and lakes) N: 484

Virginia (Rivers and lakes) V: 412

Roaring forties [region, Pacific]

Prevailing westerly P: 773

Roaring Twenties [U.S. history] R: 363 *with pictures*

American literature (The Lost Generation) A: 421

Automobile (World War I and the Roaring

Twenties) A: 966 *with picture*

Chicago (The Roaring Twenties) C: 436

Coolidge, Calvin Ci: 1030

Fitzgerald, F. Scott F: 190

Harding, Warren Gamaliel H: 56

Held, John, Jr. H: 167 *with picture*

Jazz (The 1920's) J: 70

United States, History of the (Life during the Roaring Twenties) U: 185

Roaster

Chicken (Producing meat) C: 445

Roasting [cooking]

Cooking (Roasting) Ci: 1028

Roasting [industrial process]

Manganese (Sources) M: 139

Metallurgy (Roasting) M: 426

Rob Roy [Scottish bandit] R: 365

Robards, Jason [American actor]

Motion picture (Best performance by an actor in a supporting role: 1976, 1977) M: 863

Robards, Lewis [American army officer]

Jackson, Andrew (Jackson's family) J: 8

Robards, Rachel Donelson [wife of]

Jackson, Andrew (Jackson's family) J: 8; *picture on* J: 9

Roberts, Emma [British social reformer]

Young Women's Christian Association (History) Y: 573

Roberts, John P. [Canadian political leader]

Ontario (table) O: 783

Roberts Research Library [Toronto]

Library *picture on* L: 247

Robb, Charles Spittal [American political leader]

Virginia (table) V: 417

Robb, Lynda Bird Johnson [daughter of]

Johnson, Lyndon Baines (Marriage) J: 146

Robbe-Grillet, Alain [French author]

French literature (Recent French literature) F: 523

Novel (After World War II) N: 574

Robber crab

Hermit crab H: 212

Robbers, The [play by Schiller]

Schiller, Johann Christoph Friedrich von S: 175

Robbery [crime] R: 365

Bandit B: 76

Burglary B: 704

Crime (Types of crimes) Ci: 1136

Robbery Under Arms [book by Boldwood]

Australia (Literature) A: 906

Robbia, Della See Della Robbia, Luca *in this index*

Robbins, Frederick Chapman [American physician]

Nobel Prizes (Physiology or medicine: 1954) N: 444

Robbins, Jerome [American choreographer]

R: 365

Ballet (Ballet in the United States) B: 53-54

Motion picture (Best achievement in directing: 1961) M: 862

Musical comedy (The modern musical emerges) M: 960

Robb, Lewis [American sportsman]

Softball (History) So: 572

Robert [brother of William, the Conqueror]

William II W: 308

Robert I [duke of Normandy]

William I, the Conqueror W: 308

Robert I [king of Scotland] See Bruce, Robert *in this index*

Robert II [king of France]

France (table) F: 471

Robert II [king of Scotland]

Scotland (The House of Stuart) S: 219

Robert, Anne-Jean [French inventor]

Balloon (The hydrogen balloon) B: 60

Robert, Marie-Noel [French inventor]

Balloon (The hydrogen balloon) B: 60

Robert, Nicholas Louis [French inventor]

Paper (History) P: 136-137

Robert C. Byrd Green Bank Telescope See

Green Bank Telescope *in this index*

National Radio Astronomy Observatory N: 59

Observatory (Ground-based observatories) O: 644-645

Robert E. Lee Memorial [Virginia]

Arlington National Cemetery A: 717

Lee, Robert Edward *picture on* L: 179

Robert-Houdin, Jean Eugène [French magician]

Houdini, Harry H: 377

Magician (Illusions) M: 51-52

Robert Hull Fleming Museum [Burlington]

Vermont (Museums) V: 322

Robert Joffrey Ballet See *Joffrey Ballet in this index*

Robert Kennedy and His Times [book by

Schlesinger]

Schlesinger, Arthur Meier, Jr. S: 177

Robert-le-Diable [opera by Meyerbeer]

Meyerbeer, Giacomo M: 479

Robert Moses power plant [New York]

Niagara River (Water power) N: 394-395

Robert of Flanders [French crusader]

Crusades (The First Crusade) Ci: 1160 *with map*

Robert of Geneva See Clement VII *in this index*

Robert of Molesme, Saint [French religious leader]

Cistercians Ci: 567

Robert of Sorbon [French religious leader]

Sorbonne So: 596

Robert Taylor Homes [Chicago]

Chicago (The South Side) C: 424-425

Robert W. Woodruff Arts Center [Atlanta]

Atlanta (Cultural life) A: 860a

Roberts, A. H. [American political leader]

Tennessee (table) T: 152

Roberts, Barbara [American political leader]

Oregon (table) O: 845

Roberts, Charles George Douglas [Canadian author] R: 365

Canadian literature (Poetry: 1850-1918) C: 157-158

Roberts, Dennis J. [American political leader]

Rhode Island (table) R: 311

Roberts, Floyd [American race driver]

Automobile racing (table: Indianapolis 500 winners) A: 980

Roberts, Frederick Sleigh [British military leader]

Boer War B: 435

Kitchener, Horatio Herbert K: 338

Roberts, Henry [American political leader]

Connecticut (table) Ci: 967

Roberts, Joseph Jenkins [Liberian political leader]

Liberia (The Liberian settlement) L: 231

Roberts, Julia [American actress]

Motion picture (Best performance by an actress: 2000) M: 862

Roberts, Marcus [American musician]

Jazz *picture on* J: 68

Roberts, Margaret Hilda See Thatcher, Margaret Hilda *in this index*

Roberts, Oral [American clergyman]

Faith healing F: 12

Roberts, Oran M. [American political leader]

Texas (table) T: 203

Roberts, Owen Josephus [American jurist]

R: 365

Roberts, Richard John [British-born physiologist]

Nobel Prizes (Physiology or medicine: 1993) N: 445

Roberts, Robin [American baseball player]

Baseball (table: Hall of Fame) B: 135

Roberts, Terrence [American social reformer]

Spingarn Medal (table: 1958) So: 793

Robert's Rules of Order [book]

Parliamentary procedure P: 175

Robertson, Anna Mary [American painter] See Moses, Grandma *in this index*

Robertson, Cliff [American actor]

Motion picture (Best performance by an actor: 1968) M: 862-863

Robertson, Eck [American musician]

Country music (Early commercial success) Ci: 1098b

Robertson, James [American pioneer]

Tennessee (Territorial years) T: 153

Westward movement in America (Crossing the Appalachians) W: 246

Robertson, James B. A. [American political leader]

Oklahoma (table) O: 730; (The 1920's) O: 732

Robertson, Oscar [American basketball player]

R: 365

Basketball (The history of professional basketball) B: 153-155; *picture on* B: 153

Robertson, Pat [American religious leader]

Christian Coalition C: 523

Robertson, Thomas B. [American political leader]

Louisiana (table) L: 496

Robertson, Wyndham [American political leader]

Virginia (table) V: 417

Robertson plaid

Tartan *picture on* T: 47

Roberval, Sieur de [French explorer] R: 365

Robes, Mistress of the

Royal Household of the United Kingdom

R: 498

Robeson, George M. [American government official]

Grant, Ulysses S. (table) **G**: 316
Robeson, Paul [American actor] **R**: 366 *with portrait*
 Shakespeare, William *picture on* **S**: 355
Robespierre [French political leader] **R**: 366 *with portrait*
 Danton, Georges-Jacques **D**: 35
 French Revolution (Terror and equality) **F**: 526-527; (The revolution ends) **F**: 527
Robichaud, Louis J. [Canadian political leader]
 New Brunswick (table) **N**: 196; (The mid-1900's) **N**: 198-199
Robie, Frederick [American political leader]
 Maine (table) **M**: 87
Robie house [Chicago]
 Architecture (Frank Lloyd Wright) **A**: 629-630
 Wright, Frank Lloyd (Early career) **W**: 507; *picture on* **W**: 508
Robin [bird] **R**: 366 *with picture*
 Bird (Birds of urban areas) **B**: 333 *with picture; picture on* **B**: 359
Robin Goodfellow [legendary figure]
 Puck **P**: 870 *with picture*
Robin Hood [legendary figure] **R**: 367 *with picture*
 Literature for children (Folk literature) **L**: 357
Robins, C. A. [American political leader]
 Idaho (table) **I**: 42
Robinson, Bill [American entertainer] **R**: 367
 Temple, Shirley *picture on* **T**: 131
Robinson, Brooks [American baseball player]
 Baseball (table: Hall of Fame) **B**: 134-135
Robinson, Charles [American political leader]
 Kansas (table) **K**: 234
Robinson, Clifford W. [Canadian political leader]
 New Brunswick (table) **N**: 196
Robinson, Eddie [American football coach]
R: 368 *with portrait*
Robinson, Edwin Arlington [American poet]
R: 368
 American literature (Realist poetry) **A**: 421
 Maine (Interesting facts) **M**: 69
Robinson, Frank [American baseball player]
R: 368
 Baseball (table: Hall of Fame) **B**: 135; (Recent developments) **B**: 137-138
Robinson, George D. [American political leader]
 Massachusetts (table) **M**: 288
Robinson, Jackie [American baseball player]
R: 368 *with picture*
 African Americans (Economic and social progress) **A**: 136n; *picture on* **A**: 136l
 Baseball (table: Hall of Fame) **B**: 135; (Postwar baseball) **B**: 137 *with picture*
Robinson, James F. [American political leader]
 Kentucky (table) **K**: 290
Robinson, Joan Violet [British economist]
R: 369
Robinson, John S. [American political leader]
 Vermont (table) **V**: 333
Robinson, Joseph Taylor [American political leader] **R**: 369
 Arkansas (table) **A**: 712
Robinson, Lucius [American political leader]
 New York (table) **N**: 313
Robinson, Mary [Irish political leader] **R**: 369
 Ireland (The Republic of Ireland) **I**: 427-428
Robinson, Moses [American political leader]
 Vermont (table) **V**: 333
Robinson, R. B. [American aviator]
 Airplane (table) **A**: 232
Robinson, Ray *See* Robinson, Sugar Ray *in this index*
Robinson, Ray Charles *See* Charles, Ray *in this index*
Robinson, Sir Robert [British chemist]
 Nobel Prizes (Chemistry: 1947) **N**: 443
Robinson, Robert P. [American political leader]
 Delaware (table) **D**: 109
Robinson, Sugar Ray [American boxer] **R**: 369 *with portrait*
 Boxing (The mid-1900's) **B**: 534 *with picture*
Robinson, Wilbert [American baseball player]
 Baseball (table: Hall of Fame) **B**: 135
Robinson Crusoe (book by Defoe) **R**: 369
 Defoe, Daniel **D**: 88
 English literature (The rise of the novel)
E: 318-319
 Literature for children (The 1700's) **L**: 361
 Novel (The first English novelists) **N**: 572
Robinson projection [cartography]
 Map (Map projections) **M**: 182 *with diagram*
Roblin, Duff [Canadian political leader]
 Manitoba (table) **M**: 159

Roblin, Sir Rodmond P. [Canadian political leader]
 Manitoba (table) **M**: 159; (Political developments) **M**: 162
Robot [machine] **R**: 369 *with picture*
 Artificial intelligence (Robotics) **A**: 760
 Automation (Uses of automation) **A**: 944;
 (History of automation) **A**: 945
 Čapek, Karel **C**: 191
 Electronics (Automation) **E**: 207
 Exploration (Deep-sea exploration) **E**: 451-452
 Factory (Location and design) **F**: 5
 Michigan *picture on* **M**: 489
 Remote control (History) **R**: 231
Robotic surgical device [medicine]
 Surgery (Instruments) **S**: 1005; *picture on*
S: 1007
Robotics
 Artificial intelligence (Robotics) **A**: 760
 Robot **R**: 369
Robotnik [newspaper]
 Pilsudski, Józef **P**: 465
Robson, George [American race driver]
 Automobile racing (table: Indianapolis 500 winners) **A**: 980
Robson, Jennifer Mary [New Zealand political leader] *See* Shipley, Jenny *in this index*
Robson, John [Canadian political leader]
 British Columbia (table) **B**: 627
Robusta coffee
 Coffee (Kinds of coffee) **C**: 754
Robusti, Jacopo *See* Tintoretto *in this index*
Roc [legendary creature]
 Elephant bird **E**: 232
Rocard, Michel [French political leader]
 France (Socialists win power) **F**: 478
Rochambeau, Comte de [French general]
R: 370
 Lafayette, Marquis de (Service to the United States) **L**: 27-28
 Revolutionary War in America (Surrender at Yorktown) **R**: 285
Rochas, Beau de [French inventor]
 Gasoline engine (Development of the gasoline engine) **G**: 66
Roche, Mazo de la See De la Roche, Mazo *in this index*
Roche moutonnée [geology]
 Glacier (How glaciers shape the land) **G**: 204-205 *with diagram*
Rochelle salt [chemical]
 Tartaric acid **T**: 48
Rochester [New York] **R**: 370
 Douglass, Frederick **D**: 314
Rochester, Nathaniel [American settler]
 Rochester **R**: 370
Rochester, University of
 New York (Libraries) **N**: 294
Rochesterville [former city]
 Rochester (Government and history) **R**: 370
Rocinante [fictional animal]
 Don Quixote **D**: 307
Rock [geology] **R**: 371 *with pictures*
 Earth (Earth's rocks) **E**: 20 *with pictures*
 Mantle **M**: 168
 Metamorphic rock **M**: 428
 Metamorphism **M**: 428
 Pyroxene **P**: 920
 Quarrying **Q**: 7
 Quartz **Q**: 8
 Sand **S**: 106
 Soil (How soil is formed) **S**: 573-574 *with diagrams*
 Stratified rock **S**: 920
See also the list of Related Articles in the Rock article
Rock, Johann [German religious leader]
 Amanites **A**: 399
"Rock-a-bye Baby"
 Nursery rhyme (Lullabies) **N**: 614
Rock and roll *See* Rock music *in this index*
Rock and Roll Hall of Fame and Museum
 [Cleveland]
 Cleveland (Cultural life and recreation) **C**: 665-666 *with picture*
Rock barnacle [sea animal]
 Barnacle *picture on* **B**: 114
Rock cleavage [property of rock]
 Metamorphic rock **M**: 428
 Schist **S**: 176
Rock climbing *See* Climbing *in this index*
Rock club [organization]
 Rock **R**: 371
Rock collecting

Rock **R**: 371; (Rocks as a hobby) **R**: 373 *with picture*
Rock cranberry [fruit]
 Lingonberry **L**: 335 *with picture*
Rock Creek Park [Washington, D.C.]
 National Park System (table: National parkways and other national parklands) **N**: 56
Rock crystal
 Quartz (Types) **Q**: 8
Rock cycle
 Earth (Cycles on and in Earth) **E**: 22
Rock drill
 Drill (Rock drills) **D**: 348
Rock elm
 Elm (Kinds) **E**: 244-245
Rock-fill dam
 Dam (Embankment dams) **D**: 18
Rock garden
 Gardening (Ornamental gardens) **G**: 31
Rock music **R**: 376 *with pictures*
 Country music (Rockabilly music) **C**: 1098a;
 (Emergence of the country music industry) **C**: 1098b-1098c
 Croatia (People) **C**: 1148-1148a
 Dance **D**: 25; (Social dances) **D**: 29 *with picture*
 Jazz (Fusion) **J**: 73
 Music (Western music) **M**: 955
 Popular music (Rock'n'roll) **P**: 671
 Radio (Broadcasting today) **R**: 94
 Rolling Stones **R**: 403
 United States *picture on* **U**: 118
 Who, The **W**: 296
 Woodstock festival **W**: 395
Rock 'n' roll *See* Rock music *in this index*
Rock of Gibraltar *See* Gibraltar, Rock of *in this index*
Rock painting [art]
 Australia (Painting) **A**: 906
 Leakey, Mary Douglas **L**: 161
Rock phosphate
 Fertilizer (Inorganic fertilizers) **F**: 79
Rock pigeon [bird]
 Pigeon (The life of a pigeon) **P**: 459; (Kinds of pigeons) **P**: 459
Rock ptarmigan [bird]
 Animal *picture on* **A**: 484
 Ptarmigan **P**: 853
Rock salt [mineral]
 Rock (Chemical sediments) **R**: 372
 Salt (Salt from the ground) **S**: 73
Rock steady [music]
 Reggae **R**: 204
Rock tunnel
 Tunnel (Rock tunnels) **T**: 490
Rock video
 Popular music (New technologies) **P**: 671
 Rock music (Rock videos) **R**: 380
Rock wren [bird]
 Wren **W**: 504
Rockabilly [music]
 Country music (Rockabilly music) **C**: 1098a
Rockaway [district]
 New York City (Queens) **N**: 329-330
Rockaway [vehicle]
 Carriage **C**: 248
Rockdusting [mining]
 Coal (Mine safety) **C**: 729
Rockefeller, David [American banker]
 Rockefeller, John Davison (Rockefeller's descendants) **R**: 382 *with picture*
Rockefeller, John Davison [American financier]
R: 382 *with picture*
 Standard Oil Company **S**: 834
Rockefeller, John Davison, Jr. [American philanthropist] **R**: 383
 Rockefeller, John Davison (Rockefeller's descendants) **R**: 382 *with picture*
 United Nations (Building UN Headquarters) **U**: 95
 Williamsburg (Restoration) **W**: 313
Rockefeller, John Davison, III [American philanthropist] **R**: 383
 Rockefeller, John Davison (Rockefeller's descendants) **R**: 382 *with picture*
Rockefeller, John Davison, IV [American political leader] **R**: 383
 West Virginia (table) **W**: 225
Rockefeller, Laurance Spelman [American philanthropist]
 Rockefeller, John Davison (Rockefeller's descendants) **R**: 382 *with picture*
 Virgin Islands National Park **V**: 397
Rockefeller, Margaretta "Happy" [wife of]

Rockefeller, Nelson Aldrich (Early life) R: 383
Rockefeller, Mary Todhunter Clark [wife of]
 Rockefeller, Nelson Aldrich (Early life) R: 383
Rockefeller, Nelson Aldrich [American political leader] R: 383 *with pictures*
 Central Intelligence Agency C: 357
 New York (table) N: 313
 Rockefeller, John Davison (Rockefeller's descendants) R: 382 *with picture*
Rockefeller, William [American financier]
 Standard Oil Company So: 834
Rockefeller, Winthrop [American political leader]
 Arkansas (table) A: 712
 Rockefeller, John Davison (Rockefeller's descendants) R: 382 *with picture*
Rockefeller Center [New York City]
 New York City (Manhattan) N: 323-325; (A visitor's guide) N: 338 *with picture*
Rockefeller Foundation R: 383
 Food supply (Food supply programs) F: 350-351
 Foundations (table) F: 430; (Health) F: 431; (International affairs) F: 431
Rockefeller Memorial Chapel
 Chicago, University of *picture on* C: 438
Rockefeller Park
 Cleveland (Recreation) Ci: 666
Rocket R: 384 *with pictures*
 Army, United States (Missiles) A: 735
 Ballistics B: 56
 Communications satellite (Types of satellites) Ci: 888a-888b
 Congreve, Sir William Ci: 950
 Fireworks F: 135
 Fuel (Chemical fuels) F: 551
 Goddard, Robert Hutchings G: 244
 Helium (Uses) H: 176
 Plasma P: 552
 Space exploration (Getting into space and back) So: 698; (The dawn of the space age) So: 706 *with pictures*; (Developing more efficient rockets) So: 728
 Technology (The computer age) T: 75
Rocket [locomotive] R: 391
 Locomotive *picture on* L: 414
 Stephenson, George So: 891
Rocket, Model R: 391 *with pictures*
Rocket booster [space exploration] See *Booster rocket in this index*
Rocket City, U.S.A. [nickname]
 Huntsville H: 451
Rocket engine
 Airplane (Rocket engines) A: 220
 Guided missile (The engine) G: 424 *with diagrams*
Rocket into Interplanetary Space, The [book by Oberth]
 Space exploration (Early dreams of space flight) So: 706
Rocket launcher
 Artillery (Kinds of artillery) A: 762
 Ballistics (Interior ballistics) B: 56
Rocket Roger [nickname]
 Clemens, Roger Ci: 662
Rocket Society, American
 American Institute of Aeronautics and Astronautics A: 412
Rockets, Houston
 Basketball (table) B: 150
Rockfish
 Fish *picture on* F: 156
Rockford [Illinois] R: 393
Rockies, Colorado [baseball team] See *Colorado Rockies in this index*
Rocking chair
 Antique *picture on* A: 558
Rocking Chair and Other Poems, The [book by Klein]
 Canadian literature (Literature between the world wars) C: 159-160
 Klein, A. M. K: 343
Rockingham, Marquess of [British political leader]
 United Kingdom (table: British prime ministers) U: 72
Rockland County [New York]
 New York City (Metropolitan area) N: 330
Rockne, Knute [American football coach] R: 393 *with portrait*
 Football (Changes in the game) F: 366
Rocks, The [district, Sydney]
 Sydney (The city) So: 1063
Rockwell, Norman [American artist] R: 393 *with pictures*

Rocky [film]
 Motion picture (Best picture: 1976) M: 861
Rocky Mount [log house]
 Tennessee (Places to visit) T: 144
Rocky Mountain bristlecone pine [tree]
 Bristlecone pine B: 610
Rocky Mountain Fur Company
 Fur trade (The 1800's) F: 565
Rocky Mountain goat
 Animal *picture on* A: 474
Rocky Mountain House [Alberta]
 Canada (table: National historic sites) C: 114
Rocky Mountain National Park [Colorado]
 R: 394
 Colorado (Places to visit) Ci: 836 *with picture*
 National Park System (table: National parks) N: 48
Rocky Mountain News
 Colorado (Communication) Ci: 843
Rocky Mountain pika [animal]
 Animal *picture on* A: 474
Rocky Mountain spotted fever [disease]
 R: 394 *with picture*
 Parasite (Parasites that feed on people and animals) P: 154
 Rickettsia R: 335
 Tick T: 279
 Typhus T: 540
Rocky Mountain States [region, U.S.] R: 394
 United States (Regions) U: 99-105 *with map*
Rocky Mountain Trench [region, North America]
 British Columbia (Land regions) B: 622
Rocky Mountains [North America] R: 394 *with picture and map*
 Alberta *picture on* A: 312
 Canada (The Rocky Mountains) C: 115 *with picture*
 Chinook C: 512
 Colorado (Land regions) Ci: 838 *with map; picture on* Ci: 828
 Rocky Mountain National Park R: 394
 Tunnel (Railroad tunnel) T: 491
 United States (The Rocky Mountains) U: 125 *with picture; map on* U: 122
Rocky Mountains, The [painting by Bierstadt]
 Bierstadt, Albert *picture on* B: 296
Rocky shore [ocean]
 Seashore (Life on rocky shores) S: 270 *with picture*
Rococo [art] R: 396
 Architecture (Rococo architecture) A: 623 *with picture*
 Austria *picture on* A: 931
 Furniture (The Rococo style) F: 576 *with picture*
 Germany *picture on* G: 154
 Painting (Rococo painting) P: 65 *with pictures*
 Sculpture (European sculpture) S: 253-254
Rococo revival [style]
 Furniture (Historical revivals) F: 581 *with picture*
Rocque, Jean François de La See *Roberval, Sieur de in this index*
Rod [anatomy]
 Eye (The retina) E: 462 *with picture*
 Color (The roles of the eyes and brain) Ci: 818
 Perception (The nervous system) P: 283
 Wald, George W: 7
Rod [engine] See *Connecting rod in this index*
Rod [fishing]
 Fishing (Rods) F: 176 *with pictures*
Rod [tool]
 Plaster (Plastering) P: 552
Rod [unit of measure] R: 396
Rod puppet
 Puppet (Rod puppets) P: 905 *with picture*
Rodbell, Martin [American physiologist]
 Nobel Prizes (Physiology or medicine: 1994) N: 445
Rodent [zoology] R: 396 *with picture*
 Animal (A table of animal intelligence) A: 493
 Hantavirus H: 54
 Mammal (table) M: 129 *with picture*
 See also the list of Related Articles in the Rodent article
Rodenticide
 Pest control (Pesticides) P: 318
Rodeo R: 397 *with picture*
 Arizona (Interesting facts about Arizona) A: 670
 Cheyenne (Description) C: 417
 Nebraska *picture on* N: 103
 Oklahoma *picture on* O: 723

Uruguay (Recreation) U: 225
Rodeo [ballet]
 Ballet (Ballet in the United States) B: 53-54
 Copland, Aaron Ci: 1040
 De Mille, Agnes D: 119 *with picture*
Rodeo Drive [Los Angeles]
 Los Angeles *picture on* L: 460
Roderick Hudson [book by James]
 James, Henry (His works) J: 26
Rodgers, Calbraith P. [American aviator]
 Airplane (Other pioneer planes and fliers) A: 233-234
Rodgers, Jimmie [American singer] R: 398
 Country music (The roots of country music) Ci: 1098a-1098b
Rodgers, Johnny [American football player]
 Football (table) F: 363
Rodgers, Richard [American composer] R: 398
 Hammerstein, Oscar, II H: 35
 Hart, Lorenz H: 77
 Musical comedy (Musical comedy matures) M: 960
Rodham, Hillary [American political leader] See *Clinton, Hillary Rodham in this index*
Ródhos [island, Aegean Sea]
 Rhodes R: 316
Rodin, Auguste [French sculptor] R: 398 *with picture*
 France *picture on* F: 463
 Impressionism (Music, literature, and sculpture) I: 95
 Philadelphia *picture on* P: 364
 Sculpture (Form and treatment) S: 230-231; (European sculpture) S: 253-255 *with picture*
Rodin Museum
 Philadelphia (Libraries and museums) P: 364 *with picture*
Rodinia
 Earth (The shaping of the continents) E: 24
Rodney, Caesar [American political leader]
 R: 399
 Delaware (table) D: 109
Rodney, Caesar A. [American government official]
 Jefferson, Thomas (table) J: 83
 Justice, Department of (table) J: 203
Rodney, Caleb [American political leader]
 Delaware (table) D: 109
Rodney, Daniel [American political leader]
 Delaware (table) D: 109
Rodó, José Enrique [Uruguayan philosopher]
 R: 399
 Latin-American literature (Modernism) L: 112
 Uruguay (The arts) U: 225
Rodrigo Díaz See *Cid, The in this index*
Rodríguez, Augustín [Spanish explorer]
 New Mexico (Exploration and settlement) N: 273
Rodríguez, Claudio [Spanish poet]
 Spanish literature (Spanish literature today) So: 763
Rodríguez Bermejo [Spanish sailor]
 Columbus, Christopher (Sailing west) Ci: 860
Rodríguez Lara, Guillermo [Ecuadorian political leader]
 Ecuador (The 1900's) E: 73-74
Rodríguez Pedotti, Andrés [Paraguayan political leader]
 Paraguay (Stroessner's rule and overthrow) P: 150
Roe [zoology]
 Fish (Reproductive system) F: 163
 Shad S: 341
 Spawn So: 768
Roe deer
 Animal *picture on* A: 495
 Deer (Habits) D: 85; (table) D: 85
Roe v. Wade [U.S. history] R: 399
 Abortion (Abortion in the United States) A: 15
 National Right to Life Committee N: 60
 Supreme Court of the United States (Civil rights) So: 1001; (table) So: 1002
 Women's movements (In Western societies) W: 386
Roebling, Emily Warren [American engineer]
 Brooklyn Bridge *picture on* B: 640
Roebling, John Augustus [American engineer]
 Brooklyn Bridge *picture on* B: 640
Roebling, Washington Augustus [American engineer]
 Brooklyn Bridge *picture on* B: 640
Roebling opal [gem]
 Opal O: 789

Roebuck, Alvah C. [American businessman]
Sears, Roebuck and Co. S: 269

Roemer, Buddy [American political leader]
Louisiana (table) L: 496

Roemer, Olaus [Danish astronomer]
Eclipse (The study of eclipses) E: 52
Light (The speed of light) L: 291-292

Roentgen, Wilhelm Conrad [German physicist]
R: 400
Electronics (Early experiments) E: 215
Invention (The late 1800's) I: 362
Physics (The beginning of modern physics)
P: 440-441 with picture
Radiation (History) R: 80
X rays X: 540

Roentgen ray [radiation]
Roentgen, Wilhelm Conrad R: 400

Roethke, Theodore [American poet] R: 400
American literature ("Confessional" poetry)
A: 423

Poetry (Forms) P: 595

Rogaine [drug] See Minoxidil in this index

Rogen, Joe [American baseball player]
Baseball (table: Hall of Fame) B: 135

Roger II [king of Sicily]
Exploration (Muslim exploration) E: 442

Roger II [duke of Apulia]
Ducat D: 373

Roger Williams National Memorial [Rhode Island]
National Park System (table: National memorials) N: 54

Roger Williams Park
Providence (Description) P: 839

Rogers, C. J. [American political leader]
Wyoming (table) W: 532

Rogers, Carl Ransom [American psychologist]
R: 400
Personality (Ratings and self-reports) P: 302
Psychology (Modern psychology) P: 850
Psychotherapy (Humanistic psychotherapy)
P: 852

Rogers, Daniel [American political leader]
Delaware (table) D: 109

Rogers, George [American football player]
Football (table) F: 363

Rogers, Ginger [American actress] R: 400
Motion picture (Best performance by an actress: 1940) M: 862

Rogers, John [American political leader]
Washington (table) W: 65

Rogers, John [American sculptor]
Sculpture (American sculpture) S: 255-256

Rogers, John Jacob [American political leader]
Foreign Service (The Rogers Act) F: 389

Rogers, Joseph W. [American aviator]
Airplane (table) A: 232

Rogers, Kenny [American singer]
Country music (Modern country music)
C: 1098c-1098d

Rogers, Robert [colonial military leader]
Rogers's Rangers R: 401

Rogers, Roy [American actor] R: 400

Rogers, Will [American humorist] R: 400 with portrait
Oklahoma (Visitor's guide) O: 722

Rogers, William Pierce [American government official]
Eisenhower, Dwight David (table) E: 152

Justice, Department of (table) J: 203
State, Department of (table) So: 860

Rogers Act [1924]
Foreign Service (The Rogers Act) F: 389

Rogers's Rangers [U.S. history] R: 401
Rangers R: 139

Roget, Peter Mark [British scholar] R: 401
Roget's Thesaurus of English Words and Phrases [book]
Roget, Peter Mark R: 401

Roggeveen, Jacob [Dutch admiral]
Easter Island E: 45

Samoa (History) S: 80a-80b

Rogue River Wars [1850's]
Indian wars (In California and the Northwest)
I: 194

Oregon (Indian wars) O: 846

Roh Tae Woo [Korean political leader]
Korea (South Korea) K: 377

Roha [ancient city]
Ethiopia (The Zagwé dynasty) E: 371

Rohan, Chevalier de [French public figure]
Voltaire (Imprisonment and early success)
V: 446

Rohrer, Heinrich [Swiss physicist]

Nobel Prizes (Physics: 1986) N: 441

Rohypnol [drug]
Drug abuse (table: Some commonly abused drugs) D: 363; (Club drugs) D: 363

Roi s'amuse, Le [play by Hugo]
Opera (*Rigoletto*) O: 806

Roi-soleil, Le See Louis XIV in this index

Rojankovsky, Feodor [Russian-American artist]
Caldecott Medal (table: 1956) C: 26

Rojas, Fernando de [Spanish dramatist]
Spanish literature (The 1400's) So: 758

Rojas, Manuel [Chilean author]
Latin-American literature (The mid-1900's)
L: 113

Rokko tunnels [Japan]
Tunnel (table) T: 491

Rokossovsky, Konstantin K. [Soviet general]
Poland (Communist rule) P: 613

Roland [literary figure] R: 401

Roland de la Platière, Marie Jeanne [French political leader] R: 401

Roland Park Shopping Center [Baltimore]
Shopping center S: 434

Roldán, Francisco [Spanish jurist]
Columbus, Christopher (Problems in Hispaniola) Ci: 862

Role [drama]
Theater (Creating a role) T: 238

Role, Social [social psychology] See Social role in this index

Role conflict
Social role So: 552

Role model [psychology]
Child (The role of parents) C: 452

Role playing [psychology] R: 401
Sexuality (In childhood) S: 338

Role-playing game
Game (Board games) G: 21-22

Rolfe, John [English colonist] R: 402
Colonial life in America (Jamestown) Ci: 788-789

Jamestown J: 28
Pocahontas P: 588

Powhatan P: 728
Tobacco (History) T: 307

Virginia (Progress of the colony) V: 418

Rolfe, Rebecca See Pocahontas in this index

Rolfe, Thomas [son of]
Pocahontas P: 588

Roll
Airplane (Basic movements and controls)
A: 222 with diagrams

Ship (The chief parts of a ship) S: 424

Roll bar
Automobile racing (Safety measures) A: 975-976

Roll bonding [industrial process]
Welding (Solid-state bonding) W: 189

Roll cage
Automobile racing (Safety measures) A: 975-976

Roll-call vote
Congress of the United States (Passing a bill)
Ci: 945

Parliamentary procedure (Voting on motions)
P: 177

Political convention (Making nominations)
P: 629

Roll-on/roll-off ship
Ship (Roll-on/roll-off ships) S: 419; picture on S: 420

Roll-out [sports]
Football (table) F: 356

Roll sulfur [chemical]
Sulfur (Forms) So: 966-967

Rolland, Romain [French author] R: 402

Roller [bird] R: 402
Bird (Birds of Europe and Asia) B: 346-347 with picture

Roller [tool]
Paint (Applying the paint) P: 25 with pictures

Roller ball pen
Pen (Roller ball pens) P: 234

Roller bandage
Bandage B: 75

Roller bearing
Bearing (Rolling element bearings) B: 189 with diagram

Roller coaster [recreation] R: 402

Roller dam
Dam (Other types of dams) D: 18-19

Roller gin [machine]
Cotton (Ginning and baling) Ci: 1090-1091

Roller hockey

Roller skating (Competitive roller skating)
R: 402-403

Roller mill [paint]
Paint diagram on P: 24

Roller printing
Textile (Finishing the fabric) T: 217

Roller skate
Roller skating (Roller skates) R: 402 with picture

Roller Skates [book by Sawyer]
Sawyer, Ruth S: 168

Roller skating R: 402 with pictures
Nebraska (Interesting facts) N: 95 with picture

Roller-spinning machine
Industrial Revolution (Spinning machines)
I: 248-249

Rollerblades
Roller skating (Roller skates) R: 402 with picture

Rolling [industrial process]
Aluminum (Rolling) A: 395

Iron and steel (Rolling) I: 447 with diagrams

Rolling blackout
California (The beginning of the 2000's) C: 64

Rolling friction
Friction (Kinds of friction) F: 532

Rolling mill
Industrial Revolution (Coal and iron) I: 249

Iron and steel (Rolling) I: 447 with diagrams

Rolling Stone [magazine]
Magazine (Other magazines) M: 42-43

Rolling Stones [musical group] R: 403
Rock music (The Beatles and the British Invasion) R: 378; (New directions and old)

R: 380; picture on R: 376

Rollins, Frank W. [American political leader]
New Hampshire (table) N: 223

Rollo [duke of Normandy]
Normandy N: 456

Normans N: 456
Vikings (The Danish Vikings) V: 383

Rolph, James, Jr. [American political leader]
California (table) C: 59

Rolvæg, Karl F. [American political leader]
Minnesota (table) M: 602

Rölvæg, Ole Edvard [Norwegian-American author]
American literature (Realist fiction) A: 422

ROM [electronics] See Read-only memory in this index

Rom [people]
Gypsies G: 451

Romaine lettuce
Lettuce (Kinds of lettuce) L: 214 with picture

Roman, Andre B. [American political leader]
Louisiana (table) L: 496

Roman alphabet
Alphabet (The Roman alphabet) A: 383 with pictures

Roman bath
Rome (Baths) R: 433

Roman calendar
Calendar (The Romans) C: 30; (The Julian calendar) C: 31

Month M: 767

Roman candle
Fireworks (How fireworks work) F: 135

Roman Catholic Church [religious group]
R: 403 with pictures

Christianity (The 1700's and 1800's) C: 527

Ireland (Way of life) I: 420

Know-Nothings K: 357

Law (The Middle Ages) L: 134

Missionary (Organization) M: 621

Monasticism (Christian monasticism) M: 700-701

Pope P: 660

Religion (How the major religions are organized) R: 218

Religious life R: 226

Riot (During the 1800's) R: 348-349

School (History of Canadian schools) S: 185

Ceremonies, sacraments, and prayers
Roman Catholic Church (Worship) R: 404

Anointing of the sick A: 518
Family (Development of the Western family)
F: 22

Marriage (Laws concerning marriage)
M: 220; (Wedding ceremonies and customs) M: 221

Mass M: 269

Meditation M: 380

Rosary R: 477

Church and state

Argentina (Religion) A: 651 *with picture*
 Bolivia (Religion) B: 444
 Brazil (Religion) B: 575
 Italy (Religion) I: 503 *with picture*; (Social problems) I: 518
 Latin America (Religion) L: 99; (Colonial rule) L: 106
 Liberation theology L: 228
 Mexico (Education) M: 458
 Northern Ireland N: 521; (Protestant settlement) N: 524
 Poland (Religion) P: 605
 Quebec Act Q: 38
 Slavs (West Slavs) S: 505
 Spain (Religion) So: 737 *with picture*
Doctrines and beliefs
 Roman Catholic Church (Roman Catholic beliefs) R: 403
 Apostles' Creed A: 566
 Bible (Modern English translations) B: 286-287; (The Bible in worship) B: 287
 Canonization C: 183
 Catechism C: 299
 Christianity (The Reformation) C: 526
 Grace G: 296
 Immaculate Conception I: 79
 Limbo L: 306
 Mary M: 238
 Old Testament (Contents) O: 740-741
 Philosophy (Medieval philosophy) P: 387
 Pope (The powers of the pope) P: 660
 Purgatory P: 909
 Saint (Roman Catholic saints) S: 30
 Transubstantiation T: 401
 Trinity T: 447
 Vulgate V: 453

History
 Architecture (Baroque architecture) A: 622
 Counter Reformation Ci: 1096
 Eastern Catholic Churches E: 45
 Encyclical E: 265
 Exploration (Spain's conquests in the New World) E: 445
 Galileo (Galileo and the Roman Catholic Church) G: 11
 Government (The Middle Ages) G: 290
 Hispanic Americans (Who are the Hispanic Americans?) H: 245; (In Mexico) H: 247
 Index of Forbidden Books I: 107
 Indulgence I: 240
 Inquisition I: 277
 Mexico (Religion) M: 458
 Middle Ages (The Christian church) M: 523; (The power of the church) M: 525; (Troubles in the church) M: 528
 Mission life in America M: 618 *with picture*
 Painting (Baroque) P: 58
 Papal States P: 132
 Reformation R: 195
 Religion (Christianity) R: 222
 Thirty-Nine Articles T: 259
 Trent, Council of T: 435
 Vatican City V: 287
 Vatican Council I V: 289
 World, History of the (The Byzantine Empire) W: 434 *with pictures*

The Church today
 Abortion (Arguments against abortion) A: 15; (Abortion history) A: 15
 Birth control (Opposition to birth control) B: 379
 Divorce (The divorce rate) D: 254-255
 Parochial school P: 177
 Private school P: 808a
 Vatican Council II V: 289

See also the list of Related Articles in the Roman Catholic Church article

Roman Catholic Union [organization]
 Knights of Saint John K: 352

Roman Circus
 Circus Maximus

Roman de Brut, Le [poem by Wace]
 Knights and knighthood (Knighthood in literature) K: 351

Roman Doric column
 Column (The Roman orders) Ci: 866 *with picture*

Roman Empire [ancient history]
See also Byzantine Empire; Rome, Ancient in this index
 Agriculture (The Roman Empire) A: 155
 Architecture (Roman architecture) A: 616 *with pictures*
 Christianity (The early church) C: 525

Europe (The Roman Empire) E: 408 *with map*
 Flag pictures on F: 216
 Golden Age G: 255
 Middle Ages (The fall of Rome) M: 522
 Rome, Ancient (The Roman Empire) R: 444; (The Roman heritage) R: 448

Armed forces

Archaeology picture on A: 596
 Armor (In early times) A: 720; *picture on* A: 720

Galley G: 15
 Praetorian Guard P: 729

Emperors

See the Emperors of Rome table in the Rome, Ancient article

Governments and law

Caesar C: 12
 Citizenship (History) Ci: 572
 Government (Ancient times) G: 290
 Justinian Code J: 204
 Law (Ancient Roman law) L: 133
 Peace (Ancient Greece and Rome) P: 206
 Postal services (Ancient times) P: 703
 Torture T: 343

Provinces

Bonn (History) B: 461
 Bulgaria (Early history) B: 692
 Colonialism (Ancient colonialism) Ci: 813
 Egypt, Ancient (Roman rule) E: 144
 England (The Roman conquest) E: 303-304
 France (Early days) F: 471
 Gaul G: 70
 Greece, Ancient (Roman rule) G: 374 *with picture*
 Jerusalem (Roman rule) J: 101
 Jews (Roman rule) J: 122
 Middle East (Early civilizations) M: 532-533
 Palestine (Roman rule) P: 104
 Pompeii (Early days) P: 653
 Portugal (Roman rule) P: 692
 Romania (Ancestry) R: 417; (Early days) R: 423
 Spain (Roman conquest) So: 746 *with picture*

Wales (History) W: 12

Republic to empire

Rome, Ancient (The height of the empire) R: 446-447

Actium, Battle of A: 30
 Augustus A: 889 *with map*

The last years

Rome, Ancient (Growing disorder) R: 447-448; (Temporary recovery) R: 448; (Decline and fall) R: 448

Alaric A: 281

Attila A: 879 *with map*

Barbarian B: 104

Goths G: 279

Hun H: 437

Italy (End of the Roman Empire) I: 512-513

Odoacer O: 674

Transportation and trade

Appian Way A: 569 *with picture and map*
 Exploration (The Romans) E: 441

Roman-fleuve [literature]

Rolland, Romain R: 402

Roman Forum

Forum, Roman F: 420 *with picture*
 Rome (Forums) R: 433 *with picture*

Roman gods

Mythology (Roman mythology) M: 981
See also the list of Related Articles in the Mythology article

Roman Hat Mystery, The [book by Queen]
 Queen, Ellery Q: 39

Roman-Kosh [mountain, Ukraine]

Ukraine (The Crimean Mountains) U: 10 *with map*

Roman law

Law (Civil law systems) L: 132; (Ancient Roman law) L: 133

Justinian Code J: 204

Rome, Ancient (The law) R: 444

Twelve Tables, Laws of the T: 531

Roman mile [unit of measure]

Mile M: 542

Roman mythology

Mythology (Roman mythology) M: 981
See also the list of Related Articles in the Mythology article

Roman numerals R: 413

Numeration systems (The Roman numeral system) N: 607

Roman Question [Italian history]

Benedict XV B: 247

Pius XI P: 503

Roman Republic

See also Rome, Ancient in this index

Augustus (Rise to power) A: 889

Rome, Ancient (The Roman Republic) R: 441-444; (History) R: 444-446

See also the Government and History sections in the Related Articles of the Rome, Ancient article

Roman type [printing]

Type (Classes of type) T: 537 *with picture*
 Handwriting (Early forms of writing) H: 49-50

Jenson, Nicolas J: 92

Roman walls [fortifications] R: 414 *with picture*

Romance [literature] R: 414

American literature (The romance) A: 418
 English literature (The development of English romances) E: 315

Fiction (History) F: 90

French literature (Narrative poetry) F: 518

Poetry (Medieval poetry) P: 596

Romance languages R: 415

Spanish literature (The 1400's) So: 758

Romance languages R: 415

Italian language I: 492

Language (Indo-European) L: 64

Romance R: 414

Romance of Renard [poem]

French literature (Narrative poetry) F: 518-519

Romance of the Rose [poem]

French literature (Narrative poetry) F: 518

Romance of the Three Kingdoms [book by Luo

Guanzhong]

Chinese literature (Drama and fiction) C: 512

Romanesque architecture R: 415 *with picture*

Architecture (Romanesque architecture) A: 618 *with picture*; (Early modern architecture in America) A: 629

Leaning Tower of Pisa L: 162 *with picture*

Richardson, Henry Hobson R: 330 *with picture*

Romanesque art

Painting (Romanesque painting) P: 50 *with picture*

Romanesques, Les [play by Rostand]

Rostand, Edmond R: 484

Romani, Felice [Italian author]

Bellini, Vincenzo B: 244

Romania R: 416 *with pictures and maps*

Communism (In Eastern Europe) Ci: 896-897

Moldova M: 690

Transylvania T: 401

Warsaw Pact W: 39

World War I (Eastern Europe) map on W: 459-460

World War II (table: Military casualties) W: 497

See also the list of Related Articles in the Romania article

Romanian Athenaeum

Bucharest B: 662

Romanian Rhapsodies [music by Enesco]

Romania (The arts) R: 419

Romano [cheese]

Cheese (Very hard, or grating, cheese) C: 392 *with picture*

Romanos the Melode [Greek poet]

Greek literature (Medieval literature) G: 378

Romanov [Russian history] R: 426

Romanov, Anastasia [czarina of Russia]

Romanov R: 426

Romanov, Grigoriy Vasilyevich [Soviet political

leader] R: 426

Romanov, Michael [czar of Russia]

Russia (The early Romanovs) R: 549; (table: Czars and empresses) R: 549

Romanow, Roy [Canadian political leader]

Saskatchewan (table) S: 144

Romans, Epistle to the [New Testament]

R: 426

Romans antiques [literature]

French literature (Narrative poetry) F: 518

Romans bretons [literature]

French literature (Narrative poetry) F: 518

Romansh [language]

Saint Moritz S: 51

Switzerland (Language) So: 1053

Romantic comedy

Comedy Ci: 867

Romantic hero [literature]

Romanticism (The qualities of romanticism) R: 427

Romantic movement *See Romanticism in this index*

Romantic School, The [book by Heine]

- Heine, Heinrich H: 167
Romantic tutu [costume]
 Ballet (Sets and costumes) B: 49-50
Romanticism R: 426
 Ballet (Romantic ballet) B: 51
 Classical music (The Romantic era) Ci: 648
 Classicism (The qualities of classicism) Ci: 653
 Criticism (History of literary criticism) Ci: 1146
 Drama (Romanticism) D: 337
 English literature (Romantic literature) E: 319
 Europe (Art since the Renaissance) E: 393
 France (Literature) F: 461-462
 French literature (Romanticism) F: 521
 German literature (Romanticism) G: 141
 Italian literature (Romanticism) I: 495
 Latin-American literature (Romanticism) L: 112
 Novel N: 571; (The 1800's) N: 572
 Opera (Romanticism) O: 798
 Painting (Romanticism) P: 68 *with pictures*
 Poetry (Romantic poetry) P: 597
 Realism R: 171
 Rousseau, Jean-Jacques (His literary influence) R: 493
 Russian literature (The age of romanticism) R: 560
 Scandinavian literature (The Golden Age) S: 171
 Sculpture (European sculpture) S: 253-254 *with picture*
 Shakespeare, William (Romantic criticism) S: 369
 Spanish literature (The 1800's) So: 761
Romanus [pope]
 Pope (table) P: 666
Romany [language]
 Gypsies (Culture) G: 451
Romberg, Sigmund [American composer]
 R: 427
 Musical comedy (The first musicals) M: 959
Rome [Italy] R: 428 *with pictures and maps*
See also Rome, Ancient *in this index*
 Architecture *picture on* A: 607
 City *picture on* Ci: 580
 Italy *pictures on* I: 497
 Vatican City V: 287
See also the list of Related Articles in the Rome article
Rome [New York] R: 435
Rome, Ancient [European history] R: 436 *with pictures and map*
See also Roman Empire *in this index*
 Mythology (Roman mythology) M: 981 *with picture*
 February F: 60
 Name (Beginnings) N: 6
 Rome R: 433 *with pictures and map*
 Art and architecture
 Rome, Ancient (Food, clothing, and shelter) R: 438-439 *with picture*; (Arts and sciences) R: 440-441; (Learning about ancient Rome) R: 448
 Arch A: 593
 Architecture (Roman architecture) A: 616 *with pictures*
 Classical music (Early music) Ci: 645
 Classicism (Rome) Ci: 653
 Colosseum Ci: 849 *with picture*
 Column (The Roman orders) Ci: 866 *with pictures*
 Drama (Roman drama) D: 328
 Hippodrome H: 240
 Latin language L: 114
 Latin literature L: 114
 Novel (Ancient Greek and Roman narratives) N: 572
 Painting (Roman painting) P: 42 *with picture*; (Egyptian painting) P: 40-41
 Pantheon P: 131
 Poetry (Ancient poetry) P: 595-596
 Sculpture (Roman sculpture) S: 247 *with pictures*
 Communications and mass media
 Rome, Ancient (Transportation and communication) R: 440
 Postal services (Ancient times) P: 703
 Defense
 Rome, Ancient (The army) R: 444 *with picture*
 Army (Ancient armies) A: 726
 Germany (Ancient times) G: 162
 Navy (Ancient navies) N: 79
 Education
 Rome, Ancient (Education) R: 437
 Education (Ancient Roman education) E: 98
 Library (Ancient libraries of papyrus) L: 258
 Government
 Rome, Ancient (Government) R: 441-444
 Augur A: 885
 Ballot (Older customs) B: 63
 Census (Early censuses) C: 349
 Consul Ci: 1017
 Democracy (Origins of democracy) D: 122
 Dictatorship D: 191
 Equestrian order E: 347
 Fasces F: 48
 Forum, Roman F: 420 *with picture*
 Freedom (In ancient Greece and Rome) F: 502
 Law (Ancient Roman law) L: 133
 Patricians P: 196
 Plebeians P: 572
 Tribune T: 440
 Triumvirate T: 448
 Twelve Tables, Laws of the T: 531
See also the Emperors of Rome table in the Rome, Ancient article
 Health and welfare
 Bath (History) B: 164 *with picture*
 Fire department (History) F: 128
 Public health (History) P: 857
 History
 England (The Roman conquest) E: 303
 Etruscans (Influence on Rome) E: 374
 Exploration (The Romans) E: 441
 Gaul G: 70
 History (The ancient Greeks and Romans) H: 261
 Lyon L: 537
 Medicine (Greece and Rome) M: 372-373
 Punic Wars P: 903
 Romulus and Remus R: 450
 Sibil S: 446
 Slavery S: 501 *with picture*
 Turkey (History) T: 509
 Utica U: 251
 World, History of the (The Romans) W: 429
 Mining
 Rome, Ancient (Mining) R: 440
 People
 Rome, Ancient (The people) R: 437; (Life of the people) R: 437-439; (Work of the people) R: 439-440
 Boxing (Ancient times) B: 532-533
 City (Ancient cities) Ci: 578 *with picture*
 Clothing (Ancient times) Ci: 696-698 *with picture*
 Cork Ci: 1054
 Family (Ancient families) F: 21-22
 Fire prevention (Fire prevention laws) F: 132
 Food (Ancient times) F: 336
 Furniture (Ancient Rome) F: 570 *with picture*
 Hairdressing (Ancient times) H: 11 *with picture*
 Installment plan (History) I: 304
 Races, Human (Race and discrimination) R: 59
 Ring *picture on* R: 342
 Sabines S: 3
 Shelter (Ancient times) S: 393
 Physical features
 Rome, Ancient (The land) R: 436
 Recreation and sports
 Rome, Ancient (Recreation) R: 439 *with picture*
 Religion
 Rome, Ancient (Religion) R: 437-438
 Bell (History) B: 239
 Galilee G: 10
 Lares and penates L: 76
 New Year's Day (Early customs) N: 289
 Saturnalia S: 153
 Vesta V: 342
 Social and cultural life
 Circus (History) Ci: 562b
 Cremation Ci: 1126
 Gladiator G: 206
 Marriage (Wedding ceremonies and customs) M: 221
 Tomb T: 326
 Women's movements (In ancient societies) W: 384
 Technology and science
 Rome, Ancient (Arts and sciences) R: 440-441 *with picture*
 Aqueduct (Ancient aqueducts) A: 581
 Calendar (History) C: 30
 Drug (Drugs in ancient times) D: 358
 Geology (The Romans) G: 98
 Lighthouse (History) L: 295
 Paint (The history of paint) P: 26
 Pipe (History) P: 489
 Road (The first roads) R: 361
 Science (Ancient Rome) S: 197
 Ship (Roman ships) S: 406 *with pictures*
 Transportation (Ancient Rome) T: 387
 Warship *picture on* W: 42
 Trade
 Rome, Ancient (Trade) R: 440
 Textile (Prehistoric and ancient times) T: 218
 Trade (Early trade) T: 363
 Trade route (Early trade routes) T: 364
 Transportation
 Rome, Ancient (Transportation and communication) R: 440
Rome, King of [son of Napoleon I]
 Napoleon II N: 19
Rome, Treaties of [1957]
 European Union (Formation of the European Community) E: 420
Rome, University of [Italy] R: 449
 Rome (Schools) R: 430 *with picture*; (Period of construction) R: 435
Rome Auditorium [Italy]
 Rome (Recent developments) R: 435
Rome Beauty
 Apple (table) A: 571 *with picture*
Rome-Berlin Axis [World War II]
 Axis A: 995
 Italy (World War II) I: 517
 World War II (Allies) W: 470-471
Rom   de l'  le [French mineralogist]
 Mineral (The scientific study of mineral crystals) M: 571
Romeo and Juliet [opera by Gounod]
 Gounod, Charles G: 281
Romeo and Juliet [play by Shakespeare]
 Shakespeare, William (Romeo and Juliet) S: 358; *picture on* S: 368
"Romeo and Juliet in the Village" [story by Keller]
 Keller, Gottfried K: 254
Romer, Roy [American political leader]
 Colorado (table) C: 844
Romer v. Evans [U.S. history]
 Homosexuality (Attitudes toward homosexuality) H: 307
 Supreme Court of the United States (table) So: 1002
Romero, Carlos Humberto [Salvadoran political leader]
 El Salvador (Recent developments) E: 252
Romero, Oscar Arnulfo [Salvadoran archbishop]
 R: 449
 El Salvador (Recent developments) E: 252
Romero Barcel  , Carlos [Puerto Rican political leader]
 Puerto Rico (Puerto Rico today) P: 884
Rommel, Erwin [German general] R: 450
 Montgomery, Bernard Law M: 766
 World War II (Fighting in Africa) W: 476; (In northern Africa) W: 480; (D-Day) W: 482-483
Romney [West Virginia]
 West Virginia (Interesting facts) W: 207
Romney, George Wilcken [American government official]
 Housing and Urban Development, Department of (table) H: 393
 Michigan (table) M: 507; (The mid-1900's) M: 511
Romney sheep
 Sheep (Long-wooled sheep) S: 382; *picture on* S: 381
Romulo, Carlos Pena [Filipino statesman]
 R: 450
Romulus and Remus [legendary figures] R: 450
 Calendar (The Romans) C: 30
 Mars M: 222
 Mythology (Romulus and Remus) M: 981 *with picture*
 Rome, Ancient (Beginnings) R: 444-445 *with picture*
 Sabines S: 3
Romulus Augustulus [Roman emperor]
 Rome, Ancient (table) R: 447
RON
 Gasoline (Gasoline octane ratings) G: 61
Ronald McDonald House Charities [organization]
 McDonald's Corporation M: 335
Ronald Reagan Building [Washington, D.C.]

Washington, D.C. *map on W: 76*
Ronald Reagan National Airport

Washington, D.C. (Transportation) **W: 84-85**

Roncaglia, Diet of

Adrian IV **A: 67**

Roncelli, Angelo Giuseppe *See* John XXIII *in this index*

Rond de jambe [movement]

Ballet (table) **B: 45**

Rond-Point

Paris (Gardens, squares, and parks) **P: 162**

Rondanini Pietà [sculpture by Michelangelo]

Michelangelo (Later years) **M: 487 with picture**

Rondel [poetry]

Poetry (table) **P: 594**

Rondine, La [opera by Puccini]

Puccini, Giacomo **P: 870**

Rondo [music] **R: 450**

Classical music (Rondo) **Ci: 644**

Ronne, Finn [American explorer]

Antarctica (Exploration by air) **A: 537-538**

Ronsard, Pierre de [French poet] **R: 450**

French literature (The *Pléiade*) **F: 519**

Roof R: 450 with pictures

House (The roof) **H: 382 with diagram**

Pioneer life in America (A pioneer settlement)
P: 479-480

Shelter *picture on S: 392*

Roof comb [architecture]

Maya (Arts and crafts) **M: 325**

Roof of the World [nickname, Pamirs]

Pamirs **P: 112**

Roof of the World [nickname, Tibet]

Tibet **T: 276**

Roof rat

Rat (The body of a rat) **R: 146 with picture**

Rook [bird] **R: 451**

Rook [chess]

Chess (The board and the men) **C: 412 with diagram; (The moves) C: 413**

Rookery [zoology]

Penguin *picture on P: 239*

Rook **R: 451**

Seal (Seal rookeries) **S: 266 with picture**

Rookery building [Chicago]

Root, John Wellborn **R: 475**

Rookwood [book by Ainsworth]

Turpin, Dick **T: 519**

Rookwood pottery

Pottery (Pottery of the 1700's and 1800's)
P: 718-719

Room

Interior design **I: 326 with pictures**

Room air conditioner

Air conditioning (Kinds of air conditioners)

A: 179; (Choosing a window air conditioner) A: 179-180

Room-and-pillar mine

Coal (The room-and-pillar system) **Ci: 723 with diagram**

Mining (Underground mining methods) **M: 576**

Salt (Salt from the ground) **S: 73-74**

Room at the Top [book by Braine]

English literature (Literature after World War II) **E: 322-323**

Room of One's Own, A [essay by Woolf]

Woolf, Virginia **W: 401**

Room service

Hotel **H: 377**

Roosevelt [ship] *See* Theodore Roosevelt *in this index*

Roosevelt, Alice [daughter of]

Roosevelt, Theodore (Life in the White House)
R: 469-470

Roosevelt, Alice Hathaway Lee [wife of]

Roosevelt, Theodore (First marriage) **R: 466 with picture**

Roosevelt, Edith Cerow [wife of Theodore Roosevelt]

First ladies (table) **F: 142**

Roosevelt, Theodore (Second marriage)

R: 467; (Life in the White House) R: 470 with picture

Roosevelt, Eleanor [American stateswoman]

R: 451 with portrait

African Americans (The Great Depression)

A: 1361

First ladies **F: 143**

Franklin Delano Roosevelt Memorial **F: 493**

Roosevelt, Franklin Delano (Roosevelt's family)
R: 454

Truman, Harry S. (First administration) **T: 468**

Roosevelt, Franklin Delano [U.S. President]

R: 452 with pictures

African Americans (The Great Depression)
A: 1361

Asian Americans (Japanese internment)

A: 812e-812f

Atlantic Charter **A: 862 with picture**

Bank (The crisis of 1933) **B: 93-94**

Churchill, Sir Winston Leonard Spencer
 (Meetings with Roosevelt) **C: 548 with picture**

Congress of the United States (Continued struggle for power) **Ci: 948**

Conservation (The rise of the conservation movement) **Ci: 985-986**

Democracy (Famous quotations about democracy) **D: 120**

Democratic Party **D: 124; (The New Deal) D: 127 with picture**

Einstein, Albert (Letter to President Roosevelt)
E: 147

Franklin Delano Roosevelt Memorial **F: 493 with picture**

Freedom (The 1900's) **F: 503**

Garner, John Nance **G: 44**

Great Depression (The New Deal) **G: 341**

Hoover, Herbert Clark (Election of 1932) **H: 330**

Hopkins, Harry Lloyd **H: 333**

Johnson, Lyndon Baines (Election to the House) **J: 146**

Knox, Frank **K: 357**

Monroe Doctrine (The Good Neighbor Policy)
M: 740

National Park System (table: National historic sites) **N: 52-53**

New Deal **N: 200**

New York (Places to visit) **N: 302 with picture; (table) N: 313**

Pearl Harbor (The attack) **P: 218-219**

President of the United States (The rebirth of presidential leadership) **P: 768-769; picture on P: 765**

Presidential assistant **P: 770**

Radio (The Golden Age of Broadcasting) **R: 92-93 with picture**

Roosevelt, Eleanor **R: 451**

Saint Lawrence Seaway (Agreements of 1941 and 1954) **S: 45**

Smith, Alfred Emanuel **S: 516**

Stalin, Joseph (World War II) **So: 827**

Tehran Conference **T: 88**

Union of Soviet Socialist Republics (Results of the war) **U: 37**

United States, History of the (Roosevelt, recovery, and reform) **U: 189**

Wallace, Henry Agard **W: 16**

White House (A new building) **W: 290**

Willkie, Wendell Lewis **W: 314**

Works Progress Administration **W: 405**

World War II (The United States enters the war) **W: 477; (The Allies attack in Europe and Northern Africa) W: 478 with picture**

Roosevelt, James [father of]

Roosevelt, Franklin Delano (Boyhood) **R: 453**

Roosevelt, James [son of]

Roosevelt, Franklin Delano (Roosevelt's family)
R: 454 with picture

Roosevelt, Mertha Bulloch [mother of]

Roosevelt, Theodore (Boyhood and education)
R: 464

Roosevelt, Nicholas J. [American inventor]

R: 463

Roosevelt, Sara Delano [mother of]

Roosevelt, Franklin Delano (Boyhood) **R: 453**

Roosevelt, Theodore [father of]

Roosevelt, Theodore (Boyhood and education)
R: 464

Roosevelt, Theodore [U.S. President] **R: 464 with pictures**

Cleveland, Grover (Governor of New York)
Ci: 670

Congress of the United States (Continued struggle for power) **Ci: 948**

Conservation (The rise of the conservation movement) **Ci: 985 with picture**

Fairbanks, Charles Warren **F: 8**

Football (Changes in the game) **F: 366**

Hawaii (The Territory of Hawaii) **H: 108**

Madeira River **M: 30**

McKinley, William ("President of the whole people") **M: 341; (Assassination) M: 341-342**

Monroe Doctrine (The Roosevelt Corollary)
M: 740

Mount Rushmore National Memorial *picture on M: 887*

Muckrakers **M: 908**

New York (table) **N: 313; (The early 1900's) N: 318**

Panama Canal (The United States and the canal) **P: 125-126 with picture**

President of the United States (The rebirth of presidential leadership) **P: 768-769; picture on P: 765**

Progressive Party (The "Bull Moose" Party)
P: 814

Republican Party (The party splits) **R: 256**

Rough Riders **R: 490**

Russo-Japanese War (Treaty of Portsmouth)
R: 566

Spanish-American War (Land battles) **So: 754**

Taft, William Howard (Secretary of war) **T: 10; (Election of 1912) T: 12**

Theodore Roosevelt National Park **T: 252**

Tyler, John **T: 532**

United States, History of the (The Progressive Era) **U: 181-182; (A world power) U: 183**

Vice President of the United States (table)
V: 351

White House (A new building) **W: 290**

White House conference **W: 291**

Wilson, Woodrow (Presidential candidate)
W: 322

Roosevelt, Theodore, Jr. [American government official] **R: 473**

American Legion (History) **A: 413**

Roosevelt and Hopkins: An Intimate History [book by Sherwood]

Sherwood, Robert Emmet **S: 398**

Roosevelt Campobello International Park

[New Brunswick] **R: 473**

New Brunswick (Places to visit) **N: 188 with picture**

Roosevelt Corollary [American history]

Monroe Doctrine (The Roosevelt Corollary)
M: 740

Roosevelt, Theodore (Foreign policy) **R: 469**

Roosevelt Dam [Salt River, Arizona] **R: 473**

Phoenix (History) **P: 398-399**

Roosevelt Island [New York]

New York City (Small islands) **N: 330**

Roosevelt Memorial [Washington, D.C.] *See* Franklin Delano Roosevelt Memorial *in this index*

Roost

Bird (Sleeping and resting) **B: 355**

Roosters [play by Sanchez-Scott]

Hispanic Americans *picture on H: 248*

Root [anatomy]

Hair (The root and shaft) **H: 9 with diagram**

Teeth (Kinds of teeth) **T: 79; (Pulp) T: 80 with diagram**

Root [aviation]

Airplane (The wing) **A: 213**

Root [botany] **R: 473 with diagrams**

Corn (How the plant develops) **Ci: 1057-1058 with picture**

Mangrove **M: 140 with picture**

Plant (Roots) **P: 529 with pictures;**

(Germination) **P: 536 with pictures;**

(Factors affecting plant growth) **P: 538-539 with picture**

Sap (Vascular sap) **S: 121**

Tree (Roots) **T: 417 with diagram**

Vegetable (Roots) **V: 292 with picture**

Root [mathematics] **R: 473**

Algebra (Statements and equations) **A: 351**

Logarithms (Finding a root) **L: 424**

Root [spelling]

Spelling (Adding new words) **So: 777**

Root, Elihu [American statesman] **R: 475**

Nobel Prizes (Peace: 1912) **N: 447 with portrait**

United States Army War College **U: 198**

Root, John Wellborn [American architect]

R: 475

Architecture (Early modern architecture in America) **A: 629**

Burnham, Daniel Hudson **B: 709**

Root canal

Teeth (Pulp) **T: 80 with diagram**

Root canal therapy

Dentistry (Endodontics) **D: 144**

Teeth (Dental decay) **T: 82-83**

Root cap [botany]

Plant (Roots) **P: 529 with picture**

Root (The root tip) **R: 474 with diagram**

"Root Celler" [poem by Roethke]

Poetry (Forms) **P: 595**

Root hair [botany]

- Plant (Roots) P: 529 *with picture*
 Root (The outer tissues) R: 474; *diagram on*
 R: 473
 Tree (Roots) T: 417
- Root-Takahira Agreement** [1908]
 Roosevelt, Theodore (Friction with Japan)
 R: 471
- Roots** [book by Haley]
 American literature (Works by minority writers) A: 425
 Haley, Alex H: 19
- "Roots"** [television program]
 Television (The 1970's) T: 119-120
- Rootstock** [botany]
 Apple (Planting and caring for apple trees)
 A: 571
 Fruit (Growing fruit) F: 545
 Grafting G: 298 *with picture*
 Lemon (Growing lemons) L: 188
- Rope R: 475** *with pictures*
 Cowboy (His rope) Ci: 1109 *with picture*
 Knots, hitches, and splices K: 355
 Macramé M: 26
- Rope and Faggot** [book by White]
 White, Walter Francis W: 285
- Roper, Daniel C.** [American government official]
 Commerce, Department of (table) Ci: 871
 Roosevelt, Franklin Delano (table) R: 458
- Roper, Elmo** [American statistician]
 Public opinion poll (History) P: 863
- Roper, Sylvester H.** [American inventor]
 Automobile (The steam car) A: 962
- Roper, William** [English biographer]
 Biography (The Renaissance) B: 313
- Ropin' the Wind** [recording]
 Brooks, Garth B: 641
- Roquefort** [food]
 Cheese (Semisoft cheese) C: 392 *with picture*
 Mold M: 690
- Rorqual**
 Whale (Rorquals) W: 255; (Skin and blubber)
 W: 259
- Rorschach test** [psychology]
 Personality (Projective tests) P: 302
- Rosa, João Guimarães** [Brazilian author]
 Brazil (The arts) B: 576-577
- Rosales, Luis** [Spanish poet]
 Spanish literature (The Generation of 1927)
 So: 763
- Rosalie** [mansion]
 Mississippi *picture on* M: 622
- Rosario** [Argentina] R: 477
- Rosary** [religion] R: 477
 Meditation M: 380
- Rosary pea** [seed]
 Poisonous plant P: 602
- Rosas, Juan Manuel de** [Argentine political leader]
 Argentina (Forming a national government)
 A: 657
 Pedro II P: 228
- Rosat** [satellite]
 Astronomy (X-ray astronomy) A: 844-845
 Telescope *pictures on* T: 107
- Rosberg, Keke** [Finnish race car driver]
 Automobile racing (table: Grand Prix world champions) A: 980
- Roscius, Quintus** [Roman actor] R: 477
- Roscoe Village** [Coshocton]
 Ohio (Places to visit) O: 690 *with picture*
- Rose** [plant] R: 477 *with pictures*
 Attar A: 878
 Eglantine E: 119
 Flower (Garden perennials) F: 281 *with picture*; F: 301 *with picture*
 Heraldry *picture on* H: 195
 Rose water R: 480
- Rosé** [wine]
 Wine (Types of wine) W: 336
- Rose, Ernestine Potowski** [American social reformer] R: 479
- Rose, Sir John** [Canadian political leader] R: 479
- Rose, Mauri** [American race driver]
 Automobile racing (table: Indianapolis 500 winners) A: 980
- Rose, Murray** [Australian swimmer]
 Swimming (History) So: 1048
- Rose, Pete** [American baseball player] R: 479
 Baseball (table: Modern major league records)
 B: 137; (Recent developments) B: 137-139 *with picture*
- Rose Bowl**
 California (Visitor's guide) C: 46
 Pasadena P: 189
- Rose-breasted grosbeak**
 Grosbeak G: 398 *with picture*
- Rose bug** [insect]
 Rose chafer R: 480 *with picture*
- Rose Center for Earth and Space** [New York City]
 Planetarium (Modern planetariums) P: 514a-514b; *picture on* P: 514
- Rose chafer** [insect] R: 480 *with picture*
- Rose comb**
 Chicken (Kinds of chickens) C: 441 *with picture*
- Rose-cut**
 Gem (Types of gem cuts) *pictures on* G: 79
- Rose Garden** [book by Saadi]
 Saadi S: 2
- Rose geranium** [plant]
 Geranium G: 136 *with picture*
- Rose-Marie** [operetta by Friml]
 Friml, Rudolf F: 534
- Rose moss** [plant]
 Portulaca P: 696
- Rose of Jericho** [plant]
 Resurrection plant R: 264
- Rose of Lima, Saint** [Peruvian religious figure]
 R: 480
- Rose of Sharon** [plant] R: 480
 Flower (Garden perennials) F: 281 *with picture*
 Hibiscus H: 222
- Rose Parade** [Pasadena]
 California *picture on* C: 47
- Rose Period**
 Picasso, Pablo (The Rose Period) P: 448a *with picture*
- Rose quartz** [mineral]
 Gem *picture on* G: 78
 Quartz (Types) Q: 8
- Rose-ringed parakeet** [bird]
 Parrot (Kinds of parrots) P: 179
- Rose Test Gardens, International**
 Portland [Oregon] (Education and cultural life)
 P: 683-684
- Rose water R: 480**
- Rose window**
 Stained glass (Technical improvements)
 So: 823
 Window W: 334
- Roseate spoonbill**
 Spoonbill So: 801 *with picture*
- Roseau** [Dominica] R: 480
 Dominica D: 302
- Rosebay** [shrub]
 Rhododendron R: 318 *with picture*
- Rosebery, Earl of** [British political leader]
 United Kingdom (table: British prime ministers) U: 72
- Rosebud, Battle of** [1876]
 Indian wars (The Sioux wars) I: 194
- Rosecrens, William Starke** [Union general]
 R: 480
 Civil War (Battle of Stones River) Ci: 630;
 (Battle of Chickamauga) Ci: 630
- Rosella** [bird]
 Parrot (Kinds of parrots) P: 179
- Rosemary** [shrub] R: 480
- Rosenberg, Alfred** [Nazi war criminal] R: 481
 Hitler, Adolf (Rise of the Nazis) H: 266
- Rosenberg, Julius and Ethel** [American public figures] R: 481
- Rosenberger v. University of Virginia** [U.S. history]
 Supreme Court of the United States (Church and state) So: 1001
- Rosenborg Palace** [Copenhagen]
 Christian IV C: 522d
- Rosencrantz and Guildenstern Are Dead** [play by Stoppard]
 Stoppard, Tom So: 911
- Rosenkavalier, Der** [opera by Strauss]
 Opera (Richard Strauss) O: 799;
 (Rosenkavalier, Der) O: 807 *with picture*
 Strauss, Richard So: 922
- Rosenquist, James Albart** [American painter]
 R: 481
 Painting (Pop art) P: 86
 Pop art P: 659
- Rosenthal, Joe** [American photographer]
 Iwo Jima *picture on* I: 523
- Roses, Tournament of**
 California (Visitor's guide) C: 46
- Roses, Wars of the** *See Wars of the Roses in this index*
- Rose's toad**
 Toad (Kinds of toads) T: 304
- Rosetta stone R: 481** *with picture*
 Egypt, Ancient (Learning about ancient Egypt)
 E: 144
 Hieroglyphics (Deciphering hieroglyphic writing) H: 226
- Rosewood** [tree product] R: 482
 Wood *picture on* W: 389
- Rosh Ha-Shanah** [religion] R: 482
 Feasts and festivals (In Judaism) F: 58
 Judaism (The High Holidays) J: 181
 September S: 308
- Rosicrucian Order** [organization] R: 482
 Magic (During the Middle Ages) M: 50
- Rosicrucian Park**
 San Jose (Recreation) S: 101
- Rosie the Riveter**
 United States, History of the (The war effort)
 U: 190
 World War II *picture on* W: 494
- Rosie the Riveter National Historical Park**
 [California]
 National Park System (table: National historical parks) N: 57
- Rosin R: 482**
 Resin R: 259
- Rosina** [opera character]
 Opera (*Barber of Seville, The*) O: 801 *with picture*
- Rosini, Paul** [American magician]
 Magician (Sleight of hand) M: 51
- Roskilde, Treaty of** [1658]
 Sweden (The age of expansion) So: 1033
- Rospigliosi Cup**
 Shell *picture on* S: 390
- Ross, Alexander** [Scottish-born explorer] R: 482
- Ross, Araminta** [American social reformer] *See*
 Tubman, Harriet *in this index*
- Ross, Betsy** [American public figure] R: 483
 Flag (First United States flags) F: 208-210
- Ross, C. Ben** [American political leader]
 Idaho (table) I: 42
- Ross, Diana** [American singer]
 Gordy, Berry, Jr. G: 273
 Rock music (Expanding styles and sounds)
 R: 378-379
- Ross, Edmund Gibson** [American political leader] R: 483
- Ross, George** [American patriot] R: 483
- Ross, George W.** [Canadian political leader]
 Ontario (table) O: 783
- Ross, Harold Wallace** [American editor] R: 483
- Ross, J. H.** *See* Lawrence, T. E. *in this index*
- Ross, Sir James Clark** [British explorer] R: 483
 Antarctica (Early exploration) A: 535-536
 Boothia Peninsula B: 481
 Exploration (The exploration of Antarctica)
 E: 450 *with map*
- Ross, John** [American Indian chief] R: 483
 Oklahoma (The Civil War) O: 731
 Trail of Tears T: 368
- Ross, John** [husband of]
 Ross, Betsy R: 483
- Ross, Sir John** [Scottish explorer]
 Boothia Peninsula B: 481
 Northwest Passage N: 528
- Ross, John Jones** [Canadian political leader]
 Quebec (table) Q: 29
- Ross, Lawrence S.** [American political leader]
 Texas (table) T: 203
- Ross, Malcolm** [American balloonist]
 Balloon (Balloon explorations of the upper atmosphere) B: 61-62 *with picture*
- Ross, Nellie Tayloe** [American political leader]
 R: 483
 Wyoming W: 517; (table) W: 532; (Progress as a state) W: 536; *picture on* W: 535
- Ross, Robert** [British general]
 Maryland (The War of 1812 and industrial development) M: 258
 War of 1812 (Campaigns of 1814) W: 31
- Ross, Shapley P.** [American settler]
 Waco W: 2
- Ross, Sinclair** [Canadian author]
 Canadian literature (Literature between the world wars) C: 159-160
- Ross, William B.** [American political leader]
 Ross, Nellie Tayloe R: 483
 Wyoming (table) W: 532
- Ross, William H.** [American political leader]
 Delaware (table) D: 109
- Ross Dam** [Skagit River, Washington] R: 483
- Ross Dependency** [region, Antarctica] R: 484
- Ross House** [post office]
 Winnipeg (Cultural life) W: 341

- Ross Ice Shelf** [region, Antarctica]
Amundsen, Roald (The race to the South Pole)
A: 445
Antarctica (Early exploration) A: 535-536
Exploration (The exploration of Antarctica)
E: 450
Glacier *picture on G*: 203
- Ross Lake National Recreation Area**
[Washington]
National Park System (table: National recreation areas) N: 49
- Ross Sea** [bay]
Antarctica (Coastal waters) A: 534
Exploration (The exploration of Antarctica)
E: 450
Southern Ocean (Boundaries) So: 688
- Ross Trophy**
Hockey (Professional leagues) H: 279-280
- Rossbach, Battle of** [1757]
Seven Years' War (In Europe) S: 328
- Rossby, Carl-Gustaf** [Swedish-American meteorologist]
Meteorology (History) M: 433
- Rosse, Lord** [British astronomer]
Astronomy (Discovering other galaxies) A: 848
- Rosseau Lake** [Ontario]
Muskoka Lakes M: 963
- Rossellini, Albert D.** [American political leader]
Washington (table) W: 65
- Rossellini, Roberto** [Italian director]
Motion picture (Postwar realism) M: 869
- Rossellino, Antonio** [Renaissance sculptor]
Sculpture (Early Renaissance) S: 252
- Rosselló, Pedro J.** [Puerto Rican political leader]
Puerto Rico (Puerto Rico today) P: 884
- Rossetti, Christina Georgina** [British poet]
R: 484
March (Quotations) M: 195
- Rossetti, Dante Gabriel** [British artist] R: 484
with picture
Ballade B: 43
Painting (The Pre-Raphaelite Brotherhood)
P: 71
Pre-Raphaelite Brotherhood P: 756
- Rossi, Carlo** [Italian architect]
Saint Petersburg [Russia] S: 54
- Rossignol, Lake**
Nova Scotia (Rivers and lakes) N: 562-564
- Rossini, Gioacchino Antonio** [Italian composer]
R: 484
Opera (*Barber of Seville, The*) O: 801 *with picture*
- Rossio**
Lisbon *picture on L*: 348
- Rossiter, Thomas P.** [American painter]
United States, History of the *picture on U*: 162
- Rosso antico** [china]
Wedgwood ware W: 179
- Ross's Landing**
Chattanooga C: 388
- Rosta Agency** [news service]
TASS T: 50
- Rostand, Edmond** [French author] R: 484
- Rostankowski, Dan** [American political leader]
Congress of the United States (Congressional ethics) Ci: 948
- Rostock** [city, Germany] R: 484
- Rostov-on-Don** [city, Russia] R: 485
- Rostropovich, Mstislav** [Russian musician]
R: 485
- Roswell** [New Mexico] R: 485
New Mexico (table: Average monthly weather)
N: 268
- Rosy boa** [snake]
Boa B: 426
- Rosy wolf snail** [animal]
Invasive species (Managing invasive species)
I: 354k
- Roszak, Theodore** [American sculptor] R: 485
with picture
- Rot** [plant disease] R: 485
Alfalfa (Diseases and pests) A: 347
Cotton (Diseases) Ci: 1090
- Rotary club** [organization]
Rotary International R: 486
- Rotary dial**
Telephone (The dialing mechanism) T: 94-95
- Rotary drilling**
Drill (Rock drills) D: 348
Petroleum (Methods of drilling) P: 338 *with picture*
- Rotary engine** R: 485 *with diagrams*
Gasoline engine (Kinds of gasoline engines)
G: 63-64 *with diagram*
- Rotary International** [organization] R: 486 *with picture*
- Rotary kiln**
Furnace (Heating the charge) F: 567
- Rotary motion** [physics]
Gear G: 75
Machine *diagram on M*: 13
Pneumatic tool P: 586
- Rotary plow**
Plow (Other types of bottoms) P: 576 *with picture*
Road (Clearing ice and snow) R: 360
- Rotary press**
Newspaper (Printing the newspaper) N: 385
with picture
Printing (Letterpress printing) P: 799-800;
(Offset presses) P: 798; (Gravure presses)
P: 800 *with diagram*
- Rotary pump**
Pump (Rotary pumps) P: 899
- Rotary screen printing**
Textile (Finishing the fabric) T: 217 *with picture*
- Rotary wing aircraft**
Autogiro A: 942 *with picture*
Helicopter (Lift) H: 171 *with diagram*
- Rotating gun turret**
Warship (Warships of the 1800's) W: 41
- Rotating reference frame** [physics]
Centrifugal force C: 357
- Rotating shutter** [photography]
Motion picture (The projector) M: 859 *with diagram*
- Rotation** [astronomy]
Coriolis effect Ci: 1053
Earth (How Earth moves) E: 17 *with diagram*
Moon (Rotation and orbit) M: 783
Planet (Rotation) P: 510
Weather (Planetary-scale systems) W: 158
- Rotation** [game]
Billiards (Pool) B: 306
- Rotation of crops**
Cropping system Ci: 1153
- Rotational axis** *See* Axis of rotation *in this index*
- Rotational grazing**
Alfalfa (Uses of alfalfa) A: 346
- Rotational molding**
Doll (The doll industry today) D: 293
Plastics (Making plastic products) P: 557-558
- Rotavirus** [virus]
Disease D: 227
- Rotblat, Joseph** [British social reformer]
Nobel Prizes (Peace: 1995) N: 449
- ROTC**
Reserve Officers Training Corps R: 258
- Rotenone** [insecticide] R: 487
Insecticide (Botanical insecticides) I: 302
Jicama J: 126
- Roth, Henry** [American author] R: 487
- Roth, Mark** [American bowler] R: 487
- Roth, Philip** [American author] R: 487
Novel (The middle and late 1900's) N: 575
- Roth, William Victor, Jr.** [American political leader]
Kemp, Jack French K: 258
- Roth v. United States** [U.S. history]
Obscenity and pornography (In the United States) O: 643-644
Supreme Court of the United States (table)
So: 1002
- Rothenberg, Susan** [American artist]
Painting (New image painting) P: 87 *with picture*
- Rothermel, Peter Fraderick** [American painter]
Henry, Patrick *picture on H*: 190
- Rothko, Mark** [American painter] R: 487 *with picture*
Painting (Abstract expressionism) P: 84-85
- Rothschild** [European bankers] R: 488
- Rothschild, Amschel Mayer** [German banker]
Rothschild, Mayer Amschel R: 488
- Rothschild, Evelyn de** [British banker]
Rothschild, Guy de R: 488
- Rothschild, Guy de** [German banker] R: 488
- Rothschild, Housa of** [European history]
Rothschild R: 488
- Rothschild, James Mayer** [German banker]
Rothschild, Mayer Amschel R: 488
- Rothschild, Karl Mayer** [German banker]
Rothschild, Mayer Amschel R: 488
- Rothschild, Lionel** [British political leader]
R: 488
- Rothschild, Mayer Amschel** [German banker]
R: 488
- Rothschild, Nathan Mayer** [1777-1836,
German banker] R: 488
- Rothschild, Nathan Mayer** [1840-1915, British
political leader]
Rothschild, Lionel R: 488
- Rothschild, Salomon Mayer** [German banker]
Rothschild, Mayer Amschel R: 488
- Rotifer** [microorganism] R: 488 *with pictures*
Animal (A classification of the animal kingdom)
A: 506 *with picture*
- Rotogravure** [printing]
Printing (Gravure cylinders) P: 800 *with diagram*
Offset O: 678
- Rotor** [aviation]
Helicopter (Types of helicopters) H: 170-171
with diagrams
- Rotor** [mechanics]
Electric generator (Parts of a generator) E: 171
Electric motor (AC motors) E: 181 *with picture*
Electric power (Sources of electric power)
E: 182 *with diagram*
Ignition (The conventional electronic ignition
system) I: 49-50
Pneumatic tool P: 586
- Rotten borough** [English history]
Borough B: 491
- Rotterdam** [The Netherlands] R: 488
Europe *picture on E*: 405
Netherlands (World War II) N: 149 *with picture; picture on N*: 147
- Rotting** [industrial process]
Hemp H: 184
- Rotweiler** [dog] R: 489 *with picture*
- Rotunda** [U.S. Capitol]
Capitol, United States C: 196
Washington, D.C. *picture on W*: 72
- Rouault, Georges** [French artist] R: 489 *with picture*
Stained glass (Decline and revival) So: 823
- Rouble** [money]
Ruble R: 508
- Roue, William J.** [marine architect]
Bluenose B: 424
- Rouen** [France] R: 489 *with picture*
- Rouen Cathedral, Full Sunlight** [painting by
Monet]
Painting *picture on P*: 35
- Rouge** [abrasive]
Grinding and polishing (Polishing) G: 395
- Rouget de Lisle, Claude Joseph** [French composer]
"Marseillaise" M: 227
- Rough**
Golf (The fairway) G: 261 *with picture*
- Rough carpentry**
Carpentry C: 246
- Rough cut**
Motion picture (The rough and fine cuts)
M: 855
- Rough green snake**
Snake *picture on S*: 532
- Rough hardwood dimension**
Lumber (Hardwood lumber) L: 517
- Rough-legged hawk**
Hawk (North American hawks) H: 111
- Rough lumber**
Lumber (Kinds of lumber) L: 517; (Grading
lumber) L: 519
- Rough rice**
Rice (How rice is processed) R: 326
- Rough Riders** [U.S. history] R: 490
Knox, Frank K: 358
Roosevelt, Theodore (The Rough Riders)
R: 467; *picture on R*: 468
Spanish-American War (Land battles) So: 754
with picture
Wood, Leonard W: 390
- Rough stock event**
Rodeo R: 397
- Roughage** [diet] *See* Fiber, *Dietary in this index*
- Roughage feed**
Beef (Food value) B: 211
Feed F: 67
- Roughing**
Football (Violations and penalties) F: 363-364
- Roughing It** [book by Twain]
Twain, Mark (Newspaper work in the West)
T: 528
- Roughing It in the Bush** [book by Moodie]
Moodie, Susanna M: 781
- Roughing mill** [machine]
Iron and steel (Ingot casting) I: 445-447 *with diagram*

- Roughneck** [job]
Petroleum (table) P: 331; (Methods of drilling) P: 338-339 *with picture*
- Roughriders, Saskatchewan**
Football (Canadian Football League) F: 364
- Roughy** [fish] R: 490 *with picture*
- Rougon-Macquart, The** [books by Zola]
French literature (Naturalism) F: 522
Zola, Émile Z: 602
- Rouleau, Félix R. Cardinal** [Canadian religious leader]
Cardinal (table: Canadian cardinals) C: 211
- Roulette** [gambling] R: 490
- Roulette** [stamp collecting]
Stamp collecting (Separations) So: 830
- Round** [ammunition]
Ammunition (Small-arms ammunition) A: 435
- Round** [food]
Cheese (Packaging) C: 394
- Round** [music]
Canon C: 182
- Round** [sports]
Boxing (Time periods) B: 528
Golf (The course) G: 260
- Round dance** [ceremony]
Indian, American (Indians of the Great Basin) I: 164-165
- Round Hill School** [Northampton, Massachusetts]
Bancroft, George B: 73.
- Round Island boa** [snake]
Snake (Round Island boas) S: 535
- Round-leaved sundew** [plant]
Sundew So: 990
- Round Midnight** [music by Monk]
Monk, Thelonious M: 725
- Round system**
Boxing (Scoring a fight) B: 528-529
- Round Table** [English legend] R: 490
Arthur, King A: 757
English literature (The development of English romances) E: 315
Holy Grail (The search for the Grail) H: 298 *with picture*
Lancelot, Sir L: 56
Launfal, Sir L: 121
- Round timber**
Forest products (Round timbers) F: 400 *with picture*
- Round window** [anatomy]
Ear (The inner ear) E: 8 *with diagrams*
- Rounders** [sport]
Baseball (Rounders) B: 132
- Roundheads** [English history]
England (The Civil War) E: 308
Hairdressing (The 1600's) H: 12
- Roundup**
Cowboy (The roundup) Ci: 1111
North Dakota *picture on N: 497*
Western frontier life in America (Life in the country) W: 237
- Roundworm R: 491**
Animal (A classification of the animal kingdom) A: 506 *with picture*
Cat (Veterinary care) C: 295
Disease (Other infectious diseases) D: 227-228
Dog (Medical care) D: 279
Human Genome Project H: 427
Nematode N: 123
Parasite (Parasites that feed on people and animals) P: 154
Worm (Roundworms) W: 501 *with pictures*
- Rous, Francis Peyton** [American physiologist] R: 491
- Roush, Edd** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Rousseau, Henri** [French painter] R: 492
- Rousseau, Jean-Jacques** [French philosopher] R: 492 *with portrait*
Age of Reason A: 138
French literature (The Age of Reason) F: 520; (The preromantics) F: 521
Philosophes P: 382
Political science (Liberalism) P: 639; (Democracy and socialism) P: 639
Romanticism (Romanticism and society) R: 427
- Rousseau, Judge of Jean Jacques** [book by Rousseau]
Rousseau, Jean-Jacques (Later life) R: 492
- Rousseau, Théodore** [French painter]
Barbizon School B: 108 *with picture*
- Roustabout** [career]
Circus (Behind the scenes) Ci: 562
- "Route of Evanescence, A"** [poem by Dickinson]
Dickinson, Emily (Her life) D: 190
- Route 66** [highway] R: 493
- Router** [electronic device]
Internet *picture on I: 350c*
- Router** [tool]
Woodworking (Cutting) W: 397
- Routes of trade** *See Trade route in this index*
- Routhier, Sir Adolphe Basile** [Canadian judge] "O Canada" O: 635
- Routt, John L.** [American political leader]
Colorado (table) Ci: 844; (Statehood) Ci: 845
- Rouvroy, Claude Henri de** [French philosopher]
Saint-Simon, Comte de S: 56
- ROV** [vehicle] *See Remotely operated vehicle in this index*
- Rova beetle** [insect]
Beetle (Rove beetles) B: 217; *picture on B: 218*
- Rover** [rank]
Scouts Canada (Age groups) S: 224
- Rovert, Francesco della** *See Sixtus IV in this index*
- Rovert, Giuliano della** *See Julius II in this index*
- Roving** [yarn]
Cotton (Spinning) Ci: 1091; *picture on Ci: 1092*
Philadelphia (Housing) P: 363 *with picture*
San Francisco (Housing) S: 94
Wales (Way of life) W: 9
- Row planter** [agriculture]
Corn *picture on Ci: 1062*
- Rowan, Carl Thomas** [American journalist] R: 493
Spingarn Medal (table: 1997) So: 793
- "Rowan and Martin's Laugh-In"** [television program]
Television (The 1960's) T: 119
- Rowan tree**
Mountain ash M: 897
- Rowboat**
Boating (Types of boats) B: 428; *picture on B: 430*
Rowing R: 493
Transportation (Water transportation) T: 384-385
- Rowe, Nicholas** [English poet]
Poet laureate (table: Poets laureate of the United Kingdom) P: 590
- Rowel**
Cowboy (His clothing) Ci: 1108-1109
Horse (Spurs) H: 351
- Rowing** [sport] R: 493
Olympic Games (Summer Olympic Games) O: 746e-747
- Rowland, Frank Sherwood** [American chemist]
Nobel Prizes (Chemistry: 1995) N: 443
- Rowland, Henry Augustus** [American physicist] R: 494
- Rowland, John G.** [American political leader]
Connecticut (table) Ci: 967
- Rowlandson, Mary** [American colonist]
Colonial life in America (Literature) Ci: 806
- Rowlatt bills** [1919]
Gandhi, Mohandas Karamchand (Gandhi's independence campaigns) G: 25
- Rowling, J. K.** [British author] R: 494
Literature for children (Fiction) L: 358-359; *picture on L: 377*
Potter, Harry P: 715
- Roxane** [wife of]
Alexander the Great (Central Asia and the Indus) A: 343
- Roxas y Acuña, Manuel** [Filipino political leader] R: 494
Philippines (Independence) P: 380
- Roxbury** [district, Boston]
Boston (The south side) B: 500
- Roy, Arundhati** [Indian author]
Novel (The novel today) N: 575
- Roy, Gabrielle** [Canadian author] R: 494
Canadian literature (Modern literature: 1945 to the present) C: 160
- Roy, Louis** [Canadian publisher]
Ontario (Communication) O: 782
- Roy, Maurice Cardinal** [Canadian religious leader]
Cardinal (table: Canadian cardinals) C: 211
- Roy, Ram Mohan** [Indian religious leader] R: 494
- Roy, Rob** [Scottish bandit] *See Rob Roy in this index*
- Royal, Mount** (Quebec)
Cartier, Jacques (Exploration of Canada) C: 262
Montreal M: 768; (Parks) M: 774
Quebec (Land regions) Q: 22
- Royal Academy of Arts** [Great Britain]
Gainsborough, Thomas G: 7
Kauffmann, Angelica K: 249
Reynolds, Sir Joshua R: 289
- Royal Academy of Dancing** [French history]
Ballet (The rise of professional ballet) B: 51
- Royal Academy of Music** [French history]
Ballet (The rise of professional ballet) B: 51
- Royal Academy of Painting and Sculpture** [France]
Painting (Classicism) P: 61
- Royal Air Force**
Air force (The British Air Force) A: 184; (History) A: 184-185
Flag *picture on F: 195*
World War II (The Battle of Britain) W: 475
- Royal and Ancient Golf Club** [Scotland]
Golf (Beginnings) G: 264
Scotland (Recreation) S: 214 *with picture*
- Royal and Pontifical University**
Mexico, National Autonomous University of M: 475
- Royal Ascot** [horse race]
Horse racing (Types of horse races) H: 364
United Kingdom *picture on U: 57*
- Royal Astronomical Society** [United Kingdom]
Astronomy (Astronomy associations) A: 849-850
- Royal Astronomical Society of Canada** [organization]
Astronomy (Astronomy associations) A: 849-850
- Royal Ballet** [United Kingdom]
Ballet *picture on B: 44*
De Valois, Ninette D: 173
Dolin, Anton D: 285
Fonteyn, Margot F: 327
- Royal Bank** [French history]
Law, John L: 141
- Royal Botanic Gardens** [London]
London (Parks) L: 435-436
- Royal Botanical Gardens** [Canada]
Hamilton (The city) H: 30 *with map*; (Cultural life) H: 31
Ontario (Places to visit) O: 774
- Royal Canadian Air Force**
Canada, Armed Forces of (Organization) C: 128
- Royal Canadian Legion** R: 495
Veterans' organizations (In Canada) V: 345
- Royal Canadian Mint** [Ottawa]
Canada, Government of (Money and taxation) C: 138
- Royal Canadian Mounted Police** R: 495 *with pictures*
Alberta (Early settlement) A: 329
Clothing *picture on Ci: 691*
Police (In Canada) P: 623 *with picture*
Saskatchewan (Places to visit) S: 136 *with picture*
- Royal Canadian Navy** [Canadian history]
Canada, Armed Forces of (Organization) C: 128
- Royal Chitwan National Park** [Nepal]
National park (table) N: 42f
- Royal colony** [U.S. history]
Colonial life in America (Changes in colonial control) Ci: 790
- Royal comb venus** [sea animal]
Shell *picture on S: 387*
- Royal Commentaries** [book by de la Vega (El Inca)]
Latin-American literature (Colonial literature) L: 111
- Royal crown**
Crown Ci: 1158 *with pictures*
- Royal Dutch Petroleum Company**
Royal Dutch/Shell Group R: 498
- Royal Dutch/Shell Group** [company] R: 498
Manufacturing (table) M: 170
- Royal family** [Great Britain]
Elizabeth II (The royal family) E: 240
- Royal fern** [plant]
Fern (Kinds of ferns) F: 75-76

Royal Festival Hall
London (The arts) L: 433

Royal Fireworks Music [music by Handel]
Handel, George Frideric (His work) H: 42-43

Royal flush
Poker P: 603

Royal Flying Doctor Service See Flying Doctor Service *in this index*

Royal Geographical Society R: 498

Royal Gorge [canyon, Colorado] R: 498
Colorado (Places to visit) Ci: 836; (Rivers and lakes) Ci: 840

Royal Greenwich Observatory See Greenwich Observatory, Royal *in this index*

Royal Guipuzcoana Company
Venezuela (European exploration and settlement) V: 304

Royal Hibernian Academy
Ireland (The arts) I: 421

Royal Highway See El Camino Real *in this index*

Royal Household of the United Kingdom
R: 498

Royal Humane Society
Medals, decorations, and orders (Europe) M: 358

Royal Hunt of the Sun, The [play by Shaffer]
Shaffer, Peter S: 342

Royal Institution [organization] R: 498

Royal jelly
Bee (From egg to adult) B: 202

Royal Liver Building
Liverpool L: 395 *with picture*

Royal Manas National Park [Bhutan]
National park (table) N: 42f

Royal Marines [Britain]
Marine (Marines of other lands) M: 203-204 *with picture*

Royal Mile [road]
Edinburgh E: 77

Royal Military College of Canada R: 498

Royal Mint [London]
Mint M: 612

Royal Montreal Golf Club
Golf (Beginnings) G: 264

Royal moth
Moth (Giant silkworm moths and royal moths) M: 841-842 *with picture*

Royal National Eisteddfod [festival]
Wales (The arts) W: 11

Royal National Park [Australia]
National park (Australia) N: 42b

Royal National Theatre Company
London (The arts) L: 433
Theater (Britain) T: 247-248; *picture on* T: 247

Royal Navy
Navy (The United Kingdom) N: 79; *picture on* N: 76

Royal Niger Company [African history]
Nigeria (British rule) N: 417

Royal North-West Mounted Police See Royal Canadian Mounted Police *in this index*

Royal Ontario Museum
Ontario (Museums) O: 769
Toronto (Museums and libraries) T: 339

Royal Opera House [Covent Garden]
London (The arts) L: 433

Royal Palace
Budapest (City) B: 666

Royal palm [tree] R: 498
Palm *picture on* P: 108
Tree *pictures on* T: 413

Royal palm [turkey]
Turkey (Domestic turkeys) T: 513

Royal Pavilion
Brighton and Hove B: 609

Royal Philips Electronics [company]
Manufacturing (table) M: 170
Netherlands (Manufacturing) N: 146

Royal Plowing Ceremony
May M: 320

Royal poinciana [tree]
Poinciana P: 600

Royal Saskatchewan Museum [Reginal]
Saskatchewan (Museums) S: 133

Royal Shakespeare Company [theater group]
Shakespeare, William *picture on* S: 357
Stratford-upon-Avon So: 920
Theater (Britain) T: 247-248

Royal Society [organization] R: 498
Winthrop, John, Jr. W: 343

Royal Society of Canada [organization] R: 499

Royal Society of London for Improving Natural Knowledge
Royal Society R: 498

Royal Standard [Britain]
Flag (Flags of individuals) F: 195 *with picture*

Royal Stewart plaid
Tartan *picture on* T: 47

Royal Swedish Academy of Sciences [Stockholm]
Nobel Prizes N: 439

Royal Throne [art]
Sculpture (Form and treatment) S: 230-231

Royal Toxophilite Society
Archery (History) A: 603-604

Royal Tyrrell Museum of Paleontology
Alberta (Interesting facts) A: 313

Royal Victorian Order
Knighthood, Orders of (Honorary orders) K: 347 *with picture*

Royal walnut moth
Moth *picture on* M: 840

Royal water [chemistry] See Aqua regia *in this index*

Royal Winnipeg Ballet
Canada (Ballet and opera) C: 111

Royalists [English history]
England (The Civil War) E: 308

Royall, Anne Newport [American journalist]
R: 499

Royall, Kenneth C. [American government official]
Truman, Harry S. (table) T: 469

Royals, Kansas City See Kansas City Royals *in this index*

Royalty [income]
Copyright (Users' rights) Ci: 1047-1048
Petroleum (table) P: 331
Publishing (Acquiring the manuscript) P: 868
Recording industry (Releasing the recording) R: 182
Tape recorder (History) T: 38-39
Theater (Acquiring a script) T: 235
Writing (Nonfiction) W: 511; (Scriptwriting) W: 512

Roybal, Edward R. [American political leader]
Hispanic Americans (Political developments) H: 255

Royce, Josiah [American philosopher] R: 499
Lotze, Rudolf Hermann L: 473

Royce, Stephen [American political leader]
Vermont (table) V: 333

Rozelle, Pete [American football commissioner]
Football (The rise of professional football) F: 366-367

Rozier, Ferdinand [American businessman]
Audubon, John James (His life) A: 884

Rozier, Mike [American football player]
Football (table) F: 363

Rozwi [people]
Zimbabwe (History) Z: 597

RPE [anatomy]
Eye (Adaptation to light and dark) E: 464

RPR [political party] See Rally for the Republic *in this index*

RQ [publication]
American Library Association A: 413

RRB
Railroad Retirement Board R: 121

rRna [biochemistry] See Ribosomal RNA *in this index*

RSA algorithm [cryptography]
Codes and ciphers (Public-key systems) Ci: 750; (Later developments) Ci: 751

RSI [injury] See Repetitive strain injury *in this index*

R.S.V.P.
Letter writing (Formal invitations) L: 212-213; (Informal invitations) L: 213

Ru [symbol]
Ruthenium R: 569

RU-486 [drug] See Mifepristone *in this index*

Ruana [clothing]
Colombia (Clothing) Ci: 781

Ruanda-Urundi [African history] R: 499
Burundi B: 712; (History) B: 713
Rwanda (History) R: 571-572

Rub al Khali [region, Arabia]
Arabian Desert A: 582b
Saudi Arabia (The Rub al Khali) S: 158 *with map*

Rubaiyat [poem by Omar Khayyam] R: 499
Omar Khayyam O: 760
FitzGerald, Edward F: 190

Rubber R: 500 *with pictures and map*

Edison, Thomas Alva (Last work) E: 81
Guayule G: 418
Invention (The inventive process) I: 355-357
Latex L: 90
Malaysia (British rule) M: 101
Materials (Rubber) M: 300d *with picture*
Ohio *picture on* O: 701
Silicone (Uses) S: 458
Tire T: 296 *with pictures*

Rubber ball [toy]
Rubber (First uses) R: 500

Rubber boa [snake]
Boa B: 426

Rubber bridge [cards]
Bridge B: 604

Rubber bullet
Ammunition (Riot control ammunition) A: 435

Rubber cement
Rubber (Uses of rubber) R: 500

Rubber doll
Doll (Rubber dolls) D: 290 *with picture*

Rubber plant R: 506 *with picture*
Gardening (Some popular house plants) G: 37 *with picture*
Leaf *picture on* L: 153

Rubber plantation
Rubber (The first plantations) R: 501

Rubber plate [printing]
Photoengraving and photolithography (Plates for relief printing) P: 407

Rubber-sheet geometry See Topology *in this index*

Rubber tree
Agriculture *picture on* A: 147
Liberia *picture on* L: 231
Rubber *picture on* R: 500; (The rubber tree) R: 502 *with diagram*

Rubbia, Carlo [Italian physicist]
Nobel Prizes (Physics: 1984) N: 441
Physics (Physics today) P: 442-443

Rubel, Ira [American printer]
Printing (Developments in platemaking) P: 803-804

Rubella [disease] R: 506
See also Measles *in this index*
Autism (Causes) A: 942
Cerebral palsy (Causes) C: 361
Deafness (Birth defects) D: 57
Disease (table) D: 226
Mental retardation (Causes) M: 410

Ruben, Samuel [American chemist]
Radiocarbon (Radiocarbon in biology) R: 98

Rubenists [art history]
Painting (Rococo painting) P: 65

Rubens, Peter Paul [Flemish painter] R: 506 *with picture*
Antwerp (Chief buildings) A: 561
Baroque (Baroque painting) B: 117
Daniel, Book of *picture on* D: 34
Drawing *picture on* D: 343
Jesus Christ *picture on* J: 108
Marie de Médicis M: 200
Painting (Baroque) P: 58-59 *with picture*; (Rococo painting) P: 65

Rubeola See Measles *in this index*

Rubicon [river, Italy] R: 507
Rome, Ancient (Breakdown of the republic) R: 446

Rubidium [element] R: 507

Rubin, Robert Edward [American government official] R: 507

Rubinstein, Anton Gregor [Russian pianist]
R: 508

Rubinstein, Arthur [American pianist] R: 508

Ruble [money] R: 508

Rubruck, William of [Flemish explorer]
Exploration (European exploration) E: 442

Ruby [dog]
English toy spaniel E: 325

Ruby [fruit]
Grapefruit G: 321

Ruby [gem] R: 508 *with picture*
Gem *picture on* G: 78; (Cutting and polishing) G: 79
Laser (History) L: 86 *with picture*
Sapphire S: 122

Ruby, Jack [American assassin]
Kennedy, John Fitzgerald (The death of Oswald) K: 267; *picture on* K: 268
Oswald, Lee Harvey O: 869
Texas (The mid-1900's) T: 208
Warren Report W: 37

Ruby Beach [Washington]

Washington picture on W: 57
Ruby-crowned kinglet
 Bird (Birds of forests and woodlands) B: 334
 with picture
 Kinglet K: 330
Ruby Lake
 Nevada (Rivers and lakes) N: 166-168
Ruby Mountains [Nevada]
 Nevada (Places to visit) N: 164
Ruby-spot damselfly
 Insect picture on I: 280
Ruby-throated hummingbird
 Hummingbird (The ruby-throated hummingbird) H: 435
Rucellai Palace [Florence, Italy]
 Alberti, Leon Battista A: 332
Ruck [sports]
 Rugby football (Rugby Union) R: 510-511
Ruckelshaus, William D. [American government official]
 Environmental Protection Agency E: 340
 Watergate (The tape controversy) W: 144
Rucker, Edmund W. [Confederate army leader]
 Fort Rucker F: 416
Rudder
 Airplane (The tail) A: 214 with picture; (The controls and instruments) A: 217; (Basic movements and controls) A: 222-223 with diagram; picture on A: 218
 Airship (Control) A: 251
 Helicopter (Piloting a helicopter) H: 171-172 with diagram
 Invention (The Middle Ages) I: 359
 Sailing (Hull) S: 23 with diagram
 Ship (The cog) S: 407; (The chief parts of a ship) S: 424-425
 Transportation (The Middle Ages) T: 388
Rudder Grange [book by Stockton]
 Stockton, Frank Richard So: 906
Ruddy duck
 Duck (Stiff-tailed ducks) D: 377; picture on D: 375
Ruddy turnstone [bird]
 Turnstone T: 519 with picture
Rude, François [French sculptor]
 Arc de Triomphe A: 593
 Sculpture (European sculpture) S: 253-255
Rudin [book by Turgenev]
 Russian literature (Early realism) R: 562
Rudolf I [Holy Roman emperor]
 Austria (The Habsburgs) A: 937
 Germany (The Holy Roman Empire) G: 162-163
 Habsburg, House of H: 3
Rudolf IV [archduke of Austria]
 Austria (The Habsburgs) A: 937
Rudolf, Lake See Lake Rudolf in this index
Rudolph [son of]
 Francis Joseph F: 481
Rudolph, Lucretia [wife of James A. Garfield]
 See Garfield, Lucretia Rudolph in this index
Rudolph, Paul [American architect] R: 508 with picture
 Architecture (Architecture today) A: 632-633
Rudolph, Wilma R. 509 with portrait
Rueda, Lope de [Spanish dramatist]
 Drama (Secular drama) D: 333
 Spanish literature (The 1500's) So: 758-759
Ruehl, Mercedes [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1991) M: 863
Ruff [bird] R: 509
Ruff [collar]
 Clothing (The Renaissance) Ci: 700 with picture
Ruffe [fish] R: 509 with picture
Ruffed grouse R: 509 with picture
 Bird (Other means of communication) B: 354
 Grouse G: 403
 Partridge P: 189
Ruffed lemur
 Lemur L: 189
 Primate picture on P: 778
Ruffin, Edmund [Confederate soldier] R: 510
Ruffing, Red [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Ruffner Pamphlet [document]
 West Virginia (The Civil War and statehood) W: 226
Rufiji River
 Tanzania (Rivers and lakes) T: 33 with map
Rufous hummingbird
 Hummingbird picture on H: 434
Rufous-sided towhee [bird]

Towhee T: 349 with picture
Rufus See William II in this index
Rug See Rugs and carpets in this index
Rugby [North Dakota]
 Geographic center of North America G: 91
Rugby football [sport] R: 510 with pictures
 England (Recreation) E: 296-297
 Football (The history of football) F: 365
 Ireland (Recreation) I: 420
 London (Recreation) L: 434
 Pacific Islands picture on P: 7
 Scotland (Recreation) S: 214
 Wales (Recreation) W: 10
Rugby Football League
 Rugby football (History) R: 513
Rugby League
 Australia (Recreation) A: 904
 Rugby football R: 510 with pictures
Rugby School [Rugby, England] R: 513
 Rugby football (History) R: 513
Rugby Union
 Australia (Recreation) A: 904
 New Zealand (Recreation) N: 348 with picture
 Rugby football R: 510 with pictures
Ruger, Thomas H. [American general]
 Georgia (table) G: 130
Rugs and carpets R: 513 with pictures
 Industry pictures on I: 259
 Insulation (Insulation against sound) I: 307
 Interior design (Planning on paper) I: 330-331; (Choosing patterns and textures) I: 332 with pictures
 Islamic art (Rugs) I: 469 with picture
 Weaving picture on W: 174
Ruhr [region, Germany] R: 517 with maps
 Europe (Industry) E: 402-403
 Germany (Manufacturing) G: 160 with picture
Ruhr River [Germany] R: 518
Ruhuna National Park [Sri Lanka]
 National park (table) N: 42f
Ruisdael, Jacob van [Dutch painter] R: 518 with picture
Ruivo, Pico [mountain]
 Madeira Islands (The island of Madeira) M: 29
Ruiz, José [Spanish slave trader]
 Amistad Rebellion A: 433
Ruiz, Juan [Spanish poet] R: 519
 Spanish literature (Early medieval literature) So: 757-758
Ruiz Cortinas, Adolfo [Mexican political leader] R: 519
Ruiz-Tagle, Eduardo Frei [Chilean political leader]
 Chile (Recent developments) C: 470
Rukh [political movement]
 Ukraine (Politics) U: 6
Rule [measurement]
 Tool (Woodworking tools) T: 330
 Woodworking (Planning and design) W: 396 with picture
Rule [religion]
 Monasticism (Christian monasticism) M: 700-701
 Roman Catholic Church (Religious institutes) R: 405
Rule of cloister
 Cloister Ci: 684
Rule of law
 Due process of law D: 378
Rule of Saint Benedict [religion]
 Monasticism (Christian monasticism) M: 700-701
Ruler on Horseback Leading an Army Across a Battlefield, A [painting]
 Painting (Indian painting) P: 44 with picture
Rules Committee [government]
 House of Representatives (Committees) H: 387; (Considering legislation) H: 387
 United States, Government of the (How a bill moves through Congress) U: 142-143
Rules of order
 Parliamentary procedure P: 175
Rules of the Game, The [film]
 Renoir, Jean R: 240
Rules of the Road, International
 Ship (Safety at sea) S: 424
Rulfo, Juan [Mexican author]
 Latin-American literature (The mid-1900's) L: 113
Rum
 Alcoholic beverage (Rum) A: 336; (History) A: 337
 Puerto Rico picture on P: 882
"Rum, Romanism, and rebellion"

Cleveland, Grover (Election of 1884) Ci: 670
Rumaila [oil field]
 Persian Gulf War (Disputes between Iraq and Kuwait) P: 300b
Rumania See Romania in this index
Rumba [dance] R: 519
 Ballroom dancing B: 63
 Latin America (Dancing) L: 103
Rumble Fish [book by Hinton]
 Hinton, S. E. H: 238
Rumble seat
 Roaring Twenties picture on R: 363
Rumen [zoology]
 Cattle (Stomach) C: 307 with diagram
 Ruminant R: 519 with diagram
Rumford [former name]
 Concord (New Hampshire) Ci: 929
Rumford, Count [American-British physicist]
 See Thompson, Benjamin in this index
Ruminant [zoology] R: 519 with diagram
 Camel (Food) C: 79
 Cattle (Stomach) C: 307
 Deer (Food) D: 84-85
 Goat (Digestive system) G: 240-241
Rumney Marsh [former name]
 Revere R: 266
Rumors [play by Simon]
 Simon, Neil S: 467
Rump cut [meat]
 Ham (Kinds of ham) H: 28 with pictures
Rump Parliament [English history] R: 519
 Long Parliament L: 448
"Rumpelstiltskin" [story]
 Fairy (Fairytales in literature) F: 11 with picture
 Grimm's Fairy Tales G: 394
Rumsfeld, Donald Henry [American government official] R: 520
 Cheney, Richard Bruce (Career) C: 408
 Defense, Department of (table) D: 87
Rumung [Island, Pacific]
 Yap Islands Y: 553
Run [banking]
 Bank (Making loans) B: 89
Run [sports]
 Baseball (The game) B: 128; (table: Modern major league records) B: 137
 Football diagram on F: 359
Run-of-mine coal
 Coal (Cleaning and shipping coal) Ci: 726
Run-through train
 Railroad (Railroad systems) R: 112-113
Runabout [boat]
 Boating (Motorboats) B: 428; picture on B: 430
 Motorboat racing (Hull designs) M: 876 with picture
Rundle, Robert T. [Canadian religious leader]
 Alberta (The missionaries) A: 329
Rune [alphabet] R: 520 with pictures
Rune [Norse mythology]
 Odin O: 674
Rune stone
 Kensington rune stone K: 271
Runeberg, Johan Ludvig [Finnish poet]
 Finland (The arts) F: 112
Rungis [France]
 Paris (Renewal and new construction) P: 166-167
Runkle, John D. [American educator]
 Vocational education (Early vocational education in schools) V: 435
Runnels, Hardin R. [American political leader]
 Texas (table) T: 203
Runnels, Hiram G. [American political leader]
 Mississippi (table) M: 640
Runner [botany]
 Fruit (Growing fruit) F: 545
 Plant (Vegetative propagation) P: 535 with picture
 Watermelon W: 146
Running [sailing]
 Sailing (Basic sailing maneuvers) S: 26 with diagram
Running [sport] R: 520
 Cross-country Ci: 1155
 Indian, American (Recreation) I: 142
 Jogging J: 130
 Oregon picture on O: 830
 Physical fitness picture on P: 434
 Track and field (Track events) T: 354; (World track and field records) T: 358
Running back
 Football (The offensive team) F: 356-357 with diagrams
Running bond

- Brick (Bonds) **B**: 599 *with picture*
Running buffalo clover [plant]
 Endangered species (table) **E**: 270
Running key
 Codes and ciphers (Substitution) **Ci**: 750
Running of the bulls [custom] *See* San Fermin,
 Fiesta of *in this index*
Running rigging
 Sailing (Rigging) **S**: 24
Running stitch
 Sewing (Hand stitches) **S**: 332
Runnymede [meadow, England] **R**: 521
 Kennedy, John Fitzgerald (The world mourns)
K: 268
 Magna Carta **M**: 53
Runoff election
 Election (Nomination of candidates) **E**: 159
Runs batted in
 Baseball (Baseball terms) **B**: 124; (table:
 Modern major league records) **B**: 137
Runway
 Airport (Runways) **A**: 245
Runyon, Damon [American author] **R**: 521
Runyon, William N. [American political leader]
 New Jersey (table) **N**: 249
Rupee [money] **R**: 521 *with picture*
Rupert's Land [region, Canada]
 Canada, History of (New provinces) **C**: 147
 Manitoba (Exploration) **M**: 160; (The Red River
 Rebellion) **M**: 160
 Northwest Territories (Creation of the
 Northwest Territories) **N**: 533
Rupp, Adolph [American coach] **R**: 521
Rupture
 Hernia **H**: 212
R.U.R. [play by Čapek]
 Čapek, Karel **C**: 191
Rural delivery [mail] **R**: 521
 Postal Service, United States *picture on* **P**: 701
 West Virginia (Interesting facts) **WV**: 207
Rural Electrification Act [1936]
 Housing (Farm housing) **H**: 390
Rural Electrification Administration [U.S.]
R: 521
 Agriculture (Labor-saving technologies) **A**: 159
Rural Utilities Service
 Electric power (Growth of the electric power
 industry) **E**: 186
Rurik [Norse explorer]
 Russia (Early days) **R**: 547
Rus [ancient people]
 Ukraine (Kievan Rus) **U**: 12
 Vikings **V**: 378; (The Swedish Vikings) **V**: 383
Ruse [city, Bulgaria]
 Bulgaria *picture on* **B**: 691
Rush [botany] **R**: 522
Rush [fraternity]
 Fraternity (Membership) **F**: 496
Rush, Benjamin [American doctor] **R**: 522
 Mental illness (Humane treatment) **M**: 408
Rush, Geoffrey [Australian actor]
 Motion picture (Best performance by an actor:
 1996) **M**: 863
Rush, Richard [American government official]
 Adams, John Quincy (table) **A**: 43
 Jackson, Andrew (Election of 1828) **J**: 10
 Justice, Department of (table) **J**: 203
 Treasury, Department of (table) **T**: 407
Rush-Bagot Agreement [1817]
 Arms control (History of arms control) **A**: 721
 Ghent, Treaty of **G**: 181
 Monroe, James (Diplomacy) **M**: 738
Rushdie, Salman [Indian-born author] **R**: 522
 English literature (Recent English fiction)
E: 323
 Novel (The novel today) **N**: 575
Rushes
 Motion picture (The rushes) **M**: 855
Rushing, Jimmy [American singer]
 Jazz (The swing era) **J**: 71
Rushlight [candle]
 Rush **R**: 522
Rushmore, Mount *See* Mount Rushmore
 National Memorial *in this index*
Rusie, Amos [American baseball player]
 Baseball (table: Hall of Fame) **B**: 135
Rusizi River [Africa]
 Lake Tanganyika **L**: 46 *with map*
Rusk, Dean [American statesman] **R**: 522
 Kennedy, John Fitzgerald (table) **K**: 266
Rusk, Jeremiah McLain [American political
 leader]
 Agriculture, Department of (table) **A**: 161
 Wisconsin (table) **W**: 365
Ruske, Ernst [German physicist]
 Electron microscope **E**: 204
 Nobel Prizes (Physics: 1986) **N**: 441
Ruskin, John [British author] **R**: 523
 Hill, Octavia **H**: 231
 Whistler, James Abbott McNeill **W**: 283
Ruslan and Lyudmila [opera by Glinka]
 Glinka, Mikhail Ivanovich **G**: 231
Russell, Bertrand [British philosopher] **R**: 523
 Logic (Modern logic) **L**: 425
 Mathematics (Philosophies of mathematics)
M: 307
Russell, Bill [American basketball player]
R: 523
 Basketball (The history of professional basket-
 ball) **B**: 153-155; *picture on* **B**: 153
Russell, Charles H. [American political leader]
 Nevada (table) **N**: 173
Russell, Charles Marion [American artist]
R: 523
 Cowboy *picture on* **Ci**: 1109
 Dodge City *picture on* **D**: 261
Russell, Charles Taze [American religious
 leader]
 Jehovah's Witnesses **J**: 89
Russell, D. L. [American political leader]
 North Carolina (table) **N**: 490
Russell, Donald S. [American political leader]
 South Carolina (table) **So**: 658
Russell, Earl [British philosopher] *See* Russell,
 Bertrand; Russell, Lord John *in this index*
Russell, Francis [English political leader]
 Russell family **R**: 524
Russell, George William [Irish author] **R**: 524
Russell, Harold [American actor]
 Motion picture (Best performance by an actor
 in a supporting role: 1946) **M**: 863
Russell, Hastings William Sackville [British
 nobleman]
 Russell family **R**: 524
Russell, Henry Norris [American astronomer]
R: 524
 Star (The Hertzsprung-Russell diagram)
So: 845
Russell, James E. [American educator]
 Teachers College, Columbia University
 (History) **T**: 64
Russell, John [English political leader]
 Russell family **R**: 524
Russell, Lord John [British political leader]
R: 524
Russell, John [British religious leader]
 Jack Russell terrier **J**: 3
Russell, John Robert [South African journalist]
 Russell family **R**: 524
Russell, Lee M. [American political leader]
 Mississippi (table) **M**: 640
Russell, Lillian [American actress] **R**: 524 *with
 portrait*
Russell, Richard Brevered [American political
 leader] **R**: 524
 Georgia (table) **G**: 130
Russell, William [English farmer]
 Mayflower **M**: 327
Russell, William [English political leader]
 Russell family **R**: 524
Russell, William E. [American political leader]
 Massachusetts (table) **M**: 288
Russell, William F. [American educator]
 Teachers College, Columbia University
 (History) **T**: 64
Russell Cave National Monument [Alabama]
 Alabama (Places to visit) **A**: 266; *picture on*
A: 277
 National Park System (table: National monu-
 ments) **N**: 51
Russell family **R**: 524
Russell, Majors, and Waddell [U.S. history]
 Pony express **P**: 657
Russell Senate Office Building [Washington,
 D.C.]
 Washington, D.C. *map on* **W**: 76
Russell's viper
 Viper **V**: 391 *with picture*
Russet Burbank
 Potato **P**: 712; *picture on* **P**: 711
Russet Norkoteh
 Potato **P**: 712
Russia **R**: 525 *with pictures and maps*
See also Russian Soviet Federative Socialist
 Republic; Union of Soviet Socialist
 Republics *in this index*
 Agriculture (Europe) **A**: 153
 Asia **A**: 770
 Flag *pictures on* **F**: 207, **F**: 217, **F**: 218
 Lapland **L**: 74
Art and architecture
 Russia (The arts) **R**: 536 *with pictures*
 Ballet (Ballet in Russia) **B**: 52
 Doll (Traditional dolls) **D**: 287 *with picture*
 Painting (Painting outside France) **P**: 72;
 (Nonobjective painting in Russia) **P**: 79
 Theater (Russia) **T**: 248 *with picture*
Communications and mass media
 Russia (Transportation and communication)
R: 546
 Newspaper (In Europe) **N**: 386
 Television (In Europe) **T**: 116
Defense
 Russia (Armed forces) **R**: 532
 Air force (The Russian Air Force) **A**: 184; *pic-
 ture on* **A**: 183
 Army (The Russian Army) **A**: 726
 Hot line **H**: 374a
 Navy (Major navies of the world) **N**: 78
 Strategic Arms Reduction Treaty **So**: 919
Education
 Russia (Education) **R**: 535
 Library (Eastern Europe and Russia) **L**: 252
with picture; (Libraries of the 1600's
 and 1700's) **L**: 260-261
Government
 Russia (National government) **R**: 531
 Police (In other countries) **P**: 623
 Ruble **R**: 508
Health and welfare
 Abortion (In other countries) **A**: 16
History
 Russia (History) **R**: 547
 Afghanistan (The Anglo-Afghan wars)
A: 95
 Armenia (History) **A**: 718b
 Azerbaijan (History) **A**: 997
 Belarus (History) **B**: 224b-224c
 California (Spanish and Russian settlement)
C: 60
 Chechnya **C**: 390
 Cold War (The Cold War after 1980) **Ci**: 770
 Communism (Before 1917) **Ci**: 892
 Cossacks **Ci**: 1079
 Eastern Orthodox Church **E**: 45
 Estonia (History) **E**: 362-363
 Exploration (The Russians in Siberia)
E: 447
 Finland **F**: 108; (Control by Russia) **F**: 116
 Georgia (History) **G**: 111
 Inuit (New ways of life) **I**: 354g-354h; (The
 Inuit today) **I**: 354h
 Jews (The growth of anti-Semitism) **J**: 123
 Kazakhstan (History) **K**: 251
 Kyrgyzstan (History) **K**: 400
 Latvia (History) **L**: 119
 Lithuania (History) **L**: 389-390
 Manchuria (History) **M**: 134
 Moldova (History) **M**: 690a
 Moscow **M**: 823
 North Atlantic Treaty Organization (History)
N: 471
 Organization for Security and Cooperation in
 Europe **O**: 853
 Poland (The partitions) **P**: 612 *with maps*
 Romania (Russian control) **R**: 423
 Russo-Japanese War **R**: 566
 Russo-Turkish wars **R**: 566
 Tajikistan (History) **T**: 18b
 Turkestan (History) **T**: 501
 Turkmenistan (History) **T**: 514b
 Ukraine (Russian rule) **U**: 12
 Union of Soviet Socialist Republics (History)
U: 35
 Uzbekistan (History) **U**: 254
 Warsaw (History) **W**: 38
Language and literature
See Russian language; Russian literature *in
 this index*
Natural resources
 Russia (The economy) **R**: 543 *with pictures
 and map*
 Conservation (Russia) **Ci**: 989
 Nickel (Mining nickel) **N**: 404
 Petroleum (Where petroleum is found)
P: 332
People
 Family *picture on* **F**: 20
 Russia (People) **R**: 532; (Population density)
map on **R**: 532
 Sami **S**: 78
 Standard of living (table) **So**: 834

- Social and cultural life*
 Russia (Way of life) R: 533 *with pictures*
 Clothing picture on C: 687
- Technology and science*
 Astronaut A: 828; (The cosmonauts) A: 833
 Aviation (Aircraft manufacturing) A: 984
 International Space Station I: 346b
 Space exploration (Mir) So: 722; (Docking with Mir) So: 726
 See also the list of Related articles in the Russia article
- Russia Leaves the War** [book by Kennan]
 Kennan, George Frost K: 259
- Russian alphabet**
 Russian language (Alphabet) R: 557 *with pictures*
- Russian-American Company** [U.S. history]
 Alaska (The Russian era) A: 301; *picture on* A: 302
 Flag picture on F: 209
- Russian bath**
 Turkish bath T: 514
- Russian blue**
 Cat (Short-haired breeds) C: 290-291; *picture on* C: 288
- Russian Catholic Church** [religious group]
 Eastern Catholic Churches E: 45
- Russian Communist Party** [Soviet history]
 Union of Soviet Socialist Republics (The October Revolution) U: 35-36
- Russian desman** [animal]
 Mole (The European mole) M: 690b
- Russian Hill**
 San Francisco (Downtown San Francisco) S: 92-93 *with map*; S: 92
- Russian Imperial Ballet**
 Ballet (The rise of professional ballet) B: 51; (Ballet in Russia) B: 52
 Russia (Catherine the Great) R: 550
- Russian language** R: 557
 Russia (Language) R: 533
 Ukraine (Language) U: 6
 Union of Soviet Socialist Republics (People) U: 31
- Russian literature** R: 558 *with picture*
 Drama (Russian drama and Chekhov) D: 338
 Nihilism N: 421
 Novel (Russia) N: 573
 Russian language (History) R: 557
 See also the list of Related Articles in the Russian Literature article
- Russian mulberry** [plant]
 Mulberry M: 913
- Russian Orthodox Church** [religious group]
 Eastern Orthodox Churches E: 45
 Ivan III, the Great I: 520
 Moscow (Religion) M: 824
 Russia (Religion) R: 535; (The early Romanovs) R: 549
 Tolstoy, Leo (His conversion) T: 323
- Russian Revolution of 1917**
 Communism (Before 1917) Ci: 892
 Kerensky, Alexander Feodorovich K: 306
 Lenin, V. I. (The road to power) L: 193
 Reed, John R: 194
 Russia (The February Revolution) R: 552-553; (The October Revolution) R: 553
 Stalin, Joseph (The Bolshevik revolution) So: 826
 Union of Soviet Socialist Republics (History) U: 35
 World War I (The Russian Revolution) W: 462
- Russian Social Democratic Labor Party** [political party]
 Communism (Before 1917) Ci: 892
 Lenin, V. I. (Beginnings of revolution) L: 192
 Mensheviks M: 403
 Union of Soviet Socialist Republics (Background of the revolution) U: 35
- Russian Soviet Federative Socialist Republic**
 Russia (Civil war and the formation of the U.S.S.R.) R: 553
- Russian State Library** [Moscow]
 Library (Eastern Europe and Russia) L: 252 *with picture*; (Libraries of the 1600's and 1700's) L: 260-261
 Moscow (Museums and libraries) M: 825
 Russia (Museums and libraries) R: 536
- Russian thistle** [plant]
 Thistle T: 261
 Tumbleweed T: 484
- Russian turnip**
 Rutabaga R: 568
- Russian wheat aphid** [insect]
- Invasive species (Managing invasive species) I: 354k
- Russian wolfhound** See Borzoi in this index
- Russians** [people]
 Kazakhstan (People) K: 250a
 Russia R: 525
 Tajikistan (People) T: 18a
 Ukraine (People) U: 6
 Union of Soviet Socialist Republics (People) U: 31
 Uzbekistan (People) U: 253
- Russia's Choice** [political party]
 Russia's Democratic Choice (Politics) R: 531
- Russia's Democratic Choice** [political party]
 Russia (Politics) R: 531
- Russification** [Russian history]
 Belarus (History) B: 224b-224c
 Stalin, Joseph (The five-year plan) So: 826
 Ukraine U: 5; (Language) U: 6
- Russo-Finnish wars** [1939-1944] R: 565
- Russo-Japanese War** [1904-1905] R: 566
 Chinese-Japanese wars C: 509
 Japan (Imperialism) J: 57
 Manchuria (History) M: 134
 Nicholas II [czar] N: 402
 President of the United States picture on P: 765
 Russia (The Revolution of 1905) R: 552
- Russo-Turkish wars** [European history] R: 566
 See also Crimean War in this index
 Berlin, Congress of B: 266
 Russia (Nicholas I) R: 551
- Russolo, Luigi** [Italian painter]
 Futurism F: 589
- Russwurm, John Brown** [American social reformer] R: 567
- Rust** [chemistry] R: 567
 Corrosion Ci: 1072
 Iron (Properties) I: 435
 Oxidation O: 888 *with picture*
- Rust** [fungus] R: 567
 Barberry B: 107
 Currant Ci: 1196
 Fungal disease (In plants) F: 558
 Lawn picture on L: 143
 Wheat (Care during growth) W: 271
- Rustichello** [Italian writer]
 Polo, Marco (Later life) P: 648-649
- Rustin, Bayard** [American social reformer] R: 567
- Rustler**
 Western frontier life in America (Crime) W: 238
- Rustproofing**
 Paint (Industrial paints) P: 24; *picture on* P: 23
- Rutabaga** [plant] R: 568
- Rape** [plant] R: 142
- Rutgers, The State University of New Jersey** R: 568
 Football (The history of football) F: 365
 New Jersey picture on N: 240
 Universities and colleges (The oldest U.S. universities and colleges) U: 210
- Ruth** [Biblical figure]
 Ruth, Book of R: 568
- Ruth, Babe** [American baseball player] R: 568 *with portrait*
 Autograph picture on A: 943
 Baltimore (Other interesting places to visit) B: 69
 Baseball (table: Hall of Fame) B: 135; (table: Modern major league records) B: 137; (The Babe Ruth Era) B: 136 *with picture*
 United States, History of the (An age of heroes) U: 186 *with picture*
- Ruth, Book of** [Old Testament] R: 568
 Shavuot S: 377
- Ruth, George Herman** See Ruth, Babe in this index
- Ruthenia** [region, Europe] R: 568
- Ruthenian Catholic Church** [religious group]
 Eastern Catholic Churches E: 45
- Ruthenians** [people]
 Ruthenia R: 568
- Ruthenium** [element] R: 569
- Rutherford, Alexander C.** [Canadian political leader]
 Alberta (table) A: 328
- Rutherford, Daniel** [Scottish doctor]
 Nitrogen N: 425
- Rutherford, Ernest** [British physicist] R: 569
 Atom (The first descriptions of atomic structure) A: 875 *with diagram*
 Geology (Experimental geology) G: 99
- Nuclear energy (The beginning of nuclear physics) N: 590
- Physics (Uncovering the secrets of the atom) P: 442
- Radiation (History) R: 80
- Science (Science in the early 1900's) S: 201
- Rutherford, John** [American political leader]
 Virginia (table) V: 417
- Rutherford, Johnny** [American race driver]
 Automobile racing (table: Indianapolis 500 winners) A: 980
- Rutherford, Margaret** [British actress]
 Motion picture (Best performance by an actress in a supporting role: 1963) M: 863
- Rutherford B. Hayes Library** [Fremont]
 Ohio (Libraries) O: 685; (Places to visit) O: 690
- Rutherfordium** [element] R: 569
 Transuranium element T: 401
- Rutile** [mineral]
 Crystal (Classifying crystals) Ci: 1166 *with picture*
 Mineral picture on M: 568
- Rutland** [city, Vermont] R: 569
- Rutland Herald** [newspaper]
 Vermont (Communication) V: 332
- Rutledge, Ann** [American settler] R: 569
 Lincoln, Abraham (Search for a career) L: 314
- Rutledge, Edward** [American patriot] R: 569
 South Carolina (table) So: 658
- Rutledge, John** [American political leader] R: 570
 South Carolina (table) So: 658
- Rutledge, Wiley B.** [American jurist]
 Supreme Court of the United States (table) So: 1000
- Rutskoi, Alexander Vladimirovich** [Russian political leader] R: 570
 Russia (The new nation) R: 555
- Rutting season** [zoology]
 Mammal (Mating) M: 122-123
- Ruttman, Troy** [American race driver]
 Automobile racing (table: Indianapolis 500 winners) A: 980
- Ruttman, Walter** [German filmmaker]
 Animation (Animation in Europe) A: 514
- Ruwenzori National Park** [Uganda]
 National park (table) N: 42f
- Ruwenzori Range** [mountains, Africa]
 Africa (Mountains) A: 120
- Ruysdael, Jacob van** See Ruisdael, Jacob van in this index
- Ruz, Fidel Castro** See Castro, Fidel in this index
- Ružicka, Leopold** [Swiss chemist]
 Nobel Prizes (Chemistry: 1939) N: 443
- RV** See Recreational vehicle in this index
- Rwanda** R: 570 *with picture and map*
 Burundi (History) B: 713
 Flag picture on F: 199
 Genocide G: 90
 Ruanda-Urundi R: 499
 War (Recent developments) W: 24-25
- Rwandan Patriotic Front**
 Rwanda (History) R: 571-572
- Rx** [symbol]
 Rx appears after the index headings for R
- Ryan, Claude** [American businessman]
 United Parcel Service, Inc. U: 97
- Ryan, George** [American political leader]
 Illinois (table) I: 71; (Recent developments) I: 76
- Ryan, Nolan** [American baseball player] R: 572
 Baseball (table: Hall of Fame) B: 135; (table: Modern major league records) B: 137; (Recent developments) B: 137-138 *with picture*
- Ryan, Paddy** [Irish boxer]
 Sullivan, John L. So: 969
- Ryan, Thelma Catharine "Pat"** [wife of Richard Nixon] See Nixon, Pat in this index
- Ryder, Albert Pinkham** [American painter]
 R: 572 *with picture*
- Ryder, Samuel A.** [British businessman]
 Ryder Cup R: 572
- Ryder Cup** [golf] R: 572
 Golf (Tournaments) G: 264
- Rye** [plant] R: 572 *with picture*
 Ergot E: 350
 Grain G: 301
 Leaf picture on L: 153
 Triticale T: 448
- Rye, Tom C.** [American political leader]
 Tennessee (table) T: 152
- Rye bread**
 Rye (Uses) R: 573

Rye House Plot [English history] R: 574
Rye Patch Dam [Humboldt River, Nevada]
 Nevada (Natural resources) N: 169
Rye whiskey
 Whiskey W: 282
Ryegrass
 Lawn (Planting the grass) L: 142
Ryerson, G. S. [Canadian military leader]
 Red Cross (In Canada) R: 188
Ryga, George [Canadian dramatist]
 Canadian literature (Modern Canadian drama)
 C: 161
Rylant, Cynthia [American author]
 Newbery Medal (table) N: 359
Ryle, Sir Martin [British physicist]
 Nobel Prizes (Physics: 1974) N: 441
Ryokan [hotel]
 Tokyo (Visitor's guide) T: 316
Ryswick, Treaty of [1697]
 French and Indian wars (King William's War)
 F: 512
 Nova Scotia (The struggle in Acadia) N: 568
Ryukyu Islands [islands, Pacific] R: 574 *with*
map
 Japan (The Ryukyu and Bonin islands) J: 48
 Okinawa O: 710

S

S [letter] S: 1 *with pictures*
S [symbol]
 Sulfur (Properties) So: 966
S-A node [anatomy] *See* Sinoatrial node *in this*
index
S quark [physics] *See* Strange quark *in this*
index
Saadi [Persian author] S: 2
Saadians [ruling family]
 Morocco (Corsairs and sharifs) M: 814
Saanen goat
 Goat (Domestic goats) G: 239; *picture on*
 G: 241
Saar [state, Germany] S: 2
Saarinén, Eero [American architect] S: 2
 Architecture *picture on* A: 607
 Furniture (The retro style) F: 584; *picture on*
 F: 583
 Saint Louis *picture on* S: 46
Saarinén, Eliel [Finnish-American architect] S: 2
 Finland (The arts) F: 112
Saavedra, Alvaro de [Spanish navigator]
 Bismarck Archipelago B: 383
Saavedra, Ángel de [Spanish author]
 Spanish literature (The 1800's) So: 761
Saavedra Lamas, Carlos [Argentine statesman]
 Nobel Prizes (Peace: 1936) N: 447
Saaz, Johannes von [German author]
 German literature (The Renaissance) G: 139
Sab [people]
 Somalia (People) So: 588
Saba [island, Caribbean]
 Netherlands Antilles N: 151
Sabaeans [people]
 Saudi Arabia (History) S: 160
Sabah [state, Malaysia]
 Borneo (History) B: 490
 Malaysia M: 98a
 Singapore (History) S: 471
Sabah I [Kuwaiti ruler]
 Kuwait (History) K: 396
Sabatier, Paul [French chemist]
 Hydrogenation H: 470
 Nobel Prizes (Chemistry: 1912) N: 442
Sabbat [holiday]
 Witchcraft (Witchcraft as a religion) W: 371-
 372
Sabbath [religion] S: 2
 Jerusalem J: 94a
 Judaism (The Sabbath) J: 181
 Sunday So: 989
Sabbatical
 Teaching (Rewards of teaching) T: 69
Saber [weapon]
 Sword So: 1061 *with picture*
Saber saw [tool]
 Saw (Power saws) S: 167 *with picture*
 Woodworking (Cutting) W: 397-398 *with pic-*
ture
Saber-toothed cat [extinct animal] S: 2 *with pic-*
ture
Sabin, Albert Bruce [American biochemist]
 S: 3
 Poliomyelitis (Prevention of poliomyelitis)
 P: 626
Sabin, Florence Rena [American biologist]
 S: 3
Sabin Convention Center
 Cincinnati (The city) Ci: 554 *with map*
Sabin lock
 Soo Canals (The American canals) So: 595
with map
Sabin polio vaccine
 Sabin, Albert Bruce S: 3
Sabine-Neches Waterway [Texas]
 Canal (table) C: 164
Sabines [ancient people] S: 3
 Romulus and Remus R: 450
Sabinian [pope]
 Pope (table) P: 666
Sable [animal] S: 3 *with picture*
 Fur (table) F: 561; *picture on* F: 562
Sable [color]
 Heraldry (Expansion) H: 194 *with picture*
Sable, Jean Baptiste Point du [American pio-
 neer] *See* Du Sable, Jean Baptiste Point *in*
this index
Sable antelope
 Antelope (Kinds of antelope) A: 542-543
Sable Island [Atlantic] S: 3 *with map*
 Nova Scotia (Mining) N: 566
Sabotage [crime] S: 3
Sabots [clothing]
 Sabotage S: 4
Sabre [weapon]
 Fencing (The sabre) F: 71 *with picture*
Sabres, Buffalo
 Hockey (table: National Hockey League)
 H: 281
SAC *See* Strategic Air Command *in this index*
Sac Indians *See* Sauk Indians *in this index*
Sacagawea [American Indian guide] S: 4 *with*
picture
 Dollar (The United States dollar) D: 295 *with*
picture
 Exploration (Crossing North America)
 E: 447
 Lewis and Clark expedition (Up the Missouri)
 L: 222-223, (West to the Rockies)
 L: 223
Sacajawea *See* Sacagawea *in this index*
Sacasa, Juan Batista [Nicaraguan political
 leader]
 Nicaragua (The Somoza period) N: 400
 Somoza García, Anastasio So: 590
Saccadic movements [physiology]
 Reading (Perceiving reading matter) R: 156
Saccharides [chemistry] S: 4
 Carbohydrate (Kinds of carbohydrates) C: 203
with diagrams
Saccharin [chemical] S: 4
 Artificial sweetener A: 761
Sacco, Nicola [American public figure]
 Sacco-Vanzetti case S: 4
Sacco and Vanzetti [opera by Blitzstein]
 Blitzstein, Marc B: 404
Sacco chair *See* Beanbag chair *in this index*
Sacco-Vanzetti case [U.S. history] S: 4
 Anderson, Maxwell A: 452
 Shahn, Ben S: 342 *with picture*
Saccomani, Lorenzo [Italian singer]
 Opera *picture on* O: 803
Saccule [anatomy]
 Ear (The inner ear) E: 8 *with diagram*
Sachar, Louis [American author]
 Newbery Medal (table) N: 359
Sachem [leader]
 Indian, American (Indians of the Northeast)
 I: 154-155
Sachs, Bernard [American physician]
 Tay-Sachs disease T: 56
Sachs, Hans [German author]
 Eulenspiegel, Till E: 378
 German literature (Popular literature) G: 139
Sachs, Nelly [German-Jewish author] S: 5
Sack
 Football (table) F: 356
Sack coat
 Clothing (The 1800's) Ci: 702
Sackville-West, Victoria Mary [British author]
 S: 5
Saco River
 Maine (Rivers and lakes) M: 82
 New Hampshire (Rivers and lakes) N: 220
Sacral vertebra [anatomy]

Spine So: 792 *with diagram*
Sacrament [religion] S: 5
 Augustine, Saint (His beliefs) A: 888
 Communion Ci: 889
 Eastern Orthodox Churches (Sacraments)
 E: 46
 Luther, Martin (The break with the Roman
 Catholic Church) L: 528
 Lutherans (Doctrine) L: 529
 Marriage (Wedding ceremonies and customs)
 M: 221
 Protestantism (Belief in sacraments) P: 834
 Roman Catholic Church (Worship) R: 404
 Trent, Council of T: 435
Sacrament of the Altar [religion]
 Lutherans (Doctrine) L: 529
Sacramento [California] S: 5
 California C: 36
Sacramento Kings
 Basketball (table) B: 150
Sacramento River [California] S: 6
 California (Rivers, waterfalls, and lakes)
 C: 50
Sacramento River Deepwater Ship Canal
 [waterway, California]
 Canal (table) C: 164
Sacramento Valley
 California (Agriculture) C: 56
Sacré Coeur, Basilique du
 Paris (Famous buildings) P: 163-164 *with*
map
Sacré Coeur de Montmartre [painting by
 Utrillo]
 Utrillo, Maurice *picture on* U: 252
Sacre du Printemps, Le [music by Stravinsky]
See Rite of Spring, The *in this index*
Sacred Band [ancient Greece]
 Pelopidas P: 232
Sacred bundle
 Indian, American (Indians of the Northeast)
 I: 154-156
Sacred College of Cardinals [religion]
 Cardinal C: 210
 Pope P: 660; (Present procedures) P: 662
Sacred fire [religion]
 Fire (Fire in legend and religion) F: 122
Sacred History [book by Daniel-Rops]
 Daniel-Rops, Henri D: 34
Sacred music
 Classical music (Church music) Ci: 645
 Oratorio O: 818
Sacred recitation vehicle [religion]
 Buddhism (The Mantrayana) B: 669
Sacred Way [ancient Rome]
 Rome (Forums) R: 433
Sacrifice [religion] S: 6
 Abraham A: 17
 Aztec (Religion) A: 1000 *with picture*
 'Id al-Adha I: 25
 Inca (Religion) I: 96-97
 Indian, American (Ceremonies) I: 148 *with pic-*
ture; pictures on I: 171, I: 173
 Mythology (American Indian mythology)
 M: 985-986
 Scapegoat S: 172
Sacrifice [sports]
 Baseball (Baseball terms) B: 124
Sacroiliac joint [anatomy]
 Skeleton (The axial skeleton) S: 479-480
Sacrum [anatomy]
 Pelvis P: 233 *with diagram*
 Human body *diagram on* H: 422
 Skeleton (The axial skeleton) S: 479-480 *with*
diagram
SAD [disorder] *See* Seasonal affective disorder
in this index
Sadaqa [religion]
 Islam (The Five Pillars of Islam) I: 463-464
Sadat, Anwar el- [Egyptian political leader]
 S: 7
 Arab-Israeli conflict (The Camp David Accords)
 A: 582a
 Begin, Menachem B: 219
 Carter, Jimmy (Foreign affairs) C: 257-258
with picture
 Egypt (Renewed warfare and peace) E: 133
with picture
 Israel (The Camp David Accords) I: 488
Saddle [riding equipment] S: 7 *with diagrams*
 Cowboy (His saddle) Ci: 1109
 Horse (The saddle) H: 351 *with pictures*
 Indian, American *picture on* I: 161
Saddle bronc riding
 Rodeo (Saddle bronc riding) R: 397

Saddle horse

Horse (table: Some types and breeds of horses) H: 343; (Saddle horses) H: 343

Saddleback butterflyfish

Fish picture on F: 155

Saddleback caterpillar

Insect picture on I: 297

Saddladome, Pangrowth

Calgary (History) C: 34

Sadducees (religious group) S: 8

Jews (The Hellenistic period) J: 121-122

Pharisees P: 354

Sanhedrin S: 110

Sade, Marquis de [French author] S: 8**Sadhus** [religion]

Jainism J: 22

Sadhvis [religion]

Jainism J: 22

Sadism [psychology]

Sade, Marquis de S: 8

Sadler's Wells Ballet

De Valois, Ninette D: 173

Sadowa, Battle of [1866]

Seven Weeks' War S: 325

S.A.E. rating

Horsepower H: 367

Sáenz Peña, Roque [Argentine political leader]

Argentina (Reform movements) A: 658

Safari S: 8**Safavid dynasty** [Iranian history] S: 8

Abbas I A: 4

Iran (The Safavid dynasty) I: 406

Muslims (The Safavid dynasty) M: 964d

Safdie, Moshe [Canadian architect] S: 8

National Gallery of Canada N: 37 with picture

Safe Drinking Water Act [1974]

Water pollution (Drinking water standards) W: 138

Safed Koh [mountain range]

Khyber Pass K: 309 with map

Safeguard [weapon]

Nixon, Richard Milhous (The national scene) N: 433-434

Safelight

Photography (Printing black-and-white photographs) P: 421

Safety S: 9 with pictures

Camping (Safety) C: 96

Consumerism (The right to safety) Ci: 1018

Cooking (Some rules for safe food preparation) Ci: 1027

Earthquake (Safety precautions) E: 36

Electricity (Electrical safety) E: 195 with pictures

Fire department (Fire prevention and fire safety) F: 124

Fire drill F: 129

Fire prevention F: 130

Halloween (Halloween customs and symbols) H: 24a-24b

Herbal medicine H: 196

Ice skating (Skating safety) I: 10

Kite (Flying a kite) K: 340

Lightning (Protection from lightning) L: 301

Mountain climbing (Mountain climbing safety) M: 897

Red Cross (Health and safety training) R: 185

Shark (Shark attacks) S: 376

State government (State services) So: 864

Swimming (Water safety) So: 1042 with picture

Tornado (Damage by tornadoes) T: 334;

(Forecasting tornadoes) T: 334-335

Woodworking (Tool care and safety) W: 398

Home

Knife (Knife safety) K: 346

Match (Matches can be dangerous) M: 299

Poison P: 601

Industry

Safety (Safety on the job) S: 13

Business (Health and safety regulations) B: 726

Coal (Mine safety) Ci: 729 with picture

Health (Occupational health hazards) H: 127

Nuclear energy (Hazards and safeguards) N: 587; (Safety concerns) N: 592

Transportation

Safety (Safety in transportation) S: 14

Air bag A: 175

Airplane (Safety) A: 227

Automobile (Problems of safety) A: 948;

(Driving safely) A: 960; (The growth of government regulation) A: 971

Automobile racing (Safety measures) A: 975

Aviation (Airline safety concerns) A: 991

Bicycle (Bicycle care and safety) B: 292 with pictures

Coast Guard, United States (Coast Guard activities) Ci: 734

Motorcycle (Motorcycle safety) M: 879

Ship (Safety at sea) S: 424

Transportation (Problems of modern transportation) T: 397

See also the list of Related Articles in the Safety article

Safety [football]

Football (The defensive team) F: 357-358 with diagrams; (Scoring) F: 362

Safety [device]

Firearm (Mechanism) F: 132-133

Safety, Committees of [U.S. history]

Committees of safety Ci: 873

Madison, James M: 32

Safety bicycle

Bicycle (Early bicycles) B: 292-293 with picture

Safety Council, National

National Safety Council N: 60

Safety engineering

Safety (In manufacturing plants) S: 13

Safety fusa [explosives]

Fuse F: 589

Safety glass

Glass (Specialty glasses) G: 212

Safety glasses

Glasses (Nonprescription glasses) G: 225

Safety lamp [mining] S: 16 with picture**Safety match**

Match (Safety matches) M: 299; (The first safety matches) M: 300a

Safety of Life at Sea Conventions, International

Ship (Safety at sea) S: 424

Safety pin

Pin P: 466

Safety razor [tool]

Razor R: 153

Safety valve S: 17 with diagram

Boiler B: 439

Saffir, Herbert S. [American engineer]

Hurricane (Hurricane damage) H: 455

Saffir-Simpson scale [meteorology]

Hurricane (Hurricane damage) H: 455; (table) H: 456

Safflower [plant] S: 17 with picture**Safflower oil** [food]

Safflower S: 17

Vegetable oil V: 294

Saffron [seasoning] S: 17

Crocus Ci: 1150

Spain (Food and drink) So: 737

Safi al-Din, Sheik [Persian religious leader]

Safavid dynasty S: 8

SAG See Screen Actors Guild in this index**Saga** [literature] S: 17

Scandinavian literature (Beginnings) S: 171

Saga of Egill Skallagrímsson, The [book by Snorri Sturluson]

Snorri Sturluson S: 538

Saga of the Volsungs [book]

Sigurd S: 455

Sagamore [American Indians]

Micmac Indians M: 513

Sagamore Hill [house]

Roosevelt, Theodore picture on R: 471

Sagamore Hill National Historic Site [New York]

National Park System (table: National historic sites) N: 52-53

Sagan, Carl Edward [American astronomer]

S: 18 with portrait

Sagarmatha See Mount Everest in this index**Sagarmatha National Park** [Nepal]

National park (Other interesting national parks) N: 42e; (table) N: 42f

Sage [plant] S: 18 with picture

Pollen picture on P: 645

Sage, Anna [American public figure]

Dillinger, John Herbert D: 204

Sage, Margaret Olivia Slocum [American phil-

anthropist] S: 18

Sagebrush [plant] S: 18 with picture

Wormwood W: 502

Sagebrush State

Nevada N: 156

Saginaw [Michigan] S: 19**Sagittarius** [astrology] S: 19 with picture

Zodiac (The zodiac in astrology) Z: 601 with picture

Sagittarius [astronomy]

Milky Way (The center of the galaxy) M: 551

Sagittarius A* [astronomy]

Milky Way (The center of the galaxy) M: 551-552

Sago [tree product] S: 19**Sagoyawatha** [American Indian leader]

Red Jacket R: 188

Sagrada Familia, Church of the [Barcelona]

Gaudi, Antonio G: 69

Saguaro [plant] S: 19 with picture

Arizona (Plant and animal life) A: 683 with picture

Cactus (Kinds of cactuses) C: 10 with picture

Tree pictures on T: 415

Saguaro National Park [Arizona] S: 20

Arizona picture on A: 683

National Park System (table: National parks) N: 48

Saguenay River [Quebec] S: 20 with picture**Saguenay-Saint Lawrence National Park**

Canada (table: National marine parks and conservation areas) C: 113

Sahara [desert, Africa] S: 20 with pictures and map

Africa picture on A: 119

Algeria (The Sahara) A: 363 with picture

Desert D: 155

Egypt (The Western Desert) E: 125 with picture and map

Harmattan H: 61

Libya (Land and climate) L: 266 with picture

Plant (Deserts) P: 525

Saharawi Arab Democratic Republic

Organization of African Unity O: 854

Sahel [region, Africa] S: 22

Famine (Drought) F: 25-26

Sahelanthropus tchadensis [hominid]

Prehistoric people P: 744

Sai Gon River [Vietnam]

Mekong River M: 388

Said bin Taimur [sultan of Oman]

Oman (History) O: 759

Said Pasha [Egyptian political leader]

De Lesseps, Ferdinand Marie D: 115

Egypt (Muhammad Ali and modernization) E: 131

Suez Canal (History) So: 958

Saiga [animal]

Animal picture on A: 483

Saigon See Ho Chi Minh City in this index**Saikaku, Ihara** [Japanese author]

Higuchi Ichiyo H: 229

Sail [boat]

Sailing S: 23 with pictures

Ship (Egyptian ships) S: 403-404 with pictures; (Phoenician and Greek ships) S: 405

Windsurfing W: 335 with picture

Sail [submarine]

Submarine So: 939

Sailboarding [sport]

Windsurfing W: 335 with picture

Sailboat

Boating (Types of boats) B: 428-429 with picture

Aerodynamics (Lift and drag in a sailboat) A: 87 with diagram

Sailing S: 23 with pictures

Transportation (Water transportation) T: 384-385

Sailendras [Indonesian rulers]

Indonesia (Hindu and Buddhist kingdoms) I: 236 with picture

Sailer, Toni [Austrian skier]

Skiing (The middle and late 1900's) S: 487

Sailfin molly [fish]

Molly M: 696

Sailfish [fish] S: 23

Fish picture on F: 152

Sailing [sport] S: 23 with pictures

America's Cup A: 431

Canoeing (Poling and sailing) C: 181

Catamaran C: 298
 Flag *pictures* on **F:** 197
 Knots, hitches, and splices (Uses of knots) **K:** 355
 Ship (The age of sailing ships) **S:** 403
 Transportation (The first great civilizations) **T:** 386
See also the list of Related Articles in the Sailing article

Sailor
 Navy, United States (Training a sailor) **N:** 83
 Ship (Officers and crew) **S:** 423

Sailors' Church, The
 Montreal (Churches) **M:** 773

Sailplane [aircraft]
 Airplane, Model *picture* on **A:** 241
 Glider **G:** 228 *with pictures*

Sailsurfing [sport]
 Windsurfing **W:** 335

Saimaa Lake System
 Finland (Land regions) **F:** 113

Saint [title] **S:** 29
 All Saints' Day **A:** 370
 Biography (The Middle Ages) **B:** 313
 Canonization **C:** 183
 Hinduism (Worship of saints) **H:** 237
See also the list of Related Articles in the Saint article

Saint, Eva Marie [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1954) **M:** 863

Saint, Thomas [British inventor]
 Sewing machine (History) **S:** 333

Saint ...
Individual saints appear under their names, as in Paul, Saint. Other entries, such as Saint Louis (Missouri), appear below

Saint Albans [Vermont]
 Vermont **V:** 336

Saint Albans, Battle of [1455]
 Wars of the Roses **W:** 38
 York **Y:** 568

Saint Andrew, Order of
 Knighthood, Orders of (Honorary orders) **K:** 347

Saint Andrews [city, New Brunswick] **S:** 30

Saint Andrews [city, Scotland] **S:** 30
 United Kingdom **U:** 57

Saint Andrew's Blockhouse National Historic Site [New Brunswick]
 Canada (table: National historic sites) **C:** 114

Saint Andrews-by-the-Sea
 Saint Andrews [New Brunswick] **S:** 30

Saint Andrew's cross
 Andrew, Saint **A:** 456
 Cross *picture* on **Ci:** 1155
 Flag *picture* on **F:** 217

Saint Ann's [Nova Scotia]
 Nova Scotia (Visitor's guide) **N:** 560

Saint Anthony [former village]
 Minneapolis (Industrial development) **M:** 583

Saint Anthony's cross
 Cross *picture* on **Ci:** 1155

Saint Augustine [Florida] **S:** 30 *with picture*
 Florida (Places to visit) **F:** 252 *with picture*;
 (Exploration and Spanish settlement) **F:** 261-262
 Hispanic Americans (Exploration and settlement) **H:** 250 *with picture*
 Menéndez de Avilés, Pedro **M:** 400

Saint Augustine Free Public Library
 Florida (Libraries) **F:** 247

Saint Augustine grass
 Lawn (Planting the grass) **L:** 142-144

Saint Bartholomew's Day, Massacre of [1572] **S:** 31
 France (Religious wars) **F:** 473
 Huguenots (The massacre) **H:** 410-411 *with picture*

Saint Basil's Cathedral [Moscow]
 Architecture (Byzantine architecture) **A:** 617
 Europe *picture* on **E:** 381
 Moscow (Famous landmarks) **M:** 823-824 *with picture and map*
 Russia *picture* on **R:** 525; (Architecture) **R:** 536 *with picture*

Saint Benedict, Rule of [religion]
 Monasticism (Christian monasticism) **M:** 700-701

Saint Bernard [dog] **S:** 31 *with picture*

Saint Bernard monastery [Switzerland]
 Saint Bernard **S:** 31

Saint Bernard Passes [Switzerland] **S:** 31

Saint Boniface, Cathedral of [Manitoba]
 Manitoba (Visitor's guide) **M:** 152

Saint Catherine's Day
 Holiday (In other countries) **H:** 291

Saint Charles River
 Quebec **Q:** 34

Saint Christopher [island, West Indies]
 Saint Kitts and Nevis **S:** 37

Saint Clair, Arthur [American general] **S:** 32
 Cincinnati **Ci:** 554
 Northwest Territory (Settlement) **N:** 535
 Ohio Company (The second Ohio Company) **O:** 705

Saint Clair, Lake [Michigan-Ontario]
 Lake Saint Clair **L:** 45

Saint Clare, Augustine [literary figure]
Uncle Tom's Cabin **U:** 20

Saint Cloud [Minnesota] **S:** 32

Saint Crispin, Knights of
 Labor movement (The first nationwide labor organizations) **L:** 9

Saint Croix [island]
 Virgin Islands **V:** 392 *with map; pictures* on **V:** 394

Saint Croix Island International Historic Site **S:** 32

Saint Croix River
 Maine (Rivers and lakes) **M:** 82
 New Brunswick *picture* on **N:** 180

Saint Croix Valley [Minnesota]
 Minnesota (The Louisiana Purchase) **M:** 603-604

Saint Denis, Louis Juchereau de [French frontiersman]
 Louisiana (Exploration and early settlement) **L:** 497-498

Saint Denis, Ruth [American choreographer] **S:** 32 *with picture*
 Shawn, Ted **S:** 378

Saint Domingue
 Haiti (History) **H:** 15-16

Saint Dunstan's University
 Prince Edward Island (Schools) **P:** 786

Saint Elias Mountains [Alaska-Yukon Territory] **S:** 33
 Alaska (Land regions) **A:** 292
 Yukon Territory (Location, size, and description) **Y:** 582 *with map*

Saint Elmo's fire [electricity] **S:** 33

Saint-Exupéry, Antoine de [French author] **S:** 33

Saint Francis, Lake [Canada]
 Saint Lawrence River (The course of the St. Lawrence) **S:** 41

Saint Francis in Ecstasy [painting by Bellini]
 Francis of Assisi, Saint *picture* on **F:** 481

Saint Francis River
 Quebec (Rivers, waterfalls, and lakes) **Q:** 24

Saint-Gaudens, Augustus [American sculptor] **S:** 33 *with picture*

Saint-Gaudens National Historic Site [New Hampshire]
 National Park System (table: National historic sites) **N:** 52-53 *with picture*

Saint George [Bermuda]
 Bermuda (History) **B:** 268

Saint George [district]
 New York City (Staten Island) **N:** 330

Saint George [sculpture by Donatello]
 Donatello **D:** 307 *with picture*

Saint George, Order of [award]
 Garter, Order of the **G:** 46

Saint George and the Dragon [painting by Crivelli]
Painting picture on **P:** 38

Saint George Island [Bering Sea]
 Pribilof Islands **P:** 774

Saint George Slaying the Dragon [sculpture by Donatello]
 Dragon *picture* on **D:** 319

Saint George's [Grenada] **S:** 34
 Grenada *picture* on **G:** 389

Saint George's Chapel [England]
 Windsor Castle **W:** 335

Saint George's cross
 Flag *picture* on **F:** 217
 George, Saint **G:** 109

Saint-Germain, Treaty of [1919] **S:** 34
 World War I (The Paris Peace Conference) **W:** 465; (Provisions of the treaties) **W:** 466

Saint-Germain-en-Laye, Treaty of [1632]
 Nova Scotia (The struggle in Acadia) **N:** 568
 Quebec (Early days) **Q:** 36

Saint Gotthard Pass [Switzerland] **S:** 34

Saint Gotthard Road Tunnel [Switzerland]
 Alps (Alpine travel) **A:** 386
 Switzerland (Transportation) **So:** 1058
 Tunnel (table) **T:** 491 *with picture*

Saint Gotthard tunnels [Switzerland] **S:** 34
 Tunnel (table) **T:** 491

Saint Helena [island, Atlantic] **S:** 34 *with picture*
 Napoleon I (The Hundred Days and Waterloo) **N:** 18

Saint Helens, Mount [mountain] *See* Mount Saint Helens *in this index*

Saint Ignace [island, Ontario]
 Lake Superior (Description) **L:** 45 *with map*

Saint Isaac of Dalmatia, Cathedral of
 Saint Petersburg [Russia] (The city) **S:** 54

Saint James the Greater [carving by Riemenschner]
 Germany *picture* on **G:** 154

Saint James's, Court of *See* Court of Saint James's *in this index*

Saint James's Palace [London] **S:** 35
 London (Palaces) **L:** 435

Saint-Jean [city, Quebec]
 Quebec *picture* on **Q:** 20

Saint Jean, Cathedral of [France]
 Lyon **L:** 536

Saint Jean Baptiste Day [holiday]
 Canada *picture* on **C:** 108

Saint Joan [play by Shaw]
 Joan of Arc, Saint (The memory of Joan of Arc) **J:** 129
 Shaw, George Bernard (Mature period) **S:** 378

Saint Joe River [Idaho]
 Idaho (Interesting facts about Idaho) **I:** 27

Saint John [city, New Brunswick] **S:** 35
 New Brunswick **N:** 180 *with picture*;
 (Population) **N:** 184 *with pictures*;
 (Transportation) **N:** 195; (Recent developments) **N:** 199, *picture* on **N:** 198

Saint John [island]
 Virgin Islands **V:** 392 *with map*
 Virgin Islands National Park **V:** 397

Saint John, J. Hector [French author]
 Crèvecoeur, Michel-Guillaume Jean de **Ci:** 1129

Saint John, John Pierce [American political leader]
 Kansas (table) **K:** 234

Saint John, Knights of *See* Knights of Saint John *in this index*

Saint John, Order of [organization] **S:** 35 *with picture*

Saint John Ambulance [foundation]
 Saint John, Order of **S:** 36

Saint John Lateran [church, Rome]
 Vatican City (St. Peter's Basilica) **V:** 287

Saint John Ophthalmic Hospital
 Saint John, Order of **S:** 36

Saint John River [Maine]
 Maine (Rivers and lakes) **M:** 82

Saint John River [New Brunswick] **S:** 36
 New Brunswick (Rivers and lakes) **N:** 192 *with picture*
 Reversing Falls of Saint John **R:** 268

Saint John the Baptist Day [holiday]
 June **J:** 192

Saint John the Divine, Cathedral of [New York City]
 Morgan, John Pierpont **M:** 803

Saint John's [Antigua and Barbuda]
 Antigua and Barbuda **A:** 555

Saint John's [city, Newfoundland] **S:** 36 *with picture*
 Newfoundland and Labrador **N:** 360 *with pictures*;
 (Population) **N:** 364; (table: Average monthly weather) **N:** 372

Saint John's Church [Richmond]
 Richmond (Other interesting places to visit) **R:** 332
 Virginia (Places to visit) **V:** 408 *with picture*

Saint John's College [Maryland]
 Maryland (Schools) **M:** 244

Saint John's Island

Prince Edward Island (Exploration and early history) P: 791

Saint-John's-wort [shrub] S: 37 *with picture*

Saint Johnsbury Athenaeum

Vermont (Museums) V: 322

Saint Joseph [city, Missouri] S: 37

Saint Joseph University

Lebanon (Education) L: 172

Saint Joseph's Oratory

Montreal (Churches) M: 773 *with picture*

Saint Julien, Cathedral of [France]

Le Mans L: 187

Saint Just, Baron de

Poutrincourt, Jean de Biencourt de P: 722

Saint Katherine's Dock [London]

Architecture (The Industrial Revolution) A: 625

Saint Kilda National Park [United Kingdom]

National park (table) N: 429

Saint Kitts [island, West Indies]

Saint Kitts and Nevis S: 37

Saint Kitts and Nevis [country, West Indies] S: 37

Flag *picture on* F: 201

West Indies (Independence movements)

W: 205

Saint-Lambert Lock [Montreal]

Quebec *picture on* Q: 28

Saint Laurens Church

Rotterdam R: 488

Saint Laurent, Jean Paul [Canadian political leader]

Saint Laurent, Louis Stephen (Marriage) S: 39

Saint Laurent, Louis Stephen [Canadian political leader] S: 39 *with pictures*

Canada, History of (Increasing foreign involvement) C: 151

King, William Lyon Mackenzie (Third term as prime minister) K: 327

Liberal Party L: 227

Saint Laurent, Yves [French fashion designer] S: 40

Saint Lawrence, Gulf of [Canada]

Gulf of Saint Lawrence G: 437

Saint Lawrence, Lake [New York]

Saint Lawrence Seaway (The seaway system)

S: 43; (The hydroelectric power project)

S: 44; (Construction of the seaway) S: 45

Saint Lawrence Church

Rotterdam R: 488

Saint Lawrence Deep Waterway Treaty [1932]

Saint Lawrence Seaway (First construction plans) S: 44-45

Saint Lawrence Islands National Park

[Ontario]

Canada (table: National parks and national park reserves) C: 113

Thousand Islands T: 268

Saint Lawrence Lowlands [Canada]

Canada (Land regions) C: 112-117 *with map*

Ontario (Land regions) O: 776 *with picture*

Quebec (Land regions) Q: 22

Saint Lawrence River [Canada-U.S.] S: 41 *with map*

Canada (Rivers, waterfalls, and lakes) C: 118

Exploration (The search for a northern passage) E: 446

Great Lakes (Drainage) G: 345

Gulf of Saint Lawrence G: 437

Montreal (The city) M: 768-769

Ontario (Rivers, waterfalls, and lakes) O: 778

Quebec Q: 11; (Rivers, waterfalls, and lakes) Q: 24; Q: 34

River (table) R: 352

Saint Lawrence Seaway S: 42 *with picture and map*

Thousand Islands T: 268 *with picture*

Saint Lawrence River Valley

Quebec (Land regions) Q: 22; *picture on* Q: 24

Saint Lawrence Seaway [waterway, Canada-U.S.] S: 42 *with pictures and maps*

Canada (Waterways and ports) C: 126 *with picture*

Canal (table) C: 164

Chicago (Trade) C: 432

Great Lakes (Water routes to the sea) G: 345

Gulf of Saint Lawrence G: 437

Inland waterway (Great Lakes-St. Lawrence Seaway System) I: 274

Lake Michigan (Routes) L: 41

Lake Ontario L: 43

North America (Transportation and communication) N: 469

Ontario (Shoreline and coastline) O: 778;

(Transportation) O: 782

Quebec (Rivers, waterfalls, and lakes) Q: 24

Saint Lawrence River S: 41

Saint Lawrence Seaway Development Corporation S: 45

Welland Ship Canal W: 193

Saint Lawrence Seaway Authority [Canada]

Saint Lawrence Seaway (Canals and locks)

S: 43

Saint Lawrence Seaway Development Corporation [U.S.] S: 45

Saint Lawrence Seaway (Canals and locks)

S: 43

Saint Lazarus, Order of [religious group] S: 45

Saint Lager, Barry [British general] S: 45

Revolutionary War in America (Victory at

Saratoga) R: 282

Saint Louis [Missouri] S: 46 *with pictures and maps*

Climate (Oceans and large lakes) Ci: 676-676a

Missouri (Exploration and settlement) M: 669;

picture on M: 651

United States *picture on* U: 110

Saint Louis [Senegal]

French West Africa (History) F: 528

Saint Louis, Lake [Canada]

Saint Lawrence River (The course of the St. Lawrence) S: 41

Saint Louis Blues [hockey team]

Hockey (table: National Hockey League)

H: 281

Saint Louis Cardinals

Baseball (table) B: 130

Saint Louis Cathedral

New Orleans (Downtown New Orleans)

N: 279; *picture on* N: 282

Saint Louis Post-Dispatch [newspaper]

Pulitzer, Joseph (His career) P: 887

Saint Louis Rams

Football (National Football League) F: 364

Saint Louis River [Minnesota]

Lake Superior (Description) L: 45 *with map*

Saint Lawrence River (The course of the St.

Lawrence) S: 41

Saint Louis Symphony Orchestra

Saint Louis (The arts) S: 48

Saint Louis World's Fair [1904] See Louisiana

Purchase Exposition *in this index*

Saint Lucia S: 50 *with picture and map*

Flag *picture on* F: 201

Saint Lucia Day [custom]

Christmas (In Denmark, Norway, and Sweden)

C: 531 *with picture*

Sweden (Holidays) So: 1026; *picture on*

So: 1025

Saint Luke's Church [Smithfield]

Virginia (Places to visit) V: 408

Saint Maarten Island See Saint Martin *in this index*

Saint Margaret, Chapel of

Edinburgh E: 77

Saint Mark, Basilica of [Venice] S: 51

Architecture (Byzantine architecture) A: 617

Campanile C: 90a

World, History of the *picture on* W: 434

Saint Mark's Square

Venice (The city) V: 306 *with picture and map*

Saint Martin [island, Caribbean]

Guadeloupe G: 408 *with map*

Netherlands Antilles N: 151

Saint Martin d'Ainay, Church of [France]

Lyon L: 536

Saint Martin's summer [weather]

Indian summer I: 189

Saint Mary Lake [lake, Montana]

Glacier National Park (Lakes) G: 205-206

Saint Mary-le-Bow Church [London]

London (Ancestry) L: 430

Saint Mary Magdalene [painting by Van der Weyden]

Van der Weyden, Rogier *picture on* V: 280

Saint Mary's City [Maryland]

Colonial life in America (Places to visit) Ci: 800

Maryland (Places to visit) M: 248 *with picture*

Saint Mary's Hospital [Rochester, Minnesota]

Mayo, William Worrall M: 328

Saint Marys River [Michigan-Ontario] S: 51

Lake Huron L: 39 *with map*

Soo Canals So: 594

Saint Marys River [Nova Scotia]

Nova Scotia (Rivers and lakes) N: 562

Saint Matthew and the Angel [painting by Poussin]

Poussin, Nicolas *picture on* P: 722

Saint Maurice River

Quebec (Rivers, waterfalls, and lakes) Q: 24

Saint Michael and Saint George, Order of

[award]

Knighthood, Orders of (Honorary orders)

K: 347 *with picture*

Saint Michael's Cathedral [Sitka]

Alaska *picture on* A: 291

Saint-Mihiel, Battle of [1918]

World War I (The last campaigns) W: 463 *with picture*

Saint Moritz [Switzerland] S: 51

Saint Nicholas [magazine]

Literature for children (The early 1900's)

L: 363-364

Saint Nicholas, Church of [Italy]

Bari B: 110

Saint Nicholas, Feast of [custom] S: 51

Netherlands (Holidays and recreation) N: 141

Saint Olaf, Order of [award]

Knighthood, Orders of (Honorary orders)

K: 347

Saint-Ours Canal [Quebec]

Canada (table: National historic sites) C: 114

Saint Patrick's Cathedral [Dublin]

Dublin (History) D: 371

Saint Patrick's Cathedral [New York City] S: 51

New York City (A visitor's guide) N: 338-339

with picture

Saint Patrick's cross

Flag *picture on* F: 217

Saint Patrick's Day [custom] S: 51

Ireland [Saint Patrick] I: 425

Saint Paul [Minnesota] S: 52

Minneapolis (The metropolitan area) M: 581

with map

Minnesota M: 584; (Population) M: 588; (table:

Average monthly weather) M: 598; *pic-*

tures on M: 585

Saint Paul Island [Bering Sea]

Pribilof Islands P: 774

Saint Paul University

Ottawa, University of O: 875

Saint Paul Winter Carnival

Minnesota (Visitor's guide) M: 594

Saint Paul-Ilkaira, Walter von [German govern-

ment official]

African violet A: 137

Saint Paul's Cathedral [London]

Architecture (Baroque architecture) A: 622

with picture

London (Churches) L: 435 *with picture*; (The

Middle Ages) L: 439-440 *with picture*

Saint Paul's Church [Norfolk]

Virginia (Places to visit) V: 408

Saint Paul's Church National Historic Site

[New York]

National Park System (table: National historic sites) N: 52-53

Saint Paul's Episcopal Church [Richmond]

Virginia (Places to visit) V: 408

Saint Paul's Seafood Festival [Mississippi]

Mississippi *picture on* M: 626

Saint Peter, Collegiate Church of [London] See

Westminster Abbey *in this index*

Saint Peter's Basilica [Vatican City] S: 53 *with*

picture

Architecture (Later Renaissance architecture)

A: 621 *with picture*; (Baroque architec-

ture) A: 622

Bernini, Gian Lorenzo B: 271

Peter, Saint (Later years) P: 325

Rome (Churches, palaces, and fountains)

R: 429

Sculpture *picture on* S: 254

Vatican City (St. Peter's Basilica) V: 287 *with*

picture; (History) V: 288-289

Saint Peter's Church See Saint Peter's Basilica

in this index

Saint Peter's Church, Old [Rome]

Architecture (Medieval architecture) A: 617

with picture

Saint Peter's Square

Pope *picture on* P: 660

Saint Petersburg [city, Florida] S: 55**Saint Petersburg** [city, Russia] S: 54

Ballet (Ballet in Russia) B: 52

Leningrad, Siege of L: 195

Peter I, the Great (Policies within Russia) P: 324

Saint Petersburg [poem by Bely]

Russian literature (Symbolism) R: 563

Saint Philibert [ship]

Shipwreck (table: Major shipwrecks) S: 428

Saint-Pierre [Martinique]

Martinique M: 235

Saint-Pierre, Charles Irénée Castel de [French author]

Peace (From the 1400's to the 1700's) P: 206

Saint-Pierre and Miquelon [islands, Atlantic] S: 56

Quebec, Battle of (The attack on Quebec) Q: 37-38

Saint Roch [ship]

Northwest Passage N: 529

Saint-Saëns, Camille [French composer] S: 56**Saint Sebastian** [painting by Mantegna]

Painting (The 1400's) P: 52-53 *with picture*

Saint Serapion [painting by Zurbarán]

Painting (The Spanish masters) P: 64 *with picture*

Saint Sernin [church, Toulouse]

Architecture (Romanesque architecture) A: 618

Saint-Simon, Comte de [French philosopher] S: 56

Avant-garde A: 982

Saint Simons Island [Georgia]

Fort Frederica National Monument F: 413

Saint Stephen's Cathedral [Vienna]

Vienna (The city) V: 362

Saint Stephen's Cathedral [Zagreb]

Croatia *picture on* Ci: 1148a

Saint Stephen's Day [custom]

Stephen, Saint So: 890

Saint Sulpice Seminary

Montreal (Old Montreal) M: 770

Saint Swithin's Day [custom]

Swithun, Saint So: 1049

Saint Thomas [island]

Virgin Islands V: 392 *with map; picture on* V: 396

Virgin Islands National Park V: 397

Saint Thomas African Episcopal Church

Jones, Absalom J: 157

Saint Thomas Aquinas, University of

Santo Domingo, University of S: 117

Saint Ursula's Convent [book by Hart]

New Brunswick (Interesting facts) N: 181

Saint Valentine's Day [custom]

Valentine's Day V: 263 *with pictures*

Saint Valentine's Day Massacre [1929]

Capone, Al C: 197

Chicago (The Roaring Twenties) C: 436

Saint Vincent [island, West Indies]

Grenadines G: 390

Saint Vincent and the Grenadines S: 56 *with picture and map*

Flag *picture on* F: 201

Saint Vincent National Wildlife Refuge

[Florida]
National Wildlife Refuge System *picture on* N: 61

Saint Vitus' Cathedral

Prague (The city) P: 730

Saint Vitus's dance [disease]

Chorea C: 522

Sainte-Anne-de-Beaupré [church, Quebec]

S: 57 *with picture*

Quebec (Places to visit) Q: 20 *with picture*

Sainte-Bauve, Charles Augustin [French author] S: 58

French literature (Realism) F: 521-522

Sainte Chapelle [church, Paris]

Stained glass (Technical improvements) So: 823

Sainte Foy [Quebec]

Quebec, Battle of (The attack on Quebec) Q: 37-38

Sainte Genevieve [Missouri]

Missouri *picture on* M: 661

Sainte Geneviève Library [Paris]

Architecture (The Industrial Revolution) A: 625

Saints, New Orleans *See* New Orleans Saints *in this index***Saints Peter and Paul, Cathedral of** *See*

Washington Cathedral *in this index*

Saipan [island, Pacific] S: 58

Northern Mariana Islands, Commonwealth of the N: 525 *with picture and map*
World War II (Island hopping in the Central Pacific) W: 488-489

Sairy Gamp [literary figure]

Dickens, Charles (The first phase) D: 188

Saison en enfer, Une [book by Rimbaud]

Rimbaud, Arthur R: 341

Sajama [mountain, Bolivia]

Andes Mountains (Physical features) A: 452

Sajudis [political movement]

Lithuania (History) L: 389-390

Saka Era [calendar]

Kanishka K: 215

Sakakawea *See* Sacagawea *in this index***Sakakawea, Lake** [North Dakota]

North Dakota (Places to visit) N: 504; (Rivers and lakes) N: 508 *with picture*

Sake [drink]

Rice (Other uses) R: 323

Sakhalin [island, Russia] S: 58**Sakharov, Andrei Dmitriyevich** [Soviet physicist] S: 59 *with portrait***Saki** *See* Munro, Hector Hugh *in this index***Sakmann, Bert** [German physiologist]

Nobel Prizes (Physiology or medicine: 1991) N: 445

Sakoku [Japanese history]

Tokyo (Western influence) T: 319

Sakonnet River

Rhode Island (Rivers and lakes) R: 306

Sal soda

Soda So: 569

Salaam, Rashaan [American football player]

Football (table) F: 363

Saladin [Muslim warrior] S: 59

Cairo (History) C: 17-18

Crusades (The Third Crusade) Ci: 1160

Egypt (Muslim rule) E: 130

Fatimid dynasty F: 55

Palestine (Arab control) P: 105

Syria (Christian crusaders) So: 1075

Salafiyah [political movement]

Muslims (Reform and renewal) M: 965

Salam, Abdus [Pakistani physicist]

Nobel Prizes (Physics: 1979) N: 441

Salamanca [literary school]

Spanish literature (The 1500's) So: 758-759

Salamander [animal] S: 59 *with pictures*

Amphibian (Kinds of amphibians) A: 440 *with pictures*

Animal (Regeneration) A: 498; *picture on*

A: 478

Lizard L: 399

Mudpuppy M: 909 *with picture*

Salamasina [Samoan political leader]

Samoa (History) S: 80a

Salamis [island, Greece] S: 60**Salamis, Battle of** [480 B.C.]

Aristides A: 662

Themistocles T: 251

Xerxes I X: 544

Salammô [book by Flaubert]

Flaubert, Gustave F: 230

Salary *See* Wages and hours *in this index***Salary Grab Act** [1873]

Wheeler, William Almon W: 279

Salary schedule

Teaching (Rewards of teaching) T: 69

Salat [religion]

Islam (The Five Pillars of Islam) I: 463

Salat al-id [religion]

'Id al-Fitr I: 25

Salazar, António de Oliveira [Portuguese political leader] S: 60

Portugal (The Salazar dictatorship) P: 694

Salé [city, Morocco]

Rabat R: 46

Sale, Bill of [law]

Bill of sale B: 305

Sale, Jamie [Canadian athlete]

Olympic Games *picture on* O: 746d

Sale barn

Meat packing (Kinds of markets) M: 350

Salem [Massachusetts] S: 60 *with picture*

Massachusetts (Places to visit) M: 280;

(Massachusetts Bay Colony) M: 289

Salem [Oregon] S: 61**Salem** [former city]

Winston-Salem W: 342

Salem, Peter [American soldier] S: 61**Salem Express** [ship]

Shipwreck (table: Major shipwrecks) S: 428

Salem Maritime National Historic Site

[Massachusetts]

National Park System (table: National historic sites) N: 52-53

Salem (Location and description) S: 60-61

Salem witchcraft trials [U.S. history] S: 61

Colonial life in America (Religion) Ci: 804-805

Massachusetts *picture on* M: 291

Mather, Cotton M: 309

Salem (History) S: 61

Sewall, Samuel S: 331

Witchcraft (Middle Ages through the 1700's) W: 372 *with picture*

Sales [economics] S: 61

Advertising A: 72

Automobile (Selling) A: 960

Careers (Sales) C: 229 *with picture*

Manufacturing (Distribution and sales) M: 171

Marketing M: 214

Sales tax S: 66

United States, History of the (Distribution, sales, and communication) U: 178

Sales, Saint Francis de [French religious leader] *See* Francis de Sales, Saint *in this index***Sales agreement** [document]

Sales (Persuasion) S: 63-64

Sales representative

Careers (Sales) C: 229

Sales tax S: 66

Taxation (Taxes on transactions) T: 53

West Virginia (Interesting facts) W: 207

Salesians [religious group]

Aristide, Jean-Bertrand A: 662

Religious life (table) R: 227

Salesperson

Sales S: 61

Salian dynasty [German history]

Germany (The Holy Roman Empire) G: 162

Salians [people]

Franks F: 494

Salic law [European history] S: 66

Austria (Wars in the 1700's and 1800's) A: 938

Valois V: 267

Salicylic acid [chemical] S: 66**Salientia** [zoology]

Frog (Kinds of frogs) F: 539

Salinas de Gortari, Carlos [Mexican political leader] S: 66 *with portrait*

Mexico (Recent developments) M: 474

Salinas Pueblo Missions National Monument

[New Mexico]

National Park System (table: National monuments) N: 51

Salinas Valley [region, California]

Lettuce (Growing lettuce) L: 214

Salinger, J. D. [American author] S: 66

Novel (After World War II) N: 574

Salinity [measurement]

Estuary E: 364

Salinometer [measuring device]

Hydrometer H: 471

Salisbury [England] S: 67 *with picture***Salisbury** [Zimbabwe] *See* Harare *in this index***Salisbury, Marquess of** [British political leader] S: 67**Salisbury Cathedral**

Gothic art (Gothic architecture in England) G: 278

Salisbury S: 67 *with picture*

Salish Indians [American Indians] S: 67

British Columbia (Early days) B: 628

Indian, American *picture on* I: 162

Saliva [physiology] S: 67 *with diagram*

See also Ptyalin *in this index*

Digestive system (From mouth to stomach) D: 202-203

Human body (The mouth, esophagus, and stomach) H: 419

Mastication M: 298

Salivary glands [anatomy]

Saliva S: 68 *with diagram*

- Gland (table) **G**: 209
 Human body *diagram on H*: 422
 Mouth **M**: 903 *with diagram*
 Mumps **M**: 926
- Salk, Jonas Edward** [American biochemist]
S: 68 *with picture*
 Poliomyelitis (Prevention of poliomyelitis) **P**: 626
 Sabin, Albert Bruce **S**: 3
- Salk Institute for Biological Sciences** [La Jolla, California]
 Kahn, Louis Isadore *picture on K*: 209
- Salka Valka** [book by Laxness]
 Scandinavian literature (The modern period in Scandinavian literature) **S**: 171
- Salle, David** [American artist]
 Painting (Post-modernism) **P**: 88 *with picture*
- Sallé, Marie** [French dancer]
 Ballet (The rise of professional ballet) **B**: 51
- Salley, John Peter** [American explorer] See Salling, John Peter *in this index*
- Salling, John Peter**
 West Virginia (Early settlement) **W**: 226
- Sallust** [Roman historian]
 History (The ancient Greeks and Romans) **H**: 261-262
 Latin literature (The age of Cicero) **L**: 115
- Salmagundi** [magazine]
 Irving, Washington (Early career) **I**: 460
- Salmon** [fish] **S**: 69 *with pictures*
 Alaska (American purchase) **A**: 301, *picture on A*: 299
 Canada (Fishing industry) **C**: 124-125 *with picture*
 Fish *pictures on F*: 146
 Scotland (Food and drink) **S**: 214
 Seal (Seals and fishing crews) **S**: 268
 Washington (Recent developments) **W**: 68-69
- Salmon Falls River**
 New Hampshire (Rivers and lakes) **N**: 220
- Salmon River**
 Idaho (Rivers, waterfalls, springs, and lakes) **I**: 38
 Nevada (Rivers and lakes) **N**: 166
- Salmon River Mountains**
 Idaho (Mountains) **I**: 36
- Salmon Ruins**
 New Mexico (Places to visit) **N**: 264
- Salmon spear** [weapon]
 Indian, American *picture on I*: 139
- Salmonella** [bacteria]
 Dysentery **D**: 398
 Food poisoning **F**: 340
 Salmonellosis **S**: 71
 Turtle **T**: 520
- Salmonella typhi** [bacteria]
 Typhoid fever (Cause and spread) **T**: 539
- Salmonellosis** [disease] **S**: 71
- Salome** [Biblical figure] **S**: 71
- Salome** [opera by Strauss]
 Opera (*Salome*) **O**: 807 *with picture*
 Strauss, Richard **S**: 922
- Salomé** [play by Wilde]
 Opera (*Salome*) **O**: 807
- Salomon, Edward** [American political leader]
 Wisconsin (table) **W**: 365
- Salomon, Haym** [American patriot] **S**: 71
- Salon** [French history]
 Salon **S**: 71
 Women's movements (From the Renaissance to the 1800's) **W**: 384
- Salon** [room] **S**: 71
- Salon Carré** [Paris]
 Salon **S**: 71
- Salon des Refusés** [Paris]
 Salon **S**: 71
- Salonika** [city, Greece] See Thessaloniki *in this index*
- Salote** [queen of Tonga]
 Tonga (History) **T**: 329
- Salsa** [music]
 Hispanic Americans (Entertainment and arts) **H**: 248
- Salsify** [plant] **S**: 71 *with picture*
- Salt** **S**: 72 *with pictures*
 See also Salt, Chemical *in this index*
 Drainage **D**: 320
 Food preservation (Curing) **F**: 341
 Horse (Food) **H**: 355
 Nutrition (Limit intake of sodium and sugar) **N**: 628
- Ocean (Composition) **O**: 654
 Rock (Chemical sediments) **R**: 372
 Sodium (Where sodium is found) **So**: 569
 Thirst **T**: 259
- SALT** [meetings] See Strategic Arms Limitation Talks *in this index*
- Salt, Chemical** **S**: 75
 Neutralization **N**: 154
- Salt Acts** [history of India]
 Gandhi, Mohandas Karamchand (Gandhi's independence campaigns) **G**: 25
 India (New Constitution) **I**: 132
- Salt Creek pupfish** [fish]
 Pupfish *picture on P*: 904
- Salt-cured meat**
 Fishing industry (Methods of processing) **F**: 186
- Salt dome** [geology]
 Louisiana (Land regions) **L**: 490
 Petroleum (How petroleum was formed) **P**: 334-335; *picture on P*: 336
 Salt (Salt from the ground) **S**: 73-74
- Salt Lake, Great** See Great Salt Lake *in this index*
- Salt Lake City** [Utah] **S**: 76 *with picture*
 Mormons (Mormons today) **M**: 809 *with picture*
 Utah **U**: 230 *with picture*
- Salt lick**
 Pioneer life in America (Food) **P**: 481-482
 Rabbit (Food) **R**: 48-49
 Salt *picture on S*: 73
- Salt mine**
 Salt (Salt from the ground) **S**: 73-74 *with picture*; (History of salt) **S**: 75
- Salt River** [Arizona] **S**: 76a
 Phoenix (The city) **P**: 395 *with map*; (Early developments) **P**: 399
- Salt Sea**
 Dead Sea **D**: 56
- Salt water** See Brine; Seawater *in this index*
- Saltbush** [shrub]
 Australia (Native plants) **A**: 914-915 *with picture*
- Saltcellar of Francis I** [sculpture by Cellini]
 Cellini, Benvenuto **C**: 339 *with picture*
- Salter, Susanna Madora** [American political leader] **S**: 76a *with portrait*
 Kansas (Interesting facts) **K**: 217
- Salto** [Uruguay] **S**: 76a
- Salton Sea** [lake, California] **S**: 76a
 California (Rivers, waterfalls, and lakes) **C**: 50-51
- Saltpeter** [mineral] **S**: 76a
 Mammoth Cave National Park **M**: 130
- Saltwater crocodile**
 Animal *picture on A*: 486
 Crocodile **Ci**: 1150
- Saltwater fish**
 Fish (Saltwater environments) **F**: 150 *with pictures*
- Saluda Dam** [Saluda River, South Carolina] **S**: 76b
- Saluki** [dog] **S**: 76b *with picture*
 Dog (History) **D**: 281; *picture on D*: 271
- Salutation**
 Letter writing (The salutation) **L**: 210 *with picture*
- Salutatorian** [education]
 Graduation **G**: 297
- Salute** [custom] **S**: 76b
 Flag (Saluting the flag) **F**: 219
- Salvador** [city, Brazil] **S**: 76b
- Salvador, El** See El Salvador *in this index*
- Salvage**
 Fire department (Firefighting) **F**: 123-124
- Salvage** [village, Newfoundland and Labrador]
 Newfoundland and Labrador *picture on N*: 364
- Salvage** [law] **S**: 76b
- Salvage service**
 Salvage **S**: 76b
- Salvarsan** [medication]
 Ehrlich, Paul **E**: 145
- Salvation** [religion]
 Predestination **P**: 734
 Protestantism (Faith and grace) **P**: 833
 Religion (A doctrine of salvation) **R**: 216
 Roman Catholic Church (Sin, the Incarnation and salvation) **R**: 404
- Salvation Army** [religious group] **S**: 77 *with pictures*
 Booth, Evangeline Cory **B**: 480
 Booth, William **B**: 480
- Salvia** [plant] **S**: 77 *with picture*
- Salvor** [person]
 Salvage **S**: 76b
- Salyut** [space station]
 Astronaut (Achievements in space) **A**: 829-830
 International Space Station (History) **I**: 346b
 Space exploration (Salyut and Skylab) **So**: 721
- Salzburg** [city, Austria] **S**: 78
 Reinhardt, Max **R**: 209
- Salzburg Festival**
 Austria (The arts) **A**: 932-933
- SAM** [weapon]
 Guided missile (Surface-to-air missiles) **G**: 426
- Sam and Dave** [musical group]
 Rock music (Expanding styles and sounds) **R**: 378-379
- Sam Lawson's Oldtown Fireside Stories** [book by Stowe]
 Stowe, Harriet Beecher (Other works) **So**: 916
- Sama-Veda** [Hindu book]
 Vedas **V**: 291
- Samaal** [people]
 Somalia (People) **So**: 588
- Samar** [island, Philippines]
 Philippines (The main islands) **P**: 376-378 *with map*
- Samara** [city, Russia] **S**: 78
- Samaria** [ancient city] **S**: 78
- Samaritans** [ancient people] **S**: 78
- Samarium** [element] **S**: 78
- Samarkand** [city, Uzbekistan] See Samarqand *in this index*
- Samarqand** [city, Uzbekistan] **S**: 78
 Timur **T**: 293
- Samba** [dance]
 Ballroom dancing **B**: 63
- Sambar** [food]
 India (Food and drink) **I**: 118
- Sambo** [sport]
 Wrestling (Chief forms of wrestling) **W**: 505
- Sambuke** [musical instrument]
 Elder **E**: 157
- Same-sex union**
 Family (Varieties of families) **F**: 20
- Samhain** [custom]
 Halloween **H**: 24a; (History) **H**: 25
 October **O**: 670
- Samhitas** [religious books]
 Hinduism (Sacred writings) **H**: 236
 Vedas **V**: 291
- Sami** [language]
 Sami (Language and culture) **S**: 79
- Sami** [people] **S**: 78 *with pictures*
 Arctic (In the European Arctic) **A**: 639 *with picture*
 Clothing *picture on Ci*: 690
 Europe *picture on E*: 401
 Finland (People) **F**: 111; *picture on F*: 113; (History) **F**: 116
 Lapland **L**: 74
 Norway (Ancestry) **N**: 539
 Reindeer **R**: 208
- Samlog scoring system**
 Ice skating (Long-track skating) **I**: 14
- Samnites** [ancient people]
 Rome, Ancient (The early republic) **R**: 445
- Samo** [people]
 Burkina Faso (People) **B**: 706
- Samoa** [country] **S**: 80 *with pictures and map*
 Flag *picture on F*: 204
- Samoa Islands** [Pacific] **S**: 80b
 Samoa **S**: 80
- Samoa** [language]
 Samoa (People) **S**: 80a
- Samoset** [American Indian chief] **S**: 80b
 Plymouth Colony (The first year) **P**: 583
- Samothrace** [island, Greece] **S**: 81
- Samothraki** [island, Greece]
 Samothrace **S**: 81
- Samotlor** [oil field]
 Siberia *picture on S*: 445
- Samoyed** [dog] **S**: 81
 Dog *picture on D*: 267
 Sled dog **S**: 505
- Samoyeds** [people]
 Arctic (In the Siberian arctic) **A**: 639

Sampaio, Jorge [Portuguese political leader]
Portugal (Recent developments) P: 695

Sampan [boat] S: 81
Transportation (Water transportation) T: 384-385

Sample [statistics]
Psychology (Naturalistic observation) P: 847-848
Public opinion poll (Selecting the sample) P: 862
Sociology (Surveys) So: 565
Statistics (Collecting the data) So: 868; (Sampling) So: 869

Sampler [handicraft] S: 81 *with picture*

Sampling calorimeter [machine]
Particle detector (Sampling calorimeters) P: 187

Sampras, Pete [American tennis player] S: 81

Sampson, Deborah [American patriot] S: 81

Sampson, William Thomas [American admiral] S: 81
Spanish-American War (Cuban blockade) So: 753

Sam's Art [drawing by Steinberg]
Steinberg, Saul *picture on* So: 885

Samsara [religion]
Yoga Y: 567

Samson [Biblical figure] S: 82
Delilah D: 116

Samson Agonistes [poem by Milton]
Milton, John M: 557

Samsung Electronics
Manufacturing (table) M: 170

Samudragupta [emperor of India]
Gupta dynasty (Rise and fall of the dynasty) G: 442

Samuel [Biblical figure]
Samuel, Books of S: 82
Jews *picture on* J: 122

Samuel, Books of [Old Testament] S: 82

Samuelson, Paul Anthony [American economist] S: 82

Samuelsson, Bengt Ingemar [Swedish biochemist]
Nobel Prizes (Physiology or medicine: 1982) N: 445

Samurai [Japanese history] S: 82 *with picture*
Hara-kiri H: 55
Japan (Creation of private estates) J: 53; (Meiji era) J: 56
Kamakura period K: 212
Sword So: 1062 *with picture*

San [people] S: 83
Botswana (People) B: 511
Drakensberg D: 323
Family *picture on* F: 24
Kalahari Desert K: 210
Religion *picture on* R: 215
South Africa (History) So: 617
Zimbabwe (History) Z: 597

San Andreas Fault [California] S: 83 *with picture and map*
California (Land regions) C: 48
Earthquake (How an earthquake begins) E: 33 *with picture*
Plate tectonics (Transform plate boundaries) P: 563

San Antonio [Texas] S: 84 *with pictures and map*
Texas (The mission period) T: 206

San Antonio [ship]
Magellan, Ferdinand (The voyage begins) M: 46

San Antonio de Bexar, Fort
Texas (The mission period) T: 206

San Antonio de Valero, Mission
Alamo (Early days) A: 280
Mission life in America (A visitor's guide) M: 620
Texas (The mission period) T: 206

San Antonio Independent School District v. Rodriguez [U.S. history]
Education (How should education be financed?) E: 108

San Antonio Spurs
Basketball (table) B: 150

San Bernardino [California] S: 87

San Bernardino County [California]
California (Land regions) C: 48

San Bernardino Tunnel [Switzerland]

Tunnel (table) T: 491

San Blas Indians [American Indians] S: 87

Panama (Way of life) P: 116-117 *with picture*; (Clothing) P: 118

San Callisto, Catacomb of [Rome]
Bible *picture on* B: 281

San Carlos, University of
Guatemala (Education) G: 414

San Carlos Borromeo, Mission
Mission life in America *picture on* M: 619

San Cristóbal Island
Galapagos Islands G: 7 *with map*

San Diego [California] S: 88 *with pictures and maps*

San Diego Bay
California (Coastline) C: 50
San Diego S: 88 *with pictures*

San Diego Chargers
Football (National Football League) F: 364

San Diego de Alcalá, Mission
California (The California missions) C: 60; *picture on* C: 61
Hispanic Americans *picture on* H: 245
Mission life in America (Western missions) M: 618-619

San Diego Marine Corps Recruit Depot [California] S: 91

San Diego Naval Base [California] S: 91
San Diego (Economy) S: 90b *with picture*

San Diego Padres
Baseball (table) B: 130

San Diego Ranges [mountains, Mexico-U.S.]
California (Land regions) C: 48-50

San Diego Track Club [athletics]
Triathlon T: 440

San Diego Wild Animal Park
Zoo (Cageless zoos) Z: 606

San Diego Zoo
California (Places to visit) C: 46 *with picture*
San Diego (Recreation) S: 90a *with picture*
Zoo *picture on* Z: 603

San Domingo See Santo Domingo *in this index*

San Esteban Rey de Acoma
Mission life in America (A visitor's guide) M: 620

San Felipe de Austin [former city]
Texas (American settlement) T: 206

San Felipe de Neri [church]
Albuquerque (Description) A: 333

San Fermín, Fiesta of [custom]
Spain (Religious holidays) So: 738; *picture on* So: 731

San Fernando Valley [region, California]
Los Angeles (The San Fernando Valley) L: 460 *with picture*; (Housing) L: 463; (Recent developments) L: 470-471

San Francesco di Paola [church, Naples]
Architecture (Neoclassical architecture) A: 623-624

San Francisco [California] S: 92 *with pictures and maps*
California C: 36; (table: Average monthly weather) C: 51
Climate (Oceans and large lakes) Ci: 676-676a
Gold rush (Gold rushes in the United States) G: 254
Golden Gate Bridge G: 255
United States *picture on* U: 98

San Francisco, Rio [river, Brazil]
São Francisco, River S: 117

San Francisco Acatepec, Church of [Pueblo, Mexico]
Mexico *picture on* M: 460

San Francisco Bay [California]
California (Coastline) C: 50
San Francisco (Downtown San Francisco) S: 92-93 *with picture and map*

San Francisco Conference [1945] S: 99
United Nations (The San Francisco Conference) U: 95

San Francisco de los Tejas
Texas (French exploration) T: 204-206

San Francisco earthquake [1906]
California (Early statehood) C: 62; *picture on* C: 63
San Francisco (Earthquake and fire) S: 98 *with picture*

San Francisco Examiner [newspaper]
Hearst, William Randolph H: 131

San Francisco 49ers

Football (National Football League) F: 364

San Francisco Giants
Baseball (table) B: 130

San Francisco Mountains [mountains, Arizona]
Arizona *picture on* A: 671

San Francisco-Oakland Bay Bridge [California] S: 99
Bridge (table: Combination) B: 603
California (Transportation) C: 57
San Francisco *picture on* S: 92

San Francisco Renaissance
Duncan, Robert D: 384

San Gabriel Arcángel, Mission
Los Angeles (Settlement) L: 469

San Giorgio Maggiore [church, Venice]
Palladio, Andrea *picture on* P: 107

San Isabel National Forest
Colorado *picture on* Ci: 828

San Jacinto [ship]
Trent Affair T: 435

San Jacinto, Battle of [1836] S: 99
Mexico (War with Texas and the United States) M: 471
Santa Anna, Antonio López de (War with Texas) S: 113
Texas (The Texas revolution) T: 206-207
Westward movement in America (Texas) W: 249

San Jacinto Battleground State Historical Park [Texas]
Houston (Landmarks) H: 395

San Jacinto Monument [Houston]
Texas (Places to visit) T: 194

San Joaquin River [California] S: 99
California (Rivers, waterfalls, and lakes) C: 50

San Joaquin Valley [region, California]
California (Agriculture) C: 56
San Joaquin River S: 100

San Jose [California] S: 100 *with picture*

San José [Costa Rica] S: 102
Costa Rica Ci: 1080 *with picture*

San José, Mission
Mission life in America (A visitor's guide) M: 620 *with picture*
Texas (Places to visit) T: 194

San Jose scale [insect] S: 102 *with pictures*
Insect *picture on* I: 281
Scale insect S: 170

San Juan [Puerto Rico] S: 103
Puerto Rico *picture on* P: 872; (People) P: 874-875 *with picture*

San Juan Capistrano [city, California] S: 103

San Juan Capistrano, Mission
Mission life in America (A visitor's guide) M: 620

San Juan-Chama project
New Mexico (The mid-1900's) N: 275-276 *with picture*

San Juan de Los Caballeros [U.S. history]
New Mexico (Exploration and settlement) N: 273

San Juan Hill, Battle of [1898]
Roosevelt, Theodore (The Rough Riders) R: 467
Rough Riders R: 490
Spanish-American War (Land battles) So: 754

San Juan Mountains
Colorado (Land regions) Ci: 838 *with map*

San Juan National Historic Site [Puerto Rico]
San Juan S: 103
National Park System (table: National historic sites) N: 52-53

San Lorenzo, Church of
Architecture (Early Renaissance architecture) A: 620

San Lorenzo, Treaty of See Pinckney Treaty *in this index*

San Luis Potosí [city, Mexico] S: 103

San Marcos, University of [Lima] S: 103

San Marino [country] S: 103 *with picture and map*
Flag *picture on* F: 207

San Marino [city, San Marino] S: 104 *with picture*

San Martín, José de [Argentine general] S: 105 *with portrait*
Argentina (Independence) A: 656 *with picture*
Chile (Independence) C: 468
Flag *picture on* F: 217
Latin America (The wars of independence) L: 107

Peru (The war of independence) P: 314

San Martín, Plaza

Lima (The city) L: 305

San Miguel de Allende [Mexico]

Mexico picture on M: 466

San Miguel de Gualdape [Spanish settlement]

Hispanic Americans (Exploration and settlement) H: 250

South Carolina (Exploration and settlement) So: 659

San Miguel Mission

New Mexico (Places to visit) N: 264 with picture

San Pedro, Diego de [Spanish author]

Spanish literature (The 1400's) So: 758

San Pedro fig [fruit]

Fig F: 96

San Pedro Sula [Honduras] S: 105

Honduras (The Northern Coast) H: 309 with map

San Quentin [prison, California] S: 105

San Salvador [El Salvador] S: 105

El Salvador E: 248

San Salvador [island, Pacific]

Galapagos Islands G: 7 with map

San Salvador Island [Atlantic]

Bahamas B: 28 with map

Columbus, Christopher (The first landing) Ci: 860; map on Ci: 859

San Simeon [estate]

Hearst, William Randolph H: 131

Morgan, Julia M: 804

San Stefano, Treaty of [1878]

Berlin, Congress of B: 266

San Vitale [church, Ravenna]

Architecture picture on A: 617

Byzantine art picture on B: 749

San Xavier del Bac Mission

Arizona (Places to visit) A: 678 with picture

Kino, Eusebio Francisco K: 332

Mission life in America (A visitor's guide) M: 620

Sanaa [Yemen] S: 105

Yemen Y: 561 with picture

Sanatorium [medicine]

Sanitarium S: 111

Sanchez, Florencio [Argentine dramatist]

Latin-American literature (Realism) L: 112

Sánchez, George Isidore [American educator] S: 105

Sánchez, Oscar Arias [Costa Rican political leader]

Nobel Prizes (Peace: 1987) N: 449

Sánchez Cerro, Luis [Peruvian political leader]

Peru (The growth of U.S. influence) P: 315; (The rise of APRA) P: 315

Sánchez de Lozada, Gonzalo [Bolivian political leader]

Bolivia (Recent developments) B: 447

Sanchez-Scott, Milcha [American dramatist]

Hispanic Americans picture on H: 248

Sánchez Vilella, Roberto [Puerto Rican political leader]

Puerto Rico (Puerto Rico today) P: 884

Sancho II [king of Castile]

Cid, The Ci: 552

Sancho Panza [literary figure]

Don Quixote D: 307

Sanctions, Economic [political science] S: 106

Human rights (Trade and diplomatic measures) H: 428a

League of Nations (Why the League failed) L: 160

Peace (International organizations) P: 207

Terrorism (Diplomatic, economic, and military pressure) T: 179

Sanctuary [book by Faulkner]

Faulkner, William F: 55

Sand S: 106

Glass (Soda-lime glass) G: 213; (Early times) G: 217-218

Gravel G: 330

Loam L: 404

Seashore (Life on sandy shores) S: 270

Soil (Minerals) So: 573

Sand, George [French author] S: 106 with portrait

Chopin, Frédéric François (His life) C: 521

French literature (Romantic fiction) F: 521

Liszt, Franz (His life) L: 349-350

Sand casting [industrial process]

Cast and casting (How castings are made)

C: 278 with pictures

Sand cherry [shrub]

Beach plum B: 179

Sand Creek Massacre [1864]

Cheyenne Indians C: 418

Colorado (Territorial days) Ci: 845

Indian wars (The Southern Plains) I: 194

Sand dollar [sea animal] S: 107 with picture

Sand dune See Dune in this index

Sand fly [insect] S: 107

Fly (table) F: 310

Sand Hills [Nebraska]

Nebraska (Land regions) N: 104; (Rivers and lakes) N: 106

Sand painting [handicraft] S: 107

Folklore picture on F: 324

Indian, American (After European contact) I: 168

Sand Plains [Netherlands]

Netherlands (The land) N: 144

Sand sea [geology]

Dune D: 384

Sand trap

Golf (Hazards) G: 261 with picture

Sand verbena [plant] S: 107

Flower (Flowers of the desert) F: 290 with picture

Sand wedge

Golf (Golf clubs) G: 262 with picture

Sandal [clothing]

Shoe pictures on S: 430, S: 432

Sandalwood [wood] S: 107

Sandalwood oil

Sandalwood S: 107

Sandbagging [flood control]

Flood picture on F: 238

Sandblasting [industrial process] S: 107

Glass (Sandblasting) G: 217

Sandbur [plant] S: 107

Plant picture on P: 542

Sandburg, Carl [American author] S: 107 with portrait

American literature (Realist poetry) A: 421 with portrait

Sande, Earl [American jockey] S: 108

Sanderling [bird] S: 108

Sanders, Barry [American football player] S: 108

Football (table) F: 363

Sanders, Carl E. [American political leader]

Carter, Jimmy (Steps to the governorship)

C: 254

Sanders, Deion [American football player/baseball player] S: 109

Sanders, George [British actor]

Motion picture (Best performance by an actor in a supporting role: 1950) M: 863

Sanders, Thomas [American businessman]

Telephone (The Bell System) T: 100

Sandglass [measuring device]

Hourglass H: 379 with picture

Time (Devices that measure time) T: 288

Sandgrouse [bird] S: 109

Sandhill crane [bird]

Crane (Kinds) Ci: 1117 with picture

Animal picture on A: 485

Sandia National Laboratories S: 109

New Mexico (Recent developments) N: 276

Sandinista National Liberation Front See

Sandinistas in this index

Sandinistas [political group]

Communism (Communist influence in other areas) Ci: 894

Honduras (Recent developments) H: 313

Iran-contra affair (Background) I: 407

Nicaragua (Rebel victory) N: 400 with picture

Ortega, Daniel O: 859

Sandino, Augusto César S: 109

Sandino, Augusto César [Nicaraguan revolutionary] S: 109

Nicaragua (The United States and Nicaragua) N: 400; (Rebel victory) N: 400

Somoza García, Anastasio So: 590

Sandman

Fairy F: 10

Sandoy [island]

Faroe Islands F: 47

Sandpaper

Woodworking (Sanding and finishing) W: 398

Sandpiper [bird] S: 109

Bird (Birds of inland waters and marshes)

B: 340 with picture; picture on B: 361

Ruff R: 509

Upland sandpiper U: 213 with picture

Sandstone [rock] S: 110

Building stone B: 685

Rock (table) R: 373 with picture; (Clastic sediments) R: 372

Sandstone Hills [region, Oklahoma]

Oklahoma (Land regions) O: 724

Sandstorm [weather] S: 110

Sandwich

Food (Interesting facts about food) F: 329

Sandwich, Earl of [English nobleman]

Food (Interesting facts about food) F: 329

Sandwich glass

Glass (Early American glass) G: 222; (Types of art glass) G: 221

Sandwich Islands

Hawaii (European exploration) H: 106

Sanford, Edward T. [American jurist]

Supreme Court of the United States (table) So: 1000

Sanford, John F. A. [American public figure]

Dred Scott Decision (The background of the case) D: 345

Sanford, Maria L. [American educator] S: 110

Sanford, Terry [American political leader]

North Carolina (table) N: 490

Sanforizing [industrial process]

Textile (Finishing the fabric) T: 217

Sangam [center, India]

Girl Scouts (In other countries) G: 199-200

Sanger, Frederick [British chemist] S: 110

Sanger, Margaret [American social reformer]

S: 110 with portrait

Birth control (The birth control movement)

B: 378

Planned Parenthood Federation of America

(History) P: 515

Sangha [religion]

Buddhism (The sangha) B: 668 with picture

Religion (How the major religions are organized) R: 218

Sango [language]

Central African Republic (People) C: 352

Sangre de Cristo Mountains [Colorado-New Mexico]

Colorado (Land regions) Ci: 838 with map

Sangria [drink]

Spain (Food and drink) So: 737

Sangster, Charles [Canadian poet] S: 110

Canadian literature (Poetry: 1850-1918) C: 158

Sanguine humor [psychology]

Personality (Personality types) P: 302

Sanguinetti, Julio Maria [Uruguayan political leader]

Uruguay (Recent developments) U: 228

Sanhedrin [ancient Israel] S: 110

Hillel I H: 232

Sanibel Island [Florida]

Florida (Places to visit) F: 252

Sanidine [mineral]

Feldspar F: 68

Sanitarium [medicine] S: 111

Tuberculosis (Treatment of tuberculosis) T: 479

Sanitary Commission, United States

Civil War (Hospitals) Ci: 630-631

Sanitary landfill

Waste disposal (Land disposal) W: 113 with picture

Sanitary napkin

Menstruation (Effects of menstruation) M: 404

Sanitary sewerage system

Sewage S: 329

Sanitation S: 111

City (Description) Ci: 578

Garbage disposer G: 28

Plant (Control of diseases and pests) P: 545

Sewage S: 329 with diagrams

Waste disposal W: 112

Water (City water systems) W: 124

Sanity [law]

Insanity I: 277

Sankara [Hindu religious leader]

Monasticism (Non-Christian monasticism) M: 701

Sankey, Ira D. [American singer]

Moody, Dwight Lyman M: 781

- Sankhya** [philosophy]
Hinduism (The six schools of philosophy)
H: 236
- Sankore Mosque** [Timbuktu, Mali]
World, History of the *picture on W*: 436
- Sannazaro, Jacopo** [Italian poet]
Italian literature (Humanism and the Renaissance) I: 494
- Sannyasi** [Hinduism]
Manu M: 168
- Sans-serif type** [printing]
Type (Classes of type) T: 537 *with picture*
- Sanskrit language** S: 111 *with picture*
Aryans A: 764
India (Languages) I: 114; (The Aryans) I: 128
- Sanskrit literature** S: 112
Drama (India) D: 336
India (Literature) I: 120; (The Aryans) I: 128
- Sansovino, Jacopo** [Italian sculptor]
Sculpture (Michelangelo) S: 252-253
- Sant'Andrea, Church of** [Mantua]
Architecture (Early Renaissance architecture)
A: 620-621 *with picture*
- Santa Ana** [El Salvador] S: 112
- Santa Anna, Antonio López de** [Mexican political leader] S: 112 *with portrait*
Alamo (Early days) A: 280
Houston, Sam H: 399
Mexican War (Taylor's campaign) M: 446
Mexico (Reform) M: 472; (War with Texas and the United States) M: 471
Texas (American settlement) T: 206; (The Texas revolution) T: 206 *with picture*
- Santa Barbara** [city, California] S: 113
- Santa Bárbara, Mission**
Mission life in America (A visitor's guide)
M: 620
- Santa Barbara Island** [island, California]
Channel Islands National Park C: 375
- Santa Claus** [Indiana] S: 114
Indiana (Interesting facts) I: 197 *with picture*
- Santa Claus** [legendary figure] S: 113 *with pictures*
Christmas (In the United States and Canada)
C: 529
Nicholas, Saint N: 403
Saint Nicholas, Feast of S: 51
- Santa Croce, Church of** [Florence, Italy]
Giotto (Giotto's works) G: 193
- Santa Cruz** [former name, Saint Croix]
Virgin Islands (Islands) V: 393
- Santa Cruz** [island]
Galapagos Islands G: 7 *with map*
- Santa Cruz, Andrés** [Bolivian general]
Bolivia (Independence) B: 446-447
- Santa Cruz de Tenerife** [province, Spain]
Canary Islands C: 165
- Santa Fe** [Argentina] S: 114
- Santa Fe** [New Mexico] S: 114
Hispanic Americans (In the Southwest) H: 250
New Mexico (Interesting facts) N: 257 *with picture*
- Santa Fe Independent School District v. Doe** [U.S. history]
School prayer S: 186
- Santa Fe Railroad**
Los Angeles (Development and growth) L: 470
- Santa Fe Republican** [newspaper]
New Mexico (Communication) N: 271
- Santa Fe Trail** [U.S. history] S: 115
- Santa Isabel** [Equatorial Guinea]
Malabo M: 95
- Santa Maria** [ship]
Caravel C: 203
Columbus, Christopher (First voyage westward) Ci: 859 *with picture*
- Santa Maria della Grazie, Monastery of** [Milan (The city)] M: 540
- Santa Maria Island**
Galapagos Islands G: 7 *with map*
- Santa Maria Novella, Church of** [Florence, Italy]
Alberti, Leon Battista A: 332
Architecture (Early Renaissance architecture)
A: 620-621
- Santa Marta** [Colombia] S: 115
- Santa Monica Mountains National Recreation Area** [California]
National Park System (table: National recreation areas) N: 49
- Santangel, Luis de** [Spanish government official]
Columbus, Christopher (Success in Spain)
Ci: 858
- Santayana, George** [American philosopher] S: 115
- Santee-Cooper Project** [Santee River, South Carolina]
South Carolina (The mid-1900's) So: 662
- Santee Indians**
Sioux Indians S: 474
- Santee River**
South Carolina (Rivers, waterfalls, and lakes)
So: 652; *picture on So*: 661
- Santeria** [religion]
Cuba (Religion) Ci: 1172
- Santero** [craftworker]
Puerto Rico *picture on P*: 876
- Santiago** [city, Chile] S: 115 *with picture*
Chile (City life) C: 460; C: 458 *with picture*
- Santiago** [city, Dominican Republic] S: 116
- Santiago** [ship]
Magellan, Ferdinand (The voyage begins)
M: 46
- Santiago, Battle of** [1898]
Sampson, William Thomas S: 81
Spanish-American War (Chief events) So: 753-754
- Santiago de Cuba** [city, Cuba] S: 116
Spanish-American War (Land battles) So: 754
- Santiago de los Caballeros** [Dominican Republic]
Santiago S: 116
- Santillana, Marquis of** [Spanish author]
Spanish literature (The 1400's) So: 758
- Santo Amaro Lake**
São Paulo (The city) S: 117-118
- Santo Antão** [island]
Cape Verde C: 189 *with map*
- Santo Domingo** [Dominican Republic] S: 117
Dominican Republic D: 303; *picture on D*: 304
- Santo Domingo, Cathedral of**
Mahogany M: 66
Santo Domingo S: 117
- Santo Domingo, University of** [Dominican Republic] S: 117
- Santo Spirito, Church of** [Florence]
Architecture (Early Renaissance architecture)
A: 620
Brunelleschi, Filippo *picture on B*: 652
- Santo Tomás, University of** [Philippines]
Manila (Education and cultural life) M: 142
- Santon**
Christmas (In France) C: 530 *with picture*
- Santos** [Brazil] S: 117
- Santos-Dumont, Alberto** [Brazilian aviator] S: 117
Airplane (Other pioneer planes and fliers)
A: 233 *with picture*
Airship (The first airships) A: 251
- Sanusi, Muhammad Idris al Mahdi as-** [Libyan political leader] See Idris I *in this index*
- Sanusi brotherhood** [political organization]
Libya (Italian control) L: 267
- Sanzio, Raffaello** See Raphael *in this index*
- São Francisco River** [Brazil] S: 117
South America (Rivers) So: 628
- São Paulo** [city, Brazil] S: 117 *with pictures*
Brazil B: 567 *with picture*
- São Paulo, University of**
Brazil (Education) B: 575-576
São Paulo (Education and cultural life) S: 118
- São Tiago** [island]
Cape Verde C: 189 *with map*
- São Tomé** [city, São Tomé and Príncipe] S: 119
São Tomé and Príncipe S: 119
- São Tomé and Príncipe** S: 119 *with maps*
Flag *picture on F*: 199
- Saône River** [France] S: 120
Lyon L: 536 *with picture*
Rhône River R: 319 *with map*
- Sap** [tree product] S: 120 *with diagram*
Maple syrup (Production) M: 188
Tree (Trunk and branches) T: 416
- Sapa Inca** [title]
Inca (Government) I: 97
- Sapajou** [animal] See Capuchin *in this index*
- Saphenous vein** [anatomy]
Human body *diagram on H*: 422
- Sapir, Edward** [American anthropologist] S: 121
- Sapitwa** [mountain, Malawi]
Malawi (Land) M: 97
- Sapling**
Tree (How a tree grows) T: 418
- Sapmi** [region, Europe]
Lapland L: 74
Sami (Land and climate) S: 79
- Sapodilla** [tree] S: 122 *with picture*
Chicle C: 446
Gum tree G: 440
Latex L: 90
Mexico (Plant and animal life) M: 463
- Saponin** [tree product]
Soapberry So: 543
Yam Y: 550
- Sapphire** [gem] S: 122
Gem *picture on G*: 78
Montana (Interesting facts) M: 743
- Sappho** [Greek poet] S: 122
Greek literature (Lyric poetry) G: 377
Poetry (Ancient poetry) P: 595-596
- Sapporo** [Japan] S: 122
Japan (Climate) J: 48
- Saprophyte** [biology] S: 122
Fungi (How a fungus lives) F: 559
Mushroom (How a mushroom obtains food)
M: 942
Plant (Photosynthesis) P: 538 *with picture*
- Sapsago** [cheese]
Cheese (Very hard, or grating, cheese) C: 392 *with picture*
- Sapsucker** [bird] S: 123 *with picture*
Bird (Kinds of food) B: 350 *with picture*
- Sapwood** [botany]
Sap (Vascular sap) S: 121
Tree (How trunks and branches grow thicker)
T: 418 *with diagram*
- Saqqarah** [ancient city]
Pyramids (The first pyramids) P: 916
- Saquinavir** [drug]
AIDS (Treatments) A: 164
- Sara** [people]
Chad (People) C: 366; (History) C: 367
- Sara orangetip** [insect]
Butterfly *picture on B*: 735
- Saracens** [ancient people] S: 123
- Sarafina!** [musical]
Masekela, Hugh M: 263
- Saragossa** [Spain] S: 123
- Saragossa, Treaty of** [1529]
Line of Demarcation L: 334 *with map*
- Sarah** [Biblical figure]
Abraham A: 16
Isaac I: 461
Ishmael I: 462
- Sarai** [ancient city]
Russia (Mongol rule) R: 548
- Sarajevo** [city, Bosnia-Herzegovina] S: 123
Bosnia-Herzegovina B: 491; (History) B: 492-493 *with picture*
- Saramago, José** [Portuguese author]
Nobel Prizes (Literature: 1998) N: 446
- Saranac Laboratory** [Saranac Lake, New York]
Trudeau, Edward Livingston T: 460
- Sarandon, Susan** [American actress]
Motion picture (Best performance by an actress: 1995) M: 862
- Sarasota** [Florida] S: 123
- Saratoga** [carrier]
Aircraft carrier (History) A: 207
- Saratoga, Battle of** [1777]
Burgoyne, John B: 705 *with picture*
Franklin, Benjamin (Serving in France) F: 490-491
New York (The Revolutionary War) N: 315 *with picture*
Revolutionary War in America (Victory at Saratoga) R: 282-283
- Saratoga National Historical Park** [New York]
New York (Places to visit) N: 302
- Saratoga Springs** [New York]
New York (Places to visit) N: 302
- Sarawak** [state, Malaysia]
Borneo (History) B: 490
Malaysia M: 98a
Singapore (History) S: 471
- Sarcasm**
Humor (The types of humor) H: 435-436
Satire S: 150h
- Sarcodine** [zoology]

Protozoan (Sarcodines) P: 837 *with picture*

Sarcoidosis [disease] S: 123

Sarcoma [disease]

Cancer (Classification by tissue) C: 168-169

Tumor T: 484

Sarcophagus [funeral] S: 124

Sarcopterygian [zoology]

Coelacanth Ci: 752

Fish (The Age of Fishes) F: 171

Sardegna *See* Sardinia *in this index*

Sardine [fish] S: 124 *with picture*

Fish *picture on* F: 168

Sardinia [island, Mediterranean] S: 124

Italy (Sardinia) I: 509

Sardinia, Kingdom of [Italian history] S: 125

Italy (Italy united) I: 515 *with map*

Sardinian dialect

Romance languages R: 415

Sardonix [gem] S: 125

Gem *picture on* G: 78

Onyx O: 788

Sardou, Victorien [French dramatist]

Opera (*Tosca*) O: 807

Sarek National Park [Sweden]

National park (table) N: 42g

Sargasso Sea [region, Atlantic] S: 125 *with map*

Atlantic Ocean (Ocean life) A: 866

Seaweed (Kinds) S: 276

Sargassum [plant]

Sargasso Sea (Origin of the seaweed) S: 125

Sargassum fish

Fish *picture on* F: 144

Sargasso Sea (Origin of the seaweed) S: 125-126

Sargassum weed [seaweed]

Atlantic Ocean (Ocean life) A: 866

Sargent, John G. [American government official]

Coolidge, Calvin (table) Ci: 1032

Hoover, Herbert Clark (table) H: 330

Justice, Department of (table) J: 203

Sargent, John Singer [American painter] S: 126 *with picture*

Sargent, Winthrop [American political leader]

Mississippi (Territorial days) M: 641

Sargon II [king of Assyria]

Architecture (Mesopotamian architecture) A: 611

Hittites (History) H: 269

Sennacherib S: 300

Sargon of Akkad [king of Sumer] S: 126

Babylonia (The Semites) B: 14

World, History of the (The Tigris-Euphrates Valley) W: 422-424

Sari [clothing]

Asia (Country life) A: 782

India (Clothing) I: 117

Sarin [chemical agent]

Terrorism (Terrorism in the 1900's) T: 179

Sark [island, English Channel] S: 126

Sarka [clothing]

Cyprus (People) Ci: 1206

Sarkisyan, Vazgen [Armenian political leader]

Armenia (Recent developments) A: 719

Sarles, E. Y. [American political leader]

North Dakota (table) N: 513

Sarmatians [ancient people]

Russia (Early days) R: 547

Sarmiento, Domingo Faustino [Argentine political leader]

Argentina (The arts) A: 651; (The Constitution of 1853) A: 657-658

Latin-American literature (Romanticism) L: 112

Sarney, José [Brazilian political leader]

Brazil (Return to civilian government) B: 586

Sarno River [Italy]

Pompeii (The eruption of Mount Vesuvius)

P: 654; (Excavations) P: 654

Sarnoff, David [American businessman] S: 126

Sarong [clothing]

Indonesia (Clothing) I: 229

Saronic Gulf [Aegean Sea]

Corinth Canal Ci: 1053

Saroyan, William [American author] S: 127 *with portrait*

Sarto, Giuseppe Melchiorre

Pius X, Saint P: 503

Sartor Resartus [book by Carlyle]

Carlyle, Thomas (Early career) C: 239

English literature (Early Victorian literature)

E: 321

Sartoris [book by Faulkner]

Faulkner, William F: 55

Sartre, Jean-Paul [French philosopher] S: 127

with portrait

Novel (Existentialism) N: 574

Philosophy (Philosophy in the 1900's) P: 390 *with picture*

Sarus crane [bird]

Crane (Kinds) Ci: 1117 *with picture*

Sasanqua [plant]

Camellia C: 79

Sash [construction]

House (Interior construction) H: 382

Sashimi [food]

Food (Interesting facts about food) F: 329

Saskatchewan S: 128 *with pictures and maps*

Canada, Government of *picture on* C: 133

Prairie Provinces P: 733

See also the list of Related Articles in the Saskatchewan article

Saskatchewan, University of S: 148 *with picture*

Saskatchewan Herald [newspaper]

Saskatchewan (Communication) S: 143

Saskatchewan Plain

Alberta (Land regions) A: 322

Manitoba (Land regions) M: 154

Saskatchewan Rebellion [1885] *See* North

West Rebellion *in this index*

Saskatchewan River [Canada] S: 148

Saskatchewan Science Centre [Regina]

Saskatchewan (Places to visit) S: 136

Saskatchewan Wheat Pool

Regina (Economy) R: 205

Saskatchewan (Territorial progress) S: 147;

picture on S: 145

Saskatoon [Saskatchewan] S: 148 *with pictures*

Saskatchewan (table: Average monthly weather) S: 140

Sasquatch

Bigfoot B: 298

Sassacus [American Indian chief]

Indian wars (The Pequot War) I: 191

Sassafras [tree] S: 149 *with picture*

Tree *pictures on* T: 423

Sassafras Mountain

South Carolina (Land regions) So: 652

Sassanian coin [money]

Persia, Ancient *picture on* P: 298

Sassanid dynasty

Persia, Ancient (The Sassanid dynasty) P: 300

Iran (The Sassanid dynasty) I: 406

Sasseen, Mary Towles [American educator]

Mother's Day M: 843

Sassou-Nguesso, Denis [Congolesse political

leader]

Congo (Brazzaville) (Government) Ci: 938;

(History) Ci: 939-940

Sastruga [geography]

Antarctica (Land regions) A: 532

SAT [test]

College entrance examination (The College

Entrance Examination Board) Ci: 775

Satan *See* Devil *in this index*

Satanic Verses, The [book by Rushdie]

Rushdie, Salman R: 522

Satanism

Devil worship D: 175

Satan's Flight Through Chaos [engraving by

Doré]

Doré, Gustave *picture on* D: 310

Satellite [astronomy] S: 150 *with pictures*

Earth (Earth and its moon) E: 18

Europa E: 379

Ganymede G: 27 *with picture*

Jupiter (Satellites) J: 200

Mars (Satellites) M: 226b

Moon M: 782

Neptune (Satellites and rings) N: 129 *with picture*

Planet P: 507

Saturn (Satellites) S: 153 *with picture*

Solar system (Moons) So: 580

Titan T: 299

Voyager V: 451

Satellite [international relations]

Cold War (The Iron Curtain descends) Ci: 763;

(The great blocs split) Ci: 768

Communism (World War II) Ci: 893-894

Russia (The Cold War) R: 554

Union of Soviet Socialist Republics

(Beginnings of the Cold War) U: 38

Satellite, Artificial S: 150d *with pictures*

See also Communications satellite; Weather satellite *in this index*

Airport (Air traffic control) A: 246-247

Altimeter A: 390

Astronomy (Infrared astronomy) A: 842

Communications satellite Ci: 888a

International Space Station I: 346a

Map (How maps are made) M: 180

Observatory (Satellite observatories) O: 645

Ocean (Satellites) O: 663

Phenology P: 356

Radar (In the military) R: 65-66

Remote sensing R: 231 *with picture*

Rocket (Launching probes and satellites)

R: 386

Space exploration (The dawn of the space age) So: 706-707; (Types of shuttle missions) So: 724; (Expanding space activities) So: 728

Surveying (Surveying tools) So: 1011

Telecommunications T: 89

Telescope *picture on* T: 102; (Gamma-ray telescopes) T: 109

Satellite navigation system

Airplane (Navigating across oceans) A: 227

Global Positioning System G: 231

Navigation (Satellite navigation) N: 74 *with picture*

Satellite operations control center

Communications satellite *picture on* Ci: 888b

Satellite plan [aviation]

Airport (Terminal designs) A: 248-249 *with diagram*

Satellite television

Television (Satellite television) T: 110b; (Cable

and satellite systems) T: 115; (Tuner)

T: 123

Satellite terminal

Airport (Terminal designs) A: 248-249 *with diagram*

Satherley, Arthur E. [American record producer]

Country music (Early commercial success)

Ci: 1098b

Sati *See* Suttee *in this index*

Satie, Erik [French composer] S: 150h

Satiety center [physiology]

Weight control (Causes of obesity) W: 181

Satin [fabric] S: 150h

Satin glass

Glass (Types of art glass) G: 221

Satin weave

Textile (Woven fabrics) T: 214

Weaving (Types of weaves) W: 173-174 *with picture*; (The satin weave) W: 174

Satire [literature] S: 150h

Black humor B: 389

Drama (England) D: 334

English literature (Jacobean drama) E: 317;

(Swift and Pope) E: 318

Humor (The types of humor) H: 435-436

Satires [book by Horace]

Horace H: 334

Latin literature (The Augustan Age) L: 116

Satires [poems by Donne]

Donne, John (His poetry) D: 308

Satisfaction [combat]

Duel D: 378

Sato, Eisaku [Japanese political leader]

Nobel Prizes (Peace: 1974) N: 448

Satori [religion]

Buddhism (Zen) B: 669

Zen Z: 593

Satrap [title] S: 150h

Persia, Ancient (Government) P: 298

India (Persian and Greek invasions) I: 128

Saturable reactor [electronics]

Magnetic amplifier M: 55

Saturated fats

Fat (Structure) F: 52

Cholesterol (Factors that cause high cholesterol levels) C: 520

Nutrition (Fats) N: 625; (Limit intake of saturated fats, trans fats, and cholesterol) N: 628

Saturation S: 150h

Humidity H: 433

Hydrogenation H: 470

Weather (Humidity) W: 158

Saturation bombing

World War II (The air war) **W**: 481

Saturation habitat

Diving, Underwater (History) **D**: 247

Saturation temperature *See* Dew point *in this index*

Saturday [day] **S**: 150h

Saturday Evening Post [magazine]

Magazine (History) **M**: 43-45

Saturday Night and Sunday Morning [book by Sillitoe]

Sillitoe, Alan **S**: 463

Saturday Night Fever [film]

Travolta, John **T**: 406

Saturday Review [newspaper]

Beerbohm, Max **B**: 212

Saturn [planet] **S**: 151 *with pictures*

Astronomy (How the planets move) **A**: 835

Cassini **C**: 276

Cassini, Giovanni Domenico **C**: 277

Planet **P**: 507 *with pictures*

Satellite (Currently active satellites) **S**: 150a;

(table: Satellites of the solar system)

S: 150b; (Geologic history unknown)

S: 150c; (History of satellite study)

S: 150c-150d

Space exploration (Probes to Jupiter and beyond) **So**: 710

Titan **T**: 299

Voyager **V**: 451

Saturn [Roman mythology] **S**: 150h

Jupiter **J**: 201

Mythology (table) **M**: 980

Saturnalia **S**: 153

See also Cronus *in this index*

Saturn 5 [rocket]

Louisiana (The mid-1900's) **L**: 500

Rocket **R**: 384 *with picture*; (Space travel)

R: 386-387

Space exploration *picture on* **So**: 698;

(Apollo: Mission to the moon) **So**: 714-715

Saturnalia [ancient festival] **S**: 153

Saturn **S**: 150h

Satyagraha [social reform] *See* Nonviolent resistance *in this index*

Satyr [entomology]

Butterfly (Satyrs and wood nymphs) **B**: 735-736 *with picture*

Satyr [Greek mythology] **S**: 153

Dionysus **D**: 215

Faun **F**: 56

Satyr play

Drama (Satyr plays) **D**: 327

Euripides **E**: 378

Satyricon [book by Petronius]

Petronius **P**: 351

Novel (Ancient Greek and Roman narratives) **N**: 572

Satyros [Greek architect]

Seven Wonders of the Ancient World (The Mausoleum at Halicarnassus) **S**: 325

Saucer, Flying *See* Unidentified flying object *in this index*

Saud [king of Saudi Arabia]

Saudi Arabia (The new kingdom) **S**: 161

Saud dynasty

Saudi Arabia (The Saud dynasty) **S**: 160

Saudades do Brasil [music by Milhaud]

Milhaud, Darius **M**: 543

Saudi Arabia **S**: 154 *with pictures and maps*

Bush, George Herbert Walker (Persian Gulf War) **B**: 721

Food *picture on* **F**: 328

Ibn Saud **I**: 3

Iraq (The Persian Gulf War) **I**: 414

Kuwait (History) **K**: 396

Mecca (History) **M**: 358-353

Persian Gulf War **P**: 300a

Riyadh **R**: 356

United States, History of the (The Persian Gulf War) **U**: 195

See also the list of Related Articles in the Saudi Arabia article

Sauerbraten [food]

Germany (Food and drink) **G**: 150

Sauerkraut [food]

Germany (Food and drink) **G**: 150

Saugus Iron Works National Historic Site [Massachusetts]

Colonial life in America (Places to visit) **Ci**: 801 *with picture*

Massachusetts (Places to visit) **M**: 280

National Park System (table: National historic sites) **N**: 52-53

Sauk Indians [American Indians] **S**: 163

Iowa (Indian days) **I**: 393

Wisconsin (Territorial days) **W**: 366

Saul [king of ancient Israel] **S**: 163

Amalekites **A**: 399

David **D**: 45

Jews (The Kingdom of Israel) **J**: 121

Palestine (Early history and settlement) **P**: 104

Saul [music by Handel]

Handel, George Frideric (His work) **H**: 42

Saul of Tarsus *See* Paul, Saint *in this index*

Sault Sainte Marie [city, Ontario] **S**: 163

Sault Sainte Marie Canal *See* Soo Canals *in this index*

Sault Sainte Marie Canal National Historic Site [Ontario]

Canada (table: National historic sites) **C**: 114

Sauna [bath] **S**: 163

Bath (Bathing for cleanliness) **B**: 163; *picture on* **B**: 164

Finland (Way of life) **F**: 111 *with picture*

Saunders, Albert C. [Canadian political leader]

Prince Edward Island (table) **P**: 791

Saunders, Richard [pen name of Franklin]

Poor Richard's Almanac **P**: 658

Sauria, Charles [French physician]

Match (The first matches) **M**: 300-300a

Saurischian [dinosaur]

Dinosaur (Kinds of dinosaurs) **D**: 206b *with pictures*

Eoraptor **E**: 341

Sauropod [extinct animal]

Brachiosaurus **B**: 544

Diplodocus **D**: 216

Supersaurus **S**: 994

Sauropodomorph [dinosaur]

Dinosaur (True dinosaurs) **D**: 206b-208

Sausage [food] **S**: 163

Meat packing (Sausage making) **M**: 351 *with picture*

Saussure, Ferdinand de [Swiss linguist]

Language (The science of language) **L**: 66

Linguistics (Structuralism) **L**: 337

Sauté [cooking]

Cooking (table) **Ci**: 1029

Meat (How meat is cooked) **M**: 347

Sauvé, J.-Paul [Canadian political leader]

Quebec (table) **Q**: 29

Sauvé, Jeanna Mathilde [Canadian political leader] **S**: 164

Sava I Bridge [Yugoslavia]

Bridge (table: Plate and box girder) **B**: 603

Savage, Edward [American painter]

United States, History of the *picture on* **U**: 159

Washington, George *picture on* **W**: 107

Savai'i [island, Pacific]

Samoa **S**: 80 *with map*

SAVAK [Iranian history]

Iran (Reforms and growing unrest) **I**: 406a

Savanna [geography] **S**: 164 *with picture*

Africa (Deserts, grasslands, and forests) **A**: 120

Biome (table) **B**: 323 *with map*

Climate (Tropical wet and dry climates)

Ci: 676a-676b

Forest (Kinds of forests) **F**: 392-394 *with map*;

(Temperate savannas) **F**: 395 *with map*;

picture on **F**: 390

Grassland **G**: 329

Llanos **L**: 402

Plant (Savannas) **P**: 525

Prairie (Climate and soil) **P**: 731

Savannah [Georgia] **S**: 164

Savannah [geography] *See* Savanna *in this index*

Savannah [nuclear ship]

Ship (Nuclear power and automation) **S**: 413 *with picture*

Savannah [steamship] **S**: 164 *with picture*

Ship (Oceangoing steamships) **S**: 412

Savannah, Battle of [1778]

Revolutionary War in America (Savannah and Charleston) **R**: 283

Savannah River [Georgia-South Carolina] **S**: 165

Georgia *picture on* **G**: 113

South Carolina (Rivers, waterfalls, and lakes)

So: 652-654

Savant syndrome [psychology]

Memory (Exceptionally good memory) **M**: 393-394

Save the Children **S**: 165

Savery, Thomas [English inventor]

Industrial Revolution (The steam engine) **I**: 249

Newcomen, Thomas **N**: 359

Steam engine (The first steam engines)

So: 881

Savimbi, Jonas Malheiro [Angolan political leader]

Angola (History) **A**: 465-466

Saving Private Ryan [film]

Spielberg, Steven **So**: 792

Savings [economics]

Depression (Causes and prevention) **D**: 150-151

Investment **I**: 366; (Indirect investments)

I: 367

Savings account

Bank (Safeguarding deposits) **B**: 88-89

Certificate of deposit **C**: 363

Investment (Indirect investments) **I**: 367

Savings and loan association **S**: 165

Bank (Savings and loan associations) **B**: 90;

(The savings and loan crisis) **B**: 94

Bush, George Herbert Walker (National affairs)

B: 720

Federal Deposit Insurance Corporation **F**: 63

Savings Association Insurance Fund

Savings and loan association **S**: 165

Savings bank **S**: 165

Bank (Savings banks) **B**: 91

Savings bond **S**: 166

Investment (Indirect investments) **I**: 367-368

Savings plan

Pension (Thrift, or savings, plans) **P**: 273

Savior, The [poem]

German literature (Early German literature)

G: 139

Savonarola, Girolamo [Italian religious leader]

S: 166

Botticelli, Sandro **B**: 513

Perspective *picture on* **P**: 305

Savoy [Italian history] **S**: 166

Savoy, Duchy of [former region]

Sardinia, Kingdom of **S**: 125

Savoy cabbage

Cabbage (Kinds of cabbage) **C**: 2

Savoy operas

D'Oyly Carte, Richard **D**: 317

Saw [tool] **S**: 166 *with pictures*

Forestry *picture on* **F**: 404

Woodworking (Cutting) **W**: 397 *with pictures*

Saw-scaled viper [snake]

Snake *picture on* **S**: 534

Saw set

Saw **S**: 166

Saw shark [fish]

Sawfish **S**: 167

Saw-whet [bird]

Animal *picture on* **A**: 494

Owl (Important owls) **O**: 884-886

Sawatch Range

Colorado (Land regions) **Ci**: 838 *with map*

Sawdust

Lumber **L**: 517

Sawfish [fish] **S**: 167 *with picture*

Sawfly [insect] **S**: 167

Sawgrass Mills [mall]

Fort Lauderdale (Government and history)

F: 414

Sawing [industrial process]

Machine tool (Metal removal) **M**: 18 *with picture*

Sawmill [industry]

Lumber (From sawmill to lumberyard) **L**: 519

Tree (Wood products) **T**: 412 *with picture*

Sawtimber

Lumber (table) **L**: 518

Sawtooth Mountain Range [mountains]

Idaho (Mountains) **I**: 36-38; *picture on* **I**:

Sawyer, Helen Battles

Hogg, Helen Sawyer H: 288

Sawyer, Ruth [American author] S: 168

Regina Medal (table: 1965) R: 206

Storytelling (The Middle Ages) So: 914

Sax, Adolphe [Belgian inventor]

Saxophone S: 168

Saxbe, William Bart [American government official]

Ford, Gerald Rudolph (table) F: 378

Justice, Department of (table) J: 203

Nixon, Richard Milhous (table) N: 433

Saxe-Coburg-Gotha [British history]

Windsor W: 334

Saxe-Weimar, Duke of [German nobleman]

Bach, Johann Sebastian (His life) B: 15

Saxifrage [plant] S: 168 *with picture*

Flower pictures on F: 283, F: 289, F: 301

Saxon dynasty [German history]

Germany (The breakup of Charlemagne's empire) G: 162

Saxons [ancient people] S: 168

Alfred the Great A: 348

Anglo-Saxons A: 464 *with map*

Charlemagne (Military conquests) C: 378-379

England (The Germanic invasions) E: 304, (The

Anglo-Saxon period) E: 304

Trial (History) T: 438

Saxony [region, Germany]

Charlemagne map on C: 379

Saxons S: 168

Saxony rug

Rugs and carpets (Kinds of rugs and carpets)

R: 514-515 *with picture***Saxony wheel** [machine]Spinning (Early spinning wheels) So: 794 *with picture***Saxophone** [musical instrument] S: 168 *with picture*

Jazz (The reeds) J: 69

Saxton, Ida [wife of William McKinley] *See*McKinley, Ida Saxton *in this index***Say, Allen** [American author]

Caldecott Medal (table: 1994) C: 26

Saya San [Burmese political leader]

Myanmar (British conquest and rule) M: 970d

Sayers, Dorothy L. [British author] S: 168**Sayers, Frances Clarke** [American author]

Regina Medal (table: 1973) R: 206

Sayers, Joseph D. [American political leader]

Texas (table) T: 203

Sayings of the High One, The [poem]

Edda E: 74

Sayles Belton, Sharon [American political

leader]

Minneapolis (Recent developments) M: 583

Saylor, David O. [American businessman]

Cement and concrete (History) C: 345

Sb [symbol]

Antimony A: 557

SBA [U.S.]

Small Business Administration S: 512

SBC Communications Inc.

Telephone (In the United States) T: 99

SBR [synthetic]

Rubber (General-purpose synthetic rubbers)

R: 504

Sc [symbol]

Scandium S: 171

Scab [labor]

Labor movement (Handling labor disputes)

L: 6-7

Scab [physiology]

Blood (Controlling bleeding) B: 411

Scab [plant disease]

Apple (Pests and diseases) A: 571-572

Fungicide F: 560

Potato (Diseases and insect pests) P: 713

Scabies [disease] S: 169**Scabland** [geography]

Washington W: 58

Scafell Pike [mountain, England]England (The Pennines) E: 300 *with map***Scalare** [fish]Angelfish A: 460 *with picture***Scalawags** [U.S. history] S: 169

Reconstruction (The Republicans in the South)

R: 179

Scald [injury] *See* Burn *in this index***Scale** [biology] S: 169

Bud B: 665

Butterfly (The thorax) B: 738-739 *with pictures*Fish (Scales) F: 160 *with pictures*Pangolin P: 130 *with pictures*Reptile (Skin) R: 251 *with picture***Scale** [deposit]

Boiler B: 439

Scale [insect]

Insect picture on I: 281

Scale [measurement]

Interior design (Scale) I: 328

Map (Scale) M: 178 *with pictures*

Railroad, Model (Scale and size) R: 120

Scale [music]

Key K: 307

Music (Tone) M: 950 *with diagrams***Scale, Weighing** S: 169**Scale insect** [insect] S: 170 *with picture*

Orange (Pests and diseases) O: 815

San Jose scale S: 102

Scale-leaved cedar [tree]Cedar (Scale-leaved cedars) C: 324 *with picture***Scalad quail** [bird]

Quail Q: 4

Scalene triangle [geometry]Triangle (Kinds of triangles) T: 438 *with diagram***Scales, A. M.** [American political leader]

North Carolina (table) N: 490

Scalia, Antonin [American jurist] S: 170

Supreme Court of the United States picture

on So: 999

Scaliger, Julius [Italian scientist]

Platinum (Production) P: 567

Scaling laws [engineering]

Nanotechnology (Types of nanostructures)

N: 12

Scallop [sea animal] S: 170 *with pictures*Mollusk (Bivalves) M: 695 *with picture*

Shell picture on S: 387

Scalp [anatomy]

Baldness B: 38

Hair H: 9

Head H: 123

Scalpel

Surgery (Instruments) So: 1004

Scalping

Indian, American (Why the Indians fought)

I: 144

Scaly-breasted thrasher [bird]

Thrasher T: 269

Scandentia [zoology]Mammal (table) M: 128 *with picture***Scanderbeg** [Albanian patriot]Albania (Ottoman rule) A: 307 *with picture***Scandinavia** [region, Europe] S: 170 *with map*

Cooperative (In other countries) Ci: 1036

Scandinavian design [style]

Furniture (Modern Scandinavian design)

F: 583; pictures on F: 569, F: 584

Scandinavian literature S: 171

Mythology (Teutonic mythology) M: 984

Theater (Scandinavia) T: 248; picture on T: 247

See also the list of Related Articles in the

Scandinavian literature article

Scandinavian Peninsula

Scandinavia S: 171

Scandium [element] S: 171**Scania** [region, Sweden]

Scandinavia S: 171

Scanner [electronic device]*See also* Optical scanner *in this index*

Computer (A scanner) Ci: 915

Copying machine (Electrostatic copying)

Ci: 1045

Desktop publishing D: 158

Laser (Scanning) L: 82

Photoengraving and photolithography

(Capturing the image) P: 405 *with picture*

Printing (Preparing illustrations for reproduction)

P: 797; (Process color printing)

P: 802

Scanning [electronics]

Television (Creating television signals) T: 120;

(The television camera) T: 121; (Receiving

television signals) T: 123; (Digital televi-

sion) T: 126-127

Scanning electron microscope [instrument]

Cell picture on C: 337-338

Electron microscope (Scanning electron micro-

scopes) E: 204 *with diagram*

Microscope (Other kinds of microscopes)

M: 519

Scanning optical microscope [instrument]

Microscope (Using an optical microscope)

M: 519

Scanning probe microscope S: 172 *with picture*

Microscope (Other kinds of microscopes)

M: 519

Nanotechnology (The challenge of nanotech-

nology) N: 11

Scanning tunneling microscope [instrument]

Cell (The 1900's) C: 337-338

Chemistry picture on C: 405

Scanning probe microscope S: 172

Scapegoat [religion] S: 172**Scaphoid bone** [anatomy]

Hand (Parts of the hand) H: 40

Scaphopoda [zoology] *See* Tooth shell *in this*

index

Scapula [anatomy]Collarbone Ci: 773 *with diagram*

Human body diagram on H: 422

Shoulder S: 439 *with picture*

Skeleton diagrams on S: 480

Scar S: 172

Keloid K: 257

Scarab [insect] S: 173 *with picture*

Beetle (Scarabs) B: 217

Scarcity

Economics E: 57

Value (Value and scarcity) V: 267

Scarface [nickname]

Capone, Al C: 197

Scarface [film]

Hawks, Howard H: 113

Scarlatti, Alessandro [Italian composer] S: 173

Overture O: 881

Scarlatti, Domenico [Italian composer] S: 173**Scarlet fever** [disease] S: 173**Scarlet Letter, The** [book by Hawthorne]

Hawthorne, Nathaniel (His novels) H: 114

Scarlet macaw [bird]

Parrot picture on P: 180

Scarlet oak [tree]

Oak (Red oaks) O: 635

Scarlet Pimpernel, The [book by Orczy]

Orczy, Baroness O: 825

Scerlet runner bean [plant]

Bean (Kinds of beans) B: 181

Scarlet sage [plant]Salvia S: 77 *with picture***Scarlet tanager** [bird]

Tanager T: 24

Bird picture on B: 335

Scarp [astronomy]

Moon (Rilles) M: 790

Scarpia [opera character]Opera (*Tosca*) O: 807**Scarpland**

England (The English Lowlands) E: 300-301

Scat singing

Armstrong, Louis A: 723

Fitzgerald, Ella F: 190

Jazz (The 1920's) J: 70-71

Scatter package

Advertising (Television) A: 73-74

Scattering

Light (Scattering) L: 286

Scaup [bird]

Duck picture on D: 375

Scavenger beetle [insect]

Beetle picture on B: 218

SCCA

Automobile racing (Racing organizations)

A: 976

Scelidosaurus [extinct animal]

Dinosaur picture on D: 206d

Scene designTheater (Scene design) T: 239 *with pictures***Scenery** [theater]Ballet (Sets and costumes) B: 49 *with pictures*Theater (Scene design) T: 239 *with pictures***Scenic trail**

National Trails System N: 61

Scent [zoology]

Territoriality T: 176

Scent hound [dog]

- Dog (Hounds) D: 270 *with pictures*
Hound H: 378
- Schachter, Stanley** [American psychologist]
Emotion (Modern theories about emotion)
E: 261
- Schaeffer, Pierre** [French composer]
Classical music (Electronic music) Ci: 650
- Schafer, Edward T.** [American political leader]
North Dakota (table) N: 513
- Schaffner, Franklin J.** [American director]
Motion picture (Best achievement in directing:
1970) M: 862
- Schalk, Ray** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Schaller, George Beals** [American zoologist]
S: 173
- Schally, Andrew Victor** [American physiologist]
Nobel Prizes (Physiology or medicine: 1977)
N: 445
- Scharnhorst, Gerhard von** [Prussian general]
Army (The rise of modern armies) A: 727-728
- Schaumburg Palace** [Germany]
Bonn (The city) B: 460-461
- Schawlow, Arthur Leonard** [American physicist]
Laser (History) L: 86
Nobel Prizes (Physics: 1981) N: 441
- Schechter Poultry Corporation**
Schechter v. United States S: 174
- Schechter v. United States*** [U.S. history]
S: 174
Interstate commerce (Interstate commerce
today) I: 351
Labor movement (The New Deal) L: 12
Supreme Court of the United States (table)
So: 1002
- Scheckter, Jody** [South African race driver]
Automobile racing (table: Grand Prix world
champions) A: 980
- Scheduled airliner**
Airport (General aviation airports) A: 243
- Scheele, Carl Wilhelm** [Swedish chemist]
Air (The study of air) A: 174
Chemistry (The phlogiston theory) C: 401
Chlorine C: 516
Glycerol G: 237
Molybdenum M: 697
Oxygen (History) O: 890
- Scheelite** [mineral]
Tungsten T: 486
- Scheer, Reinhard** [German admiral]
Jutland, Battle of J: 205
World War I (The war at sea) W: 460
- Scheharazade** [ballet]
Fokine, Michel F: 315
- Scheherazade** [legendary figure]
Aladdin A: 280
Arabian Nights A: 582b
- Schelde River** [Europe]
Belgium (The land) B: 230
Netherlands (The land) N: 144 *with map*
- Schell, Maximilian** [Austrian actor]
Motion picture (Best performance by an actor:
1961) M: 862-863
- Schellenberg** [former region]
Liechtenstein (History) L: 273
- Schelling, Friedrich Wilhelm Joseph von**
[German philosopher] S: 174
- Schalomo** [music by Bloch]
Bloch, Ernest B: 404
- Schenck v. United States** [U.S. history]
Supreme Court of the United States (table)
So: 1002
- Schenectady** [city, New York] S: 174
- Schertel, Hanns von** [German engineer]
Hydrofoil (Modern hydrofoil developments)
H: 468
- Scherzo** [music] S: 174
- Scheveningen** [Netherlands]
Hague, The H: 6
- Schiaparelli, Giovanni V.** [Italian astronomer]
Mars (Observation from Earth) M: 226c
- Schicklgruber, Anna** [grandmother of]
Hitler, Adolf (Boyhood) H: 265
- Schieffelin, Ed** [American frontiersman]
Tombstone T: 326
- Schiele, Egon** [Austrian artist] S: 174 *with picture*
- Schikaneder, Emanuel** [German librettist]
Opera (*Magic Flute, The*) O: 805
- Schildkraut, Joseph** [Austrian actor]
Motion picture (Best performance by an actor
in a supporting role: 1937) M: 863
- Schiller, Johann Christoph Friedrich von**
[German author] S: 174
German literature (The Storm and Stress
movement) G: 140-141
Beethoven, Ludwig van (Beethoven's place in
music history) B: 214
Goethe, Johann Wolfgang von (Middle years)
G: 247
- Schimmel, Wilhelm** [American sculptor]
Folk art (Folk artists) F: 319
Woodcarving W: 391
- Schindel, Morton** [American author]
Regina Medal (table: 1979) R: 206
- Schindler, Oskar** [German businessman] S: 175
- Schindler's Ark*** [book by Keneally]
Keneally, Thomas K: 259
- Schindler's List*** [book by Keneally]
Keneally, Thomas K: 259
- Schindler's List*** [film]
Motion picture (Best picture: 1993) M: 861
Spielberg, Steven So: 792
- Schipperke** [dog] S: 175
Dog picture on D: 275
- Schirra, Walter Marty, Jr.** [American astronaut]
S: 175
Space exploration (Vostok and Mercury: The
first human beings in space) So: 711-712
with pictures
- Schirrmann, Richard** [German educator]
Youth hostel Y: 574
- Schism** [1378-1417]
See also Great Schism *in this index*
Eastern Orthodox Churches (History) E: 45-46
Roman Catholic Church (Split with the East)
R: 407
- Schist** [rock] S: 176
Rock (table) R: 373 *with picture*
- Schistosome** [animal]
Flatworm F: 229
Fluke F: 304
Schistosomiasis S: 176
- Schistosomiasis** [disease] S: 176
- Schizophrenia** [psychiatry] S: 176
Brain (Brain chemistry and mental illness) B: 556
Catalepsy C: 297
Mental illness (Schizophrenia) M: 405
Shock treatment S: 429
Tranquilizer T: 370
- Schlaflly, Phyllis Stewart** [American political figure]
S: 176 *with portrait*
- Schlegel, Friedrich** [German author]
Language (The science of language) L: 66
Linguistics (Comparative and historical
research) L: 337
- Schleicher, August** [German linguist]
Linguistics (Comparative and historical
research) L: 337
- Schleiden, Matthias** [German botanist]
Biology (Materialistic physiology and the cell
theory) B: 319
Cell (Before 1900) C: 337
- Schlesinger, Arthur Meier, Jr.** [American historian]
S: 177
- Schlesinger, Bruno Walter** [German-American conductor]
See Walter, Bruno *in this index*
- Schlesinger, James Rodney** [American government official]
Energy, Department of (table) E: 276
Ford, Gerald Rudolph (table) F: 378
- Schlesinger, John** [British director]
Motion picture (Best achievement in directing:
1969) M: 862
- Schleswig-Holstein** [European history]
Denmark (The Schleswig wars) D: 140
Germany (The unification of Germany) G: 165
with map
- Schley, Winfield Scott** [American military leader]
Navy, United States (The Spanish-American
War [1898]) N: 88
Sampson, William Thomas S: 82
Spanish-American War (Land battles) So: 754
- Schleyer, Johann Martin** [German religious leader]
Universal language U: 205
- Schlieffen, Alfred von** [German general]
World War I (The Western Front) W: 455-456
- Schlieffen Plan** [German history]
World War I (The Western Front) W: 455-456
- Schliemann, Heinrich** [German archaeologist]
S: 177
Mycenae M: 970f
Troy (The archaeological Troy) T: 455
- Schlossberg, Caroline Kennedy** [daughter of]
Kennedy, John Fitzgerald (Kennedy's family)
K: 262; *picture on* K: 265
Kennedy, Joseph Patrick (His family) K: 269-270
Onassis, Jacqueline Kennedy O: 761
- Schmalkaldic League** [German history] S: 177
- Schmedeman, Albert G.** [American political leader]
Wisconsin (table) W: 365
- Schmidt, Helmut** [German political leader]
S: 177
Germany (West Germany) G: 170
- Schmidt, Maarten** [Dutch-born physicist]
Astronomy (Finding quasars and pulsars)
A: 849
- Schmidt, Mike** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Schmitt, Harrison Hagan** [American astronaut]
S: 177
- Schnabel, Julian** [American artist]
Painting (Recent painting) P: 87-88
- Schnauzer** [dog]
Dog picture on D: 273
Giant schnauzer G: 184
Miniature schnauzer M: 573
Standard schnauzer So: 835 *with picture*
- Schneider, Hannes** [Austrian skier]
Skiing (The development of modern skiing)
S: 487
- Schneider, Herman** [American educator]
Cooperative education Ci: 1037
- Schneider, Louis** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Schnitzer, Eduard** [German explorer] *See* Emin
Pasha in this index
- Schnitzler, Arthur** [Austrian author] S: 177
Austria (The arts) A: 932-933
German literature (Impressionism) G: 142
- Schnozzola** [book by Fowler]
Durante, Jimmy D: 388
- Schoenberg, Arnold** [Austrian composer] S: 178
Austria (The arts) A: 933
Berg, Alban B: 257
Classical music (Atonal music) Ci: 649
- Schoenbrunn Village** [Ohio]
Ohio (Places to visit) O: 690
- Schoendienst, Red** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Schoenherr, John** [American artist]
Caldecott Medal (table: 1988) C: 26
- Schoenhut, Albert** [German toymaker]
Doll (The early 1900's) D: 291
- Schoepfel, Andrew Frank** [American political leader]
Kansas (table) K: 234
- Schöffer, Peter** [German printer]
Gutenberg, Johannes G: 444
- Schofield, John McAllister** [American military leader]
Civil War (North to Nashville) Ci: 632-633
Johnson, Andrew (table: Johnson's Cabinet)
J: 140
- Scholarship** [award] S: 178
Foundations (Education) F: 430-431
- Scholastic aptitude**
Careers (Aptitudes) C: 215
- Scholastic aptitude test**
See also SAT *in this index*
Testing (Kinds of tests) T: 181
- Scholasticism** [philosophy] S: 179
Christianity (The Middle Ages) C: 526
Humanism (The development of humanism)
H: 431
Middle Ages (Learning and the arts) M: 527
Philosophy (Medieval philosophy) P: 387
Political science (Scholasticism) P: 639
Roman Catholic Church (Scholasticism) R: 407
- Scholes, Myron Samuel** [American economist]
Nobel Prizes (Economics: 1997) N: 449
- Schönbein, Christian Friedrich** [German chemist]
Guncotton G: 441

Schönberg, Arnold [Austrian composer] See Schoenberg, Arnold in this index

Schönbrunn Palace [Vienna]

Vienna (The city) V: 362

Schönbrunn Zoo [Vienna]

Vienna (The city) V: 362

Zoo (The first modern zoos) Z: 608

Schongauer, Martin [German artist] S: 179

School [education] S: 180 with pictures

See also Education in this index

Alternative school A: 388

Charter school C: 386

Child (Poor performance in school) C: 452

Children's home C: 457

Colonial life in America (Education) Ci: 803

with picture

Edison Schools E: 82

India picture on I: 118

Physical fitness (Developing physical fitness)

P: 435

Reading (Working with the school) R: 160

Reconstruction (New state programs and policies) R: 179

Safety (Safety at school) S: 11

Sexuality (Cultural influences) S: 338a

Teaching T: 65 with pictures

See also the list of Related Articles in the

School article

School [zoology]

Dolphin (Group life) D: 299 with picture

Fish (How fish live together) F: 167; picture on

F: 168

Herring (Commercial fishing) H: 215

Whale (Group life) W: 261

School Act [1864]

Tupper, Sir Charles (Premier) T: 494

School board

School (Public school districts) S: 182 with picture

ture

Teaching (Employment practices) T: 68

School bus

Bus (Kinds of bus service) B: 714-715 with

picture

Transportation picture on T: 383

School busing See Busing in this index

School camp

Camping (Organized camping) C: 96-97

School district

Education (Control and support of U.S. education) E: 91

School District of Abington Township,

Pennsylvania, v. Schempp [U.S. history]

Religious education (Public schools) R: 225

School prayer S: 186

School Employees, American Association of

Classified

Labor movement (table) L: 8

School for Lifelong Learning

New Hampshire, University of N: 228

School for Scandal, The [play by Sheridan]

Sheridan, Richard Brinsley S: 397

Drama picture on D: 335

School for Wives, The [play by Molière]

Molière M: 694

School integration See Segregation in this

index

School library

Library (School libraries) L: 244 with pictures;

(Variety of kinds) L: 235 with picture

School Library Journal [magazine]

Literature for children (Book reviews) L: 366-

367

School of ...

Proper names of schools appear under their

key words, as in Montreal, School of

School of Athens [painting by Raphael]

Painting (The High Renaissance) P: 54-55

Raphael (His works) R: 143 with picture

Renaissance (The fine arts) R: 235-236 with

picture

School of the air

Australia (Education) A: 905 with picture

Television (In Australia and New Zealand) T: 116

School prayer S: 186

Religious education (Public schools) R: 225

Supreme Court of the United States (Church

and state) So: 1001

School reform

Education (How should schools be run?)

E: 108

School-site management

Education (How should schools be run?)

E: 108

School Superintendents, Association of

National Education Association of the United

States N: 34

School-to-work program

Careers (Preparing for a career) C: 216

School without walls

Alternative school (Features of alternative

schools) A: 388-389

Schoolcraft, Henry Rowe [American author]

Minnesota (The Louisiana Purchase) M: 603-

604; picture on M: 605

Schoolroom Poets

American literature (Poetry) A: 418

Schooner [ship]

Sailing (Yawls, ketches, and schooners) S: 24

with picture

Ship (Sailing ships in the 1900's) S: 411

Schopenhauer, Arthur [German philosopher]

S: 186

Schorl [mineral]

Tourmaline T: 347

Schoumatoff, Elizabeth [American painter]

Roosevelt, Franklin Delano (Death) R: 462-

463

Schouten, Willam Cornelis [Dutch navigator]

Cape Horn C: 188

Tonga (History) T: 329

Schramm, Wilbur L. [American political analyst]

Communication (Communication and politics)

Ci: 888

Schrank, John N. [American assassin]

Roosevelt, Theodore ("Bull Moose" candi-

date) R: 471-472

Schreiber, Martin J. [American political leader]

Wisconsin (table) W: 365

Schreyer, Edward Richard [Canadian govern-

ment official] S: 186

Manitoba (table) M: 159

Schreyvogel, Charles

Indian Territory picture on I: 190

Schricker, Henry Frederick [American political

leader]

Indiana (table) I: 214

Schrieffer, John Robert [American physicist]

Bardeen, John B: 109

Nobel Prizes (Physics: 1972) N: 441

Superconductivity So: 993

Schröder, Gerhard [German political leader]

S: 186

Germany (Recent developments) G: 172

Schrödinger, Erwin [Austrian physicist] S: 187

Born, Max B: 489

Dirac, Paul Adrien Maurice D: 217

Physics (Quantum theory) P: 441

Schrödinger equation [physics]

Schrödinger, Erwin S: 187

Schubert, Ferdinand [brother of]

Schubert, Franz Peter (His life) S: 187

Schubert, Franz Peter [Austrian composer]

S: 187

Classical music (The Romantic era) Ci: 648

with picture

Schuler, Max [German engineer]

Inertial guidance (History) I: 263

Schuller, Gunther [American composer]

Jazz (New directions) J: 73

Schultz, Augustus [American inventor]

Leather (History) L: 169

Schultz, Theodore William [American econo-

mist]

Nobel Prizes (Economics: 1979) N: 449

Schulz, Charles Monroe [American cartoonist]

S: 187 with picture

Schulze, Johann H. [German physicist]

Photography (Early developments) P: 425

Schumacher, Michael [German race driver]

Automobile (table: Grand Prix world champi-

ons) A: 980

Schuman, William [American composer] S: 188

Schumann, Clara [German pianist] S: 188

Brahms, Johannes (His life) B: 548

Schumann, Robert (His life) S: 188

Schumann, Robert [German composer] S: 188

Brahms, Johannes (His life) B: 548

Schumann, Clara S: 188

Schumpeter, Joseph Alois [Czechoslovak-

American economist] S: 188

Schurz, Carl [American political leader] S: 189

with portrait

Grant, Ulysses S. (Election of 1872) G: 316

Schurz, Margaretha Meyer [American educa-

tor]

Education (Development of U.S. education)

E: 102-104

Kindergarten (Early kindergartens) K: 318

Schussing

Skiing (Alpine skiing) S: 482; diagram on

S: 484

Schütz, Sinold von [German author]

Encyclopedia (An age of experiment) E: 268a

Schutzstaffel troops [German history] See S.S.

troops in this index

Schuyler, Philip John [American general]

S: 189

Schuylkill Canal [waterway, Pennsylvania]

Pennsylvania (Industrial growth) P: 267

Schuylkill River [Pennsylvania] S: 189

Schwa

Phonetics (An international phonetic alphabet)

P: 400

Schwab, Charles Michael [American business-

man]

Bethlehem Steel Corporation B: 275

United States Steel Corporation U: 204

Schwane Range [mountains, Borneo]

Borneo (The land and its resources) B: 489

with map

Schwann, Theodor [German physiologist]

Biology (Materialistic physiology and the cell

theory) B: 319; picture on B: 321

Cell (Before 1900) C: 337 with picture

Science (Scientific advances in the 1800's)

S: 200 with picture

Schwartz, Barry K. [American fashion designer]

Klein, Calvin K: 343

Schwartz, Delmore [American poet] S: 189

Schwartz, Melvin [American physicist]

Neutrino N: 154

Nobel Prizes (Physics: 1988) N: 441

Schwarz, David [Austrian engineer]

Airship (The first airships) A: 251-252

Schwarzkopf, H. Norman [U.S. military leader]

S: 189 with portrait

Schwarzwald See Black Forest in this index

Schweiker, Mark S. [American political leader]

Pennsylvania P: 263

Schweiker, Richard S. [American government

official]

Health and Human Services, Department of

(table) H: 128

Reagan, Ronald Wilson (table) R: 169

Schweitzer, Albert [German-born humanitarian]

S: 190 with portrait

Gabon G: 3

Nobel Prizes (Peace: 1952) N: 448 with pic-

ture

Schwellenbach, Lewis B. [American govern-

ment official]

Truman, Harry S. (table) T: 469

Schwenkfeld, Caspar von Ossig [German reli-

gious leader]

Schwenkfelders S: 190

Schwenkfelders [religious group] S: 190

Schwinden, Ted [American political leader]

Montana (table) M: 757

Schwinger, Julian Seymour [American physi-

cist]

Nobel Prizes (Physics: 1965) N: 441

Schwitters, Kurt [German artist] S: 190

Avant-garde A: 982

Collage picture on Ci: 773

Painting (Dadaism) P: 80-81

Schwyz [canton, Switzerland]

Switzerland (The struggle for freedom)

So: 1059

Schwyzerdütsch [language]

Switzerland (Language) So: 1053

Sciatic nerve [anatomy]

Human body diagram on H: 422

- Empiricism** **E:** 263
Environmental pollution (Scientific efforts) **E:** 336
Galileo (Galileo's scientific contribution) **G:** 12
Mathematics (In science) **M:** 302,
 (Mathematics and the scientific revolution) **M:** 306
Radiation (In science) **R:** 75
Science projects **S:** 206
Social science (Relationship to natural sciences) **So:** 552
Technology **T:** 74
World, History of the (Scientific and technological achievements) **W:** 448
See also the list of Related Articles in the Science article
- Science, American Association for the Advancement of**
 American Association for the Advancement of Science **A:** 407
- Science, Bachelor of** *See* Bachelor's degree in this index
- Science, Master of** *See* Master's degree in this index
- Science, Philosophy of**
 Philosophy (Philosophy and science) **P:** 385
 Popper, Karl Raimund **P:** 668
- Science and Energy, American Museum of Tennessee** (Places to visit) **T:** 144
- Science and Health with Key to the Scriptures** [book by Eddy]
 Christian Scientists (Beliefs) **C:** 523
- Science and Industry, Museum of** *See* Museum of Science and Industry in this index
- Science and Technology Policy, Office of** (U.S.)
 President of the United States (The executive branch) **P:** 764
- Science fair**
 Science projects **S:** 206
- Science fiction** [literature] **S:** 205
 Literature for children (Fiction) **L:** 358-359
 Novel (The middle and late 1900's) **N:** 575
- Science Foundation, National** *See* National Science Foundation in this index
- Science museum**
 Museum (Science museums) **M:** 938
- Science Museum** [Richmond]
 Planetarium (Digital projectors) **P:** 514b
- Science Museum of Franklin Institute** [Philadelphia]
 Franklin Institute **F:** 493
- Science Museum of Minnesota**
 Minnesota (Places to visit) **M:** 594; (Museums) **M:** 589 with picture
- Science of Creative Intelligence**
 Transcendental Meditation **T:** 370
- Science of Logic** [book by Hegel]
 Hegel, G. W. F. (Hegel's writings) **H:** 165
- Science projects** **S:** 206
 Air (The effects of air pressure) **A:** 170-171 with pictures
 Battery (Energy from a lemon) **B:** 170 with pictures
 Chemistry (A simple chemical experiment) **C:** 403 with pictures
 Dam (Building a model dam) **D:** 20-21 with pictures
 Heredity (Studying heredity) **H:** 207 with pictures
 Light (How light behaves) **L:** 288-289 with pictures
 Magnetism (Experimenting with magnetism) **M:** 60d with pictures
 Microscope (The microscopic world) **M:** 518 with pictures
 Moon (Simulating the phases of the moon) **M:** 793 with pictures
 Water (How detergents reduce the surface tension of water) **W:** 130-131 with pictures
 Waves (Wave patterns in a ripple tank) **W:** 151 with pictures
 Weather (A cloud in a bottle) **W:** 168 with pictures
- Science, Technology and Society in Seventeenth Century England** [book by Merton]
 Merton, Robert King **M:** 419
- Sciences, Academy of** [France]
 Institute of France **I:** 305
- Sciences, National Academy of**
 National Academy of Sciences **N:** 27
- Scientific Affairs, Council on**
 Hypnotism (Dangers of hypnotism) **H:** 478-479
- Scientific and Technical Information, Canada Institute for**
 Library (Canadian government libraries) **L:** 249
- Scientific classification** *See* Classification, Scientific in this index
- Scientific creationism** [doctrine] *See* Creationism in this index
- Scientific Management** [work by Taylor]
 Taylor, Frederick Winslow **T:** 57
- Scientific method**
 Age of Reason **A:** 138
 Education (The Age of Reason) **E:** 101
 Inductive method **I:** 240
 Psychology (Methods of psychological research) **P:** 847
 Science (How scientists work) **S:** 194
 World, History of the (The Renaissance) **W:** 438-440
- Scientific notation** [mathematics] **S:** 207
- Scientific photography**
 Photography (Scientific photography) **P:** 429
- Scientific research satellite**
 Satellite, Artificial (Types of artificial satellites) **S:** 150f
- Scientific Unions, International Council of**
See International Council of Scientific Unions in this index
- Scientific visualization software**
 Computer (Scientific visualization software) **C:** 919
- Scientology** **S:** 208
- Scintillator** [instrument]
 Particle detector (Scintillators) **P:** 187
 Telescope (Gamma-ray telescopes) **T:** 109 with picture
- Scion** [botany]
 Grafting **G:** 298 with pictures
- Scioto River** [Ohio]
 Ohio (Rivers and lakes) **O:** 692
- Scipio Africanus, Publius Cornelius** [Roman military leader] **S:** 208
 Hannibal (The turning point) **H:** 52
- Scissor-tailed flycatcher** [bird]
 Bird (Birds of grasslands) **B:** 336 with picture
 Flycatcher **F:** 311
- Scissorbill** [bird]
 Skimmer **S:** 488
- Scissors** [gymnastics]
 Gymnastics (Men's events) **G:** 448
- Scissors** [tool] **S:** 208 with pictures
- Scissors kick**
 Swimming (The basic kicks) **So:** 1043
- Scituate Reservoir**
 Rhode Island (Rivers and lakes) **R:** 306-308
- SCLC** *See* Southern Christian Leadership Conference in this index
- Sclera** [anatomy]
 Eye (The sclera and the cornea) **E:** 460 with picture; (Diseases of the sclera) **E:** 467
- Scleritis** [disease]
 Eye (Diseases of the sclera) **E:** 467
- Scleroderma** [disease] **S:** 209
- Sclerometer** [instrument]
 Hardness **H:** 59
- Sclerosis** [disorder]
See also Arteriosclerosis in this index
 Multiple sclerosis **M:** 920
- Sclerotia** [botany]
 Ergot **E:** 350
- Sclerotium rot** [plant disease]
 Larkspur **L:** 77
- Scobee, Francis R. "Dick"** [American astronaut]
 Space exploration (The Challenger disaster) **So:** 725
- Scofield, Edward** [American political leader]
 Wisconsin (table) **W:** 365
- Scofield, Paul** [British actor]
 Motion picture (Best performance by an actor: 1966) **M:** 862-863
- Scoke** [plant]
 Pokeweed **P:** 603 with picture
- Scolex** [biology]
 Tapeworm **T:** 40 with picture
- Scoliosis** [disorder] **S:** 209
- Scone, Stone of** [British history] **S:** 209
 Coronation (The British coronation) **Ci:** 1068-1069
 Edward I **E:** 112
 Scotland (Fight for independence) **S:** 219
- Scoon, Sir Paul Godwin** [Grenada political leader]
 Grenada (History and government) **G:** 389-390
- Scooter, Motor**
 Motorcycle (Kinds of motorcycles) **M:** 878
- Scopas** [Greek sculptor]
 Seven Wonders of the Ancient World (The Mausoleum at Halicarnassus) **S:** 325
- Scopes, John T.** [American educator]
 Darrow, Clarence Seward **D:** 38
 Evolution (Acceptance of evolution) **E:** 433
 Scopes trial **S:** 209
 Tennessee (The early 1900's) **T:** 154-156
- Scopes trial** [U.S. history] **S:** 209 with picture
 Creationism (The 1900's) **Ci:** 1123
 Darrow, Clarence Seward **D:** 38
 Evolution (Acceptance of evolution) **E:** 433
 Tennessee (The early 1900's) **T:** 154-156
- Scopula**
 Spider (Legs) **So:** 785
- Scorched-earth policy**
 World War II (In other countries) **W:** 495
- Score** [satellite]
 Communications satellite (History) **Ci:** 888b-889
- Scorekeeper**
 Basketball (The officials) **B:** 145
- Scorer, Official**
 Baseball (Baseball terms) **B:** 124
- Scoria** [rock]
 North Dakota (Land regions) **N:** 506-508
- Scorpio** [astrology] **S:** 210 with picture
 Zodiac (The zodiac in astrology) **Z:** 601 with picture
- Scorpion** [animal] **S:** 210 with picture
 Animal picture on **A:** 482
- Scorpion orchid** [plant]
 Orchid picture on **O:** 824
- Scorpionfly** [insect] **S:** 210
- Scorsese, Martin** [American film director] **S:** 210
- Scotch heather** [plant]
 Heath **H:** 157
- Scotch-Irish** [people]
 Colonial life in America (Why the colonists came to America) **Ci:** 787
- Scotch pine** [tree]
 Pine (Other pines) **P:** 470 with picture
 Tree picture on **T:** 427
- Scotch whisky** [drink]
 Alcoholic beverage (Whiskey) **A:** 336
 Scotland (Food and drink) **S:** 214
 Whiskey **W:** 282
- Scotia Square** [Nova Scotia]
 Halifax (Government and history) **H:** 21 with picture
- Scotland** **S:** 211 with pictures and maps
 Caledonia **C:** 28
 Christmas (In England, Ireland, Scotland, and Wales) **C:** 530
 Clan **Ci:** 638
 Colonial life in America (Why the colonists came to America) **Ci:** 787
 Edward I **E:** 112
 England (The beginnings of Parliament) **E:** 306
 Gaelic language **G:** 5
 Gaels **G:** 5
 Halloween (Halloween symbols) **H:** 24b
 Highland Clearances **H:** 229
 Parliament (The House of Commons) **P:** 172
 Picts **P:** 452
 Scone, Stone of **S:** 209
 United Kingdom **U:** 48 with picture; (Regional government) **U:** 50; (Politics) **U:** 54; (The land) **U:** 58-59; (Long-standing conflicts) **U:** 73
See also the list of Related articles in the Scotland article
- Scotland, Kingdom of** [Scottish history]
 Scotland (Beginning of the Scottish kingdom) **S:** 219
- Scotland Yard** [London] **S:** 221
- Scots** [people]
 Scotland (Beginning of the Scottish kingdom) **S:** 219

Caledonia C: 28
Scott, Abram M. [American political leader]
 Mississippi (table) M: 640
Scott, Adam Sherriff [Canadian artist]
 Canada, History of picture on C: 140
Scott, Barbara Ann [Canadian ice skater] S: 221
Scott, Caroline Lavinia [wife of Benjamin Harrison] See Harrison, Caroline Scott *in this index*
Scott, Coretta See King, Coretta Scott *in this index*
Scott, David Randolph [American astronaut]
 Armstrong, Neil Alden A: 723
 Moon picture on M: 791
 Space exploration (Other moon landings)
 So: 719; picture on So: 720
Scott, Doug [British mountain climber]
 Mount Everest M: 884
Scott, Dred [American public figure]
 Dred Scott Decision (The background of the case) D: 345 *with portrait*
Scott, Duncan Campbell [Canadian author]
 S: 221
 Canadian literature (Poetry: 1850-1918)
 C: 157-158
Scott, F. R. [Canadian poet] S: 221
Scott, George C. [American actor]
 Motion picture (Best performance by an actor: 1970) M: 862-863
Scott, James [English public figure]
 Monmouth, Duke of M: 730
Scott, John W. [American educator]
 Harrison, Benjamin (Education) H: 70
Scott, Robert Falcon [British explorer] S: 222
 Antarctica (The "Heroic Era") A: 536 *with picture*
 Exploration (The exploration of Antarctica)
 E: 450
Scott, Robert W. [American political leader]
 North Carolina (table) N: 490
Scott, W. Kerr [American political leader]
 North Carolina (table) N: 490
Scott, Sir Walter [Scottish author] S: 222
 Bruce, Robert B: 648
 December (Quotations) D: 69
 English literature (Romantic prose) E: 320
 Irving, Washington (Years in Europe) I: 460
 Novel (Britain) N: 573
 Scotland (The arts) S: 215
Scott, Winfield [American army chaplain]
 Scottsdale S: 224
Scott, Winfield [American general] S: 222
 Lee, Robert Edward (The Mexican War) L: 177
 Mexican War (Scott's campaign) M: 446
 Mexico (War with Texas and the United States) M: 471 *with picture*
 New Brunswick (The Aroostook War) N: 198
 Pierce, Franklin (Election of 1852) P: 456
 Taylor, Zachary (Mexican War) T: 58-59
 War of 1812 (Campaigns of 1814) W: 31;
 (Lundy's Lane) W: 32-33
 Whig Party (Decline of the Whigs) W: 280
Scott Air Force Base [military base] S: 223
Scott O'Dell Award for Historical Fiction
 Literature for children (Awards) L: 366
Scotti [people]
 Gaels G: 5
Scottie [dog]
 Scottish terrier S: 223
Scottish Blackface sheep
 Scotland (Agriculture, forestry, and fishing)
 S: 218
Scottish deerhound [dog] S: 223 *with picture*
 Wolfhound W: 378
Scottish Highland pipe [musical instrument]
 Bagpipe B: 26 *with pictures*
Scottish Rite
 Masonry (The lodges and degrees of
 Masonry) M: 267; (Organization) M: 267
Scottish Rite Cathedral [Indianapolis]
 Indianapolis (Recreation) I: 222
Scottish terrier [dog] S: 223
 Dog picture on D: 273
Scotts Bluff National Monument [Nebraska]
 National Park System (table: National monuments) N: 51
Scottsbluff [Nebraska]
 Nebraska (table: Average monthly weather)
 N: 106
Scottsboro Case [U.S. history] S: 223

Scottsdale [Arizona] S: 224
Scotus, John Duns See Duns Scotus, John *in this index*
Scouring rush See Horsetail *in this index*
Scout [frontiersman] S: 224
Scout [rank]
 Scouts Canada (Age groups) S: 224
Scout, The [memorial]
 Kansas City picture on K: 241
Scout bee [insect]
 Bee (Swarming) B: 204 *with picture*
Scout Law
 Boy Scouts (Boy Scouting) B: 537
 Girl Scouts G: 196
Scout Motto
 Girl Scouts G: 196
Scout Oath
 Boy Scouts (Boy Scouting) B: 537
Scout Promise
 Girl Scouts G: 196
Scouts [organization] See Boy Scouts; Girl Scouts *in this index*
Scouts Canada [organization] S: 224
Scouts of the Prairies [play]
 Buffalo Bill B: 679
Scouts Rest Ranch
 Nebraska (Places to visit) N: 102 *with picture*
Scow [boat]
 Barge B: 110
 Sailing (Hull) S: 23; (Catboats and sloops)
 S: 24
Scrambler [plant]
 Liana L: 226
Scramjet [engine] See Supersonic combination ramjet *in this index*
Scramming
 Nuclear energy (Hazards and safeguards)
 N: 587-588
Scranton [Pennsylvania] S: 224
Scrap metal
 Aluminum (Recycling) A: 396-397
 Iron and steel (How steel is made) I: 442-443
with diagrams; (The electric furnace process) I: 444
 Magnetism (In industry and business) M: 60a;
 picture on M: 58
 Sculpture (Movement) S: 230-231
Scrapie [disease]
 Mad cow disease M: 26
 Prion P: 804
Scratching post
 Cat (Training) C: 294 *with picture*
Scrawled filefish
 Fish picture on F: 155
Scream, The [painting by Munch]
 Expressionism E: 455
 Munch, Edvard picture on M: 926
 Painting (Symbolism) P: 76
Screech owl
 Owl (Important owls) O: 884
Screed [tool]
 Plaster (Plastering) P: 552
Screen, Projection
 Projection screen P: 816
 Motion picture (The screen) M: 859
Screen Actors Guild
 Labor movement (table) L: 8
 Reagan, Ronald Wilson (Union leader) R: 166
Screen pass
 Football (table) F: 356
Screen printing [technique] S: 225 *with diagrams*
 Graphic arts G: 322
 Painting (Pop art) P: 86
 Printing (Screen printing) P: 801
 Textile (Finishing the fabric) T: 217
Screening mammography [medicine]
 Mammography M: 130
Screening test
 Blood (Blood tests) B: 413
 Cancer (Cancer checkups) C: 171
Screenplay
 Motion picture (Developing the story) M: 848
Screenwriter
 Motion picture (Developing the story) M: 848
Screw [hardware] S: 225 *with pictures*
 Machine (Screw) M: 15 *with pictures*
Screw [propeller]
 Propeller P: 826
 Screw (Uses) S: 225-226

Ship (The chief parts of a ship) S: 424-425
Screw, Archimedeal [water system] See Archimedeal screw *in this index*
Screw-cutting lathe
 Screw (History) S: 226
Screw pine [tree] See Pandanus *in this index*
Screw press
 Invention (Ancient Greece) I: 358-359
 Screw (History) S: 226
Screwball
 Baseball (Pitching) B: 127
Screwball comedy
 Hawks, Howard H: 113
 Motion picture (Movies in the 1930's) M: 868
with picture
Screwdriver [tool]
 Woodworking (Fastening) W: 398 *with pictures*
Screwtape Letters, The [book by Lewis]
 Lewis, C. S. L: 220
Screwworm [insect]
 Blow fly B: 419
 Insect (Insect control) I: 284-285 *with picture*
Scriabin, Alexander [Russian composer] S: 226
Scribe S: 226
 Book (The Middle Ages) B: 466
 Communication (During the Middle Ages)
 Ci: 879
 Egypt, Ancient (Education) E: 136
 Manuscript (European manuscripts of the Middle Ages) M: 173
Scribe, Augustin Eugène [French dramatist]
 S: 226
Scrim [scenery]
 Theater (Kinds of scenery) T: 239
Scrimmage, Line of
 Football (The players and coaches) F: 356 *with diagrams*
Scrimshaw [engraving]
 Folk art (Scrimshaw) F: 318 *with picture*
 Ivory (Ivory carving) I: 521
Scripps, Edward Wyllis [American publisher]
 S: 227
 Journalism (The age of sensationalism) J: 174-175
 Newspaper (Development of U.S. newspapers) N: 386-387
Scripps, Robert P. [American publisher]
 Scripps, Edward Wyllis S: 227
Scripps-Howard Newspapers, Inc.
 Scripps, Edward Wyllis S: 227
Scripps Institution of Oceanography
 [California] S: 227
 Marine biology (What marine biologists do)
 M: 204-205
Script [drama]
 See also Screenplay *in this index*
 Motion picture (Development) M: 848-849
with picture; (Reviewing the script)
 M: 850; (Holding rehearsals) M: 852
 Television (Planning and preparation) T: 110c-110d
 Theater (Acquiring a script) T: 235;
 (Interpreting the script) T: 235
 Writing (Scriptwriting) W: 512
Script [writing]
 Handwriting (Cursive writing) H: 47; (Learning cursive writing) H: 48
Script type [printing]
 Type (Classes of type) T: 537 *with picture*
Scriptorium [room]
 Illuminated manuscript I: 78
 Library (Medieval collections) L: 259 *with picture*
 Manuscript (European manuscripts of the Middle Ages) M: 173
Scriptures
 See the Sacred Writings section of the list of Related Articles *in the Religion article*
Scriptwriter News [magazine]
 Writing (Scriptwriting) W: 512
Scrofula [disease] S: 227
Scroll [art]
 Painting (Egyptian painting) P: 40; (Japanese painting) P: 47 *with picture*
Scroll [book] S: 227 *with picture*
 Book (Early books) B: 465
 Mythology picture on M: 977
Scrolls from the Dead Sea [book by Wilson]
 Wilson, Edmund W: 316

- Scrollwork** [design]
Scroll S: 227
- Scrophularia** [plant]
Figwort family F: 97
- Scrotum** [anatomy]
Human body (The reproductive system) H: 425
Reproduction, Human (The human reproductive system) R: 244-245 *with diagram*
Testicle T: 181
- Scrovegni frescoes**
Giotto (Giotto's works) G: 193
Mural *picture on M*: 929
- Scrub jay** [bird]
Jay J: 66 *with picture*
- Scrub typhus** [disease]
Rickettsia R: 335
- Scrubber**
Air cleaner (Types of air cleaners) A: 175-176
Air pollution (Control of air pollution) A: 199 *with picture*
Coal (Coal research) Ci: 730-731
Deodorizer D: 148
Incinerator I: 100
- Scruggs, Earl** [American musician]
Country music (Bluegrass music) Ci: 1098a *with picture*
- Scrum**
Rugby football (Rugby Union) R: 510-511;
(Rugby League) R: 511-513
- Scrummage**
Rugby football (The scrum) R: 513
- Scruple** [unit of measure]
Apothecaries' weight A: 567
- Scrutiny** [journal]
Leavis, F. R. L: 170
- Scuba diving**
Diving, Underwater (Ambient diving) D: 245
Skin diving S: 492 *with pictures*; (Scuba diving) S: 493
- Scud** [missile]
Persian Gulf War (Iraq's response) P: 300d
- Scudéry, Madeleine de** [French author]
Novel (Early novels) N: 572
- Scull** [boat]
Rowing (Types of rowing) R: 493
- Scullin, James** [Australian political leader]
Australia (table) A: 925
- Sculling** [sport]
Rowing (Types of rowing) R: 493
- Sculpin** [fish] S: 227
- Sculpture** [art] S: 228 *with pictures*
Africa (Sculpture) A: 116 *with pictures*
Alabaster *picture on A*: 280
Baroque (Baroque sculpture) B: 117
Classicism (Greece) Ci: 653
Egypt, Ancient *picture on E*: 141
Folk art (Sculpture) F: 317 *with pictures*
Gargoyle G: 43
Gothic art (Gothic sculpture and painting) G: 278
Impressionism (Music, literature, and sculpture) I: 95
Inca *picture on I*: 98
Marble (Uses) M: 192
Maya (Arts and crafts) M: 325 *with pictures*
Mobile M: 682
Nok N: 451
Relief R: 212
Renaissance (The fine arts) R: 235-236 *with picture*
Rome, Ancient (Sculpture and painting) R: 441
See also the list of Related Articles in the Sculpture article
- Sculpture coral** [animal]
Ocean *picture on O*: 656
- Sculpture in the round** [art]
Sculpture (Kinds of sculpture) S: 230
- Scum** [biology]
Euglena E: 377
- Scurvy** [disease] S: 261
Cook, James (First Pacific voyage) Ci: 1025-1026
Exploration (Exploring the Pacific) E: 447
Nutrition (Deficiency diseases) N: 630-631
- Scutari, Lake** *See Lake Scutari in this index*
- Scutching** [industrial process]
Flax (Growing and processing fiber flax) F: 230-231
- Scute** [zoology]
- Turtle (Shell) T: 520-521
- Scylla** [Greek mythology] S: 261
- Scyllac** [fusion device]
Energy supply *picture on E*: 282
- Scyphozoa** [zoology]
Jellyfish J: 89
- Scythe** [tool] S: 261
Wheat (The mechanization of wheat farming) W: 276
- Scythians** [ancient people] S: 261
Amazons A: 404
Russia (Early days) R: 547
Ukraine (Early days) U: 12
- SDI** *See Strategic Defense Initiative in this index*
- SDR's** [securities] *See Special drawing rights in this index*
- SDS** *See Students for a Democratic Society in this index*
- Se** [symbol]
Selenium S: 289
- Sea** *See Ocean in this index*
- Sea, Law of the** [treaty, 1982] *See Law of the Sea Convention in this index*
- Sea anemone** [sea animal] S: 262
Animal *pictures on A*: 486, A: 506
- Sea Around Us, The** [book by Carson]
Carson, Rachel C: 250
- Sea arrow** *See Squid in this index*
- Sea bass** [fish]
Bass (True bass) B: 157 *with picture*
- Sea bird**
Bird (Birds of the seacoasts) B: 342 *with pictures*; (Birds of the ocean) B: 344 *with pictures*
- Sea cave** [geology]
Cave (How caves are formed) C: 319
- Sea Convention, Law of the** [treaty] *See Law of the Sea Convention in this index*
- Sea cow** [sea animal] S: 262 *See Manatee in this index*
- Sea cucumber** [sea animal] S: 262
Deep sea (Invertebrates) D: 82a-82b; *picture on D*: 82
Trepang T: 436
- Sea dog** [pirate]
Pirate (Pirates of the Caribbean and other areas) P: 495
- Sea Drift** [music by Delius]
Delius, Frederick D: 117
- Sea duck**
Duck (Kinds of ducks) D: 376; *picture on D*: 375
- Sea elephant** *See Elephant seal in this index*
- Sea fan** [sea animal] S: 262
Animal *picture on A*: 468
Coral *picture on Ci*: 1048a
- Sea floor**
Climate (Sea-floor sediments) Ci: 679
Deep sea (The deep-sea floor) D: 82a
Ocean (Sediments) O: 654; (The land at the bottom of the sea) O: 659 *with picture*
Ocean Drilling Program O: 667
Pacific Ocean (The ocean floor) P: 14
Southern Ocean (The ocean floor) So: 688a
- Sea-floor spreading** *See Seafloor spreading in this index*
- Sea fog**
Fog F: 314
- Sea grass** [plant]
Coral reef (Life on coral reefs) Ci: 1048b-1049
- Sea gull** [bird]
Gull G: 439
- Sea Gull, The** [play by Chekhov]
Chekhov, Anton C: 396
- Sea ice**
Arctic Ocean (Ice) A: 643
- Sea Island cotton**
Cotton (New World cotton) Ci: 1088
- Sea lamprey** [sea animal]
Lamprey (Body) L: 54
- Sea Launch Company**
Space exploration So: 728
- Sea-Launched Ballistic Missile Detection System**
Radar (In the military) R: 65
- Sea lavender** [plant]
Statice So: 867 *with picture*
- Sea Legs** [hydrofoil]
Hydrofoil (Modern hydrofoil development) H: 468-469
- Sea lettuce** [plant]
Seaweed *picture on S*: 277
- Sea level** S: 262
Global warming (Rising sea level) G: 232a
- Sea Life Park**
Hawaii (Places to visit) H: 98 *with picture*
- Sea lily** [animal] S: 262
Deep sea (Invertebrates) D: 82a-82b; *picture on D*: 82
- Sea lion** [sea animal]
Balance of nature (Upsetting the balance) B: 35
Mammal *picture on M*: 126
Seal S: 265; (Birth) S: 266 *with picture*; (Seals and fishing crews) S: 268; (Seals in captivity) S: 267
- Sea Lion Caves** [Florence]
Oregon (Places to visit) O: 836 *with picture*
- Sea loch** [geography]
Fiord F: 119
Scotland (Rivers and lakes) S: 217
- Sea mammal**
Cetacean C: 364
Dolphin D: 296 *with pictures*
Dugong D: 379 *with picture*
Manatee M: 133
Porpoise P: 679 *with picture*
Sea cow S: 262
Sea otter S: 263 *with picture*
Seal S: 265
Sirenia S: 475
Walrus W: 20 *with picture*
Whale W: 254 *with pictures*
- Sea mile** [unit of measure]
Mile M: 542
- Sea mount** [oceanography] *See Seamount in this index*
- Sea nettle** [sea animal]
Jellyfish J: 89
- Sea of Azov** [Russia] *See Azov, Sea of in this index*
- Sea of Chinnereth** [Old Testament]
Galilee, Sea of G: 10 *with maps*
- Sea of Cortés**
Gulf of California G: 436
- Sea of Japan** *See Japan, Sea of in this index*
- Sea of Japan, Battle of the** [1905]
Russo-Japanese War (Final battles) R: 566
- Sea of Marmara** [Turkey]
Marmara, Sea of M: 216
- Sea of Mindoro** [Borneo-Philippines]
Sulu Sea So: 971
- Sea of Okhotsk** [Russia]
Okhotsk, Sea of O: 710
- Sea onion** [plant]
Squill So: 814
- Sea otter** [animal] S: 263 *with picture*
Balance of nature (Upsetting the balance) B: 35
- Sea parrot** [bird] *See Puffin in this index*
- Sea pen** [sea animal]
Animal *picture on A*: 486
- Sea Peoples**
Philistines P: 382
- Sea pigeon** [bird]
Guillemot G: 429
- Sea plant**
Marine biology M: 204
See also the Related articles in the Marine biology article
- Sea power**
Navy N: 76 *with pictures*
- Sea rover**
Pirate P: 494
- Sea Scouting** [program]
Boy Scouts (Venturing) B: 540
- Sea serpent** [legendary creature] S: 263
- Sea shell**
Shell S: 384 *with pictures*
- Sea snail**
Conch Ci: 928 *with picture*
Snail S: 522 *with picture*
- Sea snake** [zoology]
Snake *picture on S*: 526
- Sea squirt** [sea animal] S: 263
- Sea star** *See Starfish in this index*
- Sea swallow** [bird]
Tern T: 174
- Sea trout** [fish] *See Weakfish in this index*
- Sea turtle**

Animal (Animal travelers) **A:** 502-503
 Shell *picture on S:* 384
 Turtle **T:** 520 *with picture*; (Sea turtles) **T:** 522
Sea urchin [sea animal] **S:** 263 *with picture*
 Animal (Sexual reproduction) **A:** 496; *picture on A:* 486
 Balance of nature (Upsetting the balance) **B:** 35
 Egg (How embryos develop) **E:** 117
 Marine biology (What marine biologists do) **M:** 204-205
Sea Venture [ship]
 Bermuda (History) **B:** 268
Sea walnut [sea animal] *See* Ctenophore *in this index*
Sea wasp [sea animal]
 Jellyfish **J:** 89 *with picture*
Sea water *See* Seawater *in this index*
Sea whip [animal]
 Deep sea *picture on D:* 82
Sea Wolf, The [book by London]
 London, Jack **L:** 444
Sea World [aquarium]
 San Diego (Recreation) **S:** 90a
Seabed
 United Nations (Peaceful uses of outer space and the seabed) **U:** 93
Seabed Arms Control Treaty [1972]
 Arms control (History of arms control) **A:** 721-722
 United Nations (Peaceful uses of outer space and the seabed) **U:** 93
Seabees [U.S. Navy] **S:** 264
Seaborg, Glenn Theodore [American chemist] **S:** 264
 Americium **A:** 431
Seaborgium [element] **S:** 264
 Transuranium element **T:** 401
Seadragon [submarine]
 Northwest Passage **N:** 529
 Submarine (Nuclear submarines) **So:** 943
Seafirst Center [Seattle]
 Seattle (Landmarks) **S:** 273
Seafloor spreading [geology]
 Atlantic Ocean (The Mid-Atlantic Ridge) **A:** 864
 Ocean (How the sea floor was formed) **O:** 662; *picture on O:* 651
 Plate tectonics (Plate interactions) **P:** 562
Seafood **S:** 264
 Fish (The importance of fish) **F:** 146
 Fishing industry (How fish are processed and marketed) **F:** 186 *with pictures*
See also the list of Related articles in the Fishing industry article
Seaga, Edward [Jamaican political leader]
 Jamaica (History) **J:** 24-25
Seagull, The [book by Caballero]
 Spanish literature (The 1800's) **So:** 761-762
Seagull Monument [Salt Lake City]
 Salt Lake City (The city) **S:** 76
Seahawks, Seattle *See* Seattle Seahawks *in this index*
Seahorse [fish] **S:** 265 *with picture*
 Fish *picture on F:* 154
Seal [emblem] **S:** 268
 Persia, Ancient *picture on P:* 299
Seal [sea animal] **S:** 265 *with pictures and map*
 Animal *pictures on A:* 500, **A:** 507
 Antarctica (Animal life) **A:** 534 *with pictures*
 Balance of nature (Upsetting the balance) **B:** 35
 Bering Sea controversy **B:** 258
 Fur (table) **F:** 561
 Hand (Animal hands) **H:** 40
 Inuit (Hunting and fishing) **I:** 354d, (Language) **I:** 354f
 Mammal *picture on M:* 116
 Pribilof Islands **P:** 774
Seal Island [film]
 Disney, Walt (Full-length movies) **D:** 236
Seal of the President of the United States
 President of the United States *picture on P:* 758
Seal of the United States *See* Great Seal of the United States *in this index*
Seale, Bobby [American social reformer]
 African Americans (Black militancy) **A:** 136a
 Black Panther Party **B:** 390
Sealed-beam lamp
 Lighthouse (How lighthouses work) **L:** 294

Sealyham terrier [dog] **S:** 268
 Dog *picture on D:* 273
Seam [geology]
 Coal (How coal was formed) **Ci:** 717
Seam [sewing]
 Sewing (Seams) **S:** 332
Seam welding
 Welding (Resistance welding) **W:** 189
Seaman [rank]
 Navy, United States (Training a sailor) **N:** 83
 Rank, Military (table) **R:** 140
 Ship (Officers and crew) **S:** 423
Seaman, Elizabeth Cochrane [American journalist] *See* Bly, Nellie *in this index*
Seamanship
 Merchant marine (Careers in the merchant marine) **M:** 413
 Navigation **N:** 70 *with pictures*
 Sailing (Sailing a boat) **S:** 25 *with pictures*
 Ship (A ship at sea) **S:** 423-424
Seamount [oceanography] **S:** 268 *with picture*
 Hot spot **H:** 374a
 Ocean (Deep-sea peaks, valleys, and plains) **O:** 662
 Pacific Ocean (The ocean floor) **P:** 14
Seanad Éirann [Irish government]
 Ireland (Parliament) **I:** 417
Séance [spiritualism]
 Ouija board **O:** 879
 Spiritualism (The medium) **So:** 796
Seaplane
 Airplane (Engineering improvements) **A:** 237; (Seaplanes) **A:** 212 *with picture*
Seaplane base
 Airport (General aviation airports) **A:** 243
Seaport
 Harbor **H:** 55
 New York City (Trade) **N:** 333
 Port **P:** 680
Sear
 Firearm (Mechanism) **F:** 132-133
Search, Right of
 Right of search **R:** 340
Search and rescue team
 Police (Other activities) **P:** 621
Search engine [electronics]
 Internet (Research) **I:** 350a; *picture on I:* 350b
Search for Extraterrestrial Intelligence *See* SETI *in this index*
Search warrant [law] **S:** 269
 Constitution of the United States (Amendment 4) **Ci:** 1012
 Warrant **W:** 37
Sears, Richard [American businessman]
 Sears, Roebuck and Co. **S:** 269
Sears, Roebuck and Co. [U.S. company] **S:** 269
Sears Canada, Inc.
 Eaton, Timothy **E:** 48
Sears Tower [Chicago] **S:** 269
 Chicago (Places to visit) **C:** 430-431; *picture on C:* 420
 Skyscraper (table) **S:** 498 *with picture*; *picture on S:* 497
 United States *picture on U:* 117
Seascape painting
 Painting (Landscapes and seascapes) **P:** 32
Seashore **S:** 269 *with pictures*
Seashore Trolley Museum [Kennebunkport]
 Maine (Places to visit) **M:** 78
Seasickness
 Motion sickness **M:** 874
Seaside and the Fireside, The [poems by Longfellow]
 Longfellow, Henry Wadsworth (Author and world celebrity) **L:** 450
Seaside Park [Connecticut]
 Bridgeport **B:** 606
Seaside plantain [plant]
 Plantain **P:** 550
Season **S:** 270 *with diagram*
 Earth (How Earth moves) **E:** 17
Season [sports]
 Baseball (Regular season) **B:** 130
Season [tile]
 Mah-jongg **M:** 64 *with picture*
Season in Hell, A [book by Rimbaud]
 Rimbaud, Arthur **R:** 341
Seasonal affective disorder [psychology] **S:** 271
Seasonal unemployment

Unemployment (Types of unemployment) **U:** 22
Seasoning [cooking]
 Spice **So:** 781
Seasoning [industrial process]
 Leather *picture on L:* 168
 Lumber (Seasoning lumber) **L:** 519
Seasons, The [book by Thomson]
 Thomson, James **T:** 264
Seated Lincoln [sculpture by French]
 Lincoln Memorial *picture on L:* 328
SEATO *See* Southeast Asia Treaty Organization *in this index*
Seaton, Frederick A. [American government official]
 Eisenhower, Dwight David (table) **E:** 152
Seattle [Washington] **S:** 272 *with pictures and maps*
 Washington **W:** 46 *with picture*; **W:** 61
Seattle Art Museum
 Seattle (Museums and libraries) **S:** 274
 Venturi, Robert *picture on V:* 310
Seattle Asian Art Museum
 Seattle (Museums and libraries) **S:** 274
Seattle Center
 Washington (Places to visit) **W:** 56
Seattle Mariners
 Baseball (table) **B:** 130
 Griffey, Ken, Jr. **G:** 392
Seattle Seahawks
 Football (National Football League) **F:** 364
Seattle Slew [horse]
 Kentucky Derby **K:** 297
Seattle SuperSonics
 Basketball (table) **B:** 150
Seaver, Tom [American baseball player]
 Baseball (table: Hall of Fame) **B:** 135
Seawater
 Ocean (Composition) **O:** 654
 Salt (Salt from the sea) **S:** 72
 Water (Fresh water from the sea) **W:** 127
Seawater, Purification of
 Water (Fresh water from the sea) **W:** 127; *diagrams on W:* 129
Seaweed [plant] **S:** 276 *with pictures*
 Aquaculture **A:** 578
 Food *picture on F:* 332
 Sargasso Sea (Origin of the seaweed) **S:** 125
SeaWorld [Florida]
 Florida (Places to visit) **F:** 252 *with picture*
Sebaceous cyst [disorder]
 Wen **W:** 196
Sebaceous gland [anatomy]
 Acne **A:** 27 *with diagram*
 Gland (Exocrine glands) **G:** 208; (table) **G:** 209
 Hair (Glands and muscles) **H:** 9 *with diagram*
 Skin (Hair, nails, and glands) **S:** 489
Sebaste [ancient city]
 Samaria **S:** 78
Sebastian [literary figure]
 Shakespeare, William (*Twelfth Night*) **S:** 360
Sebastian, Saint [Christian martyr] **S:** 277
Sebastiano del Piombo [Italian artist]
 Painting (The Renaissance in Venice) **P:** 55-56 *with picture*
Sebastopol [city] *See* Sevastopol *in this index*
Sebastopol [goose]
 Goose (Kinds of geese) **G:** 270-271
Seborrhea [disease]
 Dandruff **D:** 33
Sebum [oil]
 Skin (Hair, nails, and glands) **S:** 489
SEC *See* Securities and Exchange Commission *in this index*
SECAM [electronics]
 Television (The television camera) **T:** 121-122
Secant [geometry]
 Circle (Parts of a circle) **Ci:** 558
 Sphere **So:** 780
 Trigonometry (Right triangles) **T:** 443
Secession [U.S. history]
 Buchanan, James (Prelude to war) **B:** 661
 Confederate States of America **Ci:** 931
 Lincoln, Abraham (The South secedes) **L:** 320
 Nullification **N:** 603
 United States, History of the (Secession) **U:** 174
Secession Building [Vienna]
 Architecture (Early modern architecture in Europe) **A:** 627-628 *with picture*

Seclusion edicts [Japanese history]Japan (Tokugawa period) **J**: 55**Seconal** [medication]Barbiturate (Medical uses) **B**: 107**Second** [combat]Duel **D**: 378**Second** [time] **S**: 277Metric system (Structure of the metric system) **M**: 437Minute **M**: 613**Second** [unit of measure]Latitude **L**: 116Second **S**: 277**Second Amendment** [U.S. Constitution] **S**: 278Constitution of the United States **Ci**: 1012Gun control (Opposition to gun control) **G**: 441**Second Balkan War** See Balkan Wars *in this index***Second Bank of the United States** See Bank of the United States *in this index***Second blessing** [religion]Pentecostal churches (Major Pentecostal churches) **P**: 275**Second British-Afghan War** [1878-1881]India (British India) **I**: 130-131**Second Church** [Boston]Mather, Increase **M**: 309**Second-class citizen**Citizenship **Ci**: 568**Second-class lever**Lever (Classes of levers) **L**: 217; *picture on***L**: 218Machine (Lever) **M**: 14**Second Class Scout**Boy Scouts (Boy Scouting) **B**: 537-539**Second Coalition**Napoleon I (Egypt invaded) **N**: 16**Second Coming** [religion]Adventists **A**: 70Pentecostal churches (Beliefs and practices) **P**: 275Thessalonians, Epistles to the **T**: 257Wandering Jew **W**: 22**Second Continental Congress** See Continental Congress *in this index***Second-degree burn**Burn (Classification of burns) **B**: 708First aid (Burns) **F**: 139Skin (Burns) **S**: 490**Second Empire** [French history]France (The revolutions of 1830 and 1848) **F**: 474Napoleon III (Becomes emperor) **N**: 19**Second estate** [French history]Estates-General **E**: 360**Second Fleet**Navy, United States (The Operating Forces) **N**: 85**Second gear**Transmission (How a manual transmission works) **T**: 378 *with diagram***Second hand smoke** See Secondhand smoke *in this index***Second Hittite Empire** [Asian history] See Hittites *in this index***Second Hundred Days, The** [U.S. history]New Deal (The Second Hundred Days) **N**: 201**Second Indochina War** See Vietnam War *in this index***Second International** [organization]Socialism (Moderate socialism) **So**: 561**Second law of motion** [physics]Motion (Newton's laws of motion) **M**: 845Force (Acceleration) **F**: 369-370Mass **M**: 268**Second mortgage** [economics]Mortgage **M**: 821**Second Mrs. Tanqueray, The** [play by Pinero]Pinero, Arthur Wing **P**: 473**Second Navigation Act** [1663]Navigation Acts **N**: 75**Second of arc** [measurement unit]Surveying (Surveying tools) **So**: 1011**Second Punic War** [218-201 B.C.] See Punic Wars *in this index***Second Republic** [French history]France (The revolutions of 1830 and 1848) **F**: 474Napoleon III (Becomes emperor) **N**: 19Revolution of 1848 **R**: 269**Second Riel Rebellion** See North West Rebellion *in this index***Second Scroll, The** [book by Klein]Klein, A. M. **K**: 343**Second Seminole War** See Seminole Wars *in this index***Second Sex, The** [book by Beauvoir]Beauvoir, Simone **B**: 191**Second summer** [weather]Indian summer **I**: 189**Second Temple** See Temple in Jerusalem *in this index***Second Triumvirate** See Triumvirate *in this index***Second Vatican Council** See Vatican Council II *in this index***Second Virginia Convention** [1775]Jefferson, Thomas (Revolutionary leader) **J**: 78-79Virginia (The course toward independence) **V**: 420**Second World**Third World **T**: 258**Second World War** See World War II *in this index***Second World War** [book by Churchill]Churchill, Sir Winston Leonard Spencer (Leader of the opposition) **C**: 549**Secondary** [football]Football (The defensive team) **F**: 357-358 *with diagrams***Secondary battery** [electricity]Battery (Secondary batteries) **B**: 170**Secondary boycott** [labor]Labor movement (Handling labor disputes) **L**: 6-7Taft-Hartley Act **T**: 13**Secondary color**Color (Mixing colorants) **Ci**: 819-821 *with diagram*, (Producing color harmony) **Ci**: 823 *with diagram***Secondary consumer**Ecology (Energy flow) **E**: 54Forest (The flow of energy) **F**: 396**Secondary cosmic rays**Cosmic rays (Secondary cosmic rays) **Ci**: 1077 *with diagram***Secondary crater** [astronomy]Moon (Craters) **M**: 789**Secondary data**Market research **M**: 214**Secondary education**See also High school *in this index*Education (The organization of U.S. education) **E**: 89-90; (Education around the world) **E**: 94Junior high school **J**: 196Language arts **L**: 67**Secondary electron** [physics]Electron microscope (Scanning electron microscopes) **E**: 204 *with diagram***Secondary fiber**Paper (How paper is made) **P**: 134**Secondary flight feather** [bird]Bird (Feathers) **B**: 362 *with diagram***Secondary industry**Industry (Other systems of classification) **I**: 261**Secondary infection** [illness]Influenza (Prevention and treatment) **I**: 268b**Secondary lymphoid organ** [physiology]Immune system (Lymphocytes) **I**: 87-88**Secondary-modern school**England (Education) **E**: 297**Secondary mortgage market**Government National Mortgage Association **G**: 293**Secondary recovery** [industrial process]Petroleum (Enhanced recovery) **P**: 342 *with picture***Secondary road**Road (Local and secondary roads) **R**: 357**Secondary root** [botany]Plant (Roots) **P**: 529 *with pictures*Root (Kinds of roots) **R**: 473 *with diagram***Secondary school**See also High school *in this index*Education (The Renaissance) **E**: 100School (High schools) **S**: 181, (Colonial schools) **S**: 183-184**Secondary sexual characteristics** [anatomy]Adolescent (Sexual development) **A**: 61**Secondary source**History (The evidence) **H**: 260**Secondary strike**Strike (Kinds of strikes) **So**: 928**Secondary succession** [biology]Ecology (Changes in communities) **E**: 54**Secondary tissue** [botany]Root (Secondary tissues) **R**: 474 *with diagram*Stem (Woody stems) **So**: 887-888**Secondary winding** [electricity]Transformer **T**: 371 *with diagram***Secondat, Charles de** See Montesquieu *in this index***Secondhand smoke**Smoking (Secondhand smoke) **S**: 520**Secord, Laura Ingersoll** [Canadian patriot] **S**: 278**Secret Army Organization** [Algerian history]France (France under de Gaulle) **F**: 476Plastic explosive **P**: 553**Secret ballot** [voting]Ballot (In the United States) **B**: 63**Secret Garden**Seoul (The city) **S**: 304**Secret-key system** [cryptology]Codes and ciphers **Ci**: 749**"Secret Life of Walter Mitty, The"** [story by Thurber]Thurber, James **T**: 273**Secret police** **S**: 278Communism (The party state) **Ci**: 891Gestapo **G**: 175KGB **K**: 308a**Secret Service** [play by Gillette]Gillette, William **G**: 190**Secret Service, United States** **S**: 278President of the United States (Guarding the President) **P**: 767**"Secret Sharer, The"** [story by Conrad]Conrad, Joseph **Ci**: 973**Secret writing** See Codes and ciphers *in this index***Secretarial work** **S**: 278**Secretariat** [government]League of Nations (Powers and organization) **L**: 159-160

United Nations (The six major UN organs)

U: 78 *with diagram*; (The Secretariat)**U**: 83**Secretariat** [Communist Party]

Communism (Communist Party structure)

Ci: 891

Union of Soviet Socialist Republics

(Government) **U**: 29**Secretariat** [horse]Horse racing (History) **H**: 366Kentucky Derby **K**: 297**Secretariat of State** [office]Roman Catholic Church (The pope) **R**: 405**Secretary** [career]Office work **O**: 677**Secretary** [office]Parliamentary procedure (Officers) **P**: 175;(Minutes) **P**: 176**Secretary-bird** [bird] **S**: 279Animal picture on **A**: 477Bird (Birds of Africa) **B**: 348 *with picture***Secretary-general** [office]Address, Forms of (Foreign officials in the United States) **A**: 53

North Atlantic Treaty Organization

(Organization) **N**: 471United Nations (The secretary-general) **U**: 83**Secretary of ...***Secretaries of executive departments appear under their key words, as in State,**Secretary of***Sec**Religion (Hinduism) **R**: 220**Sectarian Shinto**Religion (Shinto) **R**: 222**Section** [unit of measure]

Public lands (Management of public lands)

P: 858**Sectional form** [music]Classical music (Sectional form) **Ci**: 644**Sectionalism** [U.S. history]Civil War (The sectional division) **Ci**: 615

Secular humanism

Humanism (Later influence) H: 431

Secularism [philosophy]

Political science (Secularism) P: 639

Turkey (Religion) T: 506

Secure transaction [business]

E-commerce (Business-to-consumer transactions) E: 2

Secured debt

Debt D: 65

Securities [banking]

Bond B: 454

Engraving and Printing, Bureau of E: 327

Investment (Indirect investments) I: 367-368

Securities and Exchange Commission S: 279

Securities Exchange Act S: 279

Securities and Exchange Commission [U.S.] S: 279

New Deal (Helping savers and investors) N: 200-201

New York Stock Exchange N: 345

Securities Exchange Act S: 279

Stock exchange (How a stock exchange operates) So: 903

Securities Exchange Act [1934] S: 279

Investment banking I: 369

Security

See also Computer security in this index

Airport (Airport security) A: 247 with picture

Homeland Security, Office of H: 301

Library (Security) L: 239

Terrorism (Security procedures) T: 179

Security [psychology]

Clothing (Communication) Ci: 688-689

Security Council [UN]

United Nations (The six major UN organs)

U: 78 with diagram; (The Security Council)

U: 82 with picture; (Peacekeeping operations)

U: 90; (Military actions) U: 91; (The

Dumbarton Oaks Conference) U: 94; (The

San Francisco Conference) U: 95

Big Five B: 297

Dumbarton Oaks D: 383

International law (After World War II) I: 342

International relations (International conferences and organizations) I: 344

Persian Gulf War (The world's reaction)

P: 300b

Security Police [Air Force]

Military police M: 543

Sedan, Battle of [1870]

Franco-Prussian War (Progress of the war) F: 483

Napoleon III (His defeat) N: 20

Sedative [medication] S: 279

Barbiturate B: 107

Drug (Antianxiety and hypnotic drugs) D: 352

Seddon, James Alexander [Confederate government official] S: 279**Seddon, Margaret R.** [American astronaut]

Astronaut (A look at the astronauts) A: 831

Seder [religion]

Passover P: 192

Religion picture on R: 217

Sedge [plant] S: 280**Sedge wren** [bird]

Wren W: 504

Sedgemoor, Battle of [1685]

Monmouth, Duke of M: 730

Sedges, John [pen name]

Buck, Pearl S. B: 663

Sediment [geology]

Climate (Determining past climates) Ci: 678-679

Earth (History of Earth) E: 25

Estuary E: 364

Ice age (Evidence of ice ages and their climates) I: 6-7

Ocean (Sediments) O: 654; (Deep-sea peaks, valleys, and plains) O: 662

Silt S: 463

Sediment core [climatology]

Climate (Pollen) Ci: 679

Sedimentary rock [geology] S: 280

Coal (How coal was formed) Ci: 717 with pictures

Earth (Earth's rocks) E: 20-21 with picture

Fossil (Tracing the development of life) F: 423-424 with diagram

Paleobotany P: 102

Paleontology P: 103

Petroleum (How petroleum was formed) P: 334

Rock R: 372 with pictures

Stratified rock So: 920

Sedimentation tank

Sewage (Primary treatment) S: 329; (Secondary treatment) S: 330

Sedition [law] S: 280

Alien and Sedition Acts A: 367

Freedom of the press F: 507

Sedition Act See Alien and Sedition Acts in this index**Sedley, Amelia** [literary figure]

Thackeray, William Makepeace (Later career)

T: 220

Sedna [Inuit goddess]

Inuit (Religion) I: 354e

Sedum [botany] S: 280 with picture**See, Holy** [religion]

Pope P: 660

"See It Now" [television show]

Journalism (Television journalism) J: 175

Morrow, Edward R. M: 932

Seebeck, Thomas Johann [German physicist]

Thermocouple T: 253

Seed [botany] S: 281 with pictures

Angiosperm A: 462 with picture

Cotyledon Ci: 1095

Flower F: 271; (Fertilization) F: 296

Fruit F: 544

Gardening (Starting the garden) G: 34-35

Germination G: 173

Gymnosperm G: 450 with pictures

Plant (Seeds) P: 531 with pictures; (In seed

plants) P: 532 with diagrams;

(Germination) P: 536 with picture; (Seed

dispersal) P: 541 with pictures

Reproduction (Plants) R: 243

Tree (Seeds) T: 417 with pictures; (How seeds sprout into trees) T: 418

Vegetable (Seeds) V: 292 with picture

Seed [medicine]

Cancer (Radiation therapy) C: 172

Seed, The [sculpture by Noguchi]

Noguchi, Isamu picture on N: 451

Seed coat

Corn (How the plant develops) Ci: 1057 with diagram

Cotton (Cotton seeds) Ci: 1086-1087

Plant (Seeds) P: 531-532 with pictures

Seed (The parts of a seed) S: 281 with diagrams

Seed cone

Plant (Gymnosperms) P: 519; (In seed plants) P: 532-534 with diagram

Seed (Seed development in gymnosperms) S: 282

Seed flax [plant]

Flax (Growing and processing seed flax)

F: 231 with picture

Seed hemp [plant]

Hemp H: 184

Seed lac

Lac L: 20

Seed plant

Plant (Kinds of plants) P: 519 with pictures; (Sexual reproduction) P: 532 with pictures

Seed potato

Potato (Planting and cultivating) P: 712

Seed spike [botany]

Rye R: 572 with picture

Seed tree cutting

Forestry (Harvesting) F: 404 with picture

Seedbed [agriculture]

Farm and farming (Preparing the soil) F: 35

Seedcotton [fiber]

Cotton picture on Ci: 1088

Seeding [gardening]

Lawn (Planting the grass) L: 142-144

Vegetable (Planting) V: 293

Seeding [tennis]

Tennis (Tennis tournaments) T: 165

Seeding agent [meteorology]

Rainmaking (Rainmaking methods) R: 129

Seedless raisin

Raisin (Varieties of raisins) R: 130

Seedling [botany]

Gardening (Starting the garden) G: 34-35

Transplanting T: 381

Tree (How a tree grows) T: 418

Seedling disease

Cotton (Diseases) Ci: 1090

Seedpiece [botany]

Potato (Planting and cultivating) P: 712

Seeger, Pete [American musician] S: 284 with portrait**Seeing Eye, Inc.** [organization]

Dog guide D: 282

Seeing eye dog

Dog guide D: 282 with picture

Seekonk River

Rhode Island (Rivers and lakes) R: 306

Seelisberg Tunnel [Switzerland]

Tunnel (table) T: 491

Seepage [geology]

Irrigation (Bringing irrigation water to farms) I: 457

Seesaw [playground equipment]

Gravity, Center of G: 333

Sefer ha-Kuzari [book by Halevi]

Halevi, Judah H: 19

Seferis, George [Greek poet]

Greek literature (Modern Greek literature) G: 378

Nobel Prizes (Literature: 1963) N: 446

Sefuwa [African rulers]

Kanem K: 213

Segal, George [American sculptor] S: 284 with picture**Segmented mirror**

Telescope (Reflecting telescopes) T: 104-105

Segmented worm

Animal (A classification of the animal kingdom)

A: 507 with picture

Earthworm E: 39 with pictures

Worm (Segmented worms) W: 501 with pictures

Sego lily [plant] S: 284**Segovia** [Spain]

Castle picture on C: 281

Segovia, Andrés [Spanish guitarist] S: 284**Segrè, Emilio Gino** [American physicist]

Astatine A: 823

Nobel Prizes (Physics: 1959) N: 441

Physics (Advances in the mid-1900's) P: 442

Technetium T: 73

Segregation [sociology] S: 285

See also Apartheid; Discrimination in this index

African Americans (The growth of discrimination) A: 136i; (The civil rights movement) A: 136m

Apartheid A: 563

Ghetto G: 181

Jim Crow J: 126

Plessy v. Ferguson P: 572

Reconstruction (New state programs and policies) R: 179

South Africa So: 608

Tennessee (The mid-1900's) T: 156

Desegregation and integration

Boycott B: 541

Civil rights (The struggle for the rights of blacks) Ci: 609

Jazz (The swing era) J: 71

King, Martin Luther, Jr. (The early civil rights movement) K: 320-321

Massachusetts (The mid-1900's) M: 293

New York City (Social problems) N: 332-333

Parks, Rosa Louise P: 171

School integration

Alabama (The mid-1900's) A: 278

Arkansas (The mid-1900's) A: 714

Brown v. Board of Education of Topeka

B: 645

Education (Education for whom?) E: 107

Meredith, James Howard M: 417

Nixon, Richard Milhous (The national scene) N: 433-434

States' rights (Later developments) So: 866

Virginia (School integration) V: 422

Segregation, Law of [genetics]

Heredity (Mendel's laws) H: 208

Mendel, Gregor Johann (His work) M: 398

Segregation cell

Prison (Prison cells) P: 806

Sehna knot

Rugs and carpets (Oriental rugs) R: 516 with diagram

- Sai Shonagon** [Japanese author]
Japanese literature (The Heian period) J: 61
- Sai whale** [sea animal] S: 287
Whale (Rorquals) W: 255-258 *with picture*
- Seiche** [wave] S: 287
Flood (Other floods) F: 237
- Seidel, Emil** [American political leader]
Milwaukee (The 1900's) M: 561
- Seifert, Jaroslav** [Czech author]
Nobel Prizes (Literature: 1984) N: 446
- Seigneur** [title]
Seigneurial system S: 287
- Seigneurial system** [Canadian history] S: 287
- Seigneurie** [land]
Seigneurial system S: 287
- Seigniorial system** *See* Seigneurial system *in this index*
- Seikan Tunnel** [Japan]
Japan (Transportation) J: 51
Tunnel T: 491
- Seine** [net]
Fishing industry (Nets) F: 183
- Seine River** [France] S: 287 *with picture*
Paris (The city) P: 161-162 *with map; picture on P: 160*
River (table) R: 352
- Seiner** [boat]
Fishing industry (Nets) F: 183 *with diagram*
- Seismic prospecting**
Prospecting P: 829
- Seismic sea wave**
Earthquake E: 35
Tsunami T: 476
- Seismic waves** [geology]
Earthquake (How an earthquake spreads) E: 34 *with diagram*; (Exploring the earth's interior) E: 38
Seismology S: 288
Tsunami T: 476
- Seismograph** [instrument] S: 288 *with picture*
Earthquake (Recording, measuring, and locating earthquakes) E: 37 *with picture*
Gas [fuel] (Exploring for gas) G: 53
Petroleum (Geophysical studies) P: 336-337
Moment magnitude M: 698
Richter magnitude R: 334
Seismology S: 288
- Seismologist** [scientist]
Earthquake (Studying earthquakes) E: 37 *with picture*
Seismograph S: 288
Seismology S: 288
- Seismology** [geology] S: 288
Earthquake (Studying earthquakes) E: 37
Moment magnitude M: 697
Seismograph S: 288
- Seismometer** [instrument]
Mars (Interior) M: 225
- Seismosaurus** [dinosaur]
Dinosaur (True dinosaurs) D: 206b-209; *picture on D: 206a*
- SEIU** [organization] *See* Service Employees International Union *in this index*
- Seizure** [disorder]
Anticonvulsant A: 553
Epilepsy E: 343
- Sejm** [Polish government]
Poland (National government) P: 604; (Free elections) P: 614
- Selaginella** [plant]
Plant (Lycopods) P: 520 *with picture*;
(Classification of plants) P: 546
- Selassie, Haile** *See* Haile Selassie I *in this index*
- Selby, Douglas** [literary figure]
Gardner, Erle Stanley G: 39
- Select grade**
Beef (Grades of beef) B: 209
- Selected Poems** [book by Eberhart]
Eberhart, Richard E: 48
- Selection** [biology] *See* Artificial selection;
Natural selection *in this index*
- Selection cutting**
Forestry (Harvesting) F: 404 *with picture*
Fruit (Developing new varieties of fruit) F: 546
- Selective breeding** *See* Breeding *in this index*
- Selective estrogen receptor modulator** [hormone]
Hormone replacement therapy H: 338
- Selective serotonin reuptake inhibitor** [drug]
Antidepressant A: 553
- Mental illness (Somatic therapy) M: 407
- Selective Service Act** [1917]
Army, United States (World War I) A: 739
- Selective Service Act** [1940]
Army, United States (World War II) A: 739
- Selective Service System** [U.S.] S: 289
- Selective toxicity**
Chemotherapy C: 407
- Selectman** [office]
Maine (Local government) M: 88
- Selector**
Automobile (The transmission) A: 952-953
- Selea, Frank** [American baseball manager]
Baseball (table: Hall of Fame) B: 135
- Seligiline** [drug]
Parkinson disease (Treatment with drugs) P: 171
- Selene** [Greek mythology] S: 289
Endymion E: 273
- Selenite** [mineral]
Gypsum G: 451
- Selenium** [element] S: 289
- Sales, Monica** [American tennis player] S: 289
- Seleucia** [ancient city]
Babylon (The fall of Babylon) B: 12-13
- Seleucid dynasty** [Asian history] S: 289
Jews (The Hellenistic period) J: 121 *with map*
Judah Maccabee J: 178
Palestine (Invasions and conquests) P: 104
Persia, Ancient (The Seleucid dynasty) P: 300
- Seleucus I** [Seleucid king]
Seleucid dynasty S: 289
Babylon (The fall of Babylon) B: 12-13
Persia, Ancient (The Seleucid dynasty) P: 300
- Self** [philosophy]
Hume, David (Hume's thought) H: 432
- Self-acting principle** [engineering]
Nasmyth, James N: 24
- Self-actualization** [psychology]
Maslow, Abraham Harold M: 265
- Self-assembly** [process]
Nanotechnology (The challenge of nanotechnology) N: 11
- Self coat**
Cat (Coat) C: 287 *with picture*
- Self-contained classroom**
Education (The organization of U.S. education) E: 89-90
Elementary school (Elementary school instruction) E: 225
- Self-contained underwater breathing apparatus** *See* Scuba diving *in this index*
- Self-defense**
Homicide H: 305
Judo J: 184
Karate K: 246
Martial arts M: 234
- Self-determination** [philosophy]
Indian Affairs, Bureau of I: 184
Indian reservation (History) I: 189
Nationalism (The rise of nationalism) N: 62
- Self-directed course**
Universities and colleges (Instruction) U: 210
- Self-esteem**
Adolescent (Identity and self-esteem) A: 62
- Self-excited generator**
Electric generator (Kinds of DC generators) E: 173
- Self-fertilization** [zoology]
Hermaphrodite H: 211
- Self-governing area**
Commonwealth of Nations (Dependencies) C: 876
- Self-government**
Home rule H: 301
- Self-hypnosis**
Hypnotism (Dangers of hypnotism) H: 478-479
- Self-image** [psychology]
Child (The early school years) C: 450
- Self-incrimination** [law]
Evidence (Privilege) E: 426
- Self-inductance** [electricity]
Inductance I: 239
- Self-pollination**
Flower (Self-pollination) F: 296
Plant (In seed plants) P: 532-534
Pollen (Self-pollination) P: 645
- Self-Portrait** [painting by Dürer]
Painting (Albrecht Dürer) P: 58 *with picture*
- Self-Portrait** [painting by Van Gogh]
Van Gogh, Vincent V: 282 *with picture*
- Self-Portrait in a Convex Mirror** [book by Ashbery]
Ashbery, John A: 768
- Self-Portrait with Thorn Necklace and Hummingbird** [painting by Kahlo]
Painting (Modern Mexican painting) P: 83-84 *with picture*
- Self-rake reaper** [machine]
Reaper R: 173
- Self-realizing expectation** [economics]
Recession (Causes of recession) R: 175
- Self-reflexive fiction**
American literature (Experimental styles) A: 424
- "Self-Reliance"** [essay by Emerson]
Emerson, Ralph Waldo E: 259
- Self-reliance programs**
Camp Fire Boys and Girls (Self-reliance programs) C: 89
- Self-similarity** [geometry]
Fractal F: 443
- Self-starter** [engine]
Invention (The early and middle 1900's) I: 363
Kettering, Charles Franklin K: 307
- Self-winding watch**
Watch (Mechanical watches) W: 114
- Selridge, Thomas** [American military leader]
Airplane (Other pioneer planes and fliers) A: 233-234
- Selfunfruitful tree**
Plum (Growing plums) P: 577
- Seljuks** [ancient people] S: 289
Iran (The rise of Islam) I: 406
Middle East (Islamic empires) M: 533
Osman I O: 865
Palestine (Arab control) P: 105
Turkey (The Seljuk Turks) T: 509
Turks T: 514b
- Selkirk, Alexander** [Scottish sailor]
Juan Fernández J: 178
Robinson Crusoe R: 369
- Selkirk, Earl of** [British philanthropist] S: 289
Assiniboia A: 818
Manitoba (The Red River Colony) M: 160
- Selkirk Mountains** [British Columbia] S: 290
British Columbia (Land regions) B: 622
- Selkirk rex cat**
Cat (Short-haired breeds) C: 290-291
See Sales *in this index*
- Selling price** [economics]
Percentage (Profits) P: 282
- Selling short** [economics]
Cornering the market C: 1065
- Sells Brothers Circus**
Circus picture on C: 563
- Selma** [Alabama]
African Americans (Political gains) A: 136n
- Selous Game Reserve** [Tanzania]
National park (table) N: 42f
Tanzania (Animal life) T: 33 *with map*
- Selsam, Millicent Ellis** [American author] S: 290
- Selten, Reinhard** [German economist]
Nobel Prizes (Economics: 1994) N: 449
- Selva** [tropical rain forest]
Peru (The selva) P: 311-312 *with map*
South America So: 626
- Selvagens** [islands, Madeira]
Madeira Islands M: 29
- Selwyn Mountains** [Canada]
Rocky Mountains (Chief ranges of the Rockies) R: 395
- Selye, Hans** [Canadian physiologist] S: 290
Stress (How stress affects the body) So: 926
- Semantics** [language] S: 290
Linguistics (The components of a grammar) L: 336
- Semaphore** [signal] S: 290 *with pictures*
Flag (Flags that talk) F: 208; *picture on F: 197*
Signaling (Visual and sound signals) S: 454
Telegraph (Development of the telegraph) T: 90
- SEMATECH** [corporation]
Electronics (Research and development) E: 214
- Semen** [physiology]
Pregnancy (Becoming pregnant) P: 734a
Reproduction, Human (The human reproductive system) R: 244-246
Vasectomy V: 287

Semenov, Nikolai N. [Soviet chemist]
Nobel Prizes (Chemistry: 1956) N: 443

Semester [education]
Universities and colleges (The calendar)
U: 209

Semi [truck] See Tractor-semitrailer in this index

Semiautomatic gun
Gun control (Approaches to gun control)
G: 440-441
Handgun (Types of handguns) H: 43
Rifle (Kinds of rifles) R: 338 with picture

Semiblock form
Letter writing (The form) L: 211 with picture

Semicircle
Circle (Parts of a circle) Ci: 558

Semicircular canal [anatomy]
Ear (The inner ear) E: 8 with diagram; (The sense of balance) E: 11 with diagrams

Semicolon
Punctuation (The semicolon) P: 902

Semiconductor [electricity] S: 291 with diagrams
Computer chip (Structure) Ci: 924e
Electric current (Conductors and insulators)
E: 168
Electricity (Semiconductors) E: 193;
(Conductors and insulators) E: 193
Electronics (Types of electronic circuits)
E: 209-210; (Solid-state components)
E: 210
Germanium G: 143
Insulator, Electric I: 308
Laser (Semiconductor lasers) L: 85
Materials (Semiconductors) M: 301
Physics (Solid-state physics) P: 438
Transistor (Transistor materials) T: 372

Semiconductor laser [physics]
Laser (Semiconductor lasers) L: 85 with diagram

Semiconductor Manufacturing Technology Institute
Electronics (Research and development)
E: 214

Semidiurnal tide
Tide (Tidal patterns) T: 282

Semidrying oil
Oil (Fixed oils) O: 707

Semifixed ammunition
Ammunition (Artillery ammunition) A: 435-436

Semilunar valve [anatomy]
Heart (Chambers, valves, and inner lining)
H: 133-135 with picture

Seminal vesicle [anatomy]
Gland (table) G: 209
Human body diagram on H: 422
Reproduction, Human (The human reproductive system) R: 244-245 with diagram

Seminary [education] S: 292

Seminary of Quebec
Laval University L: 128

Seminiferous tubule
Testicle T: 181
Reproduction, Human (The human reproductive system) R: 244-245

Seminole Indians [American Indians] S: 292 with picture
Black Seminole B: 391
Florida (Territorial days) F: 262
Indian, American (Indians of the Southeast)
I: 157; pictures on I: 156, I: 158, I: 180
Indian Territory I: 189 with map
Indian wars (In the South) I: 193

Seminole Wars [U.S. history]
Indian wars (In the South) I: 193 with map
Seminole Indians S: 292
First Seminole War
Florida (The second Spanish period) F: 262
Monroe, James (War with the Seminole)
M: 737
Second Seminole War
Florida (Territorial days) F: 262
Osceola O: 862

Seminoma [disease]
Testicular cancer T: 181

Semipalmated plover [bird]
Plover P: 574 with picture

Semipermeable membrane [biology]
Osmosis O: 865 with diagrams

Semipostal
Stamp collecting (Special stamps) So: 830

Semiramis [legendary figure] S: 293

Semiregular convex polyhedron
Archimedean solid A: 604 with diagram

Semisubmersible rig
Petroleum (Offshore drilling) P: 340 with picture

Semisweet chocolate
Chocolate (Chocolate products) C: 518-519

Semisynthetic penicillin [medication]
Ampicillin A: 443
Penicillin (Forms of penicillin) P: 240

Semiotics [literature]
Criticism (History of literary criticism) Ci: 1146-1147

Semiterete hybrid orchid [plant]
Orchid picture on O: 824

Semites [people] S: 293
Asia (The people) A: 778
Babylonia (Language and literature) B: 13; (The Semites) B: 14
Ebla E: 48
Sargon of Akkad S: 126
See also the list of Related Articles in the Semites article

Semitic languages S: 293
Alphabet (The Semites) A: 382 with pictures
Egypt, Ancient (The people) E: 136
Hebrew language H: 161

Semliki River [Africa]
Lake Edward L: 37

Semlin, Charles A. [Canadian political leader]
British Columbia (table) B: 627

Semmelweis, Ignaz Philipp [Hungarian doctor] S: 293
Antiseptic (History) A: 559
Medicine (Antiseptic surgery) M: 375

Semmes, Raphael [Confederate admiral] S: 293

Sempach, Battle of [1386]
Switzerland picture on So: 1059
Winkelried, Arnold von W: 339

Semper Fidelis [motto]
Marine Corps, United States M: 206

Sempervivum [plant]
Succulent picture on So: 951

Semple, Letitia Tyler [daughter of]
Tyler, John (Life in the White House) T: 534
White House hostesses W: 291

Simple, Robert [British colonial official]
Manitoba (The Red River Colony) M: 160

Sen [money]
Yen Y: 564

Senanayake, Dudley [Sri Lankan political leader]
Sri Lanka (History) S: 819

Senate [government] S: 294 with pictures
Canada, Government of (The Senate) C: 132;
(How a bill becomes law in Canada)
C: 134-135 with diagrams
Poland (Government) P: 604
Rome, Ancient (The Roman Republic) R: 441
State government (Organization) So: 862

Senate, President of the
Vice President of the United States (President of the Senate) V: 352

Senate, United States
Address, Forms of (Officials of the United States) A: 53
Capitol, United States C: 196
Congress of the United States (The Senate)
Ci: 942; (table) Ci: 943; (Passing a bill)
Ci: 945
Constitution of the United States (Article I)
Ci: 1004; (Amendment 12) Ci: 1013;
(Amendment 17) Ci: 1014
Electoral College (The College in action) E: 164
Impeachment (Procedure) I: 91
Senate S: 294 with pictures
United States, Government of the (The legislative branch) U: 138; (How a bill becomes law in the United States) U: 141
Washington, D.C. map on W: 76

Senate Chamber [Washington, D.C.]
Capitol, United States C: 196
Senate picture on S: 294

Senate Journal [publication]
Constitution of the United States (Article I, Section 5) Ci: 1006

Senator [office]
See also Senate; Senate, United States in this index
Address, Forms of (Officials of the United

States) A: 53; (Officials of the Commonwealth of Nations) A: 53
Congress of the United States (table) Ci: 943;
(Members of Congress at work) Ci: 946
Senate (Membership of the U.S. Senate)
S: 294

Senatorial courtesy
Senate (Other powers and duties) S: 295

Senators, Ottawa
Hockey (table: National Hockey League)
H: 281

Sendak, Maurice [American author] S: 296
Literature for children picture on L: 356

Sending [spell]
Witchcraft (Witchcraft as sorcery) W: 371

Seneca, Lucius Annaeus [Roman author] S: 296
Drama (Tragedy) D: 328; (Elizabethan playwrights) D: 331
Geology (The Romans) G: 98
Latin literature (The Imperial Period) L: 116

Seneca Chief [ship]
Erie Canal (Completion of the canal) E: 352

Seneca Falls [New York]
See also Women's Rights Convention [1848] in this index

Seneca Indians [American Indians] S: 296
Hands Lake H: 46
Iroquois Indians I: 455

Seneca Lake [New York]
Finger Lakes F: 104

Seneca Nation of Indians [political group]
Seneca Indians S: 297

Senefelder, Alois [German inventor] S: 297
Printing (Offset lithography) P: 798

Senegal S: 297 with pictures and map
Flag picture on F: 199
Food picture on F: 328
French West Africa F: 528 with map
Gorée G: 274
Mali (History) M: 109

Sénégal River [Senegal]
Mali (Land and climate) M: 108

Senegambia [African history]
Gorée G: 274

Senescence [human development]
Geriatrics G: 137

Senet [game]
Egypt, Ancient (Recreation) E: 137

Senghor, Léopold Sédar [Senegalese political leader] S: 300
Senegal (History) S: 299-300

Senile cataract [disease]
Blindness (Diseases) B: 401

Senile osteoporosis [disease]
Bone (Bone disorders) B: 457

Senility [disorder] S: 300
Alzheimer's disease A: 398

Senior citizen See Geriatrics; Old age in this index

Senior Citizens, National Council of
National Council of Senior Citizens N: 32

Senior Girl Scouts
Girl Scouts (Senior Girl Scouts) G: 197 with picture

Senior high school
School (High schools) S: 181

Senior League
Little League Baseball L: 391

Senior PGA Tour
Golf (Golf today) G: 267

Seniority
Labor movement (Arranging contracts) L: 4-6

Seniority principle
Senate (Senate committees) S: 295

Senlac [English history]
Hastings, Battle of H: 83

Senna [tree product]
Cassia C: 276

Senna, Ayrton [Brazilian race driver]
Automobile racing (table: Grand Prix world champions) A: 980

Sennacherib [king of Assyria] S: 300
Babylon (The Old Babylonian Empire) B: 11-12
Library (Ancient libraries of clay) L: 257-258

Sennar [former city]
Funj Sultanate F: 560

Sennett, Mack [Canadian director] S: 300 with picture

Sensation See Perception in this index

Sensationalism

Journalism (The age of sensationalism) J: 174-175

Sense and Sensibility [book by Austen]

Austen, Jane A: 892

Sensenbrenner, Maynard E. [American political leader]

Columbus (History) Ci: 856

Senses S: 301 *with diagrams*

Amphibian (Sense organs) A: 440

Animal (Adaptations for sensing the environment) A: 492

Baby (The first month) B: 6

Bird (Senses) B: 364 *with pictures*

Cat (Senses) C: 287

Ear (The sense of hearing) E: 9, (The sense of balance) E: 11

Mammal (Senses) M: 120

Perception P: 282

See also Hearing, Perception, Smell, Taste, Touch, and Vision in this index, and the list of Related Articles in the Senses article

Sensible horizon

Horizon H: 335

Sensitive plant [plant] S: 302 *with pictures*

Plant (Factors affecting plant growth) P: 538-539

Sensitivity training [psychology] S: 302**Sensor** [electronics]

Air bag A: 175

Automation (How automation works) A: 945 *with diagram*

Bomb (Guided bombs) B: 450

Burglar alarm B: 704

Remote sensing R: 231

Sensorimotor period [psychology]

Piaget, Jean P: 445

Sensorineural disorder

Deafness (Types of hearing loss) D: 57; (Medical treatment) D: 58

Sensory cortex

Brain (The cerebrum) B: 550b

Sensory neuron [anatomy]

Human body (The peripheral nervous system) H: 426

Nervous system (How the nervous system works) N: 132 *with diagram*

Sensory perception

Brain (In receiving sensory messages) B: 553

Perception P: 282

Sensory play [recreation]

Play P: 570

Sentance [grammar] S: 302

Capitalization C: 196

Clause Ci: 657

Conjunction Ci: 951

English language (Grammar) E: 312

Grammar G: 303

Semantics S: 290

A Guide to Writing Skills Research Guide: 9

Sentence [law] S: 304

Criminal justice system (The trial) Ci: 1143; (Problems in the courts) Ci: 1144

Parole P: 178

Sentence bargaining [law]

Plea bargaining P: 571

Sentance outline

Outline O: 880

Senter, DeWitt Clinton [American political leader]

Tennessee (table) T: 152

Sentimental comedy

Drama (England) D: 334-335

Sentimental novel

American literature (The Era of Expansion [1831-1870]) A: 415

Sentimentalism

Literature (Theme) L: 353

Russian literature (Sentimentalism) R: 560

Senufo [people]

Burkina Faso (People) B: 706

Seoul [Korea] S: 304 *with pictures and map*

Korea picture on K: 366

Seoul National University

Seoul (The city) S: 304-306

Sepak takraw [game]

Malaysia (Recreation) M: 98d *with picture*

Sepal [Botany]

Flower (The calyx) F: 293 *with picture*

Plant (Flowers) P: 531 *with picture*

Separate but equal [U.S. history]

African Americans (The growth of discrimination) A: 136i

Brown v. Board of Education of Topeka B: 645

Civil rights (The struggle for the rights of blacks) Ci: 609

Separate condenser [machine]

Watt, James W: 148

Separate loading ammunition

Ammunition (Artillery ammunition) A: 435-436

Separation [process]

Milk (Separation or standardization) M: 548 *with picture*

Separation, Legal

Alimony A: 369

Divorce D: 253

Separation negative [photography]

Printing (Process color printing) P: 802

Separation of powers See Checks and balances in this index**Separatist movements** [political science]

See Independence movements and Quebec separatist movement in this index

Separatists [literature]

Homer (Early scholarship) H: 303

Separatists [religious group]

Massachusetts (The Pilgrims) M: 289

Pilgrims P: 463

Plymouth Colony (The founding of Plymouth Colony) P: 582

Protestantism (The free church movements [the 1500's and 1600's]) P: 835

Puritans (History) P: 910-911

Separator [machine]

Centrifuge C: 358

Rubber (Processing latex) R: 503

Refrigeration (The gas refrigerator) R: 202 *with diagram*

Separator [television]

Television (Amplifiers and separators) T: 123

Sephardic [language]

Hebrew language H: 162

Sephardim [people]

Jews J: 120

Sepia [pigment]

Cuttlefish Ci: 1202

Sepik River [New Guinea]

Rain forest picture on R: 126a

Sepiolite [earth]

Meerschaum M: 383

Sepoy Rebellion [1857-1859] See Indian

Rebellion in this index

Sepoys [people]

Indian Rebellion I: 187

Seppuku [custom]

Hara-kiri H: 55

Septal defect [birth defect]

Heart (Abnormal openings in the heart) H: 141

September [month] S: 308 *with pictures*

Calendar (The Romans) C: 30

September 11 terrorist attacks [U.S. history]

S: 10 *with pictures*

Afghanistan (Recent developments) A: 97

Airport (Airport security) A: 247

Ashcroft, John David A: 768

Aviation (Recent developments) A: 991

Bin Laden, Osama B: 308

Blair, Tony B: 397

Bush, George Walker (Bush's administration) B: 722f

Civil defense (Recent developments) Ci: 606

Federal Bureau of Investigation (History) F: 62-63

Homeland Security, Office of H: 301

International relations (The war against terrorism) I: 346

New York (The early 2000's) N: 320

New York City (Recent developments) N: 321-322 *with picture*; (A time of change) N: 343 *with picture*

Nuclear weapon (After the Cold War) N: 602

Pentagon Building P: 274

Qa'ida, Al- Q: 2

Ridge, Tom R: 336

Taliban T: 19

Terrorism (The war against terrorism) T: 179; *picture on T: 177*

United Kingdom (Recent developments) U: 74

United Nations (Fighting terrorism) U: 93

United States, History of the (Recent events)

U: 195-196 *with picture*

War (The war against terrorism) W: 26

Washington, D.C. (Government changes) W: 88

World Trade Center W: 451

September equinox

Equinox E: 348 *with diagram*

September Massacres [French history]

French Revolution (The Legislative Assembly) F: 526

Marat, Jean-Paul M: 191

Septic arthritis [disease]

Arthritis (Other forms of arthritis) A: 752

Septic sore throat [disease] See Strep throat in this index**Septic tank** [sanitation]

Garbage disposer G: 28

House (Plumbing) H: 382

Plumbing (History) P: 580

Sewage (Rural sewerage systems) S: 330

Septicemia See Blood poisoning in this index**Septicemic plague** [disease]

Plague (Forms of plague) P: 506

Septillion [number] S: 310b**Septimius Severus, Arch of** [ruins]

Forum, Roman F: 420 *with picture*

Septuagint [Old Testament] S: 310b

Bible (The first translations) B: 285

Septum [anatomy]

Heart (Outer lining and muscle) H: 133; (Abnormal openings in the heart) H: 141; (Cardiomyopathy) H: 142-143; *picture on H: 134*

Nose N: 548 *with diagram*

Nosebleed N: 549

Sequence [mathematics]

Series S: 316

Sequencing [genetics]

Human Genome Project H: 427

Sequestered jury

Trial (Reaching a verdict) T: 437

Sequestrant [chemical]

Food preservation (Additives) F: 343

Sequoia [tree] S: 310b *with pictures and map*

California (Natural resources) C: 53

Plant P: 516 *with picture*

Sequoia National Park [California] S: 312

National Park System (table: National parks) N: 48

Sequoia See Sequoyah in this index**Sequoyah** [American Indian educator] S: 312

with portrait

Cherokee Indians C: 409

Serahuli [people]

Gambia (People) G: 18

Serape [clothing]

Mexico (Clothing) M: 456

Seraphim [award]

Knighthood, Orders of (Honorary orders) K: 347

Seraphim, Order of the [award]

Medals, decorations, and orders (table) M: 359 *with picture*

Serapis [Egyptian god] S: 312**Serapis** [ship]

Jones, John Paul (Defeat of the *Serapis*) J: 158

Revolutionary War in America (Fighting at sea) R: 283; *picture on R: 284*

Serbia [republic, Yugoslavia] S: 313 *with pictures and map*

Austria-Hungary A: 941

Balkans (The First Balkan War) B: 42, (The Second Balkan War) B: 42

Bosnia-Herzegovina (History) B: 492

Croatia (History) Ci: 1148a-1148b

Kosovo K: 385

Montenegro M: 763

Serbia and Montenegro S: 315

United States, History of the (Keeping peace in the Balkans) U: 195

World War I (The rise of nationalism) W: 452-453; (Beginning of the war) W: 455;

(Eastern Europe) W: 459-460

Yugoslavia (History) Y: 579 *with picture*; (Ethnic tensions) Y: 580

Serbia and Montenegro S: 315

Montenegro M: 763

Serbo-Croatian [language]

- Bosnia-Herzegovina (People) **B**: 492
 Croatia (People) **Ci**: 1148
 Montenegro (People) **M**: 763
 Yugoslavia (People) **Y**: 577
- Serbs** [people]
 Serbia (People) **S**: 313
 Bosnia-Herzegovina (People) **B**: 492
 Croatia (People) **Ci**: 1148; (History) **Ci**: 1148a-1148b
 Sarajevo **S**: 123
 Yugoslavia (People) **Y**: 577
- Serbs, Croats, and Slovenes, Kingdom of the**
 Belgrade (History) **B**: 236
 Bosnia-Herzegovina (History) **B**: 492-493
 Croatia (History) **Ci**: 1148a-1148b
 Serbia (History) **S**: 314-315
 Slovenia (History) **S**: 512
 Yugoslavia (A new nation) **Y**: 579
- Seredy, Kate** [American author]
 Newbery Medal (table) **N**: 359
- Serenade** [music] **S**: 315
- Serengeti National Park** [Tanzania]
 National park (table) **N**: 42f
 Tanzania (Animal life) **T**: 33 *with map*
- Serer** [people]
 Senegal (People) **S**: 297
- Serf** [European history] **S**: 316
See also Peasant *in this index*
 Germany (Serfdom in Germany) **G**: 163
 Greece, Ancient (The people) **G**: 367
 Russia (Ivan the Terrible) **R**: 548
 Slavery (The Middle Ages) **S**: 501
- Sergeant**
 Rank, Military (table) **R**: 140
- Sergeant at arms** [office] **S**: 316
 Parliamentary procedure (Officers) **P**: 175
- Sergeant major**
 Rank, Military (table) **R**: 140
- Sergeant major damselfish**
 Fish *picture on* **F**: 155
- Sergeant York** [American soldier] *See* York,
 Alvin Cullum *in this index*
- Sergeant York** [film]
 Hawks, Howard **H**: 113
- Serger** [machine]
 Sewing (Seams) **S**: 333
- Sergius I, Saint** [pope]
 Pope (table) **P**: 666
- Serial bond**
 Bond (Kinds of bonds) **B**: 454
- Serialism** [music]
 Classical music (Atonal music) **Ci**: 649-650
 Schoenberg, Arnold **S**: 178
- Sericin**
 Silk (Spinning the cocoon) **S**: 459
- Series** [mathematics] **S**: 316
- Series circuit** [electricity]
 Electric circuit (Series circuits) **E**: 166 *with diagram*
 Electricity (Series and parallel circuits) **E**: 194
- Series E bond**
 Savings bond **S**: 166
- Series EE bond**
 Savings bonds **S**: 166
- Series HH bond**
 Savings bond **S**: 166
- Series I bond**
 savings bond **S**: 166
- Series motor**
 Electric motor (DC motors) **E**: 181
- Serif** [decoration]
 Alphabet (Capital letters) **A**: 383
- Serigraphy** [art]
 Printing (Screen printing) **P**: 801
 Screen printing **S**: 225
- Serling, Rod** [American dramatist] **S**: 318
- Serlio, Sebastiano** [Italian set designer]
 Drama (The Italian stage) **D**: 330 *with picture*
- SERM** [hormone]
 Hormone replacement therapy [Selective estrogen receptor modulator] **H**: 338
- Sermon on the Mount** [New Testament]
 Beatitudes **B**: 189
 Golden rule **G**: 256
- Serologic test** [medicine]
 Serum **S**: 319
- Serotonin** [biochemistry] **S**: 318
 Alcoholism (Causes of alcoholism) **A**: 337
 Brain (How drugs affect brain chemistry) **B**: 556
- Fibromyalgia **F**: 90
 Migraine **M**: 537
 Obsessive-compulsive disorder **O**: 646
- Serotonin receptor**
 Serotonin **S**: 318
- Serous membrane** [anatomy]
 Membrane **M**: 391
- Serous otitis media** [disorder]
 Adenoids **A**: 55
 Ear (Diseases) **E**: 12
- Serpent**
See also Snake *in this index*
 Adam and Eve **A**: 32
 Mythology (Mythical symbols) **M**: 974-975
 Sea serpent **S**: 263
- Serpent eagle** [bird]
 Eagle (Other kinds of eagles) **E**: 5
- Serpent Mound** [Hillsboro]
 Ohio (Places to visit) **O**: 690 *with picture*
- Serpent star** [sea animal]
 Brittle star **B**: 634 *with picture*
- Serpentary** [plant]
 Snakeroot **S**: 537
- Serpentine** [gun holder]
 Handgun (Early handguns) **H**: 45
 Harquebus **H**: 67
- Serpentine** [mineral] **S**: 318
 Asbestos (Types of asbestos) **A**: 765
- Serpentine marble** [stone]
 Serpentine **S**: 318
- Serra, Junipero** [Spanish missionary] **S**: 318
 California (The California missions) **C**: 60
 San Diego **S**: 88
 Santa Barbara **S**: 113
- Serra da Estrela** [mountain range]
 Portugal (Land regions) **P**: 690
- Serrano Elias, Jorge** [Guatemalan political leader]
 Guatemala (Political developments) **G**: 417
- Serrão, Francisco** [Portuguese sailor]
 Magellan, Ferdinand (Early life) **M**: 46
- Sertão** [region, Brazil]
 Brazil (The Northeast Region) **B**: 579
- Sertões, Os** [book by Cunha]
 Brazil (The arts) **B**: 576-577
 Cunha, Euclides da **Ci**: 1192
- Sertoma International** [organization] **S**: 319
- Serum** [physiology] **S**: 319
 Immunization (Passive immunization) **I**: 90
- Serum albumin** [chemical]
 Albumin **A**: 333
- Serva Padrona, La** [opera by Pergolesi]
 Pergolesi, Giovanni Battista **P**: 287
- Serval** [wildcat] **S**: 319 *with picture*
- Servant** [labor]
 Indentured servant **I**: 106
- Serve** [sports]
 Handball **H**: 41
 Table tennis (How the game is played) **T**: 3
 Tennis (The serve) **T**: 163; *pictures on* **T**: 164
- Server** [electronics]
 Computer (Personal computers) **Ci**: 909
 Internet (Other uses) **I**: 350c; (How the Internet works) **I**: 350c *with diagram*
- Servetus, Michael** [Spanish physiologist]
 Heart (Discovery of circulation) **H**: 144
- Service** [tennis]
 Tennis (The serve) **T**: 163
- Service, Robert William** [Canadian poet] **S**: 319
- Service benefit**
 Insurance (How private health insurance is provided) **I**: 311
- Service box** [sports]
 Handball **H**: 41 *with diagrams*
- Service bureau** [publishing]
 Publishing (Designing and printing) **P**: 869
- Service cooperative** [economics]
 Cooperative (Service cooperatives) **Ci**: 1036
- Service Corps of Retired Executives** [U.S.]
 Old age (Employment and other activities) **O**: 739
- Service Employees International Union** **S**: 319
 Labor movement (table) **L**: 8
- Service gentry** [Russian history]
 Russia (Ivan the Terrible) **R**: 548
- Service industries** **S**: 320
 United States, History of the (Changes in the economy) **U**: 194
See also the *Economy* sections of the various state and country articles.
- Service line**
 Gas [fuel] (Transmitting and distributing gas) **G**: 53-56
- Service magazine**
 Magazine (Consumer magazines) **M**: 42
- Service mark**
 Trademark **T**: 365
- Service module**
 Space exploration (Vostok and Mercury: The first human beings in space) **So**: 711
- Service Organizations, United** *See* United Service Organizations *in this index*
- Servicemen's Readjustment Act** [1944]
 Veterans Affairs, Department of (Benefits and other services) **V**: 343
- Servicing**
 Automobile (Servicing) **A**: 960
- Servius Tullius** [legendary figure]
 Mythology (The seven kings) **M**: 981
- Servo** [motor]
 Airplane, Model (Radio control models) **A**: 241
- Servomechanism** [electronics] **S**: 320
 Automatic flight control system (How an AFCS works) **A**: 944
- Sesame** [plant] **S**: 320 *with picture*
- "Sesame Street"** [program]
 Television (Public television) **T**: 110a
- Sesenhimer Lieder** [poems by Goethe]
 Goethe, Johann Wolfgang von (Early years) **G**: 247
- Sesotho** [language]
 Lesotho (People) **L**: 206-207
- Sesquisulfide of phosphorus** [chemical]
 Match (Strike-anywhere matches) **M**: 299;
 (The first matches) **M**: 300-300a
- Sesshu** [Japanese painter] **S**: 320
 Painting (Japanese painting) **P**: 47
- Sessile oak** [tree]
 Oak (Other oaks) **O**: 636
- Session** [religion]
 Presbyterians **P**: 756a
- Session musician**
 Country music (Emergence of the country music industry) **Ci**: 1098b-1098c
- Sessions, Roger** [American composer] **S**: 320
- Sessions, William S.** [American government official]
 Federal Bureau of Investigation (History) **F**: 62-63
- Sestet** [poetry]
 Poetry (table) **P**: 594
 Sonnet **So**: 593
- Set** [botany]
 Onion (Cultivation) **O**: 763
- Set** [Egyptian god] *See* Seth *in this index*
- Set** [mathematics] *See* Set theory *in this index*
- Set** [sports]
 Tennis (Scoring) **T**: 162-163
- Set** [theater]
 Ballet (Sets and costumes) **B**: 49 *with picture*
 Drama (The Italian stage) **D**: 330 *with picture*;
 (England) **D**: 334 *with picture*; (Early realism) **D**: 338
 Motion picture (Filming on a sound stage) **M**: 852 *with pictures*
 Theater (Scene design) **T**: 239 *with pictures*
See also Scenery *in this index*
- Set dressing**
 Theater (Properties and set dressing) **T**: 240
- Set prop**
 Theater (Properties and set dressing) **T**: 240
- Set rendering**
 Theater (The scene designer) **T**: 239
- Set theory** [mathematics] **S**: 321 *with diagrams*
 Addition **A**: 48
 Algebra (Sets and variables) **A**: 350
 Boolean algebra **B**: 474 *with diagrams*
 Infinity **I**: 266
 Mathematics (Branches of mathematics) **M**: 303
- Set-top box** [machine]
 Television (Cable television) **T**: 110b; (Tuner) **T**: 123
- Seta** [botany]
 Moss (How mosses live) **M**: 834-835
- Setae** [zoology]
 Crustacean (Senses) **Ci**: 1163 *with diagram*
- Earthworm** **E**: 39 *with pictures*
- Seth** [Egyptian god] **S**: 323
 Mythology (The Osiris myth) **M**: 976 *with picture*

Seth's Brother's Wife [book by Frederic]
Frederic, Harold F: 497

SETI

Extraterrestrial intelligence E: 458

Seti I [king of ancient Egypt] S: 323

Ramses II R: 134

SETI Institute S: 323

Seton, Ernest Thompson [Canadian naturalist]
S: 323

Seton, Saint Elizabeth Ann [American religious
leader] S: 323 *with portrait*

Seton, William Magee [husband of]

Seton, Saint Elizabeth Ann S: 323

Setswana [language]

Botswana (People) B: 511

Sett [design]

Tartan T: 47

Setter [dog] S: 323

Dog (Sporting dogs) D: 268 *with pictures*

Settignano, Desiderio da [Italian sculptor]

Sculpture (Early Renaissance) S: 252

Setting

Literature (Characters) L: 353

Settlement area [government]

Northwest Territories (Government) N: 533

Settlement house S: 324

Addams, Jane A: 46

Hull House H: 412

Progressive movement (Social reforms) P: 814
with picture

Social work (History) So: 559

Toynbee, Arnold T: 352

Settling basin

Water (Purifying and treating water) W: 126

Settlor

Trust fund (How a trust fund works) T: 474

Seurat, Georges [French painter] S: 324

Painting (What do painters paint?) P: 28;

(Postimpressionism) P: 75 *with picture*

Postimpressionism P: 709 *with picture*

Seuss, Dr. [American author] S: 324

Regina Medal (table: 1982) R: 206

Sevan, Lake [Armenia] *See* Lake Sevan *in this index*

Sevastopol [city, Ukraine] S: 324

Black Sea B: 391 *with map*

Seven Against Thebes [Greek mythology]

Antigone A: 554

Seven Brothers [book by Kivi]

Scandinavian literature (The Golden Age)

S: 171

Seven-card stud [game]

Poker P: 603

Seven Cities of Cibola *See* Cibola, Seven Cities
of in this index

Seven Days, Battles of the [1862]

Civil War (table) Ci: 624; (The peninsular cam-
paign) Ci: 626-627

Lee, Robert Edward (Opening campaigns)
L: 178

Seven Legends [book by Keller]

Keller, Gottfried K: 254

Seven Natural Wonders of the World S: 324
with pictures

Seven Oaks, Battle of [1816]

Manitoba (The Red River Colony) M: 160

Seven Pillars of Wisdom, The [book by
Lawrence]

Lawrence, T. E. L: 146

Seven Pines, Battle of [1862]

Civil War (table) Ci: 624; (The peninsular cam-
paign) Ci: 626

Lee, Robert Edward (Opening campaigns)
L: 178

Seven seas [mythology] S: 324b

Seven Storey Mountain, The [book by Merton]
Merton, Thomas M: 419

Seven Weeks' War [1866] S: 324b

Bismarck, Otto von (Bismarck's wars) B: 382
Francis Joseph F: 481

Germany (The unification of Germany) G: 165

Seven Wonders of the Ancient World S: 325
with pictures and map

Babylon (The New Babylonian Empire) B: 12

Seven Years' War [1756-1763] S: 328

See also French and Indian War *in this index*
Frederick II F: 497

French and Indian wars (The French and
Indian War) F: 512

George II G: 107

Germany (The rise of Prussia) G: 164

Louisbourg L: 477

Newfoundland and Labrador (War with France)
N: 375; *picture on* N: 376

Nova Scotia (The struggle in Acadia) N: 568

Pitt, William P: 499

Quebec, Battle of Q: 37

United Kingdom (The growing empire) U: 67

Washington, George (Messenger to the
French) W: 93-94

Seveners [religious group]

Fatimid dynasty F: 55

Seventeen

Magazine (table) M: 45

Seventeen-year locust [insect]

Cicada (Types of cicadas) Ci: 551 *with picture*

Insect *picture on* I: 281

Seventeenth Amendment

Constitution of the United States Ci: 1014

Progressive movement (Political reforms)
P: 814

Seventh Amendment

Constitution of the United States Ci: 1012

Seventh Crusade [1248-1254]

Louis IX L: 474

Seventh-day Adventists [religious group]

S: 328

Adventists A: 70

Battle Creek B: 172

Seventh Fleet

Navy, United States (The Operating Forces)
N: 85

Seventh Seal, The [film]

Motion picture (The art film revival) M: 870
with picture

76ers, Philadelphia

Basketball (table) B: 150

77 Dream Songs [book by Berryman]

Berryman, John B: 272

Seventy years' captivity [religion]

Reformation (Religious causes) R: 196

Severai Poems [book by Bradstreet]

American literature (Poetry) A: 414

Severance tax

Taxation (Taxes on transactions) T: 53

Severe combined immunodeficiency disease

Immune system (Immunodeficiency diseases)
I: 88c

Severe porcelain

Porcelain (Hard-paste porcelain) P: 675-676

Severe Storms Forecast Center, National

[Kansas City, Missouri]

Weather Service, National W: 172

Severed Head, A [book by Murdoch]

Murdoch, Iris M: 930

Severini, Gino [Italian painter]

Futurism F: 589 *with picture*

Italy *picture on* I: 505

Severinus [pope]

Pope (table) P: 666

Severn, River (United Kingdom) S: 328

England (Rivers and lakes) E: 300-301

Wales (Rivers and coastline) W: 11

Seversky, Alexander Procofiiev de [Russian-
American engineer]

De Seversky, Alexander Procofiiev D: 157

Severus [Roman emperor]

Rome, Ancient (table) R: 447

Severus, Lucius Septimius [Roman emperor]

Praetorian Guard P: 729

Rome, Ancient (table) R: 447

Severus Alexander [Roman emperor]

Rome, Ancient (table) R: 447

Seviche

Food (Interesting facts about food) F: 329

Sevier, John [American political leader] S: 328

Franklin, State of F: 493

Tennessee (table) T: 152; (Territorial years)
T: 153

Westward movement in America (Crossing
the Appalachians) W: 246

Sevier Desert

Utah (Deserts) U: 242

Sevier River

Utah (Rivers and lakes) U: 242

Sevilla [Spain] *See* Seville *in this index*

Seville [Spain] S: 329

Seville [literary school]

Spanish literature (The 1500's) So: 758-759

Seville Cathedral [Spain]

Seville S: 329

Spain (Architecture) So: 739

Sèvres, Treaty of [1920] S: 329

Turkey (After World War I) T: 511

World War I (The Paris Peace Conference)

W: 465-466; (Provisions of the treaties)
W: 466

Sèvres porcelain

Porcelain (French porcelain) P: 677 *with picture*

Sewage S: 329 *with diagrams*

Environmental pollution (Water pollution)

E: 334; *picture on* E: 332

Garbage disposer G: 28

Incinerator I: 100

House (Plumbing) H: 382

Ocean (Marine pollution) O: 664

Plumbing (The drainage system) P: 578-579

Sanitation (Sewage treatment) S: 111

Water (Water management and conservation)

W: 122; (Disposing of used water) W: 127

Water pollution (Sewage) W: 136; (Sewage
treatment) W: 138

Sewall, Arthur [American political leader] S: 331

Sewall, Samuel [American jurist] S: 331

Sewall, Sumner [American political leader]

Maine (table) M: 87

Seward, William Henry [American political
leader] S: 331

Alaska A: 283; (American purchase) A: 301

Civil War (The conflict over slavery) Ci: 616

Emancipation Proclamation *picture on* E: 254

Johnson, Andrew (Foreign relations) J: 141

Lincoln, Abraham (Election of 1860) L: 318;

(Foreign relations) L: 322; (table) L: 323

New York (table) N: 313

State, Department of *picture on* So: 861

United States, History of the (The irrepressible
conflict) U: 172; (Congressional views)

U: 172

Seward Peninsula

Alaska (The Central Uplands and Lowlands)
A: 294

"Seward's Folly" [U.S. history]

Seward, William Henry S: 331

Alaska A: 283; (American purchase) A: 301

"Seward's Icebox" *See* "Seward's Folly" *in this index*

Sewell, Anna [British author] S: 331

Sewell, Joe [American baseball player]

Baseball (table: Hall of Fame) B: 135

Sewellel [animal]

Mountain beaver M: 897

Sewer [water system]

Sewage S: 329

Sewer gas

Plumbing (The drainage system) P: 578-579

Sewerage system

Garbage disposer G: 28

Sewage S: 329

Sewing S: 331 *with diagrams*

Beadwork B: 179 *with picture*

Bookbinding (Forming a book) B: 470

Clothing (The 1900's) Ci: 703; (Ready-to-wear
clothes) Ci: 704-705

Fur (Cutting and sewing) F: 563

Needle N: 117 *with picture*

Sewing machine S: 333 *with pictures*

Howe, Elias H: 400

Needle N: 117 *with picture*

Sewing S: 331

Singer, Isaac Merrit S: 472

Sex *See* Sexuality *in this index*

Sex cell [reproduction]

Cell (Meiosis) C: 331

Heredity (Chromosomes and genes) H: 201

Sex chromosome [genetics]

Hemophilia (How hemophilia is inherited)

H: 183 *with diagram*

Heredity (Chromosomes and sexual determi-
nation) H: 202

Mental retardation (Causes) M: 410

Sex discrimination S: 335

Civil rights (The struggle for women's rights)
Ci: 609

Education (Education for whom?) E: 107-108

Equal Rights Amendment E: 345

Sexual harassment S: 337

Woman suffrage W: 380

Women's movements (Contemporary
women's movements) W: 386

Sex drive [psychology]
Sexuality (Psychological factors) S: 338

Sex education S: 336
Adolescent (Pregnancy) A: 63
Calderone, Mary Steichen C: 27

Sex hormone
Adrenal gland A: 67
DES D: 153
Hormone (Growth and sex hormones) H: 336
Lipid (Kinds of lipids) L: 345

Sex Information and Education Council of the United States
Calderone, Mary Steichen C: 27

Sex-linked gene
Heredity (Patterns of heredity) H: 202
Morgan, Thomas Hunt M: 804

Sex organs See Genital organs in *this index*

Sex Pistols [musical group]
Rock music (Disco and punk) R: 380

Sex ratio [population] S: 336

Sex reversal [biology]
Goby G: 243

Sex role [behavior]
Child (The preschool years) C: 449-450
Etiquette (The origins of etiquette) E: 374;
(Etiquette today) E: 374
Homosexuality (The causes of sexual orientation) H: 307
Indian, American (Family life) I: 136b-136c
Parent (The role of parents) P: 156
Sex discrimination (Views on sex discrimination) S: 335
Sexuality (Sex and gender) S: 338; (Cultural influences) S: 338a
Women's movements (Origins of women's traditional roles) W: 383

Sexagesimal system [mathematics]
Mathematics (Early civilization) M: 303

Sexes Throughout Nature, The [book by Blackwell]
Blackwell, Antoinette Brown B: 394

Sexism [sociology]
See also Sex discrimination in *this index*
Education (Education for whom?) E: 107-108
Equal Rights Amendment E: 345
Sex discrimination S: 335
Women's movements (Contemporary women's movements) W: 386; (Impact of women's movements) W: 387

Sextant [instrument] S: 336 with picture
Navigation (Celestial navigation) N: 71; picture on N: 72

Sextilis [month]
Calendar (The Romans) C: 30

Sextillion [number] S: 337

Sexton, Anna [American poet] S: 337 with portrait

Sexton beetle See Burying beetle in *this index*

Sextus Empiricus [Roman doctor]
Skepticism S: 481

Sexual abuse
Roman Catholic Church (In the United States) R: 412

Sexual Behavior in the Human Female [book by Kinsey]
Kinsey, Alfred Charles K: 332

Sexual Behavior in the Human Male [book by Kinsey]
Kinsey, Alfred Charles K: 332

Sexual difference
Women's movements (Origins of women's traditional roles) W: 383

Sexual dimorphism [biology]
Prehistoric people (Three species) P: 745

Sexual equality [sociology]
Women's movements (Impact of women's movements) W: 387

Sexual harassment [law] S: 337
Thomas, Clarence T: 261

Sexual intercourse
Adolescent (Dating and sex) A: 62
AIDS (How HIV is transmitted) A: 163;
(Prevention) A: 164a
Birth control (Methods of birth control) B: 378
Penis P: 241
Pregnancy (Becoming pregnant) P: 734a
Rape [crime] R: 141
Reproduction, Human (Fertilization) R: 246
Sexuality (Gender identity) S: 338; (Expressing sexuality) S: 338b

Sexually transmitted disease (Factors in the spread of STD's) S: 338b
Vagina V: 259

Sexual orientation [psychology]
Adolescent (Establishing a sexual identity) A: 63
Homosexuality H: 307
Sexuality (Sexual orientation) S: 338b

Sexual reassignment surgery
Transsexualism T: 400

Sexual reproduction [biology]
Animal (Sexual reproduction) A: 496 with diagram
Estrous cycle E: 364
Heredity (Sex cells and reproduction) H: 201
Life (Reproduction) L: 274
Plant (How plants reproduce) P: 532 with diagrams
Reproduction (Through sexual reproduction) R: 242; (How reproduction has evolved) R: 243
Reproduction, Human R: 244

Sexual Research, Institute for
Kinsey, Alfred Charles K: 332

Sexual selection [biology]
Evolution (Natural selection) E: 428-429 with picture

Sexual violence [crime]
Obscenity and pornography (In the United States) O: 643-644

Sexuality S: 337
Adolescent (Sexual development) A: 61;
(Dating and sex) A: 62; (Establishing a sexual identity) A: 63
Birth control B: 378
Freud, Sigmund (On behavior) F: 530
Gay rights movement G: 73
Heredity (Chromosomes and sexual determination) H: 202
Homosexuality H: 307
Kinsey, Alfred Charles K: 332
Masters and Johnson M: 297
Prostitution P: 830
Reproduction, Human R: 244
Sex education S: 336
Sexually transmitted disease (Factors in the spread of STD's) S: 338b
Transsexualism T: 400

Sexually transmitted disease S: 338b
AIDS (How HIV is transmitted) A: 163
Circumcision Ci: 561
Gonorrhea G: 268
Herpes, Genital H: 214
Infertility (Causes) I: 265
Pelvic inflammatory disease P: 232
Prostitution P: 830
Syphilis So: 1069
Tabes T: 2

Seychelles S: 339 with picture and map
Flag picture on F: 199

Seyfert galaxy [astronomy]
Galaxy (Emissions from galaxies) G: 8b

Seymour, Edward [uncle of]
Edward VI E: 113

Seymour, Horatio [American political leader]
S: 341
Grant, Ulysses S. (Election of 1868) G: 315
New York (table) N: 313

Seymour, Jane [wife of Henry VIII]
Edward VI E: 113
Henry VIII [of England] H: 188

Seymour, Thomas H. [American political leader]
Connecticut (table) Ci: 967

Seymouria [animal]
Prehistoric animal P: 738

Sforza, Ludovico [Italian nobleman]
Leonardo da Vinci (Years in Milan) L: 199

Sfumato [art]
Leonardo da Vinci (Paintings) L: 200b
Painting (The 1400's) P: 52-53

Sgraffito [art]
Pottery (Decorating and glazing) P: 718

's Gravenhage See Hague, The in *this index*

Shaanxi [province, China]
Mao Zedong (His life) M: 174-175

Shaba [province, Congo]
Congo (Kinshasa) (Civil disorder) Ci: 940e

Shabbazz, El-Hajj Malik El- [American social reformer] See Malcolm X in *this index*

Shabuot See Shavuot in *this index*

Shackamaxon, Treaty of [1682]
Pennsylvania (Colonial days) P: 264

Shackles
Handcuffs H: 42

Shackleton, Sir Ernest Henry [Irish explorer]
S: 341
Antarctica (The "Heroic Era") A: 536

Shad [fish] S: 341 with picture
Menhaden M: 400

Shad fly See Mayfly in *this index*

Shaddock [tree]
Grapefruit (History) G: 321

Shade
Color diagram on Ci: 822
Painting (Light and shade) P: 35

Shade tree
Pruning P: 841

Shaded coat
Cat (Coat) C: 287 with picture

Shadoof [tool]
Agriculture picture on A: 156

Shadow S: 341 with diagrams
Penumbra P: 276
Sculpture (Form and treatment) S: 230-231

Shadow and Substance [play by Carroll]
Irish literature (Drama) I: 432

Shadow Cabinet [government]
United Kingdom (National government) U: 49

Shadow Line, The [book by Conrad]
Conrad, Joseph Ci: 973

Shadow mask
Television (The picture tube) T: 124 with diagram

Shadow matter [physics] S: 341

Shadow of a Gunman, The [play by O'Casey]
O'Casey, Sean O: 646

Shadow play [drama]
Puppet (Shadow plays) P: 905 with picture

Shadow price [economics]
Cost-benefit analysis Ci: 1079

Shadrach [Biblical figure]
Daniel, Book of D: 33

Shadwell [estate]
Jefferson, Thomas (Boyhood) J: 76 with picture

Shadwell, Thomas [English poet]
Dryden, John D: 370
Poet laureate (table: Poets laureate of the United Kingdom) P: 590

Shafer, George F. [American political leader]
North Dakota (table) N: 513

Shaffer, Peter [British dramatist] S: 342
English literature (Recent English drama) E: 323

Shafii [Muslim sect]
Yemen (People) Y: 562

Shaft [anatomy]
Bone (Structure of the bones) B: 456 with diagram
Hair (The root and shaft) H: 9 with diagrams; picture on H: 10

Shaft [architecture]
Architecture (table) A: 608-609 with picture

Shaft [arrow]
Archery (Arrows) A: 602 with diagram

Shaft furnace
Iron and steel (The Iron Age) I: 450-451

Shaft Graves
Mycenae M: 970f

Shaft mine
Coal (Underground mining) Ci: 722 with diagram
Iron and steel (Mining and processing iron ore) I: 438-439
Mining (Underground mining methods) M: 576 with picture

Shaft tug
Harness diagram on H: 63

Shafter, William Rufus [American general]
Fort Shafter F: 416
Spanish-American War (Land battles) So: 754

Shagari, Shehu [Nigerian political leader]
Nigeria (Oil wealth) N: 418

Shagbark hickory [tree]
Hickory H: 224
Tree pictures on T: 421

Shaggy mane [fungus]
Mushroom picture on M: 944

Shah [title] S: 342

Shah Jahan [Mughal emperor] S: 342

- Delhi (History) D: 115-116
 India (Architecture and sculpture) I: 119; (The Mughal Empire) I: 129
 Mongol Empire (Breakup) M: 721
 Mughal Empire M: 910
 Taj Mahal T: 18
Shah-Namah [book by Firdausi]
 Painting (Islamic painting) P: 48
Shahada [religion]
 Islam (The Five Pillars of Islam) I: 463
Shaheed Dibash [holiday]
 February F: 61
Shahjahan [Mughal emperor] *See* Shah Jahan *in this index*
Shahn, Ben [American painter] S: 342 *with picture*
Shahriyar, King [legendary figure]
Arabian Nights A: 582b
Shaka [king of the Zulu] S: 342
 Zulu Z: 612
Shaken baby syndrome S: 343
Shaker Festival [South Union]
 Kentucky *picture on* K: 283
Shakers [religious group] S: 343 *with picture*
 Kentucky (Places to visit) K: 282 *with picture*
 United States, History of the (A national culture) U: 165
Shakespeare, Hamnet [son of]
 Shakespeare, William (The lost years) S: 347;
 (His last years) S: 349
Shakespeare, John [father of]
 Shakespeare, William (Shakespeare's parents) S: 346; (Early years) S: 346
Shakespeare, Judith [daughter of]
 Shakespeare, William (The lost years) S: 347;
 (His last years) S: 349
Shakespeare, Mary Arden [mother of]
 Shakespeare, William (Shakespeare's parents) S: 346
Shakespeare, Susanna [daughter of]
 Shakespeare, William (Marriage) S: 347; (His last years) S: 349
Shakespeare, William [English author] S: 344 *with pictures*
 April (Quotations) A: 577
 Blank verse B: 398
 Drama (Elizabethan playwrights) D: 331-332
 English literature (Elizabethan poetry) E: 316-317; (Elizabethan drama) E: 317
 Folger Shakespeare Library F: 315
 Globe Theatre G: 233
Holinshed's Chronicles H: 292
 January (Quotations) J: 31
 Kean, Edmund K: 253
 Olivier, Laurence O: 744
 Poetry (Forms) P: 595
 Sonnet So: 593
 Tragedy T: 368
See also the list of Related Articles in the Shakespeare, William article
Shakespeare Center
 Stratford-upon-Avon So: 920
Shakespeare Festival
See also Stratford Festival *in this index*
 Oregon *picture on* O: 837
Shakespeare in Love [film]
 Motion picture (Best picture: 1998) M: 861
Shakespearean sonnet
 Poetry (Forms) P: 595
Shakespearean Tragedy [book by Bradley]
 Shakespeare, William (Romantic criticism) S: 369
Shakespeare's Birthplace [Stratford]
 Shakespeare, William *pictures on* S: 346
Shakespeare's Sonnets [book]
 Shakespeare, William (The sonnets) S: 349
Shaking palsy *See* Parkinson disease *in this index*
Shakir al-Sayyab, Badr [Iraqi author]
 Arabic literature (Poetry) A: 583
Shakspere: A Critical Study of His Mind and Art [book by Dowden]
 Shakespeare, William (Romantic criticism) S: 369
Shalako [custom]
 Zuni Indians Z: 613
Shalala, Donna E. [American government official]
 Health and Human Services, Department of (table) H: 128
Shale [rock] S: 370
 Oil shale O: 708
 Rock (table) R: 373 *with picture*; (Clastic sediments) R: 372
 Sedimentary rock S: 280
Shalikashvili, John [American military leader]
 Joint Chiefs of Staff (table) J: 156
Shallenberger, Oliver B. [American inventor]
 Electric meter E: 178
Shallot [plant] S: 370 *with picture*
Shallow cultivation
 Dry farming D: 369
Shallow draft hydrofoil
 Hydrofoil (Fully submerged hydrofoils) H: 468 *with picture*
Shalmaneser III [king of Assyria]
 Assyria (History) A: 822
Shalom Tower
 Tel Aviv T: 88
Shalwar [clothing]
 India (Clothing) I: 117
Shalwar-qamiz [clothing]
 Pakistan (Clothing) P: 96
Sham Chun [river, China]
 Hong Kong (The land) H: 318 *with map*
Shamal [wind]
 Saudi Arabia (Climate) S: 158-159
Shaman [medicine man] S: 370
 Indian, American (Shamans) I: 147
 Inuit (Religion) I: 354e
 Magic (The magician) M: 49
Shamanism [religion]
 Sami (Religion) S: 79
Shamash [Babylonian god]
 Hammurabi *picture on* H: 36
Shamash [Judaism]
 Hanukkah H: 55
Shame [book by Rushdie]
 Rushdie, Salman R: 522
Shamela [book by Fielding] *See* Apology for the Life of Mrs. Shamela Andrews, An *in this index*
Shaming [punishment]
 Colonial life in America (Crime and punishment) Ci: 795
Shamir, Adi [Israeli computer scientist]
 Codes and ciphers (Public-key systems) Ci: 750
Shamir, Yitzhak [Israeli political leader] S: 371
 Israel (Unity government) I: 489
Shammai [Jewish scholar]
 Hillel I H: 232
Shampoo
 Hairdressing (Careers in hairdressing) H: 13
Shamrock [plant] S: 371 *with picture*
 Saint Patrick's Day S: 51
Shamshi-Adad [king of Assyria]
 Assyria (History) A: 822
Shamsu'd-din Mohammad [Persian poet]
 Hafiz H: 5
Shan [people]
 Myanmar (Early days) M: 970d
Shan-shui
 China (Painting) C: 488 *with picture*
Shang dynasty [Chinese history] S: 371
 Asia (The Huang He and Yangtze valleys) A: 805
 China (Sculpture and pottery) C: 489 *with picture*; (Beginnings of Chinese civilization) C: 500 *with map; picture on* C: 490
 Chinese language (Development) C: 511
 Sculpture (China) S: 238
 World, History of the (The Huang He Valley) W: 425 *with picture*
Shange, Ntozake [American dramatist]
 American literature (Drama) A: 425
Shanghai [China] S: 371 *with picture*
 China *picture on* C: 475
 Treaty port T: 409
Shanghai Communiqué
 China (Improved relations with the West) C: 506
Shangri-La [fictional place]
 Hilton, James H: 233
Shangri-La [U.S. history]
 Camp David C: 88
Shank [chicken]
 Chicken (The body of a chicken) C: 440 *with picture*
Shank [cut]
 Ham (Kinds of ham) H: 28 *with pictures*
Shankar, Ravi [Indian musician]
 Sitar *picture on* S: 477
Shanker, Albert [American labor leader] S: 372
Shannon, James C. [American political leader]
 Connecticut (table) Ci: 967
Shannon, Monica [American author]
 Newbery Medal (table) N: 359
Shannon, River [Ireland] S: 373
 Ireland (Rivers and lakes) I: 422
Shannon Airport [Ireland]
 Limerick L: 307
Shantung [fabric]
 Silk (Douppioni) S: 460-461
Shaolin
 Martial arts (Chinese martial arts) M: 234
Shape [aesthetics]
 Photography (Composition) P: 412
Shape-memory materials [engineering]
 Materials (Smart materials) M: 301
Shape-shifting
 Witchcraft (Witchcraft as sorcery) W: 371
Shapes
See the list of Related Articles in the Geometry article
Shaping [industrial process]
 Iron and steel (Shaping and finishing steel) I: 445-447 *with diagrams*
 Machine tool (Metal removal) M: 18
Shapiro, Karl Jay [American poet] S: 373
Shapley, Harlow [American astronomer] S: 373
Shar-pei [dog] *See* Chinese shar-pei *in this index*
Sharaku [Japanese artist] S: 373 *with picture*
 Japanese print (The master print artists) J: 63 *with picture*
Share [economics]
 Investment (table) I: 366; (Stocks) I: 368
 Stock, Capital So: 903
Share [television]
 Television (Measuring a program's success) T: 114
Share [tool]
 Plow (The moldboard plow bottom) P: 575
Share lease
 Tenant farming T: 132
Share-the-Wealth Society
 Long, Huey Pierce L: 446
Sharecropper [agriculture]
 Plantation ("Free"-labor plantations) P: 550
Shari'a [religion] S: 373
 Islam (The Shari'a) I: 465
 Muslims (Muhammad) M: 964-964a
 Nigeria (Courts) N: 411
 Saudi Arabia (National government) S: 155
Sharif, Nawaz [Pakistani political leader]
 Pakistan (Struggle for democracy) P: 100;
 (Recent developments) P: 100
Sharifs [people]
 Morocco (Corsairs and sharifs) M: 814
Shark [fish] S: 374 *with pictures*
 Animal *pictures on* A: 471, A: 487
 Brain *diagram on* B: 559
 Dogfish D: 284
 Fish (Harmful fish) F: 147; (Sharks, rays, and chimaeras) F: 148 *with picture*; (The Age of Fishes) F: 171 *with picture; pictures on* F: 168, F: 170
 Hammerhead shark H: 34 *with picture*
 Whale shark W: 265
Sharkey, Tom [American boxer]
 Bellows, George Wesley B: 245
Sharkey, William L. [American political leader]
 Mississippi (table) M: 640
Sharon, Ariel [Israeli political leader] S: 377 *with portrait*
 Israel (Recent developments) I: 489-490
Sharon, Plain of [region, Israel]
 Israel (The Coastal Plain) I: 482
Sharp [music]
 Music (Tone) M: 950; (Indicating pitch) M: 953
Sharp, Becky [literary figure]
 Thackeray, William Makepeace (Later career) T: 220
Sharp, Granville [British social reformer]
 Sierra Leone (History) S: 452
Sharp, Philip Allen [American physiologist]
 Nobel Prizes (Physiology or medicine: 1993) N: 445
Sharpe, Lake

- South Dakota (Rivers and lakes) **So**: 676
Sharpe, M. Q. [American political leader]
 South Dakota (table) **So**: 680
Sharpe, William Forsyth [American economist]
 Nobel Prizes (Economics: 1990) **N**: 449
Sharples, Sir Richard [Bermudian political leader]
 Bermuda (History) **B**: 268-269
Sharpless, K. Barry [American chemist]
 Nobel Prizes (Chemistry: 2001) **N**: 444
"Sharps and Flats" [column by Field]
 Field, Eugene **F**: 92
Sharps buffalo rifle
 Rifle *picture on* **R**: 339
Sharpsburg, Battle of See Antietam, Battle of
in this index
Shasta, Mount [California]
 Cascade Range **C**: 271
 Mount Shasta **M**: 888
Shasta daisy [plant]
 Burbank, Luther (His achievements and methods) **B**: 702
Shasta Dam [Sacramento River, California]
S: 377
 Dam *picture on* **D**: 17
 Lake *picture on* **L**: 32
Shastina [volcano, California]
 Mount Shasta **M**: 888
Shestri, Lal Bahadur [Indian political leader]
 India (India under Indira Gandhi) **I**: 133
Shett al Arab [river, Iran-Iraq]
 Iraq (The land) **I**: 411
 Middle East (The land) **M**: 532
Shaving [grooming]
 Razor (Safety razors) **R**: 153
 Clothing (Ancient times) **Ci**: 696-697
Shavuot [custom] **S**: 377
 Judaism (The pilgrimage festivals) **J**: 181
 Pentecost **P**: 275
Shaw, Anna Howard [American social reformer] **S**: 377
Shaw, George Bernard [Irish author] **S**: 378
 Drama (British drama) **D**: 338-339
 English literature (Later Victorian literature)
E: 321-322; (Literature before World War I) **E**: 322
 Irish literature (Drama) **I**: 432
 Realism (In drama) **R**: 172
 Terry, Ellen **T**: 180
Shaw, Henry Wheeler [American author]
 Billings, Josh **B**: 307
Shaw, Irwin [American author] **S**: 378
Shaw, Louis A. [American inventor]
 Iron lung **I**: 453
Shaw, T. E. See Lawrence, T. E. *in this index*
Shaw, Walter R. [Canadian political leader]
 Prince Edward Island (table) **P**: 791
Shaw, Wilbur [American race driver]
 Automobile racing (table: Indianapolis 500 winners) **A**: 980
Shaw Festival [Ontario]
 Theater *picture on* **T**: 249
Shaw Memorial [sculpture by Saint-Gaudens]
 Saint-Gaudens, Augustus **S**: 33
Shawe, Isabella [wife of]
 Thackeray, William Makepeace (Early career)
T: 220
Shawinigan Falls
 Quebec (Rivers, waterfalls, and lakes) **Q**: 24
Shawmut Peninsula
 Boston (The city) **B**: 495
Shawn, Edwin M. See Shawn, Ted *in this index*
Shawn, Ted [American dancer] **S**: 378
 Saint Denis, Ruth **S**: 33 *with picture*
Shawnee Hills [region, Illinois]
 Illinois (Land regions) **I**: 64 *with picture*
Shawnee Indians [American Indians] **S**: 378
 Boone, Daniel (Indian captivity) **B**: 478
 Indian wars (Other Midwestern conflicts)
I: 192-193
 Shawnee Prophet **S**: 379
Shawnee Prophet [American Indian chief]
S: 379
 Harrison, William Henry (Entry into politics)
H: 75
 Indian wars (Other Midwestern conflicts)
I: 192-193
 Tecumseh **T**: 78
Shawnee Sun [newspaper]
 Kansas (Interesting facts) **K**: 217
Shawwal [month]
 'Id al-Fitr **I**: 25
Shaykh Lutfullah Mosque [Isfahan]
 Isfahan **I**: 462
Shays, Daniel [American settler]
 Massachusetts (The Revolutionary War)
M: 291-292
 Shays's Rebellion **S**: 379
Shays's Rebellion [U.S. history] **S**: 379
 Constitution of the United States (The need
 for the Constitution) **Ci**: 998-999
 Massachusetts (The Revolutionary War)
M: 291-292; (Government and history)
 [Massachusetts] **So**: 808
She [book by Haggard]
 Haggard, H. Rider **H**: 6
She Done Him Wrong [film]
 Grant, Cary **G**: 311
She Stoops to Conquer [play by Goldsmith]
 English literature (The Johnson circle) **E**: 319
 Goldsmith, Oliver **G**: 259
Shea, Ambrose [Canadian political leader]
 Confederation of Canada (Fathers of
 Confederation) **Ci**: 935
Shea Stadium
 New York City (Sports) **N**: 338
Shear line
 Glider (Soaring) **G**: 229-230
Shear stress [physics]
 Aerodynamics (Principles of aerodynamics)
A: 85
Shear wall [building construction]
 Building construction (Types of construction)
B: 683
Shear wave [physics]
 Earthquake (Body waves) **E**: 34 *with diagram*
Shearer, Norma [American actress]
 Motion picture (Best performance by an
 actress: 1929-30) **M**: 862
Shearing
 Colonial life in America *picture on* **Ci**: 802
 Scotland *picture on* **S**: 215
 Wool (Processing of wool) **W**: 400 *with picture*
Shearing, George [British-American pianist]
 Jazz (The spread of jazz) **J**: 72-73
Shears [machine tool]
 Machine tool **M**: 19
Shears [tool]
 Scissors **S**: 208 *with pictures*
Shearwater [bird] **S**: 379
Sheath [botany]
 Grass (The grass plant) **G**: 324 *with picture*
Sheath dress
 Clothing (The 1900's) **Ci**: 703
Sheathing [building material]
 House (The frame) **H**: 382 *with diagram*; (The
 roof) **H**: 382 *with diagram*
Sheba, Queen of [Biblical figure]
 Ethiopia **E**: 368
 Yemen (History) **Y**: 563
Shechem [ancient city]
 Cities of refuge **Ci**: 568
Shedd Aquarium [Chicago]
 Chicago (Museums) **C**: 428-429 *with picture*
Shedlock, Marie [British storyteller]
 Storytelling (The 1900's) **So**: 914
Sheehan, Patty [American golfer]
 Golf (U.S. Women's Open) **G**: 265
Sheeler, Charles [American artist] **S**: 379
Sheen, Fulton John [American religious leader]
S: 379
Sheep [animal] **S**: 380 *with pictures*
 Animal *pictures on* **A**: 474, **A**: 475
 Biology (Current research and issues) **B**: 320-
 321
 Conservation (Australia) **Ci**: 989
 Heredity (The era of genetic engineering) **H**: 209
 Mad cow disease **M**: 26
 Mammal *diagram on* **M**: 121
 Mutton **M**: 969
 New Zealand (Agriculture) **N**: 353
 Prion **P**: 804
 Ranching **R**: 134
 Wool **W**: 399 *with picture*
Sheep bot fly
 Bot fly **B**: 507
Sheep shearing See Shearing *in this index*
Sheepdog **S**: 383
 See also Polish lowland sheepdog *in this index*
 Dog *pictures on* **D**: 276
Sheepdog [hairstyle]
 Hairdressing (The 1900's) **H**: 12
Sheepshearing See Shearing *in this index*
Sheepswool [sea animal]
 Sponge *picture on* **So**: 799
Sheet [boat]
 Sailing (Rigging) **S**: 24
Sheet bend
 Knots, hitches, and splices *diagram on* **K**: 356
Sheet-fed press
 Printing (Methods of printing) **P**: 798
Sheet-fed scanner [electronic device]
 Computer (A scanner) **Ci**: 915
**Sheet Metal Workers' International
 Association**
 Labor movement (table) **L**: 8
Sheet silicate
 Silicate **S**: 458
Sheet steel
 Iron and steel (Rolling) **I**: 447 *with diagram*
Sheet-web weaver
 Spider (table) **So**: 790
Sheffield [England] **S**: 383
 Conservation *picture on* **Ci**: 985
Shehan, Lawrence Joseph Cardinal [American
 religious leader] **S**: 383
Shehitah
 Judaism (Dietary laws) **J**: 181
 Kosher **K**: 384
Sheik [title] **S**: 383
 Asia (Country life) **A**: 778-779
Shekel [money] **S**: 383
 Coin collecting *picture on* **Ci**: 758
 Money *picture on* **M**: 704
 Talent **T**: 20
Shel-tow-ee [Indian name of]
 Boone, Daniel (Indian captivity) **B**: 478
Shelburne [Vermont]
 Vermont (Places to visit) **V**: 326
Shelburne Museum [Shelburne, Vermont]
 Folk art (Folk art collections) **F**: 319
 Vermont (Places to visit) **V**: 326
Shelby, George [literary figure]
Uncle Tom's Cabin **U**: 20
Shelby, Isaac [American political leader]
 Kentucky (Statehood) **K**: 291
Sheldon, Charles H. [American political leader]
 South Dakota (table) **S**: 680
Sheldon, William [American psychiatrist]
 Personality (Personality types) **P**: 302
Sheldon Museum [Middlebury]
 Vermont (Museums) **V**: 322
Shelduck [bird]
 Bird *picture on* **B**: 346-347
 Duck (Shelducks) **D**: 377; *picture on* **D**: 375
Shelf-life improver
 Bread (How yeast bread is made) **B**: 588
Shell [ammunition]
 Ammunition (Artillery ammunition) **A**: 435 *with
 pictures*
 Shrapnel **S**: 439
Shell [biology] **S**: 384 *with pictures*
 Diatom **D**: 185 *with pictures*
 Egg (The shell) **E**: 116 *with diagram*
 Mollusk **M**: 694
 Nautilus **N**: 69 *with picture*
 Oyster (Shell) **O**: 890 *with pictures*
 Pearl (How pearls are formed) **P**: 216 *with pic-
 ture*
 Scallop **S**: 170 *with picture*
 Turtle (Shell) **T**: 520 *with pictures*
Shell [boat]
 Rowing (Types of rowing) **R**: 493-494
Shell, Electron [physics] See Electron shell *in
 this index*
Shell, Joseph C. [American political leader]
 Nixon, Richard Milhous (Defeat in California)
N: 432
Shell molding [industrial process]
 Cast and casting (Other types of casting)
C: 278
Shell shock [psychology] See Post-traumatic
 stress disorder *in this index*
Shellac [tree product] **S**: 391
 Lac **L**: 20
 Lacquerware **L**: 23
 Paint (Industrial paints) **P**: 24
Sheller [machine]
 Rice (Cleaning and hulling) **R**: 326-327 *with
 picture*

- Shelley, Mary Wollstonecraft** (British author) S: 391
Frankenstein F: 484
 Science fiction (The first science fiction) S: 205
 Shelley, Percy Bysshe (His life) S: 391
- Shelley, Percy Bysshe** (British poet) S: 391 *with portrait*
 English literature (Romantic poetry) E: 320
 Shelley, Mary Wollstonecraft S: 391
- Shelley v. Kraemer** [U.S. history]
 Supreme Court of the United States (table) So: 1002
- Shellfish** [animal]
 Crustacean Ci: 1162 *with pictures*
 Fishing industry (Where fish are caught) F: 181-182
 Seafood S: 264
- Shelter** S: 392 *with pictures*
See also Housing *in this index*
 Animal (Providing shelter) A: 500 *with pictures*
 Civil defense (Shelter) Ci: 605
 Domestic violence D: 301
 Egypt, Ancient (Food, clothing, and shelter) E: 137; *picture on* E: 138
 Homelessness H: 302
 House H: 380 *with pictures*
 Indian, American (Shelter) I: 136d; *pictures on* I: 138
 Inuit (Shelter) I: 354c *with pictures*
 Pioneer life in America (Establishing a home-
 stead) P: 479 *with picture*; (A pioneer set-
 tlement) P: 479
See also the list of Related articles in the
Shelter article
- Shelter Belt Project** [U.S.]
 Shelterbelt S: 394
- Shelterbelt** [conservation] S: 394
- Sheltered workshop**
 Mental retardation (Treatment) M: 411
- Shelterwood cutting**
 Forestry (Harvesting) F: 404 *with picture*
- Sheltie** [dog] *See* Shetland sheepdog *in this index*
- Shelton, H. Hugh** (American military leader)
 Joint Chiefs of Staff (table) J: 156
- Shelton, Sarah Elmira Royster** [fiancée of]
 Poe, Edgar Allan (Poe's life) P: 589
- Shem** [Biblical figure]
 Noah N: 439
- Shemini Atzeret** [custom]
 Sukkot So: 965
- Shenandoah National Park** [Virginia] S: 394
 National Park System (table: National parks) N: 48
- Shenandoah River** [Virginia] S: 395
- Shenandoah Valley** [region, Virginia] S: 395
 Virginia (Land regions) V: 410 *with picture*
- Shenyang** [city, China] S: 395
- Shenzhen** [river]
 Hong Kong (The land) H: 318 *with map*
- Shepard, Alan Bartlett, Jr.** [American astro-
 naut] S: 395 *with portrait*
 New Hampshire (The mid-1900's) N: 226-227
 Space exploration (Vostok and Mercury: The
 first human beings in space) So: 711-712
with picture
- Shepard, Ernest Howard** (British artist) S: 395
 Literature for children *picture on* L: 363
- Shepard, Sam** (American playwright) S: 396
- Shephard, Esther** (American author)
 Bunyan, Paul B: 701
- Shepherdes Calender, The** [poem by Spenser]
 Spenser, Edmund (Spenser's other poems) So: 778
- Shepherd, Alexander "Boss"** (American politi-
 cal leader)
 Washington, D.C. (Territorial government abol-
 ished) W: 86
- Shepherd, William M.** [American astronaut]
 International Space Station (History) I: 346b
with picture
- Shepherd Boy, A** [sculpture by Thorvaldsen]
 Sculpture (European sculpture) S: 253-254
with picture
- Shepherd dog**
 Anatolian shepherd A: 448b *with picture*
 German shepherd dog G: 143
 Sheepdog S: 383
- Shepherd kings**
 Hyksos H: 474
- Shepherd life**
 Bedouins B: 199
 Nomad N: 452
- Shepherd's pie** [food]
 England (Food and drink) E: 295-296
- Shepherdstown** (West Virginia)
 West Virginia (White settlement) W: 226
- Sher-Gil, Amrita** (Indian painter)
 India (Painting) I: 119-120
- Sheraton, Thomas** [British furniture designer]
 S: 396
- Sheraton style** [furniture]
 Sheraton, Thomas S: 396
- Sherbet**
 Ice cream (The composition of ice cream) I: 8
- Sherbrooke** (Quebec) S: 396
- Sherbrooke, Lord** [Canadian statesman]
 Sherbrooke S: 396
- Sheriden** [armored vehicle]
 Army, United States (Armor) A: 734
- Sheridan** (Wyoming)
 Wyoming (table: Average monthly weather) W: 528
- Sheridan, Philip Henry** (Union general) S: 396
with portrait
 Civil War (Cavalry maneuvers) Ci: 632
 Early, Jubal Anderson E: 15
 Indian wars (The Southern Plains) I: 194
- Sheridan, Richard Brinsley** [Irish dramatist]
 S: 396
 English literature (The Johnson circle) E: 319
 Hastings, Warren H: 83
 Irish literature (Drama) I: 431
- Sheridan Park Research Community**
 Ontario (The mid-1900's) O: 786-787
- Sheriff** [office] S: 397
 Police (Early law enforcement in England) P: 624
- Sherlock Holmes** *See* Holmes, Sherlock *in this index*
- Sherlock Holmes** [play by Gillette]
 Gillette, William G: 190
- Sherman, James Schoolcraft** (American politi-
 cal leader) S: 397
 Taft, William Howard (Election of 1908) T: 10
 Vice President of the United States V: 349
with portrait
- Sherman, John** [American political leader]
 S: 397
- Sherman, John Ames** (American inventor)
 Envelope E: 328
- Sherman, Roger** [American patriot] S: 397 *with portrait*
 Declaration of Independence *picture on* D: 77
 New Haven (History) N: 229
- Sherman, William Tecumseh** (Union general)
 S: 397 *with portrait*
See also Sherman's March *in this index*
 Atlanta (Destruction and redevelopment) A: 861
 Civil War (Grant in command) Ci: 631; (The
 Atlanta campaign) Ci: 632; (North to
 Nashville) Ci: 632
 South Carolina (The Civil War) So: 660
- Sherman Antitrust Act** [1890]
 Antitrust laws A: 560
 Harrison, Benjamin (Domestic affairs) H: 72
 Labor movement (Opposition to unions) L: 10
 Monopoly and competition (History) M: 732
 Standard Oil Company So: 835
 United States, History of the (The Progressive
 Era) U: 181-182
- Sherman Silver Purchase Act** [1890]
 Cleveland, Grover (Saving the gold standard) Ci: 673
 Harrison, Benjamin (Domestic affairs) H: 72
- Sherman's March** [U.S. history]
 Sherman, William Tecumseh S: 397
 Civil War (Sherman's march through Georgia) Ci: 633
- Sharpas** [people] S: 398
 Nepal (People) N: 125
 Races, Human (Evolutionary theory) R: 53-54
 Tenzing Norgay T: 171
- Sherrington, Sir Charles Scott** (British physi-
 ologist)
 Nobel Prizes (Physiology or medicine: 1932) N: 444
- Sherry** [wine]
 Wine (Types of wine) W: 336; (Wine styles
 from other countries) W: 337
- Sherwood, Robert Emmet** [American author]
 S: 398
- Shetland Islands** [islands, Atlantic] S: 398
 City *picture on* Ci: 577
- Shetland pony** S: 398
 Horse (table: Some types and breeds of hors-
 es) H: 343; (Ponies) H: 347 *with picture*
- Shetland sheepdog** S: 399
 Dog *picture on* D: 276
- Shevardnadze, Eduard Amvrosiyevich**
 [Georgian political leader] S: 399 *with por-
 trait*
 Georgia [country] (History) G: 111
- Shevchenko, Taras** (Ukrainian poet) S: 399
 Ukraine (The arts) U: 9
- Shevout** *See* Shavuot *in this index*
- Shi Huangdi** [emperor of China] S: 399
 Archaeology *picture on* A: 595
 Asia *picture on* A: 806
 China (The early empire) C: 501
 Great Wall of China (History) G: 350
 Qin dynasty Q: 3
 Sculpture (China) S: 238 *with picture*
 World, History of the (The unification of China)
 W: 431 *with picture*
 Xi'an X: 545
- Shiah** *See* Shiites *in this index*
- Shiba inu** [dog] S: 399 *with picture*
- Shield** [armor] S: 399 *with pictures*
 Aztec *picture on* A: 1002
 Indian, American (Before European contact)
 I: 162 *with picture*; *pictures on* I: 138,
 I: 144
 Knights and knighthood (Armor) K: 350
- Shield** [heraldry]
 Heraldry (Elements of a coat of arms) H: 194
with pictures
- Shield of David**
 Star of David So: 853 *with picture*
 Judaism *picture on* J: 180
- Shield system** [construction]
 Tunnel (Earth tunnels) T: 490
- Shield-tailed snake**
 Snake (Shield-tailed snakes) S: 535
- Shield volcano**
 Mars (Volcanoes) M: 226
 Volcano (Kinds of volcanoes) V: 440 *with pic-
 ture*
- Shielded metal arc welding**
 Welding (Arc welding) W: 189
- Shields, James** [American political leader]
 S: 400
- Shifting cultivation** [agriculture]
See also Slash-and-burn agriculture *in this index*
 Africa (Rural life) A: 110-111
 Agriculture (Shifting cultivation) A: 149
- Shifting gears** [engine]
 Automobile (The power train) A: 952 *with dia-
 gram*
 Transmission (Gears) T: 376
- Shiga Naoya** [Japanese author]
 Japanese literature (The modern period) J: 62
- Shigehiro, Tsuneo** [Japanese mountain climber]
 Mount Everest M: 884
- Shigellosis** [disease]
 Dysentery D: 398
- Shih Huang-ti** *See* Shi Huangdi *in this index*
- Shih Tzu** [dog] S: 400 *with picture*
 Dog *picture on* D: 274
- Shiites** [religious group] S: 400
 Iran (Religion) I: 402
 Islam (Divisions of Islam) I: 466
 Lebanon (Ethnic groups and religion) L: 171;
 (War and terrorism) L: 173-174
 Muslims (Ali) M: 964b
 Persian Gulf War (Consequences of the war)
 P: 300d-301
 Safavid dynasty S: 8
 Shari'a S: 374
 Sunnites So: 991
- Shikoku** [island, Japan]
 Japan (The land) J: 45-48 *with map*
- Shilling** [money] S: 401
 Money (History of United States currency)
 M: 707 *with picture*
- Shilluk** [people]
 Sudan (People) So: 952

Shiloh, Battle of [1862]

Civil War (table) **Ci**: 624; (Battle of Shiloh) **Ci**: 629
 Grant, Ulysses S. ("Unconditional Surrender" Grant) **G**: 314
 Johnston, Albert Sidney **J**: 154
 Tennessee (The Civil War) **T**: 154 *with picture*
Shimonoseki, Treaty of [1895]
 Chinese-Japanese wars **C**: 509
Shin [anatomy]
 Human body *diagram on* **H**: 422
 Skeleton *diagrams on* **S**: 480

Shin guard

Baseball (Equipment) **B**: 125-126 *with picture*

Shin Kanmon Tunnel [Japan]

Tunnel (table) **T**: 491

Shin-pyu [ceremony]

Myanmar (Way of life) **M**: 970a

Shiner [fish]

Fish *picture on* **F**: 158

Shingle [building material]

House (The roof) **H**: 382 *with diagram*

Shingle style

House *picture on* **H**: 381

Shingles [disease] **S**: 401**Shingon** [religion]

Buddhism (The Mantrayana) **B**: 669

Shining Path [Peruvian political group]

Peru (Return to civilian government) **P**: 316;
 (Recent developments) **P**: 316

Shinjuku commuter station [Tokyo]

Japan *picture on* **J**: 33

Shinkansen *See* Bullet train *in this index***Shinn, Everett** [American artist] **S**: 401

Ascan School **A**: 768

Shinny [game]

Indian, American (Recreation) **I**: 142 *with picture*

Shinto [religion] **S**: 401 *with picture*

Asia (Life in Japan) **A**: 788

God (Gods of nature) **G**: 243

Japan (Religion) **J**: 40; (Architecture) **J**: 44; *picture on* **J**: 42

Religion (Shinto) **R**: 222 *with picture*

Tokyo (Ethnic groups and religion) **T**: 314

Shinty [game]

Indian, American (Recreation) **I**: 142 *with picture*

Ship **S**: 402 *with pictures*

Air conditioning (Air conditioners for vehicles) **A**: 179

Brig **B**: 608 *with picture*

Colonial life in America (Transportation) **Ci**: 805

Cruise ship **Ci**: 1159

Flag *picture on* **F**: 197

Invention (The Middle Ages) **I**: 359

Log **L**: 421

Navy **N**: 76 *with pictures*

Norman Conquest *picture on* **N**: 456

Ocean (Exploring the ocean) **O**: 662

Ocean Drilling Program **O**: 667 *with picture*

Plastics (To replace wood and stone) **P**: 555

Propeller (Marine propellers) **P**: 826 *with picture*

Radar (In ship navigation) **R**: 65 *with pictures*

Signaling (Marine signaling) **S**: 454-455

Tide **T**: 280

Transportation (Water transportation) **T**: 384;

(The steam age) **T**: 390 *with picture*;

(International freight) **T**: 395 *with picture*;

picture on **T**: 382

Vikings (The Vikings as shipbuilders) **V**: 381

with picture

Weather (Weather balloons, airplanes, and ships) **W**: 163

See also Shipping, Boating, and Warship *in this index and the list of Related Articles in the Ship article*

Ship, Model **S**: 427 *with picture***Ship of Fools** [book by Porter]

Porter, Katherine Anne **P**: 682

Ship of the line

Battleship (Development of the battleship) **B**: 172

Warship (The age of sailing ships) **W**: 41; *picture on* **W**: 42

Ship rat [animal]

Rat (The body of a rat) **R**: 146 *with picture*

Ship repair

Dry dock **D**: 369

Ship Rock [hill, New Mexico]

New Mexico (Land regions) **N**: 266

Ship-to-ship radio

Radio (Early development) **R**: 91-92

Ship-to-shore radio

Radio (Early development) **R**: 91-92

Shipbuilding [industry]

Ship (Safety at sea) **S**: 424

Colonial life in America (Lumbering and shipbuilding) **Ci**: 810

Ship (The art of shipbuilding) **S**: 424

Shipley, Jenny [New Zealand political leader] **S**: 428

New Zealand (Political changes) **N**: 356

Shippen, Margaret [wife of]

Arnold, Benedict (A disappointed officer) **A**: 741-742

Shipping

See also Ship *in this index*

Careers (Transportation) **C**: 235

Freight **F**: 510

Great Lakes (Commerce) **G**: 345

International Maritime Organization **I**: 342

Maritime Administration **M**: 212

New York City (Trade) **N**: 333

Port **P**: 680

Ship (Ships of today) **S**: 414; (Traditional cargo ships) **S**: 418 *with pictures*; (Container ships) **S**: 418; (Safety at sea) **S**: 424; (The United States merchant marine) **S**: 425

Weights and measures (table: Volume and capacity) **W**: 186

Shipping Board [U.S. history]

Merchant marine (The United States merchant marine) **M**: 413

Ship's bell

Ship (Nautical terms) **S**: 416

Ship's log [record]

Logbook **L**: 425

Ship's store

Post exchange **P**: 699

Shipton, Eric [British explorer]

Abominable Snowman **A**: 13

Shipway

Ship (Designing and constructing a ship) **S**: 425

Shipworm [sea animal] **S**: 428

Mollusk (Bivalves) **M**: 695

Shipwreck **S**: 428

Coast Guard, United States (History) **Ci**: 737

Disaster (table) **D**: 223

Shipyards

Ship (The art of shipbuilding) **S**: 424

Virginia (Manufacturing) **V**: 414 *with picture*

Shirakawa, Hideki [Japanese chemist]

Nobel Prizes (Chemistry: 2000) **N**: 444

Shiras, George, Jr. [American jurist]

Supreme Court of the United States (table)

So: 1000

Shire [horse]

Horse (table: Draft horses) **H**: 343; (table:

Some types and breeds of horses)

H: 343; (Draft horses) **H**: 346 *with picture*

Shire [political unit] **S**: 429**Shire River** [Africa]

Lake Nyasa **L**: 42 *with map*

Shirley [book by Brontë]

Brontë sisters (Their works) **B**: 637

Shirley, William [British colonial official] **S**: 429

Shirley poppy [plant]

Poppy **P**: 668

Shirtwaist dress

Clothing (The 1800's) **Ci**: 702

Shisha [drink]

Egypt (Recreation) **E**: 124

Shishaldin Volcano [mountain, Alaska]

Aleutian Islands **A**: 340

Shiva [custom]

Judaism (Special occasions) **J**: 181-182

Shiva [Hindu god] **S**: 429

Hinduism (Divinities) **H**: 236 *with picture*

India (Hinduism) **I**: 116

Sculpture (India) **S**: 236-237 *with picture*

Shivaji Bhonsle [Hindu prince]

India (The Mughal Empire) **I**: 129-130

Shivers, Allan [American political leader]

Texas (table) **T**: 203

Shives

Flax (Growing and processing fiber flax)

F: 230-231

Shkhara, Mount [mountain, Georgia]

Georgia (Land and climate) **G**: 110 *with map*

Shkolnik, Levi [Israeli political leader]

Eshkol, Levi **E**: 358

Shoal [group]

Squid **So**: 814

Shoals, Isles of [islands]

New Hampshire (Coastline) **N**: 220

Shoals, The [area] *See* Muscle Shoals *in this index*

Shoat [animal]

Hog (table) **H**: 284

Shock [disorder] **S**: 429

Anaphylactic shock **A**: 448

Bleeding (Effects of bleeding) **B**: 399

Burn (First-aid care) **B**: 708

First aid (Treat for shock) **F**: 136

Toxic shock syndrome **T**: 351

Shock, Electric *See* Electric shock *in this index*

Shock absorber **S**: 429

Automobile (The support system) **A**: 954

Shock syndrome [disorder]

Dengue **D**: 131

Shock treatment [medicine] **S**: 429

Mental illness (Somatic therapy) **M**: 407

Shock wave [physics] **S**: 430

Aerodynamics (Shock waves) **A**: 87-88 *with diagram*

Heliosphere (Shock waves) **H**: 175

Nuclear weapon (Blast wave) **N**: 597-598

Shockley, William [American physicist] **S**: 430

Electricity (The electronic age) **E**: 198

Electronics (The solid-state revolution) **E**: 215; *picture on* **E**: 216

Shoda, Michiko [Japanese empress]

Akihito **A**: 253

Shoddy [fabric]

Civil War (The enlisted men) **Ci**: 620

Wool (Types of wool) **W**: 399-400

Shoe [clothing] **S**: 430 *with pictures*

Clothing (The 1600's) **Ci**: 701 *with picture*

Matzeliger, Jan Ernst **M**: 312

Pioneer life in America (Clothing) **P**: 482-483

Rubber (First uses) **R**: 500

Shoe leather

Leather (Kinds of leather) **L**: 167

Shoebill [bird] **S**: 432 *with picture*

Bird (Birds of Africa) **B**: 348 *with picture*

Shoemaker, Bill [American jockey] **S**: 433**Shoemaker, Carolyn** [American astronomer]

Shoemaker, Eugene Merle **S**: 433

Shoemaker, Eugene Merle [American geologist/astronomer] **S**: 433

Moon (Describing lunar evolution) **M**: 794

Shoemaker, Willie *See* Shoemaker, Bill *in this index*

Shoemaker-Levy 9, Comet [astronomy]

Comet (Orbits) **Ci**: 868; (table) **Ci**: 868

Jupiter (The impact of Comet Shoemaker-Levy 9) **J**: 200 *with picture*

Shoemaker's Holiday, The [play by Dekker]

Dekker, Thomas **D**: 93

Shoen [estate]

Japan (Creation of private estates) **J**: 53

Shoepack

Pioneer life in America (Clothing) **P**: 482-483

Shoeshine [film]

De Sica, Vittorio **D**: 157

Shofar [religion]

Horn **H**: 339

Rosh Ha-Shanah **R**: 482

Shogun [title] **S**: 433

Japan (Rise of the shogun) **J**: 54

Minamoto Yoritomo **M**: 562

Meiji, Emperor **M**: 386

Shogunate [government]

Samurai **S**: 83

Sholem Aleichem [Jewish author] **S**: 433**Sholes, Christopher Latham** [American inventor] **S**: 433

Glidden, Carlos **G**: 227

Keyboard **K**: 308

Typewriter (History) **T**: 539

Sholokhov, Mikhail [Soviet author] **S**: 433

Russian literature (The period of socialist realism) **R**: 564

Shona [people]

Zimbabwe (People) **Z**: 596

Shooter

Marbles **M**: 193

- Shooting** [photography]
Motion picture (Developing the shooting schedule) M: 850; (Shooting the movie) M: 853 *with pictures*
- Shooting** [sports]
Biathlon B: 278
Hunting (Kinds of hunting) H: 450
Olympic Games (Summer Olympic Games) O: 746e-747
Skeet S: 479
Trapshooting T: 404
- Shooting guard**
Basketball (The players) B: 144
- Shooting star** [astronomy] *See* Meteor *in this index*
- Shooting star** [plant]
Cowslip Ci: 1113
Flower picture on F: 287
- Shop**
Safety (In other school areas) S: 12
- Shop steward** [office]
Labor movement (Local unions) L: 8
- Shoptlifting** S: 433
- Shopping**
Department store D: 149
Shopping center S: 434
- Shopping center** S: 434
- Shore**
See also Beach *in this index*
Ocean (Waves) O: 659
Seashore S: 269 *with pictures*
- Shore, John** [British musician]
Tuning fork T: 487
- Shore Establishment**
Navy, Department of the N: 81
Navy, United States (The Shore Establishment) N: 85
- Shore Patrol** [U. S. Navy]
Military police M: 543
- Shore Village Museum**
Maine (Places to visit) M: 78
- Short, Nigel** [British chess player]
Kasparov, Garry K: 248
- Short ballot** [voting]
Ballot (In the United States) B: 63
- Short-day plant**
Plant (Factors affecting plant growth) P: 538-539
- Short division** [mathematics]
Division (Short division) D: 251
- Short-eared owl** [bird]
Owl (Important owls) O: 884-886
- Short-haired cat**
Cat (Short-haired breeds) C: 290 *with pictures; pictures on C: 288*
- Short-horned grasshopper** [insect]
Locust L: 418
- Short line** [sports]
Handball H: 41 *with diagrams*
- Short-period comet** [astronomy]
Oort cloud O: 788
- Short-range ballistic missile** [weapon]
Guided missile (Ballistic missiles) G: 425
- Short-range forecast**
Weather (Mathematical models) W: 166
- Short splice**
Knots, hitches, and splices *diagram on K: 357*
- Short story** [literature] S: 434
Fiction F: 90
Writing (Fiction) W: 511
- Short-tailed shrew** [animal]
Shrew S: 440
- Short-tailed weasel** [animal] *See* Ermine *in this index*
- Short-term credit** [economics]
Credit (Types of credit) Ci: 1124
- Short ton** [unit of measure]
Ton T: 327
- Short-track skating**
Ice skating (Short-track skating) I: 15
Olympic Games (Winter Olympic Games) O: 746d-746e *with picture*
- Short Treatise on the Game of Whist, A** [book by Hoyle]
Hoyle, Edmond H: 402
- Short waves** [radio] S: 434
Marconi, Guglielmo (Short-wave radio) M: 196
Radio, Amateur R: 95
- Shortening** [food]
Tallow T: 21
- Shortfin molly** [fish]
Fish picture on F: 157
- Shorthand** [writing] S: 435 *with pictures*
Gregg, John Robert G: 387
Speedwriting So: 775
- Shorthand machine** S: 437
- Shorthorn** [animal]
Cattle (Other beef cattle) C: 309; (table) C: 312-313
- Shortleaf pine** [tree]
Pine (Southeastern pines) P: 468
- Shortnose gar** [fish]
Gar G: 28
- Shortridge, Eli C. D.** [American political leader]
North Dakota (table) N: 513
- Shorts** [food product]
Bran B: 563
- Shortsightedness** *See* Nearsightedness *in this index*
- Shortwall mine**
Coal (The longwall system) Ci: 725
- Shoshone Falls**
Idaho (Rivers, waterfalls, springs, and lakes) I: 38 *with picture*
- Shoshone Ice Cave**
Idaho (Places to visit) I: 34
- Shoshone Indian Preparing His Meal** [painting by Miller]
Indian, American picture on I: 165
- Shoshone Indians** [American Indians] S: 437
Lewis and Clark expedition (West to the Rockies) L: 223
Wyoming picture on W: 534
- Shoshone National Forest** [Wyoming]
Wyoming W: 516; (Places to visit) W: 524
- Shostakovich, Dimitri** [Russian composer] S: 437
- Shot** [ammunition]
Ammunition (Shotgun cartridges) A: 435 *with picture*
Shot tower S: 438
Shotgun S: 438
- Shot** [sports]
Track and field (Throwing events) T: 356 *with picture*
- "Shot heard round the world"**
Revolutionary War in America R: 270
- Shot huckleberry** [shrub]
Huckleberry H: 404
- Shot-put** [sport] S: 438 *with pictures*
Track and field (World track and field records) T: 358-359
- Shot tower** [munitions] S: 438
- Shote** [animal]
Hog (table) H: 284
- Shotgun** [gun] S: 438 *with picture*
Ammunition (Small-arms ammunition) A: 435 *with picture*
Firearm diagram on F: 133
Hunting (Kinds of hunting) H: 450
Skeet S: 479
Trapshooting T: 404
- Shoulder** [anatomy] S: 439 *with pictures*
Skeleton (The appendicular skeleton) S: 480 *with diagrams*
- Shoulder blade** [anatomy] *See* Scapula *in this index*
- Shoulder pads**
Football (Protective equipment) F: 355-356 *with picture*
- Shoup, George Laird** [American political leader] S: 439
Idaho (Early statehood) I: 44
- Shovel-nosed snake**
Animal picture on A: 483
- Shoveler** [bird] S: 439
Bird (Birds of inland waters and marshes) B: 340 *with picture*
- Show** [entertainment]
Circus Ci: 562 *with pictures*
Motion picture M: 846
Theater T: 232
- Show** [gambling]
Horse racing (Betting) H: 365
- Show Boat** [book by Ferber]
Ferber, Edna F: 72
- Show Boat** [musical]
Hammerstein, Oscar, II H: 35
Kern, Jerome K: 306
Musical comedy (Musical comedy matures) M: 960 *with picture*
- Show Me State** [nickname]
Missouri M: 651
- Showa** [title]
Hirohito H: 242
- Shrapnel** [ammunition] S: 439
- Shrapnel, Henry** [British military leader]
Shrapnel S: 439
- Shreve, Henry Miller** [American navigator]
Louisiana (Statehood) L: 498
Shreveport S: 439
- Shreveport** [Louisiana] S: 439
Louisiana (Places to visit) L: 488; (table: Average monthly weather) L: 492; *picture on L: 487*
- Shrew** [animal] S: 440 *with picture*
- Shrew mole** [animal]
Mole (The European mole) M: 690b
- Shrew opossum** [animal]
Mammal (table) picture on M: 128
- Shrew tenrec** [animal]
Tenrec T: 170
- Shrike** [bird] S: 440
Bird (Birds of brushy areas) B: 338 *with picture*; (Birds of Central and South America) B: 345 *with picture; picture on B: 351*
- Shrimp** [sea animal] S: 440 *with pictures*
Crustacean (Outer body) Ci: 1162 *with diagram*
Deep sea (Invertebrates) D: 82a-82b
- Shrimp boat**
Fishing industry picture on F: 184
- Shrimp Festival**
Mississippi (Visitor's guide) M: 632 *with picture*
- Shrine** [religion] S: 441
- Shrine, The** [organization] S: 442
Masonry (Organization) M: 267
- Shrine of Democracy**
South Dakota So: 664
- Shriver, Eunice Kennedy** [American public figure]
Kennedy, Joseph Patrick (His family) K: 269
Kennedy, John Fitzgerald (Boyhood) K: 260-261
- Shriver, Sargent** [American political leader] S: 442
Nixon, Richard Milhous (The 1972 election) N: 435
Peace Corps (History) P: 208-209
- Shropshire** [county, England]
United Kingdom picture on U: 61
- Shropshire Lad, A** [poems by Housman]
Housman, A. E. H: 393
- Shropshire sheep**
Sheep (Medium-wooled sheep) S: 382
- Shroud**
Sailing (Rigging) S: 24
- Shroud of Turin** [religion] S: 442 *with pictures*
- Shrove Tuesday** [custom] S: 442
Mardi Gras M: 197
Tuesday T: 481
- Shrub** S: 443
Flower (Garden perennials) F: 281 *with pictures*
Pruning P: 841
Tree T: 411
- Shrub layer** [forest]
Forest (The shrub layer) F: 392 *with picture*
- Shrub live oak**
Oak (Red oaks) O: 635-636
- Shtetl, A** [book by Asch]
Asch, Sholem A: 767
- Shu** [Egyptian god]
Mythology (The Great Ennead) M: 976; *picture on M: 974*
- Shubenacadie river**
Nova Scotia (Rivers and lakes) N: 562
- Shubun, Tensho** [Japanese artist]
Painting (Japanese painting) P: 47
- Shuck Faces**
Mask (Ceremonial masks) M: 263-264
- Shucker** [job]
Oyster (Oyster harvesting) O: 892
- Shuffleboard** [game] S: 443 *with picture*
- Shuisky, Basil** [czar of Russia]
Russia (table: Czars and empresses) R: 549, (The Time of Troubles) R: 549
- Shulevitz, Uri** [Polish-American artist] S: 443
Caldecott Medal (table: 1969) C: 26

- Shull, Clifford Glenwood** [American physicist]
Nobel Prizes (Physics: 1994) N: 442
- Shull, George H.** [American geneticist]
Corn (Development of hybrids) Ci: 1063
- Shultz, George Pratt** [American government official] S: 444
Nixon, Richard Milhous (table) N: 433
Reagan, Ronald Wilson (table) R: 169
- Shumway, Norman Edward** [American doctor] S: 444
- Shun Hing Square** [Shenzhen, China]
Skyscraper (table) S: 498
- Shunt motor**
Electric motor (DC motors) E: 181
- Shurtleff, Robert** See Sampson, Deborah in this index
- Shush** See Susa in this index
- Shushan** See Susa in this index
- Shuswap Lake**
British Columbia (Rivers, waterfalls, and lakes) B: 624
- Shut-off valve**
Plumbing (The water supply system) P: 577 with diagram
- Shutout**
Baseball (table: Modern major league records) B: 137
- Shutter** [photography]
Camera (Controlling the light) C: 80
Motion picture (The camera) M: 857 with diagram; (The projector) M: 859 with diagram
- Shutter-priority mode** [photography]
Camera (Automatic controls) C: 80-81
- Shutter speed** [photography]
Photography (Controlling exposure) P: 415 with pictures; (Setting the exposure) P: 416
- Shuttle** [sports]
Badminton B: 24 with picture
- Shuttle** [tool]
Weaving (How a loom works) W: 174 with picture
- Shuttle bus**
Bus (Special buses) B: 715
- Shuttle diplomacy**
Diplomacy (History) D: 216-217
- Shuttle Mission Simulator**
Astronaut (Advanced mission training) A: 832
- Shuttle Training Aircraft**
Astronaut (Flight training) A: 831
- Shuttle vehicle**
Rocket (Space travel) R: 386-387
- Shuttleless loom** [machine]
Textile (Woven fabrics) T: 214
- Shwe Dagon pagoda** [Myanmar]
Myanmar picture on M: 970; (The arts) M: 970c
- Shylock** [literary figure]
Shakespeare, William (*The Merchant of Venice*) S: 358-359
- Shyness**
Child (Other special problems) C: 452
Introvert I: 353
- SI** [measurement] See Metric system in this index
- Si** [symbol]
Silicon S: 458
- SI unit** [measurement]
Metric system M: 436
- Siam** See Thailand in this index
- Siamang** [ape]
Primate (Lesser apes) P: 778a
- Siamese cat**
Cat (Short-haired breeds) C: 290-291; picture on C: 288
- Siamese fightingfish**
Fightingfish F: 96 with picture
Fish (Hatching and care of the young) F: 170 with picture; picture on F: 157
- Siamese twins** See Conjoined twins in this index
- Sian** [China] See Xi'an in this index
- Sian Ka'an National Park** [Mexico]
National park (table) N: 42g
- Sibelius, Jean** [Finnish composer] S: 444
- Siberia** [region, Asia] S: 444 with pictures and map
Arctic (Climate) A: 638
Asia (Way of life in North Asia) A: 789 with picture; picture on A: 773
Exploration (The Russians in Siberia) E: 447
Hat picture on H: 85
Russia picture on R: 526; (Land regions) R: 539-541 with pictures and maps
Trans-Siberian Railroad T: 400
- Siberian elm**
Elm (Diseases) E: 245
- Siberian husky** [dog] S: 446 with picture
Dog picture on D: 278
Sled dog S: 505
- Siberian pine** [tree]
Pine (Other pines) P: 470
- Sibley, Henry Hastings** [American political leader]
Minnesota (Statehood) M: 604
- Sibley Musical Library** [Rochester]
New York (Libraries) N: 294
- Sibyl** [legendary figure] S: 446
- Sibylline books** [Roman legend]
Sibyl S: 446
- SIC** [U.S.]
Industry (The U.S. SIC) I: 260
- Sic et Non** [book by Abelard]
Abelard, Peter A: 10
- "Sic semper tyrannis"** [quotation]
Lincoln, Abraham (Assassination) L: 326
- Sichuan Basin** [region, China]
China (The Sichuan Basin) C: 493
- Sichuan Province** [China]
Chengdu C: 408
- Sicilian dialect**
Italian language (Development) I: 493
Italian literature (The Middle Ages) I: 494
- Sicilian School**
Italian literature (The Middle Ages) I: 494
- Sicilian Vespers** [Italian history]
Sicilies, Kingdom of the Two S: 446
Sicily (History) S: 448
- Sicilians** [people]
Sicily (The people) S: 447
- Sicilies, Kingdom of the Two** [Italian history] S: 446
Garibaldi, Giuseppe G: 43
Italy (The French Revolution and Napoleon) I: 514-515
- Sicily** [island, Italy] S: 447 with picture
Bourbon (In Naples and Sicily) B: 516
Dionysius the Elder D: 214
Italy (Sicily) I: 508 with picture
Mafia M: 41
Patton, George Smith, Jr. (African invasion) P: 199
- Sick building syndrome**
Environmental pollution (Air pollution) E: 331-334
- Sickle** [tool]
Wheat (The mechanization of wheat farming) W: 276
- Sickle beta thalassemia** [disorder]
Thalassemia T: 228
- Sickle cell anemia** [disease] S: 448 with pictures
Anemia (Excessive destruction of red blood cells) A: 458
Cell (Metabolic diseases) C: 336-337
Evolution (Balancing or diversifying selection) E: 429
Eugenics E: 377
Eye (Diseases of the retina) E: 467-468
Heredity (table) H: 204
Mutation M: 969
Races, Human (Susceptibility to genetic diseases) R: 58
Thalassemia T: 228
- Sickle cell retinopathy** [disorder]
Eye (Diseases of the retina) E: 467-468
- Sickle cell trait** [physiology]
Sickle cell anemia S: 448 with diagram
- Sickle hemoglobin** [physiology]
Sickle cell anemia S: 448 with picture
- Sickness** See Disease in this index
- Siddal, Elizabeth** [wife of]
Rossetti, Dante Gabriel R: 484
- Siddhartha** [book by Hesse]
Hesse, Hermann H: 219
- Siddhartha Gautama** See Buddha in this index
- Siddons, Sarah Kemble** [British actress] S: 449 with portrait
- Siddons, William** [British actor]
Siddons, Sarah Kemble S: 449
- Side** [geometry]
Polygon P: 650 with diagram
- Side-angle-side axiom**
Geometry (Congruence) G: 102
- Side check**
Harness diagram on H: 63
- Side-delivery rake** [machine]
Rake (The side-delivery rake) R: 131 with picture
- Side effect** [medicine]
Drug (Effect on the body) D: 354
Herbal medicine H: 196
- Side horse** [sports]
Gymnastics (Men's events) G: 448 with picture
- Side judge** [sports]
Football (The officials) F: 362
- Side-necked turtle** [animal]
Turtle (Side-necked turtles) T: 523
- Side sewing** [printing]
Bookbinding (Forming a book) B: 470
- Side show**
Circus (The Greatest Show on Earth) Ci: 563
- Side wall**
Tire T: 296 with diagram
- Sideburns**
Burnside, Ambrose Everett B: 710 with picture
- Sideline**
Football (The field) F: 354-355
- Sidelocks** [grooming]
Clothing (Ancient times) Ci: 696-697
- Sidepod**
Automobile racing (Indy car racing) A: 977
- Sidereal day** [time]
Sidereal time S: 449
Earth (How Earth moves) E: 17
- Sidereal month** [time]
Month M: 767
Moon (Rotation and orbit) M: 783
- Sidereal time** S: 449
Earth (How Earth moves) E: 17
Time (Measuring time by the stars) T: 288
- Sidereal year** [time]
Earth (How Earth moves) E: 17
Year Y: 554
- Siderite** [mineral]
Iron and steel (Kinds of iron ore) I: 438
- Siderophile element**
Geochemistry G: 91
- Sidesaddle flower** [plant]
Pitcher plant P: 499
- Sidestroke**
Swimming (The basic strokes) So: 1043-1044
- Sidewinder** [snake]
Animal picture on A: 482
Rattlesnake R: 149 with picture
Snake picture on S: 529
- Siding** [building material]
House (Building materials) H: 380; (The frame) H: 382 with diagram
- Siding** [railroad]
Railroad (Tracks) R: 108
- Sidjakov, Nicolas** [American artist]
Caldecott Medal (table: 1961) C: 26
- Sidney, Sir Philip** [English author] S: 449
English literature (Elizabethan fiction) E: 317
- Sidon** [ancient city] S: 449
Phoenicia (Way of life) P: 393
- SIDS** See Sudden infant death syndrome in this index
- SIECUS**
Calderone, Mary Steichen C: 27
- Siegbahn, Kai Manne Boerje** [Swedish physicist]
Nobel Prizes (Physics: 1981) N: 441
Siegbahn, Karl Manne Georg S: 450
- Siegbahn, Karl Manne Georg** [Swedish physicist] S: 449
- Siege** [warfare]
Castle (Uses) C: 280-281
- Siege of Leningrad** [Soviet history] See Leningrad, Siege of in this index
- Siege Perilous** [English legend]
Galahad, Sir G: 7
Round Table (Origin) R: 490-491 with picture
- Siegfried** [legendary figure] S: 450
See also Sigurd in this index
Mythology (Teutonic heroes) M: 985

- Nibelungenlied* N: 395
Siegfried [opera by Wagner]
 Fafnir F: 5
 Opera (*Ring of the Nibelung, The*) O: 806-807; *pictures on* O: 799
Siegfried Line [German history] S: 450
 Haig, Douglas H: 8
 Hindenburg, Paul von H: 235
 World War I (Allied failures) W: 461
 World War II (The Phony War) W: 473
Siegfried of Ardennes [Luxembourg nobleman]
 Luxembourg (History) L: 531
Siemens, Sir Charles William [German inventor] S: 450
 Iron and steel (The birth of modern steelmaking) I: 451
Siemens, Ernst Werner von [German inventor] S: 450
Siemens AG [company]
 Manufacturing (table) M: 170
Siena Cathedral [Italy]
 Campanile *picture on* C: 90a
Sienkiewicz, Henryk [Polish author] S: 450
Sierra Club S: 450
Sierra de Escambray [mountains, Cuba]
 Cuba (The land) Ci: 1172
Sierra de los Órganos [mountains, Cuba]
 Cuba (The land) Ci: 1172 *with map*
Sierra del Rosario [mountains, Cuba]
 Cuba (The land) Ci: 1172 *with map*
Sierra de Sancti Spiritus [mountains, Cuba]
 Cuba (The land) Ci: 1172
Sierra de Trinidad [mountains, Cuba]
 Cuba (The land) Ci: 1172
Sierra Leone S: 450 *with picture and map*
 Flag *picture on* F: 199
 Medicine *picture on* M: 368
Sierra lily [plant]
 Lily L: 304
Sierra Madre [mountains, Mexico] S: 452
 Mexico (The Plateau of Mexico) M: 460-462
Sierra Madre del Sur [mountains, Mexico]
 Sierra Madre S: 452
Sierra Madre Occidental [mountains, Mexico]
 Sierra Madre S: 452
 Mexico (The Plateau of Mexico) M: 460-462, *picture on* M: 448
Sierra Madre Oriental [mountains, Mexico]
 Sierra Madre S: 452
 Mexico (The Plateau of Mexico) M: 460-462
Sierra Maestra [mountains, Cuba]
 Cuba (The land) Ci: 1172 *with map; picture on* Ci: 1168
Sierra Nevada [mountains, California] S: 452
 California (Land regions) C: 48; *picture on* C: 50
 Donner Pass D: 308
 United States (The Pacific Ranges and Lowlands) U: 125
Sierra Nevada [mountains, Spain]
 Spain (The Meseta) So: 740 *with map*
Sierra Nevada de Santa Marta [mountains, Colombia]
 Colombia (The Andes Mountains) Ci: 782
Sierra redwood [tree]
 Sequoia (The giant sequoia) S: 310b
Sieve of Eratosthenes [mathematics] S: 452
Sieve tube [botany]
 Bark (Inner bark) B: 110
Sievert [unit of measurement]
 Radiation (Dose) R: 79-80
Sieyès, Abbé *See* Sieyès, Emmanuel Joseph *in this index*
Sieyès, Emmanuel Joseph [French political leader] S: 453
Sifaka [animal]
 Lemur L: 189
Siffin, Battle of [A.D. 657]
 Muslims (Ali) M: 964b
Sigatoka disease
 Banana (How bananas grow) B: 72-73
Sight *See* Vision *in this index*
Sight [gun]
 Handgun (Parts of a handgun) H: 43
 Rifle (The parts of a rifle) R: 338 *with diagram*
Sight bill [banking]
 Bill of exchange B: 301
Sight hound [dog]
 Dog (Hounds) D: 270 *with pictures*
 Hound H: 379
Sight reduction table
 Navigation (Celestial navigation) N: 71
Sight word
 Reading (Sight words and look-and-say instruction) R: 159
Sightseeing bus
 Bus (Special buses) B: 715
Sigismund [Holy Roman emperor] S: 453
Sigismund III [Polish king]
 Warsaw (History) W: 38
Sigma 7 [spacecraft]
 Schirra, Walter Marty, Jr. S: 176
Sigma Xi S: 453
Sigmoid colon [anatomy]
 Colon [anatomy] Ci: 785
 Intestine (The large intestine) I: 353 *with diagram*
Sign [astrology]
 Astrology (The zodiac) A: 827 *with picture*
 Horoscope (Parts of a horoscope) H: 341
 Zodiac (The zodiac in astrology) Z: 601 *with picture*
Sign [superstition]
 Superstition (Kinds of superstitions) So: 995
Sign, Traffic *See* Traffic sign *in this index*
Sign language S: 453 *with pictures*
 Chimpanzee (Chimpanzees and people) C: 473
 Deafness (Special language techniques) D: 58; (Education) D: 59
 Indian, American (Other communication) I: 151; *pictures on* I: 161
Sign of the Beaver, The [book by Speare]
 Speare, Elizabeth George So: 769
Signal [electronics]
 Electronics E: 206
 Television (Creating television signals) T: 120
Signal [sports]
 Basketball *diagrams on* B: 149
 Cricket *pictures on* Ci: 1135
 Football *pictures on* F: 361
 Hockey *pictures on* H: 279
Signal [warning device]
 Railroad (Traffic control) R: 110 *with pictures*
Signal Corps, United States
 Homing pigeon (History) H: 306
Signal Hill National Historic Site
 [Newfoundland]
 Canada (table: National historic sites) C: 114
Signal loss [electronics]
 Cable (Fiber-optic cables) C: 5
Signal processor [electronics]
 Radar (The signal processor) R: 71 *with diagram*
Signal transduction [medicine]
 Cancer (Molecular medicine) C: 173
Signaling [communications] S: 454
See also the list of Related Articles in the Signaling article
Signature [printing]
 Bookbinding (Forming a book) B: 470
 Printing (Offset presses) P: 798-799
Signature [writing]
 Autograph A: 943
 Letter writing (The signature) L: 211 *with picture*
Signed English
 Deafness (Special language techniques) D: 58
Signed number
 Algebra (Positive and negative numbers) A: 352-353
Signet ring
 Ring R: 342 *with picture*
Significance of Sections in American History, The [book by Turner]
 Turner, Frederick Jackson T: 515
"Significance of the Frontier in American History, The" [paper by Turner]
 Turner, Frederick Jackson T: 515
Significant figures [mathematics]
 Scientific notation (Significant figures) S: 207
 Weights and measures (Conversion factors) W: 184-185
Signing of the Alaska Treaty [painting by Leutze]
 State, Department of *picture on* So: 861
Signing the Constitution [painting by Rossiter]
 United States, History of the *picture on* U: 162
Signing the Marriage Contract [painting by Hogarth]
 Hogarth, William *picture on* H: 288
Signore [official]
 Renaissance (The Italian Renaissance) R: 233
Signoret, Simone [French actress]
 Motion picture (Best performance by an actress: 1959) M: 862
Signoria [government]
 Renaissance (The Italian Renaissance) R: 233
Signoria, Piazza della
 Florence (The city) F: 239-240 *with picture*
Signs of aggregation
 Algebra (Symbols in algebra) A: 354
Sigurd [legendary figure] S: 455
See also Siegfried *in this index*
 Brunhild B: 652
 Mythology (Teutonic heroes) M: 985
Sigurdsson, Harold *See* Harold III [king of Norway] *in this index*
Sigyn [Norse mythology]
 Loki L: 426
Sihanouk, Norodom [Cambodian political leader] *See* Norodom Sihanouk *in this index*
Sikhism [religion] S: 455 *with pictures*
 India (Sikhism) I: 117; (India under Indira Gandhi) I: 133-134
 Lahore L: 31
 Pakistan (The Mughal Empire) P: 99
 Ranjit Singh R: 139
Sikhs *See* Sikhism *in this index*
Sikkim [state, India] S: 456
Sikorsky, Igor Ivanovich [American businessman] S: 456 *with picture*
 Airplane (Other pioneer planes and fliers) A: 233-234; *picture on* A: 232
 Helicopter (The first practical helicopters) H: 173; *picture on* H: 174
Siksika Indians [American Indians]
 Blackfeet Indians B: 393
Silage [feed]
 Alfalfa (As livestock feed) A: 346-347
 Corn (Livestock feed) Ci: 1057; (Harvesting) Ci: 1061
 Feed F: 67
 Grass (Grazing and forage grasses) G: 324
 Silo S: 463
Silas Marner [book by Eliot]
 Eliot, George E: 237
Sildenafil citrate [drug] *See* Viagra *in this index*
Silence of the Lambs, The [film]
 Motion picture (Best picture: 1991) M: 861
Silent film
 Motion picture (Early motion pictures) M: 864
"Silent Night" [song]
 Christmas (Christmas carols) C: 535-536
Silent Spring [book by Carson]
 Carson, Rachel C: 250
 Pest control (Effects of pesticide use) P: 318
Silent World, The [book by Cousteau]
 Cousteau, Jacques-Yves Ci: 1106
Silenus [Greek mythology]
 Midas M: 521
Siles Zuazo, Hernán [Bolivian political leader]
 Bolivia (The Revolution of 1952) B: 447; (Recent developments) B: 447
Silesia [region, Europe] S: 457
 Maria Theresa M: 199
Silica [mineral] S: 457
 Earth (The lithosphere) E: 20
 Glass (96 per cent silica glass) G: 213
 Rock (Chemical sediments) R: 372
 Silicosis S: 458
Silica gel [chemical] S: 457
Silicate [mineral] S: 457 *with picture*
 Ceramics (Properties of ceramics) C: 359
 Interstellar medium I: 352
 Materials (Ceramics) M: 300d
 Mercury (Surface and atmosphere) M: 415
 Satellite S: 150
 Silica S: 457
 Silicon S: 458
Silicon [element] S: 458
 Charge-coupled device C: 378
 Computer chip (Structure) Ci: 924e
 Earth (The lithosphere) E: 20
 Electronics (Types of electronic circuits) E: 209-210
 Semiconductor S: 291
 Silica S: 457
 Silicone S: 458
 Solar energy (The development of photovoltaic cells) So: 577

Silicon bronze [metal]

Bronze (Silicon and aluminum bronze) B: 638

Silicon carbide [chemical]

Grinding and polishing (Grinding wheels)

G: 395

Silicon S: 458

Silicon dioxide See *Silica in this index***Silicon-oxygen tetrahedron**Silicate S: 457 *with picture***Silicon Valley** [California]

California (Manufacturing) C: 54; (The late 1900's) C: 63

San Francisco (Industry) S: 97

San Jose (Economy) S: 100

Silicone [synthetic] S: 458

Plastics (table) P: 556; (Growth of the plastics industry) P: 560

Waterproofing W: 146

Silicone gel [material]

Mastectomy M: 297

Silicone rubber

Silicone (Uses) S: 458

Silicosis [disease] S: 458**Silk** [botany]Corn (How the plant reproduces) Ci: 1058 *with picture*Silk [fiber] S: 459 *with pictures*

Clothing (Clothing materials) Ci: 704

Fiber (Animal fibers) F: 87

Materials (Biological materials) M: 300d

Moth (The importance of moths) M: 839 *with picture*

Mulberry M: 913

Painting (Chinese painting) P: 44

Pasteur, Louis (His work in industry) P: 193

Silk Road S: 462

Spider (Spinners) So: 785; (The spider's silk) So: 786 *with pictures*

Textile (Natural fibers) T: 212-213; (History) T: 218

Silk glands

Spider (How spiders make silk) So: 786

Silk Road [trade route] S: 462 *with map*Han dynasty H: 38 *with map*

Kushan Empire K: 394

Trade route (Early trade routes) T: 364

Uzbekistan (History) U: 254

Silk-screen printing See *Screen printing in this index***Silk spider**Spider (table) So: 790; *picture on* So: 789**Silko, Leslie Marmon** [American author]

American literature (Works by minority writers) A: 425

SilksHorse racing (Jockeys) H: 364 *with picture***Silkworm** [insect]Larva *picture on* L: 79Silk (Raising silkworms) S: 459 *with pictures*; (Discovery of silk) S: 461 *with pictures***Silkworm mulberry** [plant]

Mulberry M: 913

Silky anteater [animal]

Anteater A: 541

Silky oak [tree] S: 462**Silky terrier** [dog] S: 462 *with picture***Sill** [construction]House (The frame) H: 382 *with diagram***Sill, Joshua W.** [American general]

Fort Sill F: 416

Silla [former region]

Korea (Early years) K: 375-376

Sillanpää, Frans [Finnish author]

Nobel Prizes (Literature: 1939) N: 446

Sillman, Benjamin [American chemist] S: 462**Sillimanite** [mineral] S: 462**Sillitoe, Alan** [British author] S: 463**Sills, Beverly** [American singer] S: 463**Silmarillion, The** [book by Tolkien]

Tolkien, J. R. R. T: 322

Silo [agriculture] S: 463

Farm and farming (Processing and storage) F: 37

Silo [warfare]Guided missile (Launching equipment) G: 424; *picture on* G: 423**Silsbee, Joseph Lyman** [American architect]

Wright, Frank Lloyd (Early career) W: 507

Silt S: 463

Soil (Minerals) So: 573

Silty clay

Soil (Texture) So: 574

Silurian Period [geology]

Earth (The Paleozoic Era) E: 27; (table) E: 30

Prehistoric animal (table) P: 738

Silva y Velázquez, Diego Rodríguez de[Spanish painter] See Velázquez, Diego *in this index***Silver** [element] S: 463 *with pictures*See also *Silverware in this index*

Alloy (Costly and ornamental alloys) A: 378

Colorado (Interesting facts) Ci: 829 *with picture*

Free silver F: 499

Mercantilism M: 412

Metal (Metals through the ages) M: 425

Mineral *picture on* M: 568

Teeth (Dental decay) T: 82-83

Western frontier life in America (The search for gold and silver) W: 233

Silver, Long John [literary figure]

Stevenson, Robert Louis (Novels) So: 898

Silver Age

Russian literature (Literary revival) R: 563

Silver Beach [district]

New York City (The Bronx) N: 328-329

Silver birch [tree]

Birch (Yellow birch) B: 327

Tree *picture on* T: 426**Silver Box, The** [play by Galsworthy]

Galsworthy, John G: 17

Silver bromide [chemical]

Bromide B: 636

Silver certificateMoney *picture on* M: 709**Silver chloride** [chemical]

Chloride C: 516

Silver Cord, The [play by Howard]

Howard, Sidney H: 400

Silver Dart [airplane]

Airplane (Other pioneer planes and fliers) A: 233

Silver dollar [money]Dollar (The United States dollar) D: 295 *with pictures*

Free silver F: 499

Money *picture on* M: 709**Silver Dollar City** [Branson]Missouri (Places to visit) M: 660 *with picture***Silver fox** [animal]

Fox (Kinds of foxes) F: 440

Silver-haired bat [animal]

Bat (Some kinds of bats) B: 161-162

Silver hatchet fishFish *picture on* F: 157**Silver iodide** [chemical]

Rainmaking (Rainmaking methods) R: 129

Weather (How people affect the weather)

W: 170

Silver King [nickname of H. A. W. Tabor]

Colorado (Statehood) Ci: 845-847

Silver maple [tree]Maple (Silver maple) M: 187 *with pictures*Tree *pictures on* T: 413**Silver nitrate** [chemical] S: 465

Blindness (Diseases) B: 401-402

Silver plate

Brass B: 565

Electroplating E: 218 *with diagram*

Nickel silver N: 405

Silver-Spangled Hamburg [breed]Chicken *picture on* C: 442**Silver Star**Medals, decorations, and orders (table) M: 357 *with picture***Silver State**

Nevada N: 156

Silver Tassie, The [play by O'Casey]

O'Casey, Sean O: 646

Silverado Squatters, The [book by Stevenson]

Stevenson, Robert Louis (Marriage) So: 897

Silverbell [plant] S: 465**Silvered glass**

Glass (Types of art glass) G: 221

Silverfish [insect] S: 465Insect (Growth and development) I: 292-293 *with pictures; picture on* I: 280**Silverleaf whitefly** [insect]

Whitefly W: 293

Silverman, Belle [American singer] See *Sills*,Beverly *in this index***Silverpoint drawing**

Drawing (Materials and techniques) D: 342

SilversmithSee also *Silver in this index*Colonial life in America *picture on* Ci: 811Silver (Uses of silver) S: 464 *with pictures***Silverstein, Shel** [American author] S: 466**Silvertip bear**

Bear (Brown bears) B: 184

Grizzly bear G: 397

Silverware

Colonial life in America (Decorative arts)

Ci: 807 *with picture*Mexico *picture on* M: 466

Nickel silver N: 405

Revere, Paul (Craftsman and industrialist)

R: 268 *with picture*

Rhode Island (Manufacturing) R: 309

Silvery blue butterflyButterfly *picture on* B: 734**Silvia** [literary figure]Shakespeare, William (*The Two Gentlemen of Verona*) S: 357**Silviculture**

Forestry (Managing timber resources) F: 404; (Diseases and pests) F: 407

Simcoe, John Graves [British military leader] S: 466

Ontario (Upper Canada) O: 784

Toronto T: 336; (Early settlement) T: 340-340a

Simenon, Georges [French author] S: 466

Detective story (The pattern) D: 162-163

Simeon [Biblical figure]

Joseph (The prime minister) J: 167-168

Simeon I [king of Bulgaria]

Bulgaria (The first Bulgarian kingdom) B: 692

Simeon II [Bulgarian political leader]

Bulgaria (Recent developments) B: 693

Simhat Torah [custom] S: 466

Bible (The Bible in worship) B: 287

Judaism (The pilgrimage festivals) J: 181

Similarity [geometry]

Geometry (Properties of geometric figures) G: 102

Triangle (Properties and relationships of triangles) T: 438-439

Similarity, Law of [psychology]

Association A: 819

Simile [language] S: 466

Poetry (Imagery) P: 595

Simitis, Costas [Greek political leader]

Greece (Recent developments) G: 365

SimmentalCattle (Simmental) C: 309 *with picture; (table)* C: 312**Simmering** [cooking]

Cooking (Simmering) Ci: 1028

Simmons, Al [American baseball player]

Baseball (table: Hall of Fame) B: 135

Simmons, Amelia [American author]

Connecticut (Interesting facts) Ci: 953

Simmons, William J. [American public figure]

Ku Klux Klan (Early 1900's) K: 389

Simon, Claude [French author]

Nobel Prizes (Literature: 1985) N: 446

Simon, Herbert Alexander [American economist] S: 466**Simon, Neil** [American dramatist] S: 466**Simon, Paul** [American singer] S: 467**Simon, Seint** [apostle] S: 467**Simon, Theodore** [French psychologist]

Intelligence (Theories of intelligence) I: 318

Simon, William Edward [American government official] S: 467**Simon Fraser University**Architecture *picture on* A: 607**Simon of Cyrene** [Biblical figure]

Jesus Christ (The Crucifixion) J: 108

Simon Peter See *Peter, Saint in this index***Simone Martini** [Italian painter] S: 467Jesus Christ *picture on* J: 108**Simons, Menno** [Dutch religious leader]

Mennonites M: 402

Simont, Marc [American artist]

Caldecott Medal (table: 1957) C: 26

Simony [religion]

Nicholas II [pope] N: 402

Pope (The early Middle Ages) P: 663

Simple carbohydrate

- Carbohydrate (Kinds of carbohydrates) C: 203
with *diagrams*
- Nutrition (Carbohydrates) N: 625
- Simple distillation** [chemistry]
Distillation (Simple distillation) D: 238 with *diagram*
- Simple eye** [entomology]
Eye (Eyes of animals) E: 469 with *picture*
Insect (Sight) I: 290; *diagram* on I: 286
- Simple fracture** [injury]
Fracture F: 451 with *diagram*
- Simple fruit**
Fruit (How botanists classify fruits) F: 546-548 with *pictures*
- Simple harmonic wave**
Waves (How waves move) W: 152
- Simple interest**
Interest (Simple interest) I: 321 with *diagram*
- Simple leaf**
Leaf (The blade) L: 153-154 with *picture*
Plant (Leaves) P: 530 with *picture*
- Simple machine** [physics]
Machine (Six simple machines) M: 14 with *pictures*
- Simple mastectomy** [surgery]
Mastectomy M: 297
- Simple motor act** [psychology]
Habit (Kinds of habits) H: 3
- Simple recitative** [music]
Opera (Early baroque opera) O: 797
- Simple sentence**
Sentence (Sentence classifications) S: 303
- Simple Verses** [poems by Martí]
Martí, José Julián M: 233
- Simplex Linotype**
Linotype (History) L: 339
- Simplicius, Saint** [pope]
Pope (table) P: 666
- Simplicius Simplicissimus** [book by Grimmelshausen]
German literature (Baroque literature) G: 140
Grimmelshausen, Hans Jakob Christoffel von G: 394
- Simplon Pass and Tunnel** [Switzerland] S: 467
Switzerland (Transportation) So: 1058
Tunnel (table) T: 491
- Simpson, Alan Kooi** [American political leader] S: 467
- Simpson, Sir George** [Scottish businessman] S: 468
- Simpson, George Gaylord** [American paleontologist]
Evolution (The synthetic theory) E: 432
- Simpson, Sir James Young** [Scottish physician]
Chloroform C: 517
- Simpson, Nicole Brown** [American public figure]
Simpson, O. J. S: 468
- Simpson, O. J.** [American football player] S: 468 with *portrait*
- Simpson, Robert H.** [American meteorologist]
Hurricane (Hurricane damage) H: 455
- Simpson, Wallis Warfield** [British public figure]
Edward VIII E: 113
United Kingdom ("Peace in our time") U: 70
- Simpson Desert** [Australia]
Australia (Deserts) A: 910 with *map*
- Sims, William S.** [American admiral]
Navy, United States (World War I [1914-1918]) N: 88
- Simulation**
See also *Computer simulation in this index*
Astronaut (Training the astronauts) A: 831-832 with *picture*
- Simulcast betting**
Horse racing (Betting) H: 365
- Simultaneous contrast** [vision]
Color (Surprising color-vision effects) Ci: 819
- Sin** [religion]
Augustine, Saint (His beliefs) A: 888
Religion (A doctrine of salvation) R: 216
- Sin Nombre virus** See *Pulmonary syndrome hantavirus in this index*
- Sinai** [mountain, Sinai Peninsula] See *Mount Sinai in this index*
- Sinai Peninsula** [region, Middle East] S: 468
Arab-Israeli conflict (The Suez crisis of 1956) A: 582
Egypt (The Sinai Peninsula) E: 126 with *picture and map*; (Republic) E: 132
- Israel (History) I: 486-487
Middle East (Continuing conflict) M: 533
- Sinan** [Turkish architect]
Turkey (The arts) T: 506-507
- Sinanthropus pekinensis** [anthropology]
Peking fossils P: 230
- Sinatra, Frank** [American singer] S: 468 with *portrait*
Motion picture (Best performance by an actor in a supporting role: 1953) M: 863
- Sinbad** [literary figure]
Arabian Nights A: 582b
- Sinclair, Elizabeth** [British public figure]
Hawaii (Niihau) H: 102
- Sinclair, Harry Ford** [American businessman]
Teapot Dome T: 72
- Sinclair, Upton** [American author] S: 468
Consumerism (Beginnings of consumerism) Ci: 1019
Novel (The United States) N: 573
Roosevelt, Theodore (Domestic problems) R: 470
- Sinclair plaid**
Tartan *picture* on T: 47
- Sindebele** [language]
Zimbabwe (People) Z: 596
- Sine**
Trigonometry (Right triangles) T: 443
- Sines, Law of**
Trigonometry (The law of sines) T: 443
- Sinew** See *Tendon in this index*
- Sinfonia** [music]
Overture O: 881
- Sing-sing** [custom]
Pacific Islands *picture* on P: 7
- Sing Sing** [prison, New York] S: 469
- Sing to the Sun: Poems and Pictures** [book by Bryan]
Literature for children *picture* on L: 356
- Singapore** [country] S: 469 with *pictures and map*
Flag *picture* on F: 204
Lee Kuan Yew L: 180
Malaysia M: 98a; (Coming of the Europeans) M: 101
Raffles, Sir Thomas Stamford R: 101
World War II (The war in Asia and the Pacific) W: 486
- Singapore [city]** S: 472, S: 469 with *picture*;
(The city of Singapore) S: 470
- Singapura cat**
Cat (Short-haired breeds) C: 290-292
- Singer** See *Singing in this index*
- Singer, Isaac Bashevis** [Polish-born author] S: 472
Nobel Prizes (Literature: 1978) N: 446
- Singer, Isaac Merrit** [American businessman] S: 472
Sewing machine (History) S: 333-335
- Singer, Israel Joshua** [Yiddish author]
Yiddish literature Y: 566
- Singer, Jerome E.** [American psychologist]
Emotion (Modern theories about emotion) E: 261
- Singer Company, The**
Sewing machine (History) S: 333-335
- Singh, Vijay** [Fijian golfer]
Golf *picture* on G: 266
- Singidunum**
Belgrade (History) B: 236
- Singing S: 472**
Careers (Sports and entertainment) C: 230-231 with *picture*
Opera (The singers) O: 792
See also *list of Related Articles in the Singing article*
- Singing Bone, The** [story by Freeman]
Detective story (History) D: 163
- Singing Gallery** [sculpture by Della Robbia]
Della Robbia, Luca D: 117
- Singing River**
Mississippi M: 623
- Singing Tower** (Florida)
Bell (Uses of bells) B: 239
- Single**
Football (Canadian football) F: 365
- Single-action revolver**
Handgun (Types of handguns) H: 43
- Single-action semiautomatic pistol**
Handgun (Types of handguns) H: 43
- Single-cross seed** [genetics]
Corn (Hybrid corn) Ci: 1059; (Development of hybrids) Ci: 1063
- Single-degree-of-freedom gyroscope**
Gyroscope (Mechanical gyroscopes) G: 454
- Single dot**
Diacritical mark D: 180
- Single element set** [mathematics]
Set theory (Kinds of sets) S: 321
- Single European Act** [1987]
European Union (Increasing cooperation) E: 420
- Single-family home**
Housing (Kinds of housing) H: 389-390 with *picture*
- Single field laboratory**
Industrial arts (Industrial arts courses) I: 242
- Single-lens reflex camera**
Camera (Types of cameras) C: 82 with *diagram*
Photography (Single-lens reflex cameras) P: 417 with *picture*
- Single-mode fiber**
Fiber optics (Kinds of optical fibers) F: 88 with *diagram*
- Single-origin theory** [anthropology]
Prehistoric people (The single origin theory) P: 747
- Single Parent, The** [magazine]
Parents Without Partners P: 158
- Single-parent family**
Family (Varieties of families) F: 20 with *picture*
- Single-person corporation**
Corporation (Other corporations) Ci: 1070
- Single phase alloy**
Alloy (Characteristics of alloys) A: 377
- Single-phase generator**
Electric generator (Kinds of AC generators) E: 173
- Single-rotor helicopter**
Helicopter (Types of helicopters) H: 170 with *diagrams*
- Single-shot pistol**
Handgun (Single-shot pistols) H: 44
- Single stitch**
Crochet Ci: 1148d with *diagrams*
- Single tax** [U.S. history] S: 473
George, Henry G: 108
- Single-unit truck** [vehicle] See *Straight truck in this index*
- Single-wattled cassowary** [bird]
Cassowary C: 277
- Singles skating**
Ice skating (Singles skating) I: 12 with *picture*
Roller skating (Artistic skating) R: 403
- Singleton, Angelica** [daughter-in-law of Martin Van Buren] See *Van Buren, Angelica Singleton in this index*
- Singmanassuk, S.** [boxer]
Boxing (Bantamweights) B: 532
- Singspiel**
Opera (Mozart) O: 798
- Singular** [grammar]
Number N: 604
- Singularity** [physics]
Black hole (Characteristics of black holes) B: 388
Star (Black holes) So: 851
- Sinhala** [language]
Sri Lanka (History) So: 819
- Sinhalese** [people]
Maldives (People) M: 104
Sri Lanka (People) So: 817; (History) So: 819-820
- Sinister side**
Heraldry (Expansion) H: 194
- Sink** [geology]
Great Basin G: 336
Lake (How lakes are formed) L: 32
- Sinker** [botany]
Root (Kinds of roots) R: 473-474
- Sinker** [pitch]
Baseball (Pitching) B: 127-128
- Sinker** [weight]
Fishing (Sinkers) F: 177; *pictures* on F: 178
- Sinkhole**
Cave (How caves are formed) C: 319 with *diagram*
- Sinkhole pond**
Pond (Kinds of ponds) P: 656-657

Sinkiang See Xinjiang in this index

Sinn Féin [Irish history] S: 473

Adams, Gerry A: 33

De Valera, Eamon D: 173

Griffith, Arthur G: 393

Ireland (The Easter Rising) I: 427; (The Irish Free State) I: 427

Irish Republican Army I: 433

Ulster Unionist Party U: 16

Sinner, George A. [American political leader]

North Dakota (table) N: 513

Sinnott, Michael See Sennett, Mack in this index

Sino-Japanese Wars See Chinese-Japanese Wars in this index

Sino-Soviet rift [international relations]

Cold War (The great blocs split) Ci: 768

Sino-Tibetan languages

Language (Other language families) L: 65 with map

India (Languages) I: 114

Sinoatrial node [anatomy]

Heart (Regulating the heart rate) H: 135-136

Muscle (Cardiac muscle) M: 935

Sinopec [company]

Manufacturing (table) M: 170

Sinowatz, Fred [Austrian political leader]

Austria (After World War II) A: 939-940; (Recent developments) A: 940

Sinte Gleska

Spotted Tail So: 805

Sintering [industrial process]

Metallurgy (Sintering) M: 426

Powder metallurgy P: 725

Sinterklaas [legendary figure]

Netherlands (Holidays and recreation) N: 141-142

Nicholas, Saint N: 403

Santa Claus (How the Santa Claus legend began) S: 113-114

Sinus [anatomy] S: 473 with diagrams

Blood (Formation of new blood components) B: 411

Bone (Structure of the bones) B: 456

Hay fever (Symptoms) H: 116

Sinus headache

Headache (Secondary headache) H: 124

Sinus venosus [anatomy]

Heart (Fish) H: 146

Sinusitis [disorder]

Sinus S: 474

Sinusoid [anatomy]

Spleen So: 797

Sinyavsky, Andrey [Russian author]

Russian literature (Modern Soviet literature) R: 564

Sioux City [Iowa] S: 474

Iowa (table) I: 388

Sioux Falls [South Dakota] S: 474

South Dakota So: 665 with picture;

(Population) So: 668; (table: Average monthly weather) So: 676

Sioux Falls Public Library

South Dakota (Libraries) So: 668

Sioux Indians [American Indians] S: 474

See also Sioux wars in this index

De Smet, Pierre Jean D: 159

Doll (Traditional dolls) D: 287

Indian, American (Indians of the Plains) I: 158-159; (In the United States) I: 179; pictures on I: 138, I: 143, I: 160

Iowa (Statehood) I: 395

Minnesota (Indian days) M: 603; (Territorial days) M: 604

North Dakota N: 496; (History) N: 513

Red Cloud R: 185

Sitting Bull S: 477

South Dakota (Indian days) So: 681; (Recent developments) So: 684-685

Sun dance So: 987

Westward movement in America (The last Indian wars) W: 250-251

Wounded Knee W: 502

Sioux Sun Dance [painting by Howe]

Indian, American picture on I: 161

Sioux wars [1854-1890]

See also Sioux Indians in this index

Indian wars (The Sioux wars) I: 194

Crazy Horse Ci: 1123

Minnesota (Statehood) M: 604

Wyoming (Indian and settler conflicts)

W: 534

Sipe

Tire T: 296 with diagram

Siphon [physics] S: 474 with diagram

Siphon [zoology]

Clam (The body of a clam) Ci: 637

Mollusk (Bivalves) M: 695

Octopus (The body of an octopus) O: 672 with diagram

Siphonaptera [entomology]

Insect (table) I: 300; picture on I: 282

Siphonophore [animal]

Deep sea (Invertebrates) D: 82a-82b

Siphuncle [zoology]

Nautilus N: 69

Siple, Paul Allman [American explorer]

Wind chill W: 331

Siqueiros, David [Mexican painter] S: 475

Latin America (Painting) L: 101-102 with picture

Mexico (Painting) M: 459 with picture

Painting (Synthetic resins) P: 40 with picture

Sir [title]

Knighthood, Orders of (Honorary orders)

K: 347

Sir ...

Knights appear under their names, as in Galahad, Sir

Sir Gawain and the Green Knight [poem]

Poetry (Medieval poetry) P: 596

Sir George-Étienne Cartier [Quebec]

Canada (table: National historic sites)

C: 114

Sir Sanford, Mount [British Columbia]

Selkirk Mountains S: 290

Sir Wilfred Grenfell College [Corner Brook]

Newfoundland and Labrador (Schools) N: 364

Siracusa [Sicily]

Syracuse (ancient city) So: 1069

Sire [animal]

Cattle C: 306

Siren [device]

Civil defense (Warning) Ci: 605

Sirenia [zoology] S: 475

Mammal (table) M: 128 with picture

Sirens [Greek mythology] S: 475

Capri C: 198

Odyssey (Odysseus describes his wanderings)

O: 675 with picture

Sirhan, Sirhan Bishara [Arab assassin]

Kennedy, Robert Francis K: 270

Sirica, John J. [American judge]

Nixon, Richard Milhous (Events at home) N: 435-436

Watergate (The tape controversy) W: 144

Siricius, Saint [pope]

Pope (table) P: 666

Sirius [ship]

Ship (Oceangoing steamships) S: 412 with picture

Sirius [star] S: 475

Calendar (The Egyptians) C: 30

Star (table: The 10 brightest stars as seen from Earth) So: 842; (table: The 10 known stars nearest Earth) So: 843

Sirius B [star]

Star (table: The 10 known stars nearest Earth) So: 843

Sirius S: 475

Sirmilik National Park [Nunavut]

Canada (table: National parks and national park reserves) C: 110-113

Sirocco [weather] S: 475

Algeria (The Sahara) A: 363

Sicily (Land and climate) S: 447-448

Sisal [fiber]

Sisal S: 475

Sisal [plant] S: 475

Rope (Natural-fiber rope) R: 476

Sisavang Vong [King of Louangphrabang]

Indochina (World War II) I: 225; (Independence) I: 225

Sisera [Biblical figure]

Deborah D: 65

Sisinnius [pope]

Pope (table) P: 666

Siskin, Pine [bird]

Pine siskin P: 471 with picture

Siskiwiit, Lake [Michigan]

Isle Royale National Park I: 474

Sisler, George [American baseball player]

Baseball (table: Hall of Fame) B: 135; (table: Modern major league records) B: 137

Sisley, Alfred [British painter] S: 476

Sisowath Sirik Matak [Cambodian political leader]

Cambodia (History) C: 72-73

Sister [religion]

Address, Forms of (Members of the clergy) A: 54

Nun N: 608

Sister Carrie [book by Dreiser]

American literature (Naturalists) A: 419-420

Dreiser, Theodore D: 346

Sister chromatid [biology]

Cell (Mitosis) C: 330 with picture

Sister Kenny [Australian nurse] See Kenny,

Elizabeth in this index

Sisters in Crime [organization]

Paretsky, Sara P: 159

Sisters of Charity [religious group]

Seton, Saint Elizabeth Ann S: 323

Vincent de Paul, Saint V: 386

Sisters of the Poor, Little [religious group] See

Little Sisters of the Poor in this index

Sistine Chapel [Vatican City] S: 476 with picture

David picture on D: 45

Jeremiah, Book of picture on J: 92

Michelangelo (The Sistine Chapel) M: 484; picture on M: 483

Painting (The High Renaissance) P: 54 with picture

Sistine Madonna [painting by Raphael]

Madonna and Child (Painters of the Madonna) M: 37-38

SiSwati [language]

Swaziland (People) So: 1017

Sisyphus [Greek mythology] S: 477

Ulysses (The Trojan War) U: 17-18

Sit-down strike

Strike (Kinds of strikes) So: 928

Sita [legendary figure]

Rama R: 132

Ramayana R: 133

Sitar [musical instrument] S: 477 with picture

India (Music and dance) I: 120

Sitatunga [animal]

Antelope A: 542

Site, Archaeological

Archaeology (What archaeologists study) A: 595 with picture

Prehistoric people (Examining prehistoric sites) P: 753 with picture

"Site Unseen" [performance]

Performance art picture on P: 285

Sitka [Alaska] S: 477

Alaska (Places to visit) A: 290 with picture

Sitrah [island, Bahrain]

Bahrain (Land and climate) B: 30 with map

Sittang River [Myanmar]

Myanmar (Land regions) M: 970c with map

Sitter [occupation]

Day care (Types of day care for children) D: 52

Sitting Bull [American Indian chief] S: 477 with picture

De Smet, Pierre Jean D: 159

Indian wars (The Sioux wars) I: 194

South Dakota (Territorial days) So: 681-683

Westward movement in America picture on W: 251

Situation and Crisis Center [Moscow]

Hot line H: 374a

Situation comedy

Comedy Ci: 867

Television (Commercial television) T: 110

Sitwell, Edith [British author] S: 478 with portrait

Siva See Shiva in this index

Sivash

Azov, Sea of A: 998

Siwinowe Kesibwi [newspaper]

Kansas (Interesting facts) K: 217

Six, Les [music]

Honegger, Arthur H: 314

Milhaud, Darius M: 543

Six Characters in Search of an Author [play by Pirandello]
Pirandello, Luigi P: 493

Six-Day War See Arab-Israeli conflict in this index

Six Flags Over Texas [park, Arlington]
Texas (Places to visit) T: 194

Six Nations [U.S. history] See Iroquois League in this index

Six-shooter [gun]
Colt, Samuel Ci: 850
Cowboy (His firearm) Ci: 1109

16 Cygni B [planet]
Planet (The first discoveries) P: 512-513

16-millimeter film
Motion picture (The film) M: 857

Sixteenth Amendment
Constitution of the United States Ci: 1014

Sixth Amendment
Constitution of the United States Ci: 1012
Escobedo v. Illinois E: 357
Gideon v. Wainwright G: 188
Trial (The criminal defendant's rights) T: 437

Sixth Fleet
Navy, United States (The Operating Forces) N: 85

Sixtus I, Saint [pope]
Pope (table) P: 666

Sixtus II, Saint [pope]
Pope (table) P: 666

Sixtus III, Saint [pope]
Pope (table) P: 666

Sixtus IV [pope] S: 478
Pope (Renaissance and Reformation) P: 664; (table) P: 666

Sixtus V [pope] S: 478
Pope (table) P: 666

"\$64,000 Question, The" [television program]
Television picture on T: 120

Size [solution]
Painting (Other materials) P: 36

Sizing
Cotton (Spinning) Ci: 1091
Dextrin D: 177
Paper (Special kinds of paper) P: 136

Sizwe Banzis Dead [book by Fugard]
Fugard, Athol F: 553

Sjælland [island, Denmark]
Copenhagen Ci: 1038
Denmark (Land regions) D: 137-138

SK [company]
Manufacturing (table) M: 170

Skadi [Norse mythology]
Frey F: 531
Freyja F: 531

Skagerrak [strait, North Sea] S: 478

Skald [Icelandic literature] S: 478
Vikings (Cultural life and recreation) V: 381

Skaldic poetry
Skald S: 478

Skandagupta [emperor of India]
Gupta dynasty (Rise and fall of the dynasty) G: 442

Skanderbeg See Scanderbeg in this index

Skåne [region, Sweden]
Scandinavia S: 171
Sweden (The Swedish Lowland) So: 1028-1029

Skansen museum [Stockholm]
Sweden (Libraries and museums) So: 1025

Skarnsundet Bridge [Norway]
Bridge (table: Cable-stayed) B: 603

Skate [fish] S: 479

Skate stride
Skiing (Nordic skiing) S: 482-483; diagram on S: 484

Skateboarding [sport] S: 479 with picture

Skater, The [painting by Stuart]
Stuart, Gilbert Charles So: 931

Skates, Hockey
Hockey (Equipment) H: 276 with picture
Ice skating picture on I: 11

Skating [sport] See Ice skating; Roller skating in this index

Skeena River [British Columbia] S: 479
British Columbia (Rivers, waterfalls, and lakes) B: 624

Skeet [sport] S: 479

Skeeter [iceboat]
Iceboating (History) I: 19

Skein [unit of measure]
Weights and measures (table: Miscellaneous weights and measures) W: 184

Skein dyeing
Dye (Dyeing textiles) D: 396

Skeletal age
Growth (Skeletal age) G: 406

Skeletal muscle [anatomy]
Human body (Skeletal muscles) H: 419 with picture
Muscle (Skeletal muscles) M: 933-934 with diagrams
Muscular dystrophy M: 936
Paralysis P: 152
Tongue T: 329

Skeleton [anatomy] S: 479 with pictures
See also Bone; Exoskeleton; Joint in this index
Bird (Skeleton and muscles) B: 364 with diagram
Cat (Body size and structure) C: 286; picture on C: 285
Dinosaur picture on D: 210
Fish (Kinds of fish) F: 147; (Skeleton and muscles) F: 161; diagram on F: 162
Fossil (Working with fragments) F: 426; picture on F: 422
Frog pictures on F: 537
Giraffe diagram on G: 195
Gorilla diagram on G: 276
Human body (The skeletal system) H: 418; picture on H: 416; diagram on H: 422
Mammal (Skeleton) M: 118 with picture; diagrams on M: 122
Marfan syndrome M: 198
Marsupial (Characteristics of marsupials) M: 232
Rat diagram on R: 146
Rattlesnake picture on R: 149
See also the list of Related Articles in the Skeleton article

Skeleton [sport]
Bobsledding B: 433
Olympic Games (Winter Olympic Games) O: 746d-746e

Skeleton construction
Building construction (Types of construction) B: 683 with diagram

Skelton, John [English poet] S: 481

Skelton, Martha Wayles [wife of]
Jefferson, Thomas (Jefferson's family) J: 78

Skeltonic meter [poetry]
Skelton, John S: 481

Skene [theater]
Drama (Greek drama) D: 326

Skep
Bee (Beekeeping) B: 206

Skepticism [philosophy] S: 481
Philosophy (Ancient philosophy) P: 386-387
Pyrrho of Elis P: 920

Sketch Book of Geoffrey Crayon, Gent., The [book by Irving]
Irving, Washington (Years in Europe) I: 460
American literature (Literature of a young nation [1788-1830]) A: 415
Rip Van Winkle R: 349

Sketch for a Historical Picture of the Progress of the Human Mind [book by Condorcet]
Condorcet, Marquis de Ci: 930

Sketches by Boz [book by Dickens]
Dickens, Charles (Dickens' life) D: 187

Sketches of Eighteenth Century America [book by Crèvecoeur]
Crèvecoeur, Michel-Guillaume Jean de Ci: 1129

Sketching [art]
Drawing D: 343 with picture

Skew line [mathematics] S: 481

Skhul [archaeological site]
Prehistoric people (The single origin theory) P: 747

Ski
Skiing (Ski equipment and clothing) S: 483
Water-skiing W: 140 with picture

Ski boot
Skiing (Ski boots) S: 485 with diagram

Ski jumping
Olympic Games (Winter Olympic Games) O: 746d-746e

Skiing (Nordic skiing) S: 482-483 with picture; (Nordic competitions) S: 487

Ski lift
Skiing (Ski trails) S: 486

Ski pole
Skiing (Ski poles) S: 485 with diagram

Ski trail
Skiing (Ski trails) S: 486

Skid [aviation]
Airplane (Proper use of the controls) A: 225

Skid road [road]
Lumber (table) L: 518

Skid row [city]
Homelessness (History) H: 302

Skidding [logging]
Lumber (table) L: 518

Skiff [boat]
Fishing industry (Nets) F: 183 with diagram

Skiing [sport] S: 482 with pictures
Biathlon B: 278
Canada (Recreation and sports) C: 108 with picture
Chile picture on C: 463
Norway (Recreation) N: 540 with picture
Olympic Games (Winter Olympic Games) O: 746d
Safety (In winter sports) S: 12
Snowboarding S: 541
Vermont (Visitor's guide) V: 326 with picture

Skill
Education E: 87 with pictures
Learning (Skill learning and verbal learning) L: 164

Skilled nursing care home
Nursing home (Skilled nursing care homes) N: 621

Skin
Cooking (table) Ci: 1029

Skin milk
Milk (table) M: 547; (Separation or standardization) M: 548

Skimmer [bird] S: 488
Bird (Birds of the seacoasts) B: 342 with picture; pictures on B: 351, B: 363

Skin [anatomy] S: 488 with pictures
Acne A: 27 with diagram
Cell picture on C: 328
Cosmetics (Kinds of cosmetics) Ci: 1075
Dermatitis D: 153
Disease (Natural barriers) D: 231 with diagram
First aid (Poisons on the skin) F: 138; (Other first-aid procedures) F: 138
Frostbite F: 543
Human body (The skin) H: 418; picture on H: 417
Keratin K: 305
Mammal (Skin and hair) M: 118
Races, Human R: 52 with picture; (The three-race theory) pictures on R: 54; (Alternatives to racial classification) R: 55; (The problem of skin color in racial classification) R: 56 with pictures; (Climatic adaptations) R: 58
Scar S: 172
Skin cancer S: 491
Sun lamp So: 988
Sunburn So: 989
Wart W: 44
See also the list of Related Articles in the Skin article

Skin [zoology]
See also Hide in this index
Amphibian (Skin) A: 440
Elephant (Kinds of elephants) E: 227 with picture
Frog (Skin) F: 536 with pictures
Hair H: 9
Parchment P: 155
Reptile (Skin) R: 251 with pictures
Taxidermy (Process of mounting) T: 56 with picture

Skin cancer [disease] S: 491 with pictures
Cancer (Classification by primary body site) C: 167, (table) C: 170

Skin cyst [disorder]
Ear (Diseases) E: 12

Skin disease
Dermatology D: 153
Erysipelas E: 355
Leprosy L: 203

- Lupus L: 526
 Neurofibromatosis N: 152
 Psoriasis P: 844
 Scleroderma S: 209
 Skin (Skin disorders) S: 490
 Vitiligo V: 432
- Skin diving** [sport] S: 492 *with pictures*
 Diving, Underwater (Ambient diving) D: 245
- Skin gelatin**
 Gelatin G: 77
- Skin grafting** [medicine] S: 494
 Burn (Advanced medical care) B: 708
 Hypnotism (Uses of hypnotism) H: 478
 Plastic surgery (Methods of plastic surgery) P: 553
 Transplant (Tissue transplants) T: 379
- Skin Lodge of an Assiniboin Chief, A** [painting by Bodmer]
 Indian, American *picture on* I: 158
- Skin of Our Teeth, The** [play by Wilder]
 Wilder, Thornton Niven W: 303
- Skin popping** [slang]
 Heroin H: 213
- Skin test** [medicine]
 Allergy (Diagnosis and treatment) A: 374
 Tuberculosis (Diagnosis of tuberculosis) T: 479
- Skink** [reptile] S: 494 *with picture*
 Lizard (How lizards move) L: 399-400
- Skinner, B. F.** [American psychologist] S: 495
 Behavior (Behaviorism) B: 221
 Learning (Instrumental conditioning) L: 163
 Psychology (Behaviorism) P: 849-850
- Skinner, Eugene** [American settler]
 Eugene E: 376
- Skinner, John S.** [American public figure]
 "Star-Spangled Banner" (How the song came to be written) So: 853
- Skinner, Samuel K.** [American government official]
 Transportation, Department of (table) T: 400
- Skinner box** [psychology]
 Comparative psychology Ci: 902a
- Skinning**
 Fur (Skinning) F: 562
- Skip** [sports]
 Curling (The rink) Ci: 1196
 Lawn bowling L: 145
- Skipper** [entomology]
 Butterfly (Skippers) B: 733-734 *with pictures*;
 (The thorax) B: 738
- Skirt** [riding equipment]
 Saddle *diagrams on* S: 7
- Skłodowska, Marie** [Polish-French physicist]
 See Curie, Marie Skłodowska *in this index*
- Skolt Sami** [people]
 Sami S: 79
- Skopje** [Macedonia] S: 495
- Skou, Jens Christian** [Danish chemist]
 Nobel Prizes (Chemistry: 1997) N: 443
- Skua** [bird] S: 495
 Bird (Birds of the ocean and the Antarctic) B: 344 *with picture*
- Skuld** [Norse mythology]
 Norns N: 457
- Skull** [anatomy] S: 495 *with pictures*
 Brain (How the brain is protected) B: 552
 Frog *picture on* F: 537
 Head H: 123 *with diagram*
 Mammal (Skeleton) M: 118
 Phrenology P: 430
 Prehistoric people *pictures on* P: 748
- Skull and crossbones**
 Pirate (How pirates lived) P: 494 *with picture*
- Skullcap**
 Judaism (Orthodox Judaism) J: 180
- Skunk** [animal] S: 496 *with picture*
 Animal *picture on* A: 479
 Fur (table) F: 561
 Protective coloration *picture on* P: 831
- Skunk cabbage** [plant] S: 496
 Flower *picture on* F: 294
- Sky** S: 496
 Cosmology (The dark sky) Ci: 1078
 Planetarium P: 514
- Sky & Telescope** [magazine]
 Blue moon B: 421
- Sky Cathedral** [sculpture by Nevelson]
 Nevelson, Louise *picture on* N: 178
- Sky wave**
 Radio (Transmitting radio waves) R: 87 *with diagram*
- Skydiving** [sport] S: 496
 Parachute (Uses of parachutes) P: 142
- SkyDome** [stadium]
 Toronto (Landmarks) T: 336-337 *with picture*
- Skye, Isle of** [island, Scotland]
 Hebrides H: 163
- Skye terrier** [dog] S: 496
 Dog *picture on* D: 272
- Skyjacking**
 Airport (Airport security) A: 247
 Aviation (Airline safety concerns) A: 991
 Hijacking H: 229
- Skylab** [space station]
 Astronaut (Achievements in space) A: 829-830
 International Space Station (History) I: 346b
 Space exploration (Salyut and Skylab) So: 721 *with picture*
 Sun (History of modern solar study) So: 986
- Skylerk**
 Lark L: 77
- Skyline** [logging]
 Lumber (Transporting logs) L: 518
- Skyline Project**
 Denver (History) D: 148
- Skyrocket**
 Fireworks (How fireworks work) F: 135
- Skyscraper** [architecture] S: 497 *with pictures*
 Building construction (Types of construction) B: 683; (Constructing a skyscraper) B: 683 *with pictures*
 Burnham, Daniel Hudson B: 709 *with picture*
 Earthquake (Reducing earthquake damage) E: 35
 New York City N: 322 *with picture*;
 (Architecture) N: 336
- SLA** [organization]
 Hearst, William Randolph H: 131
- Slab** [by-product]
 Lumber (table) L: 518
- Slab** [construction]
 Building construction (Beams, girders, and columns) B: 682-683
 House (The foundation) H: 380
- Slab** [pottery]
 Pottery (Shaping the clay) P: 716-717, *picture on* P: 718
- Slab table**
 Furniture (Ancient Rome) F: 570-571
- Slacking off**
 Sailing (Trimming and tacking) S: 26
- Slackline** [machine]
 Mining (Surface mining methods) M: 574-575
- Slacks**
 Clothing (The 1900's) Ci: 703 *with picture*
- Slag** [by-product] S: 499
 Iron and steel (Running a blast furnace) I: 441 *with diagram*
 Metallurgy (Smelting) M: 426
- Slaked lime** [chemical]
 Lime L: 306
- Slaking** [industrial process]
 Lime L: 307
- Slalom** [race]
 Skiing (Alpine competitions) S: 486-487
 Snowboarding S: 541
- Slam**
 Bridge (Bidding) B: 604
- Slander** [law] S: 499
 Damages D: 22
 Libel L: 226
- Slang** [language] S: 499
 Grammar (Grammar and usage) G: 304
 Language (Linguistic terms) L: 63
- Slant height** [geometry]
 Pyramid P: 916 *with diagram*
- Slapstick comedy**
 Humor (The types of humor) H: 435-436
 Sennett, Mack S: 301
- Slesh-and-burn agriculture**
 See also Shifting cultivation *in this index*
 Agriculture (Shifting cultivation) A: 149
 Aztec (Agriculture) A: 1002
 Indian, American (Farming) I: 141
 Indonesia (Agriculture) I: 235
 Mozambique (People) M: 904
- Slash pine** [tree]
 Pine (Southeastern pines) P: 468-469
 Turpentine T: 519
- Slat** [airplane]
 Aerodynamics (Creating extra lift) A: 86
- Slate** [rock] S: 500
 Building stone B: 685
 Rock (table) R: 373 *with picture*; (Metamorphic rock) R: 372-373
- Slater, John Fox** [American businessman]
 Foundations (History) F: 431
- Slater, Rodney E.** [American government official]
 Transportation, Department of (table) T: 400
- Slater, Samuel** [American businessman] S: 501
 Pawtucket P: 204
 Rhode Island (Places to visit) R: 304 *with picture*;
 (Industrial growth) R: 313
- Slater Mill** [Pawtucket, Rhode Island]
 Rhode Island *picture on* R: 314
- Slatyheaded parakeet** [bird]
 Parakeet P: 151 *with picture*
- Slaughter, Enos** [American baseball player]
 Baseball (table: Hall of Fame) B: 134-135
- Slaughter cattle**
 Ranching (Life on a cattle ranch) R: 134
- Slaughterhouse**
 Meat packing (Slaughtering and dressing) M: 351
- Slaughterhouse Cases** [U.S. history]
 Miller, Samuel Freeman M: 554
- Slaughterhouse-Five** [book by Vonnegut]
 Vonnegut, Kurt V: 448
- Slave codes** [law]
 African Americans (Colonial times) A: 136d-136e
- Slave Dancer, The** [book by Fox]
 Fox, Paula F: 441
- Slave Lake, Great** [Northwest Territories] See Great Slave Lake *in this index*
- Slave-making ant**
 Ant (Slave makers) A: 526 *with picture*
- Slave River** [Canada]
 Great Slave Lake G: 348
- Slave Ship** [play by Baraka]
 Baraka, Amiri B: 103
- Slave Songs of the United States** [book]
 Spiritual So: 796
- Slavery** S: 501 *with pictures and map*
 Adams, John Quincy (Back to Congress) A: 43
 Black Seminole B: 391
 Calypso (Development) C: 71
 Folk music (American folk music) F: 321-322
 Hispanic Americans (In Puerto Rico and Cuba) H: 246
 Maroons M: 217
 Virginia (*The Mother of Presidents*) V: 421
 Washington, D.C. (The issue of slavery) W: 86
- Government action**
 Compromise of 1850 Ci: 906
 Constitution of the United States (The compromises) Ci: 1000-1001; (Amendment 13) Ci: 1013; (Amendment 14) Ci: 1014
 Crittenden Compromise Ci: 1147
 Democratic Party (The slavery issue) D: 125
 Dred Scott Decision D: 345
 Emancipation Proclamation E: 253
 Freedom Day, National F: 503
 Jackson, Andrew (Slavery and Texas) J: 14
 Kansas (The struggle over slavery) K: 235
 Kansas-Nebraska Act K: 243
 Mexican War (Results of the war) M: 447
 Missouri Compromise M: 673
 Popular sovereignty P: 672
 Proslavery movement P: 828
 Taney, Roger Brooke T: 24
 Vermont (Interesting facts) V: 319
 Wilnot Proviso W: 315
- History**
 Africa (The beginnings of European control) A: 133
 African American literature (Early works) A: 136a; (The 1800's) A: 136a
 African Americans (The years of slavery) A: 136d *with pictures*; (The end of slavery) A: 136g
 Aztec (The Aztec empire) A: 999-1000
 Berlin Conference B: 267
 Brazil (History) B: 583
 Buchanan, James B: 658; (The struggle over slavery) B: 660
 Civil War (The conflict over slavery) Ci: 616 *with map*

- Colonial life in America (The lower class)
Ci: 793 *with picture*; (Houses) Ci: 796-797
- Concentration camp (Nazi concentration camps) Ci: 927
- Cotton (American colonists) Ci: 1092-1093
- Cuba (History) Ci: 1175
- Family (Early Western families in America) F: 22-23
- Frémont, John Charles F: 511
- Gorée G: 274
- Henry the Navigator H: 191
- Immigration (The first wave) I: 81-82
- Indian, American (In Latin America) I: 178
- Jefferson, Thomas (Jefferson and Sally Hemings) J: 78; (Virginia lawmaker) J: 79-80
- Law (The influence of ancient Greece) L: 133; (Ancient Roman law) L: 133-134
- Palmares P: 110
- Pioneer life in America (Why the pioneers headed west) P: 476-477
- Plantation (Slave-labor plantations) P: 550
- Rome, Ancient (The people) R: 437, (Education) R: 437
- Serf S: 316
- Turner, Nat T: 517
- United States, History of the (The colonists) U: 154-155 *with picture*; ("A fire bell in the night") U: 165; (The irrepressible conflict) U: 172
- Reform**
- Abolition movement A: 12
- Douglass, Frederick D: 313
- Garrison, William Lloyd G: 45
- Mason, George (His constitutional views) M: 265-266
- Mauritius (History) M: 317
- Uncle Tom's Cabin* U: 20
- Underground railroad U: 21
- United States, History of the (The abolition movement) U: 171, (Reconstruction) U: 175
- Walker, David W: 14
- Slave trade**
- African Americans (Beginning of the slave trade) A: 136c *with pictures*
- Amistad Rebellion A: 433
- Drake, Sir Francis (Early life) D: 321
- Kongo K: 365
- Nigeria (The coming of the Europeans) N: 417
- Pacific Islands (Missionaries, traders, and settlers) P: 11-12
- São Tomé and Príncipe (History) S: 120
- United States, History of the *picture on* U: 174
- Slavey Indians** [American Indians]
Great Slave Lake G: 348
- Slavic countries** S: 504
- Alphabet (The Cyrillic alphabet) A: 383
- Slavs S: 505
- Slavic language**
- Russian language R: 557
- Russian literature (Religious literature) R: 558
- World, History of the (The Byzantine Empire) W: 434
- Slavonic Dances** [music by Dvořák]
Dvořák, Antonín D: 394
- Slavs** [people] S: 505
- Alphabet (The Cyrillic alphabet) A: 383
- Bulgaria (People) B: 689
- Croatia (History) Ci: 1148a
- Czech Republic (Early days) Ci: 1213
- Holocaust H: 296
- Macedonia (People) M: 12
- Russia (Ancestry) R: 532; (Early days) R: 547
- Ukraine (Ancestry) U: 6
- Union of Soviet Socialist Republics (People) U: 31
- Yugoslavia (People) Y: 577
- Slayton, Donald Kent** [American astronaut] S: 505
- Astronaut (Achievements in space) A: 829-830
- Space exploration *pictures on* So: 713, So: 720
- SLBMDs**
- Radar (In the military) R: 65
- SLE** [disease] *See* Systemic lupus erythematosus *in this index*
- Sled** S: 505
- Bobsledding B: 433 *with picture*
- Inuit (Transportation) I: 354c; *pictures on* I: 354d
- Luge L: 515
- Sled dog S: 505
- Snowmobiling S: 541 *with picture*
- Tobogganing T: 308
- Transportation (Prehistoric times) T: 385
- Yukon Territory *picture on* Y: 586
- Sled** [equipment]
Mine warfare *picture on* M: 565
- Sled dog** S: 505
- Sled Dog Derby** [Laconia]
New Hampshire *picture on* N: 217
- Sledge** [transportation]
Sled S: 505
- Transportation (Prehistoric times) T: 385; *picture on* T: 386
- Sledge hammer**
- Fire department (Fire trucks) F: 125-126 *with picture*
- Sleep** S: 506
- Dream D: 344
- Fibromyalgia F: 90
- Fish (How fish rest) F: 166
- Health (Rest and sleep) H: 125
- Hibernation H: 221
- Insomnia I: 303
- Narcolepsy N: 20
- Nightmare N: 421
- Sleeping sickness S: 507
- Sleepwalking S: 508
- Snoring S: 538
- Space exploration (Meeting basic needs in space) So: 703 *with picture*
- Sleep apnea** [disorder] S: 507
- Sleep movement** [biology]
Biological clock (Daily rhythms) B: 315
- Sleep paralysis**
Narcolepsy N: 20
- "Sleeper, The"** [poem by Poe]
Poe, Edgar Allan (Poetry and poetic theory) P: 589-590
- Sleeping bag**
Camping (Sleeping bags) C: 93
- Sleeping Bear Dunes National Lakeshore** [Michigan]
Michigan (Places to visit) M: 498
- Sleeping Beauty** [ballet]
Ballet *picture on* B: 44
- "Sleeping Beauty"** [story]
Grimm's Fairy Tales G: 394
- Sleeping car** [railroad]
Pullman, George Mortimer P: 897
- Railroad (Engineering improvements) R: 117-118
- Sleeping pill**
Barbiturate B: 107
- Sleeping sickness** [disease] S: 507
- Bruce, Sir David B: 647
- Laveran, Charles Louis Alphonse L: 129
- Trypanosome T: 475
- Tsetse fly T: 475
- Sleeplessness** *See* Insomnia *in this index*
- Sleepwalking** S: 508
- Sleet** [weather] S: 508
- Sleeve Pekingese** [dog]
Pekingese P: 231
- Sleigh** *See* Sled *in this index*
- Sleight of hand** [magic]
Magician (Sleight of hand) M: 51 *with picture*
- Sleipnir** [Norse mythology]
Horse (table: Famous horses in history and legend) H: 361
- Slemmer, Adam J.** [Union military leader]
Fort Pickens F: 415
- Slender loris** [animal]
Loris L: 455
- Slepian, Jen** [author]
Literature for children *picture on* L: 377
- Slide** [microscope]
Microtomy M: 520
- Slide** [photography]
Audio-visual materials (Filmstrips and slides) A: 882
- Photography (How color slides are made) P: 423 *with pictures*; (Color reversal film) P: 424
- Projection screen P: 816
- Slide-action rifle**
Rifle (Kinds of rifles) R: 338-339
- Slide Mountain** [New York]
Catskill Mountains C: 305
- New York (Mountains) N: 306
- Slide projector**
Projector P: 816 *with pictures*
- Slide trombone** [musical instrument] *See* Trombone *in this index*
- Slidell, John** [Confederate political leader] S: 508
- Lincoln, Abraham (Foreign relations) L: 322
- Mason, James Murray M: 266
- Mexican War (Events leading up to the war) M: 446
- Trent Affair T: 435
- Slider**
Baseball (Pitching) B: 127
- Sliding**
Baseball *picture on* B: 129
- Sliding filament theory**
Muscle (How muscles work) M: 935
- Sliding tackle**
Soccer (Tackling) So: 548
- Sliding vane pump**
Pump (Rotary pumps) P: 899 *with diagram*
- Slieve Donard** [mountain, Ireland]
Northern Ireland (Surface features) N: 523 *with map*
- Slime mold** [plant] S: 508
- Sling** [weapon] S: 508 *with picture*
- Indian, American *picture on* I: 175
- Sling club** [weapon]
Indian, American *picture on* I: 144
- Slingshot** [weapon]
Sling S: 508
- Slip** [botany]
Gardening (Caring for the garden) G: 38
- Slip** [clay]
Ceramics (Making ceramics) C: 360
- Pottery (Shaping the clay) P: 716-717
- Slip casting**
Ceramics (Making ceramics) C: 360
- Slipknot**
Knots, hitches, and splices *diagram on* K: 357
- Slipped disk** [disorder]
Back B: 17
- Spine So: 793
- Slipper**
Shoe *pictures on* S: 432
- Slipper bath** [bathtub]
Bath (History) B: 164-165
- Slipperwort** [plant] S: 508a *with picture*
- Slippery elm** [tree]
Elm (Kinds) E: 244-245
- Slippery Jack** [fungus]
Mushroom (Nonpoisonous mushrooms) M: 943-945 *with picture*
- Slipping**
Boxing *picture on* B: 529
- Slipstitch**
Sewing (Hand stitches) S: 332
- Sliver** [textiles]
Spinning (The mule) So: 794
- Cotton (Making cotton into cloth) Ci: 1091; *picture on* Ci: 1092
- Textile *picture on* T: 216
- Wool (Making yarn) W: 400 *with picture*
- Sloan, Alfred Pritchard, Jr.** [American businessman]
Automobile (Changes at the top) A: 966
- Sloan, John** [American artist] S: 508a
- Ashecan School A: 768 *with picture*
- Sloane, Sir Hans** [English biologist]
British Museum B: 632
- Sloat, John D.** [American military leader]
Mexican War (The occupation of New Mexico and California) M: 446
- Slobodkin, Louis** [American artist]
Caldecott Medal (table: 1944) C: 26
- Sloe** [shrub] S: 508a
- Slogen**
Advertising (Slogans) A: 76a
- Sloop** [boat]
Boating (Sailboats) B: 429; *picture on* B: 431
- Sailing (Catboats and sloops) S: 24 *with picture*
- Ship (Sailing ships in the 1900's) S: 411
- Slope mine**
Coal (Underground mining) Ci: 722 *with diagram*
- Mining (Underground mining methods) M: 576

Slope wind

Glider (Soaring) G: 229
Slot machine [gambling] S: 508a
Sloth [animal] S: 508a *with picture*
 Animal picture on A: 480
 Mammal picture on M: 117
Sloth bear [animal] S: 508a *with picture*
 Bear (Sloth bears) B: 186 *with picture*
Slouching Towards Bethlehem [book by
 Didion]
 Didion, Joan D: 195
Slovak [language]
 Slovakia (Ethnic groups and languages)
 S: 508c
Slovakia [country] S: 508b *with pictures and
 maps*
 Czech Republic Ci: 1209
 Czechoslovakia Ci: 1215
Slovaks [people]
 Czech Republic Ci: 1209
 Czechoslovakia Ci: 1215
 Slovakia S: 508b
Slovenes [people]
 Slovenia (People) S: 511
Slovenia [country, Europe] S: 510 *with pictures
 and map*
 Flag picture on F: 207
 Serbia (History) S: 314-315
 Yugoslavia Y: 576; (History) Y: 579; (Ethnic ten-
 sions) Y: 580
Slovenian [language]
 Italy (Language) I: 502
Slow cooker
 Cooking (Simmering) Ci: 1028
Slow loris [animal]
 Loris L: 455 *with picture*
Slow nova [astronomy]
 Nova N: 553
Slow-pitch softball
 Softball (Types of softball) So: 571
Slow virus
 Virus (Virus diseases in human beings) V: 426-
 427
Slow-wave sleep
 Sleep (What happens during sleep) S: 506;
 (The need for sleep) S: 507
Slowdown
 Labor movement (Handling labor disputes)
 L: 6
Slowworm [animal]
 Blindworm B: 403
Sludge
 Copper (Electrolytic refining) Ci: 1043
 Sewage (Primary treatment) S: 329;
 (Secondary treatment) S: 330
 Silver (Extracting and refining silver) S: 465
Sludge digestion tank
 Sewage (Secondary treatment) S: 330
Slug [animal] S: 512 *with picture*
 Mollusk (Gastropods) M: 695
Slug [measurement]
 Mass M: 268
Slug [printing]
 Linotype (How the linotype works) L: 338-339
with picture
Slum
 Colombia (Way of life) Ci: 779-781
 Housing H: 389 *with picture*
 Latin America (City life) L: 95-96 *with
 picture*
 Tenement T: 133
 Urban renewal (History) U: 220
Slurry
 Bituminous sands B: 385
 Coal (Shipping coal) Ci: 727
 Copper (Milling) Ci: 1042
 Pipeline (Solids pipelines) P: 491
Slurry explosive
 Dynamite (History) D: 397
Slye, Leonard Franklin [American actor] *See*
 Rogers, Roy *in this index*
Sm
 Samarium S: 78
Smack [slang]
 Heroin H: 213
Small, Albion W. [American sociologist]
 Chicago, University of (Research program)
 C: 438
Small, David [American artist]
 Caldecott Medal (table: 2001) C: 26
Small, William [American educator]
 Jefferson, Thomas (Education) J: 77
Small arms
 Ammunition (Small-arms ammunition) A: 435
with pictures

Firearm F: 132
Small Business Administration [U.S.] S: 512
Small-claims court S: 512
 Consumerism (The right to safety) Ci: 1018
Small combatant [ship]
 Navy (Small combatants) N: 78
 Warship (Small combatants) W: 41
Small corporation
 Business (Corporations) B: 725
Small Cowper Madonna, The [painting by
 Raphael]
 Renaissance picture on R: 234
Small craft advisory
 Boating (Buoys and other safety aids) B: 430
with picture
 Flag picture on F: 197
Small Crucifixion, The [painting by Grünewald]
 Grünewald, Matthias picture on G: 407
Small House at Allington, The [book by
 Trollope]
 Trollope, Anthony T: 449
Small intestine [anatomy]
 Intestine (The small intestine) I: 352 *with dia-
 gram*
 Blood (Transporting nutrients and wastes)
 B: 408 *with diagram*
 Digestive system (In the small intestine)
 D: 203 *with diagrams*
 Frog picture on F: 537
 Gland (table) G: 209
 Human body (The small intestine and large
 intestine) H: 420 *with picture; diagram on
 H: 422*
Small Magellanic Cloud [astronomy]
 Magellanic Clouds M: 48
Small-scale map
 Map (Scale) M: 178
Smaller festival [Islam] *See* 'Id al-Fitr *in this
 index*
Smalley, Richard Errett [American chemist]
 Carbon (Fullerenes) C: 206
 Nobel Prizes (Chemistry: 1996) N: 443
Smallholder Party [Hungarian history]
 Hungary (History) H: 445-447
Smallmouth bass
 Bass (Black bass) B: 156 *with picture*
 Fish picture on F: 158
Smallmouth buffalo fish
 Fish picture on F: 159
Smallpox [disease] S: 513
 Colonial life in America (Health and medicine)
 Ci: 809
 Disease D: 225
 Exploration (Spain's conquests in the New
 World) E: 445; (The French and English in
 North America) E: 446
 Jenner, Edward J: 91
 Medicine (The development of immunology)
 M: 374
Smalls, Robert [American political leader]
 S: 513
 African Americans (The Civil War) A: 136g-
 136h
Smalltooth sawfish
 Fish picture on F: 152
Smallwood, Joseph R. [Canadian political
 leader]
 Newfoundland and Labrador (Confederation
 with Canada) N: 377
Smart bomb
 Bomb (Guided bombs) B: 450 *with diagram*
 Nuclear weapon (Nuclear weapons in military
 planning) N: 599-600
Smart card [electronic device] S: 513
 Bank (Electronic banking) B: 89-90
Smart materials [engineering]
 Materials (Smart materials) M: 301
Smart Set [magazine]
 Mencken, H. L. M: 397
Smartweed [plant] S: 513
Smear
 Microtomy M: 520
Smeaton, John [British engineer]
 Cement and concrete (History) C: 345
Smell [sense] S: 514 *with diagram*
 Animal (Adaptations for sensing the environ-
 ment) A: 492-493 *with picture*
 Dog (Senses) D: 265
 Fish (Smell and taste) F: 164
 Insect (Smell) I: 291
 Mammal (Senses) M: 120
 Nose N: 548
 Reptile (Sense organs) R: 251-252
 Senses S: 301
 Taste T: 50

Smelling salts [medication] S: 514
Smelt [fish] S: 514 *with picture*
Smelter [industry]
 Indian, American picture on I: 140
Smelting [industrial process] S: 515
 Copper (Smelting) Ci: 1043; (How copper
 metal is produced) Ci: 1041 *with dia-
 grams*
 Gold diagram on G: 250; (Smelting) G: 253
 Hittites (Way of life) H: 269
 Industrial Revolution (Early ironmaking) I: 249
 Metallurgy (Smelting) M: 426
 Slag S: 499
Smetana, Bedřich [Czech composer] S: 515
 Czech Republic (The arts) Ci: 1211
Smetona, Antanas [Lithuanian political leader]
 Lithuania (History) L: 389-390
Smidt, Eric [Danish government official]
 Virgin Islands (Early settlement) V: 396
Smilax [plant] S: 515
Smirke, Sir Robert [British architect]
 Architecture (The Greek Revival) A: 625-626
Smith, Abigail [wife of John Adams] *See*
 Adams, Abigail Smith *in this index*
Smith, Abigail Adams [daughter of]
 Adams, John (Adams' family) A: 35
Smith, Adam [Scottish economist] S: 515
 Capital C: 192
 Capitalism (Capitalism in its ideal form) C: 194;
 (The development of capitalism) C: 195
 Economics (Capitalism) E: 59; (The classical
 economists) E: 65
 Laissez faire L: 31
 Liberalism (Early liberalism) L: 228
 Marx, Karl (Early development) M: 237
Smith, Alfred Emanuel [American political
 leader] S: 516
 Hoover, Herbert Clark (Election of 1928)
 H: 329
 Liberty League L: 233
 New York (table) N: 313
 Roosevelt, Franklin Delano (Return to politics)
 R: 455
Smith, Benjamin [American political leader]
 North Carolina (table) N: 490
Smith, Bessie [American singer] S: 516
 Blues B: 424
Smith, Caleb B. [American government official]
 Emancipation Proclamation picture on E: 254
 Lincoln, Abraham (table) L: 323
Smith, Charles E. [American government offi-
 cial]
 McKinley, William (table) M: 342
Smith, Charles Kingsford [American aviator]
 Airplane (Notable airplane flights) A: 236
Smith, Cyrus R. [American government official]
 Commerce, Department of (table) Ci: 871
 Johnson, Lyndon Baines (table) J: 151
Smith, David [American sculptor] S: 516
 Sculpture (Varieties of abstraction) S: 258 *with
 picture*
Smith, Dean [American basketball coach] S: 516
Smith, Donald Alexander [Canadian business-
 man]
 Strathcona and Mount Royal, Baron of
 So: 920
Smith, Edmund Kirby [Confederate general]
 S: 516
Smith, Edward J. [British captain]
 Titanic T: 300
Smith, Elmo [American political leader]
 Oregon (table) O: 845
Smith, Emmitt [American football player] S: 516
Smith, Francis [British military leader]
 Concord, Battle of Ci: 929
 Revere, Paul (Paul Revere's ride) R: 267
Smith, Francis Pettit [British inventor]
 Ship (Development of the ship propeller)
 S: 412
Smith, George William [American political
 leader]
 Virginia (table) V: 417
Smith, Hamilton E. [American inventor]
 Washing machine W: 45
Smith, Hamilton Othanel [American physiolo-
 gist]
 Nobel Prizes (Physiology or medicine: 1978)
 N: 445
Smith, Hilton [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Smith, Hoke [American political leader]
 Cleveland, Grover (table) Ci: 672
Smith, Holland McTyre [American general]
 Marine Corps, United States (The 1900's)
 M: 209

Smith, Hyrum [American religious leader]
Mormons (Mormons in the Middle West)
M: 808-809
Smith, Joseph (Life at Nauvoo) S: 518
Smith, Ian Douglas [Rhodesian political leader]
Zimbabwe (History) Z: 597
Smith, James [American religious leader]
Illinois (French and British control) I: 72
Smith, James [American patriot] S: 516
Smith, James, Jr. [American political leader]
Wilson, Woodrow (Governor of New Jersey)
W: 321
Smith, Jean Kennedy [sister of John F.
Kennedy]
Kennedy, John Fitzgerald (Boyhood) K: 260-
261
Kennedy, Joseph Patrick (His family) K: 269
Smith, Jedediah Strong [American explorer]
S: 516
California (American settlement) C: 60
Nevada (Exploration) N: 173
Smith, Jesse W. [American public figure]
Harding, Warren Gamaliel (Government scan-
dals) H: 58
Smith, Jessie Willcox [American artist]
Book Week B: 470
Smith, John [English colonial leader] S: 517
American literature (Virginia) A: 414
Jamestown J: 28
Map (Mapping the Americas) M: 184
Maryland (Exploration and settlement) M: 256
Pocahontas P: 588
Powhatan P: 728
United States, History of the (Virginia and
Maryland) U: 152-153
Virginia (The Jamestown settlement) V: 418
Washington, D.C. (Early days) W: 85
Smith, John Cotton [American political leader]
Connecticut (table) Ct: 967
Smith, John Stafford [British musician]
National anthem N: 28
"Star-Spangled Banner" So: 853
Smith, Joseph [1805-1844, American religious
leader] S: 517 *with portrait*
Illinois (Places to visit) I: 62
Mormons M: 806 *with picture*; (Revelations)
M: 808; (Mormons in the Middle West)
M: 808-809
Utah (The Mormons) U: 246
Young, Brigham Y: 571
Smith, Maggie [British actress]
Motion picture (Best performance by an
actress: 1969) M: 862; (Best performance
by an actress in a supporting role: 1978)
M: 863
Smith, Mamie [American singer]
Jazz (Early jazz) J: 70
Smith, Margaret [American tennis player] See
Court, Margaret Smith *in this index*
Smith, Margaret Chase [American political
leader] S: 518
Maine (The mid-1900's) M: 91
Smith, Margaret Mackall [wife of Zachary
Taylor] See Taylor, Margaret Smith *in this
index*
Smith, Michael [Canadian chemist]
Nobel Prizes (Chemistry: 1993) N: 443
Smith, Michael J. [American astronaut]
Space exploration (The Challenger disaster)
So: 725
Smith, Preston [American political leader]
Texas (table) T: 203
Smith, Robert [American government official]
Jefferson, Thomas (table) J: 83
Madison, James (table) M: 35
Smith, Robert Burns [American political leader]
Montana (table) M: 757
Smith, Rosalynn [wife of Jimmy Carter] See
Carter, Rosalynn Smith *in this index*
Smith, Samuel E. [American political leader]
Maine (table) M: 87
Smith, Samuel Francis [American religious
leader]
America A: 407
Smith, Tom [American government official]
Western frontier life in America (Law enforce-
ment) W: 239
Smith, Tommie [American runner]
Olympic Games (The 1968 games) O: 752;
picture on O: 754
Smith, Tony [American sculptor]
Sculpture (Varieties of abstraction) S: 258 *with
picture*
Smith, Walker, Jr. [American boxer]
Robinson, Sugar Ray R: 369

Smith, William [American political leader]
Virginia (table) V: 417
Smith, William [British geologist]
Geology (Experimental geology) G: 99
Smith, William E. [American political leader]
Wisconsin (table) W: 365
Smith, William French [American government
official]
Justice, Department of (table) J: 203
Reagan, Ronald Wilson (table) R: 169
Smith, William Stephens [American govern-
ment official]
Adams, John (Adams' family) A: 35
Smith Act [1940] S: 518
Freedom of speech (In the United States)
F: 506-507
Smith and Wesson [gun]
Gun control (Approaches to gun control)
G: 440-441
Handgun (Types of handguns) H: 43
Smith College S: 518
Smith-Hughes Act [1917]
Agricultural education (History) A: 145
Education (Development of U.S. education)
E: 102-104
FFA (History) F: 86
Smith-Lever Act [1914]
Agricultural education (History) A: 145
4-H (History) F: 436
**Smith Robertson Museum and Cultural
Center** [Jackson]
Mississippi (Places to visit) M: 632
Smithson, James [British chemist] S: 518
Smithsonian Institution S: 519
Smithsonian American Art Museum
[Washington, D.C.] S: 518
Smithsonian Astrophysical Observatory
[Cambridge]
Smithsonian Institution (Other facilities) S: 519
Smithsonian Institution [Washington, D.C.]
S: 519
Library (United States government libraries)
L: 248; (Libraries in the United States)
L: 261
National Air and Space Museum N: 28
National Museum of African Art N: 40
National Museum of American History N: 41
National Museum of Natural History N: 41
Smithson, James S: 518
Smithsonian American Art Museum S: 518
Washington, D.C. (Smithsonian museums)
W: 71; *map on* W: 76
Smithsonite [mineral]
Smithson, James S: 519
Smog [pollution] S: 519
Air pollution (Forms of transportation) A: 197
with picture; (Health) A: 198
Environmental pollution (Air pollution) E: 331
Ozone O: 894
Smoke S: 520
Fire (Gases) F: 121-122
Soot S: 595
Smoke alarm S: 520
Fire department (Fire prevention and fire safe-
ty) F: 124-125
Safety (Safety from fire) S: 11 *with picture*
Smoke coat
Cat (Coat) C: 287 *with picture*
Smoke detector [device] See Smoke alarm *in
this index*
Smoke-filled room [politics]
Harding, Warren Gamaliel (The smoke-filled
room) H: 57
Smoke generator
Ham (Curing and smoking) H: 28
Smoke jumper [fireman]
Forestry (Fire and forests) F: 407
Smoke signal
Indian, American (Other communication) I: 151
Smoked food
Bacon B: 18
Fishing industry (Methods of processing)
F: 186
Food preservation (Curing) F: 341
Ham (Curing and smoking) H: 28
Hickory H: 224
Meat packing (Curing and smoking) M: 351
Smokehouse
Food preservation (Curing) F: 341
Ham (Curing and smoking) H: 28
Smokeless powder
Gunpowder (Kinds of gunpowder) G: 441
Smokestack
Greater Sudbury G: 350
Ship (The chief parts of a ship) S: 424-425

Smokey Bear Historical State Park [Capitan,
N.M.]
New Mexico (Interesting facts) N: 257
Smoking S: 520
Bronchitis B: 636
Cancer (Genes damaged by substances in the
environment) C: 170; (Avoiding carcino-
gens) C: 171
Cigar Ci: 552
Cigarette Ci: 553
Disease (Environmental and occupational dis-
eases) D: 230
Drug abuse (Tobacco) D: 361
Health (Health hazards) H: 126
Heart (Coronary artery disease) H: 137;
(Progress in treatment and prevention)
H: 145-146
Lung cancer L: 525
Pipe P: 489
Tobacco T: 305
Smoky Mountains, Great See Great Smoky
Mountains *in this index*
Smollett, Tobias George [British author] S: 521
English literature (The rise of the novel)
E: 318-319
Novel (The first English novelists) N: 572
Smoot-Hawley Tariff Act [1930]
Great Depression (Economic breakdown)
G: 340
Hoover, Herbert Clark (Champion of prosperi-
ty) H: 329
Smooth bore [gun]
Artillery (Parts of a gun) A: 762
Rifle (History) R: 339
Smooth brome [plant]
Grass *picture on* G: 325
Smooth cayenne [fruit]
Pineapple (The pineapple plant) P: 472
Smooth cordgrass [plant]
Spartina So: 767 *with picture*
Smooth fox terrier [dog] S: 521
Dog *picture on* D: 273
Smooth muscle [anatomy]
Muscle (Smooth muscles) M: 934; *diagram on*
M: 933
Allergy (How an allergy develops) A: 373
Human body (Smooth muscles) H: 419
Smörgåsbord [food]
Food (Customs) F: 332-333
Sweden (Food and drink) So: 1024
Smørrebrød [food]
Denmark (Food and drink) D: 135
Mouse Opportunity School [Des Moines]
Iowa (Schools) I: 378
Smuggler's Notch
Vermont (Places to visit) V: 326
Smuggling [crime] S: 521
Coast Guard, United States (Maritime security)
Ci: 735; (History) Ci: 737
Port of entry P: 681
Prohibition (Life during prohibition) P: 815
Right of search R: 340
Smut [fungus] S: 522
Fungi *picture on* F: 559
Wheat (Care during growth) W: 271
Smuts, Jan Christiaan [South African general]
S: 522
South Africa (The Union of South Africa)
So: 618-619
United Nations (The preamble to the Charter
of the United Nations) U: 78
Smyrna See Izmir *in this index*
Smyrna fig [fruit]
Fig F: 96
Smyslov, Vassily [Russian chess player]
Chess (World chess champions) C: 414
Smyth, Alexander [American general]
War of 1812 (Queenston Heights) W: 33
Smyth, Coke [Canadian painter]
Indian, American *picture on* I: 149
Smyth, John [English religious leader]
Baptists (Early history) B: 101
Protestantism (The free church movements
[the 1500's and 1600's]) P: 835
Smyth sewing [printing]
Bookbinding (Forming a book) B: 470 *with pic-
tures*
Smytha, William [Canadian political leader]
British Columbia (table) B: 627
Sn [symbol]
Tin T: 293
Snaffle bit [riding equipment]
Horse (The bridle) H: 352 *with picture*
Snaffle bridle [riding equipment]
Horse (The bridle) H: 352

Snail [animal] **S**: 522 *with pictures*
 Animal pictures on **A**: 501, **A**: 507
 Mollusk (Gastropods) **M**: 695
 Shell (Gastropods) **S**: 385 *with diagram*; *pictures* on **S**: 384, **S**: 386

Snail darter [fish]
 Conservation (Water conservation) **Ci**: 977-978
 Darter **D**: 38

Snail kite [bird]
 Kite **K**: 338 *with picture*

Snake [instrument]
 Mine warfare (Detecting land mines) **M**: 564

Snake [reptile] **S**: 524 *with pictures*
 Animal pictures on **A**: 482, **A**: 491, **A**: 494
 Herpetology **H**: 214
 Molting *picture* on **M**: 697
 Reptile (Lizards, amphisbaenians, and snakes) **R**: 250
 Teeth (Teeth of animals) **T**: 86 *with picture*
 Zoo (Interesting facts about zoo animals) **Z**: 605
See also the list of Related Articles in the Snake article

Snake [tool]
 Plumbing (The drainage system) **P**: 578-579

Snake charming **S**: 536
 Cobra **Ci**: 742

Snake dance [custom] **S**: 536
 Indian, American (Ceremonies) **I**: 148

Snake Indians *See* Shoshone Indians *in this index*

Snake Range [mountains]
 Nevada (Land regions) **N**: 166

Snake River [U.S.] **S**: 536
 Idaho (Places to visit) **I**: 34 *with picture*;
 (Rivers, waterfalls, springs, and lakes) **I**: 38 *with picture*
 Utah (Rivers and lakes) **U**: 242
 Wyoming (Rivers and lakes) **W**: 528

Snake River Canyon [Idaho]
 Spring **So**: 806

Snake River Plains [region, Idaho]
 Snake River **S**: 536

Snake Society [Hopi Indians]
 Snake dance **S**: 536

Snakebird [bird]
 Anhinga **A**: 467
 Wryneck **W**: 513 *with picture*

Snakebite **S**: 536
 First aid (Snakebite) **F**: 141
 Snake (Fangs and venom glands) **S**: 528-529
 Snakeroot **S**: 537

Snakeroot [plant] **S**: 537 *with picture*

Snap bean [plant]
 Bean (Kinds of beans) **B**: 181

Snapdragon [plant] **S**: 537 *with picture*
 Flower **F**: 300 *with picture*; *picture* on **F**: 276

Snaphance [gun]
 Handgun (Early handguns) **H**: 45

Snapper [fish] **S**: 537 *with picture*
 Fish *picture* on **F**: 155

Snapping turtle
 Turtle (Snapping turtles) **T**: 523 *with picture*
 Animal *picture* on **A**: 479

Snapweed [plant]
 Impatiens **I**: 90

Snares [trap]
 Trapping *picture* on **T**: 404

Snares drum
 Drum **D**: 367

Snark [fictional animal]
 Carroll, Lewis (Other works) **C**: 249

Snatch
 Weightlifting **W**: 183

Snath
 Scythe **S**: 261

SNCC *See* Student Nonviolent Coordinating Committee *in this index*

Snead, Sam [American golfer] **S**: 537 *with portrait*
 Golf (British Open) **G**: 264; *picture* on **G**: 266

Sneak preview
 Motion picture (Distribution) **M**: 860

Sneezing **S**: 538
 Disease (Spread of infectious diseases) **D**: 228 *with picture*

Snefru [king of ancient Egypt]
 Khufu **K**: 309

Snell, Earl [American political leader]
 Oregon (table) **O**: 845

Snell, George Davis [American immunologist]
 Nobel Prizes (Physiology or medicine: 1980) **N**: 445

Snell Lock
 Saint Lawrence Seaway *picture* on **S**: 44

Sneva, Tom [American race driver]
 Automobile racing (table: Indianapolis 500 winners) **A**: 980

Snider, Duke [American baseball player]
 Baseball (table: Hall of Fame) **B**: 135

Snipe [bird] **S**: 538 *with picture*

Snipe [boat]
 Sailing (Catboats and sloops) **S**: 24

Snipe fly [insect]
 Deer fly **D**: 86

Snively, Cornelia Ellis [wife of]
 Wallace, George Corley **W**: 16

Sno [Norse mythology]
 Jack Frost **J**: 2

Snooker [game]
 Billiards (Snooker) **B**: 307 *with picture*

Snoopy [cartoon character]
 Schulz, Charles Monroe **S**: 187 *with picture*

Snoring **S**: 538

Snorkel [breathing device]
 Diving, Underwater (Ambient diving) **D**: 245
 Skin diving (Kinds of skin diving) **S**: 493 *with pictures*
 Submarine (The power plant) **So**: 941

Snorri Sturluson [Icelandic author] **S**: 538
 Edda **E**: 74
 Iceland (Early days) **I**: 23
 Saga **S**: 17

Snorting [slang]
 Heroin **H**: 213

Snout
 Hog (Snout) **H**: 286

Snout beetle [insect]
 Beetle (Weevils) **B**: 217
 Boll weevil **B**: 448
 Grain weevil **G**: 302

Snout butterfly
 Butterfly (Snout butterflies) **B**: 737-738 *with pictures*

Snow **S**: 539 *with pictures*
 Climate (Kinds of climates) **Ci**: 676a-676c
 Cloud (How clouds form) **Ci**: 711
 Rainmaking (Rainmaking methods) **R**: 129
 Snow blindness **S**: 540
 Snow line **S**: 540
 Snowshoe **S**: 542
 Weather (Synoptic-scale systems) **W**: 159-160

Snow, C. P. [British author] **S**: 539

Snow, John [English physician]
 Epidemic **E**: 343
 Map (Development of thematic and inventory mapping) **M**: 185

Snow, Wilbert [American political leader]
 Connecticut (table) **Ci**: 967

Snow blindness [disorder] **S**: 540
 Blindness **B**: 401

"Snow-Bound" [poem by Whittier]
 Whittier, John Greenleaf **W**: 296

Snow bunting [bird] **S**: 540 *with picture*

Snow crystal
 Snow **S**: 539 *with pictures*

Snow fence
 Road (Clearing ice and snow) **R**: 360

Snow goose [bird]
 Goose (Kinds of geese) **G**: 270 *with picture*

Snow knife [tool]
 Inuit (Shelter) **I**: 354c

Snow leopard [wild cat] **S**: 540 *with picture*
 Animal pictures on **A**: 472, **A**: 475

Snow line [geography] **S**: 540

Snow removal
 Road (Clearing ice and snow) **R**: 360

Snow snake [game]
 Indian, American (Recreation) **I**: 142-143 *with picture*

Snow tire
 Tire (Tire tread patterns) **T**: 298

"Snow-White" [story]
 Grimm's Fairy Tales **G**: 394

Snow White and the Seven Dwarfs [film]
 United States *picture* on **U**: 118

Snowball [plant] **S**: 540 *with picture*

Snowball Earth [theory]
 Earth (The ice ages) **E**: 24

Snowboard
 Snowboarding **S**: 541 *with picture*

Snowboarding [sport] **S**: 541 *with picture*
 Olympic Games (Winter Olympic Games) **O**: 746d-746e

Snowdon [mountain, Wales]
 Wales (Surface features) **W**: 11 *with map*; *picture* on **W**: 8

Snowdrop [plant] **S**: 541 *with picture*

Snowflake [bird] *See* Snow bunting *in this index*

Snowflake [weather]

Heat (Disorder) **H**: 150 *with diagram*

Snow **S**: 539 *with pictures*

Snowhouse [dwelling]
 Inuit *picture* on **I**: 354; (Shelter) **I**: 354c *with picture*

Snowmaking machine
 Skiing (Ski area facilities) **S**: 486

Snowmobile [vehicle]
 Royal Canadian Mounted Police *picture* on **R**: 496
 Safety (In winter sports) **S**: 12
 Snowmobiling **S**: 541 *with picture*
 Transportation (Land transportation) **T**: 383-384 *with picture*

Snowmobiling **S**: 541 *with picture*

Snowplow [machine]
 Road (Clearing ice and snow) **R**: 360

Snowplow [skiing]
 Skiing (Alpine skiing) **S**: 482; *diagram* on **S**: 484

Snowshoe **S**: 542 *with picture*
 Indian, American pictures on **I**: 138, **I**: 141, **I**: 156

Snowshoe hare [animal] **S**: 542 *with picture*

Snowstorm
 Blizzard **B**: 404
 Snow (Amounts of snowfall) **S**: 539
 Weather *picture* on **W**: 167

Snowstorm: Steamboat off a Harbour's Mouth [painting by Turner]
 Painting (Romanticism) **P**: 68 *with picture*

Snowy Day, The [book by Keats]
 Literature for children *picture* on **L**: 369

Snowy egret [bird]
 Egret (Kinds) **E**: 119 *with picture*

Snowy Mountains Schema [dams]
 Australia (Rivers) **A**: 910-911, *picture* on **A**: 919
 Murray River **M**: 932

Snowy owl [bird]
 Owl (Important owls) **O**: 884 *with picture*
 Animal *picture* on **A**: 484

Snowy tree cricket
 Insect *picture* on **I**: 280

Snuff [tobacco] **S**: 542
 Tobacco **T**: 305

Snyder, Diane
 Literature for children *picture* on **L**: 378

Snyder, Gary [American poet]
 American literature (Poetry) **A**: 423

Snyder, John W. [American government official]
 Truman, Harry S. (table) **T**: 469

So Big [book by Ferber]
 Ferber, Edna **F**: 72

Soak-stain technique [painting]
 Frankenthaler, Helen **F**: 484

Soaking [sports]
 Baseball (Rounders) **B**: 132

Soap
 Detergent and soap **D**: 163 *with pictures*
 Bath (Bathing for cleanliness) **B**: 163
 Perfume **P**: 286

Soap Box Derby [race] **So**: 543

Soap curd [chemical]
 Detergent and soap **D**: 164

Soap flakes
 Detergent and soap (Granules and flakes) **D**: 164

Soap granules
 Detergent and soap (Granules and flakes) **D**: 164

Soap opera **So**: 543

Soap plant [plant] **So**: 543

Soapberry [tree] **So**: 543 *with picture*
 Tree *pictures* on **T**: 423

Soapstone [rock] **So**: 543
 Inuit (Canada) **I**: 354i *with picture*

Soapstone carving [art]
 Nunavut (Economy) **N**: 609-610

Soapweed [plant]
 Flower *picture* on **F**: 291
 Yucca **Y**: 575

Soaring Society of America
 Glider **G**: 228; (Gliding today) **G**: 231

Sobhuza II [king of Swaziland]
 Swaziland (History) **So**: 1019

Sobieski, John [king of Poland] *See* John III Sobieski *in this index*

Sobrero, Ascanio [Italian chemist]
 Nitroglycerin **N**: 426

Soccer [sport] **So**: 544 *with pictures*
 Brazil (Recreation) **B**: 575
 London (Recreation) **L**: 434
 Northern Ireland (Recreation) **N**: 522
 Pelé **P**: 231

- Scotland (Recreation) S: 214
 South Africa (Recreation) So: 612 *with picture*
 United Kingdom *picture on* U: 58
 World Cup W: 450
- Sociable weaver** [bird]
 Weaver W: 173
- Social and Liberal Democratic Party** [political party]
 Liberal Democrats L: 226
- Social anthropology**
 Anthropology (Social anthropology) A: 547
- Social capital**
 Developing country D: 173
- Social change** [sociology] So: 550
 Conservatism (History) Ci: 991-992
 Cultural lag Ci: 1185
 Culture (How cultures change) Ci: 1189
 Marriage (Changing attitudes about marriage) M: 222
 Rock music (Rock and society) R: 380
 Sociology (Social change) So: 565
- Social class** [sociology] So: 550
 City (The people) Ci: 578-580
 Colonial life in America (The structure of colonial society) Ci: 793
 Communism (The ideas of Marx) Ci: 890
 Conservatism (Political conservatism) Ci: 991
 Egypt, Ancient (The people) E: 136
 Europe (Social class) E: 389
 Fashion (The origins of fashion) F: 50
 French Revolution (Background) F: 524-525
 Gay Nineties (Life during the Gay Nineties) G: 72
 Latin America (Ancestry) L: 94
 Middle class M: 529
 Peru (Ways of life) P: 309
 Union of Soviet Socialist Republics (Privileged classes) U: 32
 World War I (Social consequences) W: 465
- Social Contract, The** [book by Rousseau]
 Democracy (French contributions to democracy) D: 123
- Social Credit Party** [political party]
 Diefenbaker, John George D: 196
 Political party (Other parties) P: 636-637
- Social dancing**
 Dance (Why people dance) D: 25-26; (Dances to take part in) D: 26 *with pictures*
- Social Darwinism** [philosophy] So: 551
 Darwin, Charles Robert (The influence of Darwin's ideas) D: 40
- Social Democratic Party** [political party]
 Debs, Eugene Victor D: 65
 Denmark (Politics) D: 133
 Japan (Political changes) J: 59
 Luxemburg, Rosa L: 532
 Schröder, Gerhard S: 186
 Sweden (Politics) So: 1023, (Political changes) So: 1034; (Recent developments) So: 1035
- Social Democratic Party of Romania** [political party]
 Romania (Protests and political change) R: 425-426
- Social forestry**
 Forestry [Community forestry] F: 406
- Social fraternal society**
 Fraternal organization F: 495
- Social freedom**
 Freedom (Kinds of freedom) F: 501; (Limits on social freedom) F: 502
- Social geography**
 Geography (Human geography) G: 94
- Social group** [zoology]
 See also *Group in this index*
 Mammal (Group life) M: 125 *with picture*
- Social history**
 History (Approaches to history) H: 261
- Social insects**
 Animal (Group living) A: 502
 Ant (Life in an ant colony) A: 523
 Bee B: 200 *with pictures*; (Social bees) B: 205
 Beetle B: 215
 Insect (Family life) I: 294-295
 Termite (Life and habits) T: 173
 Wasp W: 110
 Wilson, Edward Osborne W: 316
- Social insurance** [government program]
 See also *Social security in this index*
 Social security So: 553
 Insurance (Social insurance) I: 314
 Poverty (Social welfare programs) P: 725
 Welfare W: 190
- Social interest** [psychology]
 Adler, Alfred A: 58
- Social learning**
 Aggression A: 141
- Social legislation**
 Child abuse C: 455
 Child labor (Early child labor laws) C: 455
 Women's movements (Contemporary women's movements) W: 386-387
- Social parent**
 Parent P: 156
- Social protest**
 Academic freedom (The 1900's) A: 20
 Civil disobedience Ci: 607
 Indian, American (In the United States) I: 179
 Painting (Social expression) P: 34; (Symbolism) P: 76
 Riot R: 347
- Social psychology** So: 552
 Psychology (Major fields of psychology) P: 848
 Sociology (Social behavior) So: 564
- Social realists** [art history]
 Painting (Painting outside France) P: 72
- Social rights**
 Human rights (Types of human rights) H: 428
- Social role** [sociology] So: 552
 Linton, Ralph L: 339
 Sex discrimination (Changes in attitudes) S: 335
 Sexuality (In childhood) S: 338
 Socialization So: 562
 Women's movements (Women's status through the ages) W: 383
- Social science** So: 552
 Careers (Life, physical, and social sciences) C: 225 *with picture*
 Culture Ci: 1186
 Liberal arts L: 226
 Science (The social sciences) S: 194
 Social studies So: 557
 See also *the list of Related Articles in the Social Science article*
- Social security** [government program] So: 553 *with pictures*
 See also *Social insurance in this index*
 Welfare W: 190
 Welfare state W: 192
- Social Security** [U.S.]
 Social security So: 553 *with pictures*
 Baby boom generation (Effects of the baby boom) B: 11
 Old age (Finances) O: 739
 Poverty (Social welfare programs) P: 725
 Taxation (Income taxes) T: 52-53
- Social Security Act** [1935]
 Roosevelt, Franklin Delano (The New Deal) R: 457-458
 Social security (Social security in the United States and Canada) So: 556
 Unemployment insurance U: 24
- Social Security Administration** [U.S.] So: 557
 Health and Human Services, Department of (History) H: 128
 Social security (OASDHI) So: 553
- Social services worker**
 Careers (Community and social services) C: 221
- Social settlement** See *Settlement house in this index*
- Social stomach** [entomology]
 Ant (Internal organs) A: 522
- Social stratification**
 Social class So: 550
- Social studies** So: 557
 See also *the list of Related Articles in the Social Studies article*
- Social welfare**
 Foundations (Human services) F: 431
 Denmark (Social welfare) D: 137
 Norway (Social welfare) N: 541
 Sweden (Social welfare) So: 1026; (Period of reform) So: 1034
 Welfare W: 190
- Social work** [career] So: 557 *with picture*
 Child welfare C: 456
 Hospital (Nonmedical services) H: 373
 Medicine (Other careers in medicine) M: 371
 Settlement house S: 324
 Travelers Aid Societies, National Organization of T: 405
- Social Workers, National Association of** So: 559
- Socialism** [economics] So: 560 *with picture*
 Capitalism C: 193
 Collectivism Ci: 775
 Communism Ci: 889
 Debs, Eugene Victor D: 65
 Fabian Society F: 2
 Government (Pluralism) G: 285
 Marx, Karl M: 236; (Marx's ideas) M: 237; (Marx's influence) M: 238
 May Day M: 322
 Nationalization N: 63
 Political science (Democracy and socialism) P: 639
 Radicalism (In Europe) R: 82
 World, History of the (The Industrial Revolution) W: 444-445
 See also *the list of Related articles in the Socialism article*
- Socialist Labor Party** [political party]
 Labour Party (In other countries) L: 16-17
- Socialist Party** [France]
 France (Politics) F: 455; (Socialists win power) F: 478
- Socialist Party** [Spain]
 Spain (Political parties) So: 733
- Socialist Party** [U.S.]
 Debs, Eugene Victor D: 65
 Milwaukee M: 558
 Socialism (Moderate socialism) So: 561
- Socialist Party of Serbia** [political party]
 Serbia (History) S: 314-315
- Socialist realism** [Soviet history]
 Gorki, Maxim G: 277
 Russian literature (The period of socialist realism) R: 564
 Union of Soviet Socialist Republics (The arts) U: 33
- Socialist revolutionaries** [Russian history]
 Russia (Nicholas II) R: 551-552
- Socialist Unity Party** [political party]
 Germany (East Germany) G: 170
- Socialization** So: 562
 Parent (The role of parents) P: 156
 Sociology (Social behavior) So: 564
- Socialized medicine**
 Health insurance, National H: 129
- Société Radio-Canada** [communications]
 Canadian Broadcasting Corporation C: 156
- Society**
 Culture Ci: 1186
 Durkheim, Émile D: 389
 Ethnocentrism E: 372
 Law L: 130
 Mythology M: 973; (Mythology and society) M: 988
 Philosophy (The importance of philosophy) P: 383
 Social change So: 550
 Social psychology So: 552
 Sociology So: 564
 Technology (Sharing the benefits of technology) T: 77-78
- Society for Jewish Culture and Science** [organization]
 Zunz, Leopold Z: 613
- Society for the Advancement of Education** So: 563
- Society for the Preservation and Encouragement of Barber Shop Quartet Singing in America**
 Barbershop quartet singing B: 107
- Society for the Prevention of Cruelty to Animals** So: 563 *with picture*
- Society for the Propagation of the Faith**
 Sheen, Fulton John S: 379
- Society Hill** [district, Philadelphia]
 Philadelphia (Residential districts) P: 360 *with picture*
- Society Islands** [Pacific] So: 563
- Society of Friends** See *Quakers in this index*
- Society of Jesus** See *Jesuits in this index*
- Society of Missionary Priests of Saint Paul the Apostle** See *Paulists in this index*
- Society of Tammany** See *Tammany, Society of in this index*
- Society of the Cincinnati** See *Cincinnati, Society of the in this index*
- Society of Woman Engineers**
 Engineering (table) E: 289
- Socinus, Faustus** [Polish religious leader]
 Unitarians (History) U: 42
- Sociobiology** So: 563
 Biology (table) B: 317
 Wilson, Edward Osborne W: 316
- Sociocultural perspective**
 Psychology (Modern psychology) P: 850
- Sociodrama** [psychology]
 Role playing R: 402
- Sociological jurisprudence** [law]
 Pound, Roscoe P: 722

Sociology So: 564 *with pictures*

Careers (Life, physical, and social sciences)
C: 225-226

Caste C: 279

Collective behavior Ci: 774

Comte, Auguste Ci: 926

Criminology Ci: 1145

Psychology (Psychology and other sciences)
P: 847

Races, Human (The social significance of race)
R: 59

Science (The social sciences) S: 194

Stereotyping So: 893

Sockeye salmon

Endangered species *picture on E: 271*

Salmon (Kinds of salmon) S: 70; *picture on S: 69*

Socks

Stockings So: 905

Socrates [Greek philosopher] So: 567 *with picture*

Greece, Ancient (Philosophy, science, and the arts) G: 369; *picture on G: 371*

Law (The influence of ancient Greece) L: 133

Philosophy (Ancient philosophy) P: 386

Plato (Plato's life) P: 567; (The early dialogues) P: 568

Socratic method [philosophy]

Philosophy (Ancient philosophy) P: 386

Socrates (The Socratic method) So: 568

Socratic problem [philosophy]

Socrates (The Socratic problem) So: 567

Sod house So: 568

Nebraska (Territorial days) N: 112 *with picture*

Western frontier life in America (Life in the country) W: 237-238

Sod webworm [insect]

Lawn *picture on L: 143*

Soda [chemical] So: 568

Trona T: 450

Soda ash

Soda So: 569

Soda-lead glass

Glass (Soda-lead glass) G: 213

Soda-lime glass

Glass (Soda-lime glass) G: 213

Soda pop *See Soft drink in this index*

Soda Springs

Idaho (Rivers, waterfalls, springs, and lakes)
I: 38

Soda water

Soft drink (History) So: 571

Sodding [gardening]

Lawn (Planting the grass) L: 142-144 *with picture*

Soddy, Frederick [British chemist] So: 569

Soderbergh, Steven [American director]

Motion picture (Best achievement in directing: 2000) M: 862

Söderblom, Nathan [Swedish religious leader]

Nobel Prizes (Peace: 1930) N: 447

Sodium [element] So: 569

Atom *diagram on A: 872*

Electrolysis (Uses of electrolysis) E: 201

Food (Recent developments) F: 337

Isotope (Artificial radioisotopes) I: 477

Monosodium glutamate M: 733

Nutrition (Limit intake of sodium and sugar)
N: 628

Soda So: 568

Sodium bicarbonate *See Bicarbonate of soda in this index*

Sodium bisulfate [chemical]

Salt, Chemical S: 75

Sodium borate *See Borax in this index*

Sodium carbonate [chemical]

Carbonate C: 208

Hydrolysis H: 471

Soda So: 568

Sodium (Uses) So: 569

Trona T: 450

Sodium chloride

Chloride C: 516

Salt S: 72 *with picture*

Salt, Chemical S: 75

Sodium (Where sodium is found) So: 569

Sodium hydroxide *See Lye in this index*

Sodium lamp

Electric light (Low-pressure sodium lamps)
E: 175

Sodium nitrate [mineral]

Food preservation (Curing) F: 341

Saltpeter S: 76a

Sodium (Uses) So: 569

Sodium nitrite [chemical]

Food preservation (Curing) F: 341

Nitrite N: 425

Sodium oxide [chemical]

Glass (Soda-lime glass) G: 213

Sodium Pentothal [drug]

Thiopental T: 258

Sodium silicate [chemical]

Grinding and polishing (Grinding wheels)
G: 395

Silica gel S: 457

Sodium sulfate [chemical]

Salt, Chemical S: 75

Sodium tetraborate *See Borax in this index*

Sodium thiosulfate [chemical]

Sodium (Uses) So: 569

Sodom, Apple of [plant]

Apple of Sodom A: 573

Sodom and Gomorrah [ancient cities] So: 570

Abraham A: 16

Lot L: 472

Soeharto *See Suharto in this index*

Soekarno *See Sukarno in this index*

Sofia [Bulgaria] So: 570 *with picture*

Bulgaria B: 688 *with picture*

Soft-coated wheaten terrier [dog] So: 570 *with picture*

Soft consonant

Russian language (Alphabet) R: 557

Soft contact lens

Contact lens Ci: 1020

Soft drink So: 571

Coca-Cola Company Ci: 742

Soft goods [merchandise]

Discount store D: 224

Soft lander [space probe]

Space exploration (Space probes) So: 708

Soft money

Bush, George Walker (National affairs) B: 723

Election campaign (Campaign funds) E: 160

Soft-mud process

Brick (Forming bricks) B: 597-598

Soft palate [anatomy]

Mouth M: 903 *with diagram*

Palate P: 101 *with diagram*

Snoring S: 538

Soft-paste porcelain

Porcelain (European porcelain) P: 677

Soft point bullet

Ammunition *picture on A: 434*

Soft-shell clam

Clam (Types of clams) Ci: 637 *with picture*

Soft-shelled crab

Blue crab B: 420

Soft-shelled turtle

Turtle (Shell) T: 520-521 *with picture*; (Soft-shelled turtles) T: 523

Soft-stemmed plant

Leaf (A leaf begins its life) L: 152

Soft-tip pen

Pen P: 234 *with picture*

Soft-wheat flour

Flour (Types of flour) F: 268

Soft x ray

X rays (Wavelength) X: 541

Softball So: 571 *with pictures*

Little League Baseball L: 391

Softbound book

Publishing (Designing and printing) P: 869

Software [computer]

Computer Ci: 909; (Computer software)

Ci: 916; (Internet software) Ci: 922

Computerized instruction (How computerized instruction works) Ci: 924h

Copyright (Works protected) Ci: 1046-1047

Word processing W: 403

Softwood

Forest products (Lumber) F: 400

Lumber (Softwood lumber) L: 517

Plywood (Kinds of plywood) P: 585

Tree (Needleleaf trees) T: 414; (Needleleaf

forests) T: 429 *with picture*

Wood (Kinds of wood) W: 389

Woodworking (Wood for woodworking)

W: 398

Softwood dimension lumber

Lumber (table) L: 518

Sogavare, Manasseh [Solomon Islands political leader]

Solomon Islands (History) So: 586

Sogdiana [ancient city]

Alexander the Great (Central Asia and the Indus) A: 343

Soglo, Nicéphore [Benin political leader]

Benin (History) B: 250

Sogne Fjord

Norway (Coast and islands) N: 542 *with map*

Soham [mineral]

Malachite M: 95

Soho [district]

London (Central London) L: 429-430 *with map*

SoHo [New York City]

New York City (Greenwich Village) N: 338

Soil [earth] So: 573 *with pictures and map*

Agronomy A: 162

Clay Ci: 657

Compost Ci: 905

Conservation (Soil conservation) Ci: 979 *with pictures*

Drainage D: 320

Dust storm D: 392

Earthworm E: 39

Environmental pollution (Soil pollution) E: 334

Erosion (Controlling erosion) E: 355

Fertilizer F: 78

Forestry (Water) F: 406

Gardening (Planning the garden) G: 31-34 *with pictures*

Humus H: 437

Irrigation (Providing artificial drainage) I: 459

Lawn (Preparing the soil) L: 142

Loam L: 404

Loess L: 420

Manure M: 172

Rock R: 371

Topsoil T: 333

See also the list of Related Articles in the Soil article

Soil bank [U.S. history] So: 576

Soil conservation

Conservation (Soil conservation) Ci: 979 *with pictures*; (Careers in conservation) Ci: 990

Soil Conservation Service [U.S.] So: 576

Soil geography

Geography (Physical geography) G: 93-94

Soil management

Farm and farming (Soil management) F: 33

Soil pollution

Environmental pollution (Soil pollution) E: 334

Soil stack

Plumbing (The drainage system) P: 578

Soil sterilant

Herbicide H: 198

Soil Survey Staff [U.S.]

Soil (How soils are classified) So: 575

Soilless agriculture *See Hydroponics in this index*

Soja bean [plant] *See Soybean in this index*

Sojourner [U.S. history]

Immigration (The second wave) I: 82

Sojourner Rover [spacecraft]

Mars (Observation by spacecraft) M: 226d

Mars Pathfinder M: 226d

Space exploration (Probes to Mars) So: 710

Sokol [organization] So: 576

Sokoto Caliphate [African history]

Nigeria (Early kingdoms) N: 417

SoI [calendar]

Calendar (Calendar reform) C: 32

SoI [chemistry]

Colloid Ci: 777

Solanum [plant] So: 576

Solar activity

Sun (Solar activity) So: 980

Solar and Heliospheric Observatory [spacecraft]

Astronomy (Ultraviolet astronomy) A: 844

Corona C: 1067

Sun (History of modern solar study) So: 986;

picture on So: 979

Solar cell [electricity]

Electric eye (How electric eyes work) E: 169

Electricity (Sources of current) E: 194

Energy supply (Solar energy) E: 278

Global warming (Limiting global warming)

G: 232a

Materials *picture on M: 300c*

Semiconductor (Using doped crystals) S: 292

with diagrams

Solar energy (Photovoltaic conversion) So: 577

Solar collector [physics]

Greenhouse G: 382

Solar concentrator

Solar energy (Solar thermal conversion)

- Time (Measuring time by the sun) T: 288
- Solar eclipse** [astronomy]
Baily's beads B: 31
Corona C: 1066
Eclipse E: 51 *with pictures*
Moon (Eclipses) M: 784
Sun (History of modern solar study) So: 986 *with picture*
- Solar energy** So: 576 *with pictures*
Conservation picture on C: 983
Energy E: 273
Energy supply (Solar energy) E: 278
Environmental pollution (Scientific efforts) E: 336
International Space Station I: 346b *with picture*
Sun (Energy output) So: 976-977
- Solar flare** [astronomy]
Heliosphere (Shock waves) H: 175
Magnetic storm M: 57
Sun So: 975; (Solar activity) So: 980-981; *pictures on So: 985, So: 986*
- Solar furnace**
Heat (The sun) H: 149
Solar energy (Solar heating) So: 579
- Solar halo**
Halo picture on H: 26
- Solar heating**
Heating (Central heating systems) H: 159
Solar energy (Solar heating) So: 579
- Solar magnetism** [astronomy]
Sun (Magnetic field) So: 977
- Solar Maximum Mission satellite**
Space exploration (Repair missions) So: 724
Sun (History of modern solar study) So: 986
Sunspot (Other findings) So: 993
- Solar month**
Month M: 767
- Solar nebula** [astronomy]
Planet (How the planets formed) P: 513
Solar system (Formation of our solar system) So: 581
- Solar neutrino problem**
Sun (Analyzing neutrinos) So: 984
- Solar plexus** [anatomy] So: 579
- Solar power plant**
Solar energy picture on So: 579
- Solar radiation**
Sun (Energy output) So: 976
Thermosphere T: 256
Weather (Air temperature) W: 157
- Solar salt**
Salt (Salt from the sea) S: 72
- Solar system** [astronomy] So: 580 *with picture*
Earth (How Earth moves) E: 17
Geology (Geology of the solar system) G: 100
Milky Way M: 550
Planet P: 507 *with pictures*
Sun So: 974
See also the list of Related Articles in the Solar System article
- Solar telescope**
Sun (Earth-based studies) So: 986
- Solar thermal conversion**
Solar energy So: 577 *with picture*
- Solar time** [calendar]
Sidereal time S: 449
Time (Measuring time by the sun) T: 288
- Solar Two** [power plant]
Solar energy (Central receiver systems) So: 579
- Solar wind** [astronomy] So: 581
Comet (Direction of the tails) C: 868
Corona C: 1067
Cosmic rays (Galactic cosmic rays) Ci: 1076
Heliosphere (Solar wind) H: 175
Jupiter (Magnetic field) J: 199
Magnetic storm M: 57
Moon (The exosphere of the moon) M: 788
Planet (How the planets formed) P: 513
Solar system (The sun) So: 580; (Formation of our solar system) So: 581
Sun (Zones of the sun) So: 979-980; (Sun terms) So: 976; (Energy output) So: 977
- Solar year**
Calendar C: 28
Leap year L: 162
Year Y: 554
- Solaris** [book by Lem]
Science fiction (Growing popularity) S: 205-206
- Solder** [metal] So: 582
Alloy (Other alloys) A: 378
Tin (Uses) T: 293-294
Water pollution (Drinking water standards) W: 138
- Welding (Brazing and soldering) W: 190
- Solder, Glass**
Glass (table) G: 218
- Soldier**
Army A: 724 *with pictures*
Army, United States (Life in the Army) A: 731 *with pictures*
GI G: 182
Mercenary M: 412
Rank, Military R: 139
United Nations (Peacekeeping operations) U: 90-91 *with pictures*
- Soldier** [entomology]
Ant (Castes) A: 523; (The bodies of ants) A: 521 *with pictures*
Insect (Family life) I: 294-295
Termite (Life and habits) T: 173
- Soldiers** [play by Hochhuth]
Hochhuth, Rolf H: 273
- Soldiers and Sailors Monument**
Indianapolis (The city) I: 220
- Soldiers' bonus**
Hoover, Herbert Clark (The "Bonus Army") H: 330
- Soldier's Medal**
Medals, decorations, and orders (table) M: 357
- Soldier's Tale, The** [ballet]
Stravinsky, Igor (Early works) So: 922
- Soldiers Three** [book by Kipling]
Kipling, Rudyard (Early literary success) K: 334
- Sole** [anatomy]
Foot (Ligaments and muscles) F: 352
- Sole** [fish] So: 582 *with picture*
- Soledades** [poem by Góngora]
Góngora, Luis de G: 268
- Solemn League and Covenant, The** [1643]
Covenanters Ci: 1106
- Solenodon** [animal] So: 582 *with picture*
- Solenoid** [electric current]
Magnetism (Electromagnets) M: 60
Starter (Automobile starters) So: 857 *with diagram*
- Soleri, Paolo** [Italian architect] So: 583 *with picture*
- Solfatara** [geology]
Fumarole F: 556
- Solicitor**
Lawyer L: 147
- Solicitor general** [office]
Supreme Court of the United States (The court in action) So: 999
Canada, Government of (The Cabinet) C: 132; *diagram on C: 137*
- Solid** [geometry] So: 583
Geometry G: 101; (Euclidean geometry) G: 103-104 *with pictures*
- Solid** [physics]
Cohesion Ci: 756
Density D: 142 *with diagram*
Gas [physics] G: 48
Melting point M: 389
Molecule (Molecules and matter) M: 693
Physics (Solid-state physics) P: 438
Solid So: 583
Solution (Solid solutions) So: 587
- Solid coat**
Cat (Coat) C: 287 *with picture*
- Solid fuel**
See also Solid propellant in this index
Fuel (Solid fuels) F: 550
- Solid geometry**
Geometry (Euclidean geometry) G: 103
Mathematics (Branches of mathematics) M: 303
- Solid mechanics**
Mechanics M: 354
- Solid propellant** [fuel]
Rocket (Solid-propellant rockets) R: 388 *with diagram*
Space exploration (Getting into space and back) So: 698
- Solid-propellant rocket**
Guided missile (The engine) G: 424 *with diagram*
Rocket (Solid-propellant rockets) R: 388 *with diagram*
- Solid South** [U.S. history]
Reconstruction (Effects of Reconstruction) R: 179-180
- Solid-state bonding** [industrial process]
Welding (Solid-state bonding) W: 189
- Solid-state device** [physics]
Electronics (Solid-state components) E: 210 *with pictures*; (The solid-state revolution) E: 215
- Solid-state electrometer** [instrument]
Electroscope E: 218
- Solid-state laser**
Laser (Kinds of lasers) L: 85
- Solid-state physics** So: 583
Physics (Solid-state physics) P: 438
- Solid waste**
Energy supply (Solid and liquid wastes) E: 279
Environmental pollution (Solid waste) E: 334; *picture on E: 332*
Sanitation (Solid waste disposal) S: 111
Waste disposal W: 112
- Solidarity** [labor organization]
Communism (In Eastern Europe) Ci: 896
Gdańsk G: 74
Jaruzelski, Wojciech J: 64
Poland (Politics) P: 605; (History) P: 611-614 *with picture*
Wałęsa, Lech W: 13
- Solidarity Electoral Action** [political party]
Poland (Politics) P: 605
- Soliloquy** [drama]
Shakespeare, William (Dramatic conventions) S: 354
- Soliman** [Manilan ruler]
Manila (History) M: 143
- Solis, Juan Díaz de** [Spanish explorer]
Río de la Plata R: 346
Uruguay (Early days) U: 227
- Solitaire** [bird]
Dodo D: 261
- Solitaire** [game] So: 584 *with picture*
- Solitaire** [painting by Balthus]
Balthus picture on B: 65
- Solitary confinement**
Prison (Prison cells) P: 806
- Solitary insect**
Bee (Solitary bees) B: 205-206 *with pictures*
Beetle B: 215
Wasp W: 110 *with pictures*
- Solitary mammal**
Mammal (Group life) M: 125
- Solitary oak leafminer** [moth]
Moth picture on M: 837
- Solitary wave**
Waves (How waves move) W: 152; *diagram on W: 150*
- Soliton** [physics] *See Solitary wave in this index*
- Solitudes** [poem by Góngora]
Spanish literature (The 1600's) So: 759-760
- Solo, Jay** [American author] *See Ellison, Harlan in this index*
- Solo flight**
Airplane (Learning to fly) A: 226
- Solo music**
Classical music (Solo music) Ci: 643
- Sololá** [Guatemala]
Guatemala picture on G: 414
- Solomon** [Biblical figure] So: 584
Ecclesiastes E: 49
Ethiopia E: 368
Jerusalem (Ancient times) J: 100
Jews (The kingdom of Israel) J: 121
Phoenicia (The spread of Phoenician influence) P: 394-395
- Solomon, Temple of**
Knights Templars K: 353
- Solomon Islands** [country] So: 584 *with picture and map*
Exploration (Exploring the Pacific) E: 448
Flag picture on F: 204
- Solomon Islands** [islands, Pacific] So: 586
Amphibious warfare (History of amphibious warfare) A: 442
- Solomon's seal** [plant] So: 586 *with picture*
- Solomos, Dionysios** [Greek poet]
Greek literature (Modern Greek literature) G: 378
- Solon** [Greek political leader] So: 586
Athens (Earliest times) A: 857
Greece, Ancient (New forms of government) G: 372-373
Law (The influence of ancient Greece) L: 133
- Solow, Robert Merton** [American economist]
So: 586
- Solstice** [astronomy] So: 586
Season S: 271
- Solti, Sir Georg** [Hungarian-born British conductor] So: 587
- Solubility**
Solution (Liquid solutions) So: 587
- Solute** [chemistry]
Solvent So: 587
- Solution** [chemistry] So: 587
Osmosis O: 865 *with diagrams*

- Suspension **So**: 1012
Solution cave [geology]
 Cave (How caves are formed) **C**: 319 *with diagram*
Solution-gas drive
 Petroleum (Primary recovery) **P**: 342 *with picture*
Solution mining
 Salt (Salt from the ground) **S**: 73-74
Solution set [mathematics]
 Algebra (Statements and equations) **A**: 351
 Set theory (In algebra) **S**: 322
Solvated ion [chemistry]
 Ion (Ions in liquids) **I**: 371
Solvent [chemistry] **So**: 587
 Dry cleaning **D**: 368
 Ink **I**: 273
 Lipid (Importance of lipids) **L**: 344
 Paint **P**: 23
 Water (The properties of water) **W**: 129-130
Solvent extraction [industrial process]
 Cottonseed oil **Ci**: 1094
 Perfume (Plant substances) **P**: 286
 Petroleum (Refining petroleum) **P**: 343-345 *with diagram*
 Soybean (How soybeans are used) **So**: 689-690; (How soybeans are processed) **So**: 692 *with diagram*
 Vegetable oil (Production) **V**: 294
Solzhenitsyn, Alexander [Russian author] **So**: 587
Somali cat
 Cat (Long-haired breeds) **C**: 292; *picture on C*: 289
Somali National Movement
 Somalia (History) **So**: 589-590
Somalia **So**: 588 *with pictures and map*
 Bush, George Herbert Walker (U.S. troops in Somalia) **B**: 722a
 Flag *picture on F*: 199
Somaliland [region, Africa]
 Djibouti (History) **D**: 257
 Somalia (History) **So**: 589
Somaliland, French
 Djibouti **D**: 256
Somaliland Republic
 Somalia (History) **So**: 589-590
Somatic cell [biology]
 Cell (table) **C**: 327
 Heredity (Chromosomes and genes) **H**: 201; (Sources of genetic variation) **H**: 203
Somatic death
 Death (Medical aspects of death) **D**: 61
Somatic mutation
 Mutation **M**: 969
Somatic therapy
 Psychiatry (Somatic therapy) **P**: 845
Somatoform disorder [illness]
 Mental illness (Somatoform disorders) **M**: 406
Somatosensory cortex [anatomy]
 Brain (In receiving sensory images) **B**: 553 *with diagram*
Somatostatin [hormone]
 Hypothalamus **H**: 481
Sombrero [hat]
 Mexico (Clothing) **M**: 456
 Western frontier life in America (Clothing) **W**: 236
Somers [city, New York]
 Circus (The circus grows) **Ci**: 562b
Somers, Sir George [British admiral]
 Bermuda (History) **B**: 268
Somers, Will [English jester]
 Jester **J**: 103
Somers Islands
 Bermuda (History) **B**: 268
Somersault
 Swimming (Starts and turns) **So**: 1046
Somerset, Duke of [English regent]
 Edward VI **E**: 113
Somerset, Fitzroy Richard [British scholar] *See* Raglan, Lord in this index
Somerset House [London]
 Architecture (Neoclassical architecture) **A**: 623
Something of Myself [book by Kipling]
 Kipling, Rudyard (Later career) **K**: 334
Somma, Mount [Italy]
 Vesuvius **V**: 342 *with picture*
Somme, Battles of the [1916]
 Tank (History) **T**: 28
 World War I (The Battle of the Somme) **W**: 458
Somnambulism *See* Sleepwalking in this index
Somnus [Roman mythology]
See also Hypnos in this index
 Mythology (table) **M**: 980
Somoza Debayle, Anastasio [Nicaraguan political leader]
 Nicaragua (The Somoza period) **N**: 400
 Ortega, Daniel **O**: 859
 Somoza García, Anastasio **So**: 590
Somoza Debayle, Luis [Nicaraguan political leader]
 Nicaragua (The Somoza period) **N**: 400
 Somoza García, Anastasio **So**: 590
Somoza García, Anastasio [Nicaraguan political leader] **So**: 590
 Nicaragua (The Somoza period) **N**: 400
Son [religion]
 Trinity **T**: 447
Son of God [religion]
 Jesus Christ (The early Christians) **J**: 109
Son of the Wolf, The [book by London]
 London, Jack **L**: 444
Sonar [navigation] **So**: 590 *with pictures*
 Dolphin (The bodies of dolphins) **D**: 297-298
 Echo **E**: 50
 Ultrasound (Ultrasound devices) **U**: 16-17
Sonar transducer
 Transducer **T**: 371
Sonata [music] **So**: 591
 Classical music (Sonata) **Ci**: 645
Sondergaard, Gale [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1936) **M**: 863
Sondheim, Stephen [American composer] **So**: 591
 Musical comedy (During the late 1900's) **M**: 960
Song **So**: 592
 Classical music (Songs) **Ci**: 644
 Folk music **F**: 321
 Madrigal **M**: 40
 National anthem **N**: 28
See also the list of Related Articles in the Song article
Song [biology]
 Whale (Group life) **W**: 261
Song dynasty [Chinese history] **So**: 592 *with picture*
 China (The arts) **C**: 488 *with picture*; (The Song dynasty) **C**: 502
 Lacquerware *picture on L*: 23
 Painting (Chinese painting) **P**: 44-45
 Pottery *picture on P*: 716
 Tang dynasty (The fall of the dynasty) **T**: 26
 World, History of the (China) **W**: 435
Song of birds
 Bird (Calls and songs) **B**: 354
See also articles on specific birds, such as Robin
"Song of Deborah" [Old Testament]
 Hebrew literature (Early works) **H**: 162
Song of Esther [painting by Rattner]
 Rattner, Abraham *picture on R*: 150
Song of Hiawatha [poem by Longfellow]
 Longfellow, Henry Wadsworth (Narrative poems) **L**: 450
 Chippewa Indians **C**: 514
 Finland (The arts) **F**: 112
 Hiawatha **H**: 221
 Minnehaha Falls **M**: 583
 Minnesota (Lakes, rivers, and waterfalls) **M**: 598
"Song of Myself" [poem by Whitman]
 Whitman, Walt (His work) **W**: 294
Song of Roland, The [poem]
 Charlemagne (Military conquests) **C**: 378-379
 French literature (Narrative poetry) **F**: 518
 Roland **R**: 401
Song of Solomon [book by Morrison]
 Morrison, Toni **M**: 817
Song of Solomon [Old Testament] **So**: 592
 Solomon **So**: 584
Song of Songs [Old Testament] *See* Song of Solomon in this index
Song of the Earth, The [music by Mahler]
 Mahler, Gustav **M**: 65
Song of the Lark [painting by Breton]
 Breton, Jules Adolphe **B**: 594 *with picture*
Song of the Nibelungs [poem]
 German literature (Epic poetry) **G**: 139
 Nibelungenlied **N**: 395
Song of whales
 Humpback whale **H**: 436
Song sparrow
 Sparrow **So**: 764 *with picture*
"Song to Bolívar" [poem by Olmedo]
 Latin-American literature (The 1800's) **L**: 112
Songbird
 Bird (Calls and songs) **B**: 354
Songe [people]
 Mythology *picture on M*: 983
Songhai [people]
 Niger (People) **N**: 407-408
Songhai Empire [African history] **So**: 593 *with map*
 Askia Muhammad **A**: 814
 French West Africa (History) **F**: 528
 Niger (History) **N**: 409
 Nigeria (Early kingdoms) **N**: 417
 World, History of the (African civilizations) **W**: 437
Songs and Sonnets [poems by Donne]
 Donne, John (His poetry) **D**: 308
Songs for the Nursery [book by Fleet]
 Mother Goose (Who was Mother Goose?) **M**: 842
Songs of a Semite [book by Lazarus]
 Lazarus, Emma **L**: 148
Songs of Experience [poems by Blake]
 Blake, William **B**: 397
Songs of Innocence [poems by Blake]
 Blake, William **B**: 397
Songs of Life and Hope [book by Darío]
 Darío, Rubén **D**: 37
Songs on the Death of Children [music by Mahler]
 Mahler, Gustav **M**: 65
Songs Without Words [music by Mendelssohn]
 Mendelssohn, Felix (His music) **M**: 399-400
Songs Without Words [poem by Verlaine]
 Verlaine, Paul **V**: 317
Songster [song book]
 Popular music (Revolutionary War to 1840) **P**: 669
Sonia Shankman Orthogenic School
 Bettelheim, Bruno **B**: 276
Sonic boom **So**: 593
 Aerodynamics (Supersonic aerodynamics) **A**: 88 *with diagram*
 Shock wave **S**: 430
Soninke [people]
 Ghana Empire **G**: 181
Sonnambula, La [opera by Bellini]
 Bellini, Vincenzo **B**: 244
Sonnet [poetry] **So**: 593
 English literature (Elizabethan poetry) **E**: 316
 Poetry (table) **P**: 594; (Forms) **P**: 595
 Shakespeare, William (The sonnets) **S**: 349; (The sonnets) **S**: 366
Sonnet 138 [poem by Shakespeare]
 Shakespeare, William (Themes) **S**: 366
Sonnet sequence
 English literature (Elizabethan poetry) **E**: 316-317
"Sonnet—To Science" [poem by Poe]
 Poe, Edgar Allan (Poetry and poetic theory) **P**: 589-590
Sonnets [poems by Shakespeare]
 Shakespeare, William (The sonnets) **S**: 349
 Sonnet **So**: 593
Sonnets for Hélène [poems by Ronsard]
 Ronsard, Pierre de **R**: 450
Sonnets from the Portuguese [poems by Browning]
 Browning, Elizabeth Barrett **B**: 646
Sonnets to Orpheus [book by Rilke]
 Rilke, Rainer Maria **R**: 341
Sonobuoy
 Sonar (Uses of sonar) **So**: 591
Sonora Mountain kingsnake
 Snake *picture on S*: 532
Sons and Lovers [book by Lawrence]
 Lawrence, D. H. **L**: 145
Sons of Freedom [religious group]
 Doukhobors **D**: 314
Sons of Liberty [Canadian history]
 Rebellions of 1837 (In Lower Canada) **R**: 173
Sons of Liberty [U.S. history] **So**: 593
 Declaration of Independence *picture on D*: 78
 North Carolina (Revolution and independence) **N**: 492
 Putnam, Israel **P**: 913
 United States, History of the (Colonial reaction) **U**: 157
Sons of Mil [legendary people]
 Mythology (The Irish cycles) **M**: 983
Sons of Saint Tammany [organization]
 Tammany, Society of **T**: 22
Sons of the American Revolution [organization] **So**: 594
Sons of thunder [religion]
 James the Greater, Saint **J**: 28
 John, Saint **J**: 133

- Sontag, Susan** [American author] **So:** 594
 Essay (Formal essays) **E:** 359
- Sony Corporation** **So:** 594
- Soo Canals** [waterways, Michigan-Ontario]
So: 594 *with map*
 Canal (Major canals in the United States and Canada) **C:** 163 *with picture*; (table) **C:** 164
 Great Lakes (Water routes to the sea) **G:** 345
 Lake Huron **L:** 39
 Michigan *picture on* **M:** 510
- Soochow** [China] *See* Suzhou *in this index*
- Sooner** [U.S. history]
 Oklahoma (The great land rushes) **O:** 732
- Sooner State**
 Oklahoma **O:** 712
- Soong Ching-ling** [Chinese political leader]
So: 595
- Soong Mei-ling** [Chinese public figure]
 Chiang Kai-shek (Nationalist victory) **C:** 419
See Chiang Soong Mei-ling *in this index*
- Soot** **So:** 595
 Fire (What fire produces) **F:** 121
- Sooty tern** [bird]
 Tern **T:** 174
- Sophia** [queen of Spain]
 Juan Carlos I **J:** 177
- Sophia** [sister of]
 Peter I, the Great (Early life) **P:** 323
 Russia (Peter the Great) **R:** 549
- Sophie's Choice** [book by Styron]
 Styron, William **So:** 936
- Sophist, The** [book by Plato]
 Plato (The later dialogues) **P:** 568
- Sophists** **So:** 595
 Greek literature (Philosophical literature) **G:** 378
 Socrates (Socrates' life) **So:** 567-568
- Sophists' Banquet** [book by Athenaeus of Naucratis]
 Greek literature (The Greco-Roman Age) **G:** 378
- Sophocles** [Greek dramatist] **So:** 595
 Drama (Tragedy) **D:** 326-327
 Greek literature (Drama) **G:** 377
- Soprano** [music]
 Singing (Voice classification) **S:** 472
 Treble **T:** 409
- Sopwith Camel** [airplane]
 Aircraft, Military *picture on* **A:** 204
- Sor Juana** [Mexican poet] *See* Juana Inés de la Cruz *in this index*
- Sorak National Park** [South Korea]
 National park (table) **N:** 42f
- Sorbonne** [college, France] **So:** 596
 Paris, University of **P:** 167
 Rabelais, François **R:** 49
- Sorcerer's Apprentice, The** [music by Dukas]
 Dukas, Paul Abraham **D:** 380
- Sorcery**
 Magic (The magician) **M:** 49
 Witchcraft **W:** 371
- Soredia** [biology]
 Lichen (How lichens grow) **L:** 269
- Sorel** [Quebec]
 Quebec (Transportation) **Q:** 28
- Sorel, Julien** [literary figure]
 Stendhal **S:** 889
- Sørensen, Søren** [Danish biochemist]
 pH **P:** 353
- Sorensen, Virginia** [American author]
 Newbery Medal (table) **N:** 359
- Sorenstem, Annika** [Swedish golfer]
 Golf *picture on* **G:** 266
- Soret, J. Louis** [Swiss chemist]
 Holmium **H:** 296
- Sorghum** [botany] **So:** 596 *with picture*
- Sorghum** [syrup]
 Sorghum (Sweet sorghums) **So:** 596
- Sorgo** [plant]
 Sorghum (Sweet sorghums) **So:** 596
- Sorlie, A. G.** [American political leader]
 North Dakota (table) **N:** 513
- Sorokin, Peter** [American physicist]
 Laser (History) **L:** 86
- Soroptimist International** **So:** 596
- Sorority** [organization] **So:** 596
 Universities and colleges (Fraternities and sororities) **U:** 210
- Soros, George** [American financier] **So:** 597
- Sorrel** [plant] **So:** 597 *with picture*
- Sorrel-tree** *See* Sourwood *in this index*
- Sorrows of Young Werther, The** [book by Goethe]
 Goethe, Johann Wolfgang von (Early years) **G:** 247
- German literature (Romanticism) **G:** 141
- Sortie** [warfare]
 Air Force, United States (Offense) **A:** 190
- Sorting yard** [railroad] *See* Classification yard *in this index*
- Sortland, Bjorn** [Norwegian author]
 Literature for children *picture on* **L:** 354
- Sorus** [botany]
 Fern (Parts of a fern) **F:** 74-75
 Plant (In ferns and mosses) **P:** 534-535 *with pictures*
- Sorvino, Mira** [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1995) **M:** 863
- SOS** **So:** 597
- Sosa, Sammy** [Dominican baseball player]
So: 597
 Baseball (Recent developments) **B:** 137
- Soseki, Natsume** [Japanese author] *See* Natsume Soseki *in this index*
- Sosigenes** [Greek astronomer]
 Calendar (The Julian calendar) **C:** 31
- Sosso** [people]
 Ghana Empire **G:** 181 *with map*
- Stostenuto**
 Piano (The pedals) **P:** 446-447
- Sostratos** [Greek architect]
 Seven Wonders of the Ancient World (The Lighthouse of Alexandria) **S:** 325
- Sot-Weed Factor, The** [book by Barth]
 Barth, John B. **B:** 120
- Soter, Saint** [pope]
 Pope (table) **P:** 666
- Sotho** [people]
 South Africa (People) **So:** 609
- Soto** [religion]
 Zen **Z:** 593
- Soto, Hernando de** [Spanish explorer] *See* De Soto, Hernando *in this index*
- Sou** [currency] **So:** 597
- Soubairan, Eugene** [French chemist]
 Chloroform **C:** 517
- Souders, George** [American race driver]
 Automobile racing (table: Indianapolis 500 winners) **A:** 980
- Soufflot, Jacques** [French architect]
 Architecture (Neoclassical architecture) **A:** 623-624
- Soufrière** [village, Dominica]
 Dominica *picture on* **D:** 302
- Soufrière** [mountain, Saint Vincent]
 West Indies (Land and climate) **W:** 204
- Soufrière Hills** [region, West Indies]
 Montserrat **M:** 780
- Soul**
 Augustine, Saint (His beliefs) **A:** 888
 Immortality **I:** 86
 Mythology (Tylor's theory) **M:** 986
 Plato (Immortality of the soul) **P:** 568
 Religion (A doctrine of salvation) **R:** 216
 Spiritualism (Beliefs) **S:** 796
- Soul cake** [custom]
 Halloween (Halloween customs and symbols) **H:** 24a
- Soul music**
 Popular music (Soul music) **P:** 671
 Rock music (Expanding styles and sounds) **R:** 378-379
- Soul on Ice** [book by Cleaver]
 Cleaver, Eldridge **C:** 660
- Soule, John** [American journalist]
 Greeley, Horace (His publications) **G:** 379
- Soulé, Pierre** [American government official]
 Ostend Manifesto **O:** 866
- Soulé, Samuel W.** [American inventor]
 Shoes, Christopher Latham **S:** 433
 Typewriter (History) **T:** 539
- Souling** [custom]
 Halloween (Halloween customs and symbols) **H:** 24a
- Souls of Black Folk, The** [book by Du Bois]
 Du Bois, W. E. B. **D:** 372
- Sound** [physics] **So:** 598 *with pictures*
 Acoustics **A:** 28
 Decibel **D:** 70
 Ear (The sense of hearing) **E:** 9; (How sounds reach the brain) **E:** 10 *with diagram*
 Echo **E:** 49
 Interference **I:** 323
 Physics (Sound) **P:** 437
 Shock wave **S:** 430
 Theater (Sound production) **T:** 242
 Waves **W:** 150
- Sound** [zoology]
 Isinglass **I:** 462
- Sound, Speed of**
 Sound (The speed of sound) **So:** 601
 Aerodynamics (Supersonic aerodynamics) **A:** 88
 Airplane (Supersonic airplanes) **A:** 238
 Mach, Ernst **M:** 12b
 Wind tunnel **W:** 333
 Yeager, Charles Elwood **Y:** 554
- Sound and the Fury, The** [book by Faulkner]
 Faulkner, William **F:** 55
- Sound barrier**
 Sonic boom **S:** 593
- Sound bite** [communication]
 Television (Effects on society) **T:** 117-118
- Sound effect**
 Motion picture (Adding music and sound effects) **M:** 856
 Radio *picture on* **R:** 93
 Shakespeare, William (Costumes and sound effects) **S:** 353
- Sound of Music, The** [film]
 Motion picture (Best picture: 1965) **M:** 861
- Sound of Music, The** [musical]
 Rodgers, Richard **R:** 398
- Sound-pattern**
 Language (The makeup of language) **L:** 62
- Sound-post**
 Violin (Parts of the violin) **V:** 389
- Sound quality**
 Sound (table) **So:** 599; (Sound quality) **So:** 601
- Sound recording**
 Compact disc **C:** 901
 Motion picture (The sound track) **M:** 858 *with pictures*; (The movies talk) **M:** 867
 Phonograph **P:** 400 *with pictures*
 Recording industry **R:** 180
 Tape recorder **T:** 36 *with pictures*
 Videotape recorder **V:** 360 *with picture*
- Sound shift**
 Linguistics (Internal reconstruction) **L:** 336
- Sound spectrograph**
 Voiceprint **V:** 437
- Sound stage**
 Motion picture (Assembling the production team) **M:** 850; (Filming on a sound stage) **M:** 852 *with picture*; *picture on* **M:** 848
- Sound track**
 Motion picture (Preliminary steps) **M:** 854; (The sound track) **M:** 858 *with diagram*
- Sound wave** [physics]
 Microphone **M:** 516
 Music (Musical instruments) **M:** 948
 Radio (From sound waves to electric waves) **R:** 86
 Sonar **So:** 590; (How sonar works) **So:** 591
 Sound (The nature of sound) **So:** 599 *with diagram*; (How sound behaves) **So:** 601-602 *with diagrams*
 Telephone (How a telephone works) **T:** 94-95
- Soundboard**
 Piano (The soundboard) **P:** 447 *with picture*
- Soundbox**
 Harp **H:** 65 *with picture*
- Sounder** [telegraph]
 Telegraph (The Morse telegraph) **T:** 90 *with picture*
- Sounding** [geology]
 Satellite (Spacecraft missions) **S:** 150c
- Sounding** [meteorology]
 Radiosonde **R:** 99
- Sounding** [navigation]
 Exploration (Deep-sea exploration) **E:** 451
 Fathometer **F:** 54
 Sonar **So:** 590
- Sounding rocket**
 Rocket (Atmospheric research) **R:** 386 *with picture*
 Space exploration (Early unmanned explorations) **So:** 708
- Soundproofing**
 Insulation (Insulation against sound) **I:** 307
- Souphanouvong** [Laotian prince]
 Laos (History) **L:** 71-72
- Sour cherry** [tree]
 Cherry **C:** 409 *with picture*
- Sour cream**
 Milk (table) **M:** 547
- Sour cream butter**
 Butter (Churning) **B:** 730
- Sour orange** [tree]
 Orange (Sour or bitter oranges) **O:** 815
- Source** [geography]
 River (Sources of river water) **R:** 351 *with picture*
- Source, News**

- Journalism (Protecting the identity of news sources) J: 173
- Sourgum** [tree]
Tupelo T: 492
- Sourwood** [tree] So: 606 *with pictures*
- Sousa, John Philip** [American composer]
So: 607 *with portrait*
Marine Corps, United States M: 206
Yankee Doodle Y: 552
- Sousaphone** [musical instrument]
Music (Wind instruments) M: 949-950, *picture on* M: 949
Tuba T: 477
- Souster, Raymond** [Canadian poet] So: 607
- Soutache braid**
Braiding B: 549
- Souter, David Hackett** [American jurist] So: 607
Supreme Court of the United States *picture on* So: 999
- South, The U.S. Army**
Army, United States (Organization of the Army) A: 736-737
- South Africa** So: 608 *with pictures and maps*
Africa (The movement to independence) A: 134-135; *picture on* A: 136
African National Congress A: 136t
Afrikaners A: 137
Angola (History) A: 465-466
Apartheid A: 563
Botswana (History) B: 512
Concentration camp (Other concentration camps) Ci: 927
Diamond (Where natural diamonds are found) D: 181
Gold (World gold production) G: 253
Human rights (Trade and diplomatic measures) H: 428a
Inkatha Freedom Party I: 273
Library (Africa) L: 253
Minority group (Minority groups in other countries) M: 610
Namibia N: 8; (History) N: 9-10
National park (South Africa) N: 42d *with picture*
Olympic Games (Boycotts) O: 753
Racism (History) R: 62
Segregation (Segregation in other countries) S: 286
Sullivan, Leon Howard So: 970
Tennis (Tennis today) T: 168
Railroad (In other countries) R: 113-114
United Kingdom (Gladstone and Disraeli) U: 69; (Decline of the empire) U: 71
United Nations (Working for self-government) U: 93-94
Walvis Bay W: 22
See also the list of Related Articles in the South Africa article
- South African cycad**
Tree *pictures on* T: 413
- South African Native National Congress** [political party]
South Africa (The Union of South Africa) So: 618-619
- South African Republic** [former name, Transvaal]
Boer War B: 435
South Africa (Discovery of diamonds and gold) So: 618
- South African Students' Organization**
Biko, Steve B: 299
- South African War** *See* Boer War *in this index*
- South America** So: 622 *with pictures and maps*
Clothing *pictures on* Ci: 695
Continental divide Ci: 1022
Indian, American (Indians of the Andes) I: 173 *with pictures*; (Indians of the Tropical Forest) I: 175; (Indians of the South American Marginal Regions) I: 176 *with pictures and map*
Latin America (The wars of independence) L: 107
Line of Demarcation L: 333 *with map*
Monroe Doctrine M: 739
National park (table) N: 42g
Prehistoric animal (The distribution of mammals) P: 741
Railroad (In other countries) R: 113
Rain forest (The Americas) R: 126b *with map*
Wheat (South America) W: 273 *with map*
See also the list of Related Articles in the South America article
- South American ostrich**
Rhea R: 290 *with picture*
- South Arabia, Federation of** So: 639
- Yemen (Formation of Yemen [Aden]) Y: 563-564
- South Asia**
Asia (Way of life in South Asia) A: 780 *with pictures*; (Land regions) A: 792
- South Asian Association for Regional Cooperation**
Maldives (History) M: 104-105
- South Australia** [state, Australia] So: 639 *with map*
Adelaide A: 55
- South Bank** [district]
London (Central London) L: 429-430
- South Bay** [Los Angeles]
Los Angeles (South Bay) L: 461
- South Bend** [Indiana] So: 639
- South Boston** [Massachusetts]
Boston (South Boston) B: 498
- South Canal**
Soo Canals (The American canals) So: 595 *with map*
- South Carolina** So: 640 *with pictures and maps*
Calhoun, John Caldwell C: 35
Colonial life in America (Development of the Thirteen Colonies) Ci: 789 *with map*
United States, History of the (The Southern Colonies) U: 154; (Jackson as President) U: 170
See also the list of Related Articles in the South Carolina article
- South Carolina, University of** So: 663
South Carolina (Libraries) So: 645
- South Carolina Canal and Railroad Company**
Railroad (Developments in the United States) R: 115
- South Carolina Exposition** [U.S. history]
Jackson, Andrew (Split with Calhoun) J: 11
Nullification N: 603
South Carolina (Nullification) So: 660
- South Carolina Weekly Journal**
South Carolina (Communication) So: 657
- South China Sea**
China Sea C: 508 *with map*
- South Dakota** So: 664 *with pictures and maps*
See also the list of Related Articles in the South Dakota article
- South Dakota, University of** So: 685
South Dakota (Libraries) So: 668 *with picture*
- South Dakota State University** So: 685
- South End** [district, Boston]
Boston (The south side) B: 500
- South Equatorial Current**
Atlantic Ocean (Moving ocean waters) A: 866
Ocean (Circulation) O: 658
Pacific Ocean (Currents) P: 15
- South European Pipeline**
Pipeline (In other countries) P: 491-492
- South Foreland Lighthouse** [England]
Electric power (Early developments) E: 186
- South Gate** [gate, Seoul]
Seoul *picture on* S: 305
- South geographic pole**
Antarctica (Land regions) A: 532-534
South Pole So: 686
- South Georgia** [island, Atlantic]
Penguin *picture on* P: 239
- South Island** [island]
New Zealand (The South Island) N: 351 *with picture and map*; (European colonization) N: 355
- South Jersey glass**
Glass (Types of art glass) G: 221
- South Korea**
Asia (Korea and Taiwan) A: 789 *with picture*; (The spread of Communism) A: 809 *with map*
Automobile (Economic importance) A: 959-960
Cold War (The Korean War) Ci: 764
Flag *picture on* F: 203
Inchon I: 99
Korea K: 366; (South Korea) K: 366; (South Korea) K: 377
Korean War K: 379
United Nations (Military actions) U: 91
- South lawn** [park]
White House (The south lawn) W: 286
- South Luangwa National Park** [Zambia]
National park (table) N: 42f
- South magnetic pole** [geography]
Antarctica (Land regions) A: 532-534; *picture on* A: 531
Magnetic equator M: 55
South Pole So: 686
- South Ossetia** [region]
- Georgia (History) G: 111
- South Pacific** [musical]
Rodgers, Richard R: 398
- South Pacific Commission** [organization]
Pacific Islands (Recent developments) P: 12
- South Pacific Forum** [organization]
Pacific Islands (Recent developments) P: 12
- South Pass** [Wyoming]
Wyoming (The great trails) W: 533
- South Philadelphia** [district, Philadelphia]
Philadelphia (Residential districts) P: 360
- South Platte River** [Colorado-Nebraska]
Platte River P: 569
- South Pole** [geography] So: 686
Amundsen, Roald A: 445 *with map*
Antarctica A: 530; (The "Heroic Era") A: 536
Balchen, Bernt B: 38
Byrd, Richard Evelyn B: 746
Earth (How Earth moves) E: 17
Exploration (The exploration of Antarctica) E: 450
Midnight sun M: 535
Shackleton, Sir Ernest Henry S: 341
- South pole of balance** [geography]
South Pole So: 686
- South Sea** [former name, Pacific]
Balboa, Vasco Núñez de B: 37
- South Shore Canal** [waterway]
Quebec (Transportation) Q: 28
- South Slavs** [people]
Slavs (South Slavs) S: 505
Yugoslavia (The movement for Slavic unity) Y: 579
- South Vietnam**
Cold War (The death of Stalin) Ci: 764-765; (The Vietnam War) Ci: 769
Geneva Accords G: 87
Indochina (The Geneva Accords) I: 225
Vietnam V: 364; (History) V: 369-371
Vietnam War V: 372 *with map*
- South Vietnamese Army**
Vietnam War V: 373
- South West Africa** [former name] *See* Namibia *in this index*
- South West Africa People's Organization**
Namibia (Government) N: 8; (History) N: 9-10
United Nations (Working for self-government) U: 93-94
- South Wind** [book by Douglas]
Douglas, Norman D: 312
- South Yemen**
Yemen Y: 561
- Southampton** [England] So: 686 *with picture*
- Southampton, Earl of** [English nobleman]
Shakespeare, William (His first poems) S: 347-348
- Southampton Island** [Hudson Bay] So: 686
Nunavut (Land and resources) N: 608 *with map*
- Southard, Samuel L.** [American political leader]
Adams, John Quincy (table) A: 43
- Southdown sheep**
Sheep (Medium-wooled sheep) S: 382
- Southeast Asia** [region, Asia] So: 686 *with map*
Asia (Way of life in Southeast Asia) A: 783 *with pictures*; (Land regions) A: 792; (Climate) A: 794-796 *with maps*; (Plants) A: 798 *with map*; (The spread of Communism) A: 809 *with map*
Asian Americans (Arrivals of the late 1900's) A: 812f
Association of Southeast Asian Nations A: 820
Colombo Plan Ci: 784
East Indies E: 40
Library (South and Southeast Asia) L: 253
Vietnam War V: 374 *with map*
- Southeast Asia Collective Defense Treaty** [1954]
Cold War (The death of Stalin) Ci: 764
- Southeast Asia Treaty Organization** [alliance]
So: 687
Cold War (The death of Stalin) Ci: 764
- Southeast Division**
Hockey (table: National Hockey League) H: 281
- Southeastern Pennsylvania Transportation Authority**
Philadelphia (Transportation) P: 365
- Southern Alps** [mountains, New Zealand]
New Zealand (The South Island) N: 351 *with picture and map*
- Southern Baptist Convention** [religious group]
So: 687
Baptists (Baptists in America) B: 101
- Southern California, University of** So: 688

- Southern Christian Leadership Conference** [organization] So: 688
Abernathy, Ralph David A: 10
King, Martin Luther, Jr. (The early civil rights movement) K: 320-321
Rustin, Bayard R: 568
- Southern Colonies**
Colonial life in America (Geographic divisions) Ci: 789 *with map*; *picture on* Ci: 792
- Southern copperhead** [snake]
Snake *picture on* S: 533
- Southern Cross** [constellation] So: 688
- Southern Cult** [American Indians]
Mound builders (The Mississippian Culture) M: 882-883
- Southern deciduous-evergreen forest**
Forest (Southern deciduous-evergreen forests) F: 394 *with map*
- Southern 500 stock car race** [race]
South Carolina (Visitor's guide) So: 650
- Southern Hemisphere**
Astronomy (The stars and constellations of the Southern Hemisphere) *map on* A: 837
Hemisphere H: 181 *with picture*
Ocean (Circulation) O: 658
Season S: 270
- Southern lights** *See* Aurora in this index
- Southern Living** [magazine]
Magazine (table) M: 45
- Southern Methodist University** So: 688
- Southern Mississippi, University of**
Mississippi *picture on* M: 627
- Southern Newfoundland Seaman's Museum** [Grand Bank]
Newfoundland and Labrador (Libraries and museums) N: 364
- Southern Nigeria, Colony and Protectorate of** [former colony]
Nigeria (British rule) N: 417
- Southern Ocean** So: 688 *with map*
Atlantic Ocean (Boundaries and size) A: 864
Ocean (The world ocean) O: 651 *with picture*
- Southern Ocean Whale Sanctuary**
Whale (The future of whales) W: 264
- Southern Oscillation**
El Niño E: 245
Ocean (Discoveries) O: 664
Pacific Ocean (El Niño) P: 14-15
- Southern Pacific Railroad**
California (Early statehood) C: 62
- Southern red lily**
Lily L: 304
- Southern Rhodesia**
Rhodesia and Nyasaland, Federation of R: 318
Zambia (History) Z: 589-590
Zimbabwe (History) Z: 597
- Southern Ring Nebula**
Star *picture on* So: 841
- Southern Rockies** [U.S.]
Rocky Mountains (Chief ranges of the Rockies) R: 395
- Southern snout butterfly**
Butterfly (Snout butterflies) B: 737-738 *with picture*
- Southern Song Academy** [Chinese history]
Painting (Chinese painting) P: 44-46
- Southern States** [region, U.S.] So: 688b
African Americans (The growth of slavery) A: 136e *with pictures*; (The antislavery movement) A: 136f; (Temporary gains) A: 136i; (The growth of discrimination) A: 136j; (During the early 1900's) A: 136j
Civil rights (The struggle for the rights of blacks) Ci: 609
Dixie D: 255
Reconstruction R: 176
United States (Regions) U: 99-104 *with map*; *picture on* U: 108
United States, History of the (The abolition movement) U: 171; (The war-torn South) U: 179
- Southey, Robert** [British poet] So: 688b *with portrait*
Lake Poets L: 44
Coleridge, Samuel Taylor (His life) Ci: 771
Inchcape Rock I: 99
- Southwark** [England]
Shakespeare, William (The Globe Theatre) S: 348; *picture on* S: 352
- Southwark** [district, Philadelphia]
Philadelphia (Residential districts) P: 360
- Southwest Asia**
Asia (Way of life in Southwest Asia) A: 774 *with pictures*; (Land regions) A: 792; (Wild animals) A: 797-798 *with map*
- Southwest Indians**
Indian, American (Indians of the Southwest) I: 166 *with picture and map*
- Southwest Pass**
Mississippi River *picture on* M: 649
- Southwestern Indian Polytechnic Institute**
Albuquerque (Description) A: 333
- Southwestern States** [region, U.S.] So: 688b
United States (Regions) U: 99-105 *with picture and map*
- Souvanna Phouma** [Laotian prince]
Laos (History) L: 71-72
- Souvenir de Soferino, Un** [book by Dunant]
Red Cross (Beginnings) R: 187
- Souvenir sheet**
Stamp collecting *picture on* So: 832
- Sovereign** [money]
Pound P: 721
- Sovereignty** [political science] So: 689
Government (Elements of government) G: 282
Human rights (The development of human rights) H: 428-428a
International relations I: 344
Territorial waters T: 175
Treaty T: 408
- Sovereignty association** [government]
Parti Québécois P: 183
- Soviet** [Soviet history] So: 689
Lenin, V. I. (The February Revolution) L: 193
Union of Soviet Socialist Republics (History) U: 35
- Soviet literature**
Russian literature (Soviet literature) R: 564
- Soviet of Nationalities**
Union of Soviet Socialist Republics (National government) U: 29
- Soviet of the Union**
Union of Soviet Socialist Republics (National government) U: 29
- Soviet of Workers' and Soldiers' Deputies** [Russian history]
Lenin, V. I. (The February Revolution) L: 193
Union of Soviet Socialist Republics (The February Revolution) U: 35
- Soviet of Workers' Deputies** [Russian history]
Russia (The Revolution of 1905) R: 552
- Soviet satellite** *See* Satellite [international relations] in this index
- Soviet Union** *See* Union of Soviet Socialist Republics in this index
- Sovkhozy** [agriculture] *See* State farm in this index
- Sow** [animal]
Hog (table) H: 284
- Sow bug** [insect]
Wood louse W: 391
- Sowetan** [newspaper]
South Africa (Communication) So: 617
- Southistle** [plant] So: 689 *with picture*
- Soy meal**
Soybean (Soy meal) So: 690
- Soy oil**
Soybean (Soy oil) So: 691
- Soy protein concentrate**
Soybean (Soy meal) So: 690
- Soya bean** [plant] *See* Soybean in this index
- Soybean** [plant] So: 689 *with pictures and map*
Bean B: 180
Food supply (Developing new sources of food) F: 350
Iowa (Agriculture) I: 390
Julian, Percy Lavon J: 187
Missouri (Agriculture) M: 666
Tofu T: 308
- Soybean curd**
Tofu T: 308
- Soybean meal**
Soybean (Soy meal) So: 690
- Soybean oil**
Soybean (Soy oil) So: 691
Vegetable oil V: 294
- Soyer, Moses** [American artist]
Soyer brothers So: 693
- Soyer, Raphael** [American artist]
Soyer brothers So: 693 *with picture*
- Soyer brothers** [American artists] So: 693 *with picture*
- Soyinka, Wole** [Nigerian author] So: 693
Drama (Drama in other countries) D: 341
Nobel Prizes (Literature: 1986) N: 446
- Soyuz** [spacecraft]
Astronaut A: 828
- Soyuz missions** [space exploration]
Astronaut (Achievements in space) A: 829
Rocket *picture on* R: 387
- Space exploration (Making ready) So: 715; (Soviet attempts to reach the moon) So: 720 *with picture*; (The Apollo-Soyuz Test Project) So: 721; (Salyut and Skylab) So: 721
- Soyuz-U** [spacecraft]
Space exploration *picture on* So: 699
- Spa** [resort]
Bath (Medical bathing) B: 163
Hydrotherapy H: 473
Mineral water M: 572
- Spaak, Paul-Henri** [Belgian statesman] So: 693
- Spaatz, Carl** [American general] So: 693
- Space** [aesthetics]
Painting (The elements of painting) P: 34-35
Photography (Composition) P: 412
- Space** [game]
Division (Fun with division) D: 252
- Space** [philosophy]
Metaphysics (Space and time) M: 430
- Space** [physics]
Relativity (Lorentz transformations) R: 211
Space exploration (What is space?) So: 696; (Living in space) So: 701
United Nations (Peaceful uses of outer space and the seabed) U: 93
- Space adaptation syndrome** [disorder]
Motion sickness M: 874
Space exploration (Microgravity) So: 701-702
- Space age**
Eisenhower, Dwight David (The space age) E: 154
Science (Achievements of the mid-1900's) S: 202 *with picture*
Space exploration (The dawn of the space age) So: 706
Technology (The computer age) T: 75
World, History of the (The world since 1900) W: 445 *with picture*
- Space and Missile Defense Command**
Army, United States (Organization of the Army) A: 736-737
- Space and Rocket Center, U.S.** [Huntsville]
Alabama A: 266 *with picture*
Huntsville H: 451
- Space band** [printing]
Linotype (How the linotype works) L: 338
- Space Command** [U.S.]
NORAD N: 453
- Space exploration** So: 694 *with pictures*
Astronomy (Space probes) A: 849
Exploration (Space exploration) E: 452
International Space Station I: 346a
Life (The search for life on other planets) L: 279
Map (Mapmaking and modern technology) M: 185
Mars (Observation by spacecraft) M: 226d
Mercury (Flights to Mercury) M: 416
Mir M: 613 *with picture*
Moon (Apollo missions) M: 795
Radar (In space travel) R: 68
Rocket (Space travel) R: 386-387 *with pictures*; (The space age) R: 391
Telemetry T: 93
United Nations (Peaceful uses of outer space and the seabed) U: 93
United States, History of the (The space race) U: 195; (The International Space Station) U: 195
Voyager V: 451
World, History of the (The world since 1900) W: 445 *with picture*
See also the list of Related articles in the Space exploration article
- Space Infrared Telescope Facility**
Observatory (Satellite observatories) O: 645
- Space measurement**
Metric system (Space and time) M: 437
- Space medicine**
Aerospace medicine A: 89
Space exploration (Living in space) So: 701 *with pictures*
- Space Needle**
Seattle (Landmarks) S: 273 *with picture*
Washington (Places to visit) W: 56; *picture on* W: 67
- Space probe**
Geology (Geology of the solar system) G: 100
Heliosphere (Probing the heliosphere) H: 175
Astronomy (Space probes) A: 849; *picture on* A: 843
Rocket (Launching probes and satellites) R: 386
Jupiter (Flights to Jupiter) J: 201

768 Space race

- Space exploration **So**: 694 *with picture*;
(Space probes) **So**: 708 *with pictures*
Sun (History of modern solar study) **So**: 986
Voyager V: 451
- Space race** [international relations]
Space exploration **So**: 695; (The space race begins) **So**: 707
- Space shuttle**
Astronaut (Achievements in space) **A**: 829-830
Exploration (Space exploration) **E**: 452
Florida *picture on* **F**: 264
Space exploration (Getting into space and back) **So**: 698-700 *with diagrams*; (Space shuttles) **So**: 723 *with pictures*; *pictures on* **So**: 695, **So**: 699, **So**: 700
- Space station**
See also International Space Station; *Mir in this index*
Astronaut (Achievements in space) **A**: 829-830
Space exploration (Assembling space stations) **So**: 704 *with picture*; (Space stations) **So**: 721 *with pictures*
- Space suit**
Astronaut *picture on* **A**: 828
Helmet *picture on* **H**: 178
Space exploration (Leaving the spacecraft) **So**: 704-705 *with pictures*
- Space surveillance** [defense]
Radar (In the military) **R**: 65
- Space telescope**
See also Hubble Space Telescope *in this index*
- Space-time** [mathematics]
Einstein, Albert **E**: 146
Fourth dimension **F**: 438
Relativity (Lorentz transformations) **R**: 211;
(General relativity) **R**: 211-212
- Space travel** *See* Space exploration *in this index*
- Space tug**
Rocket (Space travel) **R**: 386-387
- Space walk** *See* Extravehicular activity *in this index*
- Spacecraft**
Engineering (Aerospace engineering) **E**: 284
Radar (In space travel) **R**: 68
Space exploration **So**: 694 *with pictures*
- Spacek, Sissy** [American actress]
Motion picture (Best performance by an actress: 1990) **M**: 862
- Spacelab** [spacecraft]
Astronaut (Achievements in space) **A**: 829-830
Careers *picture on* **C**: 227
European Space Agency **E**: 418
Space exploration (Spacelab missions) **So**: 725 *with picture*
- Spaceplane** [aircraft]
Airplane (Future developments) **A**: 239
- Spaceport U.S.A.**
Florida (Places to visit) **F**: 252
- Spacetrack network, United States Air Force**
Radar (In the military) **R**: 65 *with map*
- Spacely, Kevin** [American actor]
Motion picture (Best performance by an actor: 1999) **M**: 863; (Best performance by an actor in a supporting role: 1995) **M**: 863
- Spade** [suit]
Card game (History) **C**: 209
- Spadefoot toad**
Frog (Other frogs) **F**: 540
- Spadix** [botany]
Anthurium **A**: 550
Jack-in-the-pulpit **J**: 2
- Spaghetti**
Pasta **P**: 192
- Spagnoletto, Lo** [nickname]
Ribera, Jusepe de **R**: 321
- Spahn, Warren** [American baseball player]
So: 729
Baseball (table: Hall of Fame) **B**: 135
- Spaight, R. D., Jr.** [American political leader]
North Carolina (table) **N**: 490
- Spaight, Richard Dobbs** [American political leader]
So: 729
North Carolina (table) **N**: 490
- Spain** **So**: 730 *with pictures and maps*
Flag *pictures on* **F**: 207, **F**: 209, **F**: 217
Art and architecture
Spain (The arts) **So**: 738 *with pictures*
Furniture (Spain) **F**: 573 *with picture*
Painting (The Spanish masters) **P**: 64 *with pictures*
Finance and banking
Euro **E**: 379
History
Spain (History) **So**: 746 *with pictures*
Aztec (The Spanish conquest) **A**: 1003
Belgium (Habsburg rule) **B**: 233
Bolivia (Colonial rule) **B**: 446
Bourbon (In Spain) **B**: 516
Buenos Aires (History) **B**: 673
California (Spanish and Russian settlement) **C**: 60
Central America (The colonial period) **C**: 355
Chile (Spanish conquest) **C**: 468; (Colonial period) **C**: 467
Colombia (History) **Ci**: 783
Colonialism **Ci**: 813; (Early European colonialism) **Ci**: 813
Columbus, Christopher (Years of waiting) **Ci**: 858
Cuba (History) **Ci**: 1175
Drake, Sir Francis (Expeditions against Spain) **D**: 322
Exploration (The great age of European exploration) **E**: 442-443 *with picture*
Fascism (Fascism in other countries) **F**: 50
Gibraltar **G**: 186
Golden Age **G**: 255
Haiti (History) **H**: 15-16
Hispanic Americans (Exploration and settlement) **H**: 250-251
Indian, American (In Latin America) **I**: 178
Jews (The Jews under Islam) **J**: 122; (Jews in Christian Europe) **J**: 122-123
Line of Demarcation **L**: 333
Louisiana Purchase **L**: 502
Mexico **M**: 469-471
Mission life in America **M**: 618 *with picture*
Monroe Doctrine (Origins) **M**: 739
Netherlands (History) **N**: 148
Panama (The Spanish colonial period) **P**: 120
Paraguay (History) **P**: 149
Philippines (History) **P**: 379
Spanish Armada **So**: 755
Spanish Civil War **So**: 756 *with map*
Tenochtitlan **T**: 170
United States, History of the (The Spanish and Portuguese) **U**: 151
Uruguay (Colonial years) **U**: 227;
(Independence) **U**: 227
Virginus Affair **V**: 424
Western Sahara **W**: 241
World War II (The Spanish Civil War) **W**: 471
Language and literature
Spain (Language) **So**: 733; (Literature) **So**: 738
Hebrew literature (Medieval works) **H**: 162
See also Spanish language; Spanish literature *in this index*
People
Spain (People) **So**: 733
Social and cultural life
Christmas (In Spain) **C**: 531
Flamenco **F**: 226 *with picture*
See also the list of Related Articles in the Spain article
- Spalding, Albert G.** [American baseball player]
Baseball (table: Hall of Fame) **B**: 135
- Spalding, Eliza** [American missionary]
Idaho (Exploration and early settlement) **I**: 42
- Spalding, Henry H.** [American missionary]
Idaho (Exploration and early settlement) **I**: 42
- Spallanzani, Lazzaro** [Italian biologist]
So: 753
Food preservation (Modern food preservation) **F**: 344
- Span** [engineering]
Bridge **B**: 600
- Spandex** [fiber] **So**: 753
- Spandrel column** [construction]
Bridge (Arch bridges) **B**: 601 *with diagram*
- Spangled feather**
Chicken (Kinds of chickens) **C**: 441
- Spangler, Edward** [American public figure]
Lincoln, Abraham (The trial of the conspirators) **L**: 326
- Spaniel** [dog] **So**: 753
Cavalier King Charles spaniel **C**: 318
Dog (Sporting dogs) **D**: 268 *with pictures*
Field spaniel **F**: 94 *with picture*
- Spanish America** [Latin America] **So**: 753
Hispanic Americans (Cultural backgrounds) **H**: 246
- Spanish American culture**
Hispanic Americans (Cultural backgrounds) **H**: 246
- Spanish-American War** [1898] **So**: 753 *with pictures and map*
Army, United States (The Spanish-American War [1898]) **A**: 738; *picture on* **A**: 730
Buffalo Soldiers **B**: 680
Cuba (Struggle against Spain) **Ci**: 1176
Gay Nineties (A growing world power) **G**: 73
Latin America (The wars of independence) **L**: 107-108
Manila Bay **M**: 143
Marine Corps, United States (The 1800's) **M**: 208-209; *picture on* **M**: 207
McKinley, William (The Spanish-American War [1898]) **M**: 340
Navy, United States (The Spanish-American War [1898]) **N**: 88
Philippines (The Spanish-American War) **P**: 380
Roosevelt, Theodore (The Rough Riders) **R**: 467
Spain (The reign of Alfonso XIII) **So**: 749
Spanish literature (The 1900's) **So**: 762
Territory (In the United States) **T**: 176
United States, History of the (The Spanish-American War) **U**: 183 *with picture*
War (table) **W**: 25
See also the list of Related Articles in the Spanish-American War article
- Spanish Armada** **So**: 755 *with picture*
Bay of Biscay **B**: 176
Drake, Sir Francis (Expeditions against Spain) **D**: 322
Navy (The beginning of modern navies) **N**: 79
Philip II (of Spain) **P**: 369
Ship (The galleon) **S**: 408-409 *with picture*
Spain (The Spanish decline) **So**: 747-748 *with picture*
- Spanish bayonet** [tree] **So**: 756
- Spanish chicken**
Chicken (table) **C**: 443
- Spanish Civil War** [1936-1939] **So**: 756 *with picture and map*
Falange Española **F**: 12
Franco, Francisco (His early life) **F**: 483
Picasso, Pablo (The 1920's and 1930's) **P**: 448b-449
Spain (Civil war) **So**: 750
Spanish literature (Spanish literature today) **So**: 763
World War II (The Spanish Civil War) **W**: 471
- Spanish Confederation of Autonomous Rightist Parties** [political party]
Spain (The Spanish republic) **So**: 750
- Spanish-Cuban-American War** [1895-1898]
Cuba (Struggle against Spain) **Ci**: 1176
- Spanish dollar**
Money (History of United States currency) **M**: 707; *picture on* **M**: 708
- Spanish Inquisition** *See* Inquisition *in this index*
- Spanish jasmine**
Jasmine **J**: 64
- Spanish language** **So**: 756b
Hispanic Americans **H**: 244; (A rapidly growing minority) **H**: 258; (Who are the Hispanic Americans?) **H**: 245
Name (Hispanic names) **N**: 5
United States (Language) **U**: 110
- Spanish literature** **So**: 757 *with pictures*
Drama (The Golden Age of Spanish drama) **D**: 332
See also the list of Related Articles in the Spanish literature article
- Spanish lynx** [animal] *See* Iberian lynx *in this index*
- Spanish mackerel** [fish]
Mackerel **M**: 24
Kingfish **K**: 329
- Spanish Main** [Latin American history] **So**: 763
- Spanish milled dollar**
Piece of eight *pictures on* **P**: 452
- Spanish moss** [plant] **So**: 764
Epiphyte **E**: 344 *with picture*
- Spanish onion**
Onion (Cultivation) **O**: 763
- Spanish Phalanx** *See* Falange Española *in this index*
- Spanish process**
Olive (Harvesting and preparation for market) **O**: 743-744
- Spanish Sahara** *See* Western Sahara *in this index*
- Spanish Succession, War of the** *See* Succession wars *in this index*
- Spanish Tragedy, The** [play by Kyd]
Drama (Elizabethan playwrights) **D**: 331
English literature (Elizabethan drama) **E**: 317
Kyd, Thomas **K**: 398
- Spanish War Veterans, United** [organization]
Veterans' organizations (In the United States) **V**: 344
- Spanishfly** [insect] **So**: 764

- Spanworm** [caterpillar]
Measuring worm M: 346
- Spar** [pole]
Sailing (Spars) S: 23
- Spare**
Bowling (Scoring) B: 521; (table) B: 521;
(Bowling for spares) B: 522; *picture on*
B: 523
- Spark, Electric**
Lightning L: 299
- Spark, Muriel** [Scottish author] So: 764
- Spark chamber** [physics]
Particle detector (Spark chambers) P: 186
- Spark-ignition engine**
Diesel engine (How a diesel engine works)
D: 199
Ignition I: 49 *with diagrams*
- Spark of Life** [book by Remarque]
Remarque, Erich Maria R: 228
- Spark plug**
Automobile (How an automobile works)
A: 949; *diagram on* A: 951
Gasoline engine (Ignition system) G: 65
Ignition (Parts of an ignition system) I: 49 *with diagram*
- Sparkling wine**
Champagne C: 373
- Sparkman, John Jackson** [American political leader] So: 764
Nixon, Richard Milhous (The 1952 campaign)
N: 430-431
- Sparks**
Girl Scouts (Sparks) G: 199
- Sparks, Jared** [American historian] So: 764
- Sparrow** [bird] So: 764 *with pictures*
Bird (Birds of urban areas) B: 333 *with picture*;
(Birds of grasslands) B: 336 *with picture*
House sparrow H: 388
- Sparrowhawk** So: 765 *with picture*
- SPARS** [U.S.]
Coast Guard, United States (Women in the
Coast Guard) Ci: 737
- Sparta** [Greece]
Otto I O: 876
- Sparta** [ancient city] So: 766 *with maps*
Greece, Ancient (Government) G: 372 *with map*
Education (Ancient Greek education) E: 97
Lycurgus L: 532
Messenia M: 423 *with map*
Peloponnesian War P: 232
Pericles (War with Sparta) P: 287
Police state P: 626
- Spartacus** [Roman gladiator] So: 767
Crassus, Marcus Licinius Ci: 1121
- Spartacus Party** [political party]
Luxemburg, Rosa L: 532
- Spartans** [people]
Greece, Ancient (Education) G: 367
Sparta (The people) So: 766
- Spartina** [plant] So: 767 *with picture*
- Spasm** [disorder]
Asthma A: 825
Cramp Ci: 1116
Tetany T: 183
- Spassky, Boris** [Russian chess player]
Chess (World chess champions) C: 414
Fischer, Bobby F: 143
- Spastic colon**
Colitis Ci: 773
- Spastic paralysis** So: 767
Cerebral palsy (Types) C: 361-362
Paralysis (Paralysis of central nervous system
origin) P: 152
- Spathe** [botany]
Anthurium A: 550
Jack-in-the-pulpit J: 2
Skunk cabbage S: 496
- Spatter cone**
Volcano (Lava) V: 439
- Spavin** [disease] So: 767
- Spawn** [zoology] So: 767
Fish (Reproductive system) F: 163; (How fish
reproduce) F: 169
Salmon (The life of a salmon) S: 69 *with pic-
ture*; (Salmon conservation) S: 70
- Spawning** [zoology]
Fish (How fish reproduce) F: 169 *with pictures*
- Spaying**
Cat (Birth control) C: 295-296
Dog (Social and moral responsibilities) D: 279-
280
Pet (Birth control) P: 322
- SPCA** See Society for the Prevention of Cruelty
to Animals *in this index*
- "Speak softly and carry a big stick"** [quota-
tion]
Roosevelt, Theodore (Governor of New York)
R: 467
- Speak Up** [book by McCord]
Literature for children (The middle and late
1900's) L: 364
- Speakeasy**
Prohibition (Life during prohibition) P: 815
- Speaker** [electronics] So: 768
Computer (Speakers) Ci: 916; *picture on*
Ci: 913
Headphones H: 125
Radio (The speaker) R: 89 *with picture*
Stereophonic sound system (Parts of a stereo
system) So: 892
- Speaker** [office] So: 768
See also Speaker of the House *in this index*
Canada, Government of (The Senate) C: 132
Parliament (How the House of Commons
works) P: 173
- Speaker, Tris** [American baseball player] So: 768
Baseball (table: Hall of Fame) B: 135
- Speaker of the House** [office]
Congress of the United States (The House of
Representatives) Ci: 943
House of Representatives (The speaker and
other leaders) H: 387
Speaker (In the United States) So: 768
- Speakers' Corner** [London]
London (Parks) L: 435
- Speaking** See Speech *in this index*
- Speaking in tongues** [religion]
Assemblies of God A: 817
Pentecostal churches (Beliefs and practices)
P: 275
- Speaking skills**
Public speaking P: 865
- Spear** [weapon] So: 768 *with pictures*
Folsom point F: 326 *with picture*
Indian, American *pictures on* I: 140, I: 151
Spearfishing So: 769 *with pictures*
- Spear gun**
Spearfishing So: 769 *with pictures*
- Spear thrower** [weapon]
Indian, American (Early days) I: 151; *picture on*
I: 172
- Speare, Elizabeth George** [American author]
So: 768
Laura Ingalls Wilder Award (table) L: 121
Newbery Medal (table) N: 359
- Spearfish** [South Dakota]
Passion play *picture on* P: 191
- Spearfishing** So: 769 *with pictures*
- Spearing Fish by Torchlight** [painting by Kane]
Indian, American *picture on* I: 155
- Spearman, Charles E.** [British psychologist]
Intelligence (Theories of intelligence) I: 318
- Spearmint** [plant] So: 769 *with picture*
- SPEBSQSA** [organization]
Barbershop quartet singing B: 107
- Spec, Working on**
Motion picture (Developing the story) M: 848-
849
- Special administrative region**
Hong Kong (The return to Chinese rule) H: 320
- Special agent**
Federal Bureau of Investigation F: 62
- Special counsel** [law] See Independent counsel
in this index
- Special district** [government]
Metropolitan area (Special districts) M: 444
- Special Drawing Rights** [economics] So: 770
International Monetary Fund I: 343
Money (International reserves) M: 716-718
- Special education** So: 770
Blindness (Education and training) B: 403
Careers (Teaching) C: 231
Disabled (Special education) D: 220 *with pic-
ture*
Education (Kinds of education) E: 88 *with pic-
ture*
Gifted children G: 188
Learning disabilities (Diagnosis and treatment)
L: 166
Mental retardation (Treatment) M: 411
School (Other kinds of schools) S: 182
- Special effects**
Computer graphics (In entertainment) Ci: 924g
with picture
Motion picture (The computer revolution)
M: 872 *with pictures*; *pictures on* M: 855
Television (Putting a show on the air) T: 111-
113
Theater (Lighting methods) T: 240-241
- Special election**
Recall R: 174
- Special endorsement**
Negotiable instrument (Endorsement) N: 119
- Special forces** [military]
Army (Attack) A: 725
- Special Forces** [U.S. Army]
Army, United States (Special units) A: 735
with picture
Commando Ci: 870
- Special handling** [service]
Postal Service, United States (Special han-
dling) P: 700
- Special-interest group**
City government (Influencing city government)
Ci: 597
- Special Libraries Association** So: 771
Library (Special libraries) L: 250
- Special library**
Library (Special libraries) L: 250 *with pictures*
- Special multiple-peril and business owners' insurance**
Insurance (Other kinds of property and liability
insurance) I: 313-314
- Special municipality** [government]
Chongqing C: 521
- Special Olympics** So: 771 *with picture*
- Special Operations** [military]
Commando Ci: 870
- Special Operations Command**
Army, United States (Organization of the
Army) A: 736-737
- Special Operations Executive**
World War II (Spies and saboteurs) W: 493
- Special Political Committee**
United Nations (Committees) U: 81
- Special prosecutor** See Independent counsel *in this index*
- Special session**
Congress of the United States (When
Congress meets) Ci: 943
- Special theory of relativity**
Einstein, Albert E: 146
Relativity R: 209; (Special relativity) R: 210
- Special weapons unit**
Police (Other activities) P: 621-622 *with pic-
ture*
- Specialist**
Medicine (Specialty care physicians) M: 365;
(Primary care physicians) M: 366
Stock exchange (Memberships) So: 904
- Specialization** [economics]
Agriculture (Specialized farms) A: 148
Farm and farming (Specialized farms) F: 30
with pictures
Trade (Trade and specialization) T: 361
- Specialized farm**
Farm and farming (Specialized farms) F: 30-32
with pictures
- Specialized magazine**
Magazine (Specialized business magazines)
M: 42
- Specialty camp**
Camping (Organized camping) C: 96
- Specialty school**
Alternative school A: 389
- Speciation** [biology]
Evolution (Main ideas of evolutionary theory)
E: 426; (Evolution of new species) E: 429-
430
- Specie Circular** [U.S. history]
Jackson, Andrew (The money surplus) J: 12-
13
Van Buren, Martin (The Panic of 1837) V: 272
Wildcat bank W: 301
- Species** [biology]
Classification, Scientific (Groups in classifica-
tion) Ci: 654-656
Animal (The scientific classification of animals)
A: 472-473; (How new species are
formed) A: 503
Ecology (The role of a species) E: 54
Evolution (Main ideas of evolutionary theory)
E: 426; (Evolution of new species) E: 429
- Species diversity**
Biodiversity (Kinds of biodiversity) B: 311
- Species Survival Plan**
Zoo (Wildlife conservation) Z: 604
- Specific gravity** See Gravity, Specific *in this index*
- Specific heat** [physics]
Heat (Changes in temperature) H: 152 *with picture*
- Specific illumination** [lighting]
Theater (Lighting methods) T: 240-241

Specific learning disability

Learning disabilities (Types) L: 165

Specific lien [law]

Lien L: 273

Specific rate

Vital statistics (Using vital statistics) V: 429

Specific rationing

Rationing R: 148

Specific tariff [economics]

Tariff (Main kinds of tariffs) T: 43

Specific weight

Manometer M: 166

Specifications [publishing]

Encyclopedia (Preparing specifications) E: 267

Specimen Ridge

Yellowstone National Park (The Upper Loop)

Y: 559 *with map***Speckled alder**Alder A: 339 *with picture***Spectacle**Circus (At the circus) Ci: 562 *with picture*

Drama (Other parts of drama) D: 325

Spectacled bearBear (Spectacled bears) B: 186 *with picture***Spectacled cobra**

Cobra Ci: 741

Spectacled porpoise

Porpoise P: 680

Spectacles See Glasses *in this index***Spectator, The** [essays by Addison and Steele]

Addison, Joseph A: 47

Magazine (History) M: 43

Steele, Sir Richard So: 882

Spectral class [astronomy]Star (Spectral classes) So: 846; *diagram on*
So: 849**Spectral lines**

Astronomy (Optical astronomy) A: 838-840

Planet (Planets in other solar systems) P: 512

Telescope (Analyzing spectral) T: 105

Zeeman effect Z: 593

Spectral pattern [astronomy]

Satellite (Spectroscopy) S: 150c

Spectral typeStar (The Hertzsprung-Russell diagram)
So: 845-846**Spectrogram, Speech**Voiceprint V: 437 *with picture***Spectrograph** [instrument]Hubble Space Telescope (How the telescope
works) H: 403

Satellite (Spectroscopy) S: 150c

Spectrometer So: 772

Sun (Analyzing electromagnetic radiation)

So: 983

Telescope (Gathering light for spectrographs)
T: 103**Spectrograph, Sound**

Voiceprint V: 437

Spectroheliograph [instrument]

Hale, George Ellery H: 18

Sun (History of modern solar study) So: 986

Spectrometer [instrument] So: 771 *with dia-*
gram

Atom (How scientists study atoms) A: 874

Light (Electromagnetic waves) L: 285

Satellite (Spectroscopy) S: 150c

Spectrophotometer [instrument]Color (The CIE System of Color Specification)
Ci: 824Crime laboratory (Analyzing the evidence)
Ci: 1141

Spectrometer So: 772

Spectroscope [instrument]

Spectrometer So: 772

SpectroscopyAstronomy (Optical astronomy) A: 838-840
with pictures

Magnetic resonance imaging M: 57

Planet (Planets in other solar systems) P: 512

Satellite (How scientists study satellites)
S: 150c**Spectrum** [light] So: 772 *with diagram*

Astronomy (Optical astronomy) A: 838-840

Color (The relation between color and light)
Ci: 817-818 *with diagram*

Cosmology (Movement of galaxies) Ci: 1078

Galaxy (Origin of galaxies) G: 8b-9

Infrared rays I: 270

Light (Electromagnetic waves) L: 285 *with dia-*
gram

Newton, Sir Isaac (Light and color) N: 389

Physics (The beginning of modern physics)
P: 440-441Prism P: 805 *with picture*Rainbow (How rainbows appear) R: 128 *with*
*picture*Redshift R: 192 *with diagram*

Satellite (Spectroscopy) S: 150c

Spectrometer So: 771

Sun (Analyzing electromagnetic radiation)
So: 983

Star (Color and temperature) So: 843-844

Telescope (Gathering light for spectrographs)

T: 103; (Analyzing spectra) T: 105

Speculation [economics]Commodity exchange (Forward and futures
contracts) Ci: 873

Housing (Private housing) H: 390

Margin M: 198

Speculative masons

Masonry (History) M: 267

Speculum [reference]Encyclopedia (From the 1200's to the 1600's)
E: 268a**Speculum maius** [book by Vincent de Beauvais]Encyclopedia (From the 1200's to the 1600's)
E: 268a**Speech** So: 772

Communication (Prehistoric times) Ci: 879

Dialect D: 180

Kinesics K: 319

Language L: 62

Phonetics P: 399

Phonics P: 400

Prehistoric people (The development of
speech) P: 751

Pronunciation P: 820

Public speaking (Approach to a speech) P: 865
A Guide to Speaking Skills Research

Guide: 20

Speech, Freedom of See Freedom of speech *in*
*this index***Speech and Hearing Association, American**

Speech therapy (History) So: 773-774

Speech clinician

Speech therapy So: 773

Speech defect

Aphasia A: 565

Lisping L: 349

Speech therapy So: 773

Stuttering So: 934

Speech-language pathology See Speech ther-
*apy in this index***Speech spectrogram**Voiceprint V: 437 *with picture***Speech therapy** So: 773Disabled *picture on* D: 221**Speechreading** See Lip reading *in this index***Speed** [drug] See Methamphetamine *in this*
*index***Speed** [physics]

Animal (Comparative speeds of animals) A: 489

Automobile (The power train) A: 952

Governor G: 293

Mach, Ernst M: 12b

Motion (Velocity) M: 844

Navigation N: 70

Transmission T: 375

Velocity V: 297

Speed, James [American government official]Johnson, Andrew (table: Johnson's Cabinet)
J: 140

Justice, Department of (table) J: 203

Lincoln, Abraham (table) L: 323

Speed governor [mechanics]Governor G: 293 *with diagram***Speed of light** See Light, Speed of *in this index***Speed of sound** See Sound, Speed of *in this*
*index***Speed reading** So: 774**Speed skating**Ice skating (Speed skating) I: 13 *with pictures*;
I: 10 *with picture*

Olympic Games (Winter Olympic Games)

O: 746d-746e

Roller skating (Competitive roller skating)

R: 403

Speedcup [mechanics]Speedometer So: 774 *with diagram***Speeding**Radar (In controlling automobile speed and
traffic) R: 67 *with pictures***Speedometer** [instrument] So: 774 *with dia-*
*gram***Speedway race**

Kart racing K: 248

Speedwell [ship]Plymouth Colony (The founding of Plymouth
Colony) P: 582**Speedwriting** So: 775**Speer, Albert** [Nazi leader] So: 775

Nuremberg Trials (The trials) N: 612-613

Speke, John Hanning [British explorer]

Lake Tanganyika L: 46

Lake Victoria L: 48

Spektr [spacecraft]Mir M: 613 *with picture*

Space exploration (Mir) So: 722

Speleology [geology] So: 775

Cave C: 319

Speleothem [geology]

Cave C: 319

Spell

Magic (Magic words) M: 49

Witchcraft W: 371

Spelling So: 775English language (Pronunciation and spelling)
E: 312

Phonetics (Phonetics and spelling) P: 400

Spellman, Francis Joseph Cardinal [American
religious leader] So: 777**Spelunker**

Cave (Caving) C: 321

Speleology So: 775

Spemann, Hans [German biologist]Nobel Prizes (Physiology or medicine: 1935)
N: 444**Spence, Andrew Michael** [American econo-
mist]

Nobel Prizes (Economics: 2001) N: 449

Spencer, Anna Garlin [American social
reformer] So: 777**Spencer, Lady Diana** [British princess] See
Diana, Princess of Wales *in this index***Spencer, Herbert** [British philosopher] So: 777

Social Darwinism So: 551

Sociology (Early sociological thought) So: 566

Spencer, John C. [American government offi-
cial]

Tyler, John (table) T: 534

Van Buren, Martin (U.S. senator) V: 271

Spencer, Platt Rogers [American educator]

Handwriting (Later writing styles) H: 50

Spencerian writing

Handwriting (Later writing styles) H: 50

Spender, Stephen [British poet] So: 778English literature (Poetry between the wars)
E: 322**Spengler, Oswald** [German philosopher]

So: 778

Civilization (Why civilizations rise and fall)
Ci: 636**Spenser** [literary figure]

Parker, Robert B. P: 170

Spenser, Edmund [English poet] So: 778English literature (Elizabethan poetry) E: 316-
317

July (Quotations) J: 189

May (Quotations) M: 321

Spenserian stanzaSpenser, Edmund (*The Faerie Queene*)
So: 778**Sperm** [reproduction]Animal (Sexual reproduction) A: 496 *with dia-*
gram

Cell (Meiosis) C: 331; (Before 1900) C: 337

Corn (How the plant reproduces) Ci: 1058

Embryo E: 257

Heredity (Chromosomes and genes) H: 201

Human body (The reproductive system)

H: 425

Infertility (Causes) I: 265

Plant (Flowers) P: 531; (How plants reproduce)

P: 532

Prostate gland P: 830

Reproduction (Through sexual reproduction)

R: 242; (How reproduction has evolved)

R: 243 *with picture*Reproduction, Human (The human reproduc-
tive system) R: 244-245; (Fertilization)

R: 246; (Development of the embryo)

R: 246-248 *with picture*

Seed (How seeds develop) S: 281

Sexuality (Before birth) S: 338

Testicle T: 181

Vasectomy V: 287

Sperm oil [animal product]

Sperm whale So: 779

Whale (American whaling) W: 262

Sperm whale [sea animal] So: 778

Ambergris A: 405

Spermaceti So: 779

Whale (Sperm whales) W: 258; (American
whaling) W: 262; *picture on* W: 257

- Spermaceti** [animal product] So: 779
Whale (American whaling) W: 262-263
- Spermatophore** [biology]
Salamander (The life of a salamander) S: 60
- Spermatozoa**
Fertilization F: 78
- Spermicide**
Birth control (Methods of birth control) B: 378-379
- Sperry, Armstrong** [American author]
Newbery Medal (table) N: 359
- Sperry, Elmer Ambrose** [American inventor]
So: 779
Gyrocompass G: 453
Gyroscope (History) G: 454
- Sperry, Lawrence** [American inventor]
Automatic flight control system (History) A: 944
- Sperry, Roger Wolcott** [American physiologist]
Nobel Prizes (Physiology or medicine: 1981) N: 445
- Sperry, Thomas** [American businessman]
Trading stamps T: 366
- Sperry Gyroscope Company**
Automatic flight control (History) A: 944
- Spessartite** [gem]
Garnet G: 45
- Speyer, Diet of** [European history]
Protestantism P: 833
- Sphagnum moss** [plant]
Peat moss [Peat moss] P: 225
- Sphalerite** [mineral] So: 779
Zinc Z: 598
- Sphenoid bone** [anatomy]
Head *diagram* on H: 123
Human body *diagram* on H: 422
Skull S: 495
- Sphenoid sinus** [anatomy]
Sinus S: 474 *with diagram*
- Sphere** [geology]
Earth (Earth's spheres) E: 18 *with pictures*
- Sphere** [geometry] So: 779 *with diagram*
Geometry (Non-Euclidean geometry) G: 104 *with picture*
- Spherical aberration** [light]
Aberration (Point aberration) A: 10-11 *with diagram*
- Spherical triangle**
Trigonometry T: 442; (Spherical trigonometry) T: 444 *with diagram*
- Spherical trigonometry**
Trigonometry (Spherical trigonometry) T: 444 *with diagram*
- Spheroid** [geometry] So: 780
- Sphincter** [anatomy]
Eye (The uveal tract) E: 460-461 *with picture*
- Sphincter of Oddi** [anatomy]
Gallbladder G: 14
- Sphinx** [mythological creature] So: 780 *with pictures*
Oedipus O: 676 *with picture*
Pyramids (The pyramids of Giza) P: 917
- "Sphinx, The"** [poem by Emerson]
Emerson, Ralph Waldo (His poetry) E: 259
- Sphinx moth** See Hawk moth *in this index*
- Sphygmomanometer** [instrument]
Blood pressure B: 416
Manometer M: 166
- Spice** [star] So: 781
- Spice So: 781**
- Spice Islands** [Indonesia]
Exploration (Magellan's globe-circling expedition) E: 445
Indonesia (The Molucca Islands) I: 234
Magellan, Ferdinand (Planning the expedition) M: 46
- Spicule** [sun]
Sun (Chromosphere) So: 980; (Solar activity) So: 980-982; *picture* on So: 985
- Spicule** [zoology]
Sponge (Skeleton) So: 799
- Spider** So: 782 *with pictures*
Arachnid A: 590
Arthropod A: 752 *with picture*
Black widow B: 391 *with picture*
Brown recluse B: 644 *with picture*
Tarantula T: 42 *with picture*
Trap-door spider T: 402 *with pictures*
- Spider crab** [animal]
Animal *picture* on A: 486
- Spider fish**
Tripod fish T: 447
- Spider monkey** So: 791
Animal *picture* on A: 480
Monkey *picture* on M: 727
- Spidering**
Information retrieval (How information retrieval works) I: 268b
- Spiderwort** [plant] So: 791
- Spiegel, Herbert** [American scientist]
Hypnotism (Scientific studies) H: 479-480
- Spiegeleisen** [metal]
Iron and steel (The birth of modern steelmaking) I: 451
- Spiegelman, Art** [American cartoonist]
Comics (The new comics) Ci: 870
- Spielberg, Steven** [American director] So: 791
Animation (The animation revival) A: 514b
Lucas, George L: 513
Motion picture (Best achievement in directing: 1993, 1998) M: 862; (A new generation of filmmakers) M: 872
- Spier, Peter** [American artist]
Caldecott Medal (table: 1978) C: 26
- Spike** [botany]
Inflorescence I: 268b *with picture*
- Spike** [sports]
Volleyball (The game) V: 445 *with picture*
- Spike-tooth harrow** [agricultural implement]
Harrow H: 77
- Spikelet** [botany]
Oats (The oat plant) O: 640
- Spikenard** [plant] So: 792
- Špilberk fortress** [Czech Republic]
Brno B: 634
- Spillway**
Dam *picture* on D: 19
- Spin** [physics]
Subatomic particle (Kinds of subatomic particles) So: 937
- Spin-casting** [manufacturing]
Telescope (Reflecting telescopes) T: 104-105; *picture* on T: 108
- Spin-casting reel**
Fishing (Reels) F: 176 *with picture*
- Spina bifida** [birth defect] So: 792
Folic acid F: 315
Reproduction, Human (Development of organs and organ systems) R: 248
- Spinach** [plant] So: 792
- Spinach jade** [mineral]
Jade (Nephrite) J: 20
- Spinal anesthesia**
Anesthesia (Local anesthesia) A: 459
- Spinal column** See Spine *in this index*
- Spinal cord** [anatomy]
Nervous system (The central nervous system) N: 132-133 *with diagram*; *diagram* on N: 134
Brain B: 550a
Cerebrospinal fluid C: 362
Human body *diagram* on H: 422
Meningitis M: 401
Multiple sclerosis M: 920
Myelitis M: 970f
Pain (How the body feels pain) P: 21-22
Paralysis (Paralysis of central nervous system origin) P: 152
Poliomyelitis (Kinds of poliomyelitis) P: 626
Reproduction, Human (Development of organs and organ systems) R: 248
Shaken baby syndrome S: 343
Spine So: 792
- Spinal nerves** [anatomy]
See also Spinal cord *in this index*
Amyotrophic lateral sclerosis A: 447
Cerebral palsy (Treatment) C: 362
Nervous system (The peripheral nervous system) N: 133 *with diagram*
Reflex action (How reflex action occurs) R: 195
- Spinal reflex** [physiology]
Human body (The central nervous system) H: 425-426
Nervous system (Simple pathways) N: 134
- Spinal tap** [medicine]
Cerebrospinal fluid C: 362
Meningitis (Symptoms and diagnosis) M: 401
- Spindle** [biology]
Cell (Mitosis) C: 330 *with pictures*
- Spindle** [tool]
Spinning So: 794
- Spindle picker** [machine]
Cotton (Harvesting) Ci: 1090
- Spindle tuber** [plant disease]
Potato (Diseases and insect pests) P: 713
- Spindletop oil field** [Texas]
Beaumont B: 191
Texas (The early 1900's) T: 207 *with picture*
- Spine** [anatomy] So: 792 *with diagram*
- Chiropractic C: 514
Human body *diagram* on H: 422
Hunchback H: 437
Mammal (Skeleton) M: 118-119
Physical fitness (Flexibility of the spine) P: 434
Rib R: 320
Sciatica S: 190
Scoliosis S: 209
Skeleton (The axial skeleton) S: 479 *with diagrams*
Spina bifida So: 792
Vertebrate V: 340
- Spine** [botany]
Leaf (Protective leaves) L: 156 *with picture*
Plant (How plants protect themselves) P: 544
- Spinelli, Jerry** [American author]
Newbery Medal (table) N: 359
- Spinet** [musical instrument] So: 793
Piano (Upright pianos) P: 447
- Spingarn, Joel Elias** [American author] So: 793
- Spingarn Medal** [award] So: 793
Spingarn, Joel Elias So: 793
- Spinnaker**
Sailing (Sails) S: 24; (Trimming and tacking) S: 26
- Spinner** [lure]
Fishing (Artificial bait) F: 178; *picture* on F: 177
- Spinneret** [entomology]
Butterfly (The larva) B: 740-741 *with diagram*
Moth (The larva) M: 839
Spider (Spinnerets) So: 785 *with diagrams*
- Spinneret** [machine]
Rayon (How rayon is made) R: 153 *with diagram*
- Spinning** [thread] So: 794 *with picture*
Clothing (The 1700's) Ci: 701; *picture* on Ci: 691
Cotton (Spinning) Ci: 1091; *picture* on Ci: 1092
Crompton, Samuel Ci: 1151
Industrial Revolution (Spinning machines) I: 248
Rhode Island (Industrial growth) R: 313
Slater, Samuel S: 501
- Spinning field**
Spider (Spinnerets) So: 785
- Spinning frame**
Textile *picture* on T: 216
- Spinning jenny** [machine] So: 794
Hargreaves, James H: 60 *with picture*
Industrial Revolution (Spinning machines) I: 248-249
Spinning (The spinning jenny) So: 794
- Spinning lure** See Spinner *in this index*
- Spinning mule** [machine]
Crompton, Samuel Ci: 1151
Industrial Revolution (Spinning machines) I: 248-249
Spinning (The mule) So: 794
- Spinning reel**
Fishing (Reels) F: 176 *with picture*
- Spinning tubes**
Spider (Spinnerets) So: 785
- Spinning wheel**
Industrial Revolution (Spinning machines) I: 248-249
Spinning (Early spinning wheels) So: 794 *with picture*
- Spinone Italiano** [dog]
Spinone Italiano So: 794
- Spinoza, Baruch** [Dutch philosopher] So: 795
Philosophy (Modern philosophy) P: 387-388
- Spiny anteater** See Echidna *in this index*
- Spiny-bodied spider**
Spider (table) So: 790; *picture* on So: 782
- Spiny eel**
Fish *picture* on F: 156
- Spiny-finned fish**
Fish (Bony fish) F: 147; *pictures* on F: 149
- Spiny-headed worm** See Acanthocephala *in this index*
- Spiny lobster**
Crustacean *picture* on Ci: 1163
Lobster L: 405 *with picture*
- Spiny-tailed iguana**
Iguana I: 50
- Spiracle** [entomology]
Animal (Adaptations for breathing) A: 491-492 *with picture*
Beetle (The abdomen) B: 216
Butterfly (The internal organs) B: 739 *with diagram*
Fly (Abdomen) F: 309
Grasshopper (The body) G: 327-328 *with diagram*
Insect (Respiratory system) I: 289 *with diagram*; *diagram* on I: 286

Moth (The abdomen) **M**: 838 *with diagram*
 Spider (Respiratory system) **So**: 785
Spiraea [shrub] **So**: 795
 Flower (Garden perennials) **F**: 281 *with picture*
Spiral fracture [injury]
 Fracture **F**: 451 *with diagram*
Spiral galaxy [astronomy]
 Andromeda Galaxy **A**: 457 *with picture*
 Astronomy (Discovering other galaxies) **A**: 848
 Galaxy (Shapes of galaxies) **G**: 8a *with picture*;
 (Evolution of spiral galaxies) **G**: 9
 Milky Way (Shape of the galaxy) **M**: 550
Spirant [pronunciation]
 Consonant **Ci**: 992
Spire [architecture] **So**: 795
Spire [zoology]
 Shell *diagram on S*: 385
Spirilla
 Bacteria (The structure of bacteria) **B**: 20
Spirit
 Angel **A**: 460
 Ghost **G**: 182
 Spiritualism **So**: 796
 Witchcraft (Witchcraft as sorcery) **W**: 371
Spirit baptism [religion]
 Pentecostal churches (Beliefs and practices)
P: 275
Spirit duplicator [copier]
 Duplicator (Spirit duplicators) **D**: 386
Spirit Lake
 Iowa (Rivers and lakes) **I**: 386
Spirit of America [automobile]
 Breedlove, Craig **B**: 593
Spirit of Christianity, The [book by
 Chateaubriand]
 Chateaubriand, François-René de **C**: 387
Spirit of Haida Gwaii [sculpture by Reid]
 Canada *picture on C*: 110
Spirit of Saint Louis [airplane]
 Airplane (Fliers of the golden age) **A**: 237
 Lindbergh, Charles Augustus (His historic
 flight) **L**: 330 *with picture*
Spirit of Saint Louis, The [book by Lindbergh]
 Lindbergh, Charles Augustus (After the war)
L: 331
Spirit of '76 [painting by Willard] **So**: 795 *with
 picture*
Spirit of the Laws, The [book by Montesquieu]
 Age of Reason (The orderliness of nature)
A: 139
 Freedom (During the Age of Reason) **F**: 503
 Montesquieu **M**: 764
Spirit power [religion]
 Indian, American (Religion) **I**: 146-147; (After
 European contact) **I**: 159-160
Spirit Sands [Manitoba]
 Manitoba (Places to visit) **M**: 152
Spirit vinegar See *Vinegar in this index*
Spirit worship
 Animism **A**: 514b
 Religion (Tylor's theory) **R**: 219
Spirit wrestlers [religious group]
 Doukhobors **D**: 314
Spirits See *Alcoholic beverage in this index*
Spirits of camphor
 Camphor **C**: 91
Spiritual [music] **So**: 795
 Burleigh, Harry Thacker **B**: 707
 Folk music (Kinds of folk music) **F**: 321
 Popular music (The Civil War [1861-1865])
P: 669-670
Spiritual Exercises [book by Loyola]
 Loyola, Saint Ignatius **L**: 512
Spiritual Milk for Boston Babies [book by
 Cotton]
 Literature for children (The Puritans) **L**: 361
Spiritualism [belief] **So**: 796
 Psychical research **P**: 846
Spiritualists [art]
 Abstract art **A**: 18
Spirituals [religion]
 Franciscans **F**: 482
Spirochete [microorganism]
 Bacteria (The structure of bacteria) **B**: 20 *with
 picture*
 Relapsing fever **R**: 209
 Syphilis **So**: 1069
 Yaws **Y**: 553
Spirogram
 Spirometer **So**: 796
Spirometer [instrument] **So**: 796 *with picture*
 Asthma **A**: 825
Spirula squid
 Shell (Octopuses and squids) **S**: 388
Spitfire [airplane]

Aircraft, Military (World War II [1939-1945])
A: 205
 World War II (Weapons of World War II) *pic-
 ture on W*: 485
Spitsbergen [island, Arctic]
 Exploration (The search for a northern pas-
 sage) **E**: 446
 Svalbard **So**: 1013
Spitteler, Carl [Swiss author]
 Nobel Prizes (Literature: 1919) **N**: 446
Spitting cobra [snake]
 Cobra **Ci**: 741
 Snake (Protection against enemies) **S**: 532-
 533; *picture on S*: 525
Spitz [dog] **So**: 797
 Finnish spitz **F**: 119 *with picture*
Spitz, Mark [American swimmer]
 Olympic Games (Terrorism in Munich) **O**: 752-
 753
 Swimming (History) **So**: 1048
Splat
 Furniture (China) **F**: 571 *with picture*
Spleen [anatomy] **So**: 797 *with diagram*
 Frog *picture on F*: 537
 Iron (How bodies use iron) **I**: 435
 Lymphatic system (Lymphoid tissue) **L**: 534
 Thymus **T**: 274
Splendid isolation [British history]
 United Kingdom (Gladstone and Disraeli) **U**: 69
Splenectomy [medicine]
 Spleen **So**: 797
Splice [knot]
 Knots, hitches, and splices (Useful knots)
K: 356 *with diagram*
Splicing
 Cable (Cable installation) **C**: 5-6
 Knots, hitches, and splices **K**: 355
Spint
 First aid (Fractures and dislocations) **F**: 140-
 141
Split [city, Croatia] **So**: 797
Split [sports]
 Bowling (table) **B**: 521; *picture on B*: 523
Split [stocks]
 Dow Jones averages **D**: 316
Split brain
 Brain (The work of the brain) **B**: 552-553
Split complementary colors
 Color (Producing color harmony) **Ci**: 823-824
with diagram
Split end
 Football (The offensive team) **F**: 356 *with dia-
 grams*
Split income [taxation]
 Income tax (History of U.S. income taxes)
I: 105
Split infinitive [grammar]
 Adverb (Adverbs that split an infinitive) **A**: 71
Split-leaved philodendron [plant]
 Gardening (Some popular house plants) **G**: 37
with picture
Split-letter system
 Encyclopedia (Arrangement of content) **E**: 266
Split pattern
 Cast and casting (Patterns for casting) **C**: 278
Split pea
 Pea (Kinds of peas) **P**: 205
Split Rock Lighthouse [Minnesota]
 Lake Superior (Description) **L**: 45 *with map*
Split screen
 Television (Putting a show on the air) **T**: 111-
 113
Split ticket
 Ballot (In the United States) **B**: 63
Splitter [device]
 Lumber *picture on L*: 520
Splitting [industrial process]
 Leather (Final processing) **L**: 168 *with picture*
Spock, Benjamin McLane [American doctor]
So: 797
Spodosol [soil]
 Soil (How soils are classified) **So**: 575-576
with map
Spoilage
 Food preservation (How food spoils) **F**: 341
Spoiler
 Airplane (The wing) **A**: 213-214
 Glider (Landing) **G**: 230
Spoils [mining]
 Coal (Strip mining) **Ci**: 721
Spoils system [politics] **So**: 798
 Arthur, Chester Alan (Custom house collector)
A: 755-756
 Civil service (History) **Ci**: 613
 Cleveland, Grover (Reforms) **Ci**: 670

Foreign Service (Beginnings) **F**: 389
 Grant, Ulysses S. (Political corruption) **G**: 315-
 316 *with picture*
 Jackson, Andrew (The spoils system) **J**: 10
 Jefferson, Thomas (New policies) **J**: 83-84
 Patronage **P**: 198
Spokane [Washington] **So**: 798 *with picture*
 Washington **W**: 61
Spokane House [U.S. history]
 Washington (Settlement) **W**: 66
Spoke [weaving]
 Basket making (Methods) **B**: 141
Spoken language
 Language (Methods of study) **L**: 62
Sponge [bread]
 Bread (How yeast bread is made) **B**: 588-589
Sponge [sea animal] **So**: 799 *with pictures*
 Animal (A classification of the animal kingdom)
A: 506 *with picture*
 Deep sea (Invertebrates) **D**: 82a *with picture*
 Marine biology (What marine biologists do)
M: 204
Sponge rubber
 Rubber (Sponge rubber) **R**: 505
Spongin
 Sponge (Skeleton) **So**: 799
Spongy tissue [botany]
 Leaf (Photosynthesis) **L**: 155 *with diagram*
Sponson [boat]
 Hydroplane **H**: 471
 Motorboat racing (Hull designs) **M**: 876 *with
 picture*
Sponsor [advertising]
 Radio (Stations and networks) **R**: 90
Spontaneous abortion See *Miscarriage in this
 index*
Spontaneous combustion [chemistry]
 Combustion **Ci**: 867
 Fire (Kinds of fire) **F**: 120
 Hay **H**: 115
Spontaneous emission [physics]
 Laser (Producing laser light) **L**: 83-84
Spontaneous generation **So**: 801
 Biogenesis **B**: 312
 Leeuwenhoek, Anton van **L**: 181
 Life (The theory of spontaneous generation)
L: 278
Spontaneous nuclear transformation [physics]
 Curie **Ci**: 1194
Spontaneous nystagmus [disorder]
 Nystagmus **N**: 633
Spoon [fishing]
 Fishing (Bait) **F**: 177-178; *picture on F*: 177
Spoon [utensil]
 Indian, American *picture on I*: 156
Spoon-billed catfish See *Paddlefish in this
 index*
Spoon gourd
 Gourd *picture on G*: 281
Spoon River
 Illinois (Rivers and lakes) **I**: 64-66
Spoon River Anthology [poems by Masters]
 Masters, Edgar Lee **M**: 297
Spoonbill [bird] **So**: 801 *with picture*
 Bird *picture on B*: 363
Spoonbill [duck]
 Shoveler **S**: 439
Sporades [islands, Aegean Sea]
 Aegean Sea **A**: 84 *with map*
Sporangiophore [fungus]
 Fungi (Parts of a fungus) **F**: 558-559 *with dia-
 gram*
Sporangium [biology]
 Fern (Parts of a fern) **F**: 74-75 *with picture*
 Fungi (Parts of a fungus) **F**: 558-559 *with dia-
 gram*
 Mold **M**: 690
 Plant (Sexual reproduction) **P**: 532; *picture on
 P*: 534
 Spore (Plant spores) **So**: 801
Spore [biology] **So**: 801 *with pictures*
 Alternation of generations **A**: 388
 Anthrax **A**: 545
 Bacteria (Where bacteria live) **B**: 20-21
 Fern (Parts of a fern) **F**: 74-75
 Fungi (Parts of a fungus) **F**: 558-559 *with dia-
 gram*
 Lichen (How lichens grow) **L**: 269
 Mold **M**: 690
 Mushroom (How a mushroom grows) **M**: 942
with pictures
 Plant (Sexual reproduction) **P**: 532; *picture on
 P*: 534, (Diseases) **P**: 543 *with picture*
 Protozoan (Reproduction) **P**: 837
 Pteridophyte **P**: 854

- Rust R: 567
Seed (How seeds develop) S: 281
- Sporophyte** [botany]
Alternation of generations A: 388
Bryophyte B: 656
Fern (Life cycle of a fern) F: 75 *with picture*
Liverwort L: 396
Plant (Sexual reproduction) P: 532 *with picture*
Spore (Plant spores) So: 801
- Sport** [genetics] So: 802
Fruit (Developing new varieties of fruit) F: 546
- Sport balloon**
Balloon (Gas balloons) B: 58 *with picture*;
(Recreational uses) B: 59
- Sport climbing**
Climbing (Technical climbing) Ci: 680
- Sport fisherman** [boat]
Boating *picture on* B: 430
- Sport of kings**
Horse racing (History) H: 366
- Sport parachuting** See *Skydiving in this index*
- Sport shoe**
Shoe (Kinds of shoes) S: 431 *with picture*
- Sport utility vehicle**
Automobile *picture on* A: 971
- Sporting dog**
Dog (Kinds of dogs) D: 265-266; *pictures on* D: 268
- Sports** So: 802
Careers (Sports and entertainment) C: 230 *with picture*
Gambling (Sports betting) G: 20
Hall of fame (Sports halls of fame) H: 22; *picture on* H: 24
Indian, American (Current issues) I: 182-183
Olympic Games O: 746 *with pictures*
Safety (Safety at school) S: 11-12; (Safety in recreation) S: 12
Sports medicine So: 803
Television (Effects on society) T: 117-118
See also *the list of Related Articles in the Sports article*
- Sports car** [automobile] So: 802 *with pictures*
Automobile *picture on* A: 967
Automobile racing (Sports car racing) A: 977 *with pictures*
Tire *picture on* T: 296
- SPORTS CAR** [organization]
Automobile racing (Racing organizations) A: 976
- Sports Car Club of America**
Automobile racing (Racing organizations) A: 976
- Sports Illustrated** [magazine]
Magazine (table) M: 45
- Sports medicine** So: 803
- Sports Palace**
Rome *picture on* R: 431
- Sportsman's Sketches, A** [book by Turgenev]
Russian literature (Early realism) R: 562
- Sportswear**
Clothing (The 1900's) Ci: 703
- Spot** [fish] So: 804 *with picture*
- Spot announcement**
Advertising (Television) A: 73
- Spot-billed pelican** [bird]
Pelican (Pelicans and people) P: 231
- Spot bowling**
Bowling (Aiming) B: 522
- Spot market** [economics]
Commodity exchange (Cash market contracts) Ci: 873
- Spot removing**
Dry cleaning (How clothes are dry cleaned) D: 368
- Spot welding**
Welding (Resistance welding) W: 189
- Spotlight**
Theater (Lighting methods) T: 240-241
- Spotswood, Alexander** [American colonial official] So: 804
- Spotsylvania Court House, Battle of** [1864]
Civil War (table) Ci: 624; (Battle of Spotsylvania Court House) Ci: 631
Grant, Ulysses S. (Grant in command) G: 315
- Spotted elder** [shrub]
Witch hazel W: 371
- Spotted bass**
Bass (Black bass) B: 156 *with picture*
- Spotted cucumber beetle**
Beetle *picture on* B: 218
- Spotted eagle ray** [fish]
Fish *picture on* F: 153
- Spotted fever, Rocky Mountain** See *Rocky Mountain spotted fever in this index*
- Spotted goatfish**
Fish *picture on* F: 154
- Spotted hyena** [animal]
Hyena H: 473; *picture on* H: 473
- Spotted owl** [bird] So: 804 *with picture*
Animal *picture on* A: 478
- Spotted salamander**
Salamander *picture on* S: 59
- Spotted sandpiper**
Bird (Birds of inland waters and marshes) B: 340 *with picture*
Sandpiper S: 109
- Spotted skunk**
Skunk S: 496
- Spotted spurge** [plant]
Spurge So: 810
- Spotted Swine**
Hog (Kinds of hogs) H: 285 *with picture*;
(table) H: 286
- Spotted Tail** [American Indian leader] So: 804 *with portrait*
- Spotter**
Trampoline T: 369 *with picture*
- Spout** [zoology]
Whale (Respiratory system) W: 259-260 *with picture*
- Sprague, Charles A.** [American political leader]
Oregon (table) O: 845
- Sprague, Frank Julian** [American engineer]
Electric railroad (History) E: 188-189
- Sprague's pipit** [bird]
Pipit P: 492
- Sprain** [injury] So: 805
Joint J: 155
Ligament L: 281
- Sprat** [fish] So: 805
- Spray-drying**
Food preservation (Drying) F: 342-343
- Spray gun** [tool]
Airbrush A: 201
Paint (Applying the paint) P: 25 *with picture*
- Spray pond**
Electric power (Fossil-fueled steam electric power plants) E: 183
- Spraying** [agriculture]
Airplane (Special-purpose planes) A: 212 *with picture*
Insecticide (Spraying and dusting) I: 303 *with picture*
- Sprayskirt**
Kayak K: 250a
- Spread foundation**
Building construction (Foundations) B: 682
- Spreading center** [geology]
Earth (Earth's crust) E: 23
- Spreading dogbane** [plant]
Dogbane D: 283 *with picture*
- Spreadsheet** [computer program] So: 805 *with picture*
Computer (Spreadsheet programs) Ci: 917
Office work (Recording information) O: 677
- Spreadsheet modeling**
Computer (Spreadsheet programs) Ci: 917-918
- Sprigging** [gardening]
Lawn (Planting the grass) L: 142-144
- Spring** [geology] So: 806 *with diagram*
- Spring** [hardware] So: 806
Torsion bar suspension T: 341
- Spring** [season] So: 806
Ground-Hog Day G: 401
May Day M: 322
- Spring-beauty** [plant] So: 806 *with picture*
- Spring bloom** [organisms]
Atlantic Ocean (Ocean life) A: 866
- Spring cankerworm** [larva]
Cankerworm C: 177 *with picture*
- Spring-driven clock**
Clock (Mechanical clocks) Ci: 682]
- Spring Fiesta** [custom]
New Orleans (Annual events) N: 282
- Spring latch**
Lock (Types of locks) L: 410
- Spring lizard**
Lizard L: 399
- Spring-neap cycle**
Tide (Tidal cycles) T: 282
- Spring scale**
Scale, Weighing (Mechanical scales) S: 169
- Spring tide**
Tide (Tidal cycles) T: 282; *diagram on* T: 281
- Spring-tooth harrow**
Harrow H: 77
- Spring wheat**
Wheat (Winter wheats and spring wheats) W: 268 *with pictures*
- Springboard diving**
Diving (Types of diving) D: 242 *with pictures*
- Springbok** [animal] So: 807 *with picture*
- Springbuck** [animal] See *Springbok in this index*
- Springer** [architecture]
Arch *diagram on* A: 593
- Springer spaniel**
Dog *picture on* D: 269
Welsh springer spaniel W: 195
- Springfield** [Illinois] So: 807
Lincoln, Abraham (Assassination) L: 326 *with picture*
- Springfield** [Massachusetts] So: 807
Massachusetts *picture on* M: 279
- Springfield** [Missouri] So: 808
- Springfield, Lake** [Illinois]
Springfield So: 807
- Springfield Armory National Historic Site** [Massachusetts]
National Park System (table: National historic sites) N: 52-53
- Springhaas**
Springhare So: 808
- Springhare** [rodent] So: 808 *with picture*
- Spring's Awakening** [play by Wedekind]
Wedekind, Frank W: 178
- Springsteen, Bruce** [American singer] So: 808
Rock music (Rock goes pop) R: 379-380
- Springtail** [insect]
Insect *picture on* I: 280
- Springwood** [estate]
Roosevelt, Franklin Delano *picture on* R: 453
- Sprinkler system** [firefighting]
Fire department (Fire prevention and fire safety) F: 124
Bismuth B: 383
- Sprinkler system** [irrigation]
Irrigation (Sprinkler irrigation) I: 458 *with picture*
- Sprint** [race]
Bicycle racing (Track races) B: 293
Kart racing K: 248
Track and field (Track events) T: 354
- Sprint car**
Automobile racing (Other kinds of racing) A: 979
- Sprouting** [botany]
Germination G: 173
- Spruance** [ship]
Destroyer D: 162 *with pictures*
- Spruance, Raymond Ames** [American admiral] So: 809
- Spruce** [tree] So: 809 *with picture*
Tree *pictures on* T: 425, T: 427
- Spruce budworm** [insect] So: 810 *with picture*
- Spruce Goose** [airplane]
Hughes, Howard Robard H: 409
- Spruce grouse** [bird]
Grouse (Habits) G: 403-404 *with picture*
- Spruce Knob** [mountain]
West Virginia (Land regions) W: 218
- Spruce Tree House** [Colorado]
Mesa Verde National Park M: 420
- Sprudel** [spring]
Karlovy Vary K: 247
- Sprung rhythm** [poetry]
Hopkins, Gerard Manley H: 333
- Spun silk**
Silk (Spun silk) S: 461
- Spun soy protein**
Soybean (Soy meal) So: 690
- Spun yarn**
Textile (Making the yarn) T: 215
- Spur**
Chicken (The body of a chicken) C: 440 *with picture*
- Spur** [riding equipment]
Cowboy (His clothing) Ci: 1108-1109
Horse (Spurs) H: 351
- Spur gear**
Gear G: 75
- Spurge** [plant] So: 810
Poisonous plant P: 602
- Spurgeon, Caroline** [British author]
Shakespeare, William (Modern critics) S: 369
- Spurs, San Antonio**
Basketball (table) B: 150
- Sputnik** [satellite] So: 810
- Sputnik 1**
Eisenhower, Dwight David (The space age) E: 154
Rocket (The space age) R: 391
Space exploration *picture on* So: 698; (The first artificial satellites) So: 707
Sputnik So: 810
- Sputnik 2**
Eisenhower, Dwight David (The space age) E: 154

Space exploration (The space race begins) So: 707

Sputum [physiology]
Tuberculosis (The disease) T: 478; (Diagnosis of tuberculosis) T: 479

Spy So: 810
See also Espionage in this index

Spy [newspaper]
Thomas, Isaiah T: 261

Spy, The [book by Cooper]
Cooper, James Fenimore Ci: 1035

Spy Who Came in from the Cold, The [book by Le Carré]
Le Carré, John L: 174

Spyri, Johanne [Swiss author] So: 810

Squab
Pigeon (Life history) P: 460 *with picture*

Squad [military]
Army, United States (table) A: 737

Squadron [military unit]
Air force (The organization of air forces) A: 183

Squall [weather] So: 811

Squamous cell [physiology]
Epithelium E: 345

Squamous cell cancer [disease]
Skin cancer (Nonmelanoma skin cancer) S: 492

Squanto [American Indian interpreter] So: 811
Plymouth Colony (The first year) P: 583

Square [arithmetic]
Algebra (Quadratic equations in one unknown) A: 358
Multiplication (Multiplication facts) M: 921-922
Power P: 728

Square [geometry] So: 811 *with diagram*

Square [tool]
Woodworking (Planning and design) W: 396 *with picture*

Square [unit of measure]
Weights and measures (table: Miscellaneous weights and measures) W: 184

Square centimeter [measurement]
Metric system (The metric system at a glance) M: 438 *with picture*

Square dancing So: 811 *with picture*
Dance picture on D: 25
Folk dancing F: 321

Square deal [U.S. history]
Roosevelt, Theodore (Friend of labor) R: 468-469
United States, History of the (The Progressive Era) U: 181-182

Square division [military]
Brigade B: 608

Square foot [unit of measure]
Foot F: 352

Square kilometer [measurement]
Metric system (The metric system at a glance) diagram on M: 438

Square knot
Knots, hitches, and splices (Useful knots) K: 356 *with diagram*

Square measure [measurement] So: 811
See also Area in this index
Metric system (Space and time) M: 437;
(Metric conversion table) M: 439 *with pictures*

Square meter [unit of measure]
Metric system (Space and time) M: 437; (The metric system at a glance) M: 438 *with picture*

Square-rigger
Ship (The full-rigged ship) S: 408

Square root [mathematics] So: 812
Algebra (Quadratic equations in one unknown) A: 358

Square sail
Ship (Egyptian ships) S: 403-404 *with picture*
Warship (Early warships) W: 41

Squash [drink]
England (Food and drink) E: 295-296

Squash [microbiology]
Microtomy M: 520

Squash [plant] So: 812 *with pictures*
Zucchini Z: 612 *with picture*

Squash [sport] So: 813 *with pictures*

Squash racquets [sport] *See* Squash in this index

Squat [weightlifting]
Weightlifting W: 183

Squatter [Australian history]
Australia (The squatter period) A: 923

Squatter [U.S. history] So: 814
Kansas (The struggle over slavery) K: 235

Pioneer life in America (How the pioneers obtained land) P: 479
Pre-emption P: 734a

Squatter community [housing]
Colombia (Way of life) Ci: 779-781
Peru (Housing) P: 309

Squatter sovereignty *See* Popular sovereignty in this index

Squatter's rights [U.S. history] So: 814
Pre-emption P: 734a

Squaw Man, The [film]
Western frontier life in America (Entertainment) W: 240

Squawfish
Minnow M: 607

Squeegee
Screen printing S: 225 *with picture*

Squeeze play
Baseball (Baseball terms) B: 124

Squeteague *See* Weakfish in this index

Squid [sea animal] So: 814 *with picture*
Animal (Fins, tails, and flippers) A: 490
Antarctica (Animal life) A: 534
Deep sea (Invertebrates) D: 82a-82b
Giant squid G: 184 *with picture*
Marine biology (What marine biologists do) M: 204-205
Mollusk (Octopuses and squids) M: 695
Ocean (The nekton) O: 655
Shell (Octopuses and squids) S: 388

SQUID magnetometer [physics]
Magnetometer M: 62

Squill [plant] So: 814

Squire [European history]
Knights and knighthood (The squire) K: 348 *with pictures*

Squirrel So: 815 *with pictures and map*
Animal (Animals of the polar regions) A: 484; *picture on* A: 478
Fur (table) F: 561

Squirrel monkey So: 817

Sr [symbol]
Strontium So: 930

SR-71A [airplane]
Airplane (Military planes) A: 212

SRBM [missile] *See* Short-range ballistic missile in this index

SRI International [research organization]
So: 817

Sri Jayewardenepura Kotte [city, Sri Lanka] So: 817

Sri Lanka So: 817

Sri Lanka [country] So: 817 *with pictures and map*
Agriculture picture on A: 147
Asia (Education) A: 783; *picture on* A: 802
Flag picture on F: 204
Sri Jayewardenepura Kotte So: 817

Srivijaya [former kingdom, Indonesia]
Indonesia (Hindu and Buddhist kingdoms) I: 236

S.S. troops [German history]
Himmler, Heinrich H: 234
Hitler, Adolf (Rise of the Nazis) H: 266

SSA *See* Social Security Administration in this index

SSI [program]
Welfare W: 190

SSM [weapon]
Guided missile (Surface-to-surface missiles) G: 426

SSRI [drug]
Selective serotonin reuptake inhibitor M: 407

SSS *See* Selective Service System in this index

SST [airplane] *See* Supersonic transport plane in this index

St. ...
Individual saints appear under their names, as in Peter, Saint. Other entries, such as Saint Louis (Missouri), appear under Saint ...

Stabilator
Airplane (The tail) A: 214-216; *picture on* A: 214

Stabile [sculpture]
Calder, Alexander C: 27

Stabilizer [food]
Food additive (Kinds of additives) F: 339

Stabilizer [instrument]
Airplane (The tail) A: 214 *with picture*
Ship (The chief parts of a ship) S: 424

Stabilizing selection [biology]
Evolution (Natural selection) E: 428

Stable [barrel]
Horse (The stall) H: 355

Stable equilibrium

Gravity, Center of G: 333

Staccato
Music (Indicating expression) M: 955 *with diagram*

Stacking chair
Eames, Charles E: 6

Stacy, Mehlon [American pioneer]
Trenton T: 435

Stadecona [Canadian history]
Quebec (Early days) Q: 36

Stadholder [title]
Netherlands (Wars with England and France) N: 149

Stadium So: 820
Artificial turf A: 761
Colosseum Ci: 849 *with picture*

Staedtler, Frederick [German businessman]
Pencil (History) P: 236

Staël, Madame de [French author] So: 820
French literature (The preromantics) F: 521

Staël-Holstein, Baron [Swedish diplomat]
Staël, Madame de So: 820

Staff [music]
Music (Indicating pitch) M: 953 *with pictures*

Staff officer
Navy, United States (Training an officer) N: 83

Staff sergeant
Rank, Military (table) R: 140

Staff signature [music]
Music (Indicating pitch) M: 953 *with pictures*

Staff writing
Writing W: 511

Stafford, James F. [American cardinal]
Cardinal (table: American cardinals) C: 211

Stafford, Jean [American author] So: 820

Stafford, Thomas Patten [American astronaut]
Space exploration (Voskhod and Gemini: The first multiperson space flights) So: 714;
(The Apollo-Soyuz Test Project) So: 721 *with picture*

Staffordshire bull terrier So: 820 *with picture*
Pit bull P: 498

Staffordshire terrier
American Staffordshire terrier A: 430
Dog picture on D: 273

Stag [animal]
Deer D: 82d

Stag at Sharkey's [painting by Bellows]
Bellows, George Wesley B: 245

Stag beetle So: 821
Beetle picture on B: 215
Insect picture on I: 283
Shell picture on S: 384

Stage [engine]
Turbine (How turbines work) T: 495-496

Stage [microscope]
Microscope (Parts of an optical microscope) M: 519 *with picture*

Stage [rocket]
Rocket (Multistage rockets) R: 385 *with diagram*
Space exploration (Getting into space and back) So: 698

Stage [theater]
Drama (Greek drama) D: 326 *with picture*;
(Roman drama) D: 328 *with picture*; (The Italian stage) D: 330 *with picture*;
(Elizabethan theaters) D: 331; (Religious plays) D: 333 *with picture*; (England) D: 334 *with picture*
Shakespeare, William (The stage) S: 352 *with picture*
Theater (The stage) T: 233 *with picture*

Stage designer [career]
Theater (The scene designer) T: 239
Opera (The designers) O: 794 *with picture*;
pictures on O: 799

Stage director
Opera (The stage director) O: 794

Stage manager
Opera (The stage manager) O: 796; *picture on* O: 795
Theater (The director's assistants) T: 237

Stage name
Name (Stage names) N: 8
Pseudonym P: 844

Stage picture
Theater (Rehearsing) T: 236

Stagecoach [film]
Westerns W: 242 *with picture*

Stagecoach [vehicle] So: 821 *with picture*
Colonial life in America (Transportation) Ci: 805-806
Postal services (The creation of the Penny Post) P: 706 *with picture*

- Transportation (Development of inland transport) T: 389-390; *picture on* T: 388
 Western frontier life in America (Transportation) W: 238; *picture on* W: 233
- Stagehand**
 Opera (The technical staff) O: 795-796 *with picture*
- Stagflation** [economics]
 Keynes, John Maynard K: 308a
- Stagg, Amos Alonzo** [American football coach] So: 821
 Connecticut (Interesting facts) Ci: 953
- Staggers Rail Act** [1980]
 Railroad (Railroads today) R: 119
- Staghorn sumac**
 Sumac So: 972
- Staging** [medicine]
 Cancer (Staging) C: 172
- Staging flock** [zoology]
 Duck (Habits) D: 376
- Stagnant anoxia**
 Anoxia A: 519
- Stahl, Franklin** [American geneticist]
 Heredity (The chemistry of genes) H: 209
- Stahl, Georg** [German chemist]
 Acetic acid A: 25
 Chemistry (The phlogiston theory) C: 401
- Ståhlberg, Kaarlo Juho** [Finnish political leader]
 Finland (The new republic) F: 117
- Stain** [dye] So: 821
 Cell *picture on* C: 326
 Paint (Industrial paints) P: 24
- Stain removal technician**
 Dry cleaning (How clothes are dry cleaned) D: 368
- Stained glass** [art] So: 821 *with pictures*
 Tracery T: 353
- Stainless steel** So: 823
 Alloy (Alloys of iron) A: 377-378
 Chromium C: 538
 Iron and steel (Kinds of iron and steel) I: 437
 Manganese (Industrial uses) M: 139
- Stairway**
See also Escalator *in this index*
 Safety (Safety at school) S: 11 *with pictures*
- Stake** [diocese]
 Mormons (Church organization) M: 807
- Stakes race**
 Horse racing (Types of horse races) H: 364
- Staking** [industrial process]
 Leather (Final processing) L: 168
- Stalactite** [geology] So: 824 *with picture*
 Cave (Speleothems) C: 319 *with diagram*
 Stalagmite So: 824
- Stalagmite** [geology] So: 824 *with picture*
 Cave (Speleothems) C: 319 *with diagram*
 Stalactite So: 824
- Stalemate** [chess]
 Chess (How chess is played) C: 413
- Stalemate** [warfare]
 War (How wars end) W: 25
- Stalin, Joseph** [Soviet dictator] So: 824 *with pictures*
 Churchill, Sir Winston Leonard Spencer (Meetings with Roosevelt) C: 548 *with picture*
 Cold War (The alliance breaks up) Ci: 763
 Collective farm Ci: 775
 Communism (Restrictions on personal freedom) Ci: 891-892; (Under Stalin) Ci: 892 *with picture*
 Dictatorship D: 191
 Khrushchev, Nikita Sergeyevich K: 308b
 Roosevelt, Franklin Delano (The Big Three) R: 461
 Russia (Stalin) R: 553
 Tehran Conference T: 88
 Tito, Josip Broz (Yugoslav leader) T: 302
 Trotsky, Leon T: 452
 Union of Soviet Socialist Republics (History) U: 35-36 *with picture*
 World War II (The Allies attack in Europe and Northern Africa) W: 478 *with picture*
 Yalta Conference Y: 549
- Stalinabad** [former name]
 Dushanbe D: 390
- Stalingrad** *See* Volgograd *in this index*
- Stalingrad, Battle of** [1942-1943] So: 828 *with picture*
 Russia (World War II) R: 554
 Union of Soviet Socialist Republics (World War II) U: 37 *with picture*
 World War II (On the Soviet front) W: 479 *with picture*
- Stalinism**
 Stalin, Joseph So: 824; (Stalinism) So: 828
- Stalk** [botany]
 Corn (How the plant develops) Ci: 1057-1058 *with picture*
- Stalk-cutting** [agriculture]
 Tobacco (Harvesting tobacco) T: 306
- Stalked sea lily** [animal]
 Deep sea (Invertebrates) D: 82a-82b
- Stalking** [crime]
 Domestic violence D: 301
- Stalky and Co.** [book by Kipling]
 Kipling, Rudyard (Childhood) K: 334
- Stall** [aerodynamics]
 Aerodynamics (Angle of attack) A: 86
- Stall** [barn]
 Barn B: 113
 Horse (The stall) H: 355
- Stall-feeding**
 Dairying (History of dairying) D: 8
- Stalling**
 Airplane (Stalling) A: 225; (Measuring flying speed) A: 225-226
- Stallings, Laurence** [American author]
 Anderson, Maxwell A: 452
- Stalwarts** [U.S. history]
 Garfield, James Abram (Congressman) G: 41-42
 Hayes, Rutherford Birchard (Campaign of 1876) H: 120
 Republican Party (The Radical Republicans and Reconstruction) R: 254-255
- Stamen** [botany]
 Angiosperm A: 462
 Flower (The stamens) F: 293-294
 Plant (Flowers) P: 531 *with picture*; (In seed plants) P: 532
 Pollen P: 644 *with diagram*
 Seed (Seed development in angiosperms) S: 281-282
- Stamford** [Connecticut] So: 828
- Stamford Bridge, Battle of** [1066]
 Harold III H: 65
- Staminate flower**
 Flower (Variations in flower structure) F: 294
- Stammering**
 Stuttering S: 934
- Stamp** So: 829
See also Postage stamp *in this index*
 United States, History of the *picture on* U: 157
- Stamp Act** [1765] So: 829 *with picture*
 Adams, John (In New England) A: 35
 Franklin, Benjamin (A delegate in London) F: 490
 Henry, Patrick (Early life) H: 189-190
 Journalism (Early American journalism) J: 174
 Massachusetts (Pre-Revolutionary days) M: 291
 Revolutionary War in America (The Quartering and Stamp acts) R: 272
 United States, History of the (British policy changes) U: 156-157 *with pictures*
- Stamp Act Congress** [U.S. history]
 Federal Hall F: 64
 Revolutionary War in America (The Quartering and Stamp acts) R: 272
 Stamp Act So: 829
- Stamp collecting** So: 829 *with pictures*
 Liechtenstein (Economy) L: 272
- Stamp weed** [plant] *See* Velvetleaf *in this index*
- Stamped envelope**
 Postal Service, United States (Stamps and other mailing materials) P: 699
- Stampar** [recording]
 Phonograph (How phonograph records are made) P: 401
- Stamping** [industrial process]
 Die and die-making D: 195
- Stan the Man** [nickname]
 Musial, Stan M: 945
- Stanbery, Henry** [American government official]
 Johnson, Andrew (table: Johnson's Cabinet) J: 140
 Justice, Department of (table) J: 203
- Stanchion**
 Dairying (Housing) D: 6
- Stand Up and Cheer** [film]
 Temple, Shirley T: 131
- Standard** [ethics]
 Television (The Federal Communications Commission) T: 118
- Standard** [flag]
 Flag (table) F: 193; (Flags of individuals) F: 195 *with pictures*
- Standard** [weapon]
 Guided missile *picture on* G: 425
- Standard & Poor's Indexes** [stock market]
 Standard & Poor's indexes So: 833
- Standard deviation**
 Statistics (Probability) So: 868-869
- Standard English**
 Grammar (Grammar and usage) G: 304
- Standard fire test**
 Building construction (Classification of buildings) B: 683
- Standard gauge**
 Railroad (Tracks) R: 108-109
- Standard German** [language]
 Germany (Language) G: 150
- Standard grade**
 Beef (Grades of beef) B: 209
- Standard hive**
 Bee (As an industry) B: 206-207 *with picture*
- Standard housing**
 Housing H: 389
- Standard Industrial Classification**
 Industry (The U.S. SIC) I: 260
- Standard mail**
 Postal Service, United States (Classes of mail) P: 699
 Postal services (Technological advancements) P: 707
- Standard Model** [physics] So: 833
 Higgs, Peter Ware H: 227
 Subatomic particle (The Standard Model) So: 938
 Sun (Analyzing neutrinos) So: 984
- Standard of living** So: 833
 African Americans (Disappointments and controversy) A: 136q
 Conservation (To meet demands for resources) Ci: 975
 Economics (How the economy grows) E: 59
 Food (Economic reasons) F: 331-332
 Food supply (Increased demand for food) F: 348
 Infant mortality I: 264
 Technology (Benefits of technology) T: 76
 Trade (Trade and specialization) T: 361
- Standard Oil Company** So: 834
 Exxon Mobil Corporation E: 459
 Flagler, Henry Morrison F: 224
 Monopoly and competition (History) M: 732
 Rockefeller, John Davison (The Standard Oil Company) R: 382
- Standard Oil Trust** [U.S. history]
 Rockefeller, John Davison (The Standard Oil Company) R: 382
 Standard Oil Company So: 834
- Standard schnauzer** So: 835 *with picture*
- Standard time** So: 835
 Time (Local and standard time) T: 288-289 *with map*
- Standardbred**
 Harness racing (Harness horses) H: 63
 Horse (table: Some types and breeds of horses) H: 343; (Light harness horses) H: 345 *with picture*
- Standardization**
 Milk (Separation or standardization) M: 548 *with diagram*
- Standardized test**
 Testing T: 181
 Psychology (Systematic assessment) P: 848
- Standards** [botany]
 Iris I: 429 *with picture*
- Standards, National Institute of** *See* National Institute of Standards and Technology *in this index*
- Standby Reserve**
 Marine Corps, United States (Reserves) M: 208
 Navy, United States (Regulars and reserves) N: 85
- Standing committee**
 Congress of the United States (Working in committees) Ci: 944; (table) Ci: 944
 House of Representatives (Committees) H: 387; (Considering legislation) H: 387
 Senate (Senate committees) S: 295
 State government (Organization) So: 862-864
- Standing rigging**
 Sailing (Rigging) S: 24
- Standing Rock Reservation** [South Dakota]
 Indian wars (The Sioux wars) I: 194
- Standing wave** [physics]
 Particle accelerator (How accelerators work) P: 184-185
 Sound (Resonance) So: 603-604 *with diagram*

- Waves (How waves move) W: 152; *diagram on W*: 150
- Standing-wave linear accelerator** [machine]
Particle accelerator (How accelerators work)
P: 184-185 *with diagram*
- Standish, Miles** [American colonial leader]
So: 835
Longfellow, Henry Wadsworth (Narrative poems) L: 450
- Standpipe** [water system]
Reservoir R: 259
- Stanfield, Robert Lorne** [Canadian political leader]
So: 836
Clark, Joe (Political worker and student)
Ci: 640-641
- Stanford, Jane Lathrop** [American philanthropist]
Stanford University (History) So: 836
- Stanford, Leland** [American political leader]
So: 836
California (Early statehood) C: 62
Stanford University (History) So: 836
- Stanford Linear Accelerator Center**
Particle accelerator (How accelerators work)
P: 184-185
- Stanford Research Institute**
SRI International So: 817
- Stanford University** So: 836
California (Libraries) C: 40-41
- Stanhope, Earl of** [British inventor]
Printing (New presses and typesetting machines) P: 803
- Stanhope, Philip** [son of]
Chesterfield, Earl of C: 415
- Stanhope, Philip Dormer** [British author]
Chesterfield, Earl of C: 415
- Stanislas I** [king of Poland]
Louis XV L: 476
- Stanislas, Saint** [Polish religious leader]
So: 836
- Stanislavski, Konstantin** [Russian director]
So: 837
Method acting M: 434
Moscow Art Theater M: 828
Theater (Systems of acting) T: 238
- Stanislavski method** [drama]
Stanislavski, Konstantin So: 837
Theater (Systems of acting) T: 238
- Stanley** [Falkland Islands]
Falkland Islands F: 15
- Stanley, Francis E.** [American inventor]
Stanley brothers So: 838
- Stanley, Frederick Arthur** *See Stanley of Preston, Baron in this index*
- Stanley, Freelan O.** [American inventor]
Stanley brothers So: 838
- Stanley, Sir Henry Morton** [British explorer]
Stanley and Livingstone So: 837 *with picture and map*
Exploration (The exploration of Africa) E: 449 *with picture and map*
Lake Edward L: 37
- Stanley, Thomas B.** [American political leader]
Virginia (table) V: 417
- Stanley, Wendell Meredith** [American biochemist]
Nobel Prizes (Chemistry: 1946) N: 443
Virus V: 426
- Stanley, William Eugene** [American political leader]
Kansas (table) K: 234
- Stanley and Livingstone** [British explorers]
So: 837 *with pictures and map*
See also Livingstone, David; Stanley, Sir Henry Morton in this index
Exploration (The exploration of Africa) E: 449 *with picture*
- Stanley brothers** [American inventors] So: 838
Automobile (The first cars) A: 962-963; *picture on A*: 964
- Stanley Cup** So: 838 *with picture*
Hockey (Professional leagues) H: 279-280
Stanley of Preston, Baron So: 838
- Stanley of Preston, Baron** [British political leader] So: 838 *with portrait*
Hockey (Beginnings) H: 281
Stanley Cup So: 838
- Stanley Park** [Vancouver]
British Columbia (Interesting facts about British Columbia) B: 613
Vancouver (Parks) V: 276
- Stanley Pool** [lake]
Congo (Brazzaville) (Land) Ci: 939 *with map*
Congo River Ci: 940f
- Stanley steamer** [automobile]
Automobile (The steam car) A: 962-963; *picture on A*: 964
- Stanley brothers So: 838
- Stannous fluoride** [chemical]
Tin (Uses) T: 293-294
- Stans, Maurice H.** [American government official]
Commerce, Department of (table) Ci: 871
Nixon, Richard Milhous (table) N: 433
Watergate W: 144
- Stansbury, Joseph** [Canadian author]
Canadian literature (Early English-Canadian literature) C: 157
- Stanton, Charles E.** [American military officer]
Pershing, John Joseph (World War I) P: 296
- Stanton, Edwin McMasters** [American political leader] So: 838 *with portrait*
Emancipation Proclamation *picture on E*: 254
Grant, Ulysses S. (National hero) G: 315
Lincoln, Abraham (table) L: 323
- Stanton, Elizabeth Cady** [American social reformer] So: 839 *with portrait*
Anthony, Susan Brownell A: 544
Woman suffrage (Beginnings of the movement) W: 380
Women's movements (The beginnings of women's movements) W: 385
- Stanton, Frank** [American sociologist]
Communication (The effects of media) Ci: 887
- Stanza della Segnatura** [Vatican]
Raphael (His works) R: 143
- Stanzaic syllabic** [poetry]
Poetry (Rhythm and meter) P: 591-592
- Stanzas from the Grande Chartreuse** [poem by Arnold]
Arnold, Matthew A: 742
- Stapes** [anatomy]
Ear (The middle ear) E: 7-8 *with diagram*;
(Diseases) E: 12; *diagram on E*: 10
- Staphylococcus** [bacteria] So: 839 *with picture*
Antibiotic (Resistance to antibiotics) A: 551
Carbuncle C: 208
Food poisoning F: 340
Toxic shock syndrome T: 351
- Staphylococcus aureus** [bacteria]
Penicillin (Resistance) P: 241
Pneumonia (How pneumonia develops) P: 586
- Staple** [textiles]
Cotton (Classing) Ci: 1091
Cotton gin Ci: 1094
Textile (Sources of textile fibers) T: 212;
(Making the yarn) T: 215
- Staple fiber**
Fiber F: 87
- Stapledon, Olaf** [British author] So: 839
- Stapleton, Maureen** [American actress]
Motion picture (Best performance by an actress in a supporting role: 1981) M: 863
- Star** [astronomy] So: 840 *with pictures*
Astronomy (Observing the sky) *maps on A*: 835; (Modern astronomy) A: 836
Astrophysics A: 850
Binary star B: 308
Black hole (Formation of black holes) B: 388
Brown dwarf B: 644
Constellation Ci: 993
Cosmology Ci: 1078
Galaxy G: 8 *with pictures*
Herschel, Sir William H: 216
Interstellar medium I: 352
Light (Other sources of light) L: 283
Magnitude M: 62
Milky Way M: 550
Nebula (Diffuse nebulae) N: 116
Nova N: 553
Planet (Observing the planets) P: 507-508;
(Planets in other solar systems) P: 512
Planetarium P: 514
Radiation (The sun and other stars) R: 77
Shock wave S: 430
Space exploration (Space between the stars) So: 696
Supernova So: 994
White dwarf W: 285
X rays (In outer space) X: 542-543
See also the list of Related Articles in the Star article
- Star** [award]
Knighthood, Orders of (Honorary orders) K: 347 *with pictures*
- Star** [boat]
Sailing (Catboats and sloops) S: 24
- Star** [entertainer]
Motion picture (Movies become big business) M: 866
- Star Chamber** [English history] So: 853
- Long Parliament L: 448
- STAR Events** [program]
Family, Career and Community Leaders of America F: 25
- Star Maker** [book by Stapledon]
Stapledon, Olaf So: 839
- Star-nosed mole** [animal]
Mammal *picture on M*: 116
Mole (The star-nosed mole) M: 690b
- Star note**
Money (Printing paper money) M: 714
- Star of Africa** [gem]
Coronation (The British coronation) Ci: 1068-1069
Gem (Some famous gems) G: 79
- Star-of-Bethlehem** [plant] So: 853 *with picture*
- Star of David** So: 853 *with picture*
Judaism *picture on J*: 180
- Star of India**
Sapphire S: 122
- Star of India, Order of** [organization]
Knighthood, Orders of *picture on K*: 347
- Star of the West** [ship]
Buchanan, James (Prelude to war) B: 661; *picture on B*: 662
- Star orchid** [plant]
Orchid *picture on O*: 824
- Star party**
Astronomy (Learning about astronomy) A: 846 *with picture*
- Star route service** [mail]
Arthur, Chester Alan (The star route frauds) A: 756
- Star ruby** [gem]
Ruby R: 508
- Star sapphire**
Sapphire S: 122
- Star Scout**
Boy Scouts (Boy Scouting) B: 537-539
- Star shell** [ammunition]
Ammunition (Artillery ammunition) A: 435-436
Fireworks (Other uses of fireworks) F: 135
- "Star-Spangled Banner"** [song] So: 853 *with picture*
Anacreon A: 447
Flag (Flags of the United States and Canada) F: 208
Key, Francis Scott K: 307
Maryland (The War of 1812 and industrial development) M: 258
National anthem N: 28
- Star thistle**
Flower (Flowers of summer-dry regions) F: 288 *with picture*
- Star Wars** [film]
Lucas, George L: 513
Motion picture (A new generation of filmmakers) M: 872
- Star Wars defense** *See Strategic Defense Initiative in this index*
- Starboard**
Boating (Boating regulations) B: 429
- Starch** So: 855
Carbohydrate (Kinds of carbohydrates) C: 203-204 *with diagram*
Dextrin D: 177
Grain (Other uses) G: 301
Nutrition (Carbohydrates) N: 625
Sago S: 19
- Stare decisis** [law]
Supreme Court of the United States (Effects of decisions) So: 999-1000
- Starfish** [sea animal] So: 855 *with pictures*
Animal *pictures on A*: 486, A: 507
Coral (Stony corals) Ci: 1048-1048a
Deep sea (Invertebrates) D: 82a-82b
- Starflight**
Camp Fire Boys and Girls (Club programs) C: 88 *with picture*
- Stargazer**
Fish *picture on F*: 167
- Stargell, Willie** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Stark** [ship]
Reagan, Ronald Wilson (Persian Gulf conflicts) R: 170
- Stark, John** [American general] So: 856
- Starkad** [legendary figure]
Mythology (Teutonic heroes) M: 985
- Starkey, Richard**
Beatles B: 189
- Starling** [bird] So: 856 *with picture*
Bird (In nature) B: 330
- Starr, Belle** [American bandit] So: 856 *with portrait*

- Starr, Ellen Gates** [American social reformer]
Hull House H: 412
Settlement house S: 324
- Starr, Kenneth Winston** [American attorney]
So: 857
Clinton, Bill (National affairs) Ci: 682d-682e;
(Domestic events) Ci: 682f
- Starr, Ringo** [British musician]
Beatles B: 189
- Starr Foundation**
Foundations (table) F: 430
- Starry Night, The** [painting by Van Gogh]
Expressionism E: 455
Painting (Texture) P: 35 *with picture*;
(Postimpressionism) P: 75
- Stars, Dallas** [hockey team] See Dallas Stars in
this index
- Stars and Bars** [flag]
Flag *picture on* F: 210
- Stars and Stripes** [boat]
America's Cup A: 431
- Stars and Stripes** [flag]
Flag (Flags of the United States and Canada)
[Flag, United States] F: 208;
(Manufacturing flags) F: 222 *with pictures*
- Stars and Stripes** [newspaper] So: 857
Mauldin, Bill M: 313
- Stars Look Down, The** [book by Cronin]
Cronin, A. J. Ci: 1152
- START** [treaties] See Strategic Arms Reduction
Treaty in *this index*
- Starter** [electricity]
Fluorescent lamp *diagram on* F: 305
- Starter** [engine] So: 857 *with diagrams*
Automobile (The electrical system) A: 954;
(Technological advances) A: 965
- Startle reflex**
Baby (The first month) B: 6
- Starvation** So: 858
Famine F: 26
Somalia (History) So: 589-590 *with picture*
- Starved Rock State Park** [Illinois]
La Salle, Sieur de (Expeditions to the Gulf of
Mexico) L: 80
- Stasis** [biology]
Evolution (Main ideas of evolutionary theory)
E: 426-427
- Stassen, Harold Edward** [American political
leader] So: 858
- State** [political unit]
Address, Forms of (Officials of the United
States) A: 53
Constitution of the United States (Article IV)
Ci: 1010
Country Ci: 1097
Indian, American (Empires and states) I: 144
Nationalism (The rise of nationalism) N: 62
Postal Service, United States (table) P: 700
State government So: 862
Territory (In the United States) T: 176
- State, Department of** [U.S.] So: 858 *with pic-
tures*
Foreign policy (The executive) F: 387
International relations (Diplomacy) I: 344
Library (United States government libraries)
L: 248
Washington, D.C. *map on* W: 76
- State, Secretary of** [U.S.]
Flag *picture on* F: 211
State, Department of (Secretary of state) So: 859
State government (Other officers) So: 862
- State, The** [book by Wilson]
Wilson, Woodrow (Teacher) W: 320
- State and Church** See Church and state in *this
index*
- State and Local Fiscal Assistance Act** [1972]
Revenue sharing R: 266
- State bed**
Bed (History) B: 197-198
Furniture (The early 1600's) F: 574-575 *with
picture*
- State birds**
Bird (table) B: 332
United States (table) U: 104-105
- State capitals**
United States (table) U: 104
- State church**
Freedom of religion (In other countries)
F: 505-506
- State colleges**
See the Education section of specific state
articles, such as Illinois (Education)
- State constitution**
State government (State constitutions)
So: 862
- State Council**
China (National government) C: 477
- State Council** [Russian history]
Duma D: 381
- State, County and Municipal Employees,
American Federation of**
American Federation of State, County and
Municipal Employees A: 410
Labor movement (table) L: 8
- State court**
Court (State courts) Ci: 1102; *picture on*
Ci: 1103
- State Dining Room**
White House (Public rooms) W: 286 *with pic-
ture*; *picture on* W: 288
- State Duma** [Russian legislature]
Duma D: 382
Russia (National government) R: 531 *with pic-
ture*
- State fair**
Fair (Agricultural fairs) F: 7 *with picture*
Iowa (Visitor's guide) I: 384; *picture on* I: 385
Kansas *picture on* K: 226
See also the Annual Events section of specific
state articles, such as Texas (Annual
Events)
- State farm** [agriculture]
See also Collective farm in *this index*
Agriculture (Eastern Europe) A: 154
Cuba (Agriculture) Ci: 1174
Europe (Rural life) E: 388-389; (Farm organiza-
tion) E: 407
Korea (North Korea) K: 375
Russia (Agriculture) R: 544
Slovakia (Communist rule) S: 509
Ukraine (Agriculture) U: 11
Union of Soviet Socialist Republics
(Agriculture) U: 34 *with picture*
- State Farmers Union**
National Farmers Union N: 35
- State FFA degree**
FFA (Degrees) F: 85
- State flags**
Flag (Civil and state flags) F: 195; (Flags of the
U.S. states, territories, and District of
Columbia) *pictures on* F: 212
- State flowers**
United States (table) U: 104-105
- State government** So: 862 *with pictures*
Governor G: 294
Library (State libraries) L: 249
Public health (Functions of public health agen-
cies) P: 855-856
United States, Government of the
(Federalism) U: 137
See also the list of Related Articles in the
State Government article
- State High School Associations, National
Federation of**
Football (High school competition) F: 364
- State House** [Boston]
Architecture *picture on* A: 624
- State income tax**
Income tax (State and local income taxes)
I: 105
- State Law and Order Restoration Council**
[Myanmar]
Myanmar (National government) M: 970;
(Military rule) M: 970e
- State library**
Library (State libraries) L: 249
- State mottoes**
See the Facts in Brief section in the state arti-
cles, such as Kentucky (Facts in Brief)
- State of Deseret** See Deseret in *this index*
- State of Franklin** [U.S. history]
Franklin, State of F: 493 *with map*
Sevier, John S: 328
Tennessee T: 135; (Territorial years) T: 153
- State of Jefferson** See Jefferson, State of in
this index
- State of the Prisons in England and Wales,
The** [book by Howard]
Howard, John H: 400
- State of the Union** [play by Crouse and
Lindsay]
Lindsay, Howard L: 333
- State of the Union message**
Constitution of the United States (Article II,
Section 3) Ci: 1009
President of the United States (Legislative
leader) P: 765
- State parks**
See the Places to Visit section in the state
articles, such as California (Places to Visit)
- State Peace and Development Council**
[Myanmar]
Myanmar (Government) M: 970; (Recent
developments) M: 970e
- State police**
Police (State police) P: 622 *with picture*
- State popular names**
United States (table) U: 104
- State press** [journalism] So: 866
- State seals**
See the Government section in the state arti-
cles, such as Arizona (Government)
- State Shinto** [religion]
Shinto S: 401
Religion (Shinto) R: 222
- State songs**
United States (table) U: 104-105
- State Street**
Chicago (Downtown Chicago) C: 420-421
- State trees**
United States (table) U: 104-105
- State trooper**
Police (State police) P: 622 *with picture*
- State university**
See the Education section of specific state
articles, such as Illinois (Education)
- State University of New York** See New York,
State University of in *this index*
- Statelessness**
Citizenship (Statelessness) Ci: 571
- Statement** [banking]
Bill (In commerce) B: 300
Check (How the checking system works)
C: 390
- Statement** [mathematics]
Algebra (Statements and equations) A: 351
- Statement of cash flows**
Accounting (Financial reports) A: 23
- Staten Island** [New York City] So: 866 *with pic-
ture*
New York City (The city) N: 323; (Staten
Island) N: 330 *with picture*; (Settlement)
N: 341
Richmond Town R: 334
- Staten Island Ferry**
New York City (Staten Island) N: 330
- Stater** [money]
Money *picture on* M: 706
- States-General**
Netherlands (National government) N: 139
- States-General** [French history] See Estates-
General in *this index*
- States of the Church** See Papal States in *this
index*
- States' rights** [U.S. history] So: 866
Calhoun, John Caldwell C: 35
Confederate States of America Ci: 931
Constitution of the United States (Amendment
10) Ci: 1013
Government (Interpreting the states' rights)
G: 287
Hayne, Robert Young H: 122
McCulloch v. Maryland M: 335
Nullification N: 603
Whiskey rebellion W: 282
- States' Rights Democratic Party** See Dixiecrat
Party in *this index*
- Statesman** So: 867
- Static** [electronics] So: 867
- Static electricity**
Electricity (Static electricity) E: 192
- Static** [plant] So: 867 *with picture*
- Statics** [physics] So: 867
Fluid mechanics (Fluid statics) F: 304
Mechanics M: 354
Physics (Mechanics) P: 437
- Statin** [drug]
Heart (Treatment) H: 138
- Station** [fort] See Stockade in *this index*
- Station** [ranch]
Outback O: 879
Ranching R: 134
- Station allowance** [income]
Army, United States (Careers in the Army)
A: 734
- Stationary front**
Weather (Synoptic-scale systems) W: 159-161
- Statistical mechanics** [physics]
Gibbs, Josiah Willard G: 186
- Statistics** So: 867 *with diagrams*
Careers (Technical and mathematical occupa-
tions) C: 232
Criminology (Statistical studies) Ci: 1145
Mathematics (Branches of mathematics)
M: 303

Pearson, Karl P: 219
 Probability P: 809
Statistics, Vital See *Vital statistics in this index*
Statistics Canada
 Census (Modern censuses) C: 350
Statius [Roman poet]
 Latin literature (The Imperial Period) L: 116
Statler, Ellsworth Milton [American businessman]
 Hotel (History) H: 377
Stator
 Electric generator (Parts of a generator) E: 171
 Electric motor (AC motors) E: 181 *with picture*
 Electric power (Sources of electric power) E: 182 *with diagram*
 Linear electric motor L: 334 *with diagrams*
Statuary Hall [Washington, D.C.] So: 870 *with picture*
Statue
 Sculpture (Later medieval sculpture) S: 250-251 *with pictures*
"Statue and the Bust, The" [poem by Browning]
 Browning, Robert (Browning's poems) B: 646
Statue of a seated boxer [sculpture]
 Sculpture (Hellenistic sculpture) S: 246 *with picture*
Statue of Liberty So: 872 *with pictures and map*
 Bartholdi, Frédéric Auguste B: 120
 Hunt, Richard Morris H: 450
 Liberty Island L: 233
 New York City (A visitor's guide) N: 338-339 *with picture*
 United States *picture on* U: 99
Statue of Liberty National Monument [New York-New Jersey] So: 879
 See also *Statue of Liberty in this index*
 National Park System (table: National monuments) N: 51
 New York (Places to visit) N: 302
Statuette of a dancer [art]
 Sculpture (Indus Valley) S: 235-236 *with picture*
Status [sociology]
 Careers (Social status) C: 216
 Linton, Ralph L: 339
 Women's movements (Women's status through the ages) W: 383
Status Indian [Canadian history]
 Indian, American (In Canada) I: 178
Status light
 Keyboard K: 308
Status of Women, Commission on
 Women's movements (Women's organizations) W: 386
Statute [law]
 Code Ci: 748
 Law (Civil law systems) L: 132
Statute league [unit of measure]
 League L: 159
Statute mile [unit of measure]
 Mile M: 542
Statute of Charitable Uses [1601]
 Philanthropy P: 368
Statute of Frauds [1677]
 Fraud F: 496
Statute of limitations So: 879
 Debt (Time limits on collection of debts) D: 66
Statute of Religious Freedom [1786]
 Jefferson, Thomas (Virginia lawmaker) J: 79-80
Statute of Rhuddlan [English history]
 Wales (Revolts against England) W: 12-13
Statute of Westminster [1931]
 Canada, History of (Independence) C: 150
 Commonwealth of Nations (History) Ci: 876-877
Statutory law
 Code Ci: 748
 Lien L: 273
Statutory rape [crime]
 Rape [crime] R: 141
Statutory referendum
 Initiative and referendum (The referendum) I: 272
Staudinger, Hermann [German chemist]
 Nobel Prizes (Chemistry: 1953) N: 443
Stave
 Barrel B: 118 *with picture*
Stax [company]
 Rock music (Expanding styles and sounds) R: 378-379
Stay [boat]
 Sailing (Rigging) S: 24

Stay of execution
 Reprieve R: 242
Stayman
 Apple (table) A: 571 *with picture*
STD See *Sexually transmitted disease in this index*
Ste. ...
 See *Sainte ... in this index*
Steady state theory
 Cosmology (Other theories) Ci: 1078
 Universe (Changing views of the universe) U: 205-206
Steak
 Beef B: 209
Steak and kidney pie
 England (Food and drink) E: 295-296
Steal See *Stolen base in this index*
Stealing
 Kleptomania K: 344
Stealth bomber [airplane]
 Air Force, United States (Planes and weapons of the Air Force) A: 190-191; *picture on* A: 192
 Aircraft, Military (Bombers) A: 202 *with picture*
 Bomber (History) B: 453-454
Steam So: 879
 Boiler B: 439
 Energy supply (Geothermal power) E: 279
 Water (The properties of water) W: 129-130
Steam bath
 Bath (Bathing for cleanliness) B: 163
Steam carriage
 Automobile (The first cars) A: 962 *with pictures*
Steam clock
 British Columbia *picture on* B: 621
Steam cracking [industrial process]
 Petrochemicals (How petrochemicals are made) P: 329
Steam distillation
 Perfume (Plant substances) P: 286
Steam drill
 Henry, John H: 189
Steam drop hammer
 Steam hammer So: 882
Steam engine So: 880 *with diagrams*
 Coal (Developments in England) Ci: 731-732
 Energy supply (The Industrial Revolution) E: 280
 Evans, Oliver E: 422
 Industrial Revolution (The steam engine) I: 249
 Invention (The Industrial Revolution) I: 361; *picture on* I: 359
 Locomotive (Steam locomotives) L: 416-417 *with picture*; (History) L: 417; *pictures on* L: 415
 Newcomen, Thomas N: 359
 Transportation (The steam age) T: 390 *with pictures*
 Turbine (Steam turbines) T: 496-497
 Watt, James W: 148 *with picture*
Steam fitter [career]
 Building trade (Career opportunities) B: 686
Steam fog
 Fog F: 314
Steam generator
 Boiler B: 439
 Nuclear energy (Steam production) N: 587 *with diagram*
Steam hammer So: 882
Steam heating
 Heating (Steam and hot-water heating systems) H: 159 *with diagram*
Steam locomotive See *Locomotive in this index*
Steam pumper
 Fire department (Fire protection in North America) F: 128 *with picture*
Steam turbine
 Coal (Electric power production) Ci: 719
 Electric power (Fossil-fueled steam electric power plants) E: 183 *with diagram*
 Heat (Changing heat into motion) H: 153
 Invention (The Industrial Revolution) I: 361
 Ship (Increasing power and speed) S: 413; (The chief parts of a ship) S: 424
 Steam engine (Steam turbines) So: 880
 Turbine (Steam turbines) T: 496-497 *with diagrams*
Steam whistle
 Whistle W: 282
Steamboat So: 882 *with picture*
 Fitch, John F: 189 *with picture*
 Fulton, Robert F: 555 *with picture*
 Ship (The age of engine-powered ships) S: 411

Transportation *picture on* T: 389
 United States, History of the (Expansion and the economy) U: 168 *with picture*
Steamboat Willie [film]
 Disney, Walt *picture on* D: 236
Steamer duck [bird]
 Duck (Steamer ducks) D: 377
Steaming
 Cooking (Steaming) Ci: 1029
Steamship
 Industrial Revolution *picture on* I: 254
 Navy (Engineering advances) N: 79
 Ship S: 402; (Oceangoing steamships) S: 412 *with pictures*
 Steamboat P: 882
 Warship (Warships of the 1800's) W: 41
Steamtown National Historic Site
 [Pennsylvania]
 National Park System (table: National historic sites) N: 52-53
Stearic acid [chemical] So: 882
Stearnes, Turkey [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Steatite [rock]
 Soapstone So: 543
Steel See *Iron and steel in this index*
Steel City [nickname]
 Gary G: 47
 Pittsburgh P: 500a
Steel guitar
 Hawaii (Dancing and music) H: 94
Steel mill
 Canada *picture on* C: 122
 Iron and steel *picture on* I: 436
 Russia *picture on* R: 544
 Technology *picture on* T: 74
Steel tape [tool]
 Surveying (Surveying tools) So: 1011
Steel wire gauge
 Wire (Sizes of wire) W: 343
Steel Workers Organizing Committee
 Steelworkers of America, United So: 882
Steele, George W. [American political leader]
 Oklahoma (The great land rushes) O: 732
Steele, Sir Richard [English author] So: 882
 Addison, Joseph A: 47
 English literature (Addison and Steele) E: 318
 Essay (Personal essays) E: 359
Steele, Robert W. [American political leader]
 Jefferson Territory J: 88
Steelers, Pittsburgh See *Pittsburgh Steelers in this index*
Steelhead [fish]
 Fish *picture on* F: 159
 Trout (True trout) T: 453
Steelie [marble]
 Marbles M: 193
Steelworkers of America, United So: 882
 Iron and steel (In the United States) I: 449
 Labor movement (table) L: 8
Steelyard [instrument]
 Scale, Weighing (Balances) S: 169
Steen, Jan [Dutch painter] So: 883 *with picture*
Steenbok [antelope] So: 883
 Antelope (Habits and appearance) A: 542
Steenburgen, Mary [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1980) M: 863
Steeping
 Tea (Brewing tea) T: 63
Steeplebush [shrub]
 Spiraea So: 795
Steeplechasing [sport] So: 883
 Grand National G: 308
 Track and field (Track events) T: 354 *with picture*
Steer
 Cattle C: 306
Steer roping
 Rodeo (Steer roping) R: 397
Steer undecorating
 Rodeo (All-girl rodeos) R: 398
Steer wrestling
 Rodeo (Steer wrestling) R: 397
Steerage, The [photograph by Stieglitz]
 Stieglitz, Alfred *picture on* So: 900
Steering
 Automobile (The steering system) A: 953 *with diagrams*
 Ship (The chief parts of a ship) S: 425
Steering [real estate]
 Segregation (De facto segregation) S: 286
Steering line
 Parachute (How parachutes work) P: 143

- Steeves, William Henry** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935 *with picture*
- Stefan-Boltzmann law** [physics]
Boltzmann, Ludwig B: 449
- Steffens, Lincoln** [American author] So: 883
- Stegner, Wallace** [American author] So: 883
- Stegosaur** [dinosaur]
Dinosaur (True dinosaurs) D: 205b-206c
- Stegosaur** [dinosaur] So: 884
Dinosaur (True dinosaurs) D: 206b-206c; *picture on D: 206d*
- Steichen, Eduard Jean** See Steichen, Edward *in this index*
- Steichen, Edward** [American photographer]
So: 884 *with picture*
Photography (The photographic revolution) P: 427
- Steig, William** [American author]
Caldecott Medal (table: 1970) C: 26
- Steiger, Rod** [American actor]
Motion picture (Best performance by an actor: 1967) M: 862-863
- Stein, Gertrude** [American author] So: 884 *with portrait*
American literature (The Lost Generation) A: 421
Lost Generation L: 472
Picasso, Pablo (The Rose Period) P: 448a;
(Early sculptures) P: 448a-448b
Thomson, Virgil T: 265
- Stein, William Howard** [American chemist]
Nobel Prizes (Chemistry: 1972) N: 443
- Steinbeck, John** [American author] So: 885 *with portrait*
American literature *picture on A: 416*
Dust Bowl D: 391
- Steinberg, Saul** [American artist] So: 885 *with picture*
- Steinberger, Jack** [American physicist]
Neutrino N: 154
Nobel Prizes (Physics: 1988) N: 441
- Steinbok** [animal] See Steenbok *in this index*
- Steinem, Gloria** [American social critic] So: 886 *with portrait*
Magazine (History) M: 43-45
- Steiner, Rudolf** [Austrian-born philosopher]
So: 886
- Steiner House** [Vienna]
Architecture (Early modern architecture in Europe) A: 627-629 *with picture*
- Steinheim fossil** [anthropology]
Swanscombe fossil So: 1017
- Steinitz, William** [Austrian chess player]
Chess (World chess champions) C: 414
- Steinmetz, Charles Proteus** [German-American physicist] So: 886 *with portrait*
- Steinway, Henry Engelhard** [American businessman] So: 886
- Steinway & Sons**
Steinway, Henry Engelhard So: 886
- Stelco** See Steel Company of Canada *in this index*
- Stele** [botany]
Root (The core) R: 474
- Stele** [monument]
Maya (Communication and learning) M: 324 *with picture*
- Stele of Hammurabi** [archaeology]
Hammurabi *picture on H: 36*
- Stella** [literary figure]
Swift, Jonathan (His life) So: 1039
- Stella, Frank** [American painter] So: 886 *with picture*
Art and the arts (The aesthetic experience) A: 745-746 *with picture*
- Stella, Joseph** [American painter]
Roaring Twenties (Cultural trends) R: 364
- Stellar astronomy**
Herschel, Sir William H: 216
- Stellar wind** [astronomy]
Solar wind So: 582
Star (Intermediate-mass stars) So: 848-849
- Steller's jay** [bird]
Jay J: 66
- Steller's sea cow**
Sea cow S: 262
- Steller's sea eagle**
Eagle (Other kinds of eagles) E: 5
- Stellite** [metal]
Alloy (Other alloys) A: 378
Haynes, Elwood H: 122
- Stem** [botany] So: 887 *with diagrams*
Fern (Parts of a fern) F: 74
Plant (Stems) P: 530 *with pictures*; (Factors affecting plant growth) P: 538-539 *with picture*
Vegetable (Stems) V: 292 *with picture*
- Stem** [plumbing]
Plumbing (How faucets work) P: 579 *with diagram*
- Stem** [ship]
Ship (Nautical terms) S: 416 *with diagram*
- Stem cell** [biology] So: 889
Bone marrow transplant B: 458
Clone Ci: 684
Sickle cell anemia S: 448
- Stenberg v. Carhart** [U.S. history]
Abortion (Abortion in the United States) A: 15-16
- Stencil**
Duplicator (Stencil duplicators) D: 387
Printing (Screen printing) P: 801
Screen printing S: 225
- Stendhal** [French author] So: 889
French literature (Romantic fiction) F: 521
- Stengel, Casey** [American baseball manager]
So: 889
Baseball (table: Hall of Fame) B: 135
- Stenmark, Ingemar** [Swedish skier]
Skiing (The middle and late 1900's) S: 487-488
- Steno, Nicolaus** [Danish doctor]
Geology (The rock dispute) G: 98
Mineral (The scientific study of mineral crystals) M: 571
- Stenograph**
Shorthand machine S: 437
- Stenography**
Shorthand S: 435
- Stenosis** [disorder]
Heart (Other heart disorders) H: 141
- Stenotype**
Shorthand machine S: 437
- Stent** [medicine]
Angioplasty A: 462
- Stentor** [animal]
Protozoan (Ciliates) P: 837
- Step cut**
Gem (Types of gem cuts) *pictures on G: 79*
- Step-down transformer**
Electric generator (Uses of AC generators) E: 173
Transformer T: 372
- Step Pyramid**
Egypt, Ancient (The Old Kingdom) E: 142 *with picture*
Pyramids (The first pyramids) P: 916
- Step-up transformer**
Electric generator (Uses of AC generators) E: 173
Transformer T: 372
- Stepashin, Sergei Vadimovich** [Russian political leader] So: 889
Yeltsin, Boris Nikolayevich Y: 561
- Stepfamily**
Divorce D: 253
- Stepfather**
Family (Family relationships) F: 21
- Stephen** [king of England] So: 890
England (Struggles for power) E: 305
- Stephen I, Saint** [pope]
Pope (table) P: 666
- Stephen I** [king of Hungary]
Hungary (The Kingdom of Hungary) H: 445
- Stephen II** [pope]
Papal States P: 132
Pope (table) P: 277
Pope (table) P: 666
- Stephen III** [pope]
Pope (table) P: 666
- Stephen IV** [pope]
Pope (table) P: 666
- Stephen V** [pope]
Pope (table) P: 666
- Stephen VI** [pope]
Pope (table) P: 666
- Stephen VII** [pope]
Pope (table) P: 666
- Stephen VIII** [pope]
Pope (table) P: 666
- Stephen IX** [pope]
Pope (table) P: 666
- Stephen, George** [Canadian financier] So: 890
- Stephen, Saint** [early Christian] So: 890
- Stephen, Virginia** See Woolf, Virginia *in this index*
- Stephens, Alexander Hamilton** [Confederate political leader] So: 890
Civil War (Secession) Ci: 617
- Stephens, James** [Irish author] So: 890
Irish literature (Fiction and poetry) I: 432
- Stephens, John Lloyd** [American explorer]
So: 890
- Stephens, R. L.** [American aviator]
Airplane (table) A: 232
- Stephens, Stan** [American political leader]
Montana (table) M: 757
- Stephens, Uriah S.** [American labor leader]
Knights of Labor K: 352
- Stephenson, Benjamin F.** [American soldier]
Grand Army of the Republic G: 305
- Stephenson, George** [British engineer] So: 890
Railroad (Invention of the locomotive) R: 115
Rocket R: 391
- Stephenson, Robert** [British engineer] So: 891
Locomotive (History) L: 417; *picture on L: 414*
Rocket R: 391
- Stepinac, Aloysius Cardinal** [Yugoslav religious leader]
Yugoslavia (Communist rule) Y: 580
- Stepmother**
Family (Family relationships) F: 21
- Stepmother's flower** [plant] See Pansy *in this index*
- Steppe** [geography] So: 891
Climate (Semiarid and desert climates) Ci: 676b
Grassland G: 329
Kazakhstan (Land and climate) K: 250b *with picture*
Plant (Grasslands) P: 525
Prairie (Climate and soil) P: 731
Russia (Land regions) R: 539
- Steppe eagle**
Eagle (Other kinds of eagles) E: 5
- Stepped leader** [lightning]
Lightning (A channel of charge) L: 300-301
- Steppenwolf Theatre**
Theater *picture on T: 245*
- Stepping Westward** [book by Richards]
Richards, Laura Elizabeth Howe R: 329
- Steradian** [unit of measure]
Light (The brightness of light) L: 291
Candela C: 175
- Sterbini, Cesare** [Italian librettist]
Opera (*Barber of Seville, The*) O: 801
- Stereo camera**
Camera (Stereo cameras) C: 84
- Stereo system** See Stereophonic sound system *in this index*
- Stereochemistry**
Chemistry (Development of physical chemistry) C: 404
- Stereophonic sound system** So: 891 *with picture*
Phonograph (Parts of a phonograph) P: 400-401 *with diagram*; (How phonograph records are made) P: 401 *with diagrams*; (History) P: 401-402
Radio (Stereophonic receivers) R: 89
- Stereoplotter**
Photogrammetry P: 407 *with picture*
- Stereoscope** [instrument] So: 893
Camera (Stereo cameras) C: 84
- Stereoscopic microscope** [instrument]
Microscope (Using an optical microscope) M: 519
- Stereoscopic range finder** [instrument]
Range finder R: 139
- Stereoscopic vision**
Eye (Depth perception) E: 463-464
- Stereotactic radiosurgery** [medicine]
Brain (Tumors) B: 557
Cancer (Radiation therapy) C: 172
- Stereotyping** [printing] So: 893
- Stereotyping** [sociology] So: 893
Advertising (Recent developments) A: 80
Asian American (Asian Americans today) A: 812f
Indian, American (Current issues) I: 182-183
Personality (Ratings and self-reports) P: 302
Races, Human (Race and discrimination) R: 59-60
Segregation (Causes and effects of segregation) S: 285
Sexuality (Gender roles) S: 338a
Women's movements (Women's status through the ages) W: 383
- Sterility** [biology] So: 893
See also Infertility *in this index*
Birth control (Methods of birth control) B: 378
Hybrid (Producing hybrid plants) H: 461
Insect (Insect control) I: 284-285
- Sterilization** [hygiene] So: 894

- Ultraviolet rays (Uses of ultraviolet rays) U: 17
- Sterilization** [surgery]
Birth control (Methods of birth control) B: 378
Sterilization So: 894
Vasectomy V: 287
- Sterling, Ross** [American political leader]
Texas (table) T: 203
- Sterling silver**
Silver S: 464
Solution (Solid solutions) So: 587
- Stern** [ship]
Sailing (Hull) S: 23 *with diagram*
- Stern, Isaac** [American violinist] So: 894
- Stern, Otto** [American physicist]
Nobel Prizes (Physics: 1943) N: 440
- Stern trawler** [boat]
Fishing industry (Nets) F: 183 *with diagram; picture on F: 180*
- Sternberg, Jonas** [American director] See Von Sternberg, Josef *in this index*
- Sternberg, Robert J.** [American psychologist]
Intelligence (Theories of intelligence) I: 318
- Sternberk Madonna, The**
Sculpture (Later medieval sculpture) S: 250-251 *with picture*
- Sterncastle** [ship]
Ship (The cog) S: 407
- Sterne, Laurence** [British author] So: 894
English literature (The rise of the novel) E: 318-319
Novel (The first English novelists) N: 572
- Sternocleidomastoid** [anatomy]
Head *diagram on H: 123*
Throat T: 271
- Sternpost rudder**
Invention (The Middle Ages) I: 359
- Sternum** [anatomy]
Collarbone C: 773 *with diagram*
Human body *diagram on H: 422*
Rib R: 320
Skeleton (The human skeleton) S: 479-480 *with diagram*
- Steroid** [biochemistry] So: 894
Allergy (Diagnosis and treatment) A: 374
Drug abuse (Steroids) D: 362
Hormone (How hormones work) H: 337
Life (Lipids) L: 278
Lipid (Kinds of lipids) L: 345
Olympic Games (Charges of steroid use) O: 753
Testosterone T: 182
- Sterol** [biochemistry]
Vitamin (Vitamin D) V: 432
- Stesichorus** [Greek poet]
Helen of Troy H: 168
- Stet**
Proofreading (Proofreaders' marks) P: 822
- Stethoscope** [instrument] So: 895 *with picture*
Laënnec, René Théophile Hyacinthe L: 26
- Stetson, John Batterson** [American businessman] So: 895
- Stettin** [Poland] See Szczecin *in this index*
- Stettinius, Edward Riley, Jr.** [American government official] So: 895
Truman, Harry S. (table) T: 469
- Steuben, Baron von** [German-American general] So: 895
Revolutionary War in America (Valley Forge) R: 283
Valley Forge (Conditions at Valley Forge) V: 266
- Steuben glass**
Glass (Types of art glass) G: 221 *with picture*
- Steunenberg, Frank** [American political leader]
Idaho (Early statehood) I: 44
- Stevens, George** [American director]
Motion picture (Best achievement in directing: 1951, 1956) M: 862
- Stevens, H. H.** [Canadian political leader]
Bennett, Richard Bedford (Economic reforms) B: 253
- Stevens, Hazard** [American mountain climber]
Mount Rainier M: 887
- Stevens, Isaac Ingalls** [American political leader]
Washington (Territorial days) W: 66
- Stevens, James** [American author]
Bunyan, Paul B: 701
- Stevens, John** [American engineer] So: 895
Railroad (Developments in the United States) R: 115
Ship (Oceangoing steamships) S: 412
- Stevens, John Paul** [American jurist] So: 896
Supreme Court of the United States *picture on So: 999*
- Stevens, Robert Livingston** [American engineer] So: 896
- Stevens, Siaka** [Sierra Leone political leader]
Sierra Leone (History) S: 452
- Stevens, Thaddeus** [American political leader]
So: 896
Johnson, Andrew (Plans for Reconstruction) J: 139
Reconstruction (The Radicals and the Moderates) R: 178
- Stevens, Wallace** [American poet] So: 896
- Stevenson, Adlai Ewing** [1835-1914, American political leader] So: 896 *with portrait*
Vice President of the United States V: 349 *with portrait*
- Stevenson, Adlai Ewing** [1900-1965, American statesman] So: 897 *with portrait*
Eisenhower, Dwight David (Election of 1956) E: 153
Kennedy, John Fitzgerald (Bid for the vice presidency) K: 263
- Stevenson, Coke R.** [American political leader]
Johnson, Lyndon Baines (Election to the Senate) J: 147
Texas (table) T: 203
- Stevenson, Edward C.** [American physicist]
Muon M: 928
- Stevenson, Elizabeth Cleghorn** [British author]
Gaskell, Elizabeth G: 61
- Stevenson, Robert** [Scottish engineer] So: 897
- Stevenson, Robert Louis** [Scottish author]
So: 897 *with pictures*
Apia A: 566
Literature for children (Poetry) L: 356-357
- Stew** [bath]
Bath (History) B: 164
- Steward** [horse racing]
Horse racing ("They're off!") H: 365
- Steward** [office]
Labor movement (Local unions) L: 8
- Steward Observatory**
Telescope (Reflecting telescopes) T: 104-105
- Stewart, Jackie** [British race driver]
Automobile racing (table: Grand Prix world champions) A: 980
- Stewart, James** [American actor] So: 899 *with portrait*
Motion picture (Best performance by an actor: 1940) M: 862
- Stewart, James** [Canadian political leader]
Prince Edward Island (table) P: 791
- Stewart, Potter** [American jurist] So: 899
- Stewart, Robert** [British statesman]
Castlereagh, Viscount C: 282
- Stewart, Sam V.** [American political leader]
Montana (table) M: 757
- Stewart Island** [New Zealand]
New Zealand (Other islands) N: 352
- Stewart plaid**
Tartan *pictures on T: 47*
- Steno** [Greek mythology]
Gorgons G: 275
- Stibium** [element]
Antimony A: 557
- Stibnite** [mineral]
Antimony A: 557
Mineral *picture on M: 568*
- Stick check** [sports]
Lacrosse (Men's lacrosse) L: 24
- Stick insect** See Walkingstick *in this index*
- Stick lac**
Lac L: 20
- Stickleback** [fish] So: 899
Instinct I: 304
- Stickpin**
Pin P: 466 *with picture*
- Stiegel, Henry William** [American businessman] So: 900
Glass (Early American glass) G: 222; (Types of art glass) G: 221
- Stiegel glass**
Antique *picture on A: 558*
Glass (Types of art glass) G: 221
Stiegel, Henry William So: 900
- Stieglitz, Alfred** [American photographer]
So: 900 *with picture*
Dove, Arthur Garfield D: 315
O'Keeffe, Georgia O: 709
Painting (Stieglitz and "291") P: 82
Photography (The photographic revolution) P: 427
- Stiff-mud process**
Brick (Forming bricks) B: 597
- Stiff-tailed duck**
Duck (Stiff-tailed ducks) D: 377; *picture on D: 375*
- Stiffness**
Materials (Properties of materials) M: 300b
- Stigler, George Joseph** [American economist]
Nobel Prizes (Economics: 1982) N: 449
- Stiglitz, Joseph Eugene** [American economist]
Nobel Prizes (Economics: 2001) N: 449
- Stigma** [botany]
Flower (The pistils) F: 294; (The parts of a flower) *picture on F: 293*
Plant (Flowers) P: 531 *with picture*
Pollen *picture on P: 645*
Seed (Seed development in angiosperms) S: 281-282
- Stigma** [zoology]
Egg (Development of the bird's egg) E: 117
- Stijl, De** [art]
Minimal art M: 573
Mondrian, Piet M: 703
Painting (De Stijl) P: 80 *with picture*
- Stikine River**
British Columbia (Rivers, waterfalls, and lakes) B: 624
- Stiletto snake** See Burrowing asp *in this index*
- Still**
Distillation D: 238
Distilling D: 239
- Still, Andrew Taylor** [American doctor]
Osteopathic medicine (History) O: 867
- Still, Clyfford** [American painter] So: 900
- Still, William Grant** [American composer]
So: 900
- Still fishing**
Fishing *diagram on F: 179*
- Still life** [art]
Harnett, William Michael H: 64
Painting (Still-life paintings) P: 33
Picasso, Pablo (Cubism) P: 448b *with picture*
- Still Life with Chair Caning** [painting by Picasso]
Picasso, Pablo (Cubism) P: 448b *with picture*
- Still Life with Commode** [painting by Cézanne]
Painting (Postimpressionism) P: 75 *with picture*
- Stillness at Appomattox, A** [book by Catton]
Catton, Bruce C: 316
- Stillwater** [Minnesota] So: 900
- Stillwater** [Oklahoma]
Oklahoma *picture on O: 717*
- Stilt** [bird] So: 901 *with picture*
- Stilt house**
Shelter *picture on S: 394*; (Prehistoric times) S: 393
- Stilton** [cheese]
Cheese (Semisoft cheese) C: 392
- Stilwell, Joseph Warren** [American general]
So: 901
World War II (The China-Burma-India theater) W: 489-490
- Stilwell, Mary** [wife of]
Edison, Thomas Alva (Family and friends) E: 81
- Stilwell and the American Experience in China** [book by Tuchman]
Tuchman, Barbara Wertheim T: 480
- Stilwell Road** [Myanmar-China]
Burma Road B: 708
- Stimson, Henry Lewis** [American government official]
Roosevelt, Franklin Delano (Election of 1940) R: 459
Truman, Harry S. (table) T: 469
- Stimulant** So: 901
Caffeine C: 14
Cocaine (Physical and psychological effects) C: 742
Drug (Drugs that affect the nervous system) D: 352
Drug abuse (table: Some commonly abused drugs) D: 363
Ritalin R: 350
- Stimulated emission**
Laser (Producing laser light) L: 83-84 *with diagrams*
- Stimulus** [biology]
Life (Responsiveness) L: 275
- Stimulus** [psychology]
Behavior (Behaviorism) B: 221
Habit (How we learn habits) H: 2
Instinct (How instinctive behavior works) I: 304-305
Learning (Classical conditioning) L: 163
- Stimulus-response** [psychology]
Behavior (Behaviorism) B: 221
Education (How people learn) E: 96
Learning (Classical conditioning) L: 163

- Psychology (Modern psychology) P: 850;
(Behaviorism) P: 849-850
Reflex action R: 194
Stine, R. L. [American author] So: 901
Sting
Bee (Sting) B: 202 *with pictures*
First aid (Injected poisons) F: 138; (Animal
bites or stings) F: 138
Hornet H: 340
Wasp W: 110
Sting, The [film]
Motion picture (Best picture: 1973) M: 861
Stingaree See *Stingray in this index*
Stingless bee
Bee (Social bees) B: 205; *picture on* B: 206
Stingray So: 901 *with picture*
Animal *picture on* A: 487
Stink bug So: 902 *with picture*
Insect *picture on* I: 281
Stinkhorn
Mushroom (Mushroomlike fungi) M: 945
Stinking smut [plant disease]
Smut S: 522
Stipe [botany]
Fern (Parts of a fern) F: 74-75
Stipule
Leaf (The stipules) L: 155; *picture on* L: 153
Plant (Leaves) P: 530 *with picture*
Stir-frying
Cooking (Frying) Ci: 1028
Stirling, James [British admiral]
Perth P: 305
Western Australia (History) W: 231
Stirling, Robert [Scottish inventor]
Stirling engine So: 902
Stirling engine So: 902 *with diagrams*
Stirrup [anatomy]
Ear (The middle ear) E: 7-8 *with diagram*
Stirrup [riding equipment]
Invention (The Middle Ages) I: 359-360
Saddle S: 7 *with pictures*
Stitch
Crochet Ci: 1148c *with diagrams*
Embroidery (Embroidery stitches) E: 257 *with
picture*
Knitting K: 353 *with diagrams*
Needlepoint N: 118 *with picture*
Petit point P: 326
Sewing (Kinds of stitches) S: 332
Sewing machine *diagrams on* S: 334
Stitchers [stapler]
Printing (Offset presses) P: 798-799
Stitching [industrial process]
Tire (Assembling a tire) T: 297
Stoat [animal] See *Ermine in this index*
Stock [botany]
Grafting G: 298 *with pictures*
Plant (Grafting) P: 535 *with picture*
Stock [clothing]
Necktie N: 117
Stock [gun]
Rifle (The parts of a rifle) R: 338 *with diagram*
Stock [plant] So: 902 *with picture*
Stock, Capital [economics] So: 903
Corporation (Business corporations) Ci: 1070
Dow Jones averages D: 316
Income tax (Effects of inflation) I: 103
Industry (Capital) I: 257
Initial public offering I: 271
Investment (Stocks) I: 368
Investment banking I: 369
Property P: 827
Stock exchange So: 903
Stock anchor
Anchor *picture on* A: 449
Stock car [automobile]
Automobile racing (Stock car racing) A: 978
**Stock Car Auto Racing, National Association
for**
Automobile racing (Racing organizations)
A: 976
Stock car racing
Automobile racing (Stock car racing) A: 978;
picture on A: 975
Stock certificate [economics]
Stock, Capital So: 903
Stock dividend
Stock, Capital (Stockholders) So: 903
Stock dyeing [process]
Dye (Dyeing textiles) D: 396
Stock exchange [economics] So: 903
Bears and bulls B: 189
Computer *picture on* Ci: 908
Cornering the market Ci: 1065
Dow Jones averages D: 315
Initial public offering I: 271
Investment (table) I: 366
New York Stock Exchange N: 345
Standard & Poor's indexes So: 833
Stock, Capital (Stockholders) So: 903
Telegraph (Uses for the telegraph) T: 91
See also the list of *Related Articles in the
Stock exchange*
Stock Exchange, Amsterdam [building]
Architecture (Early modern architecture in
Europe) A: 627-628 *with picture*
Stock index fund
Mutual fund M: 969
Stock index futures [economics]
Commodity exchange (Financial futures)
Ci: 874
Stock insurance company
Insurance (Types of insurance companies)
I: 315
Stock market [economics] See *Stock exchange
in this index*
Stock market crash [1929]
Great Depression (The stock market crash)
G: 339
United States, History of the (Investments,
speculation, and the crash) U: 187 *with
picture*
Stock market panic [1907]
Roosevelt, Theodore (Domestic problems)
R: 470
Stock raising [agriculture]
Livestock L: 396 *with pictures*
Stock savings bank [savings institution]
Savings bank S: 166
Stock ticker [machine] So: 904
Edison, Thomas Alva (Telegraph innovator)
E: 78 *with picture*
Stock exchange (Trading) So: 903
Telegraph (Uses for the telegraph) T: 91
Stockade [fortification]
Pioneer life in America (Defending a settle-
ment) P: 485
Stockbroker
Sales (Other types of selling) S: 62
Stock exchange So: 903
Stockdale, James B. [American naval officer]
Perot, Ross P: 292
Stockhausen, Karlheinz [German composer]
So: 904
Stockholder
Business (Stockholders) B: 725
Proxy P: 841
Stock, Capital (Stockholders) So: 903
Stockholm [Sweden] So: 904 *with picture*
Sweden *picture on* So: 1021
Stockings [clothing] So: 905
Clothing (The Renaissance) Ci: 700; (The
1900's) Ci: 703
Stockless anchor
Anchor *picture on* A: 449
Stocks [economics] See *Stock, Capital in this
index*
Stocks [punishment] So: 905
Colonial life in America (Crime and punish-
ment) Ci: 795
Pillory *picture on* P: 464
Stockton, Frank Richard [American author]
So: 906
Stockton, Richard [American patriot] So: 906
Princeton University P: 794
Stockton, Robert F. [American military leader]
Frémont, John Charles F: 511
Mexican War (The occupation of New Mexico
and California) M: 446
Stockton and Darlington Railroad
Railroad (Invention of the locomotive) R: 115
Stockyards
Meat packing (Kinds of markets) M: 350
Ranching (Life on a cattle ranch) R: 134
Stoddard, Joshua C. [American inventor]
Calloope C: 68
Stoddard, Benjamin [American government offi-
cial] So: 906
Stoic philosophy So: 906
Epictetus E: 342
Greek literature (The Greco-Roman Age)
G: 378
Hellenistic Age H: 177
Marcus Aurelius M: 197
Philosophy (Ancient philosophy) P: 386-387
Zeno of Citium Z: 593
Stojic, Manya [Yugoslavian-born author]
Literature for children L: 367
Stoke-on-Trent [England] So: 906
Stoke Poges [England]
Gray, Thomas *picture on* G: 334
Stoker, Abraham See *Stoker, Bram in this index*
Stoker, Bram [British author] So: 906
Dracula D: 317
Stokes, Carl Burton [American political leader]
So: 906
Cleveland (History) Ci: 666-667
Stokes, Montfort [American political leader]
North Carolina (table) N: 490
Stokowski, Leopold [American conductor]
So: 907
STOL [aircraft]
V/STOL V: 452
Stola [clothing]
Clothing (Ancient times) Ci: 696-698
Stolby National Park [Russia]
National park (table) N: 42f
Stolen base
Baseball (Base runners—advancing and outs)
B: 129-130; (table: Modern major league
records) B: 137; (Recent developments)
B: 137-138
Stolen Generation [Australian history] So: 907
Aborigines, Australian (Aboriginal life today)
A: 14
Stoll, Arthur [Swiss chemist]
LSD L: 512
Stolon [botany]
Fungi (Parts of a fungus) F: 558-559 *with dia-
gram*
Mold M: 690
Stomach [anatomy] So: 907 *with diagram*
Alimentary canal A: 368 *with diagram*
Cancer (table) C: 170
Frog *picture on* F: 537
Gastroscope G: 67
Gland (table) G: 209
Human body (The digestive system) H: 419;
diagram on H: 422
Insect (Digestive system) I: 289 *with diagram*
Prostaglandin P: 829
Reptile (Internal organs) R: 251
Ruminant R: 519 *with diagram*
Spider (Digestive system) So: 785 *with dia-
gram*
Vomiting V: 447
Stomach poison
Insecticide I: 302
Stomata [botany]
Leaf (Obtaining the raw materials) L: 155 *with
diagram*
Botany *picture on* B: 508
Plant (Leaves) P: 530
Respiration (Respiration in plants) R: 261
Stomatoid fish
Fish *picture on* F: 156
Stone [rock]
House (Building materials) H: 380
Materials (Stone) M: 300c
Plastics (To replace wood and stone) P: 555
Quarrying Q: 7
Stone [sports]
Curling Ci: 1195 *with picture*; (The rink)
Ci: 1196 *with diagram*
Stone [unit of measure]
Weights and measures (Miscellaneous
weights and measures) W: 184
Stone, Dan [American political leader]
Lincoln, Abraham (Success in politics) L: 314
Stone, David [American political leader]
North Carolina (table) N: 490
Stone, Edward Durell [American architect]
So: 908
Stone, Harlan Fiske [American jurist] So: 908
Stone, John M. [American political leader]
Mississippi (table) M: 640
Stone, Lucy [American social reformer] So: 908
with portrait
Woman suffrage (Growth of the movement)
W: 380
Stone, Oliver [American film director] So: 908
Motion picture (Best achievement in directing:
1986, 1989) M: 862
Stone, Precious See *Gem in this index*
Stone, Sir Richard [British economist]
Nobel Prizes (Economics: 1984) N: 449
Stone, Thomas [American patriot] So: 909
Stone Age [anthropology] So: 909
Arrowhead *picture on* A: 744
Clothing Ci: 686
Lake dwelling L: 37
Prehistoric people (The first human beings)
P: 745
Surgery (History) So: 1007
Tool (History of tools) T: 331

Stone Breakers, The [painting by Courbet] See *Stonebreakers, The* in this index

Stone carving

Petrified Forest National Park *picture on* P: 329

Sculpture (Archaic sculpture) S: 245

Stone fly See *Stonefly* in this index

Stone Mountain [mountain, Georgia] So: 909

Borglum, Gutzon B: 488

Stone of Destiny See *Scone, Stone of* in this index

Stone of Scone See *Scone, Stone of* in this index

Stone plant

Flower *picture on* F: 271

Stone Soup

[magazine]
Literature for children (The middle and late 1900's) L: 364-365

Stonebreakers, The [painting by Courbet]

Courbet, Gustave Ci: 1100

Painting (Realism) P: 70 *with picture*

Stonechat [bird] So: 909 *with picture*

Stonecrop

[botany]
Leaf *picture on* L: 157

Sedum S: 280

Stonecutters Island

Hong Kong (British control) H: 319

Stonefish So: 909 *with picture*

Fish *picture on* F: 167

Stonefly [insect] So: 910 *with picture*

Plecoptera P: 572

Stonehenge [monument, England] So: 910 *with picture*

Druids D: 367

Observatory O: 644

Stones River, Battle of [1863]

Civil War (table) Ci: 624, (Battle of Stones River) Ci: 630

Stone's sheep [animal]

Bighorn B: 299

Stonewall [U.S. history]

Homosexuality (Attitudes toward homosexuality) H: 307

Stonewall Inn [New York City]

Gay rights movement (History of gay rights) G: 73

Stonewall Jackson See *Jackson, Stonewall* in this index

Stoneware So: 911 *with picture*

Porcelain P: 675

Pottery (Stoneware) P: 716 *with picture*

Stoney, G. Johnstone [Irish physicist]

Electricity (The electronic age) E: 198

Stony coral

Coral (Stony corals) Ci: 1048 *with pictures*

Coral reef (How coral reefs form) Ci: 1048b

Stony-iron meteorite

Meteor (Meteorites) M: 431

Stony meteorite

Meteor (Meteorites) M: 431

Stony Point, Battle of [1779]

Wayne, Anthony W: 154

Stokey, S. D. [American inventor]

Glass (table) G: 218

Stool

[physiology]
Fiber, Dietary F: 88

Stop

[key]
Harmonium H: 62

Organ (Pipe organs) O: 851-852

Stop motion

Advertising (Production) A: 76b-77

Animation (Puppet animation) A: 513 *with picture*

Stop price [investment]

Auction A: 881

Stope

Mining (Underground mining methods) M: 576; (Mining terms) M: 577

Stoplight parrotfish

Fish *picture on* F: 154

Stoppage

[sports]
Rugby football R: 510

Stoppard, Tom [British dramatist] So: 911

English literature (Recent English drama) E: 323

Stopped consonant

Consonant Ci: 992

Stopper ball

Plumbing (How toilets work) P: 579

"Stopping by Woods on a Snowy Evening" [poem by Frost]

Frost, Robert Lee (His poems) F: 543

Stora Sjöfallet National Park [Sweden]

National park (table) N: 42g

Storage battery

Edison, Thomas Alva (Primary and storage batteries) E: 80

Lead (Uses) L: 149 *with picture*

Storage device

Computer (Storage devices) Ci: 915

Storage tank

Gas [fuel] *picture on* G: 55

Storax [tree product]

Sweet gum So: 1037

Store

Clothing (Ready-to-wear clothes) Ci: 704-705 *with picture*

Department store D: 149

Interior design *picture on* I: 327

Retailing R: 264

Shopping center S: 434

Store of wealth

Money M: 704

Storebaelt Bridge [Denmark]

Bridge (table: Suspension) B: 603

Stored energy [physics] See *Potential energy* in this index

Storefront library

Library *picture on* L: 239

Storefront school

Alternative school (Features of alternative schools) A: 388-389

Storied Province

Quebec Q: 11

Stork So: 911 *with picture*

Adjutant A: 58 *with picture*

Animal (Animal travelers) A: 502 *with picture*

Bird (Birds of Europe and Asia) B: 346-347

with picture

Europe *picture on* E: 401

Marabout M: 190 *with picture*

Storksbill

Flower *picture on* F: 288

Geranium G: 136

Storm [weather] So: 912 *with picture*

Cloud (Clouds and the weather) Ci: 711

Weather *pictures on* W: 167

Wind (table) W: 330

See also the list of *Related Articles* in the *Storm* article

Storm, The [play by Ostrovsky]

Russian literature (Early realism) R: 562

Storm, Tropical

Hurricane (The life of a hurricane) H: 453

Storm and Stress [literature]

German literature (The Storm and Stress movement) G: 140

Herder, Johann Gottfried von H: 199

Storm chaser [meteorology]

Tornado (Studying tornadoes) T: 335

Storm flag [U.S. Army]

Flag (table) F: 193

Storm Lake

Iowa (Rivers and lakes) I: 386

Storm-petrel [bird]

Petrel P: 328

Bird (Birds of the ocean and the Antarctic)

B: 344 *with picture*

Storm surge [oceanography]

Hurricane (Hurricane damage) H: 455; (table) H: 456 *with picture*

Typhoon T: 540 *with picture*

Storm troopers [German history]

Hitler, Adolf (Birth of the Nazi Party) H: 266

Nazism (The rise to power) N: 92

Storm warning

Boating (Buoys and other safety aids) B: 430 *with picture*

Flag (Flags that talk) F: 208; *picture on* F: 197

Storm-water drainage

Road (Storm-water drainage) R: 359

Stormalong, Alfred Bulltop [legendary figure] So: 912

Störmer, Horst Ludwig [German-born American physicist]

Nobel Prizes (Physics: 1996) N: 442

Storni, Alfonsina [Argentine poet]

Latin-American literature (The early 1900's) L: 113

Starting [government]

Nobel Prizes N: 439

Norway (National government) N: 537-539

Story See *Storytelling* in this index

Story, Joseph [American jurist] So: 912

Story, Nelson [American settler]

Montana (The cattle industry) M: 758

Story of a Novel, The [book by Wolfe]

Wolfe, Thomas Clayton W: 378

Story of Civilization, The [series by Durant] Durant, Will D: 387

Story of Doctor Dolittle, The [book by Lofting]

Lofting, Hugh L: 420 *with picture*

Story of Ferdinand, The [book by Leaf]

Lawson, Robert L: 147

Story of Philosophy, The [book by Durant]

Durant, Will D: 387

Storyboard

Animation (Preliminary steps in animation) A: 511

Storytelling So: 912 *with picture*

Homer (The Homeric question today) H: 303

Humor H: 435

See also the list of *Related Articles* in the *Storytelling* article

Storytelling Festival, National

Tennessee *picture on* T: 138

Stoss, Veit [German sculptor] So: 916 *with picture*

Stotz, Carl [American sports figure]

Little League Baseball L: 391

Stourbridge Lion [locomotive]

Locomotive (History) L: 417; *picture on* L: 414

Railroad (Developments in the United States) R: 115

Stout

[drink]
Beer B: 211

England (Food and drink) E: 295-296

Ireland *picture on* I: 424

Stout, Elihu [American printer]

Indiana (Communication) I: 213

Stout, Rex Todhunter [American author] So: 916

Detective story (The pattern) D: 162-163

Stout, William B. [American engineer]

Airplane (The golden age) A: 235

Stove See *Range* in this index

Stove bolt [hardware]

Bolt B: 449

Stove naphtha [fuel]

Gasoline (History) G: 62

Stowe [Vermont]

Vermont (Visitor's guide) V: 326 *with picture*

Stowe, Calvin [American educator]

Stowe, Harriet Beecher (Her life) So: 916

Stowe, Harriet Beecher [American author]

So: 916 *with portrait*
American literature (The sentimental novel) A: 415

Uncle Tom's Cabin U: 20

United States, History of the (Social disorder) U: 174

Stoyanov, Petar [Bulgarian political leader]

Bulgaria (Recent developments) B: 693

Strabismic amblyopia [disorder]

Eye (Strabismus) E: 466

Strabismus [disorder] So: 916

Eye (Strabismus) E: 466

Glasses (Prescription glasses) G: 224

Strabo [Greek geographer] So: 917

Geography (Beginnings) G: 95

Geology (The ancient Greeks) G: 97

Science (Ancient Rome) S: 197

Strachey, Giles Lytton See *Strachey, Lytton* in this index

Strachey, Lytton [British author] So: 917

Biography (Modern biography) B: 314

Strachey, William [American colonial leader]

Pocahontas P: 588

Strada, La [film]

Fellini, Federico F: 68

Straddle

High jump H: 227

Straddlebug [marker]

Western frontier life in America

(Homesteading on the Great Plains)

W: 234-235

Stradivari, Antonio [Italian violinmaker] So: 917 *with picture*

Violin (History) V: 390

Stradivarius violin

Stradivari, Antonio So: 917 *with picture*

Strafford, Earl of [English political leader]

So: 917

Long Parliament L: 448

Straight [poker]

Poker P: 603

Straight [sexuality] See *Heterosexuality* in this index

Straight, Beatrice [American actress]

Motion picture (Best performance by an actress in a supporting role: 1976) M: 863

Straight angle

Angle A: 463 *with picture*

- Bowling (How to bowl) B: 521-522 *with diagram*
- Straight-edged razor**
Razor (Straight-edged razors) R: 154
- Straight flush**
Poker P: 603
- Straight life policy**
Insurance (Main kinds of life insurance) I: 309-310
- Straight photography**
Adams, Ansel A: 32
Photography (The photographic revolution) P: 427-428
- Straight pin**
Pin P: 466
- Straight position**
Diving *pictures on* D: 244
- Straight-rail billiards** [game]
Billiards (Carom billiards) B: 307
- Straight right**
Boxing *picture on* B: 528
- Straight-stitch sewing machine**
Sewing machine (Kinds of sewing machines) S: 333
- Straight ticket**
Ballot (In the United States) B: 63
Voting machine (Operation) V: 451
- Straight truck** [vehicle]
Truck (Kinds of trucks) T: 457
- Strain** [medicine]
Repetitive strain injury R: 242
- Strain** [physics]
Elasticity E: 156
- Strain gage load cell**
Scale, Weighing (Electronic scales) S: 169
- Strait** [geography] So: 917
Straits appear under their key words as in Magellan, Strait of
- Straight cloth**
Broadcloth B: 634
- Straight Is the Gate** [book by Gide]
Gide, André G: 188
- Straits, The** [waterway, Turkey]
Turkey T: 502 *with picture*
- Straits Convention** [1841]
Bosporus B: 494
- Straits Settlements** [Malaysian history] So: 918
Malaysia (Coming of the Europeans) M: 101
- Stramonine** [drug]
Jimson weed J: 127
- Strand** [street]
London (Central London) L: 429-430 *with map*
- Strand, Mark** [American poet]
Poet laureate (table: Poets laureate of the United States) P: 590
- Strand, Paul** [American photographer] So: 918 *with picture*
Photography (The photographic revolution) P: 427
- Strand casting** [industrial process]
Iron and steel (Strand casting) I: 447 *with diagrams*
- Strange Bird** [sculpture by Noguchi]
Noguchi, Isamu *picture on* N: 451
- Strange Case of Dr. Jekyll and Mr. Hyde, The** [book by Stevenson]
Stevenson, Robert Louis (Novels) So: 898
- Strange Holiness** [poems by Coffin]
Coffin, Robert Peter Tristram Ci: 756
- Strange Interlude** [play by O'Neill]
O'Neill, Eugene Gladstone O: 762
- Strange quark** [physics]
Quark Q: 7
Subatomic particle (Elementary particles) So: 937; (Theoretical research) So: 938
- Stranger, The** [book by Camus]
Camus, Albert C: 97
- Stranger in a Strange Land** [book by Heinlein]
Heinlein, Robert A. H: 167
Science fiction (The Golden Age) S: 205
- Strangers and Brothers** [books by Snow]
Snow, C. P. S: 539
- Strangers on a Train** [book by Highsmith]
Highsmith, Patricia H: 229
- Strangles** [disease]
Distemper D: 238
- Strangulated hernia**
Hernia H: 212
- Strap-down system** [navigation]
Inertial guidance (Strap-down systems) I: 263
- Strapwork** [decoration]
Furniture (France) F: 572-573
- Strasberg, Lee** [American actor-director]
Method acting M: 434
- Strasbourg** [France] So: 918 *with picture*
- Strasbourg, Oaths of** [842]
French language (Old French) F: 517
- Strasbourg Cathedral** [France]
Strasbourg So: 918 *with picture*
- Strasbourg University** [France]
Strasbourg So: 918
- Strasser, Valentine** [Sierra Leone political leader]
Sierra Leone (History) S: 452
- Strassmann, Fritz** [German chemist] So: 918
Fermi, Enrico F: 74
Nuclear energy (Artificial fission) N: 590
Physics (Uncovering the secrets of the atom) P: 442
Uranium (History of the use of uranium) U: 216
- Strata** [geology]
Fossil (Tracing the development of life) F: 423
Geology (The rock dispute) G: 98
- Strategic air attack** [warfare]
Air Force, United States (Offense) A: 190
- Strategic Air Command** [U.S.] So: 919
Air Force, United States (Combat commands) A: 192-193
Nebraska (The mid-1900's) N: 114 *with picture*
- Strategic Arms Limitation Talks** So: 919
Arms control (History of arms control) A: 721-722
Bush, George Walker (International issues) B: 723
Carter, Jimmy (Foreign affairs) C: 257-258
Cold War (Soviet-American relations) Ci: 768-769; (The Cold War in the 1970's) Ci: 769-770
Union of Soviet Socialist Republics (Détente) U: 39
- Strategic Arms Reduction Talks** [meetings]
Nuclear weapon (Limiting numbers) N: 601
- Strategic Arms Reduction Treaty** [arms control] So: 919
START I (1991)
Arms control (History of arms control) A: 721-722
Bush, George Herbert Walker (International affairs) B: 721-722
Gorbachev, Mikhail Sergeyevich (International policies) G: 272
Nuclear weapon (Limiting numbers) N: 601
United States, History of the (Improved U.S.-Soviet relations) U: 195
- Strategic bomber**
Aircraft, Military (Bombers) A: 202 *with picture*
Bomber (Kinds of bombers) B: 453 *with picture*
- Strategic Command** [U.S.]
Nebraska *picture on* N: 114
Offutt Air Force Base O: 678
- Strategic Defense Initiative** So: 919
Nuclear weapon (Control of nuclear weapons) N: 600
Reagan, Ronald Wilson (Domestic affairs) R: 169
- Strategic missile**
Guided missile (Ballistic missiles) G: 425
- Strategic mission** [military]
Air force (Combat missions) A: 182
- Strategic mobility** [warfare]
Army (Armies in the nuclear age) A: 728-729
- Strategic nuclear weapon**
Nuclear weapon (Strategic nuclear weapons) N: 599
- Strategic Services, Office of** [U.S. history] So: 920
Espionage (History) E: 358
Propaganda (During World War II) P: 825
World War II (Spies and saboteurs) W: 493
- Strategic target** [warfare]
Army (Armies in the nuclear age) A: 728
- Stratemeyer, Edward** [American author] So: 920
- Stratemeyer Syndicate**
Stratemeyer, Edward So: 920
- Stratford Festival of Canada** [Ontario]
Canada (Theater) C: 110 *with picture*
Guthrie, Tyrone G: 444
Ontario (Visitor's guide) O: 774-775 *with picture*
- Stratford grammar school** [England]
Shakespeare, William (Early years) S: 346 *with picture; picture on* S: 348
- Stratford Hall** [estate]
Archaeology *pictures on* A: 598
Lee, Robert Edward L: 176; *picture on* L: 179
Virginia (Places to visit) V: 408
- Stratford-upon-Avon** [England] So: 920
- Shakespeare, William (His life in Stratford) S: 346 *with pictures; picture on* S: 348
Theater (Britain) T: 247-248
- Strath** [geography]
Scotland (Land regions) S: 217
- Strathardle** [ship]
Ship (Multipurpose ships) S: 421
- Strathclyde, University of**
Glasgow G: 210
- Strathcona** [former city]
Edmonton (History) E: 85
- Strathcona and Mount Royal, Baron of** [Canadian businessman] So: 920
- Stratified rock** So: 920
- Stratigraphic trap** [geology]
Petroleum (How petroleum was formed) P: 334-335; *picture on* P: 336
- Stratigraphy**
Archaeology (What archaeologists study) A: 594-595
Geology (Job opportunities) G: 100-101
- Stratocumulus**
Cloud (Low clouds) Ci: 709 *with pictures*
- Stratopause** [atmosphere]
Air (The stratosphere) A: 173 *with diagram*
Stratosphere So: 920
- Stratosphere** [atmosphere] So: 920
Air (The stratosphere) A: 173 *with diagram*
Balloon (Balloon explorations of the upper atmosphere) B: 61 *with picture*
Earth (The atmosphere) E: 18-19
Fallout (How fallout is distributed) F: 18-19
Jet stream J: 115
- Stratton, Charles C.** [American political leader]
New Jersey (The 1800's) N: 251
- Stratton, Charles Sherwood** [American entertainer] So: 921 *with picture*
- Stratum** [geology]
Earth (History of Earth) E: 25 *with picture*
Stratified rock So: 920
- Stratus**
Cloud (Low clouds) Ci: 709 *with pictures*
- Straub, Robert W.** [American political leader]
Oregon (table) O: 845
- Straus, Oscar** [Austrian composer] So: 921
- Straus, Oscar S.** [American government official]
Commerce, Department of (table) Ci: 871
Roosevelt, Theodore R: 470
- Strauss, Eduard** [Austrian conductor]
Strauss, Johann, Jr. So: 921
- Strauss, Johann, Sr.** [Austrian composer] So: 921
- Strauss, Johann, Jr.** [Austrian composer] So: 921
Operetta O: 809
- Strauss, Joseph B.** [American engineer]
Golden Gate Bridge G: 255
- Strauss, Levi** [American businessman] So: 922
Denim D: 131
Jeans J: 75
- Strauss, Lewis L.** [American government official]
Commerce, Department of (table) Ci: 871
Eisenhower, Dwight David (table) E: 152
- Strauss, Richard** [German composer] So: 922 *with portrait*
Opera (Richard Strauss) O: 799;
(*Rosenkavalier, Der*) O: 807 *with picture*;
(*Salome*) O: 807 *with picture*
- Stravinsky, Igor** [Russian-born composer] So: 922 *with portrait*
Classical music (Igor Stravinsky) Ci: 649;
(Neoclassicism) Ci: 649
- Straw** So: 923
Rice (Other uses) R: 323
Rye (Uses) R: 573
- Straw, Drinking**
Air (Weight and pressure) A: 168 *with diagrams*
- Straw hat**
Clothing (Protection) Ci: 688; (Why clothing varies) Ci: 690-691
Straw So: 923
- Strawberry** [plant] So: 923 *with picture*
Fruit (Compound fruits) F: 548
- Strawberry clover**
Clover (Strawberry clover) Ci: 713 *with picture*
- Strawberry comb**
Chicken (Kinds of chickens) C: 441 *with picture*
- Strawberry mark**
Birthmark B: 380
- Strawberry tongue**
Scarlet fever (Symptoms) S: 173
- Strawbery Banka**

New Hampshire (Places to visit) N: 216 *with picture*

Portsmouth [New Hampshire] P: 685

Strawflower [plant] So: 924 *with picture*

Streak test

Mineral (Other identification tests) M: 567 *with picture*

Rock (Identifying rocks) R: 373-375

Streaker bee [insect]

Bee (Swarming) B: 204

Stream

River *diagram on* R: 353

Stream of consciousness [literature]

American literature (Nonfiction writers) A: 420

Irish literature (James Joyce) I: 432

Novel (New directions in the novel) N: 573-

574; (After World War II) N: 574

Streaming [electronics]

Internet (Push technology) I: 350b

Streamliner [railroad]

Locomotive *picture on* L: 416

Streamlining So: 924 *with diagrams*

Aerodynamics (Drag) A: 86

Streamtown National Historic Site (Scranton)

Pennsylvania (Places to visit) P: 254

Streep, Meryl [American actress] So: 924 *with*

portrait

Motion picture (Best performance by an actress: 1982) M: 862; (Best performance by an actress in a supporting role: 1979)

M: 863

Street

Road R: 357

Traffic T: 366

Street, Dresden [painting by Kirchner]

Painting (Expressionism) P: 78-79 *with picture*

Street, Jabez C. [American physicist]

Muon M: 928

Street, Picabo [American skier]

Skiing (The middle and late 1900's) S: 487-488

Street academy [education]

Alternative school (Features of alternative

schools) A: 388-389

Street bike

Motorcycle (Kinds of motorcycles) M: 878

Street in Bronzeville, A [poems by Brooks]

Brooks, Gwendolyn B: 641

Street map

Map (Navigation maps) M: 177

Street race

Automobile racing A: 975

Street rod

Hot rod H: 374a

Street Scene [play by Rice]

Rice, Elmer R: 328

Streetcar [vehicle] So: 925

Transportation *picture on* T: 389; *picture on*

T: 390

Streetcar Named Desire, A [film]

Brando, Marlon B: 563

Streetcar Named Desire, A [play by Williams]

Williams, Tennessee W: 311

Streisand, Barbra [American entertainer]

So: 925 *with portrait*

Motion picture (Best performance by an

actress: 1968) M: 862

Strength

Physical fitness (Performance-related fitness)

P: 433

Strength of materials

Materials (Properties of materials) M: 300b

Strep throat [disease] So: 925

Rheumatic fever R: 291

Strepsiptera [entomology]

Insect (table) I: 300

Streptococcal pharyngitis [disease] See Strep

throat *in this index*

Streptococcus [bacteria] So: 925 *with picture*

Disease *picture on* D: 229

Erysipelas E: 355

Nephritis N: 127

Rheumatic fever R: 291

Scarlet fever (Causes) S: 173

Strep throat So: 925

Streptococcus pneumoniae [bacteria]

Penicillin (Resistance) P: 241

Pneumonia (How pneumonia develops) P: 586

Streptococcus So: 926

Streptomyces griseus [bacteria]

Streptomycin B: 926

Streptomycin [medication] So: 926

Antibiotic (table) A: 551; (Damage to organs

and tissues) A: 551; (History) A: 552

Waksman, Selman Abraham W: 6

Stresemann, Gustav [German statesman]

Germany (The Weimar Republic) G: 167

Nobel Prizes (Peace: 1926) N: 447

Stress [engineering]

Annealing A: 517

Elasticity E: 156

Metal fatigue M: 426

Stress [health] So: 926

Balance of nature (Behavior) B: 35

Child abuse C: 454

Disease (Inherited diseases) D: 228-229

Epinephrine E: 343

Health (Handling stress) H: 126

Selye, Hans S: 290

Stress [language] See Accent *in this index*

Stress ECG See Stress test *in this index*

Stress electrocardiogram [medicine] See

Stress test *in this index*

Stress meter [poetry]

Poetry (Rhythm and meter) P: 591-592

Stress test [medicine] So: 927 *with picture*

Heart (Symptoms and diagnosis) H: 137; *pic-*

ture on H: 141

Stressor [health]

Stress (Causes of stress) So: 926

Streymoy [island, Atlantic]

Faroe Islands F: 47

Striae [geology]

Ice age (Extent of the Pleistocene glaciers) I: 6

Striated muscle

Heart (Outer lining and muscle) H: 133

Human body (Skeletal muscles) H: 419

Muscle (Skeletal muscles) M: 933 *with dia-*

gram

Strickland, William [British architect]

Architecture (The Greek Revival) A: 625-626

Strict liability [law]

Product liability suit P: 810

Stride piano

Jazz (The 1920's) J: 70

Stridulation [entomology]

Ant (Sense organs) A: 522-523

Insect (Hearing) I: 290

Strife [philosophy]

Heraclitus H: 194

Strife [play by Galsworthy]

Galsworthy, John G: 17

Strike [labor] So: 928 *with picture*

Baseball (Recent developments) B: 137-139

Gay Nineties (Industrial growth) G: 72

Labor movement (Handling labor disputes)

L: 6 *with picture*

Lockout L: 413

Massachusetts (The early 1900's) M: 293

New York City (Recent developments) N: 342

Roosevelt, Theodore (Friend of labor) R: 468

Taft-Hartley Act T: 13

Teaching (Current issues in U.S. teaching)

T: 69

West Virginia (History) W: 226-229 *with pic-*

ture

Strike [sports]

Baseball (Outs by batters) B: 128; (Rule

changes) B: 133

Bowling (Scoring) B: 521

Strike Up the Band [musical]

Gershwin, George G: 174

Strike zone

Baseball (Outs by batters) B: 128

Strikebreaker

Labor movement (Handling labor disputes)

L: 6-7

Strikeout

Baseball (Outs by batters) B: 128; (table:

Modern major league records) B: 137

Striker [sports]

Cricket C: 1131

Striker mechanism See Firing pin *in this index*

Striking circle

Field hockey (The field and equipment) F: 92-

93 *with diagram*

Striking the flag

Flag (Raising and lowering the flag) F: 219

Strindberg, August [Swedish dramatist]

So: 929

Drama (Expressionism) D: 339

Expressionism (Expressionist writing) E: 456

Naturalism (Naturalism in drama) N: 65

Scandinavian literature (The Golden Age)

S: 171

Sweden (Arts) So: 1026 *with picture*

String

Twine T: 531

Catgut C: 301

Macramé M: 26 *with picture*

Piano (The strings) P: 446 *with picture*

Violin (Parts of the violin) V: 389 *with pictures*

String [physics]

Subatomic particle (Theoretical research)

So: 938

String band

Country music (Old-time music) Ci: 1098 *with*

picture

String galvanometer [instrument]

Eindhoven, Willem E: 147

Electrocardiograph E: 200

String level [tool]

Level L: 217

String orchestra

Orchestra O: 820

String quartet

Chamber music C: 371

Classical music (Chamber music) Ci: 644 *with*

picture

String section [music]

Orchestra (The musicians) O: 820

String theory [physics] So: 929

Stringed instrument

Classical music (Instrumental music) Ci: 643

Music (Stringed instruments) M: 948 *with pic-*

tures

Orchestra O: 820 *with pictures*

Stringer [fishing]

Fishing (Bait) F: 177-178

Stringer [journalism]

Newspaper (Gathering information) N: 382

Stringfellow, John [British engineer]

Airplane (Powered flight) A: 230

Stringless bean

Bean (Kinds of beans) B: 181

Stringmusic [music by Gould]

Gould, Morton G: 280

Strip, The [district]

Las Vegas (The city) L: 87 *with picture*

Los Angeles (Central Los Angeles) L: 460

Strip cropping

Conservation (Soil conservation) Ci: 979-980

Erosion (Controlling erosion) E: 355

Farm and farming (Planting) F: 35-36

Strip mine

Coal (Surface mining) Ci: 721 *with picture; pic-*

ture on Ci: 730

Kentucky (The late 1900's) K: 294

Mining (Surface mining methods) M: 574-575

with diagram

Tennessee Valley Authority (Electric power)

T: 159

Strip steel

Iron and steel (Rolling) I: 447

Stripe smut fungus

Lawn *picture on* L: 143

Striped bass

Bass (True bass) B: 157 *with picture*

Striped cucumber beetle

Insect *picture on* I: 283

Striped marlin

Fish *picture on* F: 152

Striped mullet

Mullet M: 915

Striped pear gourd

Gourd *picture on* G: 281

Striped skunk

Skunk S: 496 *with picture*

Striplight

Theater (Lighting methods) T: 240-24

- Disease (Diseases associated with aging)
D: 230
- Hypertension H: 475
- Nervous system (Disorders of the nervous system) N: 136
- Stroke, Lightning**
Lightning L: 299; (How lightning develops)
L: 300 *with pictures*
- Stroke play**
Golf (Stroke play) G: 264
- Strom, Erling** [American mountain climber]
Mount McKinley M: 886
- Strom Thurmond Dam** [Savannah River]
Savannah River S: 165
- Stromboli** [Island, Italy] So: 930
Volcano (table) V: 441 *with map*
- Strombolian eruption**
Volcano (Classifying volcanic eruptions) V: 442
- Stromeyer, Friedrich** [German scientist]
Cadmium C: 12
- Strong, John** [English explorer]
Falkland Islands F: 15
- Strong, William** [American jurist]
Supreme Court of the United States (table)
So: 1000
- Strong flour**
Flour (Types of flour) F: 268
- Strong force** [physics] *See* Strong interaction in this index
- Strong interaction** [physics]
Atom (Forces in the nucleus) A: 873
Force (The strong force) F: 371
Gluon G: 236
Physics (Physics today) P: 442-443
Quantum field theory Q: 5
Standard Model So: 833
String theory So: 929
Subatomic particle (Fundamental forces)
So: 936; (Theories of forces) So: 937-938
- Strong-mayor system** [government]
City government (The mayor-council form)
Ci: 595 *with diagram*
- Strong motion accelerograph**
Seismograph (Detecting earthquakes) S: 288
- Strong nuclear force** [physics] *See* Strong interaction in this index
- Strong trademark**
Trademark T: 365
- Strongbow** [Irish king]
Ireland (The Norman invaders) I: 425-426
- Strontianite** [mineral]
Strontium So: 930
- Strontium** [element] So: 930
- Strontium 90** [isotope]
Strontium So: 930
- Strophe** [poetry]
Ode O: 673
- Strophic song**
Classical music (Songs) Ci: 644
- Strophium**
Clothing (Ancient times) Ci: 696-698
- Strowger, Almon B.** [American inventor]
Telephone (Early telephones) T: 100
- Structural analysis** [linguistics]
Reading (Comprehending what is perceived)
R: 157
- Structural beam**
Iron and steel (Rolling) I: 447 *with diagram*
- Structural-functionalism** [sociology]
Parsons, Talcott P: 182
Sociology (Development of social research)
So: 566
- Structural glass**
Glass (Specialty glasses) G: 212
- Structural grammar**
Grammar G: 303
- Structural lighting**
Lighting (Lighting devices) L: 298
- Structural linguistics**
Lévi-Strauss, Claude L: 218
Linguistics (Structuralism) L: 337
- Structural lumber**
Lumber (Softwood lumber) L: 517
- Structural proteins**
Metabolism (Anabolism) M: 424
- Structuralism**
Gestalt psychology G: 175
Lévi-Strauss, Claude L: 218
Mythology (Lévi-Strauss's theory) M: 988
Psychology (Structuralism) P: 849
Sociology (Development of social research)
So: 566
- Structure** [economics]
Industry (Industrial organization) I: 261
- Structure class** [grammar]
English language (Grammar) E: 312
- Strudel** [food]
Hungary (Food and drink) H: 441
- Strugatsky, Arkady** [Russian author]
Science fiction (Growing popularity) S: 205-206
- Strugatsky, Boris** [Russian author]
Science fiction (Growing popularity) S: 205-206
- Struve, Otto** [American astronomer] So: 930
- Strychnine** [poison]
Poison (Kinds of poisons) P: 601
Stimulant So: 901
- Strychnos plant**
Curare Ci: 1193
- Stryn** [Norway]
Norway picture on N: 536
- Stuart, Alexander H. H.** [American government official]
Fillmore, Millard (table) F: 102
- Stuart, Charles Edward** [Scottish pretender]
Scotland (Union with England) S: 220
- Stuart, Gilbert Charles** [American artist]
So: 931
Madison, James picture on M: 32
Monroe, James picture on M: 734
Rhode Island (Places to visit) R: 304
Washington, George picture on W: 90
- Stuart, Granville** [American diplomat]
Western frontier life in America W: 232
- Stuart, Henry Carter** [American political leader]
Virginia (table) V: 417
- Stuart, House of** [British history] So: 931
England (table) E: 308
Scotland (The House of Stuart) S: 219
Tartan pictures on T: 47
- Stuart, James Ewell Brown** *See* Stuart, Jeb in this index
- Stuart, James Francis Edward** [Scottish nobleman]
Scotland (Union with England) S: 220
- Stuart, Jeb** [Confederate general] So: 931 *with portrait*
Civil War (The peninsular campaign) Ci: 626-627; (Cavalry maneuvers) Ci: 632
- Stuart, Jesse Hilton** [American author] So: 931
- Stuart, John McDouall** [British explorer]
Australia (Exploring the interior) A: 924; *map on A: 923*
Northern Territory N: 528
- Stuart, John Todd** [American lawyer]
Lincoln, Abraham (Study) L: 314
- Stuart, Mary** [queen of Scotland] *See* Mary, Queen of Scots in this index
- Stuart, Robert** [American frontiersman]
Nebraska (American exploration and settlement) N: 111
Wyoming (Exploration) W: 533
- Stuart Little** [book by White]
White, E. B. W: 284
- Stubble-mulch tillage** [farming]
Dry farming D: 369
- Stubbs, Walter Roscoe** [American political leader]
Kansas (table) K: 234
- Stucco** [construction]
Plaster P: 552
- Stuck, Hudson** [British religious leader]
Mount McKinley M: 886
- Stud** [construction]
House (The frame) H: 382 *with diagram*
- Stud** [hardware]
Tire (Tire tread patterns) T: 298
- Stud fee**
Horse (Breeding horses) H: 358
- Stud poker**
Poker P: 603
- Studbook**
Dog (table: Dog terms) D: 263
- Studebaker**
Automobile picture on A: 968
- Studebaker, Clement** [American businessman]
So: 932
- Studebaker, John Mohler** [American businessman] So: 932
- Studebaker Brothers Manufacturing Company**
Studebaker, John Mohler So: 932
- Studebaker Corporation**
Indiana (The mid-1900's) I: 216-218
Studebaker, Clement So: 932
Studebaker, John Mohler So: 932
- Student body**
Universities and colleges (The student body)
U: 208
- Student council**
Student government So: 932
- Student from Salamanca, The** [poem by Espronceda]
Spanish literature (The 1800's) So: 761
- Student government** So: 932
- Student National Coordinating Committee**
See Student Nonviolent Coordinating Committee in this index
- Student Nonviolent Coordinating Committee**
So: 932
African Americans (The growing movement)
A: 136m
Bond, Julian B: 455
King, Martin Luther, Jr. (Later years) K: 322
- Student nurse**
Nursing (Professional and technical nursing education) N: 619
- Student protest**
Riot (During the 1900's) R: 349
- Student teaching**
Teaching (Teacher-training programs) T: 67-68
- Students for a Democratic Society** [organization] So: 932
New Left N: 255
- Studhorse Man, The** [book by Kroetsch]
Canadian literature (Modern English-Canadian fiction) C: 160
- Studies in a Dying Colonialism** [book by Fanon]
Fanon, Frantz Omar F: 27
- Studies in the History of the Renaissance** [book by Pater]
Pater, Walter Horatio P: 195
- Studies in the Psychology of Sex** [book by Ellis]
Ellis, Havelock E: 243
- Studio**
Ballet (The ballet studio) B: 46 *with picture*
Radio (Radio stations) R: 86; *picture on R: 83*
Recording industry (In a recording studio)
R: 181 *with picture*
- Studio, The** [painting by Lawrence]
Lawrence, Jacob picture on L: 146
- Studio camera**
Photography (Cameras) P: 417
- Studs Lonigan** [books by Farrell]
Farrell, James T. F: 48
- Study** [education] So: 933
See also Learning in this index
Reading (Study-type reading) R: 156
- Study group**
Parent education (Methods of parent education) P: 157
- Study in Scarlet, A** [book by Doyle]
Detective story (History) D: 163
- Study of History, A** [book by Toynbee]
Toynbee, Arnold Joseph T: 352
Civilization (Why civilizations rise and fall)
Ci: 636
- Stuffing** [industrial process]
Leather (Tanning) L: 167
- Stump Speaking** [painting by Bingham]
United States, History of the picture on U: 170
- Stumping**
Cricket (Ours) Ci: 1132-1133 *with picture*
- Stunt kite**
Kite (Types of kites) K: 339-340 *with picture*
- Stupa** [building]
Architecture (Indian architecture) A: 613
Sculpture (India) S: 236-237
- Stupor Mundi**
Frederick II F: 497
- Sturbridge** [Massachusetts]
Massachusetts (Places to visit) M: 280
Museum picture on M: 938
- Sturgeon** [fish] So: 934
Caviar C: 322
Fish (Bony fish) F: 147-148; *picture on F: 158*
Russia (Fishing industry) R: 546
- Sturgeon, Theodore** [American author] So: 934
- Sturges, Preston** [American director] So: 934
- Sturluson, Snorri** [Icelandic author] *See* Snorri Sturluson in this index
- Sturm und Drang** [literature]
German literature (The Storm and Stress movement) G: 140
Herder, Johann Gottfried von H: 199
- Sturt, Charles** [British explorer]
Australia (Exploring the new land) A: 922-923 *with map*
- Stuttering** So: 934
Speech therapy (Types and causes of speech defects) So: 773
- Stuttgart** [Germany] So: 934 *with picture*

Germany *picture on G*: 151

Stuttgart pitch [sound]

Pitch P: 498

Stuyvesant, Peter [Dutch colonial official]

So: 935 *with portrait*

Delaware (Exploration and early settlement)

D: 110 *with picture*

Fire department (Fire protection in North

America) F: 128

New Netherland N: 277

New York City (English rule) N: 341

Pennsylvania (Exploration and settlement)

P: 264

Sty [disorder] So: 935

Eye (Diseases of the outer parts) E: 466 *with picture*

Style [art]

Fashion F: 50 *with pictures*

Interior design (Elements of design) I: 327

Literature (Style) L: 353

A Guide to Writing Skills Research Guide: 8

Style [botany]

Flower (The pistils) F: 294; (The parts of a flower) *picture on F*: 293

Plant (Flowers) P: 531 *with picture*

Seed (Seed development in angiosperms) S: 281-282

Stylebranch [botany]

Iris I: 429

Styler

Insect (Mouthparts) I: 286 *with diagram*

Mosquito (How a mosquito "bites") M: 832 *with diagram*

Ribbon worm R: 321

Stylus [computing]

Computer (A digitizing tablet) Ci: 914

Stylus [recording]

Phonograph (How phonographs work) P: 400; (Parts of a phonograph) P: 400-401 *with diagram*; (How phonograph records are made) P: 401 *with diagram*

Stereophonic sound system (Parts of a stereo system) So: 892

Stylus [tool]

Printing (Gravure cylinders) P: 800

Styracosaurus [dinosaur] So: 935

Dinosaur (True dinosaurs) D: 206b-208; *picture on D*: 206a

Styrene

Plastics (Making synthetic resins) P: 556

Rubber (General-purpose synthetic rubbers) R: 504

Styrene-butadiene rubber

Rubber (General-purpose synthetic rubbers) R: 504

Styrofoam [plastic]

Polystyrene P: 651

Styron, William [American author] So: 936 *with portrait*

Styx [Greek mythology] So: 936

Hades H: 4

Su-chou [China] *See Suzhou in this index*

Suárez, Francisco [Spanish philosopher]

So: 936

Suarez, Xavier L. [American political leader]

Miami (History) M: 480

Subalpine forest

Forest (Mountain evergreen forests) F: 395

Subalpine larch [tree]

Larch L: 76

Subansiri River [Asia]

Brahmaputra River B: 548

Subarachnoid hemorrhage [disorder]

Stroke (Causes) So: 930

Subarctic [region]

Arctic (The subarctic) A: 636

Indian, American (Indians of the Subarctic)

I: 153 *with picture and map*

Subarctic woodland

Forest (Subarctic woodlands) F: 396 *with map*

Subatomic particle [physics] So: 936

Atom (The nucleus) A: 871 *with diagrams*

Cosmic rays Ci: 1075

Force (Kinds of force) F: 370

Higgs boson H: 227

Particle accelerator P: 184

Particle detector P: 186

Physics (Uncovering the secrets of the atom)

P: 442; (Advances in the mid-1900's)

P: 442; (Physics today) P: 442

Quantum mechanics (Quanta of energy) Q: 6

Quark Q: 7

Radiation R: 74

See also the list of subatomic particles in the Related articles of the Atom article

Subbituminous coal

Coal (How coal was formed) Ci: 717; (Location

of U.S. and Canadian reserves) Ci: 718

with map; (The uses of coal) Ci: 719

Sub-canopy [botany]

Rain forest (Structure and growth) R: 126a

Subclavian artery

Artery (Principal arteries) A: 751

Human body *diagram on H*: 422

Subclavian vein

Human body *diagram on H*: 422

Subconscious *See Unconscious in this index*

Subcontractor

Building construction (Constructing a skyscraper) B: 683

Building trade (The contracting system) B: 685

Subcritical mass [physics]

Nuclear weapon (Fission weapons) N: 596

Subculture [anthropology]

Culture (The boundaries of cultures) Ci: 1186-1187

Subcutaneous injection

Hypodermic injection H: 480 *with picture*

Subcutaneous tissue [anatomy]

Human body (Subcutaneous tissues) H: 418

Skin (Structure of the skin) S: 488 *with picture*

Subdeacon

Eastern Orthodox Churches (Clergy) E: 46

Subdominant

Music (Tone) M: 950-951; (Harmony) M: 951-952 *with diagram*

Subduction zone [geology]

Earth (Subduction) E: 24

Mountain (Volcanic mountains) M: 892

Plate tectonics (Plate interactions) P: 562

Ring of Fire R: 342

Subercaseaux, Pedro [Chilean painter]

Argentina *picture on A*: 657

Suberin [botany]

Bark (Outer bark) B: 110

Subfloor

House (Interior construction) H: 382 *with diagram*

Subhead

Newspaper (table) N: 383

Subimago

Mayfly M: 328

Subinfederation [European history]

Feudalism (Knighthood under feudalism) F: 82

Subirrigation

Irrigation (Subirrigation) I: 459

Subject [grammar]

Sentence (Subject and predicate) S: 303

Subject-verb-complement

Grammar (The actor-action-goal relationship) G: 303

Subjection of Women, The [book by Mill]

Mill, Harriet Taylor M: 552

Philosophy (Modern philosophy) P: 387-390

Subjectivism [philosophy]

Philosophy (Ethics) P: 384-385

Subjunctive mood [grammar]

Conjugation Ci: 951

Mood M: 780

Sublette, William Lewis [American businessman] So: 938

Wyoming (Exploration) W: 533

Sublevel caving [mining]

Mining (Underground mining methods) M: 576

Sublevel stoping [mining]

Mining (Underground mining methods) M: 576

Sublimation [physics] So: 938

Cloud (How clouds form) Ci: 711

Evaporation E: 422

Refrigeration (Dry ice) R: 201

Sublimation [psychology]

Nietzsche, Friedrich (Psychological ideas) N: 407

Subliminal [psychology] So: 938

Sublingual gland

Saliva S: 68 *with diagram*

Subluxation [disorder]

Chiropractic C: 514

Submandibular gland

Saliva S: 68 *with diagram*

Submarine So: 939 *with pictures*

See also U-boat in this index

Connecticut (The mid-1900's) Ci: 971 *with picture*

Depth charge D: 152

Fulton, Robert (The inventor) F: 555

Holland, John Philip H: 292

Navy (Submarines) N: 78

Navy, United States (Combat ships) N: 84

Periscope P: 288

Warship (Submarines) W: 41; (Warships in the

nuclear age) W: 42 *with pictures*

World War I *picture on W*: 457

Submarine canyon [geography]

Atlantic Ocean (The Atlantic seafloor) A: 864

Valley (Kinds of valleys) V: 265

Submarine launched ballistic missile

Guided missile (Ballistic missiles) G: 425

Submarine oscillator [instrument]

Fathometer F: 54

Submarine warfare

Submarine (History) So: 942 *with pictures*

Torpedo T: 340c

Wilson, Woodrow (Declaration of war) W: 324-325

World War I (The war at sea) W: 460 *with picture*; (The United States enters the war) W: 462

Submerged arc welding

Welding (Arc welding) W: 189

Submersible [diving vessel]

Bathyscaphe B: 165

Deep sea (Deep-sea exploration) D: 82c

Diving, Underwater (Diving in vehicles) D: 246

Marine biology (Biological oceanographers)

M: 205

Ocean (Submersibles) O: 663 *with picture*

Submultiple [measurement]

Metric system (Kinds of metric units) M: 436

Suborbital mission

Space exploration (Vostok and Mercury: the first human beings in space) So: 711-712

Subordinate clause

Clause Ci: 657

Sentence (Sentence classifications) S: 303

Subordinating conjunction

Conjunction (Subordinating conjunctions) Ci: 951

Subordination

Grammar (Grammatical relationships) G: 303-304

Subornation of perjury [law]

Clinton, Bill (Domestic events) Ci: 682f

Perjury P: 289

Subpoena [law] So: 943

Witness W: 374

Subpolar region [geography]

Calms, Regions of (Subpolar regions) C: 69

Subscription

Magazine (Sales) M: 43

Subscription library

Franklin, Benjamin (Civic leader) F: 487-488 *with picture*

Library (Libraries in the United States) L: 261

Subscription season

Theater (Theater in the United States) T: 244-246

Subset

Set theory (Kinds of sets) S: 321 *with diagram*

Subsidiary company

Holding company H: 290

Subsidy [economics] So: 943

Exports and imports (Export promotion) E: 455

Nationalization (Advantages and disadvantages) N: 63

Ship (The United States merchant marine)

S: 425-426

Subsistence agriculture

Africa (Agriculture) A: 126-127

Agriculture (Subsistence agriculture) A: 149

Subsoil

Lawn (Preparing the soil) L: 142

Soil (Characteristics of soils) So: 574 *with diagram*

Subsonic speed

Aerodynamics (Supersonic aerodynamics)

A: 88

Streamlining So: 924

Subspecies

Classification, Scientific (Groups in classification) Ci: 654-656

Races, Human R: 53

Substance [philosophy]

Hume, David (Hume's thought) H: 432

Substance abuse *See Alcoholism; Drug abuse in this index*

Substance use disorder

Drug abuse D: 361

Substandard housing

City (Physical problems) Ci: 590 *with picture*

Housing H: 389 *with picture*

Substantive due process

Due process of law D: 378

Substitution

Codes and ciphers (Communications security)
Ci: 749

Substitution [mathematics]

Algebra (Solving linear equations in two variables) A: 357

Substrate [electronics]

Transistor (Metal oxide semiconductor field effect transistors) T: 373-374 *with diagram*

Substructure

Building construction (Parts of a building)
B: 681

Subsurface drainage [agriculture]

Drainage (Subsurface drainage) D: 320 *with diagram*

Subterranean clover

Clover (Subterranean clover) Ci: 713

Subterranean termite

Termite (Termites in the United States) T: 174
Insect I: 281

Subtitle

Closed captioning Ci: 685

Subtotal hysterectomy

Hysterectomy H: 482

Subtraction [mathematics] So: 944 *with pictures*

Addition (Checking addition) A: 51

Algebra (Subtraction) A: 355

Arithmetic (Subtraction) A: 666 *with picture*;
(Arithmetic of negative numbers) A: 668-669

Decimal system (Addition and subtraction)
D: 71 *with diagrams*

Fraction (Calculations using fractions) F: 448

Subtractive color mixture

Color (Mixing colorants) Ci: 819-820 *with diagrams*

Subtractive principle

Numeration systems (The Roman numeral system) N: 607

Subtrahend [mathematics]

Subtraction (Subtraction Terms) So: 944

Subtropical forest

Forest (Forests of the United States and Canada) F: 394 *with map*

Subtropical fruit

Fruit (How horticulturists classify fruits)
F: 544-545 *with pictures*

Subtropical high [weather]

Calms, Regions of (The horse latitudes) C: 69

Subtropical jet [wind]

Jet stream J: 115 *with map*

Subtropical maritime anticyclone [weather]

Calms, Regions of (The horse latitudes) C: 69

Subtropics [geography]

Flower (Flowers of the tropics and subtropics)
F: 292 *with pictures*

Suburb So: 949

City (Metropolitan cities) Ci: 588

Housing (Suburban developments) H: 390

Metropolitan area M: 442

United States (Urban life) U: 110 *with picture*

United States, History of the (A new life style)
U: 191 *with picture*

Suburbanization [demography]

Local government (Population changes)
L: 407-408

Subversive activity [law]

Un-American Activities Committee U: 19

Subway [railroad] So: 949 *with picture***Success**

Learning (Motivation) L: 164

Succession [biology] See Ecological succession *in this index***Succession, Act of** [1534]

More, Saint Thomas (His life) M: 801-802

Succession, Presidential See Presidential succession *in this index***Succession law**

Law (Private law) L: 130

Succession wars [European history] So: 950

The War of the Austrian Succession [1740-1748]

Succession wars (The War of the Austrian Succession) So: 950

Austria (Wars in the 1700's and 1800's)
A: 938

French and Indian wars (King George's War)
F: 512

Germany (The rise of Prussia) G: 164

Maria Theresa M: 199

Pragmatic sanction P: 729

The War of the Bavarian Succession [1778-1779]

Succession wars (The War of the Bavarian Succession) So: 950

The War of the Polish Succession [1733-1738]

Succession wars (The War of the Polish Succession) So: 950

Louis XV L: 476

The War of the Spanish Succession [1701-1714]

Succession wars (The War of the Spanish Succession) So: 950

Austria (Wars in the 1700's and 1800's)
A: 938

French and Indian wars (Queen Anne's War)
F: 512

Philip V P: 370

Sicilies, Kingdom of the Two S: 447

Spain (The Spanish decline) So: 747-748

Utrecht, Peace of U: 252

Successive contrast [vision]

Color (Surprising color-vision effects) Ci: 819

Successive hermaphroditism

Hermaphrodite H: 211

Successive planting

Gardening (Planning the garden) G: 31-32 *with picture*

Succory See Chicory *in this index***Succot** [custom] See Sukkot *in this index***Succulent** [botany] So: 950 *with picture***Sucker** [botany]

Banana (How bananas grow) B: 72

Raspberry (Growing raspberries) R: 144

Sucker [fish] So: 950 *with picture***Sucking louse** [insect]

Louse L: 507

Sucking stomach

Spider (Digestive system) So: 785 *with diagram*

Suckling, Sir John [English poet] So: 951

Cribbage Ci: 1129

Suckling, Maurice [English navigator]

Nelson, Horatio (Early life) N: 121

Sucralose

Artificial sweetener A: 761

Sucra [Bolivia] So: 951

Bolivia B: 442

Sucra, Antonio José de [Bolivian political leader] So: 951

Bolivia (Independence) B: 446-447

Ecuador (Spanish rule) E: 73

Peru (The war of independence) P: 314-315

Sucrose [sugar] So: 951

Candy (Types of candies) C: 175-176

Carbohydrate (Kinds of carbohydrates) C: 203

Fat substitute F: 54

Hydrolysis H: 471

Sugar So: 959

Suction [physics]

Vacuum cleaner V: 257

Suction curettage

Abortion (Abortion methods) A: 14

Suction spot [meteorology]

Tornado (Damage by tornadoes) T: 334

Suction vortices [meteorology] See Suction spots *in this index***Sudan** [country] So: 952 *with pictures and map*

Arabs *picture on* A: 586

Dinka D: 205

Flag *picture on* F: 200

Nuer N: 603

Sudan grass So: 956

Grass *picture on* G: 325

Sorghum (Grassy sorghums) So: 596

Sudan People's Liberation Army [political group]

Nuer N: 603

Sudanese Socialist Union

Sudan (Independence) So: 956

Sudbury [city, Ontario]

Greater Sudbury G: 350

Sudbury Basin [region]

Ontario (Natural resources) O: 779

Sudbury Neutrino Observatory

Astronomy (Neutrino astronomy) A: 845

Neutrino N: 155 *with picture*

Observatory (Neutrino observatories) O: 645

Sun (Analyzing neutrinos) So: 984-985

Sudd [swamp]

Sudan (Land and climate) So: 954

Sudden infant death syndrome So: 956

Baby (Health care and safety) B: 10

Suddhodhana [father of]

Buddha (Early life) B: 667

Sudermann, Hermann [German author] So: 957**Sudeten Germans**

Czech Republic (The creation of

Czechoslovakia) Ci: 1213

Sudeten Mountains [Czech Republic-Poland]

Czech Republic (Land and climate) Ci: 1211
with picture and map

Poland (The Sudeten Mountains) P: 609

Silesia S: 457

Sudetenland [historic region] So: 957

Czech Republic (The creation of

Czechoslovakia) Ci: 1213

Minority group (Minority groups in other countries) M: 610

Munich Agreement (Background) M: 927

World War II (The failure of appeasement)
W: 472

Sudhuroy [island]

Faroe Islands F: 47

Sudra

Caste C: 279

Hinduism (Caste) H: 236-237

Sue [fossil]

Fossil *picture on* F: 422

Sueda [leather]

Leather (Kinds of leather) L: 167

Suess, Eduard [Austrian geologist] So: 957**Suet** So: 957

Bird (Bird watching) B: 367

Suetonius [Roman author] So: 957

Latin literature (The Imperial Period) L: 116

Suez [Egypt] So: 957**Suez Canal** [waterway, Egypt] So: 957 *with map*

Arab-Israeli conflict (The Suez crisis of 1956)
A: 582

Canal (The Panama and Suez canals) C: 163;

(table) C: 164

Cold War (Trouble at Suez) Ci: 765

De Lesseps, Ferdinand Marie D: 115

Egypt (Muhammad Ali and modernization)

E: 131; (Republic) E: 132 *with picture*

Mediterranean Sea (History of the

Mediterranean) M: 382

Suez So: 957

Suez crisis So: 958

United Nations (Peacekeeping operations)
U: 90-91

Suez Canal Company

Egypt (British control) E: 131-132

Suez Canal (History) So: 958

Suez crisis So: 958

Suez crisis [Egyptian history] So: 958

Egypt (Republic) E: 132

Suffix

Spelling (Spelling rules) So: 776

Suffocation

Drowning D: 349

Suffolk and Corriedale [breed]

Sheep *picture on* S: 381

Suffolk County [New York]

New York City (Metropolitan area) N: 330

Suffolk horse

Horse (table: Some types and breeds of horses) H: 343; *picture on* H: 347

Suffolk sheep

Sheep (Medium-wooled sheep) S: 382

Suffrage See Voting *in this index***Suffrage, Woman** See Woman suffrage *in this index***Suffragist**

Woman suffrage W: 380

Sufis [religious group]

Muslims (The Abbasids) M: 964c

Sugar [food] So: 959 *with pictures*

Artificial sweetener A: 761

Beet B: 212

Candy (Types of candies) C: 175-176

Diabetes D: 178

Dominican Republic (Economy) D: 304 *with picture*

Food (Producing energy) F: 330

Food preservation (Curing) F: 341

Honey H: 314

Maple syrup (History) M: 188

Nutrition (Carbohydrates) N: 625; (Nutrition guidelines) N: 626

Rillieux, Norbert R: 341

Slavery (The Middle Ages) S: 501; (Modern times) S: 502

Starch So: 855

Sucrose So: 951

Sugar beet So: 961

Sugar cane So: 962

Teeth (A good diet) T: 81

Sugar Act [1764]

Revolutionary War in America (The Sugar Act)
R: 272

- United States, History of the (British policy changes) U: 156-157
- Sugar beet** [plant] So: 961 *with picture*
Beet B: 212 *with picture*
Sugar (The sources of sugar) So: 959 *with picture*; (Sugar from sugar beets) So: 961
- Sugar bowl** [container]
Colonial life in America *picture on* Ci: 808
- Sugar cane** [plant] So: 962 *with picture*
Cuba (Economy) Ci: 1173-1174 *with picture*; (History) Ci: 1175
Grass (Sugar cane) G: 326
Hawaii (Agriculture) H: 103-104
Molasses M: 689
Sugar (The sources of sugar) So: 959 *with picture*; (Sugar from sugar cane) So: 961
West Indies *picture on* W: 204
- Sugar Hill Gang** [pop group]
Rap music R: 141
- Sugar Loaf Mountain** [Rio de Janeiro]
Rio de Janeiro R: 345 *with picture*
South America *picture on* So: 622
- Sugar maple**
Maple (Sugar maple) M: 186 *with pictures*
Maple syrup M: 188
Tree *pictures on* T: 422
- Sugar pine**
Pine (Western pines) P: 469
Tree *pictures on* T: 425
- Sugar Street** [book by Mahfouz]
Mahfouz, Naguib M: 65
- Sugarberry** [tree]
Hackberry H: 3
- Sugarbird** [bird]
Honeyeater H: 315
- Sugarcane cycle** [books by Rego]
Latin-American literature (The early 1900's) L: 113
- Sugarfree gum**
Chewing gum (Ingredients) C: 416; (History) C: 416-417
- Sugarhouse**
Maple syrup (Production) M: 188 *with picture*
- Suggestion** [psychology] So: 963
- Suharto** [Indonesian political leader] So: 963
Indonesia (The fall of Sukarno) I: 238;
(Indonesia under Suharto) I: 238 *with picture*; (The fall of Suharto) I: 239
- Sui Dynasty** [Chinese history]
Sui dynasty So: 964
China (The early empire) C: 501
Tang dynasty (The rise of the dynasty) T: 25
- Suicide** So: 964
Adolescent (Suicide) A: 64
Bipolar disorder B: 326
Death (The right to die) D: 61
Depression D: 151
Euthanasia (Self-induced euthanasia) E: 421
Hara-kiri H: 55
- Suicide** [book by Durkheim]
Durkheim, Émile D: 389
- Suicide bombing**
Terrorism (Bombings) T: 178
- Suit** [cards]
Bridge *diagram on* B: 604
Card game (History) C: 209
- Suit** [clothing]
Clothing (The 1900's) Ci: 703 *with picture*
- Suit** [law] So: 964
Affidavit A: 91
Class action Ci: 642
Court (How civil courts work) Ci: 1102
Law (Private law) L: 130
Law enforcement L: 141
Receiver R: 174
- Suit, Diving**
Diving, Underwater (Ambient diving) D: 245-246 *with picture*; (History) D: 247
- Suit, Hal** [American political leader]
Carter, Jimmy (Steps to the governorship) C: 254
- Suite** [computing]
Computer (Software suites) Ci: 920
- Suite** [music] So: 964
Classical music (Orchestral music) Ci: 644
- Suite bergamasque** [music by Debussy]
Debussy, Claude D: 66
- Suite Provençale** [music by Milhaud]
Milhaud, Darius M: 543
- Sukarno** [Indonesian political leader] So: 964
Indonesia (The rise of nationalism) I: 237;
(Indonesia under Sukarno) I: 238; (The fall of Sukarno) I: 238
- Sukhona River** [Russia]
Dvina River D: 394
- Sukkah**
Sukkot So: 965 *with picture*
- Sukkot** [custom] So: 965 *with picture*
Judaism (The pilgrimage festivals) J: 181; *picture on* J: 179
- Sukothai** [ancient country]
Thailand (Early kingdoms) T: 226
- Sukuma** [people]
Tanzania (Population and ancestry) T: 31
- Sulawesi** [island, Indonesia]
Indonesia *picture on* I: 229; (The Greater Sunda Islands) I: 233 *with map*
- Sule Pagoda**
Yangon *picture on* Y: 551
- Süleyman I** [Sultan of the Ottoman Empire] So: 965
Muslims (The Ottoman Empire) M: 964d *with picture*
Ottoman Empire (Expansion and decline) O: 878
Turkey *picture on* T: 503; (The rise of the Ottoman Empire) T: 510
- Süleymaniye Mosque**
Istanbul (The city) I: 490-491
Turkey (The arts) T: 506-507
- Sulfate** [chemical] So: 966
Baking powder B: 33
Sulfuric acid (Uses and properties) So: 968
- Sulfate process** [industrial process]
Paper (Pulping processes) P: 134-135
- Sulfate rosin** [by-product]
Rosin R: 482
- Sulfate turpentine** [tree product]
Turpentine T: 519
- Sulfide** [chemical] So: 966
Ore O: 825
Silver (Sources of silver) S: 465
- Sulfite chemical process** [industrial process]
Paper (Pulping processes) P: 134-135
- Sulfonamide** *See* Sulfate drug in this index
- Sulfonate**
Sulfuric acid (Uses and properties) So: 968
- Sulfur** [element] So: 966 *with pictures*
Bleach B: 399
Climate (Volcanic eruptions) Ci: 676d
Fungicide F: 560
Mineral *picture on* M: 569
Mining *diagram on* M: 578
Rubber (Compounding and mixing) R: 505;
(Vulcanization) R: 505
- Sulfur-bellied flycatcher**
Flycatcher F: 311
- Sulfur butterfly**
Butterfly (Sulfurs and whites) B: 734 *with pictures*
- Sulfur-crested cockatoo**
Parrot *picture on* P: 180
- Sulfur dioxide** [gas] So: 967
Acid rain A: 27
Coal (Coal research) Ci: 730-731
Sulfur (Properties) So: 966
Sulfuric acid (How sulfuric acid is made) So: 968
- Sulfur sponge** [sea animal]
Sponge *picture on* So: 799
- Sulfur trioxide** [chemical]
Sulfuric acid (Uses and properties) So: 968;
(How sulfuric acid is made) So: 968
- Sulfuric acid** [chemical] So: 967
Acid (Inorganic acids) A: 27
Acid rain A: 27
Sulfur (Uses) So: 966
- Sulfurless gunpowder**
Gunpowder (Kinds of gunpowder) G: 441
- Sulfurous acid** [chemical]
Sulfur dioxide So: 967
- Sulgrave Manor** [England] So: 968 *with picture*
- Sulky** [vehicle]
Harness racing H: 63
- Sulky plow**
Plow (The sulky plow) P: 575
- Sulla, Lucius Cornelius** (Roman general) So: 968
Caesar, Julius (Early life) C: 12
Mithridates VI M: 679
Pompey the Great P: 655
Rome, Ancient (Breakdown of the republic) R: 446
- Sullivan, Anne Mansfield** [American educator] So: 969
Keller, Helen Adams K: 255 *with picture*
- Sullivan, Sir Arthur Seymour** [British composer] So: 969 *with portrait*
- Gilbert, Sir William Schwenck G: 189
Gilbert and Sullivan G: 189
- Sullivan, Danny** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Sullivan, Eugene C.** [American chemist]
Glass (table) G: 218
- Sullivan, Harry Stack** [American psychiatrist] So: 969
- Sullivan, John** [American general]
New York (Statehood) N: 315
Revolutionary War in America (France's entry into the Revolutionary War) R: 283
- Sullivan, John L.** [American boxer] So: 969 *with portrait*
Boxing (From bare knuckles to gloves) B: 533
Mississippi *picture on* M: 623
- Sullivan, Kathryn D.** [American astronaut]
Astronaut (A look at the astronauts) A: 831
- Sullivan, Leon Howard** [American social reformer] So: 969
Philadelphia (Urban renewal) P: 367
- Sullivan, Louis Henri** [American architect] So: 970 *with pictures*
Adler, Dankmar A: 58
Architecture (Early modern architecture in America) A: 629; *picture on* A: 630
Wright, Frank Lloyd (Early career) W: 507
- Sullivan, Louis Wade** [American government official] So: 971
- Sullivan, Thomas** [American businessman]
Tea (History) T: 63-64
- Sullivan, William E.** [American businessman]
Ferris wheel F: 77
- Sullivan, William W.** [Canadian political leader]
Prince Edward Island (table) P: 791
- Sullivan Principles**
Sullivan, Leon Howard So: 970
- Sullivan's Island** [South Carolina]
Fort Moultrie F: 415
- Sullivan's Island, Battle of** [1776]
South Carolina (The Revolutionary War) So: 659
- Sully, Duke of** [French nobleman]
France (The age of absolutism) F: 473
- Sully, Thomas** [American painter] So: 971 *with picture*
Adams, John Quincy *picture on* A: 40
- Sully Prudhomme** [French poet] So: 971
- Sulphur** *See* Sulfur in this index
- Sulpicius Severus** [early Christian author]
Martin of Tours, Saint M: 235
- Sultan** [title] So: 971
Ottoman Empire (Government) O: 877
- Sultan Ahmet Mosque**
Istanbul (The city) I: 490-491
- Sultan Hassan Mosque**
Cairo (The city) C: 15-16 *with picture*
- Sultana** [grape variety]
Raisin (Varieties of raisins) R: 130
- Sultana** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Sulu** [clothing]
Pacific Islands (Clothing) P: 6
- Sulu Archipelago**
Philippines (The main islands) P: 376 *with map*
- Sulu Saa** [Borneo-Philippines] So: 971
- Sulzberger, Arthur Hays** [American publisher] So: 971
- Sulzberger, Arthur Ochs** [American publisher] So: 971
- Sulzer, William** [American political leader]
New York (table) N: 313
- Sum** [mathematics]
Addition (Writing addition) A: 49
Series (Working with infinite series) S: 317
- Sumac** [tree] So: 972 *with pictures*
- Sumanguru** [king of the Ghana Empire]
Sundiata Keita So: 990
- Sumarokov, Alexander** [Russian author]
Russian literature (The classical movement) R: 559-560
- Sumatra** [island, Indonesia]
Indonesia (The Greater Sunda Islands) I: 233 *with map*
- Sumatran rhinoceros**
Rhinoceros (Kinds of rhinoceroses) R: 294
- Sumatriptan** [drug]
Migraine M: 537
- Sumer** [ancient country] So: 972 *with pictures*
Asia (The Tigris-Euphrates Valley) A: 804-805
Babylonia (Way of life) B: 13; (Religion) B: 14;
(The Sumerians) B: 14
Clothing (Ancient times) Ci: 696-697 *with picture*

- Cuneiform **Ci**: 1192
 Drug (Drugs in ancient times) **D**: 358 *with picture*
 Education (The beginning of formal education) **E**: 97
 Fertile Crescent **F**: 78
 Mesopotamia **M**: 421
 Water (Water and civilization) **W**: 132
 Woolley, Sir Leonard **W**: 402
 World, History of the (The Tigris-Euphrates Valley) **W**: 422
 Writing (Logographs) **W**: 513; (Phonetization) **W**: 513
- Sumerians** [ancient people]
 Architecture (Mesopotamian architecture) **A**: 611
 Sculpture (Middle Eastern) **S**: 233 *with picture*
 Sumer **So**: 972
 World, History of the (The Tigris-Euphrates Valley) **W**: 422-424
- Summa contra Gentiles** [book by Aquinas]
 Aquinas, Saint Thomas (His life) **A**: 581
- Summa cum laude**
 Degree, College (The bachelor's degree) **D**: 91
- Summa de Arithmetica, Geometria** [book by Pacioli]
 Bookkeeping (History) **B**: 473
- Summa Doctrinae Christianae** [book by Canisius]
 Canisius, Saint Peter **C**: 177
- Summa Theologica** [book by Aquinas]
 Aquinas, Saint Thomas (His life) **A**: 581
 Political science (Scholasticism) **P**: 639
- "Summary View of the Rights of British America, A"** [pamphlet by Jefferson]
 Jefferson, Thomas (Revolutionary leader) **J**: 78-79
- Summer** [season] **So**: 973
 Weather (Air temperature) **W**: 157
- Summer, Donna** [American musician]
 Rock music (Disco and punk) **R**: 380
- Summer Before the Dark, The** [book by Lessing]
 Lessing, Doris **L**: 208
- Summer camp**
 Camping (Organized camping) **C**: 96 *with picture*
- Summer Days** [painting by O'Keeffe]
 O'Keeffe, Georgia *picture on* **O**: 709
- Summer of the Swans, The** [book by Byars]
 Byars, Betsy **B**: 746
- Summer solstice** [astronomy]
 Season **S**: 271
- Summer squash** [plant]
 Squash (Summer squashes) **So**: 813 *with pictures*
- Summer tanager**
 Tanager **T**: 24 *with picture*
- Summer Time**
 Daylight saving time **D**: 54
- Summer to Die, A** [book by Lowry]
 Lowry, Lois **L**: 511
- Summerfield, Arthur E.** [American government official]
 Eisenhower, Dwight David (table) **E**: 152
- Summerlin, George** [American government official]
 Pearson, Lester Bowles *picture on* **P**: 222
- Summers, Lawrence Henry** [American government official]
 Treasury, Department of the (table) **T**: 407
- Summit conference** [international relations]
 Cold War (The spirit of Camp David) **Ci**: 766
 Eisenhower, Dwight David (Foreign affairs) **E**: 152-153
 International relations (International conferences and organizations) **I**: 344
- Summit Lake**
 Colorado (Rivers and lakes) **Ci**: 840
- Summons** [law] **So**: 973
 Clerk of court **Ci**: 662b
- Sumner, Charles** [American political leader]
So: 973
 Civil War (The Kansas-Nebraska Act) **Ci**: 616
 Grant, Ulysses S. (Foreign relations) **G**: 316
 Johnson, Andrew (Plans for Reconstruction) **J**: 139
 Reconstruction (The Radicals and the Moderates) **R**: 178
- Sumner, James Batcheller** [American biochemist]
 Enzyme **E**: 340
- Sumner, William Graham** [American sociologist] **So**: 973
 Ethnocentrism **E**: 372
- Mores **M**: 802
 Social Darwinism **So**: 551
- Sumner Elementary School**
 Topeka **T**: 333
- Sumner Nuclear Power Plant, V.C.** [South Carolina]
 South Carolina *picture on* **So**: 657
- Sumo** [sport]
 Japan (Recreation) **J**: 40 *with picture*
 Wrestling **W**: 505 *with picture*
- Sumptuary law** **So**: 973
 Fashion (The origins of fashion) **F**: 50
- Sumter, Fort** *See* Fort Sumter *in this index*
- Sumter, Thomas** [American general]
 Revolutionary War in America (Savannah and Charleston) **R**: 283-284
 South Carolina (The Revolutionary War) **So**: 659-660
- Sumu-abum** [king of Babylonia]
 Babylon (The Old Babylonian Empire) **B**: 11
- Sun** **So**: 974 *with pictures*
 Astronomy (How the stars move) **A**: 835
 Baily's beads **B**: 31
 Calendar **C**: 28
 Cassini, Giovanni Domenico **C**: 277
 Climate (The role of latitude) **Ci**: 676; (Activity on the sun's surface) **Ci**: 676d
 Cosmic rays (Solar cosmic rays) **Ci**: 1076
 Eclipse **E**: 51
 Heat (Sources of heat) **H**: 149
 Heliosphere **H**: 174
 Light (Other sources of light) **L**: 283
 Magnetism (The magnetism of the sun) **M**: 60c
 Milky Way **M**: 550
 Perihelion **P**: 288
 Planet **P**: 507 *with diagrams*
 Plant (Plants and the cycle of nature) **P**: 518 *with diagram*
 Radiation **R**: 74 *with picture*; (The sun and other stars) **R**: 77
 Satellite (Formation of satellites) **S**: 150
 Skin cancer **S**: 491
 Solar energy **So**: 576
 Solar system (The sun) **So**: 580 *with diagram*
 Space exploration (Solar probes) **So**: 710
 Star **So**: 840
 Stonehenge **So**: 910
 Tide **T**: 280 *with diagrams*
 Twilight **T**: 531
 Weather (Air temperature) **W**: 157
- Sun** [era]
 Mythology (American Indian mythology) **M**: 985
- Sun, Temple of the**
 Pyramids (American pyramids) **P**: 917
- Sun Also Rises, The** [book by Hemingway]
 Hemingway, Ernest (Rise to fame) **H**: 180
 Lost Generation **L**: 472
- Sun bath**
 Sun lamp **So**: 988
- Sun bear**
 Bear **B**: 182; (Sun bears) **B**: 185 *with picture*; *picture on* **B**: 186
- Sun Belt**
 United States (Urban life) **U**: 110-112
- Sun dance** [American Indian ceremony] **So**: 987
 Indian, American (Ceremonies) **I**: 148; *picture on* **I**: 161
- Sun-drying**
 Food preservation (Drying) **F**: 342-343
- Sun gear** [mechanics]
 Transmission (Planetary gears) **T**: 377 *with diagrams*
- Sun god** *See* Sun worship *in this index*
- Sun King, The** *See* Louis XIV *in this index*
- Sun lamp** **So**: 987
- Sun protection factor**
 Sunburn **So**: 989
- Sun Valley** [Idaho] **So**: 988
 Idaho (Visitor's guide) **I**: 34 *with picture*
- Sun worship** [religion] **So**: 988 *with picture*
 Mythology (Müller's theory) **M**: 986
 Phoenix **P**: 399
 Sun dance **So**: 987
- Sun Yat-sen** [Chinese statesman] **So**: 988 *with portrait*
 Chiang Kai-shek **C**: 419
 China (The fall of the Manchus) **C**: 503
 Nanjing (The city) **N**: 10 *with picture*
 Soong Ching-ling **So**: 595
- Sun Yat-sen, Madame** *See* Soong Ching-ling *in this index*
- Sunapee Mountain**
 New Hampshire (Mountains) **N**: 220
- Sunbeam snake**
 Snake (Sunbeam snakes) **S**: 535
- Sunbird** **So**: 989
- Sunbittern** [bird]
 Bird (Birds of Central and South America) **B**: 345 *with picture*
- Sunburn** **So**: 989
 First aid (Burns) **F**: 139
 Races, Human (Climatic adaptations) **R**: 58
 Skin (Burns) **S**: 490-491
 Ultraviolet rays (Harmful effects) **U**: 17
- Sunda Islands**
 Indonesia (The islands) **I**: 233 *with map*
- Sundance Institute** [American film institute]
 Redford, Robert **R**: 191
- Sundenese** [people]
 Indonesia (People) **I**: 227
- Sunday** [day] **So**: 989
 Colonial life in America (Religion) **Ci**: 804-805
 Easter (Easter symbols) **E**: 43
 Sabbath **S**: 2
- Sunday, Billy** [American religious leader]
So: 989 *with portrait*
 United States, History of the (Looking backward) **U**: 186-187 *with picture*
- Sunday Afternoon on the Island of La Grande Jatte** [painting by Seurat]
 Painting (What do painters paint?) **P**: 28;
 (Postimpressionism) **P**: 75-76
 Seurat, Georges **S**: 324
- Sunday Morning in the Mines** [painting by Nahl]
 Western frontier life in America *picture on* **W**: 235
- Sunday school** [religion]
 Raikes, Robert **R**: 103
 Religious education (Private education) **R**: 225
- Sundback, Gideon** [American inventor]
 Zipper **Z**: 600
- Sundew** [plant] **So**: 990
 Carnivorous plant **C**: 243
 Plant (Insect-eating plants) **P**: 542 *with picture*
- Sundial** [clock] **So**: 990 *with picture*
 Clock (History) **Ci**: 683 *with picture*
 Time (Devices that measure time) **T**: 288
- Sundiata Keita** [king of the Mali Empire]
So: 990
- Sundquist, Don** [American political leader]
 Tennessee (table) **T**: 152
- Sunfish** **So**: 990
 Bass (Black bass) **B**: 156 *with pictures*
 Fish *picture on* **F**: 153
- Sunflower** **So**: 991 *with picture*
 Evolution (Direct observation of evolution) **E**: 431-432 *with picture*
 Flower (Garden annuals) **F**: 276 *with picture*; (Flowers of prairies and dry plains) **F**: 286 *with picture*
- Sunflower oil**
 Sunflower **So**: 991
 Vegetable oil **V**: 294
- Sunflower seed**
 Sunflower **So**: 991
- Sunflower State** [nickname]
 Kansas **K**: 216
- Sunflowers** [painting by Van Gogh]
 Art and the arts (The aesthetic experience) **A**: 745
- Sung dynasty** *See* Song dynasty *in this index*
- Sunglasses**
 Glasses (Nonprescription glasses) **G**: 225
- Sunlight**
 Sun (Color) **So**: 977; (Energy output) **So**: 976; (Photosphere) **So**: 980
 Greenhouse effect (The natural greenhouse effect) **G**: 382
 Leaf (Obtaining the raw materials) **L**: 155 *with diagram*
 Plant (Plants and the cycle of nature) **P**: 518; (Photosynthesis) **P**: 538; (Factors affecting plant growth) **P**: 538 *with pictures*
 Races, Human (Climatic adaptations) **R**: 58
 Solar energy **So**: 576
 Ultraviolet rays **U**: 17
- Sunna** [religion]
 Islam **I**: 463
 Muslims (Muhammad) **M**: 964-964a
 Shari'a **S**: 374
 Sunnites **So**: 991
- Sunni Ali** [king of the Songhai Empire] **So**: 991
 Songhai Empire **So**: 593
- Sunni Islam** [religion] *See* Sunnites *in this index*
- Sunnites** [religious group] **So**: 991
 Black Muslims **B**: 390
 Egypt (Religion) **E**: 124

Iran (Religion) I: 402
 Islam (Divisions of Islam) I: 466
 Lebanon (Ethnic groups and religion) L: 171
 Libya (Religion) L: 266 *with picture*
 Muslims (Abu Bakr) M: 964a
 Saudi Arabia (Religion) S: 158

Sunrise
 Twilight T: 531

Sunrise tellin [sea animal]
 Shell *picture on* S: 387

Suns, Phoenix
 Basketball (table) B: 150

Sunset
 Twilight T: 531
 Mars *picture on* M: 226b

Sunset Boulevard
 Los Angeles (Central Los Angeles) L: 460

Sunset Crater Volcano National Monument
 [Arizona]
 National Park System (table: National monuments) N: 51

Sunset laws So: 992

Sunset Strip
 Los Angeles (Central Los Angeles) L: 460

Sunshade
 Umbrella U: 18

Sunshine laws So: 992

Sunshine Mine
 Idaho (The late 1900's) I: 45

Sunshine Sketches of a Little Town [book by Leacock]
 Leacock, Stephen Butler L: 148

Sunshine State [nickname]
 Florida F: 242

Sunshine vitamin
 Vitamin (Vitamin D) V: 432

Sunsphere [Knoxville]
 Knoxville *picture on* K: 359

Sunspot [astronomy] So: 992
 Aurora A: 892
 Climate (Activity on the sun's surface) Ci: 676d
 Sun (Magnetic field) So: 978; (Solar activity) So: 980; *pictures on* So: 982-983

Sunspot cycle
 Magnetic storm M: 57
 Sun (Magnetic field) So: 977-978 *with diagram*

"Sunstone" [poem by Paz]
 Paz, Octavio P: 205

Sunstroke [disorder]
 Hyperthermia (Forms of hyperthermia) H: 476

SUNY See New York, State University of *in this index*

Sunya [symbol]
 Numeration systems (The Hindu-Arabic numeral system) N: 607

Super [beekeeping]
 Bee (As an industry) B: 206-207

Super bantamweight
 Boxing (table) B: 530

Super Bowl
 Football (Professional competition) F: 364; (table: Professional football champions) F: 367

Super Chief [train]
 Railroad (The 1920's and the Great Depression) R: 118

Super featherweight [boxing]
 Boxing (table) B: 530

Super flyweight [boxing]
 Boxing (table) B: 530

Super G [competition]
 Skiing (Alpine competitions) S: 486-487

Super giant slalom [competition]
 Skiing (Alpine competitions) S: 486-487

Super heavyweight
 Boxing (table) B: 530

Super-Kamiokande neutrino detector
 [machine]
 Astronomy (Neutrino astronomy) A: 845
 Neutrino N: 155

Super lightweight [boxing]
 Boxing (table) B: 530

Super middleweight [boxing]
 Boxing (table) B: 530

Super welterweight [boxing]
 Boxing (table) B: 530

Superb fairywren [bird]
 Bird (Birds of Australia and the Pacific Islands) B: 349 *with picture*

Superb lyrebird [bird]
 Bird (Birds of Australia and the Pacific Islands) B: 349 *with picture*

Supercarrier [ship]
 Aircraft carrier (History) A: 207

Supercell [thunderstorm]
 Tornado (The story of a tornado) T: 333-334
 Weather *picture on* W: 162

Supercharger [engine]
 Gasoline engine (Air and fuel) G: 64

Supercluster [astronomy]
 Galaxy (Groups of galaxies) G: 8a
 Universe U: 205

Supercomputer
 Aerodynamics (Computational fluid dynamics) A: 88; *picture on* A: 87
 Computer (Mainframes and supercomputers) Ci: 910

Superconducting alloy [metal]
 alloy (Characteristics of alloys) A: 377

Superconducting cable [electronics]
 Cable (Recent developments) C: 7
 Magnetic levitation train (Electrodynamical maglev) M: 55

Superconducting magnet
 Magnetism (Electromagnets) M: 60 *with picture*; (Modern research in magnetism) M: 61

Superconducting quantum interference device
 Magnetometer M: 62

Superconducting Super Collider
 Particle accelerator (How accelerators work) P: 184-186

Superconductivity [physical property] So: 993
 Cryogenics Ci: 1165
 Electric generator (Losses and efficiency of generators) E: 171
 Electricity (Conductors and insulators) E: 193
 Electronics (Electronics today) E: 216
 Materials (Ceramics) M: 300d
 Matter (Superconductors) M: 311
 Physics (Solid-state physics) P: 438
 Solid-state physics So: 583

Supercontinent [geology]
 Earth (The shaping of the continents) E: 24

Supercooled water
 Hail H: 8
 Rain (The ice-crystal process) R: 124
 Rainmaking (Rainmaking methods) R: 129
 Snow (How snow forms) S: 539
 Weather (How people affect the weather) W: 170

Supercritical mass [physics]
 Nuclear energy (Hazards and safeguards) N: 587
 Nuclear weapon (Fission weapons) N: 596-597

Supercritical wing
 Aircraft, Military (Recent developments) A: 205

Superdome [New Orleans]
 New Orleans (Downtown New Orleans) N: 279 *with picture*

Superego [psychology]
 Ego E: 119
 Freud, Sigmund (On the mind) F: 530
 Personality (Freud's psychoanalytic theory) P: 302
 Psychoanalysis (Psychoanalytic theory) P: 846

Superfluid [physics] So: 993 *with diagram*
 Matter (States of matter) M: 311

Superfortress [airplane]
 Bomber (History) B: 453

Superfund See Comprehensive Environmental Response, Compensation, and Liability Act *in this index*

Supergiant star
 Deneb D: 130
 Star (High-mass stars) So: 849-850

Superheated steam
 Steam So: 880
 Steam engine (Modern steam engines) So: 881

Superheater
 Boiler B: 439
 Electric power (Fossil-fueled steam electric power plants) E: 183

Superhero [cartoon character]
 Comics (Comic books) Ci: 870 *with picture*

Superheterodyne circuit [electronics]
 Armstrong, Edwin Howard A: 722
 Radio (The tuner) R: 88

Superhighway
 Road (Primary highways) R: 358

Superimposition
 Television (Putting a show on the air) T: 111-113

Superinfection [medicine]

Antibiotic (Destruction of helpful microbes) A: 551

Superintendent
 Prison (The prison staff) P: 806

Superintendent of documents [office]
 Government Printing Office G: 293

Superintendent of public instruction [office]
 State government (Other officers) So: 862

Superintendent of schools [office]
 School (Public school districts) S: 182-183

Superior, Lake [Canada-U.S.] See Lake Superior *in this index*

Superior National Forest [Minnesota]
 Minnesota (Places to visit) M: 594

Superior Upland [region, U.S.]
 Michigan (Land regions) M: 500 *with map*

Superior vena cava [anatomy]
 Heart (Blood vessels) H: 135 *with pictures*
 Human body (The blood vessels) H: 421; *diagram on* H: 422

Vein V: 295

Superlative [grammar]
 Adjective (Comparison of adjectives) A: 57
 Comparison (The three degrees of comparison) Ci: 902b

Superman [cartoon character]
 Comics (Comic books) Ci: 870 *with picture*

Supermen [philosophy]
 Nietzsche, Friedrich (Psychological ideas) N: 407
 Philosophy (Modern philosophy) P: 387-390

Supermarket
 Food (Marketing) F: 335
 Retailing (Supermarkets) R: 265

Supermassive black hole [physics]
 Black hole (Supermassive black holes) B: 388

Supermaximum security prison
 Prison (Maximum security prisons) P: 805; (Current problems) P: 808

Supernaturalism [philosophy]
 Mythology M: 973

Supernova [astronomy] So: 994 *with picture*
 Galaxy (Emissions from galaxies) G: 8b
 Neutron star N: 155
 Nova N: 553
 Shock wave S: 430
 Star (Supernovae) So: 850
 Sun (Comparison with other stars) So: 978-979

Superpatriot
 Patriotism (Abuses of patriotism) P: 198

Superphénix [nuclear reactor]
 Nuclear energy (Advanced fission reactors) N: 594

Superphosphate [chemical]
 Phosphate P: 402

Superplastic alloy [metal]
 Alloy (Characteristics of alloys) A: 377

Superposition, Law of
 Geology (The rock dispute) G: 98

Superpressure balloon
 Balloon (Gas balloons) B: 57-58 *with picture*

Superrealism [sculpture]
 Sculpture (Since the mid-1900's) S: 259 *with picture*

Superregeneration [radio]
 Armstrong, Edwin Howard A: 722

Supersaurus [dinosaur] So: 994
 Dinosaur (True dinosaurs) D: 206b-209

Supersonic combination ramjet [engine]
 Jet propulsion (Ramjet) J: 114

Supersonic flight
 Aerodynamics (Supersonic aerodynamics) A: 88
 Airplane (Supersonic airplanes) A: 238
 Jet propulsion (Turbojet) J: 111; (Ramjet) J: 114
 Rocket (Rocket-powered airplanes) R: 391
 Sound (Supersonic speed) So: 602
 Streamlining So: 924
 Transportation (Air transportation) T: 385; (Overseas service) T: 394
 Wind tunnel W: 333

Supersonic transport plane
 Airplane (Supersonic airplanes) A: 238; *picture on* A: 237

SuperSonics, Seattle
 Basketball (table) B: 150

Superspeedway
 Automobile racing (Stock car racing) A: 978

Superstition So: 995
 Doll (Doll festivals and customs) D: 287
 Fetish F: 80
 Folk dancing F: 320
 Folklore (Superstitions and customs) F: 325

- Friday F: 532
 Frog F: 536
 Magic (Magic today) M: 51
See also the list of Related Articles in the Superstition article
- Superstring theories** [physics]
 Shadow matter S: 342
 String theory So: 929
 Subatomic particle (Theoretical research) So: 938
- Superstructure** [construction]
 Building construction (Parts of a building) B: 681
 Skyscraper (Building skyscrapers) S: 497
- Superstructure** [ship]
 Aircraft carrier A: 206 *with pictures*
 Ship (The chief parts of a ship) S: 424
- Supertanker**
 Ship (Tankers) S: 420
 Tanker (Kinds of tankers) T: 28
- Supertree**
 Forestry (Tree improvement) F: 405
- Supervised Agricultural Experience program**
 FFA (What FFA members do) F: 84
- Supervised assisted living facility**
 Nursing home (Supervised assisted living facilities) N: 621
- Supervisors, Board of**
 County (Forms of county governments) C: 1099
- Suppé, Franz von** [Austrian composer] So: 996
 Operetta O: 809
- Supper at Emmaus** [painting by Pontormo]
 Mannerism picture on M: 165
- Supplement, Food**
 Food additive (Kinds of additives) F: 339
- Supplemental Security Income for the Aged, Blind, and Disabled**
 Welfare (Cash aid programs) W: 190
- Supplementary angle** [geometry]
 Angle A: 463
 Trigonometry (A special case) T: 444
- Supplementary medical insurance**
 Social security (Medicare) So: 555
- Supply and demand** [economics] So: 996 *with diagram*
 Capitalism (Markets) C: 194
 Economics (Consumers) E: 60
 Inflation I: 266
 Interest (Why interest rates vary) I: 322
 Keynes, John Maynard K: 308
 Market research M: 214
 Marketing M: 214
 Price (How price is determined) P: 774
 Wheat (Controlling wheat production) W: 274-275
- Supply reel**
 Tape recorder (How tape recorders work) T: 37 *with picture*
- Supply sergeant**
 Army, United States (A typical day) A: 734
- Supply-side economics**
 Reagan, Ronald Wilson (The 1980 election) R: 167
- Support**
 Painting (Materials and techniques) P: 36
- Support command**
 Air Force, United States (Support commands) A: 193
- Support price** [economics] *See Price support in this index*
- Supporter**
 Heraldry (Elements of a coat of arms) H: 194-196 *with picture*
- Supportive medicine**
 Palliative care P: 108
- Supportive psychotherapy**
 Mental illness (Psychotherapy) M: 407-408
- Supposes** [play by Gascoigne]
 Gascoigne, George G: 60
- Suppositi, I** [play by Ariosto]
 Drama (Italian Renaissance drama) D: 330
- Suppression**
 Memory (Motivated forgetting) M: 393
- Suppressor gene** [biology]
 Cancer (How damaged genes cause cancer) C: 169
- Suprarenal gland** *See Adrenal gland in this index*
- Suprasegmentals**
 Grammar (Principles of English grammar) G: 303
- Supremacy, Acts of** [1534, 1559]
 Elizabeth I (Problems at home and abroad) E: 238
- Henry VIII [of England] H: 188
 Protestantism (The conservative reform movements [the 1500's]) P: 834
 Reformation (In England) R: 198
- Supremacy clause**
 Constitution of the United States (Article VI) C: 1011
- Suprematism** [art]
 Malevich, Kasimir M: 105
 Painting (Nonobjective painting in Russia) P: 79
 Russia (Painting and sculpture) R: 537
- Suprematist Composition: White on White** [painting by Malevich]
 Malevich, Kasimir M: 105 *with picture*
- Supreme Assembly, International Order of the Rainbow for Girls**
 Rainbow for Girls R: 128
- Supreme court**
 State government (Judicial branch) So: 864
- Supreme Court Building** [Washington, D.C.]
 Supreme Court of the United States picture on So: 998
- Supreme Court of Appeal**
 South Africa (National government) So: 608
- Supreme Court of Canada** So: 996 *with pictures*
- Supreme Court of Florida**
 Bush v. Gore B: 723
- Supreme Court of the United States** So: 998 *with pictures*
 Abortion (Abortion in the United States) A: 15
 Address, Forms of (Officials of the United States) A: 53
 Amistad Rebellion A: 433
 Boy Scouts (Organization) B: 540
 Brown v. Board of Education of Topeka B: 645
 Bush v. Gore B: 723
 Capital punishment C: 193
 Census (Controversy over census results) C: 349
 Chief justice C: 447
 Constitution of the United States (Article III) C: 1009
 Court of appeals Ci: 1105
 Creationism (The 1900's) Ci: 1123-1124
 Election of 2000 E: 161
 Freedom of assembly (In the United States) F: 504
 Government (The U.S. Constitution) G: 286;
 (Constitutional questions) G: 286;
 (Interpreting the states' rights) G: 287
 Holmes, Oliver Wendell, Jr. (Supreme Court justice) H: 295
 Homosexuality (Attitudes toward homosexuality) H: 307
 Judicial review J: 183
 Law (Beginnings of U.S. law) L: 136
 Marshall, John M: 229
 Roosevelt, Franklin Delano (The Supreme Court) R: 458
 School prayer S: 186
 Scottsboro Case S: 223
 Taft, William Howard (Chief justice) T: 12
 United States, Government of the (The Supreme Court) U: 145
 United States, History of the (The Supreme Court) U: 164; (Political and institutional splits) U: 173-174
 Washington, D.C. (Supreme Court Building) W: 71; *picture on W: 72; map on W: 76*
- Supreme People's Court**
 China (Courts) C: 481
- Supreme reality**
 God G: 243
- Supreme War Council**
 World War I (The United States enters the war) W: 462-463
- Suq** [market]
 Asia (City life) A: 779-780
 Egypt (Recreation) E: 124; *picture on E: 121*
- Surabaya** [city, Indonesia] So: 1003
- Surcharged stamp**
 Stamp collecting (Surcharged stamps) So: 830
- Surcoat**
 Clothing (The Middle Ages) Ci: 698-699 *with picture*
 Knights and knighthood (Clothing) K: 350
- Sûreté Nationale, La**
 Police (In other countries) P: 623
- Surety bond**
 Bonding B: 455
 Insurance (Other kinds of property and liability insurance) I: 313-314
 Will (Administration) W: 306-307
- Surf music**
 Rock music (Expanding styles and sounds) R: 378-379
- Surface active agent** [chemical]
 Detergent and soap D: 163
- Surface chemistry**
 Chemistry (Current research) C: 405
- Surface drainage** [agriculture]
 Drainage (Surface drainage) D: 320 *with diagram*
- Surface grinding**
 Grinding and polishing (Grinding methods) G: 395
 Machine tool (Abrasive processes) M: 18-19
- Surface irrigation**
 Irrigation (Surface irrigation) I: 457 *with pictures*
- Surface lander**
 Satellite (Spacecraft missions) S: 150c
- Surface-launched missile**
 Air Force, United States (Missiles) A: 191
- Surface measure** *See Area; Square measure in this index*
- Surface mining**
 Coal (Surface mining) Ci: 721 *with picture*
 Mining (Surface mining) M: 574 *with diagrams*
- Surface-painted enamel**
 Enamel (Techniques) E: 265
- Surface-piercing hydrofoil**
 Hydrofoil H: 467 *with diagram*
- Surface plate**
 Photoengraving and photolithography (Transferring the image) P: 406
- Surface station** [weather]
 Weather (Land-based observation stations) W: 162
- Surface-supplied diving**
 Diving, Underwater (Ambient diving) D: 245 *with picture*
- Surface tension** [physics] So: 1003
 Capillarity C: 192
 Detergent and soap (Wetting the material) D: 164
 Water (The properties of water) W: 129-130 *with diagram*
- Surface-to-air guided missile**
 Guided missile (Surface-to-air missiles) G: 426; *picture on G: 425*
- Surface-to-surface guided missile**
 Guided missile (Surface-to-surface missiles) G: 426
- Surface Transportation Board**
 Railroad (Railroad systems) R: 112-113
- Surface water**
 Hot springs H: 374b
 Irrigation (Surface water) I: 456
- Surface wave** [physics]
 Earthquake (Surface waves) E: 34
- Surfaced hardwood dimension**
 Lumber (Hardwood lumber) L: 517
- Surfacing** [book by Atwood]
 Atwood, Margaret A: 880
- Surfacing** [construction]
 Road (Paving) R: 359 *with picture*
- Surfactant** [chemical]
 Detergent and soap D: 163
- Surfboard**
 Surfing So: 1003 *with picture*
- Surfing** [computing]
 Internet (Glossary of Internet terms) I: 350a
- Surfing** [sport] So: 1003 *with picture*
See also Windsurfing in this index
- Surgeon**
 Surgery So: 1004 *with pictures*
- Surgeon bird**
 Jacana J: 2
- Surgeon Dentist, The** [book by Fauchard]
 Dentistry (Early dentistry) D: 144-145
- Surgeon general of the United States**
 So: 1004
 Public Health Service P: 857
- Surgeonfish**
 Doctorfish D: 259 *with picture*
- Surgery** [medicine] So: 1004 *with pictures*
 Amputation A: 443
 Barber B: 106
 Brain (The work of the brain) B: 552; (Tumors) B: 557
 Cancer (Surgery) C: 172
 Diathermy D: 185
 Disease (Medical treatment) D: 232-233
 Heart (Treatment) H: 138 *with pictures*; (Valve disease) H: 141-142 *with picture*; (Heart failure) H: 143 *with picture*; (Development of heart surgery) H: 144

Hypnotism (Uses of hypnotism) H: 478
 Hypothermia H: 481
 Laparoscopy L: 72
 Laser (Heating) L: 83; *picture on* L: 81
 Lister, Sir Joseph L: 349
 Medicine (Antiseptic surgery) M: 375 *with pictures*
 Needle *picture on* N: 118
 Paré, Ambroise P: 156
 Placebo P: 505
 Plastic surgery P: 553
 Testicular cancer T: 181
 Transplant T: 379 *with pictures*
 Trephining T: 436
 Weight control (Surgery) W: 183
See also the list of Related Articles in the Surgery article
Surgery [office]
 Medicine (The United Kingdom) M: 366-367
Surgical intensive care unit [medicine]
 Intensive care unit I: 320
Surgical microscope
 Eye *picture on* E: 467
Surgical sterilization
 Birth control (Methods of birth control) B: 378
Surgical unit
 Hospital (Hospital units) H: 372
Suribachi, Mount
 Iwo Jima I: 523
Suricate [animal]
 Meerkat M: 383 *with picture*
Surimi [fish]
 Fishing industry (Methods of processing) F: 186-187
 Seafood S: 265
Surinam [country] *See* Suriname *in this index*
Surinam toad [animal] So: 1008 *with picture*
Suriname [country] So: 1008 *with picture and map*
 Flag *picture on* F: 201
 Indian, American (Indians of the Tropical Forest) I: 175
 Netherlands (History) N: 148-150
Surmullet [fish]
 Mullet M: 915
Surname
 Name N: 5
Surplus [economics]
 Balance of payments (How the balance of payments is determined) B: 35-36
 Food supply (Conditions that affect the food supply) F: 348
Surprise ending [literature]
 Short story S: 434
Surratt, Mary E. [American public figure]
 Lincoln, Abraham (The trial of the conspirators) L: 326
Surrealism [art] So: 1010 *with picture*
 Breton, André B: 594
 Chagall, Marc C: 368
 Dadaism D: 3
 Dali, Salvador D: 10 *with picture*
 Ernst, Max E: 354
 French literature (Surrealism) F: 522
 Freud, Sigmund (His influence) F: 531
 Giacometti, Alberto G: 183 *with picture*
 Masson, André M: 296
 Miró, Joan M: 616
 Painting (Surrealism) P: 81 *with picture*
 Picasso, Pablo (The 1920's and 1930's) P: 448b-449
Surrealist Manifesto [document]
 Painting (Surrealism) P: 81
Surrender cost index
 Insurance (Buying life insurance) I: 311
Surrender of Breda, The [painting by Velázquez]
 Velázquez, Diego V: 296
Surrender of General Burgoyne at Saratoga [painting by Trumbull]
 Burgoyne, John *picture on* B: 704
Surrender of Lord Cornwallis at Yorktown, The [painting by Trumbull]
 Cornwallis, Charles *picture on* Ci: 1067
Surrey, Earl of [English poet] So: 1010
 Blank verse B: 398
 English literature (Elizabethan poetry) E: 316-317
 Poetry (Renaissance poetry) P: 596
Surrounded Islands [sculpture by Christo]
 Christo C: 537
 Sculpture (Environmental sculpture) S: 259-260 *with picture*
Surtees, John [British race driver]

Automobile racing (table: Grand Prix world champions) A: 980
Surtsey [Island, Iceland]
 Iceland (The inland plateau) I: 22
 Volcano (table) V: 441 *with map, picture on* V: 438
Survey
 Psychology (Systematic assessment) P: 848
 Public opinion poll P: 861
 Sociology (Surveys) So: 565
Survey Act [1824]
 Monroe, James ("The American System") M: 736-737
Survey reading
 Reading (Kinds of reading) R: 156
Surveying [measurement] So: 1010 *with picture*
 Bench mark B: 247
 Egypt, Ancient (Sciences) E: 139
 Laser (Measuring) L: 83
 Map (Observation and measurement) M: 180; (Mapping the Americas) M: 184-185
 Parallax P: 151
 Radar *picture on* R: 72
Surveyor [occupation]
 Careers (Technical and mathematical occupations) C: 232 *with picture*
 Surveying (Careers in surveying) So: 1012
Surveyor [space probes]
 Space exploration (Lunar probes) So: 709 *with picture*
Surveyor 3 [spacecraft]
 Conrad, Charles, Jr. Ci: 973
Surveyor's compass
 Surveying (Early tools) So: 1011
Survival bobbing
 Swimming (Water safety) So: 1042-1043
Survival of the fittest
See also Natural selection *in this index*
Survival Through Design [book by Neutra]
 Neutra, Richard Joseph N: 153
Survival training
 Astronaut (Survival training) A: 832
Survivors benefits [government program]
 Social security (Old-age, survivors, and disability benefits) So: 553
Survivors of the Shoah Visual History Foundation [organization]
 Spielberg, Steven So: 792
Survivorship, Right of [law]
 Joint tenancy J: 156
Susa [ancient city] So: 1012
Susan Constant [ship]
 Jamestown J: 28
Susceptor materials
 Packaging P: 18
Sushi [food]
 Asian Americans (Asian influences on American culture) A: 812c
 Seafood S: 265
Susitna-Cook Inlet
 Alaska (Land regions) A: 292-294
Suspended animation [physiology]
 Cryobiology Ci: 1165
Suspension [chemistry] So: 1012
Suspension bridge
 Bridge (Suspension bridges) B: 601-602 *with diagram, picture on* B: 600
 George Washington Bridge G: 109
 Golden Gate Bridge G: 255
Suspension line
 Parachute (Parts of a parachute) P: 142-143
Suspension-of-rules procedure [government]
 Congress of the United States (Passing a bill) Ci: 945
Suspension polymerization [industrial process]
 Polyvinyl chloride P: 652
Suspension system
 Automobile (The support system) A: 954
 Torsion bar suspension T: 341 *with diagrams*
 Truck (Common features of trucks) T: 458
Susquehanna Indians
 Virginia (Early days) V: 418
Susquehanna River [U.S.] So: 1012
 Maryland (Rivers and lakes) M: 252
Sussex breed
 Chicken (table) C: 443
Sussex spaniel So: 1012 *with picture*
Sustained yield
 Conservation (Forest conservation) Ci: 981
 Forestry (Managing timber resources) F: 404
Sutherland, Earl Wilbur, Jr. [American physiologist]
 Nobel Prizes (Physiology or medicine: 1971) N: 445

Sutherland, Edwin H. [American criminologist]
 Criminology (History) Ci: 1145-1146
Sutherland, George [American jurist]
 Supreme Court of the United States (table) So: 1000
Sutherland, Ivan [American computer scientist]
 Virtual reality V: 426
Sutherland, Joan [Australian singer] So: 1013
Opera picture on O: 792
Sutherland Falls [waterfall, New Zealand]
 So: 1013
 Waterfall (table: Famous waterfalls of the world) W: 143 *with picture*
Sutro, Adolph [German-American political leader]
 Western frontier life in America W: 232
Suttee [custom] So: 1013
Sutter, John Augustus [American settler]
 California (The gold rush) C: 62
 Sacramento (History) S: 6
Sutter, John Augustus, Jr. [American settler]
 Sacramento S: 5; (History) S: 6
Sutter's mill [Coloma]
 California (The gold rush) C: 62
 Gold rush (Gold rushes in the United States) G: 254
Suttner, Baroness Bertha von [Austrian social reformer]
 Nobel Prizes (Peace: 1905) N: 447
Sutton, Don [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Sutton, Sir Thomas [English businessman]
 Charterhouse C: 386
Sutton, Walter S. [American geneticist]
 Cell (The 1900's) C: 337-338
Suture [anatomy]
 Skull S: 495
Suture [medicine]
 Surgery (Sutures) So: 1005
Suu Kyi, Aung San [Burmese political leader]
See Aung San Suu Kyi *in this index*
Suva [Fiji Islands] So: 1013
Fiji picture on F: 98
Suwannee River [Georgia-Florida] So: 1013
Suzhou [China] So: 1013
Suzong [emperor of China]
 Tang dynasty (The middle years) T: 26
Suzuki method [education] So: 1013
Svalbard [islands, Arctic] So: 1013
Svear [ancient people]
 Sweden (Early times) So: 1032
Svedberg, Theodor [Swedish chemist]
 Nobel Prizes (Chemistry: 1926) N: 442
Svangali [literary figure]
 Du Maurier, George D: 382
Sverdlovsk [city, Russia] *See* Yekaterinburg *in this index*
Sverige *See* Sweden *in this index*
Svevo, Italo [Italian author]
 Italian literature (The 1900's) I: 495
Svoboda, Ludvik [Czechoslovak political leader]
 Czechoslovakia (The 1960's) Ci: 1216
Swab [recruit]
 Coast Guard, United States (Training an officer) Ci: 736
Swabia [former state, Germany]
 Germany (The breakup of Charlemagne's empire) G: 162
Swahili [language]
 Swahili So: 1014
 Tanzania (Languages) T: 31
Swahili [people] So: 1014
 Tanzania (History) T: 34
Swain, D. L. [American political leader]
 North Carolina (table) N: 490
Swains Island [American Samoa]
 American Samoa A: 429
Swainson's hawk
 Hawk H: 111
Swallow [bird] So: 1014 *with pictures*
 San Juan Capistrano S: 103
Swallowing
 Alimentary canal A: 368
 Palate P: 101
Swallowtail [flag]
 Flag *picture on* F: 194
Swallowtail butterfly
 Butterfly (Swallowtails) B: 736 *with pictures*;
 (The thorax) B: 738
Insect picture on I: 282
Swammerdam, Jan [Dutch anatomist]
 So: 1015
Swamp [geography] So: 1015 *with picture*
 Everglades E: 424
 Wetland W: 253

- Swamp buttercup**
Buttercup B: 731
- Swamp chestnut oak**
Oak (White oaks) O: 635
- Swamp Fox** [nickname]
Marion, Francis M: 211
South Carolina (The Revolutionary War)
So: 659-660
- Swamp hickory** See Bitternut hickory in this index
- Swamp partridge**
Grouse G: 403
- Swamp rose mallow**
Hibiscus H: 222
- Swamp white oak**
Oak (White oaks) O: 635
- Swan** [bird] So: 1015 with pictures
- Swan goose**
Goose G: 270; (Kinds of geese) G: 270
- Swan Islands** [islands, Caribbean]
Honduras (The Northeastern Plain) H: 310
- Swan Mountains**
Montana (Land regions) M: 752
- Swan Service** [tableware by Kändler]
Dresden china D: 347 with picture
- "Swanee"** [song]
Gershwin, George G: 174
- Swanee River** See Suwannee River in this index
- Swank, Hilary** [American actress]
Motion picture (Best performance by an actress: 1999) M: 862
- Swann v. Charlotte-Mecklenburg Board of Education** [1971]
Education (Education for whom?) E: 107
- Swanscombe fossil** [anthropology] So: 1016
- Swansea** [Wales] So: 1017
- Swanson, Claude A.** [American political leader]
Virginia (table) V: 417
- SWAPO** See South West Africa People's Organization in this index
- Swarm**
Bee (Swarming) B: 204 with picture
Locust L: 419 with picture
- Swarte Piet**
Christmas (In The Netherlands, Belgium, and Luxembourg) C: 531 with picture
- Swastika** [symbol] So: 1017 with pictures
Hitler, Adolf (Birth of the Nazi Party) H: 266
- S.W.A.T. team**
Police (Other activities) P: 621-622 with picture
- Swayback** [disorder]
Spine So: 792
- Swayne, Charles** [American jurist]
Impeachment (History) I: 91-92
- Swayne, Noah H.** [American jurist]
Supreme Court of the United States (table) So: 1000
- Swazi** [people]
Swaziland (People) So: 1017
- Swaziland** [country] So: 1017 with picture and map
Flag picture on F: 200
- Sweat** See Perspiration in this index
- Sweat box** [container]
Raisin (Preparation for market) R: 130
- Sweat gland** [anatomy]
Gland (Exocrine glands) G: 208; (table) G: 209
Perspiration P: 305
Skin (Hair, nails, and glands) S: 489
- Sweat lodge ceremony**
Indian, American (Ceremonies) I: 148
- Sweatshop** [industry] So: 1019 with picture
King, William Lyon Mackenzie (Education) K: 325
- Sweden** So: 1020 with pictures and maps
Army (The rise of modern armies) A: 727
Christmas (In Denmark, Norway, and Sweden) C: 531 with picture
Cooperative (In other countries) Ci: 1036
Denmark (Wars with Sweden) D: 140
Finland (Swedish rule) F: 116
Lapland L: 74
Norway (Union with Sweden) N: 545; (Independence) N: 546
Peter I, the Great (Foreign policy) P: 324
Sami S: 78
Scandinavia S: 171 with map
Sweden (Agriculture) So: 1030; (People) So: 1023
Welfare state W: 192
See also the list of Related Articles in the Sweden article
- Swedenborg, Emanuel** [Swedish religious leader]
Swedenborgians So: 1035
- Swedenborgians** [religious group] So: 1035
- Swedes** [plant]
Rape (plant) R: 142
- Swedish Broadcasting Corporation**
Sweden (Communication) So: 1032
- Swedish cross**
Cress Ci: 1127
- Swedish Match Company**
Match (The first safety matches) M: 300a
- Swedish Nightingale** [nickname]
Lind, Jenny L: 329
- Swedish turnip**
Rutabaga R: 568
- Sweeney, John Joseph** [American labor leader]
So: 1036
- Sweep** [football]
Football (table) F: 356
- Sweep oar rowing**
Rowing (Types of rowing) R: 493
- Sweeper**
Vacuum cleaner V: 257
- Sweeping**
Curling (The rink) Ci: 1196; picture on Ci: 1195
- Sweet Adelines, Inc.** [organization]
Barbershop quartet singing B: 107
- Sweet alyssum** So: 1036 with picture
- Sweet basil**
Basil B: 140
- Sweet birch**
Birch (Sweet birch) B: 327
- Sweet cassava**
Cassava C: 276 with picture
- Sweet cherry**
Cherry C: 409 with picture
- Sweet chestnut** [tree]
Tree picture on T: 426
- Sweet chocolate**
Chocolate (Chocolate products) C: 518-519
- Sweet cicely** [herb] So: 1036
- Sweet corn**
Corn (Kinds of corn) Ci: 1058-1059
- Sweet cream butter**
Butter (Churning) B: 730
- Sweet flag** [plant] So: 1036 with picture
- Sweet gum** So: 1036 with picture
Leaf picture on L: 153
Tree pictures on T: 423
- Sweet Lavender** [play by Pinero]
Pinero, Arthur Wing P: 473
- Sweet marjoram**
Marjoram M: 213
- Sweet orange**
Orange (Sweet oranges) O: 815
- Sweet pea** So: 1037 with picture
Flower (Garden annuals) F: 276 with picture
Leaf (Tendrils) L: 156
- Sweet potato** So: 1037 with picture
- Sweet William** [plant] So: 1038 with picture
Flower picture on F: 277
Phlox P: 391
- Sweetbay**
Laurel L: 121 with picture
Magnolia M: 63
- Sweetbread** [food] So: 1038
- Sweetbrier** [plant]
Eglantine E: 119
Rose R: 477
- Sweetener, Artificial** See Artificial sweetener in this index
- Sweetest Dream, The** [book by Lessing]
Lessing, Doris L: 208
- Sweets festival** [Islam] See 'Id al-Fitr in this index
- Sweikert, Bob** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Swelling** [disorder]
Inflammation I: 266
- Swietenia mahagoni** [tree]
Mahogany M: 66
- Swift** [bird] So: 1038 with pictures
Animal picture on A: 475
Bird (Feeding methods) B: 350 with picture; (How birds move) B: 350-353 with picture
Bird's-nest soup B: 375
- Swift** [reptile] So: 1039 with picture
- Swift, Gustavus Franklin** [American businessman] So: 1039
- Swift, Jonathan** [English author] So: 1039 with pictures
English literature (Swift and Pope) E: 318
Gulliver's Travels G: 439
- Irish literature (Early works in English) I: 431
Literature for children (The 1700's) L: 361
- Swift, Tom** [literary figure]
Stratemeyer, Edward So: 920
- Swift & Company**
Swift, Gustavus Franklin So: 1039
- Swift fox**
Fox (Kinds of foxes) F: 440
- Swift-Tuttle, Comet** [astronomy]
Comet (table) Ci: 868
- Swiftcurrent Lake** [Montana]
Glacier National Park (Lakes) G: 205-206
- Swigert, John Leonard, Jr.** [American astronaut] So: 1041
Space exploration (The flight of Apollo 13) So: 718
- Swilling, Jack** [American prospector]
Phoenix P: 395
- Swim bladder** [zoology]
Fish (Special organs) F: 163 with diagram
Isinglass I: 462
Roughy R: 490
- Swim fins**
Skin diving (Kinds of skin diving) S: 493 with pictures
- Swimmeret** [zoology]
Shrimp (The body of a shrimp) S: 441
- Swimming** So: 1042 with pictures
Drowning (Methods of rescue) D: 349
English Channel E: 311
Fish (How fish swim) F: 165 with diagram
Olympic Games (Summer Olympic Games) O: 746e-747
Safety (In water sports) S: 13 with picture
- Swimming meet**
Swimming (Swim meets) So: 1046 with picture
- Swimming pool** So: 1048
Swimming (The pool) So: 1044 with diagram
- Swinburne, Algernon Charles** [British poet]
So: 1049 with portrait
- Swine** See Hog in this index
- Swing** [music]
Jazz (The swing era) J: 71
Popular music (Other new styles of popular music) P: 671
- Swing bridge**
Bridge (Moveable bridges) B: 602
- Swing-needle sewing machine**
Sewing machine (Kinds of sewing machines) S: 333
- Swiss** [fabric] So: 1049
- Swiss Alps** [mountains]
Switzerland (The Swiss Alps) So: 1055 with map
- Swiss Army knife**
Knife (Types of knives) K: 345-346
- Swiss bank**
Switzerland (Banking) So: 1058
- Swiss Brethren** [religious group]
Mennonites M: 402
- Swiss chard** [plant] So: 1049 with picture
- Swiss cheese**
Cheese (Kinds of cheese) C: 392 with picture
- Swiss Confederation** [Swiss history]
Switzerland (The struggle for freedom) So: 1059
- Swiss Family Robinson** [book by Wyss]
Wyss, Johann David W: 538
- Swiss German**
Switzerland (Language) So: 1053
- Swiss Guard** [European history] So: 1049
Louis XVI L: 476
Vatican City (Armed forces) V: 288
- Swiss National Park** [Switzerland]
National park (table) N: 42g
- Switch, Electric** See Electric switch in this index
- Switch engine** [train]
Railroad (Rolling stock) R: 107
- Switchboard** [communications]
Telephone (Early telephones) T: 100
- Switcher** [machine]
Television (Putting a show on the air) T: 111-112
- Switching** [electronics]
Electronics (Transistors) E: 212
Telephone (How a telephone call travels) T: 96
Transistor (What transistors do) T: 372
- Switching and terminal railroad**
Railroad (Railroad systems) R: 112
- Switching locomotive**
Locomotive (Kinds of locomotives) L: 414
- Switchmen's Union of North America**
Railway brotherhoods R: 122

Swithin, Saint [English religious leader]
So: 1049

Switzerland So: 1050 *with pictures and maps*

Alps A: 384 *with pictures*

German literature G: 138

Helvetians H: 180

Lake dwelling L: 37

See also the list of *Related Articles in the Switzerland article*

Switzerland of America [region]

Iowa (Land regions) I: 386

Switzers [European history]

Swiss Guard So: 1049

Swivel chair

Jefferson, Thomas *picture on* J: 78

SWOC

Steelworkers of America, United So: 882

Swollen gland See *Lymph node in this index*

Sword [weapon] So: 1061 *with pictures*

Armor *pictures on* A: 720

Fencing F: 70 *with pictures*

Indian, American *picture on* I: 140

Sword Blades and Poppy Seed [book by Lowell]

Lowell, Amy L: 510

Sword dance

Folk dancing F: 321

Sword fern [plant]

Evolution (Evolution of new species) E: 429-430

Fern (Kinds of ferns) F: 75-76

Sword lily

Gladiolus G: 206

Sword of Damocles

Damocles D: 23

Sword of God [name for]

Khalid ibn al-Walid K: 308a

Swordfish So: 1062

Fish *picture on* F: 152

Swordtail

Fish *picture on* F: 157

Swynford, Katherine [wife of]

John of Gaunt J: 134

Sycamore [tree] So: 1062

Tree *pictures on* T: 423

Wood *picture on* W: 389

Sycamore maple [tree]

Maple (Other maples) M: 187

Sycon [sea animal]

Sponge (Kinds of sponges) So: 800

Sydenham, Baron [British political leader]
So: 1062

Sydenham, Thomas [English doctor] So: 1063

Sydney [Australia] So: 1063 *with picture and map*

Australia A: 894 *with picture*; (City life) A: 902 *with picture*

Exploration (Exploring Australia's interior) E: 448

Olympic Games (The recent games) O: 753-754

Sydney [Nova Scotia]

Nova Scotia (table: Average monthly weather) N: 564

Sydney, University of [Australia]

New South Wales (Education) N: 286

Sydney Harbour [Australia]

Sydney So: 1063

Sydney Harbour Bridge [Australia]

Bridge (table: Steel arch) B: 603

Sydney *picture on* So: 1063

Sydney Opera House [Australia]

Australia (Architecture) A: 907-908 *with picture*

Sydney (Cultural life) So: 1064 *with picture*

Sydneysiders

Sydney (The people) So: 1063

Sykes-Picot Agreement [1916]

Palestine (World War I and the Balfour Declaration) P: 105

Syllabary [language]

Indian, American (Writing) I: 150-151

Writing (Phoneticization) W: 513

Syllabic meter

Poetry (Rhythm and meter) P: 591-592

Syllabic system

Alphabet (The earliest writing) A: 381-382

Syllable

Pronunciation (Learning pronunciation) P: 821

Syllabus of Errors [1864]

Pius IX P: 503

Pope (The 1700's and 1800's) P: 665

Syllogism

Aristotle (Logic) A: 663-664

Logic (The categorical syllogism) L: 425

Sylphide, La [ballet]

Ballet (Romantic ballet) B: 51

Sylphides, Les [ballet]

Ballet (Ballet in Russia) B: 52

Sylvan Lake [South Dakota]

Black Hills B: 387

Sylvester, Saint [pope]

Pope (table) P: 666

Sylvester I, Saint [pope] So: 1065

Pope (table) P: 666

Sylvester II [pope] So: 1065

Pope (table) P: 666

Sylvester III [pope]

Pope (table) P: 666

Sylvester IV [antipope]

Pope (table) P: 666

Sylvester, Edmund [American settler]

Olympia O: 746

Sylvester, Francis [American lawyer]

Van Buren, Martin (Childhood and education) V: 270

Sylvia [ballet]

Delibes, Léo D: 116

Sylvie and Bruno [book by Carroll]

Carroll, Lewis (Other works) C: 249

Sylvis, William H. [American labor leader]

Labor movement (The first nationwide labor organizations) L: 9

Sylvite [mineral]

Potash P: 710

Sym, Jana [wife of]

Mackenzie, Alexander (Emigration to Canada) M: 21

Symbionese Liberation Army [organization]

Hearst, William Randolph H: 131

Symbiosis [biology] So: 1065

Deep sea (Invertebrates) D: 82a-82b

Fungi (How a fungus lives) F: 559

Symbol So: 1065 *with pictures*

Algebra (Symbols in algebra) A: 354

Bird B: 328

Culture (Using symbols) Ci: 1187

Flag F: 193 *with picture*

Mythology (Mythical symbols) M: 974-975

Propaganda (The use of symbols) P: 824

See also the list of *Related Articles in the Symbol article*

Symbolic logic

Mathematics (Branches of mathematics) M: 303

Philosophy (Modern philosophy) P: 387-388

Set theory (History) S: 322

Symbolism [arts] So: 1066

Baudelaire, Charles B: 173

Drama (Symbolism) D: 339

French literature (Symbolism) F: 522

George, Stefan G: 109

Mallarmé, Stéphane M: 110

Painting (Symbolism) P: 76 *with picture*

Poetry (Beginnings of modern poetry) P: 597

Russian literature (Symbolism) R: 563

Spanish literature (Modernism) So: 762

Verlaine, Paul V: 317

Symington, J. Fife [American political leader]

Arizona (The late 1900's) A: 691-692

Symington, William [British engineer]

Ship (The first steamboats) S: 411

Symmachus, Saint [pope]

Pope (table) P: 666

Symmes, Anne [wife of William Henry

Harrison] See Harrison, Anna Symmes *in this index*

Symmes, John C. [American businessman]

Harrison, William Henry (Harrison's family) H: 74

Symmetrical system [cryptology] See *Secret-key system in this index*

Symmetry [geometry] So: 1066 *with diagrams*

Gem (Crystal shape) G: 77

Quasicrystal Q: 9

Symmetry [physics]

Higgs boson H: 227

Sympathetic nervous system

Nervous system (The autonomic nervous system) N: 133 *with diagram*

Sympathetic ophthalmia [disease]

Blindness (Diseases) B: 401-402

Ophthalmia O: 810

Sympathy strike

Labor movement (Handling labor disputes) L: 6-7

Strike (Kinds of strikes) So: 928

Taft-Hartley Act T: 13

Symphonic ballet

Massine, Léonide M: 296

Symphonic band [music]

Band (Concert bands) B: 74

Symphonic concerto [music]

Concerto Ci: 928

Symphonic drama

Green, Paul Eliot G: 379

Symphonic poem [music] So: 1066

Classical music (Orchestral music) Ci: 644

Overture O: 882

Symphony [music] So: 1067

Classical music (Orchestral music) Ci: 644;

(The Romantic era) Ci: 648-649

Orchestra (History) O: 822

Sonata So: 591

"Symphony, The" [poem by Lanier]

Lanier, Sidney L: 68

Symphony No. 3 [music by Beethoven] See *Eroica in this index*

Symphony orchestra

Orchestra O: 820 *with picture*

Symphony society

Orchestra (Orchestra management) O: 821

Symphysis, Pubic [anatomy]

Pelvis P: 233 *with diagram*

Sympto-thermal method

Birth control (Methods of birth control) B: 378-379

Syms Free School [U.S. history]

Virginia (Schools) V: 402

Synagogue [religion] So: 1067

Judaism (The synagogue) J: 180; (Worship)

J: 181; *picture on* J: 179

Synagogue Council of America [organization]

So: 1067

Synanon

Cult (Modern cults) Ci: 1185

Synapse [anatomy]

Brain (Brain cells) B: 551

Memory M: 392

Nervous system (The dendrites) N: 134 *with diagram*; (Transmission across synapses) N: 135

Pain (How the body feels pain) P: 21-22

Synapsid [extinct animal]

Mammal (The ancestors of mammals) M: 126

Synaptic cleft [anatomy]

Brain (The brain's chemical messengers)

B: 556

Nervous system (The dendrites) N: 134

Synchronic linguistics

Linguistics (Descriptive linguistics) L: 335

Synchronized skating

Ice skating (Synchronized skating) I: 13

Synchronized swimming

Swimming (Synchronized swimming)

So: 1047 *with picture*

Synchronizing signal [electronics]

Television (The television camera) T: 121-122

Synchronous generator

Electric generator (How AC generators work) E: 173

Synchronous motor

Electric motor (AC motors) E: 181

Synchrotron [machine] So: 1067

CERN C: 363

Fermi National Accelerator Laboratory F: 74

Particle accelerator (How accelerators work)

P: 184-185 *with diagram*

X rays (In X-ray tubes) X: 542

Synchrotron radiation [physics]

X rays (Synchrotron radiation) X: 542

Syncom 2 [satellite]

Communications satellite (History) Ci: 888b-889

Syncope [music]

Jazz J: 68

Music (Rhythm) M: 951

Syncretism inducing protein [biology]

Evolution (Direct observation of evolution)

E: 431

Syndicalism [labor] So: 1067

Collectivism Ci: 775

Syndicate [crime]

Crime (Organized crime) Ci: 1136

Syndicate, Newspaper See *Newspaper syndicate in this index*

Syndicated programming

Television (Commercial stations) T: 114

Synfuel See *Synthetic fuel in this index*

- Synge, Richard Laurence Millington** [British biochemist]
Nobel Prizes (Chemistry: 1952) N: 443
- Synod** [religion]
Presbyterian Church (U.S.A.) P: 756a
Presbyterians P: 756a
- Synodic month** [time]
Month M: 767
Moon (Rotation and orbit) M: 783
- Synonym** [language] So: 1068
Dictionary (What a dictionary tells you) D: 193
- Synopsis** [grammar]
Conjugation Ci: 950
- Synoptic Gospels**
Bible (Books of the New Testament) B: 282-283
Gospels G: 277
- Synoptic-scale systems**
Weather (Weather systems) W: 158
- Synovial fluid** [physiology]
Joint J: 155
Knee K: 345
- Synovial membrane** [anatomy]
Carpal tunnel syndrome C: 245 *with diagram*
Membrane (Serous membranes) M: 391
- Syntagma Square**
Athens (Landmarks) A: 854 *with map*
- Syntan** [chemical]
Leather (Tanning) L: 167-168
- Syntax** [grammar]
Language (The makeup of language) L: 62
Linguistics (The components of a grammar) L: 336
Semantics S: 290
- Synthesis** [philosophy]
Hegel, G. W. F. (Hegel's dialectic) H: 165
- Synthesis gas**
Petrochemicals P: 329
- Synthesizer** [machine] So: 1068
Electronic music E: 204
Jazz (Recent developments) J: 74
Music (Electronic instruments) M: 950
Rock music (Characteristics of rock music) R: 376
- Synthetic chemistry**
Chemistry (The broad range of study) C: 399;
(Current research) C: 405
- Synthetic cubism** [art]
Cubism Ci: 1181 *with picture*
Painting (Cubism) P: 77-78
Gris, Juan G: 395
Picasso, Pablo (Cubism) P: 448b
- Synthetic diamond**
Diamond (Synthetic diamonds) D: 183 *with pictures*
- Synthetic drug**
Drug (Chemical laboratories) D: 354
- Synthetic dye**
Dye (Synthetic dyes) D: 395
- Synthetic environment** [electronics] See Virtual reality *in this index*
- Synthetic fiber**
Clothing (Clothing materials) Ci: 704
Cotton (Synthetic fibers) Ci: 1093
Fiber (Synthetic fibers) F: 87
Fur (Artificial fur) F: 561
- Synthetic fuel** So: 1068
Conservation (Renewed interest in conservation) Ci: 986-987
Fuel (Synthetic liquid fuels) F: 550
- Synthetic gem**
Gem (Imitation and synthetic gems) G: 79
- Synthetic geometry**
Geometry (Types of geometry) G: 103
- Synthetic hormone**
Hormone (Synthetic hormones) H: 337
- Synthetic polymer** [chemistry]
Polyethylene P: 649
- Synthetic resin** See Resin, Synthetic *in this index*
- Synthetic rubber**
Rubber (Development of synthetic rubbers) R: 501; (Synthetic rubber) R: 504
- Synthetic theory** [biology]
Evolution (The synthetic theory) E: 432
- Synthetics** So: 1068
Fiber (Synthetic fibers) F: 87
Polyester P: 649
See also the list of Related Articles in the Synthetics article
- Synthetism** [art]
Gauguin, Paul (Early career) G: 69 *with picture*
- Syon House** [London]
Architecture picture on A: 624
- Syphilis** [disease] So: 1069
Disease (table) D: 226
Sexually transmitted disease S: 338b
Tables T: 2
- Syr Darya** [river, Asia]
Uzbekistan (Land and climate) U: 254
- Syracuse** [ancient city] So: 1069
Oratory (Beginnings) O: 818
- Syracuse** [city, New York] So: 1069
- Syracuse, Battle of** [415-413 B.C.]
Syracuse [ancient city] So: 1069
- Syria** [country] So: 1070 *with pictures and maps*
Arabs picture on A: 587
Egypt (The United Arab Republic) E: 132-133
Khalid ibn al-Walid K: 308a
Middle East (Continuing conflict) M: 533
Muslim Brotherhood M: 964
United Arab Republic U: 45 *with map*
See also the list of Related Articles in the Syria article
- Syrian Desert** [region, Arabia] So: 1076
- Syrian hamster**
Hamster H: 37 *with picture*
- Syringa** [shrub]
Mock orange M: 684
- Syringe** So: 1077
Hypodermic injection H: 480 *with picture*
- Syrphid fly**
Insect picture on I: 297
- Syrup**
Corn syrup Ci: 1064
Maple syrup M: 188
Soft drink (How soft drinks are made) So: 571
- System, Organ** [biology] See Organ system *in this index*
- System of control** [sociology]
Human relations (Programs) H: 428
- System of Transcendental Idealism** [book by Schelling]
Schelling, Friedrich Wilhelm Joseph von S: 174
- Systematic assessment**
Psychology (Systematic assessment) P: 848
- Systematic desensitization** [psychology]
Phobia P: 392
- Systematic Theology** [book by Tillich]
Tillich, Paul T: 287
- Systematics** [biology]
Biology B: 316
Botany (Plant classification and form) B: 508
Classification, Scientific Ci: 653
- Système International d'Unités** [measurement] See Metric system *in this index*
- Systemic**
Insecticide I: 302
- Systemic circulation**
Circulatory system (In respiration) Ci: 559
Heart (Birds and mammals) H: 146
- Systemic disease**
Fungal disease (In people) F: 558
- Systemic lupus erythematosus** [disease]
Immune system (Systemic autoimmune diseases) I: 88c
Lupus L: 526
- Systemic poison**
Poison (Kinds of poisons) P: 601
- Systems analysis** So: 1077
- Systems analyst**
Systems analysis So: 1077
Computer (Careers) Ci: 924a
- Systems ecologist**
Ecology (Ecosystems) E: 54
- Systems flow chart**
Computer (Preparing a program) Ci: 923
- Systems physiology**
Biomedical engineering (Specialty areas of biomedical engineering) B: 324
- Systole**
Heart (Regulating the heart rate) H: 135 *with diagram*
- Systolic pressure**
Blood pressure B: 416
Heart (Regulating blood pressure) H: 136-137
- Szczecin** [Poland] So: 1077
- Széchenyi, Stephen** [Hungarian political leader]
Hungary (Habsburg rule) H: 445
- Szechwan Basin** [region, China] See Sichuan Basin *in this index*
- Szell, George** [Hungarian-American conductor] So: 1077
- Szent-Györgyi, Albert** [American biochemist] So: 1077
- Nobel Prizes (Physiology or medicine: 1937) N: 444
- Szentendre** [Hungary]
Hungary picture on H: 441
- Szilard, Leo** [American physicist] So: 1077 *with picture*
- Szoka, Edmund Casimir Cardinal** [American religious leader] So: 1077
- Szold, Henrietta** [American social worker] So: 1078 *with picture*
- Szűrös, Mátyás** [Hungarian political leader] Hungary (End of one-party rule) H: 448
- Szymborska, Wisława** [Polish poet] So: 1078
Nobel Prizes (Literature: 1996) N: 446

T

- T** [letter] T: 1 *with pictures*
- T cell** [physiology]
Blood (Protecting against disease) B: 410;
(Formation of new blood components) B: 411
Disease (Immune responses) D: 231-232
Immune system (Parts of the immune system) I: 87; (The immune response) I: 88-88a *with diagram*
Interleukin I: 336
Thymus T: 274
Tuberculosis (Primary infection) T: 477-478
- T cell receptor** [physiology]
Immune system (The cell-mediated immune response) I: 88a; (Recent advances) I: 89
- T-formation**
Football (The offensive team) F: 356 *with diagram*
- T-helper cell** [physiology]
AIDS (Cause) A: 163
Cyclosporine Ci: 1204
Disease (Immune responses) D: 231-232
Immune system (The cell-mediated immune response) I: 88a-88b
- T Hooft, Gerardus** [Dutch physicist]
Nobel Prizes (Physics: 1999) N: 442
- T lymphocyte** [physiology] See T cell *in this index*
- T maze**
Mouse picture on M: 902
- T quark** [physics] See Top quark *in this index*
- T-Rex Discovery Centre** [Eastend]
Saskatchewan (Places to visit) S: 136
- T-Tauri star**
Star (Intermediate-mass stars) So: 848
- Ta** [symbol]
Tantalum T: 29
- TA Ranch** [Wyoming]
Wyoming (The Johnson County War) W: 536
- Ta**
Airplane (The wing) A: 213-214 *with picture*
- Taback, Simms** [American artist]
Caldecott Medal (table: 2000) C: 26
- Tabard Inn**
Canterbury Tales C: 184 *with picture*
- Tabaré** [poem by Zorrilla de San Martín]
Latin-American literature (Romanticism) L: 112
- Tabasco** [state, Mexico] T: 2
- Tabassah Mountains**
Tunisia (Land) T: 488 *with map*
- Tabby**
Cat (Coat) C: 287 *with picture*; picture on C: 284
- Tabby weave** See Plain weave *in this index*
- Tabei, Junko** [Japanese mountain climber]
Mount Everest M: 884
- Tabernacle** [Old Testament] T: 2 *with picture*
Ark of the Covenant A: 693
Exodus E: 438
Moses (The covenant with God) M: 829
- Tabernacle, Mormon** [Salt Lake City]
Mormons picture on M: 808
- Tabernacles, Feast of** [custom]
Sukkot So: 965
- Tabes** [disorder] T: 2
- Tabes dorsalis** [disease]
Tabes T: 2
- Table** [furniture]
Colonial life in America (Furnishings) Ci: 797;
picture on Ci: 808
Furniture (Ancient Rome) F: 570-571; (China) F: 571 *with picture*
- Table, The** [painting by Bonnard]
France picture on F: 463

Table Alphabetical of Hard Words, A [book by Cawdrey]

Dictionary (Early English dictionaries) **D**: 194

Table beet [plant]

Beet **B**: 212 *with picture*

Table game

Game (Table games) **G**: 22

Table loom

Weaving (Kinds of looms) **W**: 174 *with picture*

Table Mountain [South Africa]

Cape Town **C**: 189 *with picture*

Table mushroom

Mushroom (Nonpoisonous mushrooms) **M**: 943 *with picture*

Table of contents [reference]

Book (Inside a book) **B**: 464-465

Table Talk [essays by Hazlitt]

Hazlitt, William **H**: 123

Table tennis [game] **T**: 3 *with pictures*

Olympic Games (Summer Olympic Games) **O**: 746e-748

Tableau

Solitaire **So**: 584

Tableau Économique [economics]

Quesnay, François **Q**: 40

Tableau of French Poetry [book by Sainte-Beuve]

Sainte-Beuve, Charles Augustin **S**: 58

Tablet [medication]

Drug pictures on **D**: 353, **D**: 360

Tablet [writing]

Book (Early books) **B**: 465

Communication picture on **Ci**: 880

Tableware [utensils]

Nickel silver **N**: 405

Silver pictures on **S**: 464

Tabloid

Newspaper (Kinds of newspapers) **N**: 380

Taboo [custom] **T**: 4

Magic (The magician) **M**: 49; (Homeopathic magic) **M**: 49

Mythology (Mana and taboo) **M**: 982

Tabor, Horace A. W. [American political leader]

Colorado (Statehood) **Ci**: 845-847

Tabor, Mount [Israel]

Deborah **D**: 65

Tabriz [Iran] **T**: 4

Tabu See *Taboo in this index*

Tabularium [ruins, Rome]

Forum, Roman **F**: 420 *with picture*

Tabulating machine

Computer (The first successful computer) **Ci**: 924b; picture on **Ci**: 924a

TAC [architecture]

Gropius, Walter **G**: 397

Tacamahac [tree]

Poplar **P**: 668

TACAN [radio]

Airplane (Radio navigation) **A**: 227

Taché, Sir Étienne-Paschal [Canadian political leader] **T**: 4

Confederation of Canada (Fathers of

Confederation) **Ci**: 935

Macdonald, Sir John Alexander (Associate provincial prime minister) **M**: 7

Tachometer [instrument] **T**: 4

Log (A tachometer) **L**: 421

Tachycardia [disorder] **T**: 4

Defibrillator **D**: 88

Drug (Antiarrhythmics) **D**: 351

Heart (Abnormal heart rhythms) **H**: 142

Tachyon [atomic particle] **T**: 4

Tacitus [Roman emperor]

Rome, Ancient (table) **R**: 447

Tacitus, Cornelius [Roman historian] **T**: 4

Agricola, Gnaeus Julius **A**: 144

Biography (Early biographies) **B**: 312-313

History (The ancient Greeks and Romans) **H**: 261-262

Latin literature (The Imperial Period) **L**: 116

Lithuania (History) **L**: 389

Sweden (Early times) **So**: 1032

Tack [riding equipment]

Horse (Riding equipment) **H**: 351 *with pictures*

Tack hammer

Hammer **H**: 34 *with picture*

Tacke, Ida [German chemist]

Rhenium **R**: 290

Tacking [sailing]

Sailing (Basic sailing maneuvers) **S**: 26;

(Trimming and tacking) **S**: 26 *with pictures*

Tackle [hardware]

Block and tackle **B**: 405 *with diagrams*

Tackle [sports]

Football (The offensive team) **F**: 356 *with diagrams*;

(The defensive team) **F**: 357 *with diagrams*; picture on **F**: 360

Soccer (table) **So**: 546 *with picture*; (Tackling) **So**: 548

Tackle, Fishing

Fishing (Fishing equipment) **F**: 175 *with pictures*

Tackling dummy

Connecticut (Interesting facts) **Ci**: 953

Tacna-Arica dispute [Latin American history]

Peru (The War of the Pacific) **P**: 315

Taco

Mexico (Food and drink) **M**: 455

Hispanic Americans (Food) **H**: 248

Tacoma [Washington] **T**: 5 *with picture*

Tacoma Narrows Bridge [Washington]

Tacoma **T**: 5

Taconic Mountains [Massachusetts-Vermont]

Massachusetts (Land regions) **M**: 282

New York (Mountains) **N**: 306

Vermont (Land regions) **V**: 328

Taconite [rock] **T**: 5 *with pictures*

Iron and steel (Kinds of iron ore) **I**: 438;

(Processing) **I**: 439

Minnesota (The mid-1900's) **M**: 606

Tactical air attack [warfare]

Air Force, United States (Offense) **A**: 190

Tactical Air Command [U.S.]

Air Force, United States (Combat commands) **A**: 192-193

Langley Air Force Base **L**: 61

Tactical mission

Air force (Combat missions) **A**: 182

Tactical nuclear weapon

Army (Prevention of war) **A**: 725

Nuclear weapon (Theater nuclear weapons)

N: 599

Tactile corpuscle

Touch **T**: 345

Tactile hair

Cat (Senses) **C**: 287-290

Hair **H**: 9

Mammal (Skin and hair) **M**: 118

Tactile sense See *Touch in this index*

Tactual map

Map (Production and reproduction) **M**: 180-181

TACV

Air cushion vehicle (History) **A**: 181

Tadpole [zoology] **T**: 6 *with pictures*

Bullfrog **B**: 696

Frog (Mating) **F**: 538 *with picture*; (Eggs)

F: 538-539 *with pictures*; (Tadpoles)

F: 539 *with pictures*

Larva **L**: 78 *with picture*

Metamorphosis (Other examples) **M**: 429 *with picture*

Toad (The life of a toad) **T**: 303-304

Tadzhikistan [country, Asia] See *Tajikistan in this index*

Tadzhiks [people] See *Tajiks in this index*

Tae kwon do [martial art] **T**: 6

Asian Americans (Asian influences on

American culture) **A**: 812c

Karate **K**: 246

Martial arts (Korean martial arts) **M**: 234

Olympic Games **O**: 748

Taegu [Korea] **T**: 7

Taehan-min'guk [South Korea]

Korea (The Choson dynasty) **K**: 376

Tafari, Ras See *Haile Selassie I in this index*

Taffrail log [measuring device]

Log (Logs used in the past) **L**: 421

Taft, Alphonso [American government official]

Grant, Ulysses S. (table) **G**: 316

Justice, Department of (table) **J**: 203

Taft, William Howard (Early life) **T**: 8

Taft, Bob [American political leader]

Ohio (table) **O**: 699

Taft, Charles Phelps, II [son of]

Taft, William Howard (Taft's family) **T**: 9

Taft, Helen Herron [wife of William Howard Taft]

First ladies (table) **F**: 142

Taft, William Howard (Taft's family) **T**: 9; (Life in the White House) **T**: 11 *with picture*

Taft, Lorado [American sculptor] **T**: 7 *with picture*

Black Hawk **B**: 387 *with picture*

Illinois (Places to visit) **I**: 62

Taft, Louise Maria Torrey [mother of]

Taft, William Howard (Early life) **T**: 8

Taft, Robert Alphonso [American political leader] **T**: 7

Eisenhower, Dwight David (Presidential candidate) **E**: 151

Taft, William Howard (Taft's family) **T**: 9

Taft, Royal C. [American political leader]

Rhode Island (table) **R**: 311

Taft, William Howard [U.S. President] **T**: 8 *with pictures*

Baguio City **B**: 27

Dollar diplomacy **D**: 295

Harding, Warren Gamaliel (Entry into politics) **H**: 57

Republican Party (The party splits) **R**: 256

Roosevelt, Theodore **R**: 470; (A party split)

R: 471

Taft, Robert Alphonso **T**: 7

United States, History of the (The Progressive Era) **U**: 181-182

Taft-Hartley Act [1947] **T**: 13

Boycott **B**: 541

Federal Mediation and Conciliation Service **F**: 65

Labor movement (The Taft-Hartley Act) **L**: 13

National Labor Relations Act **N**: 39

President of the United States (Chief executive) **P**: 764

Strike (Kinds of strikes) **So**: 928

Taft, Robert Alphonso **T**: 7

Taft Museum [Cincinnati]

Ohio (Museums) **O**: 685

Tag [baseball]

Baseball (Base runners—advancing and outs) **B**: 129 *with picture*

Tag [computing]

Computer (The World Wide Web) **Ci**: 921

Tag lock

Wool (Types of wool) **W**: 399

Tag up [baseball]

Baseball (Base runners—advancing and outs) **B**: 129

Tagalog [language]

Philippines (Languages) **P**: 374

Taganrog, Gulf of

Azov, Sea of **A**: 998

Taglioni, Filippo [Italian choreographer]

Ballet (Romantic ballet) **B**: 51

Taglioni, Marie [Swedish dancer] **T**: 13

Ballet (Romantic ballet) **B**: 51 *with picture*

Tagore, Rabindranath [Indian author] **T**: 13

Bangladesh (The arts) **B**: 82

India (Literature: 1913) **I**: 120

Tagsatzung [government]

Switzerland (Independence and expansion) **So**: 1059-1060

Tagua [animal]

Peccary **P**: 226 *with picture*

Tagus River [Portugal-Spain] **T**: 13

Lisbon **L**: 348

Portugal (Rivers) **P**: 690

Spain (The Meseta) **So**: 740 *with map*

Tahat, Mount [mountain, Algeria]

Algeria (The Sahara) **A**: 363

Tahgahjute [American Indian chief]

Logan **L**: 423

Tahiti [island, Pacific] **T**: 13 *with picture*

Exploration (Exploring the Pacific) **E**: 448

Gauguin, Paul (Gauguin in Tahiti) **G**: 69

Mythology (Pacific Islands divinities) **M**: 982

Society Islands **So**: 563

Tahkemoni [book by Alharizi]

Hebrew literature (Medieval works) **H**: 162

Tahmasb [king of Persia]

Safavid dynasty **S**: 8

Tahoe, Lake [California-Nevada] See *Lake Tahoe in this index*

Tahoe Regional Planning Compact

- Tail** [zoology] T: 14
Animal (Fins, tails, and flippers) A: 490 *with picture*
Cat (Body size and structure) C: 286
Dog (Why dogs do the things they do) D: 263 *with picture*; (Body structure) D: 263
- Tail coat**
Clothing (The 1800's) Ci: 702 *with picture*
- Tail fin** [airplane]
Airplane (The tail) A: 214 *with pictures*; (The tail) A: 214 *with diagrams*
- Tail hook** [device]
Navy (Aircraft carriers) N: 78
- Tail-twining**
Titi T: 301
- Tail wind** [weather]
Wind shear W: 332
- Tailed frog**
Frog (Other frogs) F: 540
- Tailings** [by-product]
Copper (Milling) Ci: 1042-1043
Iron and steel (Processing) I: 439
Lead (Production) L: 149
- Tailon, L.-Olivier** (Canadian political leader)
Quebec (table) Q: 29
- Tailorbird** [bird] T: 14 *with picture*
Bird *picture on B*: 357
- Taine, Hippolyte Adolphe** (French author) T: 15
French literature (Naturalism) F: 522
- Taino Indians**
Arawak Indians A: 592
Columbus, Christopher (The first landing) Ci: 860; (Trouble, settlement, and exploration) Ci: 862
Cuba (Early years) Ci: 1175
- Tainter, Charles S.** (American inventor)
Phonograph (History) P: 401-402
- Tainting** [English law]
Attainder A: 878
- Tainui** [people]
New Zealand (Maori-Pakeha relations) N: 356
- Taipa** [island, Pacific Ocean]
Macao M: 2
- Taipan** [snake]
Snake *picture on S*: 534
- Taipei** [Taiwan] T: 15 *with picture*
- Taiiping Rebellion** [1850-1864]
China (The Taiiping Rebellion) C: 503
Nanjing (History) N: 11
- Taira** (Japanese clan)
Japan (Rise of the shogun) J: 54 *with picture*
Japanese literature (The medieval period) J: 62
World, History of the *picture on W*: 436
- Taiwan** T: 15 *with pictures and map*
Asia (Way of life in East Asia) A: 785; (Korea and Taiwan) A: 789
Chiang Kai-shek (Communist triumph) C: 419
China C: 475
Cold War (The Far East) Ci: 766
Eisenhower, Dwight David (Crises in the Middle East and Asia) E: 154
Flag *picture on F*: 204
Mao Zedong (His life) M: 174-175
- Taj Mahal** [Agra, India] T: 18
Agra A: 143
Architecture (Indian architecture) A: 613
Asia *picture on A*: 772
Building construction B: 681
India (Architecture and sculpture) I: 119; *picture on I*: 109
- Tajik** [language]
Tajikistan T: 18
- Tajik Autonomous Soviet Socialist Republic** [former name]
Tajikistan (History) T: 18b
- Tajikistan** [country, Asia] T: 18 *with picture and map*
Flag *picture on F*: 205
Ruble R: 508
- Tajiks** [people]
Afghanistan (Ethnic groups and languages) A: 92a
Tajikistan (People) T: 18a
Union of Soviet Socialist Republics (People) U: 31
- Tajo River** See Tagus River *in this index*
- Tajumulco** [mountain, Guatemala]
Guatemala (The Highlands) G: 414
- Takaki, Kanehiro** (Japanese doctor)
Vitamin (History) V: 432
- Takakkaw Falls** [waterfall, British Columbia] T: 18b
British Columbia (Rivers, waterfalls, and lakes) B: 624
Waterfall (table: Famous waterfalls of North America) W: 142
- Take**
Motion picture (Shooting the movie) M: 853
- Television (Other production methods) T: 113
- Take down** [wrestling]
Wrestling *picture on W*: 506
- Take-off** [aviation]
Aircraft carrier (Flight operations) A: 206
Airplane (Gravity and lift) A: 220 *with diagram*; *diagram on A*: 224
- Take-up reel**
Tape recorder (How tape recorders work) T: 37 *with picture*
- Takakurabe** [book by Higuchi Ichiyo]
Higuchi Ichiyo H: 229
- Takin** [mammal] T: 18b *with picture*
- Takin' Off** [recording]
Hancock, Herbie H: 38
- Taking Sides** [book by Layton]
Layton, Irving L: 148
- Taking Steps** [play by Ayckbourn]
Ayckbourn, Alan A: 995
- Taklimakan Desert** [China]
China (The Xinjiang-Mongolian Uplands) C: 491
- Takraw** [sport]
Thailand (Recreation) T: 224
- Taksin** [Thai military leader]
Thailand (The Bangkok era) T: 227
- Tal, Mikhail** [Russian chess player]
Chess (World chess champions) C: 414
- Talal I** [king of Jordan]
Jordan (The Palestinian conflict) J: 165
- Talbert, Mary B.** [American social reformer]
Spingarn Medal (table: 1922) So: 793
- Talbot, Matthew** [American political leader]
Georgia (table) G: 130
- Talbot, Ray H.** [American political leader]
Colorado (table) Ci: 844
- Talbot, Thomas** [American political leader]
Massachusetts (table) M: 288
- Talbot, William Henry Fox** See Fox Talbot, William Henry *in this index*
- Talbotype** [photography] T: 19
Communication (The 1800's) Ci: 881-882
Photography (Early developments) P: 425
- Talc** [mineral] T: 19
Mineral *picture on M*: 569
Soapstone So: 543
- Talcum powder**
Talc T: 19
- Tale of a Tub, A** [book by Swift]
Swift, Jonathan (Swift's other works) So: 1040-1041
- Tale of Genji, The** [book by Murasaki]
Japan (Literature) J: 43
Japanese literature (The Heian period) J: 61
Murasaki Shikibu M: 929
Painting (Japanese painting) P: 47 *with picture*
- Tale of Peter Rabbit, The** [book by Potter]
Literature for children (Picture books) L: 363 *with picture*
- Tale of the Bamboo Cutter, The** [book]
Japanese literature (The Heian period) J: 61
- Tale of the Heiji War Scroll** [painting]
World, History of the *picture on W*: 436
- Tale of the Heike, The** [book]
Japanese literature (The medieval period) J: 62
- Tale of the Ten Princes, The** [book by Dandin]
Sanskrit literature (The Classical period) S: 112
- Tale of Tsar Sultan, The** [opera by Rimsky-Korsakov]
Rimsky-Korsakov, Nikolai R: 341
- Tale of Two Cities, A** [book by Dickens]
Dickens, Charles (The second phase) D: 188
- Talent** [ability]
Talent T: 20
- Talent** [entertainment]
Television (Planning and preparation) T: 110c-110d
- Talent** [money] T: 19
- Talent Education**
Suzuki method So: 1013
- Talented Mr. Ripley, The** [book by Highsmith]
Highsmith, Patricia H: 229
- Tales from Shakespeare** [book by Lamb]
Lamb, Mary Ann L: 51
- Tales from Silver Lands** [book by Finger]
Finger, Charles Joseph F: 104
- Tales of a Fourth Grade Nothing** [book by Blume]
Blume, Judy B: 425
- Tales of a Traveller** [book by Irving]
Irving, Washington (Years in Europe) I: 460
- Tales of a Wayside Inn** [poems by Longfellow]
Longfellow, Henry Wadsworth (Narrative poems) L: 450-451
- Tales of an Empty Cabin** [book by Grey Owl]
Grey Owl G: 392
- Tales of Belkin** [stories by Pushkin]
Pushkin, Alexander (His works) P: 911-912
- Tales of Hoffmann** [opera by Offenbach]
Hoffmann, Ernst Theodor Amadeus H: 284
Offenbach, Jacques O: 676
- Tales of Mother Goose** [book by Perrault]
Perrault, Charles P: 293
- Tales of Soldiers and Civilians** [book by Biercel]
Bierce, Ambrose Gwinett B: 295
- Tales of the Countryside** [music by Cowell]
Cowell, Henry Ci: 1112
- Tales of the Folio Club** [book by Poe]
Poe, Edgar Allan (Fiction and theory of fiction) P: 590
- Tales of the Grotesque and Arabesque** [book by Poe]
Poe, Edgar Allan (Poe's life) P: 589
- Tales of the O'Hara Family** [play by Banim]
Irish literature (Prose and poetry) I: 431
- Tales of the South Pacific** [book by Michener]
Michener, James Albert M: 487
- Talfourd, Field** [British painter]
Browning, Elizabeth Barrett *picture on B*: 646
Browning, Robert *picture on B*: 646
- Taliban** [political group] T: 19
Afghanistan A: 92; (Government) A: 92a; (Women) A: 93; (Agriculture) A: 94; (Afghanistan under the Taliban) A: 96
Bin Laden, Osama B: 308
Pakistan (Struggle for democracy) P: 92
Pashtuns P: 190
Qa'ida, Al- Q: 2
September 11 terrorist attacks S: 310
Terrorism (The war against terrorism) T: 179
- Taliesin** [Welsh poet]
Wales (The arts) W: 11
- Taliesin** [Wisconsin]
Wisconsin (Places to visit) W: 356
Wright, Frank Lloyd (Later career) W: 507
- Taliesin West** [Arizona]
Wright, Frank Lloyd (Later career) W: 507
- Talipes** [birth defect]
Clubfoot Ci: 714
- Talipot palm** [tree]
Palm (The leaves) P: 109
- Talisman** [magic]
Magic (Magic objects) M: 49
- Talisman, The** [book by Scott]
Scott, Sir Walter (The Waverley novels) S: 222
- Talk show**
Radio (Information) R: 86
Television (Commercial television) T: 110-110a
- Talkeetna Mountains** [Alaska]
Alaska (Land regions) A: 292
- Talking book**
Blindness (Aids for blind people) B: 402
- Talking Heads** [musical group]
Rock music (Disco and punk) R: 380; (Rock and society) R: 380
- Tall Grass Prairie National Preserve** See Tallgrass Prairie National Preserve *in this index*
- Tall oil** [by-product]
Rosin R: 482
- Tall thistle** [plant]
Thistle T: 260
- Tallahassee** [Florida] T: 20
- Tallchief, Maria** [American dancer] T: 20 *with picture*
- Talleyrand** [French statesman] T: 20
Adams, John (Difficulties with France) A: 37-38
Jefferson, Thomas (The Louisiana Purchase) J: 85
Pinckney, Charles Cotesworth P: 467
XYZ Affair X: 546
- Talley's Folly** [play by Wilson]
Wilson, Lanford W: 317
- Tallgrass Prairie National Preserve**
National Park System (table: National preserves) N: 58
- Tallinn** [city, Estonia] T: 21
Estonia E: 361 *with picture*
- Tallis, Thomas** [English composer] T: 21
Byrd, William B: 747
- Tallmadge, James** [American political leader]
Missouri Compromise M: 674
- Tallmadge Amendment** [U.S. history]
Missouri Compromise M: 674
- Tallow** [animal product] T: 21
Candle C: 175
Detergent and soap (How detergents are made) D: 165
Fat F: 52
- Tallowtree** T: 21
- Talmadge, Eugene** [American political leader]
Georgia (table) G: 130
- Talmadge, Herman Eugene** [American political leader]
Georgia (table) G: 130

- Talmud** [religious book] T: 21
Hebrew literature (Early works) H: 162
Jews (The Talmudic period) J: 122
Judaism (The Talmud) J: 180
- Talon** [zoology]
Animal picture on A: 494
Eagle E: 3; (Feet and legs) E: 4
Hawk H: 111
- Talon, Jean Baptiste** [French colonial official]
T: 21
Census (Early censuses) C: 349
- Talos** [Greek mythology]
Daedalus D: 3
- Talus bone** [anatomy]
Ankle A: 515 with diagram
- Tama New Town** [housing project]
Tokyo (Housing) T: 314
- Tamales** [food]
Mexico (Food and drink) M: 455-456
- Taman Ismail Marzuki Center**
Jakarta (The city) J: 22
- Taman Negara National Park** [Malaysia]
National park (table) N: 42f
- Tamandua** [animal]
Anteater A: 541
- Tamar** [book by Jeffers]
Jeffers, Robinson J: 75
- Tamara** [Georgian queen]
Georgia (History) G: 111
- Tamarack** [tree]
Larch L: 75
Tree pictures on T: 425 *
- Tamarau** [animal]
Buffalo B: 674
- Tamarin** [animal] T: 21 with picture
Mammal picture on M: 117
Primate (New World monkeys) P: 778-778a
- Tamarind** [tree] T: 22 with picture
- Tamayo, Rufino** [Mexican painter] T: 22
- Tamayo Museum of Contemporary International Art**
Mexico City (Cultural life and recreation) M: 477
- Tamayo y Baus, Manuel** [Spanish author]
Spanish literature (The 1800's) So: 761
- Tambaqui** [fish]
Pacu P: 19 with picture
- Tambon** [unit of government]
Thailand (Local government) T: 221
- Tambora, Mount** [Indonesia]
Volcano (table) V: 441 with map
- Tambour lace**
Lace L: 22
- Tambourine** [musical instrument] T: 22 with picture
- Tambura** [musical instrument]
India (Music and dance) I: 120
- Tamburlaine** [Mongol conqueror] See Timur in this index
- Tamburlaine** [plays by Marlowe]
Marlowe, Christopher M: 216
- Tamenend** [American Indian chief]
Pennsylvania (Colonial days) P: 264
- Tamerlane** [Mongol conqueror] See Timur in this index
- Tamerlane and Other Poems** [book by Poe]
Poe, Edgar Allan (Poe's life) P: 589
- Tamil** [language]
Dravidians D: 342
India (Languages) I: 114
Malaysia (People) M: 98b-98c
Sri Lanka (People) So: 817-818; (History) So: 819
- Tamil Nadu** [state, India]
Chennai C: 408
India (Christianity) I: 117
- Tamils** [people]
Sri Lanka (People) So: 817; (History) So: 819-820
- Taming of the Shrew, The** [play by Shakespeare]
Fairbanks, Douglas, Sr. picture on F: 9
Gascoigne, George G: 60
Shakespeare, William (The Taming of the Shrew) S: 356
- Taming the Star Runner** [book by Hinton]
Hinton, S. E. H: 238
- Tamino** [opera character]
Opera (Magic Flute, The) O: 805
- Tamm, Igor Yevgenevich** [Russian physicist]
Nobel Prizes (Physics: 1958) N: 441
- Tammany, Mount** [New Jersey]
Delaware Water Gap D: 114
- Tammany, Society of** [U.S. history] T: 22
Bucktails B: 664
Cleveland, Grover (Governor of New York) Ci: 670
Mitchel, John Purroy M: 676
- Nast, Thomas N: 24 with picture
New York City (The growing city) N: 341-342 with picture; (Formation of Greater New York) N: 342
Roosevelt, Franklin Delano (State senator) R: 454
Tweed, William Marcy T: 530
- Tammany Hall** See Tammany, Society of in this index
- Tammany Tiger** [cartoon]
Nast, Thomas N: 24 with picture
- Tammen, Harry H.** [American editor]
Bonfils, Frederick Gilmer B: 458
- Tammuz** [month]
Calendar (The Hebrew calendar) C: 29
- Tamoxifen** [drug] T: 23
Breast cancer B: 591
- Tampa** [Florida] T: 23
- Tampa** [ship]
Coast Guard, United States (World War I) Ci: 737-738
- Tampa Bay** [Florida]
Saint Petersburg [Florida] S: 55
- Tampa Bay Buccaneers**
Football (National Football League) F: 364
- Tampa Bay Devil Rays** [team]
Baseball (table) B: 130
- Tampa Bay Lightning**
Hockey (table: National Hockey League) H: 281
- Tamper-resistant packaging**
Packaging (Packaging regulations) P: 19
- Tampere** [Finland] T: 24
- Tampico** [Mexico] T: 24
Mexico (The Gulf Coastal Plain) M: 462
- Tampomas II** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Tampon**
Menstruation (Effects of menstruation) M: 404
Toxic shock syndrome T: 351
- Tamure** [dance]
Pacific Islands (Recreation) P: 6
- Tan, Amy** [American author]
Novel (The novel today) N: 575
- Tana, Lake** [Ethiopia]
Lake Tana L: 46
- Tana River** [Africa]
Kenya (Rivers and lakes) K: 302
- Tanager** [bird] T: 24 with picture
Bird (Birds of forests and woodlands) B: 334 with picture
- Tanakh** [book]
Bible (Books of the Hebrew Bible) B: 279-280
Old Testament O: 740
- Tanana River** [Alaska]
Yukon River (Upper Yukon) Y: 582
- Tananarive** See Antananarivo in this index
- Tancred of Hauteville** [Norman conqueror]
Normans N: 456
- Tandem**
Bicycle (Specialty bicycles) B: 290 with picture
- Tandem axles** [mechanism]
Truck (Common features of trucks) T: 458
- Tandem-rotor helicopter**
Helicopter (Types of helicopters) H: 170-171 with diagram
- Tandem Van de Graaff generator** [machine]
Particle accelerator (How accelerators work) P: 184
Van de Graaff generator V: 279
- Tandja, Mamadou** [Nigerien political leader]
Niger (History) N: 409
- Tandy, Jessica** [American actress]
Motion picture (Best performance by an actress: 1989) M: 862
- Taney, Roger Brooke** [American jurist] T: 24 with portrait
Dred Scott Decision (The Supreme Court ruling) D: 345
Jackson, Andrew (Jackson's second Administration) J: 12
Lincoln, Abraham (Fort Sumter and war) L: 321
- Taneycomo, Lake** [Missouri] See Lake Taneycomo in this index
- TANF** [U. S. program] See Temporary Assistance to Needy Families in this index
- Tang dynasty** [Chinese history] T: 25 with picture and map
Asia (Nomadic invasions) A: 805 with map
China (The arts) C: 488; (The Tang dynasty) C: 501; picture on C: 490
Chinese literature (Poetry) C: 511
Li Yuan L: 225
Painting (Chinese painting) P: 44-45
Sculpture (China) S: 238
World, History of the (China) W: 435 with picture
- Tang Gaozong** [emperor of China]
Tang dynasty (The rise of the dynasty) T: 25
- Tang Taizong** [emperor of China]
Tang dynasty (The rise of the dynasty) T: 25
- Tang Wu** [empress of China]
Tang dynasty (The rise of the dynasty) T: 25
- Tang Xianzu** [Chinese dramatist]
Chinese literature (Drama and fiction) C: 512
- Tang Xuanzong** [emperor of China]
Tang dynasty (The middle years) T: 26
- Tanganyika** [region, Africa]
Tanzania T: 30
- Tanganyika, Lake** See Lake Tanganyika in this index
- Tanganyika African National Union** [political party]
Tanzania (Independence) T: 35
- Tangaroa** [Polynesian god]
Mythology (Pacific Islands divinities) M: 982
- Tange, Kenzo** [Japanese architect]
Architecture (Architecture today) A: 632-633; picture on A: 606
Japan picture on J: 44
Tokyo (Government buildings) T: 316
- Tangelo** [fruit] T: 26
Mandarin M: 136
- Tangent** [mathematics]
Circle (Parts of a circle) Ci: 558
Trigonometry (Right triangles) T: 443
- Tanger** See Tangier in this index
- Tangerine** [fruit] T: 26 with picture
Mandarin M: 136
Orange (Mandarins) O: 815
Tangelo T: 26
Tangor T: 27
- Tangier** [city, Morocco] T: 27
- Tangier** [region, Morocco]
Tangier T: 27
- Tanglewood Tales** [book by Hawthorne]
Hawthorne, Nathaniel (His stories and sketches) H: 114
- Tango** [dance] T: 27
Ballroom dancing B: 63
Latin America (Dancing) L: 103
- Tangor** [fruit] T: 27
Mandarin M: 136
- Tanguy, Yves** [French-born artist]
Painting (Europeans in America) P: 84
- Tanimbar Islands**
Indonesia (The Molucca Islands) I: 234
- Tanjung Priok** [harbor, Indonesia]
Jakarta (Economy) J: 22
- Tank** [military vehicle] T: 27 with diagram
Ammunition (Armored-vehicle ammunition) A: 436
Army (Armies in the two world wars) A: 728
Army, United States (Armor) A: 734
Automobile picture on A: 968
Periscope P: 288
World War I picture on W: 457
- Tank, Toilet**
Plumbing (How toilets work) P: 579 with diagrams
- Tank car** [railroad]
Railroad picture on R: 108
- Tank division**
Infantry (Divisions) I: 265
- Tank truck** [vehicle]
Truck (On-highway trucks) T: 457; picture on T: 459
- Tank vacuum cleaner**
Vacuum cleaner V: 257 with picture
- Tanka** [poetry]
Japanese literature (Beginnings) J: 61
- Tankage** [feed]
Hog (Feeding) H: 287
- Tankard** [cup]
Antique (Metalwork) A: 558
Colonial life in America picture on Ci: 808
- Tanker** [aircraft]
Air force (Aircraft and missiles) A: 183
Air Force, United States (Other aircraft) A: 191 with picture
Aircraft, Military (Tankers) A: 203 with picture
- Tanker** [ship] T: 28 with picture
Petroleum (Transporting petroleum) P: 343 with diagram
Ship (Tankers) S: 420 with pictures
- Tanna** [island, Vanuatu]
Vanuatu V: 284
- Tannenberg, Battle of** [1914]
World War I (The Eastern Front) W: 456
- Tanner, Beatrice** [British actress]
Campbell, Mrs. Patrick C: 91
- Tanner, Henry Ossawa** [American painter] T: 28 with picture
Painting (Painting outside France) P: 72-73 with picture
- Tanner, John R.** [American political leader]
Illinois (table) I: 71

- Tannhäuser** [German poet] T: 29
Tannhäuser [opera by Wagner]
 Liszt, Franz (His life) L: 349-350
 Tannhäuser T: 29
 Wagner, Richard (Early career) W: 4
- Tannic acid** [chemical] T: 29
 Invisible ink I: 369
 Quebracho Q: 38
 South America (Plants) So: 632-633
- Tannin** See Tannic acid in this index
- Tanning** [industrial process]
 Lactic acid L: 25
 Leather (Tanning) L: 167-168 with picture
 Tannic acid T: 29
- Tannu Tuva** [former country]
 Tuva T: 527
- Tansy** [plant] T: 29
- Tantalite** [mineral]
 Columbite Ci: 853
 Tantalum T: 29
- Tantalum** [element] T: 29
 Columbite Ci: 853
- Tantalus** [Greek mythology] T: 29
 Niobe N: 424
- Tantrism** [religion]
 Lamaism L: 49
- Tanunda** [community]
 Australia picture on A: 903
- Tanzania** [country, Africa] T: 30 with pictures and map
 Clinton, Bill (International affairs) Ci: 682f
 Flag picture on F: 200
 Olympic Games (Boycotts) O: 753
 Standard of living (table) So: 834
 See also the list of Related articles in the Tanzania article
- Tanzanite** [gem] T: 36
 Gem picture on G: 78
- T'ao Ch'ien** See Tao Qian in this index
- Tao Qian** [Chinese poet]
 Taoism (Taoism as a philosophy) T: 36
- Tao Te Ching** See *Classic of the Way and the Virtue, The* in this index
- Tao Yuanming** [Chinese horticulturalist]
 Chrysanthemum C: 540
- Taoiseach** [title]
 Ireland (The prime minister and Cabinet) I: 417
- Taoism** [religion] T: 36 with picture
 China (Religion) C: 486
 Chinese literature (Beginnings) C: 511
 Laozi L: 72
 Religion (Taoism) R: 221 with picture
 Zhuangzi Z: 595
- Taormina** [Sicily]
 Sicily picture on S: 447
- Taos** [New Mexico] T: 36
- Taos Pueblo** [New Mexico]
 New Mexico picture on N: 257
- Tap** [bowling]
 Bowling (table) B: 521
- Tap** [faucet]
 Plumbing (How faucets work) P: 579 with diagram
- Tap** [tool]
 Tool (Metalworking tools) T: 331
- Tap dancing**
 Dance (European and American theatrical dance) D: 31-32
- Tapa cloth**
 Pacific Islands (Clothing) P: 6
- Tapajós River** [Brazil]
 Amazon River (The course of the Amazon) A: 403
- Tap** [tool]
 Woodworking (Planning and design) W: 396 with picture
- Tape, Magnetic** See Magnetic tape in this index
- Tape deck** [electronics] See Cassette tape recorder; Tape recorder in this index
- Tape drive** [electronic device]
 Computer (Tape drives) Ci: 916
- Tape grass** [plant]
 Eelgrass E: 115
- Tape recorder** T: 36 with pictures
 Audio-visual materials (Audio materials) A: 883
 Communication picture on Ci: 886
 Electronic music E: 204
 Phonograph (How phonograph records are made) P: 401
- Taper**
 Colonial life in America picture on Ci: 808
- Taper Forum**
 Theater picture on T: 245
- Tapstry** [art] T: 39 with pictures
 England picture on E: 305
 Indian, American picture on I: 175
 Jesus Christ picture on J: 107
 Needlepoint N: 118
- Unicorn picture on U: 26
- Tapetum lucidum** [zoology]
 Cat (Head) C: 286-287 with picture
 Dog (Senses) D: 265
 Eye (Eyes of animals) E: 469
 Mammal (Senses) M: 120-121
- Tapeworm** [animal] T: 40 with picture
 Cat (Veterinary care) C: 295
 Parasite (Parasites that feed on people and animals) P: 154 with picture
 Worm (Flatworms) W: 500 with picture
- Tapioca** [food] T: 41
 Cassava C: 276
- Tapiola** [Finland] T: 41
- Tapir** [animal] T: 41 with picture
 Animal pictures on A: 481
- Tappan, Arthur** [American social reformer]
 Abolition movement (In the United States) A: 12
- Tappan, Lewis** [American social reformer]
 Abolition movement (In the United States) A: 12-13
- Tapping** [industrial process]
 Chicle C: 446 with picture
 Machine tool (Metal removal) M: 17-18
 Rubber (Tapping the tree) R: 502
- Tapping Reeve Law School** [Litchfield]
 Connecticut (Schools) Ci: 956
- Taproot** [botany]
 Plant (Roots) P: 529 with picture
 Root (Kinds of roots) R: 473 with diagram; (The importance of roots) R: 474
 Tree (Roots) T: 417
 Vegetable (Roots) V: 292 with picture
- Taqiyah** [clothing]
 Sudan (Clothing) So: 953
- Tar** [building material] T: 41
- Tar** [tobacco]
 Cigarette Ci: 553
 Smoking (Why smoking is dangerous) S: 520
- Tar Baby** [book by Morrison]
 American literature (Works by minority writers) A: 425
 Morrison, Toni M: 817
- Tar Heel State**
 North Carolina N: 473
- Tar River**
 North Carolina (Rivers, waterfalls, and lakes) N: 484
- Tar sands** See Bituminous sands in this index
- Tara** [monument]
 Archaeology picture on A: 596
- Tarabulus** [city, Lebanon]
 Tripoli T: 447
- Tarabulus** [city, Libya]
 Tripoli T: 447
- Tarai** [region]
 Nepal (People) N: 125; (Land and climate) N: 126
- Tarangire National Park**
 Tanzania picture on T: 33
- Tarantella** [dance] T: 41
 Folk dancing F: 320
- Tarantino, Quentin** [American film director]
 Motion picture (A new generation of filmmakers) M: 872
- Tarantism** [disease]
 Tarantula T: 42
- Tarantula** [spider] T: 42 with picture
 Animal picture on A: 480
 Insect pictures on I: 298
 Spider So: 783 with picture; (Cheliceræ) So: 784-785 with picture; (Tarantulas) So: 787 with picture; (table) So: 790
 Trap-door spider T: 402
- Tarantula hawk** [insect]
 Insect pictures on I: 298
- Taras Bulba** [book by Gogol]
 Russian literature (Late romanticism) R: 561-562
- Terascan Indians** [American Indians] T: 42
- Tarawa** [city, Kiribati] T: 42
- Tarawa** [island, Pacific]
 Kiribati K: 335
 World War II (Island hopping in the South Pacific) W: 488 with picture
- Tarawa** [ship]
 Amphibious ship picture on A: 442
- Tarbela Dam** [Indus River, Pakistan] T: 42
 Dam (table) D: 18
- Tarbell, Ida Minerva** [American author] T: 42 with portrait
 Muckrakers M: 908
- Tarboosh** [clothing]
 Fez F: 84
- Target** [electronics]
 Image orthicon I: 79
 Television (The television camera) T: 121; diagram on T: 124
- Target** [sports]
 Archery (Target archery) A: 602
- Target** [warfare]
 Range finder R: 139
- Target and band system** [economics]
 European Monetary System E: 418
- Target archery**
 Archery (Target archery) A: 602; picture on A: 604
- Target cell** [anatomy]
 Insulin (How insulin acts in the body) I: 308
- Target designator** [guidance device]
 Laser (Guiding) L: 83
- Target game**
 Game (Target games) G: 22
- Target market**
 Advertising (Creating advertisements) A: 76a
- Target material**
 Nuclear energy (Nuclear fission) N: 582
- Target pistol**
 Handgun (Single-shot pistols) H: 44
- Targioni-Tozzetti, Giovanni** [Italian librettist]
 Opera (*Cavalleria Rusticana*) O: 803
- Targum** [translation]
 Bible (The first translations) B: 285
 Old Testament (Translations) O: 741
- Tariff** [tax] T: 43
 Calhoun, John Caldwell (Southern leader) C: 35
 Cleveland, Grover (The currency and the tariff) Ci: 671
 Economics (World trade) E: 63-64
 European Union (Internal affairs) E: 418-419
 Exports and imports (Import restrictions) E: 455
 Foreign trade zone F: 389
 Free trade F: 499
 Gay Nineties (Industrial growth) G: 72-73
 General Agreement on Tariffs and Trade G: 82
 Great Depression (Economic breakdown) G: 340
 International trade (Government trade policies) I: 348
 McKinley, William (Congressman) M: 339
 North American Free Trade Agreement N: 470
 Reciprocal trade agreement R: 175
 Taft, William Howard (Legislative defeats) T: 10-11
 Taxation (Taxes on transactions) T: 53
 World Trade Organization W: 451
- Tariff Act** [1842]
 Obscenity and pornography (In the United States) O: 643-644
- Tariff Board** [U.S. history]
 Taft, William Howard (Legislative achievements) T: 11
- Tariff Commission, United States** [U.S.]
 International Trade Commission, United States I: 349
- "Tariff of abominations"** [U.S. history]
 Adams, John Quincy (The "tariff of abominations") A: 42
 Tariff (United States tariffs) T: 44
 United States, History of the (Jackson as President) U: 170
- Tarkenton, Fran** [American football player] T: 45
 Football picture on F: 367
- Tarkington, Booth** [American author] T: 45
- Tarleton, Banastre** [British general]
 Henry, Patrick (Career as governor) H: 190
 Jefferson, Thomas (Governor) J: 80
 Marion, Francis M: 211
- Tarleton State University**
 Texas A&M University T: 210
- Tarmac**
 Airport (Loading aprons and taxiways) A: 245
- Tarnish** [chemistry] T: 45
 Rust R: 567
 Silver (Properties of silver) S: 464-465
- Taro** [plant] T: 46 with picture
 Hawaii (Food) H: 94
 Palau (People) P: 102
- Tarot cards**
 Magic (From the 1500's to the 1700's) M: 50 with pictures
- Tarpan** [animal] T: 46
 Horse (Wild horses) H: 348
- Tarpaulin**
 Camping (Sleeping bags) C: 93-94
- Tarpon** [fish] T: 46
 Fish picture on F: 153
- Tarr, Peter** [American businessman]
 West Virginia (Early industries) W: 226
- Tarragon** [plant] T: 46
- Tarrant County Convention Center**
 Fort Worth picture on F: 418
- Tárrega, Francisco** [Spanish musician]
 Guitar G: 436

Tarsal bones [anatomy]

Foot (The bones) F: 352 *with diagram*
 Frog picture on F: 537

Tarsier [animal] T: 46 *with picture*

Eye picture on E: 468
 Primate P: 777 *with picture*; (Tarsiers) P: 778;
diagram on P: 778b

Tarsus [Turkey] T: 46

Tarsus, Saul of See Paul, Saint *in this index*

Tartan [fabric] T: 47 *with pictures***Tartar** [physiology]

Teeth (Dental checkups) T: 82

Tartar, Cream of [chemical]

Tartaric acid T: 48

Tartaric acid [chemical] T: 48**Tartarin** [literary figure]

Daudet, Alphonse D: 43

Tartars [people] See Tatars *in this index***Tartarus** [Greek mythology] T: 48

Hades H: 4

Tartini, Giuseppe [Italian violinist] T: 48**Tartu** [city, Estonia] T: 48**Tartu University**

Estonia (People) E: 361-362

Tartuffe [play by Molière]

Molière M: 694

Drama picture on D: 324

Tarzan [literary figure]

Burroughs, Edgar Rice B: 711

Tarzan of the Apes [book by Burroughs]

Burroughs, Edgar Rice B: 711

Tasajo [food]

Pemmican P: 233

Taschereau, Elzéar A. Cardinal [Canadian religious leader]

Cardinal (table: Canadian cardinals) C: 211

Teschereau, L.-Alexandre [Canadian political leader]

Quebec (table) Q: 29

Tashichhodzong [monastery]

Thimphu T: 258

Tashkent [city, Uzbekistan] T: 48**Task, The** [poem by Cowper]

Cowper, William Ci: 1113

Task force [military]

Navy (The organization of navies) N: 77 *with picture*

Tasman, Abel Janszoon [Dutch explorer] T: 48

Australia (European discovery) A: 922 *with map*

Exploration (Exploring the Pacific) E: 447 *with map*

New Zealand (Early European contact) N: 354;
picture on N: 356

Tasman Sea T: 49

Tasmania (History) T: 49

Tonga (History) T: 329

Tasman Sea [Australia] T: 48**Tasmania** [state, Australia] T: 49

Australia (The land) A: 908

Exploration (Exploring the Pacific) E: 447

Tasman, Abel Janszoon T: 48

Tasmanian devil [animal] T: 49 *with picture*

Mammal (table) picture on M: 128

Tasmanian tiger [animal] T: 50 *with picture*

Tasmanian wolf See Tasmanian tiger *in this index*

TASS [news service] T: 50**Tassel** [botany]

Corn (Appearance) Ci: 1057 *with picture*; (How the plant develops) Ci: 1057-1058 *with picture*; (How the plant reproduces) Ci: 1058

Tassel [decoration]

Caps and gowns C: 198 *with pictures*

Tasses

Armor picture on A: 720

Tassili-n-Ajjer [region, Africa]

Sahara (Land and climate) S: 20

Tasso, Torquato [Italian poet] T: 50

Italian literature (Humanism and the Renaissance) I: 494

Taste [sense] T: 50 *with diagrams*

Animal (Adaptations for sensing the environment) A: 492-493 *with picture*

Fish (Smell and taste) F: 164

Insect (Taste) I: 291

Mammal (Senses) M: 120

Nose N: 549

Senses S: 301

Smell (Taste and smell) S: 514

Tongue T: 329

Taste bud [anatomy]

Taste T: 50 *with diagrams*

Tatami [mat]

Japan (City life) J: 38

Tokyo (Visitor's guide) T: 316

Tatara Bridge

Bridge (table: Cable-stayed) B: 603

Tatars [people] T: 51

Crimea Ci: 1142

Kazan K: 252

Moscow (History) M: 826

Russia (The state of Kievan Rus) R: 547-548

Russian literature (Nonreligious literature)

R: 559; (The literature of Tatar captivity)

R: 559

Siberia (History) S: 446

Ukraine (Kievan Rus) U: 12

Tate, Allen [American author] T: 51

American literature (Modernist poetry) A: 421

Tate, Nahum [English poet]

Poet laureate (table: Poets laureate of the United Kingdom) P: 590

Tate House

Maine (Places to visit) M: 78

Tatiana [grand duchess of Russia]

Nicholas II [czar] picture on N: 403

Tatler, The [essays by Addison and Steele]

Addison, Joseph A: 47

Magazine (History) M: 43

Steele, Sir Richard So: 882

Tatra National Park [Poland]

National park (table) N: 42g

Tatransky National Park [Czech Republic]

National park (table) N: 42g

Tatting [lacemaking]

Lace L: 22; *picture on L: 21*

Tattler [bird] See Willet *in this index***Tattnall, Josiah, Jr.** [American political leader]

Georgia (table) G: 130

Tattooing [decoration] T: 51**Tatum, Art** [American pianist] T: 52

Jazz (The 1920's) J: 70

Tatum, Edward Lawrie [American biochemist]

Beadle, George Wells B: 179

Cell (The 1900's) C: 337-338

Nobel Prizes (Physiology or medicine: 1958) N: 445

Tau [atomic particle]

Lepton L: 205

Subatomic particle (Kinds of subatomic particles) So: 937

Tau [letter]

T T: 1 *with picture*

Tau-neutrino [atomic particle]

Astronomy (Neutrino astronomy) A: 845

Lepton L: 205

Neutrino N: 154

Physics (Physics today) P: 442-443

Taub [clothing]

Sudan (Clothing) So: 953

Taube, Henry [American chemist]

Nobel Prizes (Chemistry: 1983) N: 443

Tauchnitz [publisher]

Book (The 1800's) B: 467-468

Tauern Tunnel [Austria]

Tunnel (table) T: 491

Taufa'ahau [king of Tonga]

Tonga (History) T: 329

Taufa'ahau Tupou IV [king of Tonga]

Tonga (History) T: 329

Taughannock Falls [falls, New York]

Finger Lakes F: 104

Taum Sauk Project [Lesterville]

Missouri (Electric power) M: 667

Taunton Flag [U.S. history]

Flag picture on F: 210

Taupin, Bernie [British songwriter]

John, Elton J: 133

Tauriskos of Tralles [Greek sculptor]

Farnese Bull F: 46

Taurog, Norman [American director]

Motion picture (Best achievement in directing: 1930-31) M: 862

Taurus [astrology] T: 52 *with picture*

Zodiac (The zodiac in astrology) Z: 601 *with picture*

Taurus Mountains

Turkey (The land) T: 507 *with map*

Taurus-Nike-Tomahawk [rocket]

Rocket picture on R: 386

Taussig, Helen Brooke [American doctor] T: 52**Tautog** [fish]

Blackfish B: 393

Tautology

Age of Reason (Criticism of the Age of Reason) A: 139

Tavern

Colonial life in America (Recreation) Ci: 802-803

Tawes, J. Millard [American political leader]

Maryland (table) M: 255

Tawhid [religion]

Islam (Teachings and practices) I: 463

Tax See Taxation *in this index***Tax accounting**

Accounting (Fields of accounting) A: 23

Tax Appeals, Board of [U.S. history]

Tax Court, United States T: 52

Tax Court, United States T: 52

Internal Revenue Service I: 337

Tax credit [economics]

Income tax (Figuring the individual income tax) I: 104

Tax-deferred annuity

Insurance (Annuities) I: 311

Tax incentive

Exports and imports (Export promotion) E: 455

Tax Reform Act [1969]

Income tax (History of U.S. income taxes) I: 105

Tax Reform Act [1986]

Income tax (History of U.S. income taxes) I: 105

Social security (Unemployment insurance) So: 555

Tax return

Income tax (Paying the individual income tax) I: 104

Internal Revenue Service I: 337

Tax sharing

Metropolitan area (Tax sharing) M: 444

Tax stamp [U.S. history]

Revolutionary War in America (The Quartering and Stamp acts) R: 272 *with picture*

Taxable income

Income tax (Types of income taxes) I: 102; (Defining taxable income) I: 102

Taxation T: 52 *with diagrams*

See also Income tax *in this index*

Assessment A: 818

Capital gains tax C: 192

City (Solving city problems) Ci: 592

Economics (Public services) E: 62-63

Education (How should education be financed?) E: 108

Environmental pollution (Government action) E: 335

Government (Taxation) G: 288

Inland revenue I: 273

Internal revenue I: 337

Local government (Financial difficulties) L: 408

Medicine (Providing medical care) M: 366

Metropolitan area (Finances and taxation) M: 443

Percentage (Taxes) P: 282

Road (How roads and highways are paid for) R: 360

School (Financial support) S: 183

Social security (Financing Social Security) So: 555

State government (State finances) So: 865

Teaching (Current issues in U.S. teaching) T: 69

Tobacco T: 305

United States, History of the (Solving financial problems) U: 162

Taxation without representation

Revolutionary War in America (The Townshend Acts) R: 272-273

Franklin, Benjamin (A delegate in London) F: 490

United States, History of the (Colonial reaction) U: 157

Taxco [Mexico] T: 55**Taxi Driver** [film]

Foster, Jodie F: 428

Scorsese, Martin S: 210

Taxicab army [World War I]

Paris (Paris in wartime) P: 166

Taxidermy T: 55 *with pictures***Taxiing**

Airport (Loading aprons and taxiways) A: 245

Taxiway

Airport (Loading aprons and taxiways) A: 245

Taxodium [botany]

Tree (Needleleaf trees) T: 414-415

Taxoid [drug]

Taxol T: 56

Taxol [drug] T: 56**Taxonomy** [biology]

Biology B: 316

Botany (Plant classification and form) B: 508

Classification, Scientific Ci: 653

Zoology (What zoologists study) Z: 610

Taxpayer Relief Act [1997]

Income tax (History of U.S. income taxes) I: 105

Tay [people]

Vietnam (People) V: 365

Tay [river, Scotland]

Scotland (Rivers and lakes) S: 217 *with map*
 Viaduct V: 347

- Tay, Waren** [British physician]
Tay-Sachs disease T: 56
- Tay-Sachs disease** T: 56 *with diagram*
Genetic counseling (Reasons for seeking genetic counseling) G: 84-84a
Heredity (table) H: 204
Races, Human (The founder effect) R: 59
- Tay Son** [dynasty]
Vietnam (Independence) V: 370
- Tay Son Rebellion** [Vietnamese history]
Vietnam (Independence) V: 370
- Taya, Maawiya Ould Sid Ahmed** [Mauritanian political leader]
Mauritania (History) M: 315
- Tayab Salih** [Sudanese author]
Sudan (The arts) So: 954
- Taylor, Alfred A.** [American political leader]
Tennessee T: 135; (table) T: 152
- Taylor, Bayard** [American author]
May (Quotations) M: 321
- Taylor, Claudia Alta "Lady Bird"** [wife of Lyndon Baines Johnson] *See* Johnson, Lady Bird *in this index*
- Taylor, Edward** [American poet] T: 56
American literature (New England) A: 414
- Taylor, Elizabeth** [American actress] T: 57 *with picture*
Motion picture (Best performance by an actress: 1960, 1966) M: 862
- Taylor, Frederick Winslow** [American engineer] T: 57
- Taylor, George** [American patriot] T: 57
- Taylor, Harriet** *See* Mill, Harriet Taylor *in this index*
- Taylor, James** [American musician]
Rock music (Rock goes pop) R: 379
- Taylor, Jeremy** [English religious leader]
English literature (Prose writings) E: 317
- Taylor, John** [American political leader]
New York (table) N: 313
- Taylor, John** [American political leader]
South Carolina (table) So: 658
- Taylor, Joseph Hooton, Jr.** [American physicist]
Nobel Prizes (Physics: 1993) N: 442
- Taylor, Kenneth N.** [American author]
Bible (Modern English translations) B: 286-287
- Taylor, Leon R.** [American political leader]
New Jersey (table) N: 249
- Taylor, Margaret Smith** [wife of Zachary Taylor]
First ladies (table) F: 142
Taylor, Zachary (Taylor's family) T: 58; (Life in the White House) T: 60
- Taylor, Maxwell Davenport** [American general] T: 57
- Taylor, Mick** [British musician]
Rolling Stones R: 403
- Taylor, Mildred D.** [American author] T: 57
- Taylor, Paul** [American choreographer] T: 57
- Taylor, Richard** [Confederate general]
Taylor, Zachary (Taylor's family) T: 58
- Taylor, Richard** [father of]
Taylor, Zachary (Childhood) T: 58
- Taylor, Richard Edward** [Canadian physicist]
Kendall, Henry Way K: 258
Nobel Prizes (Physics: 1990) N: 442
- Taylor, Robert Love** [American political leader]
Tennessee T: 135; (table) T: 152
- Taylor, Sarah** [daughter of]
Taylor, Zachary (Taylor's family) T: 58
- Taylor, Sarah Strother** [mother of]
Taylor, Zachary (Childhood) T: 58
- Taylor, William C.** [American chemist]
Glass (table) G: 218
- Taylor, William R.** [American political leader]
Wisconsin (table) W: 365
- Taylor, William S.** [American political leader]
Kentucky (table) K: 290; (The early 1900's) K: 293
- Taylor, Zachary** [U.S. President] T: 58 *with pictures*
Barnburners B: 115
Fillmore, Millard F: 100
Mexican War (Events leading up to the war) M: 446; (Taylor's campaign) M: 446
United States, History of the (Manifest destiny) U: 167
Van Buren, Martin (Later years) V: 273
Whig Party (Decline of the Whigs) W: 280
- Taylor Cub** [airplane]
Airplane picture on A: 234
- Taylorism** [industry]
Taylor, Frederick Winslow T: 57
- Tayra** [animal] T: 61 *with picture*
- Tazewell, Littleton Waller** [American political leader]
Virginia (table) V: 417
- TB** *See* Tuberculosis *in this index*
- Tb** [symbol]
- Terbium** T: 172
- Tbilisi** [city, Georgia] T: 61
Georgia G: 110 *with picture*
- Tc** [symbol]
Technetium T: 73
- TCA** [drug] *See* Tricyclic antidepressant *in this index*
- TCDD** [chemical]
Dioxin D: 215
- Tchaikovsky, Peter Ilich** [Russian composer] T: 61 *with portrait*
Ballet (Music) B: 50
Classical music picture on Ci: 650
- Tchambuli** [people]
Sexuality (Cultural influences) S: 338a
- TDD** [machine]
Deafness (Special devices) D: 58
- Te** [symbol]
Tellurium T: 129
- Te Kanawa, Kiri** [New Zealand singer] T: 62 *with portrait*
- Tea** [drink] T: 62 *with pictures*
Agriculture picture on A: 147
China picture on C: 496
Indian, American (Food) I: 136d
Kenya picture on K: 302
Scotland (Food and drink) S: 214
- Tea** [meal]
England (Food and drink) E: 296
Food (Customs) F: 332-333
- Tea Act** [1773]
Boston Tea Party B: 506
Declaration of Independence (Events leading to the Declaration) D: 74
Revolutionary War in America (The Tea Act) R: 273
United States, History of the (Renewed conflict) U: 157
- Tea bag**
Tea (History) T: 63-64
- Tea plant**
Camellia C: 79
- Tea rose**
Flower picture on F: 281
Rose R: 477; picture on R: 478
- Tea tax** *See* Tea Act *in this index*
- Teach, Edward** *See* Blackbeard *in this index*
- Teacher** *See* Teaching *in this index*
- Teacher aide**
Nursery school (Nursery schools in the United States) N: 616
Careers (Teaching) C: 231-232
Teaching (Certification of teachers) T: 68
- Teacher bird**
Ovenbird O: 881 *with picture*
- Teacher Educators, Association of** [organization]
Teaching (Teachers organizations) T: 69
- Teacher evaluation**
Teaching (The effectiveness of teaching) T: 69
- Teacher in America** [book by Barzun]
Barzun, Jacques B: 123
- Teacher training** [education]
Education (Education today) E: 101; (Who should teach?) E: 107
Pestalozzi, Johann Heinrich P: 318
Teaching (Teacher-training programs) T: 67; (The effectiveness of teacher training) T: 70
- Teachers, American Federation of** *See* American Federation of Teachers *in this index*
- Teachers College, Columbia University** T: 64 *with picture*
Butler, Nicholas Murray B: 728
Columbia University (Affiliated institutions) Ci: 853
- Teachers Insurance and Annuity Association**
Carnegie Foundation for the Advancement of Teaching C: 243
- Teacher's Word Book** [book by Thorndike]
Thorndike, Edward Lee T: 267
- Teaching** [career] T: 65 *with pictures*
See also Education *in this index*
Academic freedom A: 20
Careers (Teaching) C: 231 *with picture*
Educational psychology E: 111
Elementary school (Elementary school instruction) E: 225
High school H: 228
Kindergarten (The kindergarten teacher) K: 318
Nursery school (The nursery school teacher) N: 616
Pioneer life in America (Education) P: 484 *with picture*
Reading (The teaching of reading) R: 157; (Working with the school) R: 160
- School (Public school operation) S: 183
Universities and colleges (Faculty) U: 208
See also the list of Related articles in the Teaching article
- Teaching certificate**
Teaching (Certification of teachers) T: 68
- Teaching hospital**
Hospital (How hospitals are classified) H: 371
Medicine (Financing advanced medical care) M: 377-378
- Teaching machine**
Computerized instruction (Early teaching machines) Ci: 925
- Teagarden, Jack** [American musician] T: 70
Jazz (The swing era) J: 71
- Teak** [tree] T: 71 *with pictures*
Thailand (Economy) T: 225
- Taal** [bird] T: 71 *with picture*
Bird (Birds of inland waters and marshes) B: 340 *with picture*
- Team handball** T: 71
- Team roping**
Rodeo (Team roping) R: 397
- Team sales**
Sales (Current trends in sales) S: 65
- Team teaching**
Education (The organization of U.S. education) E: 89-90
Elementary school (Elementary school instruction) E: 225
Middle school M: 535
- Teamsters, Chauffeurs, Warehousemen, and Helpers of America, International Brotherhood of** *See* Teamsters Union *in this index*
- Teamsters Union** T: 72
American Federation of Labor and Congress of Industrial Organizations (History) A: 410
Hoffa, James Phillip H: 283
Hoffa, James Riddle H: 283
Labor movement (table) L: 8
Reuther, Walter Philip R: 266
- Teapot Dome** [U.S. history] T: 72
Fall, Albert Bacon F: 15
Harding, Warren Gamaliel H: 56
Roaring Twenties (Changing attitudes) R: 363
- Tear gas** [weapon]
Chemical-biological-radiological warfare (Chemical) C: 396
Mace M: 11
- Tear-of-the-Clouds** [lake, New York]
New York (Rivers) N: 306
- Tears** [physiology] T: 72 *with picture*
Disease (Natural barriers) D: 231 *with diagram*
Eye (The outer parts) E: 460 *with picture*
- Tears, Trail of** [U.S. history] *See* Trail of Tears *in this index*
- Teasdale, Joseph P.** [American political leader]
Missouri (table) M: 668
- Teasdale, Sara** [American poet] T: 73
- Teasel** [plant] T: 73 *with picture*
- Teaser** [job]
Glass (Glass terms) G: 222
- Teasing**
Hairdressing (The 1900's) H: 12
- Teat** [zoology]
Cattle (Udder) C: 308
- Teatree** [tree]
Tree T: 426 *with picture*
- Teatro Farnese** [Parma, Italy]
Drama (The Italian stage) D: 330-331
- Teatro Olimpico** [Vicenza, Italy]
Drama (The Italian stage) D: 330
- Teatro San Carlo** [Naples, Italy]
Naples (Way of life) N: 13
- Teatro San Cassiano** [Venice, Italy]
Opera (Early baroque opera) O: 797
- Tebaldi, Renata** [Italian singer] T: 73
- Teberdinsky National Park** [Russia]
National park (table) N: 42g
- Tebet** [month]
Calendar (The Hebrew calendar) C: 29
- Technetium** [element] T: 73
- Technical assistance** [international relations] T: 73
Foreign aid (Technical assistance and relief) F: 384
United Nations (Economic and technical aid) U: 87
- Technical Commission, International**
Suez Canal (History) So: 958
- Technical director** [career]
Television (Putting a show on the air) T: 111-112
- Technical efficiency** [economics]
Industry (Performance) I: 262
- Technical foul** [sports]
Basketball (Fouls) B: 147 *with diagram*; (Fouls) B: 147-150
Lacrosse (Men's lacrosse) L: 24

Technical institute [school]

Careers (Technical institutes) C: 217

Technical knockout

Boxing (Scoring a fight) B: 528-529

Technical Library

Library (Special libraries) L: 250

Technical nurse

Nursing N: 617

Technical penPen (Specialty pens) P: 234 *with picture***Technical rehearsal**Theater *picture on* T: 240**Technical rock climbing** [sport]Climbing Ci: 680 *with picture***Technical school**

Community college Ci: 898

England (Education) E: 297

Vocational education (Public high schools) V: 434

Technical sergeant

Rank, Military (table) R: 140

Technical writing

Writing W: 511

TechnicianCareers (Technical institutes) C: 217;
(Construction, maintenance, and repair) C: 221-222

Radio (Careers) R: 91

Technicolor [photography] T: 73

Disney, Walt (The first Disney cartoons) D: 235-236

Technique of My Musical Language, The

[book by Messiaen]

Messiaen, Olivier M: 423

Technological unemployment

Technology (Challenges of technology) T: 76-77

Unemployment (Types of unemployment) U: 22

Technology T: 74 *with pictures**See also* *Invention in this index*Careers (Technical and mathematical occupations) C: 232 *with picture*
City (Advances in technology) Ci: 577;
(Metropolitan cities) Ci: 588-589;
(Economy) Ci: 590

Culture (How cultures change) Ci: 1189

Economics (Making the economy grow) E: 59

Education (The Age of Reason) E: 101

Engineering E: 284

Environmental pollution (Scientific efforts) E: 336

Exports and imports (Reasons for change) E: 454

Human being (Industrial societies) H: 415

Industrial Revolution I: 246

Industry (Technology) I: 258

Mathematics (The importance of mathematics) M: 302

Physics (Physics today) P: 442-443

Poverty (The causes of poverty) P: 724

Science (The importance of science) S: 191

United States, History of the (Technology) U: 187

*See also the list of Related Articles in the Technology article***Technology assessment**

Technology (Using technology safely) T: 77

Technology Assessment, Office of [U.S.] T: 78**Technology education** *See* Industrial arts *in this index***Technology museum**

Museum (Science museums) M: 938

Technothriller

Science fiction (Growing popularity) S: 205-206

Tectonic plate [geology] *See* Plate tectonics *in this index***Tectorial membrane** [anatomy]Ear (The inner ear) E: 8-9 *with diagram*; *diagram on* E: 10**Tecumseh** [American Indian chief] T: 78 *with picture*

Harrison, William Henry (Entry into politics) H: 75

Indian wars (Other Midwestern conflicts) I: 192-193

Indiana *picture on* I: 217

Pioneer life in America (Pioneers and Indians) P: 485

War of 1812 (Thames River) W: 33

Westward movement in America (Indian conflicts) W: 247

Tecumseh [book by Mair]

Mair, Charles M: 94

Ted Williams Tunnel

Boston (Building boom) B: 504

Tedder, Arthur William [British general] T: 78**Teddy bear** [toy]

Roosevelt, Theodore R: 464

Teddy bear chollaFlower *picture on* F: 291**Tee** [sports]Curling *diagram on* Ci: 1196

Golf (The course) G: 260; (The tee) G: 260

Tee Ball

Little League Baseball L: 391

Teel's Island [painting by Wyeth]

Painting (Space) P: 35

Wyeth, Andrew *picture on* W: 515**Teen age**

Gang G: 26

High school H: 228

Juvenile delinquency J: 205

Library (Services for young adults) L: 240

Suicide So: 964

Teens in Action [program]

Camp Fire Boys and Girls (Teens in Action) C: 89

Teepee *See* Teepee *in this index***Teeth** [anatomy] T: 79 *with pictures**See also* Mastication *in this index*Animal (Teeth and jaws) A: 491 *with picture*

Baby (From 6 to 12 months) B: 7

Dentistry D: 143 *with pictures*

Dog (Body structure) D: 264-265

Human body *diagram on* H: 422Lion (The body of a lion) L: 340-341 *with picture*Mammal (What mammals eat) M: 121 *with diagrams*Mouth M: 903 *with diagram*

Orthodontics O: 859

Periodontitis P: 288

Prehistoric animal (Interpreting fossil evidence) P: 741

Prehistoric people (Studying fossils) P: 753

Rodent R: 397 *with picture*

Ruminant R: 519

Whale (Kinds of toothed whales) W: 258

Teeth [botany]Leaf (The blade) L: 153 *with picture***Teeth** [zoology]Shell *diagram on* S: 385**Teething**

Teeth (Deciduous teeth) T: 79

Teflon [material] T: 87**Tefnut** [Egyptian goddess]Mythology (The Great Ennead) M: 976 *with picture***Tegucigalpa** [city, Honduras] T: 87Honduras H: 308 *with picture***Teheran** [Iran] *See* Tehran *in this index***Tehran** [city, Iran] T: 87 *with picture*

Asia (City life) A: 779

Iran (Climate) I: 404; *picture on* I: 401**Tehran Conference** [1943] T: 88

Roosevelt, Franklin Delano (The Big Three) R: 461

United Nations (The Atlantic Charter) U: 94

World War II (The Allies attack in Europe and Northern Africa) W: 478-479

Tehuantepec, Isthmus of [region, Mexico]

Mexico (The Gulf Coastal Plain) M: 462

Tehuelche IndiansIndian, American (Indians of the Marginal Regions) I: 176-177; *picture on* I: 140**Teian bard** [nickname]

Anacreon A: 447

Teide, Pico de [mountain]

Canary Islands C: 165

Teilhard de Chardin, Pierre [French philosopher] T: 88**Teiresias** [legendary figure]

Odyssey (Odysseus describes his wanderings) O: 675

Tejas Indians [American Indians]

Texas T: 185

Tektite [geology] T: 88**Tel Aviv** [city, Israel] T: 88 *with picture*Israel *picture on* I: 480

Jaffa J: 20

Telecine [machine]

Motion picture (Preliminary steps) M: 854-855

Television (Other production methods) T: 113; (Telecine) T: 122

Telecommunication Union, International [UN]*See* International Telecommunication Union *in this index***Telecommunications** [communication] T: 89

Audio-visual materials (Multisensory materials) A: 883

AT&T Corp. A: 852

Modem M: 686

Technology (The development of electronics) T: 75

Telecommunications Act [1996]

Closed captioning Ci: 685

Telephone (Competition in the U.S. telephone industry) T: 101

Telecommuting

Computer (Personal computers) Ci: 909

Telegraaf, De [newspaper]

Netherlands (Communication) N: 148

Telegram

Telegraph T: 90

Telegraph, The [newspaper]

Newfoundland and Labrador (Communication) N: 374

Telegraph [communications] T: 90 *with pictures*

Cable (Telegraph cables) C: 6

Communication (The 1800's) Ci: 881-882 *with picture*

Marconi, Guglielmo M: 196

Morse, Samuel Finley Breese M: 817

Morse code M: 819

Radio (Early development) R: 91

United States, History of the (Expansion and the economy) U: 168-169 *with picture*

Western Union W: 241

Telegraph Hill

San Francisco (Downtown San Francisco) S: 92-93

Telegraph plant T: 93**Telegraph Union, International**

International Telecommunication Union I: 347

Telegraphophone

Tape recorder (History) T: 38-39

Telaki, Samuel [Hungarian explorer]

Lake Turkana L: 47

Telemachus [book by Fénelon]

Fénelon, François de Salignac de la Mothe-F: 71

French literature (Classical prose) F: 520

Telemachus [legendary figure]

Mentor M: 411

Odyssey (The *Odyssey* begins) O: 675; (The *Odyssey* as literature) O: 675

Ulysses (The Trojan War) U: 17-18

Telemann, Georg Philipp [German composer]

T: 93

Telemarketing [sales] T: 93

Careers (Sales) C: 229-230

Telemetry [measurement] T: 93

Ambulance A: 406

Rocket (Atmospheric research) R: 386

Telemundo [network]

Television (The national networks) T: 114

Teleoceras [animal]Prehistoric animal *picture on* P: 740**Teleology** [philosophy]

Ethics (Modern ethics) E: 366

God (Ideas about God) G: 244

Mechanist philosophy M: 355

Philosophy (Metaphysics) P: 383

Teleost [fish]

Fish (Bony fish) F: 147; (The first modern fish) F: 171

Teleosteans [fish]

Prehistoric animal (Fish) P: 738

Telepathy T: 93

Extrasensory perception (What parapsychologists study) E: 458

Mind reading M: 563

Telephone T: 94 *with pictures*

AT&T Corp. A: 852

Bank (Electronic banking) B: 89-90

Bell, Alexander Graham (The telephone) B: 241

Berliner, Emile B: 267

Cable (Types and functions of cables) C: 5;

(Telephone cables) C: 7

Careers (Administrative support) C: 219 *with picture*Cellular telephone C: 340 *with diagram*Communication (The telephone) Ci: 882 *with picture*; (The digital age) Ci: 885

Communications satellite Ci: 888a

Deafness (Special devices) D: 58 *with picture*Disabled (Problems of people with disabilities) D: 219 *with picture*; (Attitudes toward people with disabilities) D: 221-222Edison, Thomas Alva (The Wizard of Menlo Park) E: 78; *picture on* E: 80

Etiquette (Telephone etiquette) E: 373

Fax machine F: 57

Fiber optics (Uses of optical fibers) F: 88-89

Gray, Elisha G: 334

Intercom I: 320

Invention (Research laboratories) I: 357

Microphone (Carbon microphones) M: 516

Modem M: 686

Pager P: 20

Rural Electrification Administration (Telephone program) R: 522

- Technology (Technology and society) T: 76
 Telecommunications T: 89
 Telemarketing T: 93
 Western Union W: 241
Telephone answering machine
 Telephone picture on T: 94
Telephone directory
 Advertising (Other ways of advertising) A: 75
Telephone exchange
 Connecticut (Interesting facts) Ci: 953 *with picture*
Telephone network
 Telephone T: 94
Telephone pole design prison
 Prison (Prison buildings) P: 806
Telephoto (machine)
 Fax machine (History) F: 58
Telephoto lens
 Camera (Single-lens reflex cameras) C: 82-83
 Photography (Single-lens reflex cameras) P: 417; *picture on* P: 418
TelePrompTer
 Television (Planning and preparation) T: 110c-111 *with picture*
Telescope T: 102 *with pictures*
 Arecibo Observatory A: 644
 Astronomy (Modern astronomy) A: 836 *with pictures*
 Binoculars B: 309
 Galileo G: 11 *with picture*; (Mature scientific career) G: 11
 Green Bank Telescope G: 380
 Keck Observatory K: 254
 Moon (Early observations with telescopes) M: 792
 Mount Wilson Observatory M: 890
 Newton, Sir Isaac (Light and color) N: 389
 Observatory (Observatories with telescopes) O: 644
 Palomar Observatory P: 112
 Satellite (How scientists study satellites) S: 150c
 Science *picture on* S: 191
 Survey (Surveying tools) So: 1011
 World, History of the *picture on* W: 442
Telescope Peak (mountain, California)
 Death Valley D: 62
Telescopic sight
 Rifle (The parts of a rifle) R: 338 *with diagram*
Telesphorus, Saint [pope]
 Pope (table) P: 666
Teletext (service)
 Television (Televized information services) T: 110c
Televized information service
 Television (Televized information services) T: 110c
Television T: 110 *with pictures*
 Advertising (Television) A: 73 *with picture*;
 (The rise of radio and television) A: 80
 Animation (The animation revival) A: 514b
 Antenna A: 544 *with pictures*
 Audio-visual materials (Multisensory materials) A: 883
 Baird, John Logie B: 31
 Camcorder C: 75
 Closed captioning Ci: 685
 Color (Mixing colored lights) Ci: 821-822
 Communication (The development of television) Ci: 885 *with picture*
 Communications satellite Ci: 888a
 Deafness (Special devices) D: 58-59
 De Forest, Lee D: 89
 Disabled *picture on* D: 219
 Electronics (The vacuum tube era) E: 215
 Farnsworth, Philo Taylor F: 46
 Federal Communications Commission F: 63
 Football (The rise of professional football) F: 367
 Image orthicon I: 79
 Internet (Push technology) I: 350b
 Journalism (Television) J: 171 *with picture*;
 (Television journalism) J: 175
 McLuhan, Marshall M: 343
 Motion picture M: 847; (Distribution) M: 860;
 (Postwar American movies) M: 870
 News service N: 379
 Political convention (Attracting publicity) P: 630
 Public opinion (Radio and television) P: 860
 Reading (The importance of reading) R: 155-156
 Recreation (Kinds of recreation) R: 183
 Remote control (Applications of remote control) R: 230-231
 Remote sensing R: 231
 Sexuality (The mass media) S: 338a
 Soap opera So: 543
 Static So: 867
 Telephone (Videophones) T: 98 *with picture*
 United States, History of the (A new life style) U: 191
 Video game V: 359
 Videotape recorder V: 360
 Writing (Scriptwriting) W: 512
 Zworykin, Vladimir Kosma Z: 614
 See also the list of *Related Articles in the Television article*
Television and Radio Artists, American Federation
 Labor movement (table) L: 8
Television camera
 See also Camcorder in this index
 Television (Putting a show on the air) T: 111-112; (Creating television signals) T: 120; *diagram on* T: 124
Television station
 Television (The U.S. television industry) T: 113
Television violence
 Child (Serving as models of appropriate behavior) C: 453
Telex [communications]
 Telegraph (Decline) T: 92
 Western Union W: 241
Telfair, Edward [American political leader]
 Georgia (table) G: 130
Telford, Thomas [Scottish engineer] T: 129
 Industrial Revolution (Roads) I: 251
Tell, The [region, Algeria]
 Algeria (The Tell) A: 363
Tell, William [legendary figure] T: 129 *with picture*
 See also William Tell [opera] in this index
 Lake of Lucerne L: 42
Tell el-Amarna [Egypt]
 Egypt, Ancient (The New Kingdom) E: 143
Tell Me How Long the Train's Been Gone
 [book by Baldwin]
 Baldwin, James B: 39
Tellegen, Benjamin D. H. [Dutch engineer]
 Vacuum tube (Development of the vacuum tube) V: 259
Teller [religion]
 Pope (Present procedures) P: 662
Teller, Edward [American physicist] T: 129
Teller, Henry Moore [American government official]
 Interior, Department of the (table) I: 325
Télez, Gabriel See Tirso de Molina in this index
Tellico Dam [Little Tennessee River]
 Conservation (Water conservation) Ci: 977-978
 Darter D: 38
"Telling the Bees" [poem by Whittier]
 Whittier, John Greenleaf W: 296
Telltale board [sports]
 Squash So: 813 *with diagram*
Tellurium [element] T: 129
Telogen [anatomy]
 Hair (Cycles of hair growth) H: 10
Telephase [biology]
 Cell (Mitosis) C: 330-331
Telson
 Crustacean (The body of a crustacean) Ci: 1162 *with diagram*
Telstar 1 [communications satellite]
 Communication *picture on* Ci: 886
 Communications satellite (History) Ci: 888b-889
 New Jersey (Communication) N: 248
Telugu [language]
 Dravidians D: 342
 India (Languages) I: 114; (India in the 1950's and early 1960's) I: 133
Temasek [former name]
 Singapore (History) S: 471
Temin, Howard Martin [American physiologist]
 Nobel Prizes (Physiology or medicine: 1975) N: 445
Temne [people]
 Sierra Leone (People) S: 451
Tempel-Tuttle, Comet [astronomy]
 Comet (table) C: 868
Tempera [paint]
 Painting (Tempera) P: 38 *with picture*
Temperance League, National
 American Council on Alcohol Problems A: 409
Temperance movement [social reform]
 Prohibition (Prohibition in the United States) P: 815
 Women's movements (The beginnings of women's movements) W: 385
Temperance Union, Woman's Christian See Woman's Christian Temperance Union in this index
Temperate coniferous forest
 Biome (table) B: 323 *with map*
 Plant (Forests) P: 522; *picture on* P: 524
Temperate deciduous forest
 Animal (Animals of the temperate forests) A: 478 *with pictures*
 Biome (table) B: 323 *with map*
 Forest (Temperate deciduous forests) F: 393 *with map*; *picture on* F: 391
 Plant (Forests) P: 522-523; *picture on* P: 526
Temperate evergreen forest
 Animal (Animals of the temperate forests) A: 478 *with pictures*
 Forest (Temperate evergreen forests) F: 393 *with map*; *picture on* F: 391
Temperate forest
 Forest (Kinds of forests) F: 392-393
Temperate fruit
 Fruit (How horticulturists classify fruits) F: 544 *with pictures*
Temperate savanna
 Forest (Temperate savannas) F: 395 *with map*
Temperate zone [geography]
 Bird (The distribution of birds) B: 332
 Rain (The ice-crystal process) R: 124
Temperature T: 130
 Air *diagram on* A: 171
 Automation (How automation works) A: 945 *with diagram*
 Celsius scale C: 341
 Climate Ci: 675
 Global warming G: 232
 Greenhouse effect (Increases in greenhouse gases) G: 383
 Heat (Temperature and heat) H: 150
 Heating H: 157
 Metric system (Structure of the metric system) M: 437; (The metric system at a glance) M: 438-439 *with picture*; (Heat) M: 440
 Ocean (Temperature) O: 653
 Sun So: 975
 Thermography T: 254
 Thermometer T: 254
 Weather (Air temperature) W: 157; (table: Weather terms) W: 157
Temperature, Body [physiology] T: 130
 Animal (Some common ways of grouping animals) A: 472
 Bee (Regulating body temperature) B: 202
 Cold-blooded animal C: 761
 Dinosaur (How dinosaurs lived) D: 211
 Fever F: 83
 First aid (Heatstroke and heat exhaustion) F: 141
 Fish (How fish adjust to change) F: 168
 Homeostasis H: 303
 Hyperthermia H: 476
 Hypothermia H: 481
 Perspiration P: 305
 Races, Human (Climatic adaptations) R: 58
 Warm-blooded animal W: 36
Temperature-humidity index
 Heat index H: 155
Temperature inversion [meteorology]
 Air (The troposphere) A: 172-173
 Air pollution (Chief sources of air pollution) A: 197; (Health) A: 198
 Smog S: 519
 Weather (How people affect the weather) W: 170
Tempered glass
 Glass (Specialty glasses) G: 212
Tempered safety glass
 Glass (Specialty glasses) G: 212
Tempering [industrial process] T: 130
 Glass (Tempering) G: 217
Tempest, The [painting by Giorgione]
 Painting (The Renaissance in Venice) P: 55-56 *with picture*
Tempest, The [painting by Kokoschka]
 Painting (People) P: 31 *with picture*
Tempest, The [play by Shakespeare]
 Shakespeare, William (His last years) S: 349;
 (The Tempest) S: 365 *with picture*
Tempietro [Rome]
 Bramante, Donato B: 562 *with picture*
Templars, International Organization of Good
 Good Templars, International Organization of G: 269
Templars, Knights See Knights Templars in this index
Temple [fruit]
 Tangor T: 27
Temple [religion] T: 131 *with picture*
 See also Church in this index
 Architecture (Mesopotamian architecture) A: 611 *with picture*; (Classical Greek architecture) A: 615 *with pictures*
 Egypt, Ancient (Arts and sciences) E: 139; *picture on* E: 141

- Greece, Ancient (The arts) **G**: 369; *picture on* **G**: 370
- India (The arts) **I**: 119 *with pictures*
- Indonesia *picture on* **I**: 237
- Judaism (The synagogue) **J**: 180
- World, History of the *pictures on* **W**: 426, **W**: 430
- Temple, Henry John** [British political leader]
Palmerston, Viscount **P**: 111
- Temple, Shirley** [American actress] **T**: 131 *with picture*
- Temple, William** [American political leader]
Delaware (table) **D**: 109
- Temple in Jerusalem**
Jerusalem (Jewish sites) **J**: 95-96; (Ancient times) **J**: 100
- Jews (The kingdom of Israel) **J**: 121
- Palestine (Invasions and conquests) **P**: 104
- Solomon **So**: 584
- Tishah be-Av **T**: 298
- Temple mound**
Mound builders (The Mississippian Culture) **M**: 882-883 *with picture*
- Temple Mount** [area]
Israel (Recent developments) **I**: 489-490
- Jerusalem (Islamic sites) **J**: 96 *with map*
- Sharon, Ariel **S**: 377
- Temple of ...**
Temples appear under their key words, as in
Artemis, Temple of
- Temple School** [Boston]
Alcott, Bronson **A**: 338
- Temple Scroll**
Dead Sea Scrolls **D**: 56
- Temple Square** [Salt Lake City]
Utah (Visitor's guide) **U**: 238 *with picture*
- Temples of Abu Simbel** [Egypt] *See* Abu Simbel, Temples of *in this index*
- Templeton, Charles A.** [American political leader]
Connecticut (table) **Ci**: 967
- Tempo** [music]
Music (Indicating time values) **M**: 953-955
- Tempo, II** [newspaper]
Rome (Economy) **R**: 430
- Temporal artery** [anatomy]
Human body *diagram on* **H**: 422
Pulse **P**: 898
- Temporal bone** [anatomy]
Ear (The outer ear) **E**: 7; *diagram on* **E**: 8
- Head *diagram on* **H**: 123
- Human body *diagram on* **H**: 422
- Skull **S**: 495
- Temporal gland** [zoology]
Elephant (Musth) **E**: 231
- Temporal lobe** [anatomy]
Brain (The cerebrum) **B**: 550b *with diagram*
- Penfield, Wilder Graves **P**: 238
- Temporal muscle** [anatomy]
Head *diagram on* **H**: 123
- Temporal type** [classification]
Archaeology (Classification) **A**: 597
- Temporary Assistance to Needy Families** [U.S. program]
Welfare (Cash aid programs) **W**: 190; (Since 1960) **W**: 191-192
- Temporary hours** [time]
Sundial **So**: 990
- Temporary injunction** [law]
Injunction **I**: 272
- Restraining order **R**: 263
- Temporary visitor** [law]
Alien **A**: 367
- Temptation of Saint Anthony, The** [painting by Bosch]
Bosch, Hieronymus **B**: 491
- Temptation of Saint Anthony, The** [book by Flaubert]
Flaubert, Gustave **F**: 230
- Temptations of Big Bear, The** [book by Wiebe]
Canadian literature (Modern English-Canadian fiction) **C**: 160
- Temüjin** *See* Genghis Khan *in this index*
- Ten Commandments** [Old Testament] **T**: 131
- Ark of the Covenant **A**: 693
- Exodus **E**: 438
- Law (Early developments in the East) **L**: 133
- Moses (The covenant with God) **M**: 829
- Shavuot **S**: 377
- Ten Commandments, The** [film]
De Mille, Cecil Blount **D**: 119
- Ten Days That Shook the World** [book by Reed]
Reed, John **R**: 194
- Ten Days That Shook the World** [film]
Eisenstein, Sergei Mikhailovich **E**: 156
- Ten-gallon hat**
Stetson, John Batterson **So**: 895
- Ten-lined June beetle** [insect]
Beetle *picture on* **B**: 218
- Ten lost tribes** [ancient Israel]
Jews (Foreign domination) **J**: 121
- Ten Plagues**
Moses (The Exodus) **M**: 828-829
- 10-point must system**
Boxing (Scoring a fight) **B**: 528-529
- Ten-second rule**
Basketball (Changes in the game) **B**: 151-152
- Ten Sleep Creek**
Wyoming (The Johnson County War) **W**: 536
- Ten-spot dragonfly**
Insect *picture on* **I**: 280
- Ten Thousand Smokes, Valley of the**
Katmai National Park **K**: 249
- Ten Wings**
I Ching **I**: 2
- Ten Years' War** [1868-1878]
Cuba (Struggle against Spain) **Ci**: 1176
- Tenancy at will** [law]
Tenant **T**: 132
- Tenancy for years** [law]
Tenant **T**: 132
- Tenancy in common** [law]
Joint tenancy **J**: 156
- Tenant** [law] **T**: 132
- Fixture **F**: 191
- Joint tenancy **J**: 156
- Lease **L**: 166
- Tenant farming **T**: 132
- Tenant farming** [agriculture] **T**: 132
- Asia (Farm organization) **A**: 800
- Farm and farming (Farm owners and farm operators) **F**: 41
- United States, History of the (The war-torn South) **U**: 179
- Tenant of Wildfell Hall, The** [book by Brontë]
Brontë sisters (Their works) **B**: 637
- Tenants' insurance**
Insurance (Homeowners' insurance) **I**: 313
- Tenant's Relief Bill** [1886]
Parnell, Charles Stewart **P**: 177
- Tenasserim Coast**
Myanmar (Climate) **M**: 970c
- Tenaya** [American Indian chief]
Yosemite National Park (Yosemite Valley) **Y**: 570
- Tenaya Lake** [California]
Yosemite National Park (Hetch Hetchy Valley) **Y**: 570
- Tender** [law] *See* Legal tender *in this index*
- Tender Is the Night** [book by Fitzgerald]
American literature (The Lost Generation) **A**: 421
- Fitzgerald, F. Scott **F**: 190
- Tender point** [anatomy]
Fibromyalgia **F**: 90
- Tenderfoot** [rank]
Boy Scouts (Boy Scouting) **B**: 537
- Tenderizer**
Meat packing (Tenderizing) **M**: 351
- Tendinitis** [disorder]
Rheumatism **R**: 291
- Tendon** [anatomy] **T**: 132 *with diagrams*
- Human body (Skeletal muscles) **H**: 419 *with picture*
- Muscle (Skeletal muscles) **M**: 933
- Tendre, Mont** [mountain, Switzerland]
Switzerland (The Jura Mountains) **So**: 1054-1055 *with map*
- Tendrill** [botany]
Leaf (Tendrils) **L**: 156 *with picture*
- Melon **M**: 389
- Tendu** [movement]
Ballet (table) **B**: 45; (A ballet class) **B**: 46
- Tenebrism** [art]
Painting (Baroque) **P**: 58
- Tenement** [housing] **T**: 133
- Housing (The Industrial Revolution) **H**: 391
- New York City (Manhattan) **N**: 323-324
- United States, History of the (The underprivileged) **U**: 179-180 *with picture*
- Urban renewal (History) **U**: 220
- Tenement house system**
Cottage industry **Ci**: 1085
- Tener, John Kinley** [American political leader]
Pennsylvania (table) **P**: 263
- Tenerife** [island]
Canary Islands **C**: 165
- Teng Hsiao-p'ing** *See* Deng Xiaoping *in this index*
- Teniente, El** [mine, Chile]
Chile (Mining) **C**: 466
- Teniers, David, the Elder** [Flemish artist]
Teniers, David, the Younger **T**: 133
- Teniers, David, the Younger** [Flemish artist]
T: 133 *with picture*
- Tenn-Tom Waterway**
Tombigbee River **T**: 326
- Tennant, Smithson** [British chemist]
Iridium **I**: 429
- Osmium **O**: 865
- Tennent, Gilbert** [American religious leader]
T: 133
- Great Awakening **G**: 335
- Tennent, William** [American religious leader]
T: 133
- Tennessee** **T**: 134 *with pictures and maps*
- Reconstruction (The 14th Amendment) **R**: 178
- Westward movement in America (Crossing the Appalachians) **W**: 246
- See also the list of Related Articles in the Tennessee article*
- Tennessee, University of** **T**: 158
- Knoxville (Description) **K**: 359
- Tennessee picture on* **T**: 139
- Tennessee Aquarium** [Chattanooga]
Tennessee (Places to visit) **T**: 144
- Tennessee Banking Association**
Tennessee (Reconstruction) **T**: 154
- Tennessee Plowboy, The** [nickname]
Arnold, Eddy **A**: 742
- Tennessee River** [U.S.] **T**: 158
- Tennessee Valley Authority **T**: 158 *with map*
- Tennessee Titans**
Football (National Football League) **F**: 364
- Tennessee Tombigbee Waterway**
Tennessee (Recent developments) **T**: 157
- Tombigbee River **T**: 326
- Tennessee Valley** [region, U.S.]
Tennessee Valley Authority (The valley) **T**: 158
- Tennessee Valley Authority** [U.S.] **T**: 158 *with picture and map*
- Alabama (World War I and the Great Depression) **A**: 276
- Conservation (The rise of the conservation movement) **C**: 985-986
- Kentucky (The mid-1900's) **K**: 294
- Knoxville **K**: 359
- Lilienthal, David Eli **L**: 303
- Muscle Shoals **M**: 936
- Norris, George William **N**: 457
- Tennessee (Rivers and lakes) **T**: 148; (Electric power) **T**: 151; (The mid-1900's) **T**: 156
- Willkie, Wendell Lewis (His life) **W**: 314
- Tennessee walking horse**
Horse (table: Some types and breeds of horses) **H**: 343; (Saddle horses) **H**: 343; *picture on* **H**: 344
- Tennessee picture on* **T**: 138
- Tennessee whiskey**
Whiskey **W**: 282
- "Tennessee's Partner"** [story by Hartel]
Harte, Bret **H**: 78
- Tenniel, Sir John** [British artist] **T**: 160 *with pictures*
- John Bull **J**: 133
- Literature for children *picture on* **L**: 376
- Tennis** [sport] **T**: 161 *with pictures*
- Davis Cup **D**: 50
- Olympic Games (Summer Olympic Games) **O**: 746e-748
- See also the list of Related Articles in the Tennis article*
- Tennis, Platform** [sport]
Platform tennis **P**: 565 *with picture*
- Tennis Association, United States**
Tennis (The spread of tennis) **T**: 165
- Tennis cabinet**
Roosevelt, Theodore (Life in the White House) **R**: 469
- Tennis court**
Tennis *diagram on* **T**: 162
- Tennis Court Oath** [French history]
Estates-General **E**: 360
- French Revolution (The revolution begins) **F**: 525
- Tennis elbow** [disorder]
Elbow **E**: 157
- Tennis Federation, International**
Tennis (Amateur tennis) **T**: 165
- Tennis Professionals, Association of**
Tennis (Professional tennis) **T**: 165
- Tennis shoes**
Shoe (Kinds of shoes) **S**: 431 *with picture*
- Tennis (Tennis clothes) **T**: 162
- Tennyson, Lord** [British poet] **T**: 169 *with portrait*
- Balaklava, Battle of **B**: 33
- English literature (Later Victorian literature) **E**: 321
- Galahad, Sir **G**: 7
- January (Quotations) **J**: 31
- Poetry **P**: 591
- Tenochca** [people]
Aztec **A**: 999

- Tenochtitlan** [ancient city, Mexico] T: 170
Aztec (The Aztec empire) A: 999 *with picture*;
(History) A: 1003
Cortés, Hernando (Arrival in Mexico) Ci: 1073
with map
Exploration (Spain's conquests in the New
World) E: 445
Hispanic Americans (In Mexico) H: 247
Indian, American (Indians of Middle America)
I: 169-171 *with picture*; *picture on* I: 136
Mexico (The Plateau of Mexico) M: 460-461;
(The Toltec and the Aztec) M: 468-469;
(The Spanish conquest) M: 469; *picture*
on M: 470
Mexico City (City of the Aztec) M: 478
Montezuma II M: 764b
- Tenor** [voice]
Opera (The singers) O: 792
Singing (Voice classification) S: 472
- Tenor trombone** [musical instrument]
Trombone T: 450
- Tenor tuba** [musical instrument]
Tuba T: 477
- Tenrec** [animal] T: 170 *with picture*
- Tense** [grammar] T: 170
- Tensile strength** [physical property]
Cohesion Ci: 756
- Tension** [sewing]
Sewing (Seams) S: 332
- Tension-type headache**
Headache (Primary headache) H: 124
- Tenskwatawa** *See* Shawnee Prophet *in this*
index
- Tent** [dwelling] T: 171
Asia *picture on* A: 791
Camping (Tents) C: 93; (Selecting a location)
C: 94; *pictures on* C: 95
Circus (The circus grows) Ci: 562b
Mongol Empire M: 720 *with pictures*
Recreational vehicle (Folding camping trailers)
R: 184
- Tent caterpillar** [insect] T: 171
- Tent Chautauqua** [entertainment]
Chautauqua (Tent Chautauquas) C: 389
- Tent of Meeting** *See* Tabernacle *in this index*
- Tent of Miracles** [book by Amado]
Amado, Jorge A: 399
- Tent olive shell**
Shell *picture on* S: 386
- Tent school**
Niger (People) N: 407-408
- Tent stitch**
Petit point P: 326
- Tentacle** [zoology] T: 171
Jellyfish J: 89 *with picture*
Mollusk (Gastropods) M: 695; (Octopuses and
squids) M: 695
Octopus (The body of an octopus) O: 672 *with*
pictures
Oyster (Body organs) O: 890
Sea anemone S: 262
- Tenth Amendment** [U.S. Constitution]
Constitution of the United States Ci: 1013
- Tenth Month, The** [book by Hobson]
Hobson, Laura Zarnetkin H: 273
- Tenth Muse Lately Sprung Up in America,**
The [poems by Bradstreet]
American literature (New England) A: 414
Bradstreet, Anne B: 547
- Tenth Satire** [book by Juvenal]
Johnson, Samuel (Early years) J: 153
- Tenure** [employment]
Teaching (Employment practices) T: 68
- Tenure of Kings and Magistrates, The** [pam-
phlet by Milton]
Milton, John (Middle years) M: 557
- Tenure of Office Act** [1867]
Johnson, Andrew (Increased tension) J: 140
Reconstruction (The impeachment of
Johnson) R: 178
- Tenzing Norgay** [Nepalese mountain climber]
T: 171
Hillary, Sir Edmund Percival H: 231 *with pic-
ture*
Mount Everest M: 884
- Teocalli** [religion]
Aztec (Religion) A: 1000
- Teodoro, Rio** [river, Brazil]
Madeira River M: 30
- Teosinte** [plant]
Corn (History) Ci: 1062
- Teotihuacán** [ancient city, Mexico] T: 172
Indian, American (Before European contact)
I: 169
Maya (The Classic Period) M: 325
Mexico (The Classic Period) M: 468
Pyramids (American pyramids) P: 917 *with pic-
ture*
- Tepal** [botany]
Flower (The calyx) F: 293
- Tepee** [dwelling] T: 172
- Indian, American (Shelter) I: 136d**; (Indians of
the Plains) I: 158-159 *with picture*; *pic-
tures on* I: 138, I: 161
Shelter (In early America) S: 394
- Tepes, Vlad** [Transylvanian prince]
Dracula D: 317
Transylvania T: 402
- Tephra**
Volcano (Rock fragments) V: 439 *with diagram*
- Tequila** [drink]
Alcoholic beverage (Other distilled beverages)
A: 336
Maguey M: 64
- Ter-Petrosyan, Levon** [Armenian political leader]
Armenia (History) A: 718b-719
- Tera** [prefix]
Metric system (Metric prefixes) M: 439
- Terabyte** [unit of measure]
Computer (Computer code) Ci: 911
- Teratogen** [harmful substance]
Reproduction, Human (Development of organs
and organ systems) R: 248
- Terbium** [element] T: 172
- Terbutaline** [drug]
Bronchodilator B: 636
- TERCOM** [electronics] *See* Terrain contour map-
ping *in this index*
- Terek River** [Russia]
Caspian Sea C: 275 *with map*
- Terem Palace** [Moscow]
Kremlin K: 387
- Terence** [Roman dramatist] T: 172
Drama (Comedy) D: 328; (Medieval drama)
D: 328
- Teresa, Mother** [Indian religious leader] T: 172
with portrait
- Teresa, Saint** [Spanish religious leader] T: 172
Religious life (Religious life in the 1500's and
1600's) R: 227
Spanish literature (The 1500's) So: 759
- Tereschkova, Valentina Vladimirovna** [Soviet
cosmonaut] T: 173
Astronaut (Achievements in space) A: 829;
(table) A: 830; *picture on* A: 833
Space exploration (Vostok and Mercury: The
first human beings in space) So: 711-714
with picture
- Tergat, Paul** [Kenyan athlete]
Olympic Games *picture on* O: 748
- Terkel, Studs** [American author]
Great Depression (Economic breakdown)
G: 340
- Term** [mathematics]
Algebra (Statements and equations) A: 351
Fraction (In symbols) F: 445-446
Progression P: 811
- Term life insurance**
Insurance (Main kinds of life insurance) I: 309
- Term limits** [government] T: 173
- Term of discount**
Discount (Bank discount) D: 224
- Term paper**
A Guide to Writing Skills Research Guide: 14
- Termen, Frederick E.** [American engineer]
Stanford University (Research program)
So: 836
- Terminal** [electricity]
Electronics (Diodes) E: 210 *with diagram*
Transistor (How transistors work) T: 373
- Terminal ballistics** [engineering]
Ballistics (Terminal ballistics) B: 56 *with picture*
- Terminal bud** [botany]
Bud B: 665 *with diagram*
Plant (Stems) P: 530 *with pictures*
- Terminal building**
Airport (The passenger terminal) A: 244 *with*
diagrams; (Terminal designs) A: 248 *with*
diagram
- Terminal elevator**
Grain elevator (Kinds of grain elevators) G: 301
- Terminal emulation program** [software]
Computer (Internet software) Ci: 922
- Terminal market**
Food (Marketing) F: 335
Livestock (Marketing livestock) L: 398
Meat packing (Kinds of markets) M: 350
- Terminal moraine** [geology]
Glacier (How glaciers shape the land) G: 204-
205 *with diagrams*
Moraine M: 799
- Terminal Tower Building** [Cleveland]
Air rights A: 200
Cleveland (Downtown Cleveland) Ci: 663-664
with picture and map; *picture on* Ci: 667
- Terminating decimal** [mathematics]
Decimal system (Decimals and fractions)
D: 72 *with diagram*
Rational number R: 148
- Termination policy** [U.S. history]
Indian, American (In the United States) I: 179
- Termination shock** [astronomy]
Heliosphere (Shock waves) H: 175
- Terminator**
Moon (Rotation and orbit) M: 783
- Terminus**
Atlanta (Early days) A: 861
- Termite** [insect] T: 173
Insect (Harmful insects) I: 284; (Abdomen)
I: 288; (The life cycle of insects) I: 292;
(Reproduction) I: 292; (Family life) I: 294-
295; *pictures on* I: 279, I: 281
Isoptera I: 475
- Terms of Endearment** [book by McMurtry]
McMurtry, Larry M: 343
- Terms of Endearment** [film]
Motion picture (Best picture: 1983) M: 861
Nicholson, Jack N: 404
- Tern** [bird] T: 174 *with picture*
Animal (Animal travelers) A: 502; *picture on*
A: 468
Arctic tern A: 644 *with picture*
Bird (Birds of the seacoasts) B: 342 *with pic-
tures*; *picture on* B: 329
- Ternary form** [music]
Classical music (Sectional form) Ci: 644
- Terneplate** [metal]
Tin (Uses) T: 293-294
- Terpene** [chemical]
Lipid (Kinds of lipids) L: 345
- Terpsichore** [Greek mythology]
Muses M: 937
Mythology *picture on* M: 980
- Terra** [astronomy]
Moon M: 783
- Terra** [Roman mythology]
Mythology (table) M: 980
- Terra** [artificial satellite]
Air (The study of air) A: 174
- Terra Australis Incognita** [legendary place]
Antarctica (Human activities) A: 535
Exploration (Exploring the Pacific) E: 447
Torres, Luis Vaez de T: 340d *with map*
- Terra cotta** [pottery] T: 175
Della Robbia, Luca D: 117
Pottery (Decorating and glazing) P: 718; *pic-
tures on* P: 717
Sculpture (The sculptor at work) S: 232
- Terra Nostra** [book by Fuentes]
Fuentes, Carlos F: 553
- Terra Nova** [ship]
Scott, Robert Falcon S: 222
- Terra Nova National Park** [Newfoundland]
Canada (table: National parks and national park
reserves) C: 113
Newfoundland and Labrador (Places to visit)
N: 368
- Terracing** [conservation]
Conservation (Soil conservation) Ci: 979-980
with picture
Erosion (Controlling erosion) E: 355
Philippines *picture on* P: 372
- Terrain contour mapping**
Guided missile (Pre-set guidance) G: 426
- Terral, Thomas J.** [American political leader]
Arkansas (table) A: 712
- Terramycin** [medication]
Drug (Creating a new drug) D: 355
- Terrane**
Earth (Terrane collisions) E: 24
- Terrapin** [animal] T: 175 *with picture*
- Terrarium** [biology] T: 175
Gardening (Kinds of indoor gardens) G: 36
- Terrazzo**
Flooring F: 239
- Terre, La** [book by Choquette]
Canadian literature (Fiction: 1850-1918) C: 158
- Terrell, Joseph M.** [American political leader]
Georgia (table) G: 130
- Terrell, Mary Church** [American social reformer]
T: 175
- Terrestrial animal**
Animal (Kinds of animals) A: 472
Mammal (On land) M: 121
- Terrestrial globe**
Globe G: 233
- Terrestrial planet**
Planet P: 507
Solar system (Planets) So: 580
- Terrill** [art]
Painting (The High Renaissance) P: 54-55
- "Terrible People, The"** [poem by Nash]
Nash, Ogden N: 22
- Terrier** [dog] T: 175

- Dog (Terriers) D: 266; *pictures on* D: 274, D: 275
 Jack Russell terrier J: 3 *with picture*
 Silky terrier S: 462
- Territorial asylum**
 Asylum A: 851
- Territorial Enterprise** [newspaper]
 Nevada (Communication) N: 172
 Twain, Mark (Newspaper work in the West) T: 528
- Territorial sea** [law]
 Ocean (Who owns the ocean?) O: 665
- Territorial waters** [international law] T: 175
 International law (Consent of nations) I: 341
 Right of search R: 340
- Territoriality** [zoology] T: 176
 Animal (Home ranges) A: 501
 Balance of nature (Behavior) B: 35
 Bird (Selecting a territory) B: 356
 Dog (Behavior) D: 277
 Dominance D: 301
 Hawk (Breeding) H: 111
 Lion (Habits) L: 341
 Mammal (Territoriality) M: 125
 Prairie dog (Habits) P: 732
 Seal (Seal rookeries) S: 266
 Tiger (The life of a tiger) T: 284
 Wolf (Habits) W: 375-376
- Territory** [animal] *See* Territoriality in *this index*
- Territory** [political unit] T: 176
 Annexation A: 517
 Commonwealth of Nations (Dependencies) C: 876
 Trust territory T: 474
- Territory, Incorporated** [political unit]
 Territory (In the United States) T: 176
- Territory, Unincorporated** [political unit]
 Territory (In the United States) T: 176
- Terror** [ship]
 Exploration (The exploration of Antarctica) E: 450
- Terror, Mount** [volcano, Antarctica] *See* Mount Terror in *this index*
- Terrorism** T: 177 *with picture*
See also September 11 terrorist attacks in *this index*
 Anarchism A: 448
 Aviation (Airline safety concerns) A: 991;
 (Recent developments) A: 991
 Bin Laden, Osama B: 308
 Civil defense C: 605
 Clinton, Bill (International affairs) C: 682f
 Crime (Political crime) C: 1137
 Egypt (Recent developments) E: 133-134
 Guerrilla warfare G: 419
 Hijacking H: 230
 Homeland Security, Office of H: 301
 Hostage H: 374a
 Immigration and Naturalization Service I: 86
 International relations (The war against terrorism) I: 346
 Ireland (The Republic of Ireland) I: 427-428
 Italy (Social problems) I: 518
 Ku Klux Klan (Birth of the Klan) K: 389
 Latin America (Political unrest) L: 110
 Lebanon (War and terrorism) L: 173
 Libya (Strained relations with the United States) L: 268
 New York City (Recent developments) N: 342-343
 Northern Ireland (The continuing conflict) N: 525
 Oklahoma (Recent developments) O: 734
 Oklahoma City (History) O: 736-737 *with picture*
 Olympic Games (Terrorism in Munich) O: 752
 Pentagon Building P: 274
 Qa'ida, Al-Q: 2
 Ridge, Tom R: 336
 September 11 terrorist attacks S: 310
 State, Department of (Since World War II) S: 861
 United Nations (Fighting terrorism) U: 93
 United States, History of the (Recent events) U: 195-196 *with picture*
 War (The war against terrorism) W: 26
 World Trade Center W: 451
- Terry, Alfred H.** [American general]
 Custer, George Armstrong (The 1876 campaign) C: 1200
- Terry, Bill** [American baseball player]
 Baseball (table: Hall of Fame) B: 135
- Terry, Charles L., Jr.** [American political leader]
 Delaware (table) D: 109
- Terry, Eli** [American inventor]
 Connecticut (The 1800's) C: 970
- Terry, Ellen** [British actress] T: 180
- Terry, Lucy** [American poet]
- African American literature (Early works) A: 136a
- Terry cloth**
 Textile (table: Textile terms) T: 213
- Tertiary color**
 Color (Producing color harmony) C: 823-824 *with diagram*
- Tertiary consumer** [ecology]
 Forest (The flow of energy) F: 396
- Tertiary industry**
 Industry (Other systems of classification) I: 261
- Tertiary Period** [geology]
 Earth (table) E: 30
 Forest *picture on* F: 398
- Tertiary recovery** [industrial process]
 Petroleum (Enhanced recovery) P: 342 *with picture*
- Tertz, Abram** *See* Sinyavsky, Andrey in *this index*
- Terza rima** [poetry]
 Divine Comedy D: 242
 Poetry (Renaissance poetry) P: 596
- Teschemacher, Frank** [American clarinetist]
 Jazz (The 1920's) J: 70
- Teschen, Treaty of** [1779]
 Succession wars (The War of the Bavarian Succession) S: 950
- Tesla** [measurement]
 Tesla, Nikola (Other inventions) T: 180
 Weber W: 176
- Tesla, Nikola** [American inventor] T: 180
 Electric generator (Uses of AC generators) E: 173
 Electric motor (History) E: 181
 Marconi, Guglielmo (Marconi and Tesla) M: 197
 Radio (Early development) R: 91
 Wireless communication (History) W: 345
- Tesla coil** [electronics]
 Radio (Early development) R: 91
 Tesla, Nikola (Other inventions) T: 180
- Tesla Electric Company**
 Tesla, Nikola (The alternating-current system) T: 180
- Tess of the d'Urbervilles** [book by Hardy]
 Hardy, Thomas H: 59
- Tessellae**
 Mosaic M: 822
- Tesserae**
 Mosaic M: 822
- Test** *See* Testing in *this index*
- Test** [shell]
 Sea urchin S: 263 *with picture*
- Test Acts** [English history] T: 180
- Test ban** [international relations]
 Cold War (Easing Cold War tensions) C: 767
- Test Ban Treaty** [1963]
 Fallout (History) F: 19
 Kennedy, John Fitzgerald (Arms control) K: 266
 Nuclear weapon (Limiting testing) N: 600
- Test match**
 Cricket (History) C: 1134-1135
- Test pilot** T: 181
- Test strip**
 Photography (Printing black-and-white photographs) P: 421-422
- Test-tube baby**
 Fertilization F: 78
- Test tube skin**
 Skin grafting S: 494
- Testamentary trust** [economics]
 Trust fund (Kinds of trusts) T: 474
- Testator** [law]
 Will W: 306
- Testatrix** [law]
 Will W: 306
- Testaverde, Vinnie** [American football player]
 Football (table) F: 363
- Testes** [anatomy] *See* Testicle in *this index*
- Testicle** [anatomy] T: 181
 Frog *picture on* F: 537
 Gland (table) G: 209
 Human body (The reproductive system) H: 425; *diagram on* H: 422
 Reproduction, Human (The human reproductive system) R: 244-245 *with diagram*
 Sexuality (Biological factors) S: 337
 Testicular cancer T: 181
 Testosterone T: 182
 Vasectomy V: 287
- Testicular cancer** [disease] T: 181
- Testimonial**
 Advertising (Testimonials) A: 76a *with picture*
 Sales (Presentation) S: 63
- Testimony** [law]
 Deposition D: 149
- Trial (Presenting evidence) T: 437
 Witness W: 374
- Testing** [evaluation] T: 181
 Clinical psychology (Testing and diagnosis) C: 681
 College entrance examination C: 775
 Education (How can performance be improved?) E: 105-106
 Intelligence quotient (Calculating IQ) I: 319;
 (Problems of intelligence testing) I: 319
 Personality (Ratings and self-reports) P: 302
 Psychology (Systematic assessment) P: 848
 Races, Human (Race and discrimination) R: 59-60
 Teaching (Checking student progress) T: 67
- Testis** *See* Testicle in *this index*
- Testosterone** [hormone] T: 182
 Adolescent (Physical development) A: 60-61
 Elephant (Musth) E: 231
 Impotence I: 94
 Marijuana (Effects) M: 201
 Reproduction, Human (The human reproductive system) R: 244-245
 Steroid (The sex steroids) S: 894-895
 Testicle T: 181
- TET** [reproduction] *See* Tubal embryo transfer in *this index*
- Tet offensive** [1968]
 Vietnam War (The Tet offensive) V: 375-376
- Tetanus** [disease] T: 182
- Tetany** [disorder] T: 183
- Tête-bêche error**
 Stamp collecting *picture on* S: 831
- Tethyan mountain system**
 Mountain (The Tethyan Mountain System) M: 893
- Tethys** [satellite]
 Satellite (The middle-sized icy satellites) S: 150a
 Saturn (table) S: 152 *with picture*
- Tethys Sea** [geology]
 Mediterranean Sea (Formation) M: 382
- Tetty, Glen** [American choreographer]
 Ballet (Ballet in Europe) B: 54
- Teton, Grand** *See* Grand Teton National Park in *this index*
- Teton Dam** (Teton River, Idaho)
 Idaho (The late 1900's) I: 45
- Teton Indians**
 Sioux Indians S: 474
- Teton Range** [mountains, Wyoming] T: 183
 Grand Teton National Park G: 309 *with picture*
- Tetra** [fish] T: 183 *with picture*
 Fish *picture on* F: 157
- Tetracycline** [medication] T: 183
 Acne A: 28
 Typhus (Treatment) T: 541
- Tetradrachm** [coin]
 Money *picture on* M: 706
- Tetragonal system**
 Crystal (Classifying crystals) C: 1166 *with picture*
- Tetrahedron** [geometry]
 Polyhedron P: 650 *with diagram*
- Tetrahydrocannabinol** [chemical]
 Hashish H: 82
 Drug abuse (Marijuana) D: 362
- Tetrahydrofuran** [chemical]
 Furfural F: 566
- Tetralogy of Fallot** [disorder]
 Heart (Blockage of blood flow) H: 141
- Tetrameter** [poetry]
 Poetry (table) P: 594
- Tetrapod** [animal]
 Prehistoric animal (The move onto land) P: 737
- Tetrode** [electronics]
 Vacuum tube (Kinds of vacuum tubes) V: 258-259; (Development of the vacuum tube) V: 259
- Tetum** [language]
 East Timor (People) E: 41
- Tetzel, Johann** [German religious leader] T: 183
 Luther, Martin (The Ninety-Five Theses) L: 527
- Teufelsberg** [hill]
 Berlin (Recreation) B: 262
- Teutoburg Forest, Battle of** [A.D. 9]
 Augustus (Expansion) A: 890
- Teutonic Knights** [European history] T: 183
 Estonia (History) E: 362
 Latvia (History) L: 119
 Lithuania (History) L: 389
- Teutonic languages**
 Teutons T: 183
- Teutonic names**
 Name (Teutonic names) N: 5
- Teutons** [ancient people] T: 183
 Mythology (Teutonic mythology) M: 984; *picture on* M: 975

TeV (measurement unit)
Particle accelerator (How accelerators work) P: 184

Tewkesbury, Battle of [1471]
Henry VI [of England] H: 187

Tewkesbury Abbey [England]
Sculpture (Later medieval sculpture) S: 250-251 *with picture*

Tex [book by Hinton]
Hinton, S. E. H: 238

Texaco, Inc.
Manufacturing (table) M: 170

Texans, Houston [team] See Houston Texans *in this index*

Texarkana (Arkansas, Texas)
Arkansas (Interesting facts about Arkansas) A: 695 *with picture*

Texas [state] T: 184 *with pictures and maps*
Austin, Stephen Fuller A: 893
Bowie, James B: 520
Buchanan, James (Secretary of state) B: 660
Bush, George Walker (Governor of Texas) B: 722e
Flag *pictures on* F: 210
Hispanic Americans (In the Southwest) H: 250-251
Houston, Sam H: 399
Jackson, Andrew (Slavery and Texas) J: 14
Jefferson, State of J: 75
Mexican War (Background of the war) M: 445
Mexico (War with Texas and the United States) M: 471
Mission life in America (Western missions) M: 618-619
Polk, James Knox (The Mexican War) P: 643
Public lands (Acquisition of public lands) P: 858
Santa Anna, Antonio López de (War with Texas) S: 113
Texas Rangers T: 211
Tyler, John (The annexation of Texas) T: 534
United States, History of the (Manifest destiny) U: 167 *with map*
Westward movement in America (Texas) W: 249
See also the list of Related Articles in the Texas article

Texas [locomotive]
Civil War (Raids) Ci: 629

Texas, Republic of [Texas history]
Texas (The Republic of Texas) T: 207
United States, History of the (Manifest destiny) U: 167

Texas, University of T: 209

Texas A&M International University [Laredo]
Texas A&M University T: 210

Texas A&M University T: 210

Texas annexation [1845]
United States, History of the (Manifest destiny) U: 167 *with map*

Texas blind snake
Snake *picture on* S: 526

Texas Centennial Exposition [1936]
Texas (The early 1900's) T: 207-208

Texas Christian University T: 210

Texas City [Texas]
Texas (The mid-1900's) T: 208

Texas fever [disease]
Cattle tick C: 316

Texas fever tick [animal]
Cattle tick C: 316 *with picture*

Texas house
Western frontier life in America (Life in the country) W: 237

Texas Instruments [company]
Dallas *picture on* D: 14
Kilby, Jack K: 315

Texas longhorn [animal]
Cattle (American cattle) C: 315
Cowboy (On the ranch) Ci: 1110; (The trail drive) Ci: 1111
Western frontier life in America *picture on* W: 237

Texas Longhorns [painting by Lea]
Western frontier life in America *picture on* W: 237

Texas Memorial Museum
Austin (Description) A: 892-893
Texas (Places to visit) T: 194

Texas Navy Flag [U.S. history]
Flag *picture on* F: 210

Texas Ranger Hall of Fame [Waco]
Texas (Places to visit) T: 194

Texas Rangers T: 211 *with picture*
Police (Law and order in America) P: 624
Texas (Conquering the frontier) T: 207; *picture on* T: 207

Texas Rangers [baseball team]

Baseball (table) B: 130
Bush, George Walker (Baseball ownership) B: 722e

Dallas (Recreation) D: 14

Texas School Book Depository [Dallas]
Dallas (Landmarks) D: 11
Kennedy, John Fitzgerald (The death of Oswald) K: 267 *with picture*

Texas snakeroot
Snakeroot S: 537

Texas State Library [Austin]
Texas (Libraries) T: 189

Texas tortoise [animal]
Tortoise T: 342
Turtle (Tortoises) T: 523

Texas v. Johnson [U.S. history]
Supreme Court of the United States (table) So: 1002

Texcoco, Lake [Mexico] See Lake Texcoco *in this index*

Teixeira Pinto, Bento [Latin-American author]
Latin-American literature (Colonial literature) L: 111

Texoma, Lake [Oklahoma-Texas]
Lake Texoma L: 46 *with map*

Text
Book (Inside a book) B: 464-465

Text-editing typewriter
Typewriter (Kinds of typewriters) T: 538

Text file [electronics]
Newspaper (Making up the pages) N: 383
Computer (Storage devices) Ci: 915

Text telephone See TT *in this index*

Textbook
Publishing (Educational books) P: 868
Reading (The teaching of reading) R: 157
Teaching (Guiding and assisting student learning) T: 66

Textile [fabric] T: 212 *with pictures*
Acetate A: 25
Clothing (Why clothing varies) Ci: 690-691; (Protecting the public) Ci: 705
Fiber F: 86
Industrial Revolution (The textile industry) I: 248
Interior design (Choosing patterns and textures) I: 332
Invention (Economic needs) I: 355; (Prehistoric times) I: 357-358
Islamic art (Textiles) I: 470
Knitting K: 353
Massachusetts (Progress as a state) M: 292; (The early 1900's) M: 293
Painting (Supports) P: 36
Polyester P: 649
Rhode Island (Industrial growth) R: 313
Sewing (Choosing the equipment, fabric, and pattern) S: 332
Spandex So: 753
Technology (The Industrial Revolution) T: 75
United Kingdom (Manufacturing) U: 63-64
See also the list of Related Articles in the Textile article

Textile cone
Shell *picture on* S: 386

Textile engineering
Engineering (Other specialized fields) E: 287-288

Textile Fiber Products Identification Act [1958]
Clothing (Protecting the public) Ci: 705
Textile (In the United States and Canada) T: 218

Textile Labeling Act [Canada]
Textile (In the United States and Canada) T: 218

Textile Museum [Washington, D.C.]
Washington, D.C. (Other Washington museums) W: 75

Textile printing
Batik B: 165

Textual criticism [religion]
New Testament (Critical studies of the New Testament) N: 288

Texture
Interior design (Pattern and texture) I: 328 *with picture*; (Choosing patterns and textures) I: 332
Painting (The elements of painting) P: 34-35
Sculpture (Form and treatment) S: 230-231

Texture mapping
Animation (Computer animation) A: 512 *with picture*

Textured vegetable protein
Soybean (Soy meal) So: 690

Teylan Mosque
Tripoli T: 447

Tezcatlipoca [Aztec god]

Aztec (Religion) A: 1000

Mythology (American Indian mythology) M: 985-986

TFM [chemical]
Lamprey (Destructiveness) L: 55

TGV [train]
Electric railroad E: 187; (History) E: 188-189 *with picture*
Europe *picture on* E: 405
France (Transportation) F: 470 *with picture*
Railroad *picture on* R: 104

Th [symbol]
Thorium T: 266

Thaba Ntlenyana [mountain]
Drakensberg D: 323

Thabet, Suzanne [Egyptian reformer] See Mubarak, Suzanne *in this index*

Thackeray, Isabella Shawe [wife of]
Thackeray, William Makepeace (Early career) T: 220

Thackeray, William Makepeace [British author]
T: 220
English literature (Early Victorian literature) E: 321
Novel (Britain) N: 573

Thaddeus [apostle] See Jude, Saint *in this index*

Thaddeus Kosciuszko National Memorial [Pennsylvania]
National Park System (table: National memorials) N: 54

Thagard, Norman [American astronaut]
Space exploration (Docking with Mir) So: 726

Thai [people]
Thailand T: 221

Thai [language]
Thailand (Languages) T: 224

Thailand T: 221 *with pictures and maps*
Cold War (The Vietnam War) Ci: 769
Flag *picture on* F: 205
Kickboxing K: 311
Vientiane V: 363
Vietnam War *map on* V: 374
World War II (table: The Axis) W: 471
See also the list of Related Articles in the Thailand article

Thailand, Gulf of
China Sea C: 508 *with map*

Thais [book by France]
France, Anatole F: 480

Thakins [political movement]
Myanmar (British conquest and rule) M: 970d

Thalamotomy [medicine]
Parkinson disease (Other treatments) P: 171

Thalamus [anatomy]
Brain (The brain stem) B: 551; *diagram on* B: 553
Taste T: 51

Thalassemia [disorder] T: 228
Anemia (Excessive destruction of red blood cells) A: 458

Thaler [money]
Dollar D: 295

Thales [Greek philosopher] T: 228
Geometry (Greek geometry) G: 105
Mathematics (The Greeks) M: 306
Pre-Socratic philosophy P: 772

Thalia [Greek mythology]
Drama *picture on* D: 327
Graces G: 296 *with picture*
Muses M: 937

Thalidomide [drug] T: 29
Drug (Testing with people) D: 356

Thallium [element] T: 229

Thallium bromide [chemical]
Thallium T: 229

Thallium iodide [chemical]
Thallium T: 229

Thallium sulfate [poison]
Thallium T: 229

Thallium sulfide [chemical]
Thallium T: 229

Thallus [botany]
Hornwort H: 341
Liverwort L: 395

Thames, River [England] T: 229
England (Rivers and lakes) E: 300-301
London (Greater London) L: 428; *picture on* L: 431, L: 436; (Other places of interest) L: 437
River (table) R: 352
United Kingdom (The English Lowlands) U: 59-61 *with map*

Thames Barrier
London *picture on* L: 436; (Other places of interest) L: 437

Thames River [Canada]
London L: 444

Thames River, Battle of [1813]

- War of 1812 (Thames River) W: 33
Harrison, William Henry (Army commander) H: 75
Indiana (Territorial days) I: 215-216
- Thana** [political unit]
Bangladesh (Local government) B: 79
- "Thanatopsis"** [poem by Bryant]
Bryant, William Cullen (His early works) B: 655
- Thanatos** [Greek mythology]
Hypnos H: 477
Sisyphus S: 477
- Thane** [English history] T: 229
Witenagemot W: 374
- Thang Long** [former name]
Hanoi H: 53
- Thank-you note** [correspondence]
Letter writing (Thank-you notes) L: 213
- Thankful Poor, The** [painting by Tanner]
Painting (Painting outside France) P: 72-73
with picture
- Thanksgiving** [painting by Lee]
Lee, Doris Emrick L: 175
Thanksgiving Day picture on T: 230
- Thanksgiving Day** [holiday] T: 230 with picture
Hale, Sarah Josepha H: 19
Holiday (In Canada) H: 291
Massachusetts (The Pilgrims) M: 289
New York picture on T: 303
November (Activities) N: 576
Plymouth Colony (The first year) P: 583 with picture
- Thant, U** [Burmese diplomat] T: 231
United Nations (The secretary-general) U: 83
with portrait
- Thar Desert** [region, India-Pakistan] T: 231
India (The Northern Plains) I: 121-122; (The rainy season) I: 124 with map
Pakistan (Land and climate) P: 96-97 with picture and map
- Tharp, Twyla** [American dancer] T: 231 with picture
- Tharp, William** [American political leader]
Delaware (table) D: 109
- That Summer in Paris** [book by Callaghan]
Callaghan, Morley C: 67
- That Was Then, This Is Now** [book by Hinton]
Hinton, S. E. H: 238
- Thatch roof**
Peru (Housing) P: 309 with picture
Rice (Other uses) R: 323
Rye (Uses) R: 573
- Thatcher, Denis** [British businessman]
Thatcher, Margaret Hilda T: 231
- Thatcher, Margaret Hilda** [British political leader] T: 231 with portrait
Heseltine, Michael Ray Dibdin H: 218
United Kingdom (Thatcher) U: 73
- Thatcher, W. Ross** [Canadian political leader]
Saskatchewan (table) S: 144
- Thatcher Ferry Bridge** [Panama Canal]
Pan American Highway (Development) P: 114
Panama picture on P: 115
Panama Canal map on P: 123
- That's What We Live For** [book by Szyborska]
Szyborska, Wisawa So: 1078
- Thaw** [Russian history]
Russian literature (Modern Soviet literature) R: 564
- Thawb** [clothing]
Saudi Arabia (Clothing) S: 157
- Thayendanegea** See Brant, Joseph in *this index*
- Thayer, John M.** [American political leader]
Nebraska (table) N: 110
- Thayer, Sylvanus** [American military leader]
T: 231
United States Military Academy (History) U: 202
- Thayer, W. W.** [American political leader]
Oregon (table) O: 845
- Thayer School of Engineering**
Dartmouth College D: 39
- THC** [chemical]
Hashish H: 82
Marijuana (Effects) M: 201
- Theaetetus** [book by Plato]
Plato (The dialogues) P: 567; (The later dialogues) P: 568; (The theory of forms) P: 568
- Theater** T: 232 with pictures
See also Drama in *this index*
Ballet B: 44 with pictures
Drama (Elizabethan theaters) D: 331; (England) D: 334; pictures on D: 326
Europe picture on E: 393
Mask (Theatrical masks) M: 265
New York City (Manhattan) N: 323-325
Shakespeare, William (The Elizabethan theater) S: 352 with pictures
United Kingdom (The arts) U: 58
United States pictures on U: 119
Vaudeville V: 290
See also the list of Related Articles in the Theater article
- Theater arts**
Theater T: 232; (Colleges and universities) T: 249
- Theater District**
New York City (The arts) N: 336; pictures on N: 335, N: 343
- Theater-in-the-round**
Theater (The stage) T: 233-234 with picture
- Theater nuclear weapon**
Nuclear weapon (Theater nuclear weapons) N: 599
- Theater of Dionysus** [Greece]
Athens (Other buildings) A: 856
Drama (Greek drama) D: 326 with pictures
- Theater of the absurd**
Albee, Edward A: 311
American literature (Drama) A: 425
Black humor B: 389
Drama (Theater of the absurd) D: 340 with picture
French literature (The 1950's and 1960's) F: 523
- Theater operations**
Army, United States (table) A: 737
- Theatine order** [religious group]
Paul IV P: 200
- Theatre, The** [London]
English literature (Elizabethan drama) E: 317
Shakespeare, William (Theater buildings) S: 352
- Théâtre du Nouveau Monde, Le** (theater group)
Canada (Theater) C: 110 with picture
- Théâtre Libre** (theater group)
Drama (Early realism) D: 338
- Theatre Passe Muraille** (theater group)
Canadian literature (Modern Canadian drama) C: 161
- Theatrical dancing**
Dance (Dances to watch) D: 30 with pictures
- Thébaïde, Le** [play by Racine]
Racine, Jean R: 61
- Thebes** [ancient Egyptian city] T: 251
Cleopatra's Needles C: 662b
Egypt, Ancient (The land) E: 135-136 with map
- Thebes** [ancient Greek city] T: 251
Alexander the Great (His youth) A: 342
Cadmus C: 12
Sphinx (The Greek sphinx) So: 781
- Theiler, Max** [South African bacteriologist]
Nobel Prizes (Physiology or medicine: 1951) N: 444
- Their Eyes Were Watching God** [book by Hurston]
American literature (The Harlem Renaissance) A: 422
Hurston, Zora Neale H: 456
- "Their finest hour"**
Churchill, Sir Winston Leonard Spencer (The Battle of Britain) C: 548
- Theism** T: 251
God (Ideas about God) G: 244
Religion (Belief in a deity) R: 215
- Them** [book by Oates]
Oates, Joyce Carol O: 639
- Thema** [music by Berio]
Berio, Luciano B: 259
- Thematic Apperception Test**
Personality (Projective tests) P: 302
- Thematic map**
Map (Types of maps) M: 177-178 with picture; (Development of thematic and inventory mapping) M: 185
- Theme**
Classical music (Variation) Ci: 644
Composition Ci: 905
Drama (Thought) D: 325
Literature (Theme) L: 353
Music (Melody) M: 951
- Theme and variation** See Variation in *this index*
- Theme park**
See also Amusement park in *this index*
Amusement park A: 446
Disney, Walt (TV and theme park ventures) D: 237 with picture
Walt Disney Company W: 20
- Themistocles** [Greek political leader] T: 251
Aristides A: 662
- Then Again, Maybe I Won't** [book by Blume]
Blume, Judy B: 425
- Thenard, Louis Jacques** [French chemist]
Boron B: 490
- Theobald, Lewis** [British author]
- Pope, Alexander P: 667
Shakespeare, William (Editions of the 1700's and 1800's) S: 368
- Theocracy** [political science] T: 251
- Theocritus** [Greek poet] T: 252
Greek literature (The Hellenistic Age) G: 378
Idyl I: 47
- Theodemir** [king of the Ostrogoths]
Theodoric T: 252
- Theodolite** [instrument]
Surveying (Early tools) So: 1011
- Theodora** [wife of Justinian I] T: 252
Byzantine Empire (The people) B: 752-753; picture on B: 754
Justinian I J: 204
- Theodore** [antipope]
Pope (table) P: 666
- Theodore I** [pope]
Pope (table) P: 666
- Theodore II** [pope]
Pope (table) P: 666
- Theodore Roosevelt** [aircraft carrier]
Aircraft carrier (The United States carrier fleet) A: 206
- Theodore Roosevelt** [ship]
Peary, Robert Edwin (Arctic expeditions) P: 224
Bartlett, Robert Abram B: 121
- Theodore Roosevelt Birthplace National Historic Site** [New York]
National Park System (table: National historic sites) N: 52-53
- Theodore Roosevelt Dam** [Salt River, Arizona]
See Roosevelt Dam in *this index*
- Theodore Roosevelt Inaugural National Historic Site** [New York]
National Park System (table: National historic sites) N: 52-53
- Theodore Roosevelt Island National Memorial** [Washington, D.C.]
National Park System (table: National memorials) N: 54
- Theodore Roosevelt National Park** [North Dakota] T: 252
National Park System (table: National parks) N: 48
North Dakota (Places to visit) N: 504 with picture
Roosevelt, Theodore (Death) R: 472
- Theodoric** [antipope]
Pope (table) P: 666
- Theodoric** [king of the Ostrogoths] T: 252
Goths G: 279
Italy (The Middle Ages) I: 513
Ravenna R: 151
- Theodosius I** [Roman emperor] T: 252
Byzantine Empire (The people) B: 752-753; (Beginnings) B: 753
Inquisition I: 277
Olympic Games (The ancient games) O: 750
- Theogony** [poem by Hesiod]
Mythology (Comparing myths) M: 975; (The Creation myth) M: 978
Greek literature (Epic poetry) G: 377
Hesiod H: 218
- Theological school** See Seminary in *this index*
- Theology** [religion] T: 252
See also Religion in *this index*
- Theology of Culture** [book by Tillich]
Tillich, Paul T: 287
- Theology of Liberation, A** [book by Gutiérrez]
Liberation theology L: 228
- Theon** [Greek mathematician]
Hypatia H: 475
- Theophrastus** [Greek philosopher]
Geology (The ancient Greeks) G: 97
- Theophylline** [drug]
Bronchodilator B: 636
- Theorell, Hugo** [Swedish biochemist]
Nobel Prizes (Physiology or medicine: 1955) N: 444
- Theorem**
Binomial theorem B: 310
Geometry (Axiomatic organization) G: 102
Pythagorean theorem P: 921
- Theoretical Physics, Institute for** [Copenhagen]
Bohr, Niels B: 438
- Theory** [science]
Evolution (Main ideas of evolutionary theory) E: 426-427
- Theory of ...**
Theories appear under their key words, as in Forms, Theory of. Titles beginning Theory of... appear below
- Theory of Business Enterprise, The** [book by Veblen]
Veblen, Thorstein Bunde V: 291

- Theory of Economic Development, The** [book by Schumpeter]
Schumpeter, Joseph Alois S: 189
- Theory of Economic Growth** [book by Lewis]
Lewis, Sir Arthur L: 220
- Theory of Games and Economic Behavior, The** [book by Von Neumann and Morgenstern]
Game theory G: 22
Von Neumann, John V: 448
- Theory of Sound, The** [book by Rayleigh]
Sound (Modern acoustics) So: 606
- Theory of the Earth** [book by Hutton]
Geology (The rock dispute) G: 98-99
Hutton, James H: 458
- Theory of the Gene, The** [book by Morgan]
Morgan, Thomas Hunt M: 804
- Theory of the Leisure Class, The** [book by Veblen]
Chicago, University of (Research program) C: 438
Veblen, Thorstein Bunde V: 291
- Theosophical Society** [organization]
Besant, Annie Wood B: 273
Theosophy T: 253
- Theosophy** [philosophy] T: 253
Besant, Annie Wood B: 273
Steiner, Rudolf So: 886
- Theotokopoulos, Domenikos** See Greco, El in this index
- Thera** [Mediterranean Sea]
See also Thira in this index
Volcano (table) V: 441
- Therapsid** [extinct animal]
Mammal (The ancestors of mammals) M: 126
- Therapeutic cloning**
Clone Ci: 684
- Therapy** [medicine] See Chemotherapy;
Occupational therapy; Physical therapy;
Psychotherapy in this index
- Theravada** [religion]
Buddhism (The Theravada) B: 669
Religion (Buddhism) R: 220
Thailand (Religion) T: 224
- There Shall Be No Night** [play by Sherwood]
Sherwood, Robert Emmet S: 398
- Theremin** [musical instrument] T: 253
- Theremin, Leon** [Soviet engineer]
Electronic music E: 204
Theremin T: 253
- Theresa, Saint** See Teresa, Saint in this index
- Thériault, Camille H.** [Canadian political leader]
New Brunswick (table) N: 196
- Theriomorphic divinity**
Mythology (Mythical beings) M: 974
- Therma** [ancient city]
Thessaloniki T: 257
- Thermal** [air current]
Glider (Soaring) G: 229
- Thermal bonding** [process]
Textile (Nonwovens) T: 215
- Thermal-control system**
Space exploration (Protection against the dangers of space) So: 701
- Thermal cracking**
Petroleum (Conversion) P: 345
- Thermal degradation**
Combustion Ci: 867
- Thermal imaging**
Night vision systems N: 419
- Thermal inversion** See Temperature inversion in this index
- Thermal pollution** T: 253
Electric power (Fossil-fueled steam electric power plants) E: 183
Energy supply (Nuclear energy) E: 278;
(Environmental effects) E: 281
Environmental pollution (Water pollution) E: 334
Fish (How fish adjust to change) F: 168
Nuclear energy (Steam production) N: 587
Water pollution (Disruption of natural processes) W: 138
- Thermal power**
Nuclear energy (The role of nuclear energy in power production) N: 580; (Steam production) N: 587
Water power W: 139
- Thermal properties**
Materials (Thermal properties) M: 300c
- Thermal radiation**
Big bang B: 297
Dew D: 176
Galaxy (Emissions from galaxies) G: 8b
Infrared rays I: 269
Nuclear weapon (Thermal radiation) N: 598
- Thermal reactor** [nuclear reactor]
Nuclear energy (Nuclear fission) N: 582-583
- Thermal springs** [geology] See Hot springs in this index
- Thermal unit** See British thermal unit; Calorie in this index
- Thermal-wax color printer** [machine]
Audio-visual materials (Projectors) A: 882
- Thermidorian Reaction** [French history]
French Revolution (The revolution ends) F: 526-527
- Thermistor** [electronics]
Thermometer (Resistance thermometers) T: 255
- Thermite** [chemical]
Bomb (Incendiary bombs) B: 450
- Thermocline** [oceanography]
Ocean (Temperature) O: 653
- Thermocouple** [measuring device] T: 253
Thermometer (Thermocouple thermometers) T: 254 with diagram
- Thermodynamics** [physics] T: 253
Clausius, Rudolf Julius Emmanuel Ci: 657
Entropy E: 328
Gibbs, Josiah Willard G: 186
Heat (Thermodynamics) H: 155
Maxwell, James Clerk M: 319
Perpetual motion machine P: 293
Physics (Heat) P: 437
- Thermodynamics, First law of** See Conservation of energy in this index
- Thermodynamics, Second law of**
Heat (Thermodynamics) H: 155
Thermodynamics T: 253
- Thermodynamics, Third law of**
Heat (Thermodynamics) H: 155
- Thermoelectricity**
Thermocouple T: 253
- Thermofforming** [industrial process]
Plastics (Making plastic products) P: 557-558 with picture
Polypropylene P: 651
Polystyrene P: 651
- Thermogram** [record]
Thermography T: 253 with picture
Energy supply picture on E: 281
- Thermograph** [instrument]
Thermography T: 253
- Thermography** T: 253 with picture
- Thermohaline circulation** [oceanography]
Ocean (How the ocean moves) O: 658 with picture and map
- Thermometer** T: 254 with pictures
Bolometer B: 448
Hygrometer (The psychrometer) H: 473
Liquid air (Properties) L: 346
Mercury M: 413
Thermocouple T: 253
Thermostat T: 256
Weather (Land-based observation stations) W: 162
- Thermonuclear bomb** See Hydrogen bomb in this index
- Thermonuclear reaction** See Fusion in this index
- Thermonuclear warhead**
Nuclear weapon diagram on N: 599
- Thermonuclear weapon** See Nuclear weapon in this index
- Thermopane**
Glass (table) G: 218
- Thermopause** [atmosphere]
Thermosphere T: 256
- Thermoplastics**
Asphalt A: 815
Fiber (Synthetic fibers) F: 87
Materials (Plastics) M: 300d
Plastics (Types of plastics) P: 555; (Making plastic products) P: 557; (Growth of the plastics industry) P: 560; (Recent developments) P: 560
Polypropylene P: 651
Polystyrene P: 651
- Thermopylae** [ancient Greece] T: 255
Leonidas I L: 202
Xerxes I X: 544
- Thermopylae of America** [name for]
Alamo A: 280
- Thermos bottle** [container] See Vacuum bottle in this index
- Thermoset** See Thermosetting plastics in this index
- Thermosetting plastics**
Adhesive A: 56
Materials (Plastics) M: 300d
Phenolic P: 356
Plastics (Types of plastics) P: 555; (Making plastic products) P: 557; (Growth of the plastics industry) P: 560
Polyester P: 649
- Thermosphere** [atmosphere] T: 256
Air (The thermosphere) A: 173 with diagram
- Thermostat** [instrument] T: 256 with diagram
Heating (Central heating systems) H: 159
- Theropod** [dinosaur]
Dinosaur (True dinosaurs) D: 206b-208; (How dinosaurs lived) D: 211
- Theroux, Paul** [American author] T: 257
- Thesaurus** [reference]
Dictionary (Specialized dictionaries) D: 192
Roget, Peter Mark R: 401
- Theseus** [book by Gide]
Gide, André G: 188
- Theseus** [Greek mythology] T: 257
Helen of Troy H: 168
Minotaur M: 611 with picture
- Theseus** [literary figure]
Shakespeare, William (A Midsummer Night's Dream) S: 357
- Theseus and the Minotaur** [sculpture by Barye]
Minotaur picture on M: 611
- Thesis** [essay]
Degree, College (The master's degree) D: 91
- Thesis** [philosophy]
Hegel, G. W. F. (Hegel's dialectic) H: 165
- Thesis** [writing]
Composition (Organizing your thinking) Ci: 905
A Guide to Writing Skills Research Guide: 15, 16
- Thesis play** [drama]
French literature (Realism) F: 521-522
- Thespian**
Thespis T: 257
- Thespis** [Greek actor] T: 257
Drama (Greek drama) D: 326
- Thessalonians, Epistles to the** [New Testament] T: 257
- Thessaloniki** [city, Greece] T: 257
Greece (Population) G: 353; picture on G: 355
- Thessaly** [region, Greece] T: 258 with maps
Greece (Thessaly) G: 357 with map
- Thetan** [religion]
Scientology S: 208
- Thetis** [Greek mythology]
Achilles A: 26
Trojan War (The beginning of the war) T: 449
- They Knew What They Wanted** [play by Howard]
Howard, Sidney H: 400
- They Were Strong and Good** [book by Lawson]
Lawson, Robert L: 147
- THF** [chemical]
Furfural F: 566
- Thiamine** See Vitamin B₁ in this index
- Thibault, Jacques A. F.** See France, Anatole in this index
- Thibault, Jean** [Canadian religious leader]
Alberta (The missionaries) A: 329
- Thibodaux, Henry S.** [American political leader]
Louisiana (table) L: 496
- Thick-billed parrot**
Parrot (Kinds of parrots) P: 179
- Thickener**
Food additive (Kinds of additives) F: 339
- Thickness gauge** [instrument]
Gauge (Other types of gauges) G: 69
- Thief ant**
Ant (The importance of ants) A: 528
Insect (Family life) I: 294-295
- Thiende, De** [pamphlet]
Decimal system (Use of decimals smaller than one) D: 73
- Thierry-Primot, Catherine** [wife of]
Le Moyné, Charles L: 189
- Thiers, Louis Adolphe** [French political leader]
T: 258
- Thieu, Nguyen Van** See Nguyen Van Thieu in this index
- Thieves' Carnival** [play by Anouilh]
Anouilh, Jean A: 519
- Thigh** [anatomy]
Human body diagram on H: 422
Leg (The thigh) L: 181 with diagram
- Thigmotropism** [biology]
Tropism T: 452
- Thimble Summer** [book by Enright]
Enright, Elizabeth E: 327
- Thimbles, The** [island, Connecticut]
Connecticut (Coastline) Ci: 962
- Thimonnier, Barthélemy** [French inventor]
Sewing machine (History) S: 333-334
- Thimphu** [Bhutan] T: 258
- Thin client** [machine]
Computer (Local area networks [LAN's]) Ci: 922
- Thin-film transistor active-matrix-liquid-crystal display** [electronics]

- Electronics (Electronics today) E: 216-217
Television (Flat-panel, large-screen television) T: 128
- Thin juice**
Sugar (Making beet sugar) So: 961
- Thin layer chromatography**
Chromatography (Thin layer chromatography) C: 538
- Thin Man, The** [book by Hammett]
Hammett, Dashiell H: 35
- Thin tin** [metal]
Tin can T: 294
- Thing** [government]
Vikings (Ancestry and population) V: 378-379
- Things Fall Apart** [book by Achebe]
Achebe, Chinua A: 25
- Things of This World** [poems by Wilbur]
Wilbur, Richard W: 300
- Thingvallavatn** [lake, Iceland]
Iceland (The inland plateau) I: 22
- Thinhorn** See Dall's sheep in *this index*
- Thinker, The** [painting by Eakins]
Eakins, Thomas E: 6
- Thinker, The** [sculpture by Rodin]
Rodin, Auguste R: 399 *with picture*
- Thinking**
Adolescent (Intellectual development) A: 61
Brain (In thinking and remembering) B: 555
Reason R: 173
- Thinking Day**
Girl Scouts (Annual events) G: 198
- Thinking Machine** [literary figure]
Detective story (History) D: 163
- "Thinking Things Over with Calvin Coolidge"** [column]
Coolidge, Calvin (Later years) Ci: 1033-1034
- Thinner**
Paint P: 23
Painting (Materials and techniques) P: 36 *with picture*
- Thinning** [farming]
Fruit (Caring for the crop) F: 545
- Thiopental** [drug] T: 258
- Thiopental sodium** [drug]
Halothane H: 27
- Thira** [island, Mediterranean]
See also Thera in *this index*
Atlantis A: 868
Painting (Aegean painting) P: 41 *with picture*
- Third Amendment**
Constitution of the United States Ci: 1012
- Third-angle projection** [drawing]
Mechanical drawing (Information in the drawing) M: 353-354 *with diagram*
- Third baseman**
Baseball (Player positions) B: 127
- Third-class lever**
Lever (Classes of levers) L: 217; *picture on* L: 218
Machine (Lever) M: 14
- Third-degree burn**
Burn (Classification of burns) B: 708
First aid (Burns) F: 139
Skin (Burns) S: 490
- Third estate** [French history]
Estates-General E: 360
French Revolution (Background) F: 524-525;
(The revolution begins) F: 525
Mirabeau, Comte de M: 615
- Third Fleet**
Navy, United States (The Operating Forces) N: 85
- Third gear**
Transmission (How a manual transmission works) T: 378
- Third Man, The** [book by Greene]
Greene, Graham G: 381
- Third Navigation Act** [1672]
Navigation Acts N: 75
- Third party**
Political party (Third parties) P: 636
- Third person** [literature]
Literature (Style) L: 353
- Third Punic War** [149-146 B.C.] See Punic Wars in *this index*
- Third rail** [railroad]
Electric railroad (Kinds of electric railroads) E: 188 *with picture*
Elevated railroad E: 233
- Third Reich** [German history]
Germany (Nazi Germany) G: 167-168
Hitler, Adolf (Dictator of Germany) H: 267
Reich R: 207
- Third Republic** [French history]
France (The Third Republic) F: 474
- Third Residence** [poems by Neruda]
Neruda, Pablo N: 131
- Third-stream music**
Classical music (Third-stream music) Ci: 650
Lewis, John Aaron L: 220
- Third World T: 258**
See also Developing country; Neutral nations in *this index*
- Thirst T: 259**
- Thirteen Colonies** [U.S. history] See Colonial life in America in *this index*
- Thirteen-lined ground squirrel** [animal]
Ground squirrel G: 401 *with picture*
- Thirteen-Month Calendar, The**
Calendar (Calendar reform) C: 32
- Thirteenth Amendment**
Constitution of the United States Ci: 1013
Civil War (The Emancipation Proclamation) Ci: 621
Emancipation Proclamation (Effects of the proclamation) E: 254
Freedom Day, National F: 504
Reconstruction (Early congressional reaction) R: 177
Slavery (The decline of slavery) S: 504
Trumbull, Lyman T: 473
- Thirty, The** [Greek history] See Thirty Tyrants in *this index*
- 35-millimeter film**
Audio-visual materials (Filmstrips and slides) A: 882
Motion picture (The film) M: 857; (The projector) M: 859 *with picture*
- Thirty-Nine Articles** [religion] T: 259
Church of England (Doctrines) C: 542
Ridley, Nicholas R: 337
- Thirty-Nine Steps, The** [film by Hitchcock]
Motion picture (Movies in the 1930's) M: 868 *with picture*
- Thirty Tyrants** [ancient Greece] T: 259
Lysander L: 538
Lysias L: 538
- Thirty Years' War** [1618-1648] T: 259
Army (The rise of modern armies) A: 727
Austria (The Habsburgs) A: 937-938
Berlin (Early days) B: 264
Counter Reformation (Counteracting Protestantism) Ci: 1096
Czech Republic (Habsburg rule) Ci: 1213
Germany (The Thirty Years' War) G: 164
Guerrilla warfare (History) G: 420
Mazarin, Jules Cardinal M: 329
Prague (History) P: 730
Richelieu, Cardinal (Thirty Years' War) R: 331
Roman Catholic Church (The Counter Reformation) R: 408-409
Sweden (The age of expansion) So: 1033
Tilly, Count of T: 287
- This Above All** [book by Knight]
Knight, Eric K: 346
- This Country of Ours** [book by Harrison]
Harrison, Benjamin (Later years) H: 73
- This Gun for Hire** [book by Greene]
Greene, Graham G: 381
- This is the Place Heritage Park** [Salt Lake City]
Salt Lake City (The city) S: 76
- This Side of Paradise** [book by Fitzgerald]
Fitzgerald, F. Scott F: 190
- Thiabe** [legendary figure]
Pyramid and Thiabe P: 919
- Thistle** [plant] T: 260
Canada thistle C: 156
Composite family Ci: 904
- Thistle, Order of the** [award]
Knighthood, Orders of (Honorary orders) K: 347
- Thivai** [Greece] See Thebes in *this index*
- Thjórsa River**
Iceland (The inland plateau) I: 22
- THM** [chemical]
Water pollution (Drinking water standards) W: 138
- Thobe** [clothing] See Thawb in *this index*
- Thoc-me-tony** [American social reformer]
Winnemucca, Sarah W: 339
- Thomas, Carey** [American educator] See Thomas, Martha Carey in *this index*
- Thomas, Charles** [American political leader]
Delaware (table) D: 109
- Thomas, Charles A.** [American educator]
Shorthand (Thomas Natural shorthand) S: 436
- Thomas, Charles S.** [American political leader]
Colorado (table) Ci: 844
- Thomas, Clarence** [American jurist] T: 261
African Americans (Disappointments and controversy) A: 136q
Supreme Court of the United States *picture on* So: 999
- Thomas, Dylan** [Welsh poet] T: 261
English literature (Poetry between the wars) E: 322
- Thomas, E. Donnell** [American physiologist]
Nobel Prizes (Physiology or medicine: 1990) N: 445
- Thomas, Francis** [American political leader]
Maryland (table) M: 255
- Thomas, George Henry** [Union general]
Civil War (Battle of Chattanooga) Ci: 630;
(Battle of Chickamauga) Ci: 630
- Thomas, Herb** [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1951, 1953) A: 981
- Thomas, Isaiah** [American publisher] T: 261
Mother Goose (The history of Mother Goose literature) M: 842
- Thomas, Isiah** [American basketball player]
Basketball *picture on* B: 154
- Thomas, James** [American political leader]
Maryland (table) M: 255
- Thomas, Jefferson** [American social reformer]
Spingarn Medal (table: 1958) So: 793
- Thomas, Lorenzo** [American general]
Johnson, Andrew (Increased tension) J: 140
- Thomas, Martha Carey** [American educator] T: 261
- Thomas, Norman Mattoon** [American political leader] T: 261
Socialism (World Wars I and II) So: 561
- Thomas, Philip Francis** [American government official]
Buchanan, James (table) B: 661
Maryland (table) M: 255
Treasury, Department of the (table) T: 407
- Thomas, Rene** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Thomas, Saint** [apostle] T: 262
- Thomas à Becket** See Becket, Saint Thomas in *this index*
- Thomas à Kempis** [German author] T: 262
- Thomas and Beulah** [book by Dove]
Dove, Rita D: 315
- Thomas Aquinas, Saint** See Aquinas, Saint Thomas in *this index*
- Thomas Carlyle** [book by Froude]
Biography (Modern biography) B: 314
- Thomas Gilcrease Institute of American History and Art** [Tulsa]
Oklahoma (Places to visit) O: 722
Tulsa (Education and cultural life) T: 483
- Thomas-Houston Electric Company**
General Electric Company G: 83
- Thomas Jefferson Building**
Library of Congress L: 264
Washington, D.C. (Library of Congress) W: 71; *map on* W: 76
- Thomas Jefferson Memorial** See Jefferson Memorial in *this index*
- Thomas Jefferson Memorial Foundation**
Jefferson, Thomas (Jefferson and Sally Hemings) J: 78
- Thomas Muskerry** [play by Colum]
Colum, Padraic Ci: 851
Irish literature (Drama) I: 432
- Thomas Natural shorthand**
Shorthand (Thomas Natural shorthand) S: 436 *with diagrams*
- Thomas of Brittany** [English poet]
Gottfried von Strassburg G: 279
- Thomas Stone National Historic Site** [Maryland]
National Park System (table: National historic sites) N: 52-54
- Thomassin von Zerclaere** [German author]
Etiquette (Books on etiquette) E: 374
- Thomism** [philosophy]
Maritain, Jacques M: 212
- Thompson** [Manitoba] T: 262
Manitoba M: 144
- Thompson, Benjamin** [American-British physicist] T: 262
Heat (The caloric theory of heat) H: 154
Range (History) R: 138
- Thompson, Bill** [American political leader] See Thompson, William Hale in *this index*
- Thompson, Charlotte Pottinger** [mother of]
Thompson, Sir John Sparrow David (Early life) T: 263
- Thompson, David** [Canadian explorer] T: 262
British Columbia (The overland fur traders) B: 628
Idaho (Exploration and early settlement) I: 42
North West Company N: 519
Washington (Discovery and exploration) W: 66
- Thompson, Dorothy** [American journalist]
Lewis, Sinclair L: 221
- Thompson, Elizabeth** [British artist]
Painting (Women artists) P: 73-74 *with picture*
- Thompson, Emma** [British actress]

- Motion picture (Best performance by an actress: 1992) M: 862
- Thompson, Ernest Seton** [Canadian naturalist]
See Seton, Ernest Thompson *in this index*
- Thompson, Francis** [British poet] T: 262
July (Quotations) J: 189
- Thompson, Frank** [Union soldier]
Edmonds, Sarah Emma Evelyn E: 83
- Thompson, Hugh S.** [American political leader]
South Carolina (table) So: 658
- Thompson, J. Edgar** [American public figure]
Atlanta (Early days) A: 861
- Thompson, Jacob** [American government official]
Buchanan, James (table) B: 661
Interior, Department of the (table) I: 325
- Thompson, James R.** [American political leader]
Illinois (table) I: 71
- Thompson, John Sparrow** [father of]
Thompson, Sir John Sparrow David (Early life) T: 263
- Thompson, Sir John Sparrow David** [Canadian political leader] T: 263 *with portrait*
Abbott, Sir John Joseph Caldwell (Prime minister) A: 6
Nova Scotia (table) N: 567
- Thompson, Melvin E.** [American political leader]
Georgia (table) G: 130
- Thompson, Richard W.** [American government official]
Hayes, Rutherford Birchard (table) H: 121
- Thompson, Sam** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Thompson, Smith** [American jurist]
Supreme Court of the United States (table) So: 1000
- Thompson, Stanley G.** [American chemist]
Californium C: 66
- Thompson, Tommy G.** [American political leader]
Bush, George Walker (table) B: 723
Health and Human Services, Department of (table) H: 128
Wisconsin (table) W: 365
- Thompson, William Hale** [American political leader] T: 264
- Thompson grapefruit**
Grapefruit G: 321
- Thompson Seedless** [grape]
Grape (European grapes) G: 319-320
Raisin (Varieties of raisins) R: 130
- Thomson, Charles** [American patriot] T: 264
Great Seal of the United States G: 348
Washington, George *picture on* W: 102
- Thomson, Charles Edward Poulett** [British political leader]
Sydenham, Baron So: 1062
- Thomson, Charles Wyville** [British naturalist]
Exploration (Deep-sea exploration) E: 451
- Thomson, Sir George Paget** [British physicist]
Nobel Prizes (Physics: 1937) N: 440
Thomson, Sir Joseph John T: 264
- Thomson, James** [British poet] T: 264
- Thomson, Sir Joseph John** [British physicist] T: 264
Atom (The first descriptions of atomic structure) A: 875 *with diagram*
Electricity (The electronic age) E: 198
Electronics (Early experiments) E: 215 *with picture*
Physics (The beginning of modern physics) P: 440-441
Proton P: 836
- Thomson, Mary Agnes** [American public figure]
Keller, Helen Adams K: 255
- Thomson, Meldrim, Jr.** [American political leader]
New Hampshire (table) N: 223
- Thomson, Robert W.** [Scottish engineer]
Tire (History) T: 298
- Thomson, Tom** [Canadian painter] T: 265 *with picture*
Canada *picture on* C: 110
Group of Seven G: 402 *with picture*
- Thomson, Vernon W.** [American political leader]
Wisconsin (table) W: 365
- Thomson, Virgil** [American composer] T: 265
- Thomson's gazelle**
Gazelle G: 74 *with picture*
- Thone, Charles** [American political leader]
Nebraska (table) N: 110
- Thor** [Norse mythology] T: 265
Thursday T: 273
Vikings (Religion) V: 379-380
- Thoracic basket**
Mammal (Skeleton) M: 118-119
- Thoracic duct**
Human body (The lymphatic system) H: 424
- Lymphatic system (Lymphatic vessels) L: 534
with diagram
- Thoracic surgery**
Medicine (table) M: 369
- Thoracic vertebra**
Mammal (Skeleton) M: 118-119 *with diagram*
Spine So: 792 *with diagram*
- Thorax** [zoology]
See also Chest *in this index*
Beetle (The thorax) B: 216 *with diagram*
Butterfly (The thorax) B: 738 *with diagrams*
Insect (Thorax) I: 287 *with diagram*
Moth (The thorax) M: 838 *with diagrams*
- Thorazine** [medication]
Chlorpromazine C: 518
Tranquilizer T: 370
- Thoreau, Henry David** [American philosopher] T: 265 *with pictures*
American literature (Nonfiction prose) A: 418
Civil disobedience (History of civil disobedience) Ci: 607
Conservation (Early conservation problems) Ci: 985
Massachusetts (Places to visit) M: 280
National park (The early national parks) N: 42j
- Thorium** [element] T: 266
Radiation (Naturally radioactive substances) R: 77; *diagram on* R: 79
- Thorn** [botany] T: 266
Plant (How plants protect themselves) P: 544
- Thorn apple** [plant] See Datura; Jimson weed *in this index*
- Thorn apple** [tree] See Hawthorn *in this index*
- Thornburgh, Richard L.** [American government official]
Justice, Department of (table) J: 203
Pennsylvania (table) P: 263
- Thorndike, Edward Lee** [American psychologist] T: 267
Learning (Instrumental conditioning) L: 163
- Thorndike-Barnhart Dictionary**
Thorndike, Edward Lee T: 267
- Thorndike-Century Dictionary**
Thorndike, Edward Lee T: 267
- Thorne, George R.** [American businessman]
Ward, Aaron Montgomery W: 35
- Thornton, Dan** [American political leader]
Colorado (table) Ci: 844
- Thornton, Matthew** [American patriot] T: 267
- Thornton, William** [American architect]
Capitol, United States C: 197
- Thóróddsen, Jón** [Icelandic author]
Scandinavian literature (The Golden Age) S: 171
- Thoroughbred** [horse]
Horse (Kinds of horses) H: 343; (table: Some types and breeds of horses) H: 343;
(Saddle horses) H: 343-345 *with picture*
Horse racing (Thoroughbred horses) H: 363
Kentucky K: 272 *with picture*; (Description) [Kentucky] L: 224
- Thoroughwort** [plant]
Boneset B: 458
- Thorpe, Ian** [Australian swimmer]
Olympic Games *picture on* O: 749
Swimming (table) So: 1047
- Thorpe, Jim** [American athlete] T: 267 *with picture*
Olympic Games (The modern games) O: 751
with picture
- Thorpe, Thomas** [English publisher]
Shakespeare, William (The sonnets) S: 349;
(Composition and publication) S: 366
- Thorunn Johannsdóttir** [Icelandic pianist]
Ashkenazy, Vladimir A: 769
- Thorvaldsen, Bertel** [Danish sculptor] T: 267
Denmark (Arts) D: 136
Sculpture (European sculpture) S: 253-254
with picture
- Thorvaldsen, Eric** See Eric the Red *in this index*
- Thorwald Ericson** [Norse explorer]
Ericson, Leif E: 351
- Thorwaldsen, Bertel** See Thorvaldsen, Bertel *in this index*
- Thoth** [Egyptian god] T: 267
Egypt, Ancient (Religion) E: 137
Mythology (Other Egyptian divinities) M: 977
with picture
- Thothmes III** See Thutmose III *in this index*
- Thought** See Thinking *in this index*
- Thought, Freedom of**
Academic freedom A: 20
- Thought-rhythm** [poetry]
Whitman, Walt (His work) W: 294
- Thought transference**
Telepathy T: 93
- Thoughts on Death and Immortality** [book by Feuerbach]
- Feuerbach, Ludwig Andreas F: 83
- Thoughts on the Education of Daughters** [book by Wollstonecraft]
Wollstonecraft, Mary W: 379
- Thoughts on the Interpretation of Nature** [book by Diderot]
Diderot, Denis D: 195
- Thousand and One Nights, The** See Arabian Nights *in this index*
- Thousand Days: John F. Kennedy in the White House, A** [book by Schlesinger]
Schlesinger, Arthur Meier, Jr. S: 177
- Thousand Islands** [Saint Lawrence River] T: 268
with picture
Ontario (Visitor's guide) O: 774 *with picture*
Saint Lawrence River (The course of the St. Lawrence) S: 41
- Thousand Islands International Bridge** [Canada-U.S.]
Thousand Islands T: 268
- Thrace** [region, Europe] T: 268
Bulgaria (Early history) B: 692
Greece (Thrace) G: 357 *with map*
Turkey T: 502
- Thrasher** [bird] T: 268 *with picture*
Brown thrasher B: 645
- Thrashers, Atlanta** [team]
Hockey (table: National Hockey League) H: 281
- Thread** [fiber] T: 269 *with diagrams*
Sewing (Choosing the equipment, fabric, and pattern) S: 332
Spinning So: 794
- Thread** [hardware]
Screw S: 225 *with diagrams*
- Thread blind snake**
Snake (Feeding habits) S: 531; (Thread blind snakes) S: 535
- Threadworm**
Pinworm P: 475
- Threatened species**
See also Endangered species *in this index*
Animal (How human beings protect animals) A: 505
Hunting (Opposition to hunting) H: 450
Wildlife conservation (Classification of scarce wildlife) W: 304
Zoo (Wildlife conservation) Z: 604
- Three Affiliated Tribes**
Arikara Indians A: 661
- Three Cities, The** [books by Zola]
Zola, Émile S: 602
- Three Cornrades** [book by Remarque]
Remarque, Erich Maria R: 228
- Three-Cornered Hat, The** [ballet]
Falla, Manuel de F: 16
Massine, Léonide M: 296
- Three-Cornered Hat, The** [book by Alarcón]
Alarcón, Pedro Antonio de A: 281
- Three-cushion billiards**
Billiards (Carom billiards) B: 307
- 3-D archery**
Archery (Indoor archery) A: 603
- Three-Day Event**
Horse (Eventing) H: 358
- Three-dimensional conformal radiation therapy** [medicine]
Cancer (Radiation therapy) C: 172
- Three-dimensional model** [drawing]
Mechanical drawing (Creating a drawing) M: 354
- Three-dimensional picture**
Holography H: 297
Stereoscope So: 893
Virtual reality V: 425
- Three-dimensional vision**
Eye (Depth perception) E: 463-464
- Three Emperors' League**
World War I (A system of military alliances) W: 454-455
- Three Epitaphs** [dance]
Taylor, Paul T: 57
- Three estates** [European history]
Canterbury Tales C: 184
French Revolution (Background) F: 524-525
- Three Fires, The** [American Indians]
Potawatomi Indians P: 714
- Three Flags** [painting by Johns]
Painting (The revival of subject matter) P: 86
with picture
- Three Gorges Dam** [China] T: 270
China (Recent developments) C: 507
Yangtze River Y: 551
- Three Henrys, War of the** [1585-1589]
Henry III [of France] H: 186
- 332nd Fighter Group** [military]
Tuskegee Army T: 524
- Three-island ship**

- Ship (General cargo ships) S: 417
- Three Jewish Poems** [music by Bloch]
Bloch, Ernest B: 404
- Three Kingdoms** [Korean history]
Korea (Early years) K: 375-376
- "Three Little Pigs, The"** [story by Jacobs]
Jacobs, Joseph J: 20
- Three Lower Counties** [U.S. history]
Delaware (English rule) D: 110
- Three Mile Island** [nuclear power plant]
Fallout (History) F: 19
Nuclear energy (Safety concerns) N: 592
Pennsylvania (Economic decline) P: 268 *with picture*
- Three Musketeers, The** [book by Dumas]
Buckingham, Duke of B: 663
Dumas, Alexandre, *père* D: 382
- Three People's Principles** [book by Sun Yat-sen]
Sun Yat-sen So: 988
- Three-phase current**
Electric current (Direct and alternating current) E: 168
- Three-phase generator**
Electric generator (Kinds of AC generators) E: 173
- Three Philosophical Poets** [book by Santayana]
Santayana, George S: 115
- Three-race theory** [anthropology]
Races, Human (The three-race theory) R: 53-54 *with pictures*
- Three Rivers Art Festival**
Pittsburgh (The arts) P: 500c
- Three Sisters** [mountain, Oregon]
Oregon (Land regions) O: 838; *picture on* O: 840
- Three Sisters, The** [play by Chekhov]
Chekhov, Anton C: 396
Russian literature (Late realism) R: 562-563; *picture on* R: 558
- Three Soldiers** [book by Dos Passos]
Dos Passos, John D: 311
- Three-spined stickleback** [fish]
Instinct I: 304
- Three states, Law of the** [philosophy]
Comte, Auguste Ci: 926
- Three Tales** [stories by Flaubert]
Flaubert, Gustave F: 230
- Three Tall Women** [play by Albee]
Albee, Edward A: 311
- Three Teachings** [religion]
Vietnam (Religion) V: 366
- Three-way bulb**
Electric light *picture on* E: 176
- Three Wise Men** [Biblical figures] *See* Magi *in this index*
- Three Women at the Spring** [painting by Picasso]
Picasso, Pablo (The 1920's and 1930's) P: 448b-449
- Threefold Law of Karma**
Witchcraft (Role of magic) W: 372
- Threepenny Opera, The** [musical]
Blitzstein, Marc B: 404
Brecht, Bertolt B: 592
German literature (Expressionism) G: 142
Weill, Kurt W: 188
- Threni** [music by Stravinsky]
Stravinsky, Igor (The 12-tone works) So: 923
- "Threnody"** [poem by Emerson]
Emerson, Ralph Waldo (His life) E: 259
- Threnody for the Victims of Hiroshima** [music by Penderecki]
Penderecki, Krzysztof P: 236
- Thresher** [ship]
Shipwreck (table: Major shipwrecks) S: 428
- Thresher shark** [fish]
Shark (Kinds of sharks) S: 375 *with picture*
- Threshermen's Reunion** [Manitoba]
Manitoba (Places to visit) *picture on* M: 152-153
- Threshing** [agriculture]
Threshing machine T: 270
Combine Ci: 866
Flail F: 225
Rice (Harvesting) R: 326
World *picture on* W: 414
- Threshing machine T: 270** *with picture*
Agriculture (The invention of new farm equipment) A: 157-158
Flail F: 225
Wheat (The mechanization of wheat farming) W: 276 *with picture*
- Threshold** [architecture]
House (Interior construction) H: 382
- Threshold** [physiology]
Allergy (The allergic threshold) A: 374
- Threshold of audibility** [sound]
Sound (Intensity and loudness) So: 600-601
- Threshold Test Ban Treaty**
Nuclear weapon (Limiting testing) N: 600-601
- Thrill** [plant]
Statice So: 867
- Thrill institution**
Bank (Kinds of banks) B: 90
Credit union Ci: 1125
Savings and loan association S: 165
Savings bank S: 165
- Thrill plan**
Pension (Private pension plans) P: 273
- Thrill Supervision, Office of** [banking regulation]
Bank (Regulation of U.S. banks) B: 92; (The savings and loan crisis) B: 94
- Thriller** [music by Jackson]
Jackson, Michael J: 15
- Thrips** [insects] T: 270 *with picture*
Gladiolus G: 206
- Throat** [anatomy] T: 271
Human body *diagram on* H: 422
Strep throat So: 925
- Throckmorton, James W.** [American political leader]
Texas (table) T: 203
- Thrombin** [enzyme]
Anticoagulant A: 553
- Thrombocyte** [blood] *See* Platelet *in this index*
- Thrombocythemia** [disorder]
Blood (Bleeding disorders) B: 414
- Thrombocytopenia** [disorder]
Blood (Bleeding disorders) B: 414
- Thrombophlebitis** [disorder]
Anticoagulant A: 553
Phlebitis P: 391
- Thrombosis** [disorder]
Blood (Controlling bleeding) B: 411
Coronary thrombosis Ci: 1068
Stroke (Causes) So: 930
- Thrombus** [physiology]
Blood (Controlling bleeding) B: 411
Heart (Causes) H: 137; *diagram on* H: 140
- Throne**
Furniture (India) F: 572; *picture on* F: 570
Sculpture (Royal and public sculpture) S: 240 *with picture*
Tutankhamen *picture on* T: 526
- Throop, Enos T.** [American political leader]
New York (table) N: 313
- Throstle** [machine]
Industrial Revolution (Spinning machines) I: 248-249
- Throttle**
Airplane (Basic movements and controls) A: 222-223 *with picture*
Carburetor C: 208
- Through a Glass Darkly** [film]
Bergman, Ingmar B: 257
- Through the Looking-Glass** [book by Carroll]
Carroll, Lewis C: 248
Literature for children *picture on* L: 376
Tenniel, Sir John T: 160
- Throw-in**
Soccer (Restarts) So: 546
- Throwing**
Silk (Throwing) S: 460
- Throwing down the gauntlet**
Gauntlet G: 70
- Throwing stick** *See* Boomerang *in this index*
- Thrush** [bird] T: 271 *with pictures*
Bird (Birds of inland waters and marshes) B: 340 *with picture*
- Thrush** [disease]
Fungal disease (In people) F: 558
Horse (Medical care) H: 356
- Thrust** [painting by Gottlieb]
Gottlieb, Adolph *picture on* G: 280
- Thrust** [physics]
Airplane (Principles of flight) A: 220 *with diagram*
Airship (Thrust) A: 250
Jet propulsion J: 110; (Power in a jet engine) J: 111 *with picture*
Rocket R: 385
Space exploration (Getting into space and back) So: 698
- Thruster** [rocket]
Satellite, Artificial (Launching the satellite) S: 150g
- Thuban** [star]
North Star N: 518
- Thucydides** [Greek historian] T: 271
Greek literature (Historical literature) G: 377
History (The ancient Greeks and Romans) H: 261
Oratory (Classical orators) O: 819
War (Struggles over power) W: 24
- Thug** [history of India] T: 272
- Thuggee** [crime]
Thug T: 272
- Thule** [ancient literature]
Exploration (The Greeks) E: 441
Ultima Thule U: 16
- Thule** [people]
Inuit (Inuit origins) I: 354g
Nunavut (Early history) N: 611
- Thulium** [element] T: 272
- Thumb** [anatomy]
Hand H: 39; (Parts of the hand) H: 40 *with diagram*
Monkey (Hands and feet) M: 726
- Thumb, Tom** *See* Stratton, Charles Sherwood *in this index*
- Thumper truck**
Gas [fuel] (Exploring for gas) G: 53; *picture on* G: 54
Petroleum (Geophysical studies) P: 336-337 *with picture*
- Thun, Lake of** [Switzerland]
Lake of Thun L: 43
- Thunberg's spiraea** [plant]
Spiraea So: 795
- Thunder** [weather] T: 272 *with diagrams*
Lightning L: 299
Shock wave S: 430
- "Thunder and Lightning Polka"** [music by Strauss]
Strauss, Johann, Jr. So: 921
- Thunder Bay** [Ontario] T: 272
Ontario (Shoreline and coastline) O: 778
- Thunderbird** [automobile]
Sports car (History) So: 803
- Thunderbird Park** [Victoria]
British Columbia (Places to visit) B: 620
- Thunderbirds** [United States Air Force]
Air Force, United States *picture on* A: 188
- Thunderbolt** [mythology]
Jupiter J: 201
- Thunderhead** [weather]
Cloud (Clouds that grow vertically) Ci: 711
- Thunderstorm** [weather]
Hail H: 8
Tornado (The story of a tornado) T: 333
Weather (Synoptic-scale systems) W: 159-161 *with picture, picture on* W: 167
- Thurber, James** [American author] T: 273 *with picture*
Cartoon (Single panel cartoons) C: 265-266
Fable F: 3
- Thurible** *See* Censer *in this index*
- Thurman, Allen Granberry** [American political leader] T: 273
Harrison, Benjamin (Election of 1888) H: 72
- Thurmond, Strom** [American political leader] T: 273
Filibustering F: 99
South Carolina (table) So: 658; (The mid-1900's) So: 662
- Thurmond Dam** [Savannah River]
Savannah River S: 165
- Thurn and Taxis family**
Postal services (The growth of public mail systems) P: 703
- Thursday T: 273**
- Thursday Island**
Torres Strait Islands T: 341
- Thurston, Howard** [American magician]
Magician (Illusions) M: 51-52
- Thurstone, Louis Leon** [American psychologist] T: 273
Intelligence (Theories of intelligence) I: 318
- Thus Spake Zarathustra** [book by Nietzsche]
Nietzsche, Friedrich (Nietzsche and religion) N: 406
Philosophy (Modern philosophy) P: 387-390
- Thutmose II** [king of ancient Egypt]
Hatshepsut H: 86
Thutmose III T: 273
- Thutmose III** [king of ancient Egypt] T: 273
Egypt, Ancient (The New Kingdom) E: 143 *with picture*
Hatshepsut H: 86
- Thutmose IV** [king of ancient Egypt]
Sphinx (Egyptian sphinxes) So: 780
- Thyboron Canal**
Denmark (Land regions) D: 137-138
- Thye, Edward J.** [American political leader]
Minnesota (table) M: 602
- Thylacine**
Tasmanian tiger [Tasmanian tiger] T: 50
- Thylakoid** [botany]
Chlorophyll C: 517
- Thyme** [plant] T: 274
- Thymine** [biochemistry]
Cell [DNA—the wondrous molecule] C: 334-335 *with diagram*

- DNA D: 258
Heredity (The structure of DNA) H: 205-206
- Thymol** [medication]
Thyme T: 274
- Thymosin** [physiology]
Thymus T: 274
- Thymus** [anatomy] T: 274 *with diagram*
Blood (Formation of new blood components) B: 411
Gland (Glandlike structures) G: 209
Immune system (Parts of the immune system) I: 87; *diagram on* I: 88
Lymphatic system (Lymphoid tissue) L: 534
- Thyroid artery** [anatomy]
Human body *diagram on* H: 422
- Thyroid cartilage** [anatomy]
Larynx L: 79 *with diagram*
- Thyroid gland** [anatomy] T: 274 *with diagram*
Cretinism Ci: 1128
Drug (Animals) D: 355
Gland (table) G: 209
Goiter G: 248
Graves' disease G: 331
Hormone (Metabolic hormones) H: 335
Human body *diagram on* H: 422
Parathyroid gland P: 155
- Thyroid-stimulating hormone**
Goiter G: 248
Hormone (Endocrine control hormones) H: 336
Thyroid gland T: 274
- Thyroxine** [hormone]
Drug (Animals) D: 355
Goiter G: 248
Hormone (Metabolic hormones) H: 335
Metabolism (Control of metabolism) M: 424
Thyroid gland T: 274
- Thyrse** [botany]
Inflorescence I: 268b *with picture*
- Thysanoptera** [entomology]
Insect (table) I: 300
- Thysanura** [entomology]
Insect (table) I: 299; *picture on* I: 280
- Thyssen Krupp** [company]
Manufacturing (table) M: 170
- Ti** [symbol]
Titanium T: 300
- Ti-pao** [newspaper] *See* *Dibao in this index*
- TIA** [medicine] *See* *Transient ischemic attack in this index*
- Tiahuanaco Indians** [American Indians]
Bolivia (The arts) B: 445; (History) B: 446
Indian, American (Indians of the Andes) I: 173-174
- Tiamat** [Babylonian goddess]
Mythology (Jensen's theory) M: 988
- Tian Shan** [mountains, Asia] T: 275
China (The Xinjiang-Mongolian Uplands) C: 491
Kazakhstan (Land and climate) K: 250b *with map*
Tajikistan (Land and climate) T: 18a *with map*
Uzbekistan (Land and climate) U: 254
- Tiananmen Square** [Beijing]
Beijing (The city) B: 222; (History) B: 223-224
China (Recent developments) C: 506 *with picture*
Communism (China after Mao) Ci: 896
- Tianjin** [city, China] T: 275
- Tiber River** [Italy] T: 275
Romulus and Remus R: 450
- Tiberias, Sea of**
Galilee, Sea of G: 10 *with maps*
- Tiberius** [Roman emperor] T: 275
Caligula C: 66
November N: 576
- Tiberius Claudius Nero** [42 B.C.-A.D. 37, Roman emperor] *See* *Tiberius in this index*
- Tiberius Claudius Nero** [10 B.C.-A.D. 54, Roman emperor] *See* *Claudius in this index*
- Tibesti Mountains** [Chad]
Sahara (Land and climate) S: 20
- Tibet** T: 276 *with pictures and map*
Asia (Way of life in Central Asia) A: 790-791
China (Nationalities) C: 481 *with map*, (The Tibetan Highlands) C: 491
Tang dynasty (The middle years) T: 26
- Tibetan Buddhism** [religion]
Lamaism L: 49
- Tibetan spaniel** [dog] T: 278 *with picture*
- Tibetan terrier** [dog] T: 278 *with picture*
Dog *picture on* D: 275
- Tibia** [anatomy]
Human body *diagram on* H: 422
Knee K: 345
Leg (The leg) L: 182 *with diagram*
- Tibullus** [Roman author]
Latin literature (The Augustan Age) L: 116
- Tic** [disorder] T: 279
Neuralgia N: 152
- Tic douloureux** [disorder]
Neuralgia N: 152
- Ticarcillin** [drug]
Penicillin (Forms of penicillin) P: 240
- Tichenor, Isaac** [American political leader]
Vermont (table) V: 333
- Ticino** [canton, Switzerland]
Switzerland *picture on* So: 1056
- Ticino River** [Italy-Switzerland]
Switzerland (Rivers) So: 1056
- Tick** [animal] T: 279 *with pictures*
See also Mite *in this index*
Deer tick D: 86 *with picture*
Dog (Grooming) D: 278
First aid (Injected poisons) F: 138
Lyme disease L: 533
Parasite (Parasites that feed on people and animals) P: 154 *with picture*
Relapsing fever R: 209
Rocky Mountain spotted fever R: 394 *with picture*
- Tick fever** [disease] T: 280
- Ticker** *See* *Stock ticker in this index*
- Ticker, Reuben** *See* *Tucker, Richard in this index*
- Ticker tape**
Stock ticker So: 904
- Ticket agent** [career]
Airport (Airline passenger services) A: 246
- Tickseed** [plant]
Coreopsis Ci: 1052 *with picture*
Flower (Flowers of prairies and dry plains) F: 286-287 *with picture*
- Ticlopidine** [drug]
Stroke (Prevention) So: 930
- Ticonderoga** [ship]
Vermont (Places to visit) V: 326
- Ticonderoga, Battle of** [1775]
Allen, Ethan A: 371
Arnold, Benedict (A courageous soldier) A: 741
Fort Ticonderoga F: 416
- Ticonderoga class** [ship]
Cruiser Ci: 1159
- Tidal Basin** [Washington, D.C.]
Washington, D.C. (The Tidal Basin) W: 73 *with picture*, *map on* W: 76
- Tidal heating** [geology]
Europa E: 379
Satellite (Currently active satellites) S: 150a
- Tidal power plant**
Ocean (Sources of energy) O: 654
- Tidal range** [geology]
Tide (Tidal patterns) T: 282
- Tidal wave** *See* *Tsunami in this index*
- Tide** [water] T: 280 *with pictures*
Arctic Ocean (Currents, water masses, and tides) A: 643
Atlantic Ocean (Moving ocean waters) A: 866
Earth (Ocean currents) E: 22
Energy supply (Tidal energy) E: 279
Estuary E: 364
Pacific Ocean (Tides) P: 15
Seashore S: 269
- Tide flat** [geography]
Seattle (The city) S: 272
- Tidelands** [region, U.S.]
Petroleum (Postwar developments) P: 348
Texas (The mid-1900's) T: 208
- Tidewater**
Virginia (Land regions) V: 410
- Tidewater aristocracy**
Virginia (Royal governors and Cromwell) V: 418
- Tidjaniyya brotherhood** [religious group]
Senegal (People) S: 297-298
- Tia** [music]
Music (Indicating time values) M: 953-954
- Tie** [railroad]
Railroad (Tracks) R: 108-109 *with picture*
- Tie-down roping**
Rodeo (All-girl rodeos) R: 398
- Tie dyeing** [handicraft] T: 282
- Tie plate** [construction]
Railroad (Tracks) R: 108-109 *with picture*
- Tie-tack microphone** *See* *Lavalier microphone in this index*
- Tie wig**
Hairdressing (The 1700's) H: 12
- Tied arch bridge**
Bridge (Arch bridges) B: 601
- Tiemann, Norbert T.** [American political leader]
Nebraska (table) N: 110
- T'ien-chin** *See* *Tianjin in this index*
- Tien Shan** [mountains, Asia] *See* *Tian Shan in this index*
- Tientsin** *See* *Tianjin in this index*
- Tiepolo, Giambattista** [Italian painter] *See* *Tiepolo, Giovanni Battista in this index*
- Tiepolo, Giovanni Battista** [Italian painter]
T: 282
Rococo R: 396
- Tiepolo, Giovanni Domenico** [Italian painter]
Mythology *picture on* M: 979
- Tiergarten** [park, Berlin]
Berlin (Recreation) B: 262
- Tierra del Fuego** [islands, Argentina-Chile]
T: 283 *with maps*
Argentina (Patagonia) A: 654 *with picture*
Chile (The Archipelago) C: 465
Clothing Ci: 686
South America (Coastline and islands) So: 629 *with picture*
- Tietê River** [Brazil]
São Paulo (The city) S: 117
- Tiffany, Charles Lewis** [American businessman]
T: 283
- Tiffany, Louis Comfort** [American artist] T: 283
Art nouveau A: 750
Glass (Types of art glass) G: 221, *picture on* G: 222
Stained glass (Decline and revival) So: 823
- Tiffany diamond**
Diamond *picture on* D: 181
- Tiffany Favile glass**
Glass (Types of art glass) G: 221
Tiffany, Louis Comfort T: 283
- Tiffin, Edward** [American political leader]
Ohio (table) O: 699
- Tiflis** *See* *Tbilisi in this index*
- Tiger** [animal] T: 283 *with pictures and map*
Animal *pictures on* A: 472, A: 481
Endangered species (table) E: 270; *picture on* E: 271
Mammal *picture on* M: 127
Zoo *pictures on* Z: 604, Z: 609
- Tiger at the Gates** [play by Fry]
Fry, Christopher F: 549
- Tiger beetle**
Beetle *pictures on* B: 218
Insect *picture on* I: 283
- Tiger cat** [wild cat] *See* *Ocelot in this index*
- Tiger-Cats, Hamilton**
Football (Canadian Football League) F: 364
- Tiger cowrie**
Shell *pictures on* S: 386
- Tiger Cub program**
Boy Scouts (Cub Scouting) B: 537
- Tiger Eyes** [book by Blume]
Blume, Judy B: 425
- Tiger-Lilies** [book by Lanier]
Lanier, Sidney L: 68
- Tiger lily** [plant] T: 285 *with picture*
- Tiger moth**
Moth (Kinds of moths) M: 840 *with pictures*
Woollybear W: 402
- Tiger of France** [nickname]
Clemenceau, Georges Ci: 662
- Tiger quoll** [animal]
Quoll Q: 43
- Tiger swallowtail** [insect]
Butterfly (Swallowtails) B: 736 *with picture*
- Tigers, Detroit** *See* *Detroit Tigers in this index*
- Tight end**
Football (The offensive team) F: 356 *with diagrams*
- Tight money policy**
Inflation (Monetary policy) I: 268
Interest (Government policy) I: 322
Recession (Causes of recession) R: 175
- Tight packing** [slavery]
African Americans (Beginning of the slave trade) A: 136c-136d
- Tiglath-pileser III** [king of Assyria] T: 285
Assyria (History) A: 822
- Tiglon** [wild cat]
Lion (Cubs) L: 341
- Tigon** [wild cat]
Lion (Cubs) L: 341
- Tigran II** [king of Armenia]
Armenia (History) A: 718b
- Tigrane, II** [opera by Scarlatti]
Scarlatti, Alessandro S: 173
- Tigray** [region]
Eritrea (History) E: 353-354
Ethiopia (Recent developments) E: 372
- Tigrayans** [people]
Ethiopia (People) E: 368
- Tigress** [wild cat]
Tiger (The life of a tiger) T: 284
- Tigrinya** [language]
Eritrea (People) E: 352
Ethiopia (People) E: 368
- Tigris-Euphrates Valley** [region, Iraq]
Asia (History) A: 804
City (Ancient cities) Ci: 578

World, History of the (The Tigris-Euphrates

Valley) **W**: 422 *with map*

Tigris River [Iraq-Turkey] **T**: 286

Euphrates River **E**: 378 *with map*

Iraq (The land) **I**: 411

Tihamah [region]

Saudi Arabia (The Western Highlands) **S**: 158
with map

Yemen (Land) **Y**: 562

Tijuana [city, Mexico] **T**: 286

Tikel [ancient city, Central America] **T**: 286

Architecture *picture on A*: 614

Guatemala (The Northern Plain) **G**: 414

Maya *pictures on M*: 323, **M**: 326

Tikal National Park [Guatemala]

National park (Other interesting national parks)
N: 42e *with picture*; (table) **N**: 42g

Tikkun [religious doctrine]

Kabbalah **K**: 208

Tilbury Town [fictional place]

Robinson, Edwin Arlington **R**: 368

Tilde

Diacritical mark **D**: 180

Tilden, Bill [American tennis player] **T**: 286

Tennis (The spread of tennis) **T**: 165-166 *with picture*; (table: U.S. Open) **T**: 167 *with picture*

Tilden, Samuel Jones [American political leader] **T**: 286

Electoral Commission **E**: 164

Hayes, Rutherford Birchard (Campaign of 1876) **H**: 120

New York (table) **N**: 313

Reconstruction (The 1876 presidential election) **R**: 179

Title T: 286

Interior design (Choosing patterns and textures) **I**: 332-333

Islamic art (Pottery) **I**: 470

Tile game

Game (Tile games) **G**: 22 *with picture*

Tilefish [fish] **T**: 287 *with picture*

Tilghman, Benjamin Chew [American inventor]
Paper (History) **P**: 136-137

Tilghman Island [Chesapeake Bay]

Maryland *picture on M*: 240

Till [geology]

Minnesota (Land regions) **M**: 596-598

Till Eulenspiegel [legendary figure]

Eulenspiegel, Till **E**: 378

Till Eulenspiegel's Merry Pranks [music by Strauss]

Eulenspiegel, Till **E**: 378

Till Plains [region]

Illinois (Land regions) **I**: 64

Indiana (Land regions) **I**: 208

Ohio (Land regions) **O**: 692; (Agriculture)
O: 697 *with picture*

Tillage [agriculture]

Farm and farming (Preparing the soil) **F**: 35
with picture

Conservation (Soil conservation) **Ci**: 979-980

Cotton (Preparing the soil) **Ci**: 1090

Erosion (Controlling erosion) **E**: 355

Tillamook Burn [forest fire]

Portland [Oregon] (History) **P**: 684

Tiller [botany]

Rice (Growth and reproduction) **R**: 323

Sugar cane **So**: 962

Tiller [ship]

Sailing (Hull) **S**: 23 *with picture*

Tilley, Leonard P. de W. [Canadian political leader]

New Brunswick (table) **N**: 196

Tilley, Sir Samuel Leonard [Canadian patriot]
T: 287

Confederation of Canada (Fathers of Confederation) **Ci**: 935 *with picture*

Tillich, Paul [German-American theologian]
T: 287

Tillie's Punctured Romance [film]

Sennett, Mack *picture on S*: 301

Tillman, Benjamin Ryan [American political leader]

South Carolina (table) **So**: 658; (Industrial growth) **So**: 660-662

Tillmanites [political group]

South Carolina (Industrial growth) **So**: 660-662

Tilly, Count of [Belgian general] **T**: 287

Thirty Years' War (The Swedish period) **T**: 260;
(The Bohemian period) **T**: 260

Tilt-engine aircraft

V/STOL **V**: 452

Tilt-up construction

Building construction (Types of construction)
B: 683 *with picture*

Tilt-wing aircraft

V/STOL **V**: 452

Tilting [sport]

Knights and knighthood (Tournaments) **K**: 350-351

Tiltrotor [aircraft]

Helicopter (Recent developments) **H**: 174

Timaeus [book by Plato]

Atlantis **A**: 868

Plato (The dialogues) **P**: 567

Timber

Forest **F**: 390 *with pictures*

Forest products (Wood products) **F**: 400 *with picture*

Forestry **F**: 404 *with picture*

Timber dam

Dam (Other types of dams) **D**: 18

Timber hitch

Knots, hitches, and splices (Two half hitches)
K: 357 *with diagram*

Timber line

Forest (Mountain evergreen forests) **F**: 395

Mountain (Plants and animals) **M**: 892

Timber rattlesnake

Rattlesnake **R**: 149 *with picture*

Snake *picture on S*: 533

Timber wolf

Wolf **W**: 375 *with picture*

Timberlake, John B. [husband of]

O'Neale, Peggy **O**: 761

Timberwolves, Minnesota

Basketball (table) **B**: 150

Timbre

Harmonics **H**: 62

Music (Tone color) **M**: 952

Sound (Sound quality) **So**: 601

Timbuktu [town, Mali] **T**: 287

Africa (Kingdoms in western Africa) **A**: 132

Exploration (The exploration of Africa) **E**: 449

Mali (History) **M**: 109 *with map*

Mali Empire **M**: 110

Sunni Ali **So**: 991

World, History of the (African civilizations)

W: 437 *with picture*

Time T: 288 *with maps*

Atomic clock **A**: 877

Biological clock **B**: 314

Calendar **C**: 28

Chronometer **C**: 539

Clock **Ci**: 682i

Day **D**: 51

Daylight saving time **D**: 54

Fourth dimension **F**: 438

Hour **H**: 379

Longitude (Longitude and time) **L**: 452

Metaphysics (Space and time) **M**: 430

Metric system (Structure of the metric system) **M**: 437; (Space and time) **M**: 437

Relativity (Time dilation) **R**: 211; (Lorentz transformations) **R**: 211

Sidereal time **S**: 449

Standard time **So**: 835

Sundial **So**: 990 *with picture*

Time [magazine]

Journalism (The age of sensationalism) **J**: 174-175

Luce, Henry Robinson **L**: 514

Magazine (table) **M**: 45; (History) **M**: 43-45

Time and Free Will [book by Bergson]

Bergson, Henri **B**: 258

Time and motion study

Gilbreth, Frank and Lillian **G**: 190

Taylor, Frederick Winslow **T**: 57

Time and the Conways [play by Priestley]

Priestley, John Boynton **P**: 776

Time bill [banking]

Bill of exchange **B**: 301

Time capsule T: 293

Time-delay fuse

Fuse **F**: 589

Time deposit

Money (Definitions of the money supply)
M: 714

Savings bank **S**: 166

Time, Forward! [book by Kataev]

Russian literature (The period of industrial literature) **R**: 564

Time for Results: The Governors' 1991 Report on Education

Education (How can performance be improved?) **E**: 105-106

Time lock

Lock (Electric locks) **L**: 412

Time Machine, The [book by Wells]

Wells, H. G. **W**: 195

Time of the Hero, The [book by Vargas Llosa]

Vargas Llosa, Mario **V**: 285

Time of Troubles [Russian history]

Russia (The Time of Troubles) **R**: 549

Time of Your Life, The [play by Saroyan]

Saroyan, William **S**: 127

Time-sharing [computer]

Computer (Mainframes and supercomputers)
Ci: 910

Time signature [music]

Music (Indicating time values) **M**: 953-954
with pictures

Time to Heal, A [book by Ford]

Ford, Gerald Rudolph (Later years) **F**: 379

Time to Kill, A [book by Grisham]

Grisham, John **G**: 396

Time to run [finance]

Discount (Bank discount) **D**: 224

Time trial

Bicycle racing (Track races) **B**: 293

Time Warner Inc. [company]

Turner, Ted **T**: 518

Time zone

Time (Time zones) **T**: 288 *with maps*

Greenwich Meridian **G**: 386

Standard time **So**: 835

Timed-pulse transducer

Governor **G**: 294

Timed-release medicine

Microencapsulation **M**: 514

Timekeeper

Basketball (The officials) **B**: 145

Timer

Radar (The timer) **R**: 71 *with diagram*

Times, The [newspaper]

Communication (The 1800's) **Ci**: 881

London (Communication) **L**: 438

Murdoch, Rupert **M**: 930

Newspaper (In Europe) **N**: 386

Time's arrow

Entropy **E**: 328

Times Beach [Missouri]

Missouri (Recent developments) **M**: 672

Times Square [New York City]

New York City (Manhattan) **N**: 323-325; (The arts) **N**: 336; *pictures on N*: 343

"Times They Are A-Changin', The" [song]

Dylan, Bob **D**: 397

Times Three [poems by McGinley]

McGinley, Phyllis **M**: 336

Timetable, Geologic See Geological time scale
in this index

Timgad [ancient city]

City *pictures on Ci*: 581

Timimoun [Algeria]

Algeria *picture on A*: 363

Timișoara [Romania]

Romania (Protests and political change) **R**: 425

Timmerman, George B., Jr. [American political leader]

South Carolina (table) **So**: 658

Timms Hill

Wisconsin (Land regions) **W**: 358

Timofeyevich, Yermak [Russian military leader]

Exploration (The Russians in Siberia) **E**: 447

Timoleon [Greek general]

Syracuse (ancient city) **So**: 1069

Timon of Athens [play by Shakespeare]

Shakespeare, William (*Timon of Athens*) **S**: 364

Timor [island, Southeast Asia] **T**: 293

See also East Timor *in this index*

Timotheus [Greek sculptor]

Seven Wonders of the Ancient World (The Mausoleum at Halicarnassus) **S**: 325

Timothy [Biblical figure] **T**: 293

Timothy [plant] **T**: 293

Grass *picture on G*: 325

Timpani [musical instrument]

Drum **D**: 367

- Bolivia (Economy) **B**: 446 *with picture*
 Cassiterite **C**: 277
 Pewter **P**: 352
 Thailand (Mining) **T**: 226
- Tin** [sports]
 Squash **So**: 813 *with diagram*
- Tin can** **T**: 294
 Iron and steel (Finishing) **I**: 447-448
- Tin can** [ship]
 Destroyer **D**: 162
- Tin Drum, The** [book by Grass]
 German literature (German literature after 1945) **G**: 142
 Grass, Günter **G**: 326
 Novel (The novel today) **N**: 575
- Tin Flute, The** [book by Roy]
 Roy, Gabrielle **R**: 494
- Tin Lizzie** [automobile]
 Ford Motor Company **F**: 382
- Tin oxide**
 Majolica **M**: 94
- Tin Pan Alley** [music]
 Popular music (Vaudeville and musical comedy) **P**: 670
 Song **So**: 592
- Tin plate** [metal]
 Tin **T**: 293
- Tinamou** [bird] **T**: 294
- Tinbergen, Jan** [Dutch economist] **T**: 295
 Econometrics **E**: 57
- Tinbergen, Nikolaas** [Dutch zoologist] **T**: 295
- Tincture** [heraldry]
 Heraldry (Expansion) **H**: 194 *with pictures*
- Tincture of squill** [medication]
 Squill **So**: 814
- Tindaro, Marchese del** [Italian religious leader]
 Rampolla, Mariano Cardinal **R**: 133
- Tinder**
 Camping (Building a campfire) **C**: 94-96
 Fire (Methods of starting fires) **F**: 121
- Tinderbox**
 Fire (Methods of starting fires) **F**: 121
- Tine** [zoology]
 Deer (Antlers) **D**: 83-84
- Ting, Samuel Chao Chung** [American physicist]
 Asian Americans (Individual achievements) **A**: 812c
 Nobel Prizes (Physics: 1976) **N**: 441
 Physics (Advances in the mid-1900's) **P**: 442 *with picture*
- Tingley, Clyde** [American political leader]
 New Mexico (table) **N**: 272
- Tinguely, Jean** [French sculptor]
 Sculpture (Form and treatment) **S**: 230-231
- Tinh** [government]
 Vietnam (Local level) **V**: 365
- Tinicum Island** [U.S. history]
 Pennsylvania (Exploration and settlement) **P**: 264
- Tinker, Joe** [American baseball player]
 Baseball (table: Hall of Fame) **B**: 135
- Tinker Air Force Base** [Oklahoma]
 Oklahoma City (Economy) **O**: 736
- Tinker Bell** [literary figure]
 Peter Pan **P**: 325
- Tinnitus** [disorder] **T**: 295
 Deafness (Environmental factors) **D**: 57
 Ear (Diseases) **E**: 12
- Tinoco, Federico** [Costa Rican political leader]
 Costa Rica (Revolutions and reforms) **Ci**: 1084
- Tinstone** [mineral]
 Cassiterite **C**: 277
- Tint**
 Color *diagram on Ci*: 822
- Tintoretto** [Italian painter] **T**: 295
 Painting (Mannerism) **P**: 56-57 *with picture*
- Tipi** See *Tepee in this index*
- Tipitapa River** [Nicaragua]
 Lake Nicaragua **L**: 42
- Tippecanoe, Battle of** [1811]
 Indian wars (Other Midwestern conflicts) **I**: 192-193 *with map*
 Indiana (Territorial days) **I**: 215-216 *with picture*
 Madison, James (Events leading to war) **M**: 34-35
 Tecumseh **T**: 78
 Westward movement in America (Indian conflicts) **W**: 247
- "Tippecanoe and Tyler too"**
 Harrison, William Henry **H**: 74
 Van Buren, Martin (Election of 1840) **V**: 273
- Tipperary** [Ireland] **T**: 295
- Tipping**
 Fur (Dyeing) **F**: 563
- Tipping machine**
 Bookbinding (Forming a book) **B**: 470
- Tippit, J. D.** [American public figure]
 Kennedy, John Fitzgerald (The death of Oswald) **K**: 267
- Oswald, Lee Harvey **O**: 869
- Tiran, Straits of** [Egypt-Saudi Arabia]
 Middle East (Continuing conflict) **M**: 533
- Tirana** [Albania] See *Tiranë in this index*
- Tiranë** [Albania] **T**: 295
 Albania **A**: 306 *with picture*
- Tirant lo Blanch** [book]
 Spanish literature (The 1400's) **So**: 758
- Tire** [automobile] **T**: 296 *with pictures*
 Automobile (The support system) **A**: 954; (The gasoline car) **A**: 963
 Firestone, Harvey Samuel **F**: 135
 Materials *picture on M*: 300c
- "Tiresias"** [poem by Tennyson]
 Tennyson, Lord (His poems) **T**: 169-170
- Tirich Mir** [mountain, Asia]
 Hindu Kush **H**: 235
 Pakistan *picture on P*: 92
- Tiring room**
 Shakespeare, William (The stage) **S**: 352 *with picture*
- Tiro, Marcus Tullius** [Roman secretary]
 Shorthand (History) **S**: 437
- Tirol** See *Tyrol in this index*
- Tiros I** [spacecraft]
 Satellite, Artificial (History) **S**: 150g
- Tirso de Molina** [Spanish dramatist] **T**: 298
 Don Juan **D**: 306
 Spanish literature (The 1600's) **So**: 759
- "Tis Pity She's a Whore** [play by Ford]
 Ford, John **F**: 381
- Tiselius, Arne** [Swedish chemist]
 Immune system (Further breakthroughs) **I**: 88d
 Nobel Prizes (Chemistry: 1948) **N**: 443
- Tishah be-Av** [religion] **T**: 298
 Judaism (Other holidays) **J**: 181
- Tishreen University**
 Latakia **L**: 90
- Tishri** [month]
 Calendar (The Hebrew calendar) **C**: 29
- Tisias** [Greek orator]
 Oratory (Beginnings) **O**: 818
- Tisiphone** [Greek mythology]
 Furies **F**: 566
- Tisissat Falls** [Ethiopia]
 Ethiopia *picture on E*: 370
- Tiso, Jozef** [Slovak political leader]
 Slovakia (World War II) **S**: 509
- Tisquantum** See *Squanto in this index*
- Tissaphernes** [Persian military leader]
 Alcibiades **A**: 334
- Tissot, James** [French artist]
 Painting (Painting outside France) **P**: 72
- Tissue** [physiology] **T**: 299
 Food (Building and repairing tissues) **F**: 331
 Histology **H**: 260
 Inflammation **I**: 266
 Life (Tissues, organs, and organ systems) **L**: 277 *with diagram*
 Plant (Parts of plants) **P**: 529
 Stem cell **So**: 889
 Transplant **T**: 379
 Tree (The parts of a tree) **T**: 416 *with picture*
- Tissue bank** [medicine]
 Transplant **T**: 379
- Tissue engineering**
 Biomedical engineering (Developing) **B**: 325
- Tissue plasminogen activator** [drug]
 Heredity (The era of genetic engineering) **H**: 209
- Tissue transplant** [medicine] See *Transplant in this index*
- Tista River** [Sikkim]
 Sikkim (Land) **S**: 456
- Tisza River** [Europe]
 Hungary (Rivers and lakes) **H**: 443 *with map*
- Tit** [bird]
 Titmouse **T**: 302
- Titan** [satellite] **T**: 299
 Cassini **C**: 276
 Satellite **S**: 150; (Geologic history unknown) **S**: 150c; (History of satellite study) **S**: 150c
 Saturn (Satellites) **S**: 153 *with picture*
 Solar system (Moons) **So**: 580-581
 Voyager **V**: 451
- Titan 4** [rocket]
 Space exploration *picture on So*: 699
- Titania** [gem]
 Titanium (Uses) **T**: 300
- Titania** [legendary figure]
 Fairy (Fairies in literature) **F**: 11 *with picture*
 Shakespeare, William (*A Midsummer Night's Dream*) **S**: 357 *with picture*
- Titania** [satellite]
 Satellite (The middle-sized icy satellites) **S**: 150a
- Titanic** [film]
 Motion picture (Best picture: 1997) **M**: 861; (The computer revolution) **M**: 872-873 *with picture*
- Titanic** [ship] **T**: 299 *with picture*
 Ballard, Robert Duane **B**: 43
 Exploration (Deep-sea exploration) **E**: 451-452
 Iceberg (Ice patrols) **I**: 18
 Sarnoff, David **S**: 127
- Titaniferous magnetite** [mineral]
 Titanium (Location of deposits) **T**: 300
 Vanadium **V**: 269
- Titanite** [mineral]
 Titanium (Location of deposits) **T**: 300
- Titanium** [element] **T**: 300
 Alloy (Alloys for strength and lightness) **A**: 378
- Titanium dioxide** [chemical]
 Titanium (Uses) **T**: 300
- Titanium tetrachloride** [chemical]
 Titanium (Uses) **T**: 300
- Titano, Mount** [mountain, San Marino]
 San Marino (country) (Land) **S**: 103 *with picture*
 San Marino (city) **S**: 104
- Titanomachy** [Greek mythology]
 Rhea **R**: 290
- Titans** [Greek mythology] **T**: 300
 Atlas **A**: 868
 Cronus **Ci**: 1152
 Hecate **H**: 164
 Mythology (The Creation myth) **M**: 978-979
 Uranus **U**: 217
- Titans, Tennessee** See *Tennessee Titans in this index*
- Tithe** [tax] **T**: 301
 Mormons (Church organization) **M**: 807-808
- Tithing** [English history]
 Police (Early law enforcement in England) **P**: 624
- Tithonus** [mythology]
 Aurora **A**: 891
- "Tithonus"** [poem by Tennyson]
 Tennyson, Lord (His poems) **T**: 169-170
- Titi** [monkey] **T**: 301 *with picture*
- Titian** [Italian painter] **T**: 301 *with picture*
 Drawing *picture on D*: 344
 Painting (The Renaissance in Venice) **P**: 55-56 *with picture*
- Titicaca, Lake** See *Lake Titicaca in this index*
- Titius, Johann D.** [German mathematician]
 Bode's law **B**: 434
- Title** [law] **T**: 302
 Bill of sale **B**: 305
 Tenant **T**: 132
 Torrens system **T**: 340d
- Title** [motion picture]
 Motion picture (Early motion pictures) **M**: 864
- Title, Abstract of** [law]
 Deed **D**: 81
- Title card** [reference]
 A Guide to Research Skills Research Guide: 28
- Title insurance**
 Deed **D**: 81
 Torrens system **T**: 340d
- Title of honor**
 Nobility **N**: 450
- Title page**
 Book (Inside a book) **B**: 464-465
- Titmarsh, Michael Angelo** [pen name]
 Thackeray, William Makepeace (Early career) **T**: 220
- Titmouse** [bird] **T**: 302 *with picture*
 Bird (Birds of forests and woodlands) **B**: 334 *with picture*
- Tito, Dennis** [American businessman]
 International Space Station (History) **I**: 346b-347
- Tito, Josip Broz** [Yugoslav political leader]
T: 302
 Cold War (The Iron Curtain descends) **Ci**: 763; (The Containment Policy) **Ci**: 763-764
 Croatia (History) **Ci**: 1148a-1148b
 Podgorica **P**: 588
 Serbia (History) **S**: 314-315
 Slovenia (History) **S**: 512
 Yugoslavia (World War II) **Y**: 579; (Communist rule) **Y**: 580
- Titograd** [former name] See *Podgorica in this index*
- Titov, Gherman** [Russian cosmonaut]
 Space exploration (Vostok and Mercury: The first human beings in space) **So**: 711-712
- Tituba** [American colonist]
 Salem (History) **S**: 61
- Titus** [Biblical figure] **T**: 303
 Timothy **T**: 293
- Titus** [Roman emperor] **T**: 303
 Domitian **D**: 306
- Titus, Epistle to** [New Testament]
 Titus **T**: 303
- Titus Andronicus** [play by Shakespeare]
 Shakespeare, William (*Titus Andronicus*) **S**: 356

- Titusville** [Pennsylvania]
Pennsylvania picture on P: 266
- Tiv** [people]
Tribe T: 440
- Tivoli Gardens** [park, Copenhagen]
Denmark (Recreation) D: 136-137 with picture
- Tiw** [Norse god]
Tuesday T: 481
- Tiwanaku Indians** See Tiahuanaco Indians in this index
- TKO**
Boxing (Scoring a fight) B: 528-529
- TI** [symbol]
Thallium T: 229
- Tlaloc** [Aztec god]
Aztec (Religion) A: 1000
- Tlatelolco** [former city]
Aztec (The Aztec empire) A: 999
- Tlatelolco, Treaty of** [1967]
Arms control (History of arms control) A: 721-722
- Tlaxcalli**
Aztec (Food) A: 1001
- Tlazoltéotl** [Aztec goddess]
Mythology (American Indian mythology) M: 985-986
- Tlingit Indians** [American Indians] T: 303
Alaska (Population) A: 286
Indian, American pictures on I: 139
- Tm** [symbol]
Thulium T: 272
- TM** [psychology]
Transcendental Meditation T: 370
- TNM system** [medicine]
Cancer (Staging) C: 172
- TNT** [explosive] T: 303
Nitric acid N: 425
- "To a Mountain Daisy"** [poem by Burns]
Burns, Robert (Burns's works) B: 710
- "To a Mouse"** [poem by Burns]
Burns, Robert (Burns's works) B: 710
- "To a Water Lily"** [music by MacDowell]
MacDowell, Edward Alexander M: 11
- "To a Waterfowl"** [poem by Bryant]
Bryant, William Cullen (His early works) B: 655
- "To a Wild Rose"** [music by MacDowell]
MacDowell, Edward Alexander M: 11
- "To Althea from Prison"** [poem by Lovelace]
Lovelace, Richard L: 509
- "To Anacreon in Heaven"** [song]
Key, Francis Scott K: 307
National anthem N: 28
"Star-Spangled Banner" (How the song became famous) So: 854
- To Be a Pilgrim** [book by Cary]
Cary, Joyce C: 270
- To Be or Not To Be** [film]
Lubitsch, Ernst L: 513
- To Be Young, Gifted and Black** [book by Hansberry]
Hansberry, Lorraine H: 54
- To Bedlam and Part Way Back** [poems by Sexton]
Sexton, Anne S: 337
- To Every Thing There Is a Season** [book by Dillon]
Literature for children picture on L: 382
- "To Helen"** [poem by Poe]
Poe, Edgar Allan (Poe's life) P: 589; (Poetry and poetic theory) P: 589-590
- "To His Coy Mistress"** [poem by Marvell]
Marvell, Andrew M: 236
- "To Juan at the Winter Solstice"** [poem by Graves]
Graves, Robert G: 331
- To Kill a Mockingbird** [book by Lee]
Lee, Harper L: 175
- To Let** [book by Galsworthy]
Galsworthy, John G: 16
- "To Lucasta, Going to the Wars"** [poem by Lovelace]
Lovelace, Richard L: 509
- To the Lighthouse** [book by Woolf]
Novel (New directions in the novel) N: 573-574
Woolf, Virginia W: 401
- "To the Virgins"** [poem by Herrick]
Herrick, Robert H: 215
- Toad** [animal] T: 303 with picture
Amphibian (Kinds of amphibians) A: 440
Frog (Kinds of frogs) F: 539
Tadpole T: 6
- Toadfish** [fish] T: 304 with picture
- Toadflax** [plant] T: 304 with picture
- Toadstool**
Mushroom M: 941
- Toadstool Park**
Nebraska N: 102-103 with picture
- Toana Range** [mountains, Nevada]
Nevada (Land regions) N: 166
- Tobacco** [plant] T: 305 with pictures
See also Smoking in this index
- Cigar** Ci: 552
- Cigarette** Ci: 552
- Colonial life in America (Farming)** Ci: 809-810 with picture
- Drug abuse (Abuse of legal drugs)** D: 361
- Indian, American (Shamans)** I: 147
- Jamestown** J: 28
- Kentucky (Agriculture)** K: 289 with picture
- Lexington** L: 224
- Nicotine** N: 405
- North Carolina (Manufacturing)** N: 487; (Agriculture) N: 488
- Poisonous plant (Some poisonous plants)** P: 602
- Rolfe, John R:** 402
- Snuff** S: 542
- South Carolina (Agriculture)** So: 656 with picture
- United States, History of the picture on U:** 155
- Virginia (Manufacturing)** V: 414 with picture
- Tobacco certificate**
Colonial life in America (Money) Ci: 811
- Tobacco juice** [entomology]
Grasshopper G: 327
- Tobacco Road** [book by Caldwell]
Caldwell, Erskine C: 27
- Tobacco root** See Bitter root in this index
- Tobacco Root Mountains**
Montana (Land regions) M: 752
- Tobacco virus**
Virus picture on V: 427
- Tobacco Wars** [1904-1909]
Kentucky (The early 1900's) K: 293-294; picture on K: 292
- Tobaccowood** [shrub]
Witch hazel W: 371
- Tobago** See Trinidad and Tobago in this index
- Tobey, Charles W.** [American political leader]
New Hampshire (table) N: 223
- Tobey, Mark** [American painter] T: 308
- Tobias, Channing H.** [American social reformer]
Spingarn Medal (table: 1948) So: 793
- Tobin, James** [American economist]
Nobel Prizes (Economics: 1981) N: 449
- Tobin, Maurice J.** [American government official]
Labor, Department of (table) L: 2
Massachusetts (table) M: 288
Truman, Harry S. (table) T: 469
- Tobit** [Bible]
Bible (Development of the Christian Old Testament) B: 282
Galilee G: 10
- Tobogganing** [sport] T: 308 with picture
Indian, American picture on I: 138
- Toco toucan** [bird]
Toucan T: 344 with picture
- Tocopherol** See Vitamin E in this index
- Tocqueville, Alexis de** [French philosopher]
T: 308
Westward movement in America (The frontier influence) W: 252
- "Today and Tomorrow"** [newspaper column]
Lippmann, Walter L: 346
- Todd, Alexander** [British chemist]
Nobel Prizes (Chemistry: 1957) N: 443
- Todd, David** [American government official]
Ohio (table) O: 699
- Todd, Mary** [wife of Abraham Lincoln] See Lincoln, Mary Todd in this index
- Todd, Robert S.** [father of]
Lincoln, Mary Todd L: 327
- Todd, Thomas** [American jurist]
Supreme Court of the United States (table) So: 1000
- Toddler**
Child (The toddler stage) C: 449 with picture
- Toddy** [drink]
Coconut palm Ci: 746
- Toe** [anatomy]
Bird (Legs and feet) B: 364
- Toe dancing**
Ballet (Point work) B: 47
- Toe pick**
Ice skating (Figure skating) I: 11
- Toe ring**
Ring R: 342
- Toe shoe**
Ballet picture on B: 47
- Toenail**
Nail N: 4
- Toffee**
Candy (Chewy candies) C: 176
- Tofu** [food] T: 308
Japan (Food and drink) J: 39
- Soybean** So: 689
- Toga** [clothing] T: 309 with picture
Clothing (Ancient times) Ci: 696-698 with picture
- Tunic** T: 487
- Toggenburg goat**
Goat (Domestic goats) G: 239; picture on G: 241
- Toggle switch**
Electric switch E: 189 with diagram
- Toggling**
Leather (Final processing) L: 168
- Togo** T: 309 with pictures and map
Flag picture on F: 200
- Togo, Heihachiro** [Japanese admiral]
Russo-Japanese War (Attack on Lüshun) R: 566
- Togo Mountains**
Togo (Land) T: 310
- Togolese Unity Party, Committee for** [political party]
Togo (History) T: 310-311
- Tohono O'odham Indians**
Indian, American (Indians of the Southwest) I: 166-167
Rain dance R: 125
- Toilet**
Plumbing (How toilets work) P: 579 with diagrams; (History) P: 580
- Toilet, The** [play by Baraka]
Baraka, Amiri B: 103
- Toilet soap**
Detergent and soap (Bar soaps) D: 164
- Toilet training**
Baby (From 12 to 18 months) B: 7-8
Child (The preschool years) C: 449-450
- Toilet water**
Perfume P: 286
- Toiyabe Range** [mountains, Nevada]
Nevada (Land regions) N: 166
- Tojo, Hideki** [Japanese military leader] T: 311 with portrait
Japan (World War II) J: 58; (Allied military occupation) J: 58
Pearl Harbor (Background) P: 218
World War II (The rise of dictatorships) W: 470; (Japan attacks) W: 477-478
- Tok Pisin** [language]
New Guinea (People) N: 206
Papua New Guinea (People) P: 140
- Tokamak** [nuclear reactor]
Nuclear energy (Experimental fusion devices) N: 592-593 with pictures
- Tokara Islands** [Pacific]
Ryukyu Islands R: 574
- Tokay**
Grape (European grapes) G: 319-320
- Tokelau** [islands, Pacific]
New Zealand (Overseas territories) N: 348
- Tokugawa** [Japanese history]
Japan (Tokugawa period) J: 55
Japanese literature (The Tokugawa period) J: 62
Painting (Japanese painting) P: 47
Shogun S: 433
Tokugawa Ieyasu T: 311
- Tokugawa Ieyasu** [Japanese ruler] T: 311
Japan (Tokugawa period) J: 55
Tokyo (Early development) T: 318
- Tokyo** [Japan] T: 312 with pictures and maps
Advertising picture on A: 72
Architecture picture on A: 606
Asia picture on A: 770
Japan (People) J: 35; (Climate) J: 48; pictures on J: 33, J: 44
Olympic Games (The postwar games) O: 751-752
- Tokyo Bay**
Tokyo (The city) T: 313
- Tokyo Cathedral**
Architecture picture on A: 606
- Tokyo Central Wholesale Market**
Tokyo (Other places of interest) T: 317
- Tokyo Disney Resort** [amusement park]
Walt Disney Company W: 20
Tokyo (Other places of interest) T: 317
- Tokyo Dome** [sports]
Tokyo (Recreation) T: 316
- Tokyo International Airport** [Tokyo]
Airport (table) A: 245
Japan (Transportation) J: 51-52
Tokyo (Transportation) T: 318
- Tokyo International Forum**
Tokyo (Recent developments) T: 319-320
- Tokyo International Trade Center**
Tokyo (Trade) T: 317-318
- Tokyo Metropolitan Government Office**
Tokyo (Government buildings) T: 316

- Tokyo Metropolitan Prefecture** [province, Japan]
Tokyo (Tokyo Metropolitan Prefecture) T: 313;
(Government) T: 318
- Tokyo National Museum**
Tokyo (Museums and libraries) T: 315
- Tokyo Rose** [Japanese propagandist] T: 320
World War II (Propaganda) W: 493
- Tokyo Stock Exchange**
Tokyo (Finance) T: 317 *with picture*
- Tokyo Telecommunications Engineering Corporation** [former name]
Sony Corporation So: 594
- Tokyo Telecommunications Research Institute** [former name]
Sony Corporation So: 594
- Tokyo Tower**
Tokyo (Tokyo Tower) T: 316
- Tokyo Trade Center**
Tokyo (Trade) T: 317
- Tokyo trials** [World War II]
International law (Punishment) I: 341
War crime (World War II) W: 27
- Toland, Gregg** [American cameraman]
Motion picture (Movies in the 1930's) M: 868-869
- Toland, John** [English philosopher]
Freethinker F: 509
- Tolbert, William R., Jr.** [Liberian political leader]
Liberia (The 1970's and 1980's) L: 232
- Toledo** [city, Spain] T: 321
Spain *picture on* So: 738
- Toledo** [city, Ohio] T: 321
Ohio *picture on* O: 684
- Toledo, Alejandro** [Peruvian political leader]
Peru (Recent developments) P: 316
- Toledo, Fernando Alvarez de** [Spanish general]
See Alba, Duke of *in this index*
- Toledo, José Álvarez de** [Mexican journalist]
Texas (Communication) T: 203
- Toledo, José Rey** [American painter]
Indian, American *picture on* I: 147
- Toledo Bend** [lake, Louisiana-Texas]
Texas (Rivers and lakes) T: 198
- Toledo Strip** [U.S. history]
Michigan (Territorial period) M: 509
- Tolerance** [sociology]
Human relations H: 427
- Toleration Act** [1649]
Toleration Act T: 321
- Toleration Act** [1689] T: 321
- Toleware**
Antique (Metalwork) A: 558
- Tolima** [volcano, Colombia]
Andes Mountains (Physical features) A: 452
- Tolkien, Christopher** [son of]
Tolkien, J. R. R. T: 322
- Tolkien, J. R. R.** [British author] T: 322
Fairy (Fairies in literature) F: 11
- Toll** [tax]
Road (How roads and highways are paid for) R: 360
- Toll-free number**
Telephone (Business services) T: 98
- Toll road**
Transportation (Problems of modern transportation) T: 397
Turnpike T: 519
- Tollán** [ancient city]
Toltec Indians T: 323
Tula T: 482
- Toller, Ernst** [German author]
German literature (Expressionism) G: 142
- Tolman, Edward Chace** [American psychologist] T: 322
- Tolmie, Simon F.** [Canadian political leader]
British Columbia (table) B: 627
- Tolstoy, Alexei** [Russian author] T: 322
Russian literature (The period of rebirth) R: 564
- Tolstoy, Leo** [Russian author] T: 322 *with portrait*
Doukhobors D: 314
Novel (Russia) N: 573
Russian literature (The 1860's and 1870's) R: 562
- Toltec Indians** [American Indians] T: 323
Architecture (Pre-Columbian architecture) A: 614
Indian, American (Before European contact) I: 169-170, *picture on* I: 146
Latin America (The first inhabitants) L: 104
Maya (The Postclassic Period) M: 326
Mexico (The Toltec and the Aztec) M: 468
Pyramids (American pyramids) P: 917-919
Tula T: 482
- Toluene** [chemical] T: 324
Saccharin S: 4
- Tolypocladium inflatum** [fungus]
Cyclosporine Ci: 1204
- Tom** [bird]
Turkey T: 513
- Tom** [cat]
Cat (Reproduction) C: 293
- Tom Brown's School Days** [book by Hughes]
Hughes, Thomas H: 409
Rugby School R: 513
- Tom Jones** [book by Fielding]
Fielding, Henry (His novels) F: 94
English literature (The rise of the novel) E: 318-319
Novel (The first English novelists) N: 572
- Tom Jones** [film]
Motion picture (Best picture: 1963) M: 861
- Tom Sawyer, The Adventures of** [book by Twain]
American literature (Mark Twain and Henry James) A: 420; *picture on* A: 416
Twain, Mark (Productive years in Hartford) T: 529 *with picture*
- Tom Sawyer Fence Painting Contest** [Hannibal]
Missouri *picture on* M: 654
- Tom Shows** [U.S. history]
Stowe, Harriet Beecher So: 916
- Tom Thumb** *See* Stratton, Charles Sherwood *in this index*
- Tom Thumb** [locomotive]
Baltimore (The 1800's) B: 69
Cooper, Peter Ci: 1035 *with picture*
Maryland (The War of 1812 and industrial development) M: 258; *picture on* M: 257
Railroad (Developments in the United States) R: 115
- Tom-tom** [drum] T: 324 *with picture*
- Tomahawk** [weapon] T: 324 *with pictures*
Indian, American (Weapons) I: 144
- Tomahawk cruise missile** [weapon]
Guided missile (Preset guidance) G: 426
- Tomahawk Park** [Cut Knife]
Saskatchewan (Interesting facts) S: 129 *with picture*
- Tomarctus** [extinct animal]
Dog (History) D: 281
- Tomás, Tomás Navarro** [Spanish author]
Spanish literature (The Generation of 1898) So: 762
- Tomato** [plant] T: 325 *with pictures*
Nightshade N: 421 *with picture*
Plant *picture on* P: 519
- Tomato wilt** [plant disease]
Tomato (Growing, harvesting, and processing) T: 326
- Tomb** [funeral] T: 326
Egypt, Ancient *pictures on* E: 140
Painting (Egyptian painting) P: 40-41
Sculpture (Later medieval sculpture) S: 250 *with picture*
- Tomb of Giuliano de' Medici** [sculpture by Michelangelo]
Sculpture (Michelangelo) S: 252-253 *with picture*
- Tomb of Hugh le Despenser** [sculpture]
Sculpture (Later medieval sculpture) S: 250 *with picture*
- Tomb of Pope Alexander VII** [sculpture by Bernini]
Sculpture (European sculpture) S: 253 *with picture*
- Tomb of the Unknowns**
Arlington National Cemetery A: 716
Unknown soldier U: 212 *with picture*
Washington, D.C. (Arlington National Cemetery) W: 78
- Tomb of the Virgin, Church of the**
Gethsemane G: 175
- Tomba, Alberto** [Italian skier]
Skiing (The middle and late 1900's) S: 487-488
- Tombalbaye, François** [Chadian political leader]
Chad (History) C: 367
- Tombaugh, Clyde William** [American astronomer]
Astronomy (Finding new planets) A: 848
Pluto P: 581
- Tombigbee River** [Alabama-Mississippi] T: 326
- Tomiboutou** *See* Timbuktu *in this index*
- Tombs of the Kings, Valley of the** *See* Valley of the Kings *in this index*
- Tombstone** [Arizona] T: 326
Arizona (Places to visit) A: 678; *picture on* A: 690
Earp, Wyatt E: 15
- Tomcat** *See* Tom *in this index*
- Tomel, Marisa** [actress]
Motion picture (Best performance by an actress in a supporting role: 1992) M: 863
- Tomes, Margot** [artist]
Literature for children *picture on* L: 379
- Tomie dePaola's Mother Goose** [book by dePaola]
DePaola, Tomi D: 149
- Tomlin, Bradley Walker** [American painter]
T: 327 *with portrait*
- Tomlinson, Gideon** [American political leader]
Connecticut (table) Ci: 967
- Tommy** [rock opera by Townshend]
Townshend, Peter T: 350
Who, The W: 296
- Tomographic scan** [medicine]
Positron emission tomography P: 698 *with pictures*
X rays (Uses of X rays) X: 540
- Tomonaga, Sin-itiro** [Japanese physicist]
Nobel Prizes (Physics: 1965) N: 441
Subatomic particle (The Standard Model) So: 938
- Tompkins, Daniel D.** [American political leader]
T: 327
New York (table) N: 313
- Tompkins, William** [American businessman]
West Virginia (Early industries) W: 226
- Toms, David** [American golfer]
Golf (U.S. Open) G: 265
- Ton** [unit of measure] T: 327
Air conditioning (Capacity of air conditioners) A: 179-180
- Tonatiuh** [Aztec god]
Aztec (Religion) A: 1000; (Arts and crafts) A: 1001 *with picture*
- Tonatiuhichan** [legendary place]
Mythology (American Indian mythology) M: 985-986
- Tonawanda Band of Seneca** [political group]
Seneca Indians S: 297
- Tone** [color]
Color *diagram on* Ci: 822
Photography (Tone or color) P: 412
- Tone** [language]
Chinese language (Spoken Chinese) C: 510
- Tone** [music] T: 327
Harmonics H: 62
Music (Musical instruments) M: 948; (Tone) M: 950
Noise N: 451
- Tone arm**
Phonograph (Parts of a phonograph) P: 400-401 *with diagram*
- Tone cluster** [music]
Cowell, Henry Ci: 1112
- Tone color** *See* Timbre *in this index*
- Tone control** [electronics]
Stereophonic sound system (Parts of a stereo system) So: 892
- Tone dialing**
Telephone (The dialing mechanism) T: 94-95
- Tone poem** [music] *See* Symphonic poem *in this index*
- Tongawa, Susumu** [Japanese molecular biologist]
Nobel Prizes (Physiology or medicine: 1987) N: 445
- Toner** [chemical]
Copying machine (Electrostatic copying) Ci: 1045
Ink (Printing inks) I: 273
Printer (Laser printers) P: 795
- Tonga** T: 327 *with picture and map*
Flag *picture on* F: 205
- Tongeriro National Park** [New Zealand]
National park (New Zealand) N: 42d; (table) N: 42f
- Tongass National Forest** [Alaska]
Alaska (Places to visit) A: 290
- Tongatapu** [islands]
Tonga (Land) T: 328
- Tongue** [anatomy] T: 329 *with pictures*
Chameleon (The life of a chameleon) C: 372 *with picture*
Frog (The body of a frog) F: 536
Hummingbird (Habits) H: 435 *with pictures*
Mouth M: 903
Taste T: 50 *with diagrams*
- Tongue** [food]
Meat *pictures on* M: 349
- Tongue** [language]
Language L: 62
- Tongue and groove board** [building material]
House (Interior construction) H: 382
- Tongue twister**
Nursery rhyme (Tongue twisters) N: 614
- Tongues** [religion] *See* Speaking in tongues *in this index*
- Tonic** [music]
Key K: 307

Music (Tone) M: 950; (Harmony) M: 951

Tonight at 8:30 [plays by Coward]

Coward, Noël Ci: 1107

"Tonight Show, The" [television program]

Carson, Johnny C: 250

Tonio [opera character]

Opera (*Pagliacci*) O: 806

Tonio Kröger [book by Mann]

Mann, Thomas M: 164

Tonkin [region, Vietnam]

Indochina (French influence) I: 225

Vietnam (French rule) V: 370

Tonkin, Gulf of

China Sea C: 508 *with map*

Tonkin Gulf Resolution [1964]

Vietnam War (The Gulf of Tonkin incident) V: 375

Tonkinese cat

Cat (Short-haired breeds) C: 290-292

Tonle Sap River

Cambodia (Land) C: 72

Tono-Bungay [book by Wells]

Wells, H. G. W: 195

Tonsil [anatomy] T: 330 *with diagram*

Diphtheria (Cause, symptoms, and complications) D: 215

Lymphatic system (Lymphoid tissue) L: 534

Tonsillectomy [medicine]

Tonsillitis T: 330

Tonsillitis [disease] T: 330

Strep throat So: 925

Tonsure [religion]

Hairdressing (The Middle Ages) H: 11

Tonti, Henri de See Tonty, Henri de *in this index*

Tonto National Monument [Arizanal

National Park System (table: National monuments) N: 51

Tontons Macoutes

Haiti (History) H: 15-16

Tonty, Henri de [French explorer] T: 330

Arkansas (Exploration and settlement) A: 712

Too Late the Phalarope [book by Paton]

Paton, Alan P: 196

Tool T: 330

Chimpanzee (The life of a chimpanzee) C: 471-473

Colonial life in America (Furnishings) Ci: 797; (Farming) Ci: 809

Pioneer life in America (Tools) P: 483

Prehistoric people (The first human beings)

P: 745; (Cultural development after *Homo erectus*) P: 747; (The improvement of tools) P: 750

Stone Age So: 909

Technology (Primitive technology) T: 74

Woodworking W: 396 *with pictures*

See also the list of Related Articles in the Tool article

Tool-and-die maker [occupation]

Die and diemaking D: 195

Tool steel

Alloy (Alloys of iron) A: 377-378

Iron and steel (Kinds of iron and steel) I: 437

Toole, Joseph Kemp [American political leader]

Montana (table) M: 757; (Statehood) M: 760

Tooled leather

Embossing E: 256

Leathercraft (Cutting and assembling) L: 169 *with picture*

Toolmaking [industry] T: 331

Toombs, Robert Augustus [Confederate political leader] T: 331

Toomer, Jean [American author] T: 331

American literature (The Harlem Renaissance) A: 422

Tooth See Teeth *in this index*

Tooth decay

Fluoridation F: 305

Teeth (Dental decay) T: 82 *with pictures*

Tooth fairy

Fairy F: 10

Tooth shell [zoology]

Indian, American (Money) I: 149 *with picture*

Mollusk (Tooth shells) M: 696; *picture on*

M: 695

Shell (Kinds of mollusk shells) S: 385-388 *with picture; picture on* S: 387

Toothache

Teeth (Dental decay) T: 82

Toothache tree

Prickly-ash P: 775

Toothbrush

Teeth (Cleaning the teeth) T: 81 *with picture*

Toothpaste and toothpowder T: 331

Toothed whale

Dolphin D: 297

Porpoise P: 679

Whale (Kinds of toothed whales) W: 258 *with picture; W: 255 with pictures*

Toothpaste and toothpowder T: 331

Teeth (Cleaning the teeth) T: 81

Top [toy] T: 331 *with pictures*

Top dyeing

Wool (Making fabric) W: 401

Top Fuel car

Automobile racing (Drag racing) A: 978

Top grain

Leather (Final processing) L: 168

Top hat

Hat *picture on* H: 84

Top hat furnace

Furnace (Heating the charge) F: 567

Top level domain [electronics]

Internet (How the Internet works) I: 350c

Top quark [physics]

Physics (Physics today) P: 442-443

Quark Q: 7

Subatomic particle (Elementary particles)

So: 937; (Theoretical research) So: 938

Top speed [aviation]

Airplane (Measuring flying speed) A: 225-226

Tope Inca Yupanqui [Inca emperor]

Inca (The empire) I: 98

Topez [gem] T: 332

Gem *picture on* G: 78

Topaz Reservoir

Nevada (Natural resources) N: 169

Topoka [Kansas] T: 332 *with picture*

Kansas *pictures on* K: 221, K: 234

Topic outline

Outline O: 880

Topic sentence

A Guide to Writing Skills Research Guide: 8

Topical arrangement

Encyclopedia (Arrangement of content) E: 266

Topical geography

Geography (Regional and topical geography)

G: 93

Topkapi Palace

Istanbul (The city) I: 490-491

Topographic map

Archaeology (Surveying sites) A: 596

Map (General reference maps) M: 177; (How

maps are made) M: 180

Topographic survey

Surveying (Types of surveys) So: 1010-1011

Topology [geometry] T: 333

Geometry (Rise of non-Euclidean geometry)

G: 105

Mathematics (In the 1800's) M: 307

Topped crude [oil]

Asphalt (Asphalt production) A: 815

Topper [film]

Grant, Cary G: 311

Topping out ceremony

Building construction (Constructing a sky-

scraper) B: 683-684

Topsoil [earth] T: 333

Lawn (Preparing the soil) L: 142

Loess L: 420

Soil (Characteristics of soils) So: 574 *with diagram*

Topspin

Tennis (The ball in play) T: 163-164

Topsy [literary figure]

Uncle Tom's Cabin U: 20

Toquima Range [mountains, Nevada]

Nevada (Land regions) N: 166

Torah [religious book] T: 333

See also Pentateuch *in this index*

Bible (Books of the Hebrew Bible) B: 279-280

with picture; (The Bible in worship) B: 287

Jews (The kingdom of Israel) J: 121

Judaism J: 179; (The Bible) J: 180

Old Testament O: 740

Paul, Saint (Paul's letters and ideas) P: 201

Religion (Judaism) R: 219

Torah Umeshorah [organization]

Parochial school P: 178

Toraja [people]

Indonesia (Rural life) I: 229

Torch [light] T: 333

Fire (Light) F: 122

Statue of Liberty (Repairs and changes)

So: 878 *with pictures*

Torch Bearers, The [play by Kelly]

Kelly, George Edward K: 256

Torch ginger

Flower *picture on* F: 292

Torchbearers, The [book by Noyes]

Noyes, Alfred N: 578

Tordesillas, Treaty of [1494]

Brazil (Portuguese rule) B: 583

Latin America (European discovery and exploration) L: 104-105

Line of Demarcation L: 333 *with map*

"Toreador Song" [aria]

Opera (*Carmen*) O: 802-803

Torii [architecture]

Shinto *picture on* S: 401

Toril

Bullfighting (The bullring) B: 695

Torino See Turin *in this index*

Torn cartilage [anatomy]

Cartilage C: 263

Torn Hat, The [painting by Sully]

Sully, Thomas *picture on* So: 971

Tornado [weather] T: 333 *with pictures and map*

Cyclone Ci: 1203

Radar *picture on* R: 67

Safety (During a tornado) S: 15

Waterspout W: 147 *with picture*

Weather (Synoptic-scale systems) W: 159-

161; *picture on* W: 167

Tornado Alley [region]

Tornado T: 333

Tornado warning

Tornado (Forecasting tornadoes) T: 334-335

Tornado watch [meteorology]

Tornado (Forecasting tornadoes) T: 334-335

Torne River [Finland-Sweden] T: 335

Tornat Mountains

Newfoundland and Labrador (Mountains)

N: 370 *with map*

Tornio River

Torne River T: 335

Toronto [city, Ontario] T: 336 *with pictures and map*

Canada *picture on* C: 107

Ontario O: 764; (Population) O: 768; (table:

Average monthly weather) O: 778; *picture on* O: 765

Toronto, University of T: 340b

Ontario (Schools) O: 769 *with picture*

Toronto (Education) T: 338

Toronto Argonauts

Football (Canadian Football League) F: 364

Toronto (Sports) T: 339

Toronto Blue Jays

Baseball (table) B: 130

Toronto (Sports) T: 339

Toronto Eaton Centre [Toronto]

Canada *picture on* C: 107

Toronto (Landmarks) T: 336-337; (Urban

renewal) T: 340a

Toronto Maple Leafs

Hockey (table: National Hockey League)

H: 281; (Famous players and All-Star

teams) H: 281

Toronto (Sports) T: 339

Toronto Public Library

Toronto (Museums and libraries) T: 339

Toronto Raptors

Basketball (table) B: 150

Toronto (Sports) T: 339

Toronto Stock Exchange

Toronto (Finance) T: 340

Torosaurus [dinosaur]

Dinosaur (True dinosaurs) D: 206b-208

Torpedo [firecracker]

Fireworks (Other uses of fireworks) F: 135

Torpedo [fish] See Electric ray *in this index*

Torpedo [weapon] T: 340b *with pictures*

Mine warfare (History) M: 565

Torpedo boat [ship]

PT boat P: 853

Torpedo top [toy]

- Torrens system (In the United States) T: 340d
Torrens system [law] T: 340d
Torrent duck [bird]
 Duck (Torrent ducks) D: 377
Torres, Luis Vaez de [Spanish explorer] T: 340d
 with picture and map
 Australia (European discovery) A: 922
Torres Bodet, Jaime [Mexican author/statesman] T: 341
Torres de Serranos [gate]
 Valencia V: 260
Torres del Paine National Park [Chile]
 National park (table) N: 42g
Torres Jurado, Antonio de [Spanish guitar maker]
 Guitar G: 436
Torres Naharro, Bartolomé de [Spanish author]
 Spanish literature (The 1500's) So: 758-759
Torres Strait
 Torres, Luis Vaez de T: 340d
Torres Strait Islanders [people]
 Aborigines, Australian A: 13
 Australia (Recent developments) A: 925
Torres Strait Islands [Australia] T: 341
Torretta, Gino [American football player]
 Football (table) F: 363
Torricelli, Evangelista [Italian physicist] T: 341
 Air (The study of air) A: 174
 Barometer B: 115
 Hydraulics (Laws of hydrodynamics) H: 464
Torricelli's law [physics]
 Hydraulics (Laws of hydrodynamics) H: 464
Torrijos Herrera, Omar [Panamanian political leader] T: 341
 Panama (Relations with the United States) P: 121
Torrone
 Christmas (Christmas feasting) C: 534-535
Torsion balance [instrument] T: 341
Torsion bar suspension [automobile] T: 341
 with diagrams
Torsion catapult
 Catapult C: 298
Torsion pendulum
 Pendulum (Other pendulums) P: 237
Tort [law] T: 342
 Law (Private law) L: 130; (Law since 1900) L: 136-137
 Privacy, Right of P: 808a
Tortilla [food]
 Aztec (Food) A: 1001
 Bread (Kinds of bread) B: 588 with picture
 Food (Customs) F: 332-333
 Hispanic Americans (Food) H: 248 with picture
 Latin America (Food and drink) L: 98 with picture
 Mexico (Food and drink) M: 455
Tortilla Flat [book by Steinbeck]
 Steinbeck, John So: 885
Tortoise [animal] T: 342 with picture
 Animal picture on A: 469
 Evolution picture on E: 427
 Reptile picture on R: 250
 Turtle (Tortoises) T: 523 with picture
"Tortoise and the Hare, The" [story]
 Aesop's fables A: 90
 Folklore (Folk tales) F: 324
 La Fontaine, Jean de picture on L: 29
Tortoise shell
 Turtle (Turtles and human beings) T: 523-524
Tortoise-shell cat
 Cat (Coat) C: 287
Tortola [island]
 Virgin Islands, British V: 397
Tortuga Island [island, Haiti]
 Haiti (Land) H: 15; (History) H: 15-16
Tortugas [islands, Florida]
 Dry Tortugas National Park D: 369
Tortuguero National Park [Costa Rica]
 National park (table) N: 42g
Torture T: 343
Torus [geometry]
 Topology T: 333
Tory [U.S. history]
 Tory Party T: 343
 Revolutionary War in America (Conduct of the war) R: 278
Tory, Geoffroy [French printer]
 Book (The spread of printed books) B: 467
Tory Island [Ireland] T: 343
Tory Party [British history] T: 343
 Conservatism (History) Ci: 991
 Conservative Party Ci: 992
 United Kingdom (Politics) U: 54; (Political confusion) U: 69
Tosa school [Japanese history]
 Painting (Japanese painting) P: 47
Tosca [opera by Puccini]
 Opera (Tosca) O: 807
 Puccini, Giacomo P: 869
Tosca, La [play by Sardou]
 Opera (Tosca) O: 807
Toscana See Tuscany in this index
Toscanelli, Paolo [Italian scholar]
 Columbus, Christopher (The plan to sail westward) Ci: 858
Toscanini, Arturo [Italian conductor] T: 343
 Pearce, Jan P: 229
Toshiba [company]
 Manufacturing (table) M: 170
Toshkent [city, Uzbekistan] See Tashkent in this index
Tosi, Oscar I. (American audiologist)
 Voiceprint V: 437
Tosks [people]
 Albania (People) A: 306
Tostada [food]
 Mexico (Food and drink) M: 455-456
Total aerodynamic force [physics]
 Aerodynamics (Principles of aerodynamics) A: 85
Total blindness
 Blindness B: 401
Total communication
 Deafness (Education) D: 59
Total data station [machine]
 Archaeology (Surveying sites) A: 596-597
Total eclipse
 Eclipse (Solar eclipses) E: 51 with picture;
 (Lunar eclipses) E: 51
Total Fina Eff [company]
 Manufacturing (table) M: 170
Total hysterectomy [surgery]
 Hysterectomy H: 482
Total serialism [music]
 Classical music (Atonal music) Ci: 649-650
Total station [instrument]
 Surveying (Surveying tools) So: 1011
Total war
 Neutrality (Neutrality today) N: 154
Totalitarianism [political science] T: 343
 Communism (Communism in practice) Ci: 890
 Government (Totalitarianism) G: 283; (Modern times) G: 290-291
 Nazism (The rise to power) N: 92
Totara [tree]
 Tree picture on T: 427
Tote board
 Horse racing (At the races) H: 365
Totem T: 344 with picture
 Alaska (Places to visit) A: 290 with picture;
 pictures on A: 291, A: 300
 Animal worship A: 511
 British Columbia (Interesting facts about
 British Columbia) B: 613 with picture; picture on B: 621
 Clan Ci: 638
 Indian, American (After European contact) I: 163 with picture
Tottel's Miscellany [book by Surrey and Wyatt]
 English literature (Elizabethan poetry) E: 316-317
 Surrey, Earl of So: 1010
 Wyatt, Sir Thomas W: 514
Totuava [fish]
 Drum D: 367
Toubou [people]
 Chad (People) C: 366
 Sahara (People) S: 21
Toucan [bird] T: 344 with pictures
 Bird (Birds of Central and South America) B: 345 with picture; (Bills) B: 362
 Rain forest picture on R: 126c
Toucanet [bird]
 Toucan T: 345 with picture
Toucey, Isaac [American political leader]
 Buchanan, James (table) B: 661
 Connecticut (table) Ci: 967
 Justice, Department of (table) J: 203
 Polk, James Knox (table) P: 643
Touch T: 345
 Animal (Adaptations for sensing the environment) A: 492-493 with picture
 Fish (Touch and the lateral line system) F: 164
 Hand H: 39
 Insect (Touch) I: 291
 Mammal (Senses) M: 120-121
 Senses S: 301
 Spider (Nervous system) So: 785
Touch [fencing]
 Fencing (The foil) F: 70 with picture
Touch football
 Football F: 354
Touch judge
 Rugby football (Rugby Union) R: 510; (Rugby League) R: 511-512
Touch line
 Soccer (The field) So: 544
Touch-me-not [plant]
 Flower (Flowers of woodlands and forests) F: 284-285 with picture
 Impatiens I: 90
 Plant (Seed dispersal) P: 541-542 with picture
Touch of the Poet, A [play by O'Neill]
 O'Neill, Eugene Gladstone (His plays) O: 762
Touch pad [device] See Touchpad in this index
Touch screen [computing]
 Computer (A touch screen) Ci: 914
Touchback
 Football (The kickoff) F: 359-360
Touchdown
 Football (Scoring) F: 362
 Rugby football (Rugby League) R: 511-512
Touchhole [gun]
 Harquebus H: 67
Touchpad [electronics]
 Computer (A touchpad) Ci: 914
 Keyboard K: 308
 Laptop computer L: 74
Touchstone [literary figure]
 Shakespeare, William (As You Like It) S: 359
Touchstone Pictures [company]
 Walt Disney Company W: 20
Touculeur [people]
 Fulani F: 553
 Mali (People) M: 106
 Mauritania (People) M: 314
 Senegal (People) S: 297
Tough, Dave [American drummer]
 Jazz (The 1920's) J: 70
Toughness
 Materials (Mechanical properties) M: 300b
Toulon [France] T: 345
Toulon, Siege of [1793]
 Napoleon I (Early military career) N: 15
Toulouse [France] T: 346
Toulouse [bird]
 Goose (Kinds of geese) G: 270 with picture
Toulouse, Battle of [1814]
 Wellington, Duke of (Peninsular War) W: 194
Toulouse-Lautrec, Henri de [French artist]
 T: 346 with picture
 Art nouveau A: 750
 Lithography (History) L: 387 with picture
 Painting (Postimpressionism) P: 75
 Poster P: 708
Toungoo [ancient city]
 Myanmar (Early days) M: 970d
Tour bus
 Bus (Special buses) B: 715
Tour de France [race] T: 346
 Armstrong, Lance A: 723
 Bicycle racing (Road races) B: 294 with picture
 France (Recreation) F: 460 with picture
Tour du Crédit Lyonnais [Lyon]
 Lyon picture on L: 536
Tour guide [occupation]
 Careers (Tourism and hospitality) C: 233 with picture
Touraco [bird] T: 346 with picture
Tourane [city, Vietnam] See Da Nang in this index
Touré, Sékou [Guinean political leader] T: 347
 Guinea (History) G: 432
Tourette, Georges Gilles de la (French physician)
 Tourette syndrome T: 347
Tourette syndrome [disorder] T: 347
Touring bike
 Bicycle (Road bikes) B: 290
 Motorcycle (Kinds of motorcycles) M: 878
Touring kayak
 Kayak K: 250a
Tourism
 See also the Places to Visit section in specific state and province articles, such as California (Places to visit)
 Careers (Tourism and hospitality) C: 233 with picture
 National park (Overcrowding) N: 42i
Tourist cabin
 Motel M: 836
Tourmaline [gem] T: 347
 Gem picture on G: 78
 Polarized light (Polarizing materials) P: 618
Tournachon, Gaspard Félix [French photographer]
 Photography (The beginnings of modern photography) P: 426
Tournament [sports]
 Knights and knighthood (Tournaments) K: 350 with picture
Tournament of Roses
 California (Visitor's guide) C: 46 with picture
Tournier, Michel [French author]

French literature (Recent French literature)
F: 523

Tourniquet [first aid] T: 348

Touro Synagogue [Newport, Rhode Island]
Colonial life in America (Places to visit) Ci: 801
Newport N: 379
Rhode Island (Interesting facts) R: 297

Tours [France] T: 348

Tours, Battle of [A.D. 732]
Charles Martel C: 383

Tourte, François [French businessman]
Violin (History) V: 390

Toussaint, François Dominique See Toussaint
L'Ouverture *in this index*

Toussaint L'Ouverture [Haitian patriot] T: 348
with portrait
Haiti (History) H: 15-16
Latin America (The wars of independence)
L: 107-108

Toussant L'Ouverture [paintings by Lawrence]
Lawrence, Jacob L: 146

Tovar y Tovar, Martin [Venezuelan painter]
Latin America *picture on* L: 108

Tow [fiber]

Linen (Preparing the fibers) L: 334-335

TOW missile

Guided missile (Command guidance) G: 426
Rocket *picture on* R: 386

Tow truck

Truck (Special uses) T: 457; *picture on* T: 459

Towards a New Architecture [book by Le
Corbusier]

Le Corbusier L: 175

Tower [architecture] T: 348

Tower, Joan [American composer]

Classical music (Classical music today) Ci: 651

Tower crane [machine]

Building construction (Constructing a sky-
scraper) B: 683-684

Crane Ci: 1120 *with picture*

Tower of Babel [Babylon] T: 349 *with picture*
Architecture (Mesopotamian architecture)

A: 611

Babylon (The New Babylonian Empire) B: 12
with picture

Tower of Belém

Lisbon (The city) L: 348

Tower of London T: 349

England (The Norman Conquest) E: 305
London (The Tower of London) L: 436 *with
picture*; (Ceremonies) L: 437; (The Middle
Ages) L: 439-440

Raleigh, Sir Walter (His fall) R: 132

Tower of Nesle, The [play by Dumas]

Dumas, Alexandre, *père* D: 382

Tower of silence (custom)

Funeral customs (The funeral) F: 557-558

Tower of the Americas

San Antonio (The city) S: 84

Towhee [bird] T: 349 *with picture*

Towing point

Kite (How kites fly) K: 339

Town [political unit] T: 350

See also Township *in this index*

City government Ci: 594

Colonial life in America (Economic reasons)
Ci: 787-788

Local government L: 407

Metropolitan area M: 442

Middle Ages (Medieval towns) M: 527

Town [zoology]

Prairie dog (Habits) P: 732

Town, The [book by Faulkner]

Faulkner, William F: 55

Town, The [book by Richter]

Richter, Conrad R: 334

Town ball [game]

Baseball (From rounders to baseball) B: 132

Town Below, The [book by Lemelin]

Lemelin, Roger L: 187

Town crier T: 350

Advertising (History) A: 79

Colonial life in America (Communication)
Ci: 806

Town Hall Square

Copenhagen (The city) Ci: 1038

Town house

Housing (Kinds of housing) H: 389-390 *with
picture*

Town meeting [government] T: 350

Democracy D: 120

Maine (Local government) M: 88

Vermont *picture on* V: 319

Town Mouse and the Country Mouse, The

[book by Craig]

Literature for children *picture on* L: 374

Town planning See City planning *in this index*

Towneley, Richard [English chemist]

Gas [physics] (Gas laws) G: 48

Townes, Charles Hard [American physicist]
Laser (History) L: 86

Nobel Prizes (Physics: 1964) N: 441

Towns, George W. [American political leader]
Georgia (table) G: 130

Townsend, Francis E. [American political leader]
Townsend Plan T: 350

Townsend, John G., Jr. [American political
leader]

Delaware (table) D: 109

Townsend, Kathleen Kennedy [daughter of
Robert F. Kennedy]

Kennedy, Joseph Patrick (His family) K: 269-
270

Townsend, M. Clifford [American political
leader]

Indiana (table) I: 214

Townsend, Willard Saxby [American labor
leader] T: 350 *with portrait*

Townsend Plan [U.S. history] T: 350

Townsendia

Flower (Flowers of prairies and dry plains)
F: 286-287 *with picture*

Townshend, Charles [British political leader]
Revolutionary War in America (The
Townshend Acts) R: 272-273

Townshend, Charles [English agricultural
reformer] See Townshend, Viscount *in this
index*

Townshend, George [British general]
Quebec, Battle of (The attack on Quebec)
Q: 37

Townshend, Peter [British musician] T: 350
Who, The W: 296 *with picture*

Townshend, Thomas [British statesman]
Sydney So: 1063

Townshend, Viscount [English agricultural
reformer] T: 350
Agriculture (Improved crop-growing methods)
A: 157

Townshend Acts [1767]

Declaration of Independence (Events leading
to the Declaration) D: 74

Revolutionary War in America (The
Townshend Acts) R: 272-273

United States, History of the (Renewed con-
flict) U: 157

Township [political unit] T: 351

Local government L: 407

Maine (Local government) M: 88

Metropolitan area M: 442

Township [unit of measure]

Public lands (Management of public lands)
P: 858

Towton, Battle of [1461]

Edward IV E: 112

Toxemia of pregnancy [disorder] See
Preeclampsia *in this index*

Toxic hepatitis [disease]

Liver (Hepatitis) L: 395

Toxic psychosis

Psychosis P: 851

Toxic shock syndrome [disorder] T: 351

Toxic waste

Hazardous wastes H: 122

Incinerator I: 100

Toxicology [medicine]

Drug (Effect on the body) D: 354

Occupational medicine O: 647

Pharmacology P: 354

Poison (Fungi, plant, and animal poisoning)
P: 601

Toxin [poison] T: 351

Antitoxin A: 559

Bacteria (Protection against harmful bacteria)
B: 20

Bacteriology B: 22

Biological Weapons Convention B: 315

Disease (Bacterial diseases) D: 227

Immune system (The immune response) I: 88

Mushroom (Poisonous mushrooms) M: 945

Pfiesteria P: 353

Plant (Diseases) P: 543

Poison (Fungi, plant, and animal poisoning)
P: 601

Tetanus T: 182

Toxic shock syndrome T: 351

Toxoid [medication]

Antitoxin A: 559

Diphtheria (Prevention) D: 216

Immunization (Active immunization) I: 89

Tetanus T: 182

Toxophilus [book by Ascham]

Archery (History) A: 603-604

Toxoplasmosis [disease] T: 351

Pregnancy (Lifestyle during pregnancy) P: 735

Toy T: 351

Doll D: 286 *with pictures*

Toy books [books by Crane]
Crane, Walter Ci: 1120

Toy dog [dog] T: 352

Dog (Toy dogs) D: 266; *pictures on* D: 274

Pug P: 886

Toy fox terrier

Dog (Types of dogs) D: 265-266

Toy Manchester terrier [dog]

Manchester terrier M: 134

Toy poodle [dog]

Poodle P: 658

Toy Story [film]

Animation *picture on* A: 514b

Toy train See Railroad, Model *in this index*

Toya Maru [ship]

Shipwreck (table: Major shipwrecks) S: 428

Toynbee, Arnold [British social reformer] T: 352

Toynbee, Arnold Joseph [British historian]
T: 352

Civilization (Why civilizations rise and fall)
Ci: 636

Toynbee Hall [London]

Settlement house S: 324

Toynbee, Arnold T: 352

Toyokuni, Utagawa [Japanese artist]

Drama *picture on* D: 337

Toyota [automobile]

Automobile *picture on* A: 973

Sports car (History) So: 803

Toyota Motor Corporation T: 352

Automobile (Major producing countries and
companies) A: 955-956

Kentucky (The late 1900's) K: 294

Manufacturing (table) M: 170

Toyotomi Hideyoshi [Japanese political leader]
See Hideyoshi *in this index*

Toys in the Attic [play by Hellman]

Hellman, Lillian H: 178

TR-1 [aircraft]

Aircraft, Military (Reconnaissance aircraft)
A: 203 *with picture*

Trabea [clothing]

Augur A: 885

Trace [meteorology]

Rain (Characteristics of rain) R: 122-123

TRACE [satellite] See Transition Region and
Coronal Explorer *in this index*

Trace

Harness H: 63 *with diagram*

Trace elements [biochemistry] T: 353

Enzyme (Structure) E: 341

Trace elements [mining]

Nutrition (Minerals) N: 625-626

Prospecting P: 829

Trace evidence

Crime laboratory (Collecting the evidence)
Ci: 1140-1141 *with picture*

Tracer [painting by Rauschenberg]

Rauschenberg, Robert *picture on* R: 150

Tracer [radioisotope]

Isotope *diagram on* I: 477

Radiocarbon (Radiocarbon in biology) R: 98

Radiochemistry R: 98

Tracer bullet

Bullet B: 694

Tracery [architecture] T: 353 *with picture*

Trachea [anatomy] T: 353

Croup Ci: 1157

Human body *diagram on* H: 422

Lung (Parts of the lungs) L: 523; *diagram on*
L: 524

Mouth M: 903 *with diagram*

Respiration (Structures of breathing) R: 260

Throat T: 271

Voice (The human voice) V: 436 *with diagram*

Trachea [entomology]

Animal (Adaptations for breathing) A: 491-492
with picture

Insect (Respiratory system) I: 289 *with dia-
gram*

Respiration (Breathing in animals without
lungs) R: 261

Spider (Respiratory system) So: 785 *with dia-
gram*

Tracheotomy [surgery]

Croup Ci: 1157

Surgery (Some common surgical operations)
So: 1006

Trachinian Women [play by Sophocles]

Sophocles So: 595

Trachoma [disease] T: 353

Blindness (Diseases) B: 401-402

Chlamydia C: 516

Eye (Diseases of the outer parts) E: 466-467

Tracing and Reunion Bureau

Red Cross (Disaster services) R: 186

Tracing wheel

- Sewing (Laying out the pattern) S: 332
- Track** [electronics]
Compact disc (Playback) Ci: 901-902
Phonograph (How phonograph records are made) P: 401
Videotape recorder (Recording) V: 361 *with diagram*
- Track** [education]
Curriculum (Curriculum planning) Ci: 1197
- Track** [railroad]
Railroad (What makes up a railroad) R: 106-107; (Tracks) R: 108 *with picture*
Railroad, Model (Track) R: 120 *with picture*
- Track and field** [sports] T: 354 *with pictures*
Javelin J: 66
Olympic Games (Summer Olympic Games) O: 746-748 *with pictures*
Zaharias, Babe Didrikson Z: 588
See also the list of Related Articles in the Track and field article
- Track light**
Lighting (Lighting devices) L: 298
- Track pad** [device] *See Touchpad in this index*
- Track race**
Automobile racing A: 975 *with pictures*
Bicycle race (Track races) B: 293 *with picture*
- Track tractor** [vehicle]
Tractor (Crawler tractors) T: 361
- Trackball** [computing]
Computer (A trackball) Ci: 914
Keyboard K: 308
Laptop computer L: 74
- Tracked air cushion vehicle**
Air cushion vehicle (History) A: 181
- Tracking and Data Relay Satellite**
Satellite, Artificial *picture on* S: 150d
- Tracking chamber** [machine]
Particle detector (Tracking chambers) P: 187
- Tracking poll**
Public opinion poll (History) P: 863
- Traction control**
Brake (Hydraulic brakes) B: 560-562
- Traction engine**
Tractor (History) T: 361
- Traction motor**
Electric railroad (Kinds of electric railroads) E: 187 *with picture*
Elevated railroad E: 233
- Tractor T: 360 with pictures**
Agriculture (Labor-saving technologies) A: 159 *with picture*
Automobile (The first cars) A: 962 *with picture*
Slovakia *picture on* S: 508d
- Tractor plow**
Plow (The tractor plow) P: 575 *with picture*
- Tractor-semitrailer**
Truck T: 456; (Kinds of trucks) T: 457, *picture on* T: 459
- "Tracts for the Times"** [essays]
Oxford Movement O: 887
- Tracy, Benjamin F.** [American government official]
Harrison, Benjamin (table) H: 72
- Tracy, Spencer** [American actor] T: 361 *with portrait*
Hepburn, Katharine H: 192
Motion picture (Best performance by an actor: 1937, 1938) M: 862
- Tracy, Susan E.** [American nurse]
Occupational therapy (History) O: 649
- Tradable emission credit**
Environmental pollution (Government action) E: 335-336
- Trade** [economics] T: 361 *with pictures*
See also International trade in this index
Barter B: 120
City (Economy) Ci: 580-581; (Economy) Ci: 584
Colonial life in America (Colonists and Indians) Ci: 791; (Trade) Ci: 811
Commodity exchange Ci: 873
Crusades (Results of the Crusades) Ci: 1162
Endangered species (Wildlife trade) E: 269
Fur trade F: 564
Indian, American (Trade) I: 148 *with pictures*
Mercantilism M: 411
Middle Ages (The High Middle Ages) M: 526
Sales (The rise of sales) S: 64
Technology (Technological advances) T: 75
World, History of the (The age of exploration) W: 440-441
See also the list of Related Articles in the Trade article
- Trade** [job]
Apprentice A: 575
Careers C: 214 *with pictures*
For a list of articles on career opportunities, see the Related Articles in the Careers article
- Trade, Balance of** [economics] *See* Balance of trade *in this index*
- Trade, Board of** [economics] *See* Commodity exchange *in this index*
- Trade and Development, Conference on** *See* United Nations Conference on Trade and Development *in this index*
- Trade association** [business] T: 364
- Trade beads**
Money *picture on* M: 705
- Trade bill** [economics]
Bill of exchange B: 301
- Trade book**
Publishing (Trade books) P: 868
- Trade Commission, Federal** *See* Federal Trade Commission *in this index*
- Trade deficit** [economics] *See* Deficit *in this index*
- Trade discount**
Discount (Trade discount) D: 224
- Trade Expansion Act** [1962]
Kennedy, John Fitzgerald (The New Frontier) K: 264
- Trade fair** [economics]
City *picture on* Ci: 584
Fair (Trade fairs) F: 7
- Trade language**
Indian, American (Language groups) I: 149-150
- Trade magazine**
Magazine (Specialized business magazines) M: 42
- Trade name** *See* Trademark *in this index*
- Trade publication** [magazine] T: 364
Advertising (Magazines) A: 75
- Trade rat** *See* Woodrat *in this index*
- Trade Representative, Office of the United States**
President of the United States (The executive branch) P: 764
- Trade route** T: 364
Lake (Travel and trade routes) L: 34
Trade (The expansion of trade) T: 363
- Trade school** *See* Technical school *in this index*
- Trade union** *See* Labor union *in this index*
- Trade wind** T: 365 *with map*
Air (Air movement) A: 169
Atlantic Ocean (Winds) A: 866
Climate (Atmospheric circulation) Ci: 676a
Pacific Ocean (Winds) P: 14
Weather (Planetary-scale systems) W: 158-159
Wind (General circulation) W: 329 *with diagram*
- Trademark** T: 365
Copyright Ci: 1046
Drug (Drug names) D: 356
Intellectual property I: 317
Public domain P: 855
- Trader**
Trading post T: 366
- Trades Union Congress** [organization] T: 366
- Trading bank**
Bank (Australia and New Zealand) B: 92
- Trading Ceremony at York Factory** [painting by Scott]
Canada, History of *picture on* C: 140
- Trading exchange** [business]
E-commerce (Business-to-business transactions) E: 2
Internet (Business transactions) I: 350b
- Trading post** T: 366 *with picture*
Trade (The expansion of trade) T: 363
- Trading stamps** T: 366
- Tradition** *See* Custom *in this index*
- Tradition** [religion]
Religion (Chief characteristics of religion) R: 215
Roman Catholic Church R: 403
- Traditional grammar**
Grammar G: 303
- Traditional leaders**
South Africa (National government) So: 608
- Traditionalists** [Chinese history]
Painting (Chinese painting) P: 44-46
- Trafalgar, Battle of** [1805] T: 366
Nelson, Horatio *picture on* N: 121; (Victory at Trafalgar) N: 122
United Kingdom (The Napoleonic Wars) U: 68
- Trafalgar Square**
London (Central London) L: 429-430 *with map*; (Squares) L: 435, *picture on* L: 428
Nelson, Horatio (Nelson monument) N: 122
- Traffic** T: 366
Europe *picture on* E: 389
- Traffic control**
See also Air traffic control *in this index*
Radar (In controlling automobile speed and traffic) R: 67
- Traffic (Traffic control) T: 367
- Traffic engineering**
Traffic T: 366-367
- Traffic jam**
City (Description) Ci: 589; (Physical problems) Ci: 590-591
Traffic (Traffic problems) T: 366-367
- Traffic light**
Automation (Uses of automation) A: 944
Morgan, Garrett Augustus M: 803
Ohio (Interesting facts) O: 681 *with picture*
Traffic (Signals, signs, and markings) T: 367
- Traffic pattern**
Airport (Air traffic control) A: 246
Interior design (Planning on paper) I: 330-331
- Traffic police**
Police (Traffic operations) P: 621
- Traffic sign**
Automobile *picture on* A: 961
Traffic (Signals, signs, and markings) T: 367
- Trafficking, Drug** *See* Drug trafficking *in this index*
- Trafficant, James A.** [American political leader]
Congress of the United States (Congressional ethics) Ci: 948
- Tragedy** [drama] T: 367
Dionysus D: 215
Drama (Forms of drama) D: 325; (Tragedy) D: 326; (Roman drama) D: 328; (Italian Renaissance drama) D: 330; (England) D: 334-335
English literature (Restoration drama) E: 318
Greek literature (Drama) G: 377
Racine, Jean R: 61
- Tragedy of Pudd'nhead Wilson, The** [book by Twain]
Twain, Mark (Later works) T: 529-530
- Tragedy of Tragedies, The** [book by Fielding]
Fielding, Henry (His life) F: 94
- Tragic Exodus** [musical]
Holm, Hanya H: 294
- Tragic Overture** [music by Brahms]
Brahms, Johannes (His music) B: 549
- Tragic Sense of Life, The** [book by Unamuno]
Unamuno, Miguel de U: 19
- Tragic Ten Days, The** [Mexican Revolution]
Mexico City (Revolution and growth) M: 478
- Tragical History of Doctor Faustus, The** [play by Marlowe]
Marlowe, Christopher M: 216
Faust F: 56
- Tragicomedia de Calisto y Malibea** [play]
Spanish literature (The 1400's) So: 758
- Tragicomedy**
Drama (Jacobean and Caroline drama) D: 332
- Tragopan** [bird] T: 368 *with picture*
- Traianus, Marcus Ulpius** *See* Trajan *in this index*
- Trail**
National Trails System N: 61
- Trail bike**
Motorcycle (Kinds of motorcycles) M: 878
- Trail Blazers, Portland**
Basketball (table) B: 150
Portland (Education and cultural life) P: 683-684
- Trail blazing**
Road (The first roads) R: 361
- Trail boss**
Cowboy (The trail drive) Ci: 1111
- Trail drive** [ranching]
Chuck wagon C: 540
Cowboy (The trail drive) Ci: 1111 *with picture*; *picture on* Ci: 1108
- Trail Hard to Wyoming** [painting by Koerner]
Cowboy *picture on* Ci: 1108
- Trail of Tears** [play]
Oklahoma (Visitor's guide) O: 722 *with picture*
- Trail of Tears** [U.S. history] T: 368
Cherokee Indians C: 409 *with picture*
Five Civilized Tribes F: 191
Indian, American (After European contact) I: 158, *picture on* I: 178b
Oklahoma (The Indian nations) O: 731
Pioneer life in America (Pioneers and Indians) P: 485
United States, History of the *picture on* U: 168
- Trail of Tears, The** [painting by Lindneux]
Indian, American *picture on* I: 178b
- Trailer** [vehicle] T: 368
Mobile home M: 682
Recreational vehicle (Travel trailers) R: 184; (Folding camping trailers) R: 184; (Park trailers) R: 184
- Trailing** [custom]
Flag (Raising and lowering the flag) F: 219
- Trailing arbutus** [plant]
Arbutus A: 592

Flower picture on F: 285
Train See Electric railroad; Locomotive; Railroad in this index
Train [watch]
 Watch (Mechanical watches) W: 114
Train à grande vitesse See TGV in this index
Train of Powder, A [book by West]
 West, Rebecca W: 199
Trainer [aircraft]
 Air force (Aircraft and missiles) A: 183
Trainer [person]
 Horse racing (Trainers) H: 364
Training, Military See Military training in this index
Training and Doctrine Command
 Army, United States (Organization of the Army) A: 736-737
Training Day [film]
 Washington, Denzel W: 90
Training of an Orator, The [book by Quintilian]
 Oratory (Classical orators) O: 819
 Quintilian Q: 43
Training program [organization]
 Industrial psychology (Industrial psychologists) I: 245
Training school
 Prison (Juvenile correctional institutions) P: 806
 Reformatory R: 199
Training yard
 Horse racing (Trainers) H: 364
Trainsickness
 Motion sickness M: 874
Trait [biology]
 Heredity H: 200
Traitor
 Treason T: 406
Trajan [Roman Emperor] T: 369
 Hadrian H: 4
 Library (Ancient libraries of papyrus) L: 258-259
 Romania (Early days) R: 423
Trajan, Markets of [ruins]
 Rome (Forums) R: 433
Trajan's Column [Rome]
 Trajan T: 369
 Alphabet (Capital letters) A: 383
 Rome (Forums) R: 433 with picture
 Sculpture (As monuments and memorials) S: 229; (Roman sculpture) S: 247-248 with picture
Trajan's Forum [Rome]
 Rome (Forums) R: 433
 Trajan T: 369
Traje de luces
 Bullfighting (Types of bullfights) B: 695 with picture
Trajectory [physics]
 Ballistics (Exterior ballistics) B: 56
Trammell, Park [American political leader]
 Florida (table) F: 260
Tramp, The [film role]
 Chaplin, Charlie C: 376 with picture
Tramp Abroad, A [book by Twain]
 Twain, Mark (Productive years in Hartford) T: 529
 Black Forest B: 387
Tramp clown
 Clown C: 713
Tramp service [shipping]
 Ship (Classification of cargo ships) S: 417
Tramp ship
 Ship (Classification of cargo ships) S: 417
Trampoline T: 369 with picture
Tran [dynasty]
 Vietnam (Independence) V: 370
Trance T: 369
Trance dance
 Dance (Why people dance) D: 25-26; (Ritual ethnic dances) D: 27
Tranquilizer [medication] T: 369
 Drug (Anxiety and hypnotic drugs) D: 352
 Drug abuse (Table: Some commonly abused drugs) D: 363
Trans fat
 Nutrition (Limit intake of saturated fats, trans fats, and cholesterol) N: 628
Transactional analysis [psychiatry]
 Psychotherapy (Other forms of psychotherapy) P: 852
Transactional approach [vision]
 Ames, Adelbert, Jr. A: 431
Trans-Alaska Pipeline System
 Alaska (The discovery of oil) A: 304 with picture
 Insulation (In industry) I: 306-307
 Petroleum (Transporting petroleum) P: 343
 Pipeline (How pipelines work) P: 491 with picture
 Transportation picture on T: 396

Transalpine Gaul [former region]
 Gaul G: 70 with map
Trans-Am Championship
 Automobile racing (Sports car racing) A: 977
Transamerica Pyramid
 San Francisco (Downtown San Francisco) S: 92-93
Transantarctic Mountains
 Antarctica (Land regions) A: 532
Trans-Arabia pipeline
 Pipeline (In other countries) P: 491
Transatlantic cable
 Cable (Telegraph cables) C: 6; (Telephone cables) C: 7
Transaxle [mechanical device]
 Transmission (Transmissions and drives) T: 375 with diagrams
Trans-Canada Highway T: 370 with map
 Montreal (Transportation) M: 775-776
 Ontario (Transportation) O: 782
Trans-Canada Pipeline
 Pipeline (In Canada) P: 491
Transcaucasia [region]
 Caucasus C: 317
Transcaucasian Soviet Federated Socialist Republic [Soviet history]
 Caucasus C: 317
 Russia (Civil war and the formation of the U.S.S.R.) R: 553
Transceiver [communications]
 Citizens band radio C: 568
 Radio, Amateur (Equipment) R: 96 with picture
Transcendental Club [organization]
 Emerson, Ralph Waldo (His prose works) E: 259
Transcendental Meditation T: 370
 Yoga Y: 567
Transcendentalism [philosophy] T: 371
 Alcott, Bronson A: 338
 American literature (Nonfiction prose) A: 418
 Brook Farm B: 639
 Emerson, Ralph Waldo (His prose works) E: 259
 Philosophy (Modern philosophy) P: 387-389
 Thoreau, Henry David (His life) T: 265-266
 Unitarians (History) U: 42-43
Transcontinental railroad
 Railroad (The first transcontinental rail lines) R: 116 with picture
 United States, History of the (Distribution, sales, and communication) U: 178
Transcriber
 Dictating machine D: 191
Transcript [education]
 Universities and colleges (Entrance requirements) U: 207
Transcription [genetics]
 Heredity (How proteins are made) H: 206
Transcription unit
 Dictating machine D: 191
Transdanubia [region]
 Hungary (The land) H: 442-443 with map
Transdermal patch
 Drug (Entrance into the body) D: 353; picture on D: 350
Trans-Dniestr [region]
 Moldova (History) M: 690a-690b
Transducer [electronics] T: 371
 Oscilloscope O: 862
 Ultrasound (Ultrasound devices) U: 16 with picture
Transept
 Architecture (table) A: 608-609 with picture; (Medieval architecture) A: 617
 Cathedral (The plan of a cathedral) C: 301-302 with diagram
Trans-Europ-Express Group
 Railroad (In other countries) R: 113-114
Transfer case
 Automobile (The drive system) A: 953
Transfer of training
 Learning (Transfer of training) L: 164
Transfer payment
 Income (Sources of unearned income) I: 101; (Redistribution of income) I: 101
Transfer press [machine]
 Money (Printing paper money) M: 714
Transfer printing [ceramics]
 Porcelain (Transfer printing) P: 676
Transfer RNA [biochemistry]
 Cell (Producing proteins) C: 333-334 with diagram
 Heredity (How proteins are made) H: 206-208
 RNA R: 357
Transference [psychology]
 Freud, Sigmund (On treatment) F: 531
 Psychoanalysis (Psychoanalytic treatment) P: 846

Transferrin
 Iron (How bodies use iron) I: 435
Transfiguration [religion] T: 371
 Peter, Saint (Life as an apostle) P: 324
Transform fault [geology]
 Earth (Earthquakes) E: 24
 Earthquake (Interplate earthquakes) E: 36-37
Transform plate boundaries [geology]
 Plate tectonics (Plate interactions) P: 562-563
Transformation [process]
 Genetic engineering (How genes are reintroduced into cells) G: 84a
Transformation geometry
 Geometry (Rise of non-Euclidean geometry) G: 105
Transformation mask [art]
 Sculpture (Form and treatment) S: 230-231; picture on S: 245
Transformation of energy [physics]
 Electric power E: 182
Transformational appeal
 Advertising (Basic appeals) A: 76
Transformational grammar See Generative grammar in this index
Transformer [electricity] T: 371 with diagram
 Electric current (Direct and alternating current) E: 168
 Electric generator (Uses of AC generators) E: 173
 Electric power (Transmitting and distributing electric power) E: 184-185 with diagrams
 Magnetism (In industry and business) M: 60a
Transfusion, Blood See Blood transfusion in this index
Trans-Gambia Highway
 Gambia (Economy) G: 19
Transgendered person
 Gay rights movement G: 73
Transgenic pig [animal]
 Xenotransplant X: 544
"Transient and Permanent in Christianity, The" [sermon by Parker]
 Unitarians (History) U: 42-43
Transient ischemic attack
 Stroke (Symptoms) S: 930
Transistor [electronics] T: 372 with pictures
 Computer (Computer code) C: 911; (Miniaturization) Ci: 924c
 Electricity (Controlling electric current) E: 195; (The electronic age) E: 198
 Electronics (Transistors) E: 212; (The solid-state revolution) E: 215; diagram on E: 211
 Ignition (Parts of an ignition system) I: 49 with diagram
 Invention (Research laboratories) I: 357
 Science (Achievements of the mid-1900's) S: 202-203
 Technology (The computer age) T: 75
Transistor hearing aid
 Hearing aid (History) H: 130-131
Transit [astronomy] T: 374
 Mercury (Phases) M: 415
Transit [instrument]
 Level L: 217
 Surveying (Early tools) S: 1011
Transit [service] T: 374
 See also Mass transportation in this index
Transit 1B [spacecraft]
 Satellite, Artificial (History) S: 150g
Transit maps
 Map (Navigation maps) M: 177-178
TRANSIT satellite navigation system
 Navigation (History) N: 74-75
Transit sign
 Advertising (Other ways of advertising) A: 75
Transit system See Public transportation in this index
Transit Union, Amalgamated
 Labor movement (table) L: 8
Transition metal [chemistry]
 Element, Chemical diagram on E: 221
Transition region
 Sun (Zones of the sun) S: 979-980 with diagram
Transition Region and Coronal Explorer [satellite]
 Corona Ci: 1067
Transitional bilingual education
 Bilingual education (Transitional bilingual education) B: 300
Transitional form [biology]
 Evolution (Evidence of evolution) E: 430
Transitive verb
 Verb (Transitive and intransitive verbs) V: 315
Transjordan See Jordan in this index
Translation [genetics]
 Heredity (How proteins are made) H: 206-208

Translation [literature]

Bible (Translations of the Bible) **B**: 285 *with picture*
 Latin literature (Latin in translation) **L**: 115
 United Nations (Breaking the language barrier) **U**: 86

Translational research [medicine]

Medicine (Medical researchers) **M**: 369

Translations [play by Friel]

Friel, Brian F: 533

Translator program

Computer (Compiling or assembling a program) **Ci**: 923

Translocation [genetics]

Heredity (Mutation) **H**: 203

Translucence [physical property]

Light (Reflection, refraction, and absorption) **L**: 286

Marble (Uses) **M**: 192

Transmigration of the soul See *Reincarnation in this index***Transmission** [mechanics] **T**: 375 *with diagrams*

Automobile (The transmission) **A**: 952 *with diagram*

Transmission electron microscope

Electron microscope (Transmission electron microscopes) **E**: 204 *with diagram*

Microscope (Other kinds of microscopes) **M**: 519

Transmission fluid

Transmission (A torque converter) **T**: 377

Transmission genetics

Genetics (Transmission genetics) **G**: 87

Transmission line

Electric power (Transmitting and distributing electric power) **E**: 184

Television (Broadcasting) **T**: 122-123

Trans-Mississippi and International Exposition [1898]

Omaha (History) **O**: 756-757

Transmitter [communications]

Antenna **A**: 543

Radar (The transmitter) **R**: 70 *with diagram*

Radio (Transmitting radio waves) **R**: 87;
 (Broadcasting power and frequency) **R**: 87

Sonar (How sonar works) **So**: 591

Telephone (The transmitter) **T**: 95 *with picture*

Television (Transmitting television signals) **T**: 122; *diagram on T*: 124

Wireless communication (How wireless communication works) **W**: 345

Transmitting antenna [communications]

Antenna (Transmitting antennas) **A**: 543

Transmontane Plains

British Columbia (Land regions) **B**: 622-624

Transmutation of elements **T**: 378

See also *Radioactive decay in this index*

Alchemy **A**: 334

Atom (Radioactivity) **A**: 873

Chemistry (Beginnings) **C**: 400

Radiation (Naturally radioactive substances) **R**: 77

Rutherford, Ernest **R**: 569

Transnational [person]

Anthropology (Modern anthropology) **A**: 549

Transnational corporation

Multinational corporation **M**: 919

Trans-Neptunian disk [astronomy] See *Kuiper belt in this index***Transoceanic flight**

Airplane (Transoceanic transports) **A**: 238

Transonic flight

Aerodynamics (Supersonic aerodynamics) **A**: 88

Transparency [photography]

Audio-visual materials (Projectors) **A**: 882

Transparency [physical property]

Light (Reflection, refraction, and absorption) **L**: 286

Transparency [trade policy]

General Agreement on Tariffs and Trade **G**: 82

Transparent sculpture

Lipchitz, Jacques **L**: 344

Trans-Pecos Region

Texas (Land regions) **T**: 196

Transpiration [botany]

Irrigation (Bringing irrigation water to farms) **I**: 457

Leaf (Transpiration) **L**: 156

Plant (Water movement) **P**: 537

Rain forest (Environmental value) **R**: 126c

Sap (Vascular sap) **S**: 121

Water (Water in the air) **W**: 120

Transpired solar collector

Solar energy (Solar heating) **So**: 579

Transplant [medicine] **T**: 379 *with pictures*

AIDS (How HIV is transmitted) **A**: 163-164

Bone marrow transplant **B**: 457 *with picture*

Cyclosporine **Ci**: 1204

Death (Defining death) **D**: 61

Diabetes (Research) **D**: 179

Eye bank **E**: 470

Heart (Heart failure) **H**: 143 *with picture*; (The first heart transplants and artificial hearts) **H**: 145

Immune system (The cell-mediated immune response) **I**: 88a-88b

Kidney (Kidney diseases) **K**: 312

Liver **L**: 393

Lymphatic system (Rejection of transplanted tissue) **L**: 535

Organ donation **O**: 852

Plastic surgery (Methods of plastic surgery) **P**: 553

Red Cross (Biomedical services) **R**: 185

Surgery (Technique) **So**: 1005; (History) **So**: 1007-1008

Xenotransplant **X**: 544

Transplanting [gardening] **T**: 381 *with pictures*

Gardening (Starting the garden) **G**: 34-35

Transponder

Airplane (Safety) **A**: 227-228

Communications satellite (How communications satellites work) **Ci**: 888b

Transport

Transportation **T**: 382

Transport [airplane]

Air force (Aircraft and missiles) **A**: 183

Air force, United States (Other aircraft) **A**: 191 *with pictures*

Aircraft, Military (Transports) **A**: 203 *with picture*

Aviation *picture on A*: 985

Transport, Minister of [office]

Canada, Government of (The Cabinet) **C**: 132; *diagram on C*: 137

Transport airports

Airport (General aviation airports) **A**: 243

Transport mission [warfare]

Air force (Transport missions) **A**: 183

Transport Workers Union of America

Labor movement (table) **L**: 8

Transportable telephone

Cellular telephone **C**: 341 *with diagram*

Transportation **T**: 382 *with pictures*

Careers (Transportation) **C**: 235 *with picture*

City (Metropolitan cities) **Ci**: 588-589

City planning (Proposals of the plan) **Ci**: 599-601 *with diagram*

Colonial life in America (Transportation) **Ci**: 805 *with picture*

Electricity (In transportation) **E**: 191

Food (Transportation) **F**: 335

Indian, American (Transportation) **I**: 142

Industrial Revolution (Transportation) **I**: 250

Ocean (As a vast highway) **O**: 655

Radio (In industry) **R**: 85

Technology (Technology and society) **T**: 76

Safety (Safety in transportation) **S**: 14

Trade (The geographical extent of trade) **T**: 363

Transit **T**: 374

Truck **T**: 456

United States, History of the (Expansion and the economy) **U**: 168 *with pictures*

Transportation, Department of [U.S.] **T**: 399

with picture

Johnson, Lyndon Baines (The Great Society) **J**: 150

United States Merchant Marine Academy **U**: 200

Washington, D.C. *map on W*: 76

Transportation, Public See *Public transportation in this index***Transportation, Secretary of** [office]

Transportation, Department of **T**: 399

Flag *picture on F*: 211

Transportation Average [investment]

Dow Jones averages **D**: 315

Transportation Command, U.S. [military group]

Scott Air Force Base **S**: 223

Transportation Communications International Union

Labor movement (table) **L**: 8

Transportation engineering

Engineering (Other specialized fields) **E**: 287-288

Transportation Security Administration

Aviation (Recent developments) **A**: 991-992

Airport **A**: 242

Transportation, Department of (Agencies) **T**: 400

Transportation Union, United

Labor movement (table) **L**: 8

Transposition

Codes and ciphers (Communications security) **Ci**: 749

Transsexualism **T**: 400

Sexuality (Special cases of gender identity) **S**: 338

Trans-Siberian Express [train]

Trans-Siberian Railroad **T**: 401

Trans-Siberian Railroad **T**: 400

Asia (Life of the people) **A**: 790 *with picture*

Mongolia (Economy) **M**: 723

Russia *picture on R*: 546

Russo-Japanese War (Underlying causes) **R**: 566

Siberia (Economy) **S**: 445-446

Transubstantiation [religion] **T**: 401

Wycliffe, John **W**: 515

Transuranium element [chemistry] **T**: 401**Transvaal** [region, South Africa] **T**: 401

Boer War **B**: 435

Kruger, Paulus **K**: 388

Rhodes, Cecil John (Conflict with the Boers) **R**: 317

South Africa (The Plateau) **So**: 614 *with map*; (Discovery of diamonds and gold) **So**: 618

Transverse arch [anatomy]

Foot (The arches) **F**: 352

Transverse colon [anatomy]

Colon [anatomy] **Ci**: 785

Intestine (The large intestine) **I**: 353 *with diagram*

Transverse engine

Transmission (Transmissions and drives) **T**: 375

Transverse Ranges [mountains, California]

California (The Transverse Ranges) **C**: 50

Transverse wave [physics]

Polarized light (How light is polarized) **P**: 617

Waves (Types of waves) **W**: 152; *diagram on W*: 150

Transvestism

Sexuality (Special cases of gender identity) **S**: 338-338a

Transylvania [region, Romania] **T**: 401

Hungary (History) **H**: 445

Romania (Land regions) **R**: 420 *with map*; (Unification movement) **R**: 423; (World War I) **R**: 424

Transylvania Company [U.S. history]

Boone, Daniel (The Wilderness Road) **B**: 477

Tennessee (Early settlement) **T**: 153

Transylvania University

Kentucky (Schools) **K**: 276; (Description) [Kentucky] **L**: 224

Transylvanian Alps [mountains, Europe]

Romania (Surface features) **R**: 419 *with map*

Transylvanian Plateau

Romania (Surface features) **R**: 419 *with map*; (Land regions) **R**: 420

Traoré, Moussa [Malian military leader]

Mali (History) **M**: 109

Trap

Basketball (Defensive strategies) **B**: 147 *with picture*

Football (table) **F**: 356

Trap [fishing]

Fishing industry (Traps) **F**: 185 *with diagram*

Trap [plumbing]

House (Plumbing) **H**: 382

Plumbing (The drainage system) **P**: 578

Trap door [theater]

Shakespeare, William (The stage) **S**: 352-353 *with picture*

Trap-door spider **T**: 402 *with pictures*

Spider (Tarantulas) **So**: 787

Tarantula **T**: 42

Trap line

Fur (Trapping) **F**: 562

Trapeze [clothing]

Saint Laurent, Yves **S**: 41

Trapeze artist

Circus (At the circus) **Ci**: 562 *with picture*

Trapezoid bone [anatomy]

Hand (Parts of the hand) **H**: 40

Trapezius muscle [anatomy]

Head *diagram on H*: 123

Shoulder **S**: 439 *with picture*

Trapezoid bone [anatomy]

Hand (Parts of the hand) **H**: 40

Traphouse [machine]

Trapshooting **T**: 404

Trapp, Martin E. [American political leader]

Oklahoma (table) **O**: 730; (The 1920's) **O**: 732

Trapping [fishing]

Fishing industry (Traps) **F**: 185 *with diagram*

Inuit (Hunting and fishing) **I**: 354d-354e;

(History) **I**: 354f-354g

Lobster (Lobster fishing) **L**: 406 *with picture*

Trapping [hunting] **T**: 402 *with pictures*

Beaver **B**

Conservation (Early conservation problems) Ci: 985
 Fur (Trapping) F: 562
Trapping [sports]
 Soccer (table) So: 546
Trappistines [religious group]
 Trappists T: 404
Trappists [religious group] T: 404
 Cistercians Ci: 567
 Merton, Thomas M: 419
 Religious life (table) R: 227
Trapshooting [sport] T: 404
Trapunto-stuffed quilt
 Quilt Q: 41
Trash
 Energy supply (Solid and liquid wastes) E: 279
Trash [agriculture]
 Cotton (Harvesting) Ci: 1090
Trauma [psychology] T: 404
 Post-traumatic stress disorder P: 709
Trauma center T: 405
 Hospital (Recent developments) H: 374
Travel
See also See the Places to Visit section in specific state and province articles, such as California (Places to Visit), and Transportation in this index in this index
Travel agency T: 405
 Careers (Tourism and hospitality) C: 233 *with picture*
Travel Pictures [book by Héine]
 Heine, Heinrich H: 167
Travel trailer
 Recreational vehicle (Travel trailers) R: 184; *pictures on* R: 183
 Trailer (Recreational trailers) T: 368
Travelers Aid Societies, National Organization of T: 405
Travelers Among Mountains [painting by Fan Kuan]
 Painting (Landscapes and seascapes) P: 32-33 *with picture*; (Chinese painting) P: 44-45 *with picture*
Traveler's check [banking] T: 405
 Check (Special checking services) C: 391
Travelers Insurance Company
 Connecticut (Interesting facts) Ci: 953
 Insurance (The growth of insurance) I: 316
Traveler's-tree [tree] T: 405 *with picture*
 Tree (Interesting facts about trees) T: 411 *with picture*
Traveling wave [physics]
 Vacuum tube (Kinds of vacuum tubes) V: 258-259
Traveling-wave linear accelerator [machine]
 Particle accelerator (How accelerators work) P: 184-185
Traveller [horse]
 Horse (table: Famous horses in history and legend) H: 361
 Lee, Robert Edward *picture on* L: 177
Traveller, The [poem by Goldsmith]
 Goldsmith, Oliver G: 259
Travels in Two Democracies [book by Wilson]
 Wilson, Edmund W: 316
Travels in West Africa [book by Kingsley]
 Kingsley, Mary Henrietta K: 331
Travels with a Donkey in the Cévennes [book by Stevenson]
 Stevenson, Robert Louis (Early life) So: 897
Travels with Charley [book by Steinbeck]
 Steinbeck, John So: 885
Travers, Morris William [British chemist]
 Krypton K: 389
 Neon N: 123
 Xenon X: 543
Travers, P. L. [Australian author] T: 406
Traversing
 Skiing (Alpine skiing) S: 482; *diagram on* S: 484
Travertine [rock] T: 406
Travestias [play by Stoppard]
 Stoppard, Tom So: 911
Traviata, La [opera by Verdi]
 Dumas, Alexandre, *fils* D: 382
 Opera (*Traviata, La*) O: 807 *with picture*
Travis, Merle [American guitarist]
 Atkins, Chet A: 858
Travis, William Barret [Texas patriot] T: 406
 Alamo (Early days) A: 280
 Texas (The Texas revolution) T: 206
Travois [transportation] T: 406
 Indian, American (Transportation) I: 142; (Before European contact) I: 158-159
Travolta, John [American actor] T: 406 *with portrait*
Trawl [net]

Fishing industry (Nets) F: 183 *with diagram*; *picture on* F: 180
 Shrimp (The shrimp industry) S: 441
Trawler [boat]
 Fishing industry (Nets) F: 183 *with diagram*; *picture on* F: 180
Tray drying
 Food preservation (Drying) F: 342-343
Traynor, Pie [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Tread
 Tire T: 296 *with pictures*; (Tire tread patterns) T: 298
Treadle [loom]
 Weaving (Kinds of looms) W: 174
Treadmill [machine] T: 406
 Stress test So: 927
Treason T: 406
 Constitution of the United States (Article III, Section 3) Ci: 1010
 Crime (Treason) Ci: 1137
Treasure Island [book by Stevenson]
 Stevenson, Robert Louis (Novels) So: 898
 Literature for children (Fiction) L: 358
Treasure Island [film]
 Disney, Walt (Full-length movies) D: 236
Treasure Island [hotel and casino]
 Las Vegas (The city) L: 87-88 *with picture*
Treasure of the Humble, The [essays by Maeterlinck]
 Maeterlinck, Maurice M: 41
Treasure of the Sierra Madre, The [film]
 Huston, John H: 457
Treasure State [nickname]
 Montana M: 742
Treasurer [office]
 Parliamentary procedure (Officers) P: 175
 State government (Other officers) So: 862
Treasury, Department of the [U.S.] T: 407 *with picture*
 Internal Revenue Service I: 337
 Money (United States currency today) M: 709
 Washington, D. C. *map on* W: 76
Treasury, Secretary of the [office]
 Treasury, Department of the T: 407
 Flag *picture on* F: 211
Treasury bill
 Investment (Indirect investments) I: 367-368
 National debt (Ownership of the debt) N: 33
Treasury Board, President of the, and minister responsible for infrastructure [office]
 Canada, Government of (The Cabinet) C: 132; *diagram on* C: 137
Treasury bond
 Investment (Indirect investments) I: 367-368
Treasury Department Lifesaving Medal
 Medals, decorations, and orders (Civilian awards) M: 355
Treasury of Atrous [Mycenae]
 Architecture (Mycenae architecture) A: 615
Treatise of Harmony [book by Rameau]
 Rameau, Jean-Philippe R: 133
Treatise of Human Nature, A [book by Hume]
 Hume, David (Hume's life) H: 432
Treatise on Courtesy, A [book by Thomasin von Zerclaere]
 Etiquette (Books on etiquette) E: 374
Treatise on the Education of Girls [book by Fénelon]
 Fénelon, François de Salignac de la Mothe- F: 71
Treatise on the Improvement of Canal Navigation, A [book by Fulton]
 Fulton, Robert (The inventor) F: 555
Treatment plant
 Water (Purifying and treating water) W: 126
Treaty [international relations] T: 408 *with picture*
 Congress of the United States (Approving treaties) Ci: 946
 Fishing industry (International commissions and treaties) F: 187
 Human rights (Treaties) H: 428a
 Indian, American (In the United States) I: 178-178a
 International law I: 340
 International relations (Treaties) I: 344
Treaty body [committee]
 Human rights (Monitoring) H: 428a
Treaty Oak
 Jacksonville (Cultural life and recreation) J: 18
Treaty of ...
Treaties appear under their key words, as in Versailles, Treaty of
Treaty port [Chinese history] T: 409
Trebia River, Battle of the [218 B.C.]
 Hannibal (His military campaigns) H: 52
Treble [music] T: 409

Treble clef
 Music (Indicating pitch) M: 953 *with picture*
 Treble T: 409
Treblinka [concentration camp] T: 409
Tredegar Iron Works
 Civil War (Economy) Ci: 623
Tree T: 410 *with pictures*
See also Forest and Forest products in this index, and the list of Related Articles in the Tree article
 Arbor Day A: 592
 Bark B: 110 *with diagram*
 Bonsai B: 463
 Climate (Growth rings) Ci: 679
 Pruning P: 841 *with pictures*
 Rain forest R: 126 *with pictures*
 Sap S: 120 *with diagram*
 Shelterbelt S: 394
Tree cotton
 Cotton (Old World cotton) Ci: 1088
Tree cricket [insect]
 Cricket Ci: 1130 *with picture*
 Insect (Courtship) I: 294
Tree farming T: 433
Tree fern
 Fern *picture on* F: 75
 Plant *picture on* P: 521
 Tree (Tree ferns) T: 415; *pictures on* T: 413
Tree fox
 Fox (Kinds of foxes) F: 440
Tree frog T: 434 *with picture*
 Animal *picture on* A: 480
 Frog (Tree frogs) F: 540; *picture on* F: 536
Tree heath
 Brier B: 608
Tree kangaroo [animal]
 Kangaroo (Other macropods) K: 215
Tree line [geography]
 Arctic (Arctic lands) A: 636 *with map*
Tree of heaven *See Ailanthus in this index*
Tree of Man, The [book by White]
 White, Patrick W: 284
 Novel (The novel today) N: 575
Tree peony
 Peony P: 276 *with picture*
Tree shear [machine]
 Lumber (Cutting down trees) L: 518
Tree shrew [animal] T: 434 *with picture*
 Mammal (table) M: 128 *with picture*
Tree snake
 Invasive species (How invasive species affect) I: 354j
 Snake *picture on* S: 534
Tree squirrel
 Squirrel (Types of squirrels) So: 815 *with pictures*
Tree surgery T: 434
Tree swallow
 Swallow So: 1014 *with picture*
Tree toad *See Tree frog in this index*
Treeshopper [insect]
 Animal *picture on* A: 495
Treemonisha [opera by Joplin]
 Joplin, Scott J: 160
Treen, David C. [American political leader]
 Louisiana (table) L: 496; (The mid-1900's) L: 500-501
"Trees" [poem by Kilmer]
 Kilmer, Joyce K: 316
Trefoil [botany] T: 435
Trefoil [emblem]
 Girl Scouts G: 196 *with picture*
Trek, The Great *See Great Trek in this index*
Trekboeken [animal]
 Springbok So: 807 *with picture*
Trellis
 Fruit (Planting) F: 545
Tremblay, Michel [Canadian dramatist]
 Canadian literature (Modern Canadian drama) C: 161 *with picture*
Tremblay, Paul [Canadian diplomat]
 United Nations (table) U: 86
Trembler [bird]
 Thrasher T: 269
Tremolo
 Music (table) M: 954
Tremont House (Boston)
 Hotel (History) H: 377
Trench [geography]
 Atlantic Ocean (The Mid-Atlantic Ridge) A: 864
 Deep sea (The deep-sea floor) D: 82a
 Ocean (Depth) O: 651-652; (The land at the bottom of the sea) O: 659-660
 Pacific Ocean (The ocean floor) P: 14
Trench foot [disease]
 Immersion foot I: 79
Trench mouth [disease] T: 435
 Teeth (Periodontal diseases) T: 85-86

Trench warfare

Army (Armies in the two world wars) A: 728
World, History of the *picture on W*: 421
World War I (Trench warfare) W: 457; *picture on W*: 453

Trencher [utensil]

Colonial life in America (Furnishings) Ci: 797

Trend [musical]

Holm, Hanya H: 294

Trent See *Trent Affair in this index***Trent, Council of** [1545-1563] T: 435

Christianity (The Counter Reformation) C: 526
Counter Reformation (Counteracting Protestantism) Ci: 1096 *with picture*
Paul III P: 199
Pius IV P: 502
Roman Catholic Church (The Counter Reformation) R: 408-409
Vulgate V: 453

Trent, River (England)

England (Rivers and lakes) E: 300-301

Trent, William [American pioneer]

Trenton T: 435

Trent Affair [U.S. history] T: 435

Lincoln, Abraham (Foreign relations) L: 322
Mason, James Murray M: 266
Slidell, James S: 508
Wilkes, Charles W: 306

Trente Arpents [book by Ringuet]

Canadian literature (Literature between the world wars) C: 159

Trentino-Alto Adige [region, Italy] See *Italian Tyrol in this index***Trenton** (New Jersey) T: 435

New Jersey (Places to visit) N: 240 *with picture*
United States capitals U: 199

Trenton, Battle of [1776]

New Jersey (The Revolutionary War) N: 250
Revolutionary War in America (table) R: 276;
(Trenton and Princeton) R: 281 *with map*
Washington, George (The army) W: 99 *with picture*

Trepang [food] T: 436

Sea cucumber S: 262

Trephine [instrument]

Trephining T: 436

Trephining [medicine] T: 436

Inca (Religion) I: 96
Indian, American (Shamans) I: 147-148
Medicine (History) M: 371-372 *with picture*
Surgery (History) So: 1007

Treponema pallidum [bacterium]

Syphilis S: 1069

Très Riches Heures [book by Limbourg]

Europe *picture on E*: 411
Limbourg, Pol de L: 306
Middle Ages *picture on M*: 522
World, History of the *picture on W*: 432

Trespass [law] T: 436**Trespassers, The** [book by Hobson]

Hobson, Laura Zametkin H: 273

Tresselt, Alvin [American author]

Duvoisin, Roger Antoine D: 393

Treutlen, John A. [American political leader]

Georgia (table) G: 130

Trevelyan, George Macaulay [British historian] T: 436**Treveri** [ancient people]

Trier T: 441

Trevi Fountain [Rome]

Rome (Churches, palaces, and fountains) R: 429-430

Treviño, Elizabeth Borton de [American author]

Newbery Medal (table) N: 359

Trevino, Lee [American golfer] T: 436 *with portrait*

Golf (U.S. Open) G: 265

Trevithick, Richard [British inventor] T: 437

Automobile (The steam car) A: 962
Railroad (Invention of the locomotive) R: 115
Steam engine (Modern steam engines) So: 881

Trevor, Cleire [American actress]

Motion picture (Best performance by an actress in a supporting role: 1948) M: 863

Trevor, William [Irish author]

Irish literature (Fiction and poetry) I: 432-433

Triad [color]

Color (Producing color harmony) Ci: 823 *with diagram*

Triad [music]

Harmony H: 62
Music (Harmony) M: 951 *with diagrams*

Triage [medicine]

Emergency room E: 258

Trial [law] T: 437

See also *Jury in this index*

Constitution of the United States (Amendment 5) Ci: 1012

Court (How courts work) Ci: 1101

Criminal justice system (Pretrial procedures) Ci: 1143; (The trial) Ci: 1143

Judge J: 182

Trial, The [book by Kafka]

Kafka, Franz K: 209

Novel (New directions in the novel) N: 573-574

Trial-and-error behavior [psychology]

Learning (Instrumental conditioning) L: 163

Trial Begins, The [book by Sinyavsky]

Russian literature (Modern Soviet literature) R: 564

Trial by battle See *Trial by combat in this index***Trial by combat** [European history] T: 438

Feudalism (Justice under feudalism) F: 82

Trial by jury See *Jury; Trial in this index***Trial by ordeal** [European history]

Divination D: 241
Middle Ages (Barbarian Europe) M: 523
Trial (History) T: 438
Trial by combat T: 438

Trial court

Court (Types of courts) Ci: 1101
District court D: 240
United States, Government of the (Lower court system) U: 144

Trial judge

Judge J: 182

Trial period

Sales (Persuasion) S: 63-64

Triangle [business district]

São Paulo (The city) S: 117

Triangle [geometry] T: 438 *with diagrams*

Geometry (Properties of geometric figures) G: 102 *with pictures*

Pyramid P: 916

Pythagorean theorem P: 921

Trigonometry T: 442 *with diagrams*

Triangle [musical instrument] T: 439 *with picture***Triangle spider**

Spider (table) So: 790; *picture on So*: 788

Triangular bandage

Bandage B: 75

Triangular trade [U.S. history]

African Americans (Beginning of the slave trade) A: 136c-136d
Colonial life in America (Trade) Ci: 811

Trianon, Treaty of [1920] T: 439

Hungary (Between world wars) H: 446
World War I (The Paris Peace Conference) W: 465-466; (Provisions of the treaties) W: 466

Triassic Period [geology]

Dinosaur (Kinds of dinosaurs) D: 206b
Earth (table) E: 30
Prehistoric animal (Amphibians) P: 738; (table) P: 739

Triathlon [sport] T: 440

Olympic Games O: 748

Triatomic molecule [chemistry]

Molecule (Individual molecules) M: 692

Triazolam [drug]

Benzodiazepine B: 256

Tribal council [government]

Indian, American (Tribes) I: 143

Tribal dance

Dance (Ritual ethnic dances) D: 27 *with picture*

Tribbitt, Sherman W. [American political leader]

Delaware (table) D: 109

Tribes [sociology] T: 440

Arabs (Family life) A: 586
Family (Non-Western families) F: 24
Indian, American (Tribes) I: 143

Tribelet [American Indian unit]

Miwok Indians M: 680

Tribes and Temples [book by La Farge and Blom]

La Farge, Oliver L: 27

Tribhuwan Shah [king of Nepal]

Nepal (History) N: 126-127

Tribhuwan University

Nepal (People) N: 125-126

Triboluminescence

Sphalerite So: 779

Triborough Bridge (New York City) T: 440**Tribuna, La** [newspaper]

Honduras (Communication) H: 312

Tribunal of first instance

Egypt (Courts) E: 121

Tribunal of the Roman Rota

Vatican City (Administration) V: 288

Tribune [ancient Rome] T: 440

Legion L: 184

Tribune, New York See *New York Tribune in this index***Tribune of the people** [ancient Rome]

Tribune T: 440

Tributary [geography]

River (Tributaries) R: 351; *diagram on R*: 353
Basin B: 140

Tribute [tax]

Colonialism (Colonial economic policies) Ci: 814
Mexico (Spanish rule) M: 470

Tribute Money, The [fresco by Masaccio]

Painting (The 1400's) P: 52-53 *with picture*

Triceps [anatomy]

Arm A: 717 *with diagram*
Human body *diagram on H*: 422
Muscle (Skeletal muscles) M: 933

Triceratops [dinosaur] T: 441

Dinosaur (True dinosaurs) D: 206b-208 *with picture; picture on D*: 212

Trichina [animal] T: 441**Trichinosis** [disease]

Trichina T: 441
Hog (Diseases) H: 287
Pork P: 679

Trichlorofluoromethane [chemical]

Chlorofluorocarbon C: 517

Trichoptera [entomology]

Insect (table) I: 300

Trichromatic theory [color]

Color (The three-component theory) Ci: 826

Trichuriasis [disease]

Roundworm R: 491

Trick [cards]

Bridge (Scoring) B: 605

Trick-or-treating [custom]

Halloween (Trick-or-treating) H: 24a *with picture*

Trick score [bridge]

Bridge (Scoring) B: 605

Trick to Catch the Old One, A [play by Middleton]

Massinger, Philip M: 296

Trickle irrigation

Irrigation (Trickle irrigation) I: 458 *with picture*

Trickling filter

Sewage (Secondary treatment) S: 330

Trickster of Seville, The [play by Tirso de Molina]

Don Juan D: 306

Tirso de Molina T: 298

Triclinic system

Crystal (Classifying crystals) Ci: 1166-1167
with picture

Tricorne [hat]

Clothing (The 1700's) Ci: 701-702
Hat *picture on H*: 84

Tricorner Knob [mountain, North Carolina-Tennessee]

Great Smoky Mountains G: 349

Tricot [fabric]

Textile (Knitted fabrics) T: 214-215

Tricuspid valve [anatomy]

Heart (Chambers, valves, and inner lining) H: 133-135 *with pictures; (The work of the heart) H*: 135

Tricycle landing gear

Airplane (The landing gear) A: 216-217; *picture on A*: 215

Tricyclic antidepressant [drug]

Antidepressant A: 553

Trident [weapon]

Gladiator G: 206
Neptune N: 128 *with picture*
Poseidon P: 697

Trident submarine

Submarine (Nuclear submarines) So: 943

Tridentine Catechism [religion]

Catechism C: 299

Trier [Germany] T: 441**Trier of fact** [law]

Evidence E: 425

Trieste [Italy] T: 441**Trieste** [diving vessel]

Diving, Underwater (Diving in vehicles) D: 246
Piccard, Jacques P: 450

Trieste, Free Territory of

Trieste T: 442

Trifecta [betting]

Horse racing (Betting) H: 365

Trifles [play by Glaspell]

Glaspell, Susan G: 210

Trifluoperazine [drug]

Tranquilizer T: 370

Trifocal [lens]

Glasses (Prescription glasses) G: 224-225 *with diagrams*

Trifonov, Yuri [Soviet author]

Russian literature (Modern Soviet literature) R: 564-565

Trigeminal nerve

Neuralgia N: 152

- Trigger** [gun]
Handgun (Types of handguns) H: 43 *with picture*
- Trigger** [horse]
Rogers, Roy R: 400
- Trigger** [medicine]
Asthma A: 825
- Triggerfish** T: 442 *with picture*
Fish *picture on* F: 154
- Triglyceride** [compound] T: 442
Cholesterol C: 520
Fat (Structure) F: 52
Lard L: 76
- Trigonometric ratio**
Mathematics (Branches of mathematics) M: 303
Trigonometry (Right triangles) T: 443
- Trigonometric series**
Series S: 316
- Trigonometry** T: 442 *with pictures*
Mathematics (Branches of mathematics) M: 303, (The Renaissance) M: 306
- Trihalomethane** [chemical]
Water pollution (Drinking water standards) W: 138
- TRI-HI-Y Club**
HI-Y club H: 221
- Triiodothyronine** [hormone]
Hormone (Metabolic hormones) H: 335
Thyroid gland T: 274
- Trilateral Commission**
Brzezinski, Zbigniew Kazimierz B: 657
- Trilby** [book by Du Maurier]
Du Maurier, George D: 382
- Trilithon** [stone]
Stonehenge So: 910
- Trillion** [number] T: 445
- Trillium** [plant] T: 445
Flower (Flowers of woodlands and forests) F: 284-285 *with picture*
- Trilobite** [extinct animal] T: 445
Extinct animal (Types of extinction) E: 457
Fossil *picture on* F: 425
Prehistoric animal (The earliest animals) P: 736
- Trim tab**
Airplane (The wing) A: 213-214 *with picture*;
(Basic movements and controls) A: 222-225
- Trimaran**
Boating (Sailboats) B: 429
- Trimble, Allen** [American political leader]
Ohio (table) O: 699
- Trimble, David** [Irish political leader] T: 445
Nobel Prizes (Peace: 1998) N: 449
- Trimble, Robert** [American jurist]
Supreme Court of the United States (table) So: 1000
- Trimerophyte** [plant]
Plant (Early plants) P: 540
- Trimester** [pregnancy]
Abortion (Abortion in the United States) A: 15
Pregnancy (How pregnancy affects women) P: 734b
Reproduction, Human (Growth of the fetus) R: 248
Roe v. Wade R: 399
- Trimester system** [education]
Universities and colleges (The calendar) U: 209
- Trimeter** [poetry]
Poetry (table) P: 594
- Trimmatom nanus** [fish]
Fish F: 144 *with picture*
- Trimmer saw** [machine]
Lumber (Sawing logs) L: 519; *picture on* L: 520
- Trimming**
Sailing (Trimming and tacking) S: 26
- Trimotor plane**
Airplane (The golden age) A: 235; *picture on* A: 233
- Trimurti** [Hindu gods]
Brahman B: 548
- Trinh** [dynasty]
Vietnam (Independence) V: 370
- Trinidad** [ship]
Magellan, Ferdinand (The voyage begins) M: 46
- Trinidad and Tobago** T: 445 *with picture and map*
Calypso C: 71
Flag *picture on* F: 202
- Trinitrotoluene** See TNT *in this index*
- Trinity** [religion] T: 447
Christianity (Beliefs) C: 524
Jesus Christ (The early Christians) J: 109
Mormons (Church doctrines) M: 806-807
Protestantism (Protestant beliefs) P: 833
Roman Catholic Church (The Trinity and creation) R: 404
- Trinity Church** [Boston]
Boston (Back Bay) B: 497; *picture on* B: 495
Richardson, Henry Hobson R: 330
- Trinity College** [Dublin]
Ireland (Education) I: 420-421 *with picture*
- Trinity College** [former name]
Duke University D: 380
- Trinity River** [U.S.]
Dallas (The city) D: 11 *with picture*
- Trinity River Greenbelt** [region]
Dallas (Recreation) D: 14
- Trinity Site** [region, New Mexico]
New Mexico (World War II) N: 275 *with picture*
- Trinkle, Elbert Lee** [American political leader]
Virginia (table) V: 417
- Trinocular tube**
Microscope (Using an optical microscope) M: 519
- Trio** [music]
March M: 193
Scherzo S: 174
- Triode** [electronics]
Electronics (Early experiments) E: 215
Vacuum tube (Kinds of vacuum tubes) V: 258 *with diagram*
- Triolef**
Poetry (table) P: 594
- Trip** [drugs]
Hallucinogenic drug H: 26
LSD L: 512
- Trip balance** [instrument]
Balance B: 34 *with picture*
- Trip odometer** [measuring device]
Speedometer So: 774
- Tripalo, Miko** [Croatian political leader]
Croatia (History) Ci: 1148a-1148b
- Tripe** [food] T: 447
Cattle (Beef cattle) C: 308
- Tripitaka** [religious book]
Buddhism (The dharma) B: 668
- Triple**
Baseball (Reaching base) B: 129
- Triple Alliance** [European history]
Bismarck, Otto von (Bismarck's diplomacy) B: 382
Germany (Foreign policy) G: 166
Italy (The Kingdom of Italy) I: 516
Russia (World War I) R: 552
World War I (A system of military alliances) W: 454-455
- Triple Alliance** [Mexican history]
Cortés, Hernando (Arrival in Mexico) Ci: 1073
- Triple Alliance, War of the** [1865-1870]
Brazil (The reign of Pedro II) B: 584
Latin America (Border disputes) L: 108
Paraguay (Military ruin) P: 149
Uruguay (Struggles for power) U: 228
- Triple-alpha process** [physics]
Star (Fusion of other elements) So: 848;
(Intermediate-mass stars) So: 848
- Triple Crown** [U.S.]
Arcaro, Eddie A: 593
Horse racing (Types of horse races) H: 364-365
Kentucky Derby K: 296
- Triple Entente** [European history]
France (World War I) F: 475
Germany (Foreign policy) G: 166
Russia (World War I) R: 552
United Kingdom (Gladstone and Disraeli) U: 69
World War I (A system of military alliances) W: 454-455
- Triple jump** [track and field] T: 447
Track and field (Jumping events) T: 355;
(World track and field records) T: 358
- Triple play**
Baseball (Baseball terms) B: 124
- Triple point temperature** [physics]
Temperature T: 130
- Triple trailer** [truck]
Truck T: 456; *picture on* T: 459
- Triplet** [gem]
Gem (Imitation and synthetic gems) G: 79
- Triplet** [poetry]
Poetry (table) P: 594
- Triplet code** [genetics]
Cell (The genetic code) C: 336
Heredity (How proteins are made) H: 206
- Triplets** [multiple birth]
Multiple birth M: 919
- Tripod** [device]
Photography (Tripods) P: 419
- Tripod fish** T: 447
Deep sea (Fish) D: 82b-82c; *picture on* D: 82
Fish *picture on* F: 156
- Tripoli** [city, Lebanon] T: 447
- Tripoli** [city, Libya] T: 447
Barbary States B: 106 *with map*
Libya *picture on* L: 265; (Early days) L: 267;
(Strained relations with the United States) L: 268
- Tripoli** [earth]
Grinding and polishing (Polishing) G: 395
- Tripoli, War with** [1801-1805]
Decatur, Stephen D: 67
Jefferson, Thomas (War with Tripoli) J: 84 *with picture*
Marine Corps, United States (The 1800's) M: 208
- Tripolitania**
Libya (Independence) L: 268
- Triptych** [painting]
Beckmann, Max B: 197
- Triquetrum bone**
Hand (Parts of the hand) H: 40
- Tirreme** [ship]
Galley G: 15
Ship (Phoenician and Greek ships) S: 405 *with picture*
- Trissino, Giangiorgio** [Italian poet]
Drama (Italian Renaissance drama) D: 330
Palladio, Andrea P: 107
- Trist, Nicholas P.** [American government official]
Mexican War (The peace treaty) M: 447
- Tristan** [legendary figure] T: 448
- Tristan** [book by Mann]
Mann, Thomas M: 164
- Tristan and Isolde** [opera by Wagner]
Wagner, Richard (Later career) W: 4
Tristan T: 448
Gottfried von Strassburg G: 279
- Tristan and Isolde** [poem by Gottfried von Strassburg]
Gottfried von Strassburg G: 279
German literature (Epic poetry) G: 139
- Tristeza** [plant disease]
Orange (Pests and diseases) O: 815
- Tristram** [legendary figure]
Round Table (The knights of the Round Table) R: 491
Tristan T: 448
- Tristram** [poems by Robinson]
Robinson, Edwin Arlington R: 368
- Tristram Shandy** [book by Sterne]
English literature (The rise of the novel) E: 318-319
Novel (The first English novelists) N: 572
Sterne, Laurence So: 894
- Triticale** [plant] T: 448
- Tritium** [isotope] T: 448
Atom (The mass number) A: 871-872 *with diagram*
Deuterium (Uses) D: 172
Energy supply (Nuclear fusion) E: 278
Hydrogen (Properties) H: 469
Nuclear energy (Nuclear fusion) N: 583 *with diagram*; (The industry and the environment) N: 589
Nuclear weapon (Thermonuclear weapons) N: 597
- Triton** [Greek mythology]
Neptune N: 128
Poseidon P: 697
- Triton** [satellite] T: 448
Neptune (Satellites and rings) N: 129 *with picture*
Satellite S: 150; (Formation of satellites) S: 150; (Currently active satellites) S: 150a
Voyager V: 451
- Triton** [submarine]
Submarine (Nuclear submarines) So: 943
- Trittico, II** [operas by Puccini]
Puccini, Giacomo P: 869
- Tritty** [ancient Greece]
Athens (Democracy) A: 857
- Triumph** [automobile]
Sports car (History) So: 803
- Triumph, Arch of** See Arc de Triomphe *in this index*
- Triumph ceremony** [zoology]
Swan (Habits) So: 1016
- Triumph of Death** [painting by Bruegel]
Bruegel, Pieter, the Elder B: 648
- Triumph of Life, The** [poem by Shelley]
Shelley, Percy Bysshe (His writings) S: 391-392
- Triumph of the Egg, Tha** [book by Anderson]
Anderson, Sherwood A: 452
- "Triumphal March"** [music by Verdi]
Opera (*Aida*) O: 801; *picture on* O: 790
- Triumvirate** [ancient Rome] T: 448

- Rome, Ancient (Breakdown of the republic)
R: 446
- First Triumvirate**
Caesar, Julius (Alliance with Pompey) C: 12-13
Crassus, Marcus Licinius Ci: 1121
Pompey the Great P: 655
- Second Triumvirate**
Antony, Mark A: 561
Augustus (Rise to power) A: 889
- Trivia** [poem by Gay]
Gay, John G: 71
- Trivium** [European history]
Education (Christian education in the Middle Ages) E: 99
- tRNA** [genetics] See Transfer RNA *in this index*
- TRNC** [Cyprus] See Turkish Republic of Northern Cyprus *in this index*
- Troadic civilization** [Greek history]
Aegean civilization (The Trojan culture) A: 83
- Trobriand Islands** [islands, Pacific]
Mythology (What myths are about) M: 974
- Trochee** [poetry]
Poetry (table) P: 594
- Trochophore** [zoology]
Larva L: 78
- Troglobite** [animal]
Cave (Life in caves) C: 320-321
- Trogon** [bird] T: 448
Quetzal Q: 40; Q: 40
- Troika** [vehicle] T: 448
Sled S: 505
- Troika proposal** [U.N.]
Cold War (The troika proposal) Ci: 766
- Troilus and Cressida** [play by Shakespeare]
Shakespeare, William (*Troilus and Cressida*) S: 362
- Troilus and Criseyde** [poem by Chaucer]
Chaucer, Geoffrey (Poetry) C: 388
- Trojan horse** [program]
Computer (Computer security) Ci: 924
Internet (Security) I: 350e
- Trojan horse** [mythology]
Cassandra C: 275
Horse (table: Famous horses in history and legend) H: 361
Mythology *picture on* M: 979
Trojan War (The fall of Troy) T: 449
Troy (The legendary Troy) T: 454 *with picture*
- Trojan War** T: 448
Helen of Troy H: 168
Homer (Homer's poems) H: 303
Iliad I: 51
Mythology (Greek heroes) M: 979-980 *with picture*
Priam P: 774
Troy (The legendary Troy) T: 454
Ulysses (The Trojan War) U: 17-18
- Trojans, The** [opera by Berlioz]
Caldwell, Sarah C: 28
- Troll** [legend]
Fairy F: 10
- Troller** [boat]
Fishing industry (Hooks) F: 185 *with diagram*
- Trolley**
Alabama (Interesting facts) A: 257 *with picture*
Streetcar So: 925
- Trolley park**
Amusement park A: 446
- Trolley Square** [Salt Lake City]
Utah (Places to visit) U: 238
- Trolling**
Fishing F: 175; *diagram on* F: 179
Fishing industry (Hooks) F: 185 *with diagram*
- Trollope, Anthony** [British author] T: 449
Novel (Britain) N: 573
- Trollope, Frances** [British author]
Trollope, Anthony T: 449
- Trombone** [musical instrument] T: 449 *with pictures*
Brass *picture on* B: 566
Jazz (The brass) J: 69 *with picture*
Music (Wind instruments) M: 949-950; *picture on* M: 949
Sound *picture on* So: 598
- Trompe-l'oeil** [art]
Painting (Still-life paintings) P: 33
- Trona** [mineral] T: 450
Wyoming (Minerals) W: 529
- Trondheim** [city, Norway] T: 450
Norway (Land regions) N: 541-542 *with map*
- Troodon** [dinosaur] T: 450
Dinosaur (True dinosaurs) D: 206b-211
- Troop** [scouting]
Boy Scouts (Boy Scouting) B: 537
Girl Scouts (Troops, groups, and councils) G: 198
- Trooper**
Police (State police) P: 622 *with picture*
- Trooping the Colour** [ceremony]
London (Ceremonies) L: 437
- Troops** [military]
Army (The organization of armies) A: 724-725
- Tropic of Cancer** [book by Miller]
Miller, Henry M: 554
- Tropic of Cancer** [geography] T: 450
Climate (The role of latitude) Ci: 676
Tropics T: 451 *with map*
- Tropic of Capricorn** [book by Miller]
Miller, Henry M: 554
- Tropic of Capricorn** [geography] T: 450
Climate (The role of latitude) Ci: 676
Tropics T: 451 *with map*
- Tropical tide**
Tide (Tidal cycles) T: 282
- Tropical air mass** [meteorology]
Weather (Synoptic-scale systems) W: 159
with diagram
- Tropical cyclone**
Hurricane H: 452
- Tropical depression** [meteorology]
Hurricane (The life of a hurricane) H: 453
- Tropical disturbance** [meteorology]
Hurricane (The life of a hurricane) H: 453
- Tropical fish** T: 450
Fish (Fish of coral reefs) F: 154 *with pictures*;
(Fish of tropical fresh waters) F: 157 *with pictures*
- Tropical forest**
Forest (Kinds of forests) F: 392
- Tropical fruit**
Fruit (How horticulturists classify fruits) F: 544-545 *with pictures*
- Tropical rain forest** See Rain forest *in this index*
- Tropical seasonal forest**
Biome (table) B: 323 *with map*
Forest (Tropical seasonal forests) F: 393 *with map*; *picture on* F: 390
- Tropical storm**
Hurricane (The life of a hurricane) H: 453
- Tropical Storm Agnes**
Pennsylvania (Economic decline) P: 268
- Tropical wet and dry climate**
Climate (Tropical wet and dry climates) Ci: 676b
- Tropical wet climate**
Climate (Kinds of climates) Ci: 676a *with picture*
- Tropical year**
Year Y: 554
- Tropicalism** [music]
Brazil (The arts) B: 576-577
- Tropicbird** [bird] T: 451
Bird (Birds of the ocean and the Antarctic) B: 344 *with picture*
- Tropics** [geography] T: 451 *with map*
Bird (The distribution of birds) B: 332; (Why birds migrate) B: 360
Cyclone Ci: 1203
Flower (Flowers of the tropics and subtropics) F: 292 *with pictures*
Rain forest (Rain forests around the world) R: 126b
Trade wind T: 365 *with map*
- Tropism** [botany] T: 452
Auxin A: 982
Plant (Factors affecting plant growth) P: 538-539 *with pictures*
- Tropopause** [atmosphere]
Air (The troposphere) A: 172-173; *diagram on* A: 172
Troposphere T: 452
- Troposphere** [atmosphere] T: 452
Air (The troposphere) A: 172 *with diagram*
Earth (The atmosphere) E: 18
Fallout (How fallout is distributed) F: 18-19
Jet stream J: 115
Weather (What causes weather) W: 157
- Tros** [legendary figure]
Troy T: 454
- Trot** [gait]
Horse (Gaits) H: 353-354 *with picture*
Mammal (On land) M: 121-122
- Trotaconvantos** [literary figure]
Spanish literature (Early medieval literature) So: 757-758
- Trotsky, Leon** [Soviet political leader] T: 452 *with portrait*
Lenin, V. I. (The October Revolution) L: 193 *with picture*
Union of Soviet Socialist Republics (The October Revolution) U: 35; (Stalin gains power) U: 36
- Trotting** [sport]
Harness racing H: 63
- Trotzky, Leon** See Trotsky, Leon *in this index*
- Troubadour** [French history] T: 453
Classical music (Secular music) Ci: 646 *with picture*
French literature (Lyric poetry) F: 518
Knights and knighthood (Knighthood in literature) K: 351
Minstrel M: 611
Mistral, Frédéric M: 676
Poetry (Medieval poetry) P: 596
Storytelling (The Middle Ages) So: 914
- Troubadour, The** [play by Gutiérrez]
Spanish literature (The 1800's) So: 761
- Trouble in Paradise** [film]
Lubitsch, Ernst L: 513
- Troubles** [social unrest]
Northern Ireland N: 521; *picture on* N: 524
- Trough** [physics]
Waves (Measuring waves) W: 152; *diagram on* W: 150
- Troup, George M.** [American political leader]
Georgia (table) G: 130
- Troupe**
Ballet B: 44
- Trousdale, William** [American political leader]
Tennessee (table) T: 152
- Trousers**
Clothing (The 1600's) Ci: 701
Jeans J: 75
- Trout** [fish] T: 453 *with pictures*
Animal *picture on* A: 507
Fish *pictures on* F: 148, F: 149, F: 165, F: 169
Grayling G: 335
Lake Superior (Recreation and commerce) L: 45-46
- Trout lily** [plant]
Dogtooth violet D: 284 *with picture*
- Trouvère** [French history] T: 454
Classical music (Secular music) Ci: 646
French literature (Lyric poetry) F: 518
Poetry (Medieval poetry) P: 596
- Trovador, El** [play by García Gutiérrez]
Opera (*Trovatore, Il*) O: 808
- Trovatore, Il** [opera by Verdi]
Opera (*Trovatore, Il*) O: 808
- Trowbridge, Alexander B.** [American government official]
Commerce, Department of (table) Ci: 871
Johnson, Lyndon Baines (table) J: 151
- Trowel** [tool]
Archaeology (Excavating sites) A: 597
Plaster (Plastering) P: 552 *with pictures*
- Troy** [ancient city] T: 454 *with pictures and map*
Aegean civilization (The Trojan culture) A: 83
Painting (Aegean painting) P: 41
Schliemann, Heinrich S: 177
Trojan War T: 448
See also Trojan horse and Trojan War *in this index and the list of Related Articles in the Trojan War article*
- Troy** [Massachusetts]
Fall River F: 16
- Troy Female Seminary**
Women's movements (The beginnings of women's movements) W: 385
- Troy pound** [unit of measure]
Pound P: 721
- Troy weight** [measurement] T: 456
Avoirdupois A: 994
Weights and measures (table: Weight and mass) W: 187
- Troyes** [France]
Troy weight T: 456
- Troyes, Treaty of** [1420]
Hundred Years' War H: 437
- Trubar, Primož** [Slovenian author]
Slovenia (People) S: 511
- Truce** [warfare] T: 456
- Truce, Flag of**
Flag of truce F: 224
- Truce of God** [European history]
Peace (The Middle Ages) P: 206
Truce T: 456
- Trucial States**
United Arab Emirates (History) U: 45
- Truck** [decoration]
Flag (table) F: 193 *with diagram*
- Truck** [vehicle] T: 456 *with pictures*
See also Fire truck *in this index*
Freight F: 510
Postal services *picture on* P: 705
Recreational vehicle (Truck campers) R: 184; *picture on* R: 183
Transportation (Land transportation) T: 383 *with picture*
- Truck crane**
Crane Ci: 1119 *with picture*
- Truck farming** T: 458
- Truck gardening**

- Truck farming T: 458
Truckdriver [occupation]
 Careers (Transportation) C: 235 *with picture*
Truckee River [California-Nevada]
 Nevada (Rivers and lakes) N: 166-168
Trudeau, Edward Livingston [American doctor]
 T: 460
Trudeau, Garry [American cartoonist] T: 460
with picture
Trudeau, Pierre Elliott [Canadian political leader] T: 461 *with pictures*
 Canada, History of (Canada under Trudeau) C: 152; (The separatist threat) C: 153; *picture on* C: 154
 Chrétien, Jean (Political career) C: 522b *with picture*
 Clark, Joe Ci: 639; (The 1979 election) Ci: 641
 Liberal Party L: 227
 Montreal (The separatist movement) M: 779
 Quebec (Recent developments) Q: 32
 Turner, John Napier (In Trudeau's Cabinet) T: 517
Trudeau Sanitarium [Saranac Lake, New York]
 Trudeau, Edward Livingston T: 460
True, Allen Tupper [American painter]
 Lincoln, Abraham *picture on* L: 310
True American [newspaper]
 Clay, Cassius Marcellus Ci: 658
True bass [fish]
 Bass (True bass) B: 157 *with pictures*
True Believer, The [book by Hoffer]
 Hoffer, Eric H: 283
True bill [law]
 Bill (In law) B: 301
 Indictment I: 223
True frog
 Frog (Kinds of frogs) F: 539; (True frogs) F: 540
True History of the Conquest of New Spain, The [book by Díaz del Castillo]
 Latin-American literature (Colonial literature) L: 111
True Path [political party]
 Turkey (Political parties) T: 503; (Political changes) T: 512
True Relation of... Virginia, A [book by Smith]
 American literature (Virginia) A: 414
True rib [anatomy]
 Rib R: 320
True toad [zoology]
 Toad T: 303
True viper [zoology]
 Snake (Vipers) S: 535
Truffaut, François [French director] T: 465
 Motion picture (The New Wave in France) M: 870
Truffle [fungus] T: 465
Truitt, George [American political leader]
 Delaware (table) D: 109
Trujillo Molina, Rafael Leonidas [Dominican political leader]
 Dominican Republic (History) D: 304-305
Truk Islands [Pacific] T: 465
 Caroline Islands C: 244
 Pacific Islands, Trust Territory of the P: 13
 World War II (Island hopping in the Central Pacific) W: 488-489
Truman, Bess [wife of Harry S. Truman]
 First ladies (table) F: 142
 Truman, Harry S. (Truman's family) T: 467; *picture on* T: 468
Truman, Elizabeth Wallace [wife of Harry S. Truman] *See* Truman, Bess *in this index*
Truman, Harry S. [U.S. President] T: 466 *with pictures*
 Churchill, Sir Winston Leonard Spencer *picture on* C: 549
 Fair Deal F: 7
 Independence I: 106
 International relations *picture on* I: 346
 Korean War (The "Battle for the Hills") K: 382
 MacArthur, Douglas (The Korean War) M: 4
 McCarthyism M: 332
 Pendergast, Thomas Joseph P: 236
 President of the United States *picture on* P: 769
 Public opinion poll (History) P: 863
 Television (Important dates in television) T: 126
 United Nations *picture on* U: 95
 United States, History of the (Allied victory) U: 190
 Vietnam War (The Indochina War) V: 373
 V-J Day V: 256
 White House (Rebuilding and redecorating) W: 290
Truman, John Anderson [father of]
 Truman, Harry S. (Childhood) T: 466
Truman, Margaret [daughter of]
 Truman, Harry S. (Truman's family) T: 467
Truman, Martha Ellen Young [mother of]
 Truman, Harry S. (Childhood) T: 466
Truman Committee [U.S. history]
 Truman, Harry S. (The Truman Committee) T: 468
Truman Doctrine [U.S. history]
 Cold War (The Containment Policy) Ci: 763
 Truman, Harry S. (The Truman Doctrine) T: 470
Truman Library [Independence, Missouri]
 Independence I: 106
 Missouri (Museums) M: 655 *with picture*;
 (Places to visit) M: 660
 Truman, Harry S. (Elder statesman) T: 472
Trumbauer, Frankie [American conductor]
 Beiderbecke, Bix B: 222
Trumbull, John [American painter] T: 473
 Adams, John A: 34
 Burgoyne, John *picture on* B: 704
 Cornwallis, Charles *picture on* Ci: 1067
 Declaration of Independence *picture on* D: 77
 Hamilton, Alexander *picture on* H: 32
 Hessians *picture on* H: 219
 Painting (History paintings) P: 33
 Revolutionary War in America *picture on* R: 282
Trumbull, John H. [American political leader]
 Connecticut (table) Ci: 967
Trumbull, Jonathan [American political leader]
 T: 473
 Brother Jonathan B: 642
 Connecticut (table) Ci: 967; (The Revolutionary War) Ci: 970
Trumbull, Jonathan, II [American political leader]
 Connecticut (table) Ci: 967
Trumbull, Joseph [American political leader]
 Connecticut (table) Ci: 967
Trumbull, Lyman [American political leader]
 T: 473
 Lincoln, Abraham (A turning point) L: 317
Trümmelbach Falls [waterfall, Switzerland]
 Waterfall (table: Famous waterfalls of the world) W: 143
Trump suit
 Bridge (Bidding) B: 604
Trumpet [musical instrument] T: 473 *with pictures*
 Indian, American *picture on* I: 172
 Jazz (The brass) J: 69 *with picture*
 Music (Wind instruments) M: 949-950; *picture on* M: 949
Trumpet creeper [plant]
 Bignonia B: 299 *with picture*
Trumpet honeysuckle
 Honeysuckle H: 316 *with picture*
Trumpet narcissus [plant]
 Daffodil D: 3 *with picture*
Trumpet of the Swan, The [book by White]
 White, E. B. W: 284
Trumpet style [jazz]
 Hines, Earl H: 237
Trumpeter swan [bird]
 Swan (Kinds) S: 1015-1016
Trumpetfish
 Fish *picture on* F: 154
Trumpeting
 Elephant (Protection against enemies) E: 231
Trumpler, Robert [American astronomer]
 Lick Observatory L: 270
Truncated cube
 Archimedean solid A: 604 *with diagram*
Trundle bed [furniture]
 Bed (History) B: 197-198 *with picture*
 Colonial life in America (Furnishings) Ci: 797
Trunk [botany]
 Tree T: 411; (Trunk and branches) T: 416 *with diagram*
Trunk [zoology]
 Elephant (The body of an elephant) E: 228 *with pictures*
Trunk pipeline
 Pipeline (Liquid pipelines) P: 490
Trunkhose
 Clothing (The Renaissance) Ci: 700
Trunnion
 Iron and steel (The basic oxygen process [BOPI]) I: 443
Truss [construction]
 Bridge (Truss bridges) B: 601 *with diagram*
 Building construction (Beams, girders, and columns) B: 682-683
Truss bridge
 Bridge (Truss bridges) B: 601 *with diagram*
Trust [law]
 Antitrust laws A: 560
 Business (Antitrust laws) B: 726
 Foundations (How foundations are organized) F: 429
 Harrison, Benjamin (Domestic affairs) H: 72
 McKinley, William ("President of the whole people") M: 341
 Monopoly and competition (History) M: 732
 Roosevelt, Theodore ("Trust buster") R: 468
 United States, History of the (Monopolies) U: 178
Trust busting [U.S. history]
 Roosevelt, Theodore ("Trust buster") R: 468
Trust company [banking]
 Trust fund (How a trust fund works) T: 474
Trust department [banking]
 Trust fund (How a trust fund works) T: 474
Trust estate *See* Trust fund *in this index*
Trust fund T: 473
 Bank (Careers in banking) B: 95
 Endowment E: 273
 Pension (Private pension plans) P: 273
Trust territory [UN] T: 474
 Mandated territory M: 136
 United Nations (The Trusteeship Council) U: 84
Trust Territory of the Pacific Islands *See* Pacific Islands, Trust Territory of the *in this index*
Trustee [economics]
 Bankruptcy (In the United States) B: 97
 Receiver R: 174
 Trust fund (How a trust fund works) T: 474
Trustees, Board of
 Universities and colleges (Governing boards) U: 208
Trusteeship Council
 United Nations (The six major UN organs) U: 78 *with diagram*; (Other main organs) U: 84; (Working for self-government) U: 93-94
Trustor [law]
 Trust fund (How a trust fund works) T: 474
Truth [philosophy]
See also Knowledge *in this index*
 Age of Reason (The worship of reason) A: 139
 Metaphysics (Possibility and necessity) M: 430
 Philosophy (Epistemology) P: 383-384
 Semantics S: 290
 Skepticism S: 481
Truth, Sojourner [American social reformer]
 T: 474 *with portrait*
Truth and Reconciliation Commission [South Africa]
 South Africa (Recent developments) So: 621
 Tutu, Desmond T: 526
Truth in Lending Act [1968]
 Bank (Changes in banking laws) B: 94
 Consumerism (The right to information) Ci: 1018
 Interest (Regulation of interest rates) I: 323
 Proxmire, William P: 841
 Usury U: 229
Truth in Packaging and Labeling Act [1966]
 Consumerism (The right to information) Ci: 1018
Truth-in-Securities Act [1933]
 New Deal (Helping savers and investors) N: 200-201
Truth serum [drug]
 Thiopental T: 258
Truth table [logic] T: 474
Truxtun, Thomas [American military leader]
 Constellation Ci: 994
Truyen Kieu [poem by Nguyen Du]
 Vietnam (The arts) V: 366-368
Try [sports]
 Rugby football (Rugby Union) R: 510; (Rugby League) R: 511-512
Tryon, William [British colonial official]
 North Carolina (Revolution and independence) N: 492
Tryon Palace [New Bern]
 North Carolina (Places to visit) N: 482
Tryout
 Theater (Casting) T: 236
Trypanosome [microorganism] T: 475
 Laveran, Charles Louis Alphonse L: 129
 Parasite *picture on* P: 154
 Protozoan (Flagellates) P: 837
 Sleeping sickness (Cause) S: 506-507
 Tsetse fly T: 475
Trypanosomiasis [disease]
 Sleeping sickness S: 507
Trypillians [people]
 Ukraine (Early days) U: 12
Trypsin [enzyme]
 Digestive system (In the small intestine) D: 203

- Tryptophan** [biochemistry]
Serotonin S: 318
Vitamin (Vitamin B complex) V: 430
- Tsa-La-Gi Ancient Village**
Oklahoma (Places to visit) O: 722 *with picture*
- Tsana, Lake** [Ethiopia]
Lake Tana L: 46
- Tsantsa** [trophyl]
Jivaro Indians J: 128
- Tsar** *See* Czar *in this index*
- Tsaritsyn** [former name]
Volgograd V: 444
- Tsar's Bride, The** [opera by Rimsky-Korsakov]
Rimsky-Korsakov, Nikolai R: 341
- Tsavo National Park** [Kenya]
National park (Kenya) N: 42c; (table) N: 42f
- Tschaikowsky, Peter Ilich** *See* Tchaikovsky, Peter Ilich *in this index*
- Tschermak, Erich** [Austrian botanist]
Cell (The 1900's) C: 337-338
Heredity (The birth of genetics) H: 208
- Tselinograd** [former name] *See* Astana *in this index*
- Tsenereene** [book]
Yiddish literature Y: 566
- Tserclaes, Johan** *See* Tilly, Count of *in this index*
- Tsetse fly** [insect] T: 475 *with picture*
Bruce, Sir David B: 647
Fly (table) F: 310
Sleeping sickness (Cause) S: 506-507
- TSH** [hormone] *See* Thyroid stimulating hormone *in this index*
- Tshiluba** [language]
Luba L: 512
- Tshisekedi, Etienne** [Zairian political leader]
Congo (Kinshasa) (The fall of Mobutu) Ci: 940e
- Tshombe, Moise** [Congolese political leader]
Congo (Kinshasa) (Civil disorder) Ci: 940e
- Tshwane** [South Africa]
Pretoria P: 773
- Tsim Sha Tsui** [area]
Hong Kong (Kowloon) H: 316
- Tsimshian Indians** [American Indians] T: 475
Indian, American *picture on* I: 136a
- Tsing Ma Bridge** [China]
Bridge (table: Suspension) B: 603
- Tsinghua University** [Beijing]
China *picture on* C: 487
- Tsiolkovsky, Konstantin E.** [Russian educator]
Rocket (Rockets of the early 1900's) R: 390
Space exploration (Early dreams of space flight) So: 706
- Tsiranana, Philibert** [Madagascar political leader]
Madagascar (History) M: 28-29
- Tsongas, Paul E.** [American political leader]
Clinton, Bill (The Democratic nomination) Ci: 682c
- Tsongdu** [government]
Bhutan (Government) B: 277
- Tsou Kan** [Chinese forester]
Sequoia (The dawn redwood) S: 311
- TSS** [disorder]
Toxic shock syndrome T: 351
- Tsubouchi Shoyo** [Japanese author]
Japanese literature (The modern period) J: 62
- Tsuen Wan**
Hong Kong (Urban life) H: 317
- Tsui, Daniel Chee** [Chinese-born American physicist]
Nobel Prizes (Physics: 1998) N: 442
- Tsukiji Market**
Tokyo (Other places of interest) T: 317
- Tsukuba** [Japan]
Tokyo (Rebuilding the city) T: 319
- Tsunami** [wave] T: 475
Bangladesh *picture on* B: 86
Chile (The land) C: 463-464
Disaster (table) D: 223
Earthquake (How earthquakes cause damage) E: 34-35
Flood (Seacoast floods) F: 237
Indonesia (The Greater Sunda Islands) I: 233
Ocean (Waves) O: 659; *picture on* O: 651
Pacific Ocean P: 14
- Tsurumi Tsubasa** [Japan]
Bridge (table: Cable-stayed) B: 603
- Tsushima, Battle of** [1905]
Russo-Japanese War (Final battles) R: 566
- Tsvetaeva, Marina** [Russian poet]
Russian literature (Post-symbolism) R: 563-564
- Tswana** [people]
Botswana (People) B: 511; (History) B: 512
Namibia (People) N: 8
South Africa (People) So: 609
- TT** [machine]
- Deafness (Special devices) D: 58-59 *with picture*
- TTY** [machine]
Deafness (Special devices) D: 58-59 *with picture*
- Tu Fu** [Chinese poet] *See* Du Fu *in this index*
- Tu-144** [airplane] *See* Tupolev Tu-144 *in this index*
- Tu Yu** [Chinese scholar]
Encyclopedia (The first reference works) E: 268a
- Tuamotu Islands** [Pacific] T: 476
- Tuan, Pham** [Vietnamese astronaut]
Astronaut (table) A: 830
- Tuan Yang Chieh** [festival]
May M: 321
- Tuareg** [people] T: 476
Berbers B: 256
Mali (People) M: 106-107
Niger (People) N: 407-408
Sahara (People) S: 21 *with picture*
Walata W: 7
- Tuareg empire** [African history]
Niger (History) N: 409
- Tuatara** T: 476 *with picture*
Reptile (Tuatara) R: 251 *with picture*
- Tuatha De Danann** [Irish clan]
Irish literature (Heroic tales, romances, and sagas) I: 430
Mythology (The Irish cycles) M: 983
- Tub**
Automobile racing (Formula One racing) A: 976-977
- Tuba** [drink]
Coconut palm Ci: 746
Philippines (Way of life) P: 374-375
- Tuba** [musical instrument] T: 477 *with pictures*
Music (Wind instruments) M: 949-950
- Tubac** [settlement]
Arizona (Spanish exploration) A: 688
- Tubal embryo transfer** [reproduction]
Infertility (Treatment) I: 265
- Tubal ligation** [surgery]
Birth control (Methods of birth control) B: 378
- Tubal pregnancy** [disorder] *See* Ectopic pregnancy *in this index*
- Tube** [transportation]
London (Transportation) L: 438 *with picture*
Subway So: 949
- Tube, Electron** *See* Electron tube *in this index*
- Tube-building rotifer** [animal]
Rotifer *picture on* R: 488
- Tube camera**
Television (The television camera) T: 121
- Tuba foot** [zoology]
Echinoderm E: 49
Sea urchin S: 263
Starfish So: 855 *with picture*
- Tubectomy**
Birth control (Methods of birth control) B: 378
- Tubeless tire**
Tire (History) T: 298
- Tube** [botany] T: 477
Jerusalem artichoke J: 102 *with picture*
Potato (The potato plant) P: 712 *with picture*
Vegetable (Tubers) V: 292 *with picture*
- Tubercle** [disorder]
Tuberculosis (Primary infection) T: 477-478
- Tubercle bacillus** [bacteria]
Tuberculosis T: 477; (Diagnosis of tuberculosis) T: 479 *with pictures*
- Tubercloid leprosy**
Leprosy (Symptoms) L: 204 *with picture*
- Tuberculosis** [disease] T: 477 *with pictures*
AIDS (Opportunistic illnesses) A: 163
Bacteriology (History) B: 22-23
BCG B: 178
Dairying (Dairy farming regulations) D: 7
Disease (table) D: 226
Lupus L: 526
Races, Human (Susceptibility to genetic diseases) R: 58
Scrofula S: 227
Trudeau, Edward Livingston T: 460
- Tuberosa** [plant] T: 479 *with picture*
- Tuberous begonia**
Flower (Garden perennials) F: 280 *with picture*
- Tubeworm** [animal]
Deep sea (Invertebrates) D: 82a-82b *with picture*
- Tubman, Harriet** [American social reformer]
T: 480 *with portrait*
African Americans (The antislavery movement) A: 136f; *picture on* A: 136h
Slavery (Conditions of slavery) S: 503
Underground railroad U: 21
- Tubman, William V. S.** [Liberian political leader]
T: 480
- Liberia (The Republic of Liberia) L: 231-232
- Tubular bells** [musical instrument]
Chimes C: 471
- Tubular fluid** [anatomy]
Kidney (How the kidneys produce urine) K: 311-312
- Tubulidentata** [zoology]
Mammal (table) M: 129 *with picture*
- TUC** [labor union]
Trades Union Congress T: 366
- Tuchman, Barbara Wertheim** [American historian] T: 480
- Tuck, William M.** [American political leader]
Virginia (table) V: 417
- Tuck position**
Diving (Kinds of dives) D: 243; *picture on* D: 244
- Tucker, Jim Guy** [American political leader]
Arkansas (table) A: 712; (The late 1900's) A: 715
- Tucker, Richard** [American singer] T: 480
- Tucker, Tilghman M.** [American political leader]
Mississippi (table) M: 640
- Tucson** [Arizona] T: 481 *with picture*
Arizona (Interesting facts about Arizona) A: 670 *with picture*; (Population) A: 674; *picture on* A: 687-689
- Tucumán, Congress of** [Argentine history]
Argentina (Independence) A: 656
- Tucumcari** [hydrofoil]
Hydrofoil (Modern hydrofoil developments) H: 468-469
- Tucuruí Dam** [Brazil]
Dam (table) D: 18
- Tudor, Antony** [British choreographer]
Ballet (Ballet in the United States) B: 53-54
- Tudor, Henry** *See* Henry VII (king of England) *in this index*
- Tudor, House of** [English history] T: 481
England (table) E: 308
Henry VII [of England] H: 187
Renaissance (Political background) R: 237
- Tudor, Tasha** [American author]
Regina Medal (table: 1971) R: 206
- Tudor style**
House *picture on* H: 381
- Tuen Mun**
Hong Kong (Urban life) H: 317
- Tuesday** T: 481
- Tuesday** [book by Wiesner]
Literature for children *picture on* L: 371
- Tuesday Island**
Torres Strait Islands T: 341
- Tufa** [rock]
Limestone L: 307
Sculpture (Etruscan sculpture) S: 246-247
- Tufted rug**
Rugs and carpets (Tufting) R: 515
Textile (Other textiles) T: 215
- Tufted titmouse** [bird]
Bird (Birds of forests and woodlands) B: 334 *with picture*
Titmouse T: 302
- Tug** *See* Tugboat *in this index*
- Tugboat** T: 481
Atlantic Intracoastal Waterway *picture on* A: 863
Barge B: 109 *with picture*
Radar *picture on* R: 65
Ship (Specialized types of vessels) S: 422; (Navigating a ship) S: 423
Transportation (Water transportation) T: 384-385
- Tugela Falls** [waterfall, South Africa]
Waterfall (table: Famous waterfalls of the world) W: 143
Drakensberg D: 323
- Tugela River** [South Africa]
Drakensberg D: 323
- Tugendhat house** [Czechoslovakia]
Mies van der Rohe, Ludwig M: 536
- Tugurio** [housing]
Colombia (Way of life) Ci: 781
- Tu'i Tonga** [title]
Tonga (History) T: 329
- Tuileries** [palace] T: 481
Paris (Gardens, squares, and parks) P: 162 *with map*
- Tuition** [fee]
Parochial school P: 178
- Tuke, William** [English merchant]
Mental illness (Humane treatment) M: 408
- Tuktut Nogait National Park**
Canada (table: National parks and national park reserves) C: 113
- Tula** [ancient city, Mexico] T: 482
Maya (The Postclassic Period) M: 326
Mexico (The Toltec and the Aztec) M: 468

- Toltec Indians T: 323
Tula de Allende [Mexico]
 Tula T: 482
Tulane, Paul [American businessman]
 Tulane University T: 482
Tulane University T: 482
Tularemia [disease] T: 482
 Rabbit (Enemies) R: 48
 Veterinary medicine V: 345
Tule Lake [California]
 Indian wars (The Modoc War) I: 194
 Modoc Indians M: 686
Tule salmon See Chinook salmon in this index
Tulip [plant] T: 482 with picture
 Flower (Garden perennials) F: 280 with picture; picture on F: 273
 Leaf picture on L: 157
 Netherlands picture on N: 147
 Oregon (Agriculture) O: 843 with picture
Tulip Festival [Iowa]
 Iowa picture on I: 385
Tulip Festival [Michigan]
 Holland H: 292
 Michigan (Visitor's guide) M: 498
Tulip Festival [Ottawa]
 Ottawa (Annual events) O: 873
Tulip-poplar See Yellow-poplar in this index
Tulip suite
 Furniture (The retro style) F: 584, picture on F: 583
Tulipomania [European history]
 Tulip T: 482
Tuliptree See Yellow-poplar in this index
Tull, Jethro [English agriculturist] T: 483
 Agriculture (The invention of new farm equipment) A: 157 with picture
Tulle [fabric]
 Net N: 137
Tullus Hostilius [legendary figure]
 Mythology (The seven kings) M: 981
Tulsa [Oklahoma] T: 483 with picture
 Oklahoma (Population) O: 716 with pictures; picture on O: 734
 Riot (During the 1900's) R: 349
Tulsa Exposition Center
 Tulsa (Education and cultural life) T: 483
Tulsey town
 Tulsa (History) T: 483
Tulsi Das [Indian poet]
 Ramayana R: 133
Tumacacori National Historical Park [Arizona]
 National Park System (table: National historical parks) N: 56-57
Tumbes [Peru]
 Peru (Spanish conquest and rule) P: 314
Tumbler [biology]
 Mosquito (Pupa) M: 834
Tumbler [machine]
 Washing machine W: 45
Tumbler lock
 Lock (Mechanical locks) L: 411 with picture
Tumbleweed [plant] T: 484
 Thistle T: 261
Tumbling [sport]
 Trampoline T: 369 with picture
Tumboa [plant]
 Welwitschia W: 196 with picture
Tumbrel [cart]
 French Revolution (Terror and equality) F: 526-527
Tumor [disorder] T: 484
 See also Cancer in this index
 Biopsy B: 326
 Birthmark B: 380
 Brain (Tumors) B: 557; picture on B: 558
 Ear (Diseases) E: 12
 Epithelioma E: 345
 Mole M: 691
 Monoclonal antibody M: 730
 Neurofibromatosis N: 152
 Oncology O: 761
 Skin (Tumors) S: 491
Tumor necrosis factor alpha [protein]
 Thalidomide T: 229
Tumpline
 Indian, American (Transportation) I: 142
Tumuc-Humac Mountains
 French Guiana (The land and climate) F: 515
Tumultuous petitioning [English history]
 Freedom of assembly (History) F: 504
Tuna [fish] T: 485 with pictures
 Dolphin (Dolphins and people) D: 299
Tuna [fruit]
 Prickly pear P: 776
Tunable laser
 Lasers (Dye lasers) L: 85
Tundra [geography] T: 485 with picture
 Alaska (The Arctic Coastal Plain) A: 294
 Animal (Animals of the polar regions) A: 484 with picture
 Arctic (Plant life) A: 637 with picture
 Asia (Deserts and plains) A: 793-794
 Biome (table) B: 323 with map
 Bird (Birds of the Arctic) B: 343
 Climate (Tundra climates) C: 676d
 Flower (Flowers of the Arctic tundra) F: 283; (Flowers of alpine tundras) F: 289 with pictures
 Inuit (Plants and animals) I: 354a
 Plant (The tundra) P: 522 with picture; (Water storage) P: 541; picture on P: 524
 Russia (Land regions) R: 539
Tundra pond
 Pond (Kinds of ponds) P: 656-657
Tundra swan
 Swan (Kinds) So: 1015; picture on So: 1016
Tundra vole [animal]
 Vole V: 444
Tundra wolf
 Wolf W: 375
Tuner [electronics]
 Radio (The tuner) R: 88 with picture
 Stereophonic sound system (Parts of a stereo system) So: 892
 Television (Tuner) T: 123, diagram on T: 125
Tung Chung
 Hong Kong (Urban life) H: 317; (The land) H: 318
Tung oil [tree product] T: 486 with pictures
 Vegetable oil (Uses) V: 294
Tung tree
 Tung oil T: 486 with pictures
Tungsten [element] T: 486
 Hydrogen (Uses) H: 469
 Ion microscope picture on I: 372
 Welding (Arc welding) W: 189
 Wolframite W: 378
Tungsten carbide [alloy]
 Tungsten T: 486
Tungsten-halogen lamp
 Electric light (The bulb) E: 174
Tungsten steel [metal]
 Tungsten T: 486
Tungurahua [volcano, Ecuador]
 Andes Mountains (Volcanoes and earthquakes) A: 453
Tungus [people]
 Arctic (In the Siberian arctic) A: 639
Tunguska meteorite
 Asteroid (Asteroid collisions) A: 824
 Meteor (Meteorites) M: 431-432
Tunic [clothing] T: 487
 Clothing (Ancient times) Ci: 696-698; (The Middle Ages) Ci: 698-699 with pictures
 Knights and knighthood (Clothing) K: 350
 Rome, Ancient (Food, clothing, and shelter) R: 438-439
Tunica
 Clothing (Ancient times) Ci: 696-698
Tunica talaris
 Clothing (Ancient times) Ci: 696-698
Tunicle [clothing]
 Tunic T: 487
Tuning capacitor [electronics]
 Capacitor picture on C: 186
Tuning fork [music] T: 487
 Sound picture on So: 598
 Watch (History) W: 115
Tunis [city, Tunisia] T: 487
 Tunisia T: 487 with picture
Tunis, University of
 Tunisia (People) T: 488
Tunisia T: 487 with pictures and map
 Barbary States B: 105 with map
 Flag picture on F: 200
Tunkhannock Viaduct [Pennsylvania]
 Viaduct V: 347
Tunnel T: 490 with pictures
 Channel Tunnel C: 375
 Coal (The room-and-pillar system) Ci: 723 with picture
 Dam (Construction) D: 19
 Subway So: 949 with picture
 United Kingdom picture on U: 73
Tunnel-boring machine
 Tunnel (How tunnels are built) T: 490 with diagram
Tunnel drying
 Food preservation (Drying) F: 342-343
Tunnel hull
 Motorboat racing (Hull designs) M: 876 with picture
Tunnel kiln [industry]
 Brick (Firing bricks) B: 598
Tunnel vision [disorder]
 Eye (Diseases of the retina) E: 467-468
Tunneling current [electric current]
 Scanning probe microscope S: 172
Tunnell, Ebe W. [American political leader]
 Delaware (table) D: 109
Tunney, Gene [American boxer] T: 492
 Boxing (The golden age of U.S. boxing) B: 533
 Dempsey, Jack D: 129 with picture
Tunney, James Joseph See Tunney, Gene in this index
Tunstall, John G. [American settler]
 New Mexico (Territorial days) N: 275
Tuolumne Meadows [region, California]
 Yosemite National Park (Hetch Hetchy Valley) Y: 570
Tuolumne River [California]
 Yosemite National Park (Hetch Hetchy Valley) Y: 570
Tupac Amaru [Inca leader]
 Indian, American (After European contact) I: 175
 Peru (Spanish conquest and rule) P: 314
Tupac Amaru Revolutionary Movement
 [Peruvian political group]
 Peru (Return to civilian government) P: 316; (Recent developments) P: 316
Tupamaros [terrorist group]
 Uruguay (Military government) U: 228
Tupelo [tree] T: 492 with picture
 Tree pictures on T: 424
Tupelo National Battlefield [Mississippi]
 National Park System (table: National battlefields) N: 65
Tupelogum [tree]
 Tupelo T: 492
Tupi-Guarani Indians [American Indians] T: 492
 Brazil (Ancestry) B: 572
Tupinamba Indians
 Brazil (History) B: 583
 Indian, American (Why the Indians fought) I: 144-145; (Before European contact) I: 175-176
Tupolev Tu-144 [airplane]
 Airplane (Supersonic airplanes) A: 238
Tupou [kings of Tonga]
 Tonga (History) T: 329
Tupper, Sir Charles [Canadian patriot] T: 493 with pictures
 Bowell, Sir Mackenzie (Cabinet crisis and resignation) B: 519
 Confederation of Canada (Fathers of Confederation) Ci: 935 with picture
Tupper, Sir Charles Hibbert [Canadian political leader]
 Tupper, Sir Charles (Tupper's family) T: 493
Tupper, Frances Amelia Morse [wife of]
 Tupper, Sir Charles (Tupper's family) T: 493
Tupper, William J. [Canadian government official]
 Tupper, Sir Charles (Tupper's family) T: 493
Turandot [opera by Puccini]
 Puccini, Giacomo P: 869
Turangalila [music by Messiaen]
 Messiaen, Olivier M: 423
Turban [clothing] T: 495 with pictures
 Afghanistan (Way of life) A: 92-93
 Hat picture on H: 84
Turban snail
 Snail (Useful and harmful snails) S: 523
Turbellarian [flatworm]
 Flatworm F: 229 with pictures
Turbinate bone [anatomy]
 Nose N: 548 with diagram
 Smell S: 514
Turbine [machine] T: 495 with pictures
 Electric power (Sources of electric power) E: 182-184 with diagrams
 Hydraulic engine H: 462
 Hydraulics H: 463; (Use of hydrodynamic principles) H: 464
 Jet propulsion (Turbojet) J: 111-114
 Locomotive (Kinds of locomotives) L: 414
 Ship (The chief parts of a ship) S: 424
 Starter (Airplane starters) So: 858
 Steam engine (Steam turbines) So: 880
 Wind power (Devices that use wind power) W: 331-332
 Windmill W: 333
Turbinia [ship]
 Ship (Increasing power and speed) S: 413
 Turbine (History) T: 498-499
Turbocharger
 Automobile racing (Sports car racing) A: 977
Turbofan [engine]
 Airplane (Jet engines) A: 220
 Jet propulsion J: 112 with diagram; (Turbofan) J: 114
Turbogenerator
 Nuclear energy (Steam production) N: 587

- Turbojet** [engine]
Airplane (Jet engines) **A**: 220
Jet propulsion (Turbojet) **J**: 111; **J**: 112 *with diagram*
- Turboprop** [engine]
Airplane (Jet engines) **A**: 220
Jet propulsion **J**: 112 *with diagram*;
(Turboprop) **J**: 114
- Turbot** [fish] **T**: 500 *with picture*
- Turbulence** [atmosphere]
Aerodynamics (Friction drag) **A**: 87
Air turbulence **A**: 200
- Turbulent flow** [atmosphere]
Aerodynamics (Friction drag) **A**: 87
- Turcaret** [play by Lesage]
Lesage, Alain René **L**: 205
- Turcos** [soldiers]
Zouaves **Z**: 612
- Turcotte, Jean-Claude Cardinal** [Canadian religious leader]
Cardinal (table: Canadian cardinals) **C**: 211
- Ture, Kwame** [American social reformer]
Carmichael, Stokely **C**: 241
- Turf** [grass]
Horse racing (At the races) **H**: 365
- Turf, Artificial**
Artificial turf **A**: 761
- Turfgrass**
Grass (Turfgrasses) **G**: 324
- Turgeis** [Norwegian pirate]
Vikings (The Norwegian Vikings) **V**: 382
- Turgenev, Ivan** [Russian author] **T**: 500
Drama (Russian drama and Chekhov) **D**: 338
Nihilism **N**: 422
Russian literature (Early realism) **R**: 562
- Turgot, Robert** [French government official]
Louis XVI **L**: 476
- Turiddu** [opera character]
Opera (*Cavalleria Rusticana*) **O**: 803
- Turin** [Italy] **T**: 500
- Turin, Shroud of** *See* Shroud of Turin *in this index*
- Turing, Alan Mathison** [British mathematician]
T: 501
- Turing machine**
Turing, Alan Mathison **T**: 501
- Turk** *See* Turks *in this index*
- Turkana, Lake** *See* Lake Turkana *in this index*
- Turkestan** [region, Asia] **T**: 501
- Turkey** [country] **T**: 502 *with pictures and maps*
Atatürk, Kemal **A**: 852
Balkans (The First Balkan War) **B**: 42
Cuban missile crisis **Ci**: 1180
Cyprus **Ci**: 1205
Dardanelles **D**: 36
Kurds **K**: 392
Ottoman Empire **O**: 877
World War I (Political consequences) **W**: 464-465
World War II (table: The Allies) **W**: 471
- Turkey** [bird] **T**: 513 *with picture*
Farm and farming *picture on* **F**: 32
Meat *pictures on* **M**: 348
Poultry **P**: 720
- Turkey** [sports]
Bowling (table) **B**: 521
- Turkey farm**
Farm and farming *picture on* **F**: 32
- Turkey oak** [tree]
Oak (Red oaks) **O**: 635-636
- Turkey Red** [plant]
Kansas (The nation's breadbasket) **K**: 237
Wheat (The spread of wheat farming) **W**: 275-276
- Turkey-red dye**
Madder **M**: 29
Mordant **M**: 801
- Turkey vulture** [bird]
Buzzard **B**: 746
Vulture (New World vultures) **V**: 453 *with picture*
- Turkic peoples** *See* Turks *in this index*
- Turkish Angora cat**
Cat (Long-haired breeds) **C**: 292; *picture on* **C**: 289
- Turkish bath** **T**: 514
Bath (Bathing for cleanliness) **B**: 163
- Turkish Federated State of Cyprus**
Cyprus (History) **Ci**: 1207
- Turkish knot**
Rugs and carpets (Oriental rugs) **R**: 516 *with diagram*
- Turkish Republic of Northern Cyprus**
Cyprus **Ci**: 1205; (History) **Ci**: 1207
- Turkish rug**
Islamic art (Rugs) **I**: 469
Rugs and carpets (Oriental rugs) **R**: 516-517
- "Turkish Tales"** (book by Byron)
- Byron, Lord (Byron's poetry) **B**: 748
- Turkish van cat**
Cat (Long-haired breeds) **C**: 292
- Turkistan** *See* Turkestan *in this index*
- Turkmen** [people]
Turkmenistan (People) **T**: 514
Union of Soviet Socialist Republics (People) **U**: 31
- Turkmen Soviet Socialist Republic** [former name]
Turkmenistan **T**: 514
- Turkmenia** [former name]
Turkmenistan **T**: 514
- Turkmenistan** [country, Asia] **T**: 514 *with picture and map*
Flag *picture on* **F**: 205
- Turko-Italian War** [1911-1912]
Rhodes **R**: 317
- Turkoman horse** [animal]
Turkmenistan (Economy) **T**: 514a *with picture*
- Turkoman rug**
Rugs and carpets (Oriental rugs) **R**: 516-517
- Turkomanchai, Treaty of** [1828]
Iran (The Qajar dynasty) **I**: 406
- Turks** [people] **T**: 514b
Armenia (History) **A**: 718b
Azerbaijan (History) **A**: 997
Bulgaria (People) **B**: 689
Crusades (How the Crusades began) **Ci**: 1159-1160
Seljuks **S**: 289
Tajikistan (History) **T**: 18b
Tatars **T**: 51
Turkey (People) **T**: 505
Turkmenistan (History) **T**: 514b
Union of Soviet Socialist Republics (People) **U**: 31
- Turks and Caicos Islands** [West Indies]
T: 514b
- Turku** [Finland]
Finland *picture on* **F**: 111
- Turmeric** [plant] **T**: 514b *with picture*
- Turn** [sports]
Skiing *diagrams on* **S**: 484
- Turn of the Screw, The** [story by James]
James, Henry (His works) **J**: 26
- Turn of the Year, The** [book by Grove]
Grove, Frederick Philip **G**: 404
- Turnbull, William** [Scottish educator]
Glasgow, University of **G**: 210
- Turner, Claramae** [American singer]
Opera *picture on* **O**: 800
- Turner, Daniel W.** [American political leader]
Iowa (table) **I**: 391
- Turner, Frederick Jackson** [American historian]
T: 515
- Turner, Ike** [American musician]
Turner, Tina **T**: 518
- Turner, J. M. W.** [British painter] **T**: 515 *with picture*
Painting (Romanticism) **P**: 68 *with picture*
Ruskin, John **R**: 523
- Turner, James** [American political leader]
North Carolina (table) **N**: 490
- Turner, Joe** [American singer]
Jazz (The swing era) **J**: 71
- Turner, John H.** [Canadian political leader]
British Columbia (table) **B**: 627
- Turner, John Napier** [Canadian political leader]
T: 516 *with picture*
Canada, History of (Constitutional changes) **C**: 153
Chrétien, Jean (Political career) **C**: 522b
Mulroney, Brian (The 1984 election) **M**: 917
- Turner, Nat** [American public figure] **T**: 517
African Americans (The growth of slavery) **A**: 136e
Virginia (*The Mother of Presidents*) **V**: 421
- Turner, Roy J.** [American political leader]
Oklahoma (table) **O**: 730
- Turner, Ted** [American businessman] **T**: 518
- Turner, Thomas G.** [American political leader]
Rhode Island (table) **R**: 311
- Turner, Tina** [American musician] **T**: 518 *with portrait*
Rock music (New directions and old) **R**: 380
- Turner Broadcasting System** [network]
Turner, Ted **T**: 518
- Turner Falls** [Oklahoma]
Oklahoma *picture on* **O**: 726
- Turner Field** [Atlanta]
United States *picture on* **U**: 115
- Turner Valley oil fields**
Alberta *picture on* **A**: 330
Calgary (Economy) **C**: 34; (History) **C**: 34
- Turner's syndrome** [disorder]
Dwarf (Chromosome-related dwarfism) **D**: 395
- Turney, Peter** [American political leader]
Tennessee (table) **T**: 152
- Turning** [industrial process]
Machine tool (Metal removal) **M**: 17
- Turning** [sports]
Skiing (Alpine skiing) **S**: 482
- Turnip** [plant] **T**: 518 *with picture*
Townshend, Viscount **T**: 351
- Turnip, Russian** [plant]
Rutabaga **R**: 568
- Turnip, Swedish** [plant]
Rutabaga **R**: 568
- Turnout**
Ballet **B**: 44
- Turnover**
Basketball (Basketball terms) **B**: 145
- Turnpike** [road] **T**: 518
Pennsylvania Turnpike **P**: 271
Road (How roads and highways are paid for) **R**: 360
- Turnsole** [plant]
Heliotrope **H**: 175 *with picture*
- Turnstone** [bird] **T**: 519 *with picture*
- Turntable**
Phonograph (Parts of a phonograph) **P**: 400 *with diagram*
Stereophonic sound system (Parts of a stereo system) **So**: 892
- Turnus** [Greek mythology]
Aeneid **A**: 84
- Turpan Depression**
China (The Xinjiang-Mongolian Uplands) **C**: 491
- Turpentine** [tree product] **T**: 519
Lacquer **L**: 22
- Turpin, Dick** [English outlaw] **T**: 519
- Turquino, Pico** [mountain]
Cuba (The land) **Ci**: 1172 *with map*
- Turquoise** [gem] **T**: 519
Gem *picture on* **G**: 78
- Turret** [tower]
Architecture (Carolingian architecture) **A**: 618
Tank **T**: 27
- Turret lathe** [machine]
Machine tool (Metal removal) **M**: 17
- Turtle** [animal] **T**: 520 *with pictures*
Animal (Animal migration) **A**: 502-503; *pictures on* **A**: 479, **A**: 507
Ocean *picture on* **O**: 656
Reptile (Turtles) **R**: 251
Shell *picture on* **S**: 384
Terrapin **T**: 175 *with picture*
Tortoise **T**: 342 *with picture*
- Turtle** [submarine]
Submarine (Early submarines) **So**: 942 *with diagram*
- Turtle dove** [bird] **T**: 524 *with picture*
- Turtle Island** [book by Snyder]
American literature (Poetry) **A**: 423
- Turtle Mountains**
North Dakota (Land regions) **N**: 506
- Turton clam** [sea animal]
Shell (Bivalves) **S**: 388
- Tuscaloosa** [American Indian chief]
Alabama (Exploration and settlement) **A**: 275
De Soto, Hernando (Journey to the Mississippi) **D**: 160-161
- Tuscaloosa Trend** [region]
Louisiana (Natural resources) **L**: 493
- Tuscan column** [architecture]
Architecture (table) **A**: 608-609 *with picture*
Column (The Roman orders) **Ci**: 866 *with picture*
- Tuscan dialect**
Italian language (Development) **I**: 493
- Tuscan Sea** *See* Tyrrhenian Sea *in this index*
- Tuscany** [state, Italy] **T**: 524
Italy *picture on* **I**: 512
- Tuscarora Indians** [American Indians]
Iroquois Indians **I**: 455
North Carolina (Colonial days) **N**: 492
- Tuscarora War** [1711-1713]
North Carolina (Colonial days) **N**: 492
- Tusche** [drawing material]
Lithography (How lithography works) **L**: 387
Screen printing *picture on* **S**: 225
- Tusculan Disputations** (book by Cicero)
Cicero, Marcus Tullius (His works) **Ci**: 552
- Tush** [zoology]
Elephant (Kinds of elephants) **E**: 227-228
- Tusitala** [title]
Stevenson, Robert Louis **So**: 897
- Tusk** [zoology]
Elephant (Tusks and teeth) **E**: 228 *with pictures*
Hog (Teeth) **H**: 286
Narwhal **N**: 21
Walrus **W**: 20 *with picture*
- Tusk shell** *See* Tooth shell *in this index*

Tuskegee Airmen [American aviators] T: 524

Tuskegee Airmen National Historic Site

[Alabama]

National Park System (table: National historic sites) N: 52-54

Tuskegee Institute [former school] See

Tuskegee Institute in this index

Tuskegee Institute National Historic Site

[Alabama]

National Park System (table: National historic sites) N: 52-54

Tuskegee University T: 525

Carver, George Washington (Tuskegee instructor and researcher) C: 269

Washington, Booker T. W: 88

Tuskegee University National Historic Site

[Alabama]

Alabama (Museums) A: 261 with picture

Tuskfish [fish]

Fish picture on F: 155

Tussah silk [fiber]

Moth (Giant silkworm moths and royal moths) M: 841-842

Silk (Wild silk) S: 459

Tusseud, Marie Gresholtz [Swiss sculptor]

T: 525

Tusser, Thomas [English author]

August (Quotations) A: 887

Tussock moth [insect] T: 525

Insect pictures on I: 282

Moth (Tussock moths) M: 841 with pictures

Rain forest picture on R: 126c

Tutankhamen [king of ancient Egypt] T: 525

with pictures

Alabaster picture on A: 280

Archaeology picture on A: 599

Carter, Howard C: 251

Egypt, Ancient (The New Kingdom) E: 143; pictures on E: 141

Furniture picture on F: 570

Tutankhaton See Tutankhamen in this index

Tutor [education]

Harvard University (Educational program) H: 80

Oxford University (Educational program)

O: 888

Tutorial, Computer-assisted [learning program]

Computerized instruction (Types of programs) Ci: 924h

Tutsi [people] T: 526

Burundi B: 712; (People) B: 713; (History)

B: 713

Congo (Kinshasa) (The fall of Mobutu) Ci: 940e

Hutu H: 459

Ruanda-Urundi R: 499

Rwanda R: 571

Tuttle, Hiram A. [American political leader]

New Hampshire (table) N: 223

Tuttle, Julia [American public figure]

Miami (History) M: 480

Tutu

Ballet (Sets and costumes) B: 49-50

Tutu, Desmond [South African social reformer]

T: 526 with portrait

South Africa (Recent developments) So: 621

Tutu, Osei [Ashanti leader]

Ashanti A: 767

Tutuila [island, Pacific]

American Samoa A: 429 with map

Samoa Islands S: 80b

Tuva [region, Russia] T: 526

Tuvalu [country, Pacific] T: 527 with map

Flag picture on F: 205

Tuve, Merle A. [American physicist]

Radar (The first uses of radar) R: 71

Tuvinians [people]

Tuva T: 527

Tuxedo

Clothing (The 1800's) Ci: 702

Tuyère [furnace]

Iron and steel (The basic oxygen process [BOP]) I: 443 with diagram

Tuzigoot National Monument [Arizona]

National Park System (table: National monuments) N: 50-52

TV See Television in this index

TV Guide

Magazine (table) M: 45

TVA See Tennessee Valley Authority in this index

TVP [food]

Soybean (Soy meal) So: 690

TW Services, Inc.

Yellowstone National Park (Recreational activities) Y: 559

Twa [people]

Burundi (People) B: 713

Twain, Mark [American author] T: 528 with pictures

American literature (Mark Twain and Henry

James) A: 420; pictures on A: 416, A: 419

Autograph picture on A: 943

Connecticut (Places to visit) Ci: 960

Hannibal H: 52

Howells, William Dean H: 402

Missouri picture on M: 670

Novel (The United States) N: 573

United States, History of the (The Gilded Age) U: 180

"'Twas the Night Before Christmas" [poem by Moore]

Christmas (Other customs) C: 536

Moore, Clement Clarke M: 796

Santa Claus (Santa's appearance) S: 114

Tweed [fabric] T: 530

Ireland picture on I: 425

Tweed, River [Scotland] T: 530

Tweed, William Mercy [American public figure] T: 530

Tweed Ring [U.S. history]

Tweed, William Marcy T: 530

Tweedie, Lemuel J. [Canadian political leader]

New Brunswick (table) N: 196

Tweedsmuir, Baron [British statesman]

Buchan, John B: 657

Tweedsmuir Park

British Columbia (Places to visit) B: 620

Twelve decks

Ship (Nautical terms) S: 416 with diagram

Tweeter [electronics]

Speaker So: 768

Twelfth Amendment

Constitution of the United States Ci: 1013

Electoral College (History) E: 164

Jefferson, Thomas (Election of 1800) J: 82

Twelfth Army Group [World War II]

Bradley, Omar Nelson B: 546

Twelfth Night [holiday] T: 531

Twelfth Night [play by Shakespeare]

Shakespeare, William (Twelfth Night) S: 360

Twelve, The [poem by Blok]

Russian literature (Symbolism) R: 563

Twelve Apostles, The [rocks, Australia]

Victoria picture on V: 357

Twelve Apostles, Council of the

Mormons (Church organization) M: 807

"Twelve Days of Christmas, The" [song]

Folklore (Folk songs) F: 325

Twelve labors of Hercules [Greek mythology]

Hercules (The twelve labors) H: 198

Twelve Letters to a Small Town [book by Reaney]

Reaney, James R: 173

Twelve Tables, Laws of the [ancient Rome]

T: 531

Law (Ancient Roman law) L: 133

Twelve-tone music

Classical music (Atonal music) Ci: 649-650

Berg, Alban B: 257

Music (Tone) M: 950-951

Schoenberg, Arnold S: 178

Stravinsky, Igor (The 12-tone works) So: 923

Webern, Anton W: 176

Twelve Tribes of Israel

Jacob J: 19

Jews (Beginnings) J: 120-121

Joseph (Settling his family in Egypt) J: 168

Palestine (Early history and settlement) P: 104 with map

Religion (Judaism) R: 219

Twelvevrs [sect] See Imami Shiah in this index

Twentieth Amendment

Constitution of the United States Ci: 1015

Presidential succession P: 771

Twenty-Fifth Amendment

Constitution of the United States Ci: 1016

Presidential succession P: 771

Vice President of the United States (The 25th Amendment) V: 350

Twenty-Fifth of April Bridge

Lisbon (The city) L: 348

Twenty-First Amendment

Constitution of the United States Ci: 1015

Prohibition (The decline of the prohibition movement) P: 816

Twenty-Four Proprietors [U.S. history]

New Jersey (English control) N: 250

Twenty-Fourth Amendment

Constitution of the United States Ci: 1016

Poll tax P: 644

Voting (Restrictions on voting) V: 450

20-point-must system

Boxing (Scoring a fight) B: 528-529

Twenty-Second Amendment

Constitution of the United States Ci: 1015

Twenty-Seventh Amendment

Constitution of the United States Ci: 1016

Twenty-Sixth Amendment

Constitution of the United States Ci: 1016

Voting (Who may vote) V: 449

Twenty-sixth of July Movement [Cuban history]

Castro, Fidel C: 283

Cuba (The Castro revolution) Ci: 1178

Twenty-Third Amendment

Constitution of the United States Ci: 1015

Electoral College E: 163

Twenty-Third Psalm [Old Testament]

Metaphor M: 429

Psalms, Book of P: 844

Twenty Thousand Leagues Under the Sea

[book by Verne]

Science fiction (The first science fiction)

S: 205

Verne, Jules V: 338

Twenty Years at Hull House [book by Addams]

American literature (Nonfiction writers) A: 420

Twice-Told Tales [book by Hawthorne]

Hawthorne, Nathaniel (His stories and sketches) H: 114

Poe, Edgar Allan (Fiction and theory of fiction)

P: 590

Twickenham Rugby Ground [stadium]

London (Recreation) L: 434

Twig

Tree (How trees grow taller) T: 418

Twilight T: 531

Twilight of the Gods See Götterdämmerung, Die in this index

Twilight Zone, The [television series]

Serling, Rod S: 318

Twill [weaving] T: 531

Basket making (Methods) B: 141

Cashmere C: 274

Gabardine G: 2

Textile (Woven fabrics) T: 214

Tweed T: 530

Weaving (The twill weave) W: 173 with picture

Twin Cities [Minnesota]

Minneapolis M: 580

Minnesota (Population) M: 588

Saint Paul S: 52

Twin Falls [falls, Idaho]

Idaho (Rivers, waterfalls, springs, and lakes) I: 38

Twin-lens reflex camera

Photography (Twin-lens reflex cameras) P: 417

Twin-rotor helicopter

Helicopter (Types of helicopters) H: 170-171 with diagrams

Twin-screw ship

Propeller (Marine propellers) P: 826

Twin Territories [U.S. history]

Oklahoma (Progress toward statehood) O: 732

Twin trailer [truck] See Double trailer in this index

Twine [cord] T: 531

Twinflower [plant] T: 531

Twining [weaving]

Basket making (Methods) B: 141 with pictures

Twining, Nathan Farragut [American military leader]

Joint Chiefs of Staff (table) J: 156

Twins [family]

Conjoined twins Ci: 950 with picture

Heredity (Heredity and environment) H: 205

Intelligence (The roles of heredity and environment) I: 318

Multiple birth M: 919 with picture

Reproduction, Human (Multiple birth) R: 246

Twins, Minnesota See Minnesota Twins in this index

Twins, The [constellation]

Castor and Pollux C: 282

Twins, The [mountains, Alberta]

Alberta (Land regions) A: 322 with map

Twirling, Baton See Baton twirling in this index

Twiss, L. P. [British aviator]

Airplane (table) A: 232

Twister See Tornado in this index

Twitch [disorder]

Convulsions Ci: 1025

Two-cycle engine See Two-stroke cycle engine *in this index*

Two Deaths of Quincas Wateryell, The [book by Amado]
Amado, Jorge A: 399

Two-degree-of-freedom gyroscope
Gyroscope (Mechanical gyroscopes) G: 454

2, 4-D [herbicide]

Agent Orange A: 140

Herbicide H: 198

2,4,5-T [herbicide]

Agent Orange A: 140

Herbicide (Hazards of herbicides) H: 198

Two Gentlemen of Verona [play by

Shakespeare]

Shakespeare, William (*The Two Gentlemen of Verona*) S: 357

Two half hitches

Knots, hitches, and splices (Two half hitches) K: 357 *with diagram*

291 [art gallery]

Painting (Steiglitz and "291") P: 82

Two Noble Kinsmen, The [play]

Fletcher, John F: 234

Shakespeare, William (Shakespeare's plays) S: 355

Two-party system

Democracy (Political parties) D: 121

Political party (Two-party systems) P: 634

United States, Government of the (Representative democracy) U: 137-138

Two-second rule [driving]

Automobile (Safe following distances) A: 961 *with diagram*

Two Sicilies, Kingdom of the See Sicilies, Kingdom of the Two *in this index*

Two Sisters [painting by Renoir]

Impressionism *picture on* I: 94

Painting (Edouard Manet and the impressionists) P: 71-72

Two Sisters, The [engraving by Cournauld]

Engraving *picture on* E: 326

Two Solitudes [book by MacLennan]

Canadian literature (Modern English-Canadian fiction) C: 160

MacLennan, Hugh M: 25

Two-stroke cycle engine

Diesel engine (Kinds of diesel engines) D: 200

Gasoline engine (Cycle) G: 63 *with pictures; diagrams on* G: 65

Two Thousand Guineas [race]

Horse racing (Types of horse races) H: 364

2001: A Space Odyssey [film]

Clarke, Arthur C. Ci: 642

Motion picture (Movies in the 1960's) M: 871

Kubrick, Stanley K: 391

Two-toed sloth

Animal *picture on* A: 480

Sloth S: 508a

Two Trains Running [play by Wilson]

Wilson, August W: 316

Two Treatises of Government [book by Locke]

Freedom (During the Age of Reason) F: 503

Locke, John L: 413

Two-way bilingual education

Hispanic Americans (Hispanic Americans in the late 1900's) H: 255-257

Two-way communication

Radio (Two-way communication) R: 84

Two Years Before the Mast [book by Dana]

Dana, Richard Henry, Jr. D: 24

Twospotted lady beetle

Insect *picture on* I: 283

Twostriped grasshopper [insect]

Insect *picture on* I: 280

TWX [communications]

Telegraph (Decline) T: 92

Tybalt [literary figure]

Shakespeare, William (*Romeo and Juliet*) S: 358

Tyche [Greek mythology]

Fortuna F: 419

Tycho Brahe's Comet [astronomy]

Comet (table) Ci: 868

Tydings-McDuffie Act [1934]

Asian Americans (Asian immigration halted) A: 812e

Tyee See Chinook salmon *in this index*

"Tyger, The" [poem by Blake]

Blake, William B: 397

Tylenol [medication]

Acetaminophen A: 24

Analgesic A: 448

Tyler, Anne [American author] T: 531

Tyler, James Hoge [American political leader]

Virginia (table) V: 417

Tyler, John [1747-1813, American political

leader]

Tyler, John (Early life) T: 532

Virginia (table) V: 417

Tyler, John [1790-1862, U.S. President] T: 532 *with pictures*

Harrison, William Henry H: 74

Vice President of the United States (Tyler takes over) V: 353

Virginia (table) V: 417

Whig Party (In the 1840's) W: 280

Tyler, Julia Gardiner [wife of John Tyler]

First ladies (table) F: 142

Tyler, John (Life in the White House) T: 534 *with picture*

Tyler, Letitia Christian [wife of John Tyler]

First ladies (table) F: 142

Tyler, John (Tyler's family) T: 532; (Life in the White House) T: 534 *with picture*

Tyler, Mary Armistead [mother of]

Tyler, John T: 532

Tyler, Moses Coit [American author] T: 535

Tyler, Priscilla Cooper [daughter-in-law of]

Tyler, John (Life in the White House) T: 534

White House hostesses W: 291

Tyler, Royall [American dramatist] T: 535

Tyler, Wat [English rebel]

Wat Tyler's Rebellion W: 113

England (The Hundred Years' War) E: 306

Tylor, Sir Edward Burnett [British anthropologist] T: 535

Animism A: 514b

Mythology (Tyler's theory) M: 986

Religion (The origin of religion) R: 218-219

Tymiński, Stanisław [Polish political leader]

Poland (Free elections) P: 614-615

Tympani [musical instrument] See Timpani; Timpani *in this index*

Tympanic membrane See Eardrum *in this index*

Tympanum [zoology]

Moth (Kinds of moths) M: 840

Tympanum of the central portal of Vézelay Abbey [France]

Sculpture (The importance of sculpture) S: 228 *with picture*

Týn Church

Prague (The city) P: 730 *with picture*

Tyndale, William [English religious leader]

T: 535

Bible (Early English translations) B: 286

Puritans (History) P: 910

Tyndall, John [British physicist] T: 536

Tyndall effect [physics]

Suspension So: 1012

Tyndall, John T: 536

Ultramicroscope U: 16

Tynwald Court [government]

Man, Isle of M: 131

Type [printing] T: 536 *with pictures*

Linotype L: 338 *with picture*

Photocomposition P: 405 *with picture*

See also the *list of Related Articles in the Type article*

Type 1 diabetes [disorder]

Diabetes (Causes) D: 179; (Treatment) D: 179

Insulin (Diabetes) I: 308

Type I supernova

Star (Binary stars) So: 852

Type 2 diabetes [disorder]

Diabetes (Causes) D: 179; (Research) D: 179-180

Insulin (Diabetes) I: 308

Type II supernova

Star (Supernovae) So: 850

Type A blood

Blood (The ABO blood groups) B: 412

Races, Human (The clinal approach) R: 55-56

Type AB blood

Blood (The ABO blood groups) B: 412

Type B blood

Blood (The ABO blood groups) B: 412

Races, Human (The clinal approach) R: 55-56

Type face [printing]

Type T: 537 *with pictures*

Type form [printing]

Printing (Letterpress printing) P: 799

Type O blood

Blood (The ABO blood groups) B: 412

Races, Human (The clinal approach) R: 55-56

Typee [book by Melville]

Melville, Herman (His early life) M: 390

Marquesas Islands M: 217

Typesetting [printing]

Electronic publishing E: 205

Gutenberg, Johannes G: 444

Linotype L: 338

Newspaper (Making up the pages) N: 383

Photocomposition P: 405 *with pictures*

Printing (Typesetting) P: 797

Type T: 536

Typesetting machine See Linotype; Monotype; T: 536

Typewriter T: 538 *with pictures*

Communication *picture on* Ci: 883

Glidden, Carlos G: 227

Keyboard K: 308

Office work (Recording information) O: 677

Sholes, Christopher Latham S: 433

Word processing W: 403

Typhlopidae [zoology]

Snake (Blind snakes) S: 534

Typhoid fever [disease] T: 539

Jenner, Sir William J: 91

Reed, Walter R: 194

Typhoid Mary T: 539

Typhoid Mary [American domestic] T: 539

Typhoon [book by Conrad]

Conrad, Joseph Ci: 973

Typhoon [weather] T: 540 *with pictures*

Cyclone Ci: 1204

Hurricane H: 452

Japan (Climate) J: 48

Pacific Islands (Climate) P: 8

Pacific Ocean (Tropical cyclones) P: 14

Typhoon class

Submarine (Nuclear submarines) So: 943

Typhus [disease] T: 540

DDT D: 55

Enders, John Franklin E: 272

Jenner, Sir William J: 91

Relapsing fever R: 209

Rickettsia R: 335

Typing

Typewriter T: 538

Typing element

Typewriter (How a typewriter works) T: 538

Typist [occupation]

Office work O: 677

Typo

Proofreading (Proofreaders' marks) P: 822

Typographical error

Proofreading (Proofreaders' marks) P: 822

Typology

Archaeology (Classification) A: 597

Tyr [Norse god]

Tuesday T: 481

Tyrannosaur [dinosaur]

Dinosaur (True dinosaurs) D: 206b-211 *with picture*

Tyrannosaurus [dinosaur] T: 541 *with picture*

Dinosaur D: 206 *with picture*; (True dinosaurs) D: 206b-211 *with picture*; (Changing interpretations of dinosaurs) D: 212 *with pictures; picture on* D: 207

Fossil *picture on* F: 422

Prehistoric animal *picture on* P: 739

Tyranny [ancient Greece]

Tyranny T: 541

Greece, Ancient (New forms of government) G: 372-373

Tyranny [political science] T: 541

Government (Aristotle's categories) G: 285

Tyrant flycatcher [bird]

Flycatcher F: 311

Tyre [ancient city] T: 541

Alexander the Great (Invasion of Asia)

A: 342

Phoenicia (Trade and manufacturing) P: 393;

(Religion) P: 394; (The spread of

Phoenician influence) P: 394-395

Tyre [automobile] See Tire *in this index*

Tyrian purple [dye]

Dye (Natural dyes) D: 396

Tyrol [region, Austria-Italy] T: 542 *with maps*

Innsbruck I: 276

Tyrone, Earl of [Irish nobleman]

Ireland (The conquest of Ireland) I: 426

Tyrone Guthrie Theater See Guthrie Theater *in this index*

Tyrosine [biochemistry]

Dopamine D: 309

Tyrothricin [antibiotic]

U

- U** [letter] **U**: 1 *with pictures*
U [symbol]
 Uranium (Uranium isotopes) **U**: 214
U [title]
 Thant, U T: 231
U-boat
 Submarine (World Wars I and II) **So**: 943 *with picture*
 Warship (Warships in the two world wars) **W**: 41
 World War I (The war at sea) **W**: 460 *with picture*;
 World War II (The United States enters the war) **W**: 462
 World War II (The Battle of the Atlantic) **W**: 477
U quark [physics] See *Up quark in this index*
U Thant See Thant, U *in this index*
U2 [Irish musical group] **U**: 2
 Rock music (Rock and society) **R**: 380 *with picture*
U-2 Incident [U.S. history]
 Cold War (The U-2 incident) **Ci**: 766
 Eisenhower, Dwight David (U-2 incident) **E**: 154
 Union of Soviet Socialist Republics (Relations with the United States) **U**: 39
U-233 [isotope]
 Thorium T: 266
U-234 [isotope]
 Uranium (Uranium isotopes) **U**: 214
U-235 [isotope]
 Dempster, Arthur Jeffrey D: 130
 Nuclear energy (The full development of nuclear energy) **N**: 580; (Isotopes) **N**: 581; (Nuclear fission) **N**: 582; (Fuel preparation) **N**: 586
 Uranium (Uranium isotopes) **U**: 214; (How uranium is mined and processed) **U**: 215
U-238 [isotope]
 Nuclear energy (Isotopes) **N**: 581; (Nuclear fission) **N**: 582-583; (Wastes and waste disposal) **N**: 588
 Nuclear weapon (Thermonuclear weapons) **N**: 597
 Uranium (Uranium isotopes) **U**: 214; (How uranium is mined and processed) **U**: 215
Ua Huka [island, Pacific]
 Marquesas Islands **M**: 217
Ua Pou [island, Pacific]
 Marquesas Islands **M**: 217 *with picture*
Uakari [animal]
 Monkey *picture on M*: 728
U.A.R. See *United Arab Republic in this index*
UAV [aircraft] See *Unmanned aerial vehicle in this index*
UAW See *United Automobile Workers in this index*
Ubangi River [Africa] **U**: 2
 Central African Republic (Land) **C**: 352 *with picture*
 Congo (Brazzaville) (Land) **Ci**: 939
Ubangi-Shari (former region)
 Central African Republic **C**: 352; (History) **C**: 353
Ubar [ancient city]
 Archaeology *picture on A*: 594
Ubehebe Crater [volcano, California]
 Death Valley D: 62
Ubico, Jorge [Guatemalan political leader]
 Guatemala (The mid-1900's) **G**: 417
Ubii [people]
 Bonn (History) **B**: 461
Ucayali River [Peru]
 Amazon River (The course of the Amazon) **A**: 403
Uccello, Paolo [Italian painter] **U**: 2 *with picture*
UCLA See *California, University of in this index*
Udall, Stewart Lee [American political leader]
 Interior, Department of the (table) **I**: 325
 Johnson, Lyndon Baines (table) **J**: 151
 Kennedy, John Fitzgerald (table) **K**: 266
Udder [zoology]
 Cattle (Udder) **C**: 308
UDF [political party] See *Union for French Democracy in this index*
Uelsmann, Jerry [American photographer]
 Photography (Photography today) **P**: 428
Uemura, Naomi [Japanese explorer]
 Arctic (Arctic exploration) **A**: 639-640
 North Pole **N**: 517
Ueno Park
 Tokyo (Parks and gardens) **T**: 316
UFCW See *United Food and Commercial Workers International Union in this index*
UFO See *Unidentified flying object in this index*
UFW See *United Farm Workers of America in this index*
Ugali [food]
 Tanzania (Food and drink) **T**: 32
Uganda U: 3 *with pictures and map*
Uganda Protectorate
 Uganda **U**: 3
Ugarit [ancient city]
 Phoenicia (Way of life) **P**: 393; (Language) **P**: 393
Ugli [fruit]
 Tangelo **T**: 26
Ugolino See *Gregory IX in this index*
Ugyen Wangchuk [king of Bhutan]
 Bhutan (History) **B**: 278
UHF band [communications]
 Communications satellite (How communications satellites work) **Ci**: 888b
UHF wave See *Ultrahigh frequency waves in this index*
UHT method [pasteurization]
 Milk (Pasteurization) **M**: 548
Uhuru Peak
 Kilimanjaro **K**: 315 *with picture*
UIM [organization]
 Motorboat racing **M**: 876
Uinta Range [mountains, Utah]
 Utah (Land regions) **U**: 240 *with picture*
Uintaite [mineral]
 Asphalt (Asphalt production) **A**: 815
Uitlanders [people]
 Boer War **B**: 435
 South Africa (Discovery of diamonds and gold) **So**: 618
Ujamaa village
 Tanzania (The united republic) **T**: 35
UJC [organization] See *United Jewish Communities in this index*
Ujiji [town, Tanzania]
 Stanley and Livingstone **So**: 837 *with map*
Ujung Kulon National Park [Indonesia]
 National park (table) **N**: 42f
U.K. [country] See *United Kingdom in this index*
UKC See *United Kennel Club in this index*
Ukiyo-e [art]
 Japan (Tokugawa period) **J**: 55-56
 Japanese print **J**: 62
 Painting (Japanese painting) **P**: 47-48
 Woodcut **W**: 393
Ukraine [country, Europe] **U**: 5 *with pictures and maps*
 Air force (The Ukrainian Air Force) **A**: 184
 Bessarabia **B**: 273
 Cimmerians **Ci**: 553
 Cossacks **Ci**: 1079
 Dnepr River **D**: 258
 Flag *picture on F*: 207
 Russia (The new nation) **R**: 555
 Strategic Arms Reduction Treaty **So**: 919
 Union of Soviet Socialist Republics (History) **U**: 35
Ukrainian Catholic Church [religious group]
 Eastern Catholic Churches **E**: 45
Ukrainian Festival, National [Manitoba]
 Manitoba *picture on M*: 153
Ukrainian language
 Ukraine (Language) **U**: 6
Ukrainian Orthodox Church [religious group]
 Ukraine (Religion) **U**: 8
Ukrainian People's Republic [former country]
 Ukraine (Soviet rule) **U**: 12
Ukrainian Soviet Socialist Republic [former name]
 Ukraine **U**: 5
Ukrainians [people]
 Ukraine (People) **U**: 6
 Union of Soviet Socialist Republics (People) **U**: 31 *with picture*
Ukulele [musical instrument] **U**: 14 *with picture*
 Hawaii (Dancing and music) **H**: 94
Ulama [religious leaders]
 Saudi Arabia (National government) **S**: 155
"Ulalume" [poem by Poe]
 Poe, Edgar Allan (Poetry and poetic theory) **P**: 589-590
Ulan Bator [Mongolia] **U**: 14
 Mongolia (Government) **M**: 722 *with map*
Ulate, Otilio [Costa Rican political leader]
 Costa Rica (Revolutions and reforms) **Ci**: 1084
Ulbricht, Walter [German political leader]
 Germany (East Germany) **G**: 170
Ulcer [disorder] **U**: 15 *with pictures*
 Antacid **A**: 529
 Bedsore **B**: 199
 Herpes, Genital **H**: 214
 Prostaglandin **P**: 829
 Stomach (Peptic ulcers) **So**: 908
 Typhoid fever (Symptoms) **T**: 539
Ulcerative colitis [disease]
 Colitis **Ci**: 773
 Colostomy **Ci**: 850
 Inflammatory bowel disease **I**: 266
Ulissee [opera by Dallapiccola]
 Dallapiccola, Luigi **D**: 10
Ulloa, Antonio de [Spanish government official]
 New Orleans (French and Spanish rule) **N**: 284
Ulloa Estate, The [book by Bazán]
 Spanish literature (The 1800's) **So**: 761-762
Ullswater, Lake [lake, England]
 National park *picture on N*: 42e
Ulna [anatomy]
 Arm **A**: 717 *with diagram*
 Elbow **E**: 157 *with diagrams*
 Human body *diagram on H*: 422
 Wrist **W**: 510 *with diagram*
Ulnar artery [anatomy]
 Human body *diagram on H*: 422
Ulnar nerve [anatomy]
 Funny bone **F**: 560
 Human body *diagram on H*: 422
Ulpian Library [Rome]
 Library (Ancient libraries of papyrus) **L**: 258-259
Ulster [former region] **U**: 15
 Ireland (The conquest of Ireland) **I**: 426
 Northern Ireland **N**: 521
 Ulster Unionist Party **U**: 15
Ulster, University of
 Northern Ireland (Education) **N**: 522
Ulster cycle [Irish literature]
 Irish literature (Heroic tales, romances, and sagas) **I**: 430-431
 Mythology (The Irish cycles) **M**: 983
Ulster Unionist Party [political party] **U**: 15
 Trimble, David **T**: 445
Ultima Thule [ancient literature] **U**: 16
Ultime lettere di Jacopo Ortis, Le [book by Foscolo]
 Foscolo, Ugo **F**: 421
Ultisol [soil]
 Indiana (Natural resources) **I**: 211
 Soil (How soils are classified) **So**: 575-576
with map
Ultra filter
 Air cleaner (Types of air cleaners) **A**: 175-176
Ultra large crude carrier
 Tanker (Kinds of tankers) **T**: 28
Ultra Secret, The
 World War II (The secret war) **W**: 492
Ultracentrifuge [machine]
 Centrifuge **C**: 358
Ultrafiche [film]
 Office work (Storing information) **O**: 677
Ultrafiltration [industrial process]
 Cheese (History) **C**: 395
Ultrahigh frequency waves [communications]
 Television (Broadcasting) **T**: 122-123
Ultrahigh-temperature method
 Milk (Pasteurization) **M**: 548
Ultralight airplane
 Airplane (General aviation planes) **A**: 211-212
with picture
Ultramarine [book by Lowry]
 Lowry, Malcolm **L**: 511
Ultramarine [pigment] **U**: 16
 Lapis lazuli **L**: 74
Ultramicroscope [instrument] **U**: 16
Ultramicrotome [instrument]
 Microtomy **M**: 520
Ultrapasteurization
 Milk (Pasteurization) **M**: 548
Ultrasonic bonding [industrial process]
 Welding (Solid-state bonding) **W**: 189
Ultrasonic transducer
 Transducer **T**: 371
 Ultrasound (Ultrasound devices) **U**: 16 *with picture*
Ultrasonic wave See *Ultrasound in this index*
Ultrasound [physics] **U**: 16 *with pictures*
 Acoustics (Other areas of acoustics) **A**: 29
 Amniocentesis **A**: 438
 Burglar alarm **B**: 704
 Genetic counseling (Reasons for seeking genetic counseling) **G**: 84
 Infertility (Treatment) **I**: 265
 Physics (Sound) **P**: 437
 Pregnancy (Medical care) **P**: 734-735 *with picture*
 Prostate cancer **P**: 829
 Radiology **R**: 98
 Remote control (The parts of a remote control system) **R**: 230
 Reproduction, Human (Checking the fetus) **R**: 248
 Sonar (Uses of sonar) **So**: 591
 Sound (table) **So**: 599; (Using sound) **So**: 605
Ultraviolet astronomy
 Astronomy (Ultraviolet astronomy) **A**: 844
Ultraviolet filter
 Photography (Filters) **P**: 419
Ultraviolet lamp
 Prospecting **P**: 829

- Ultraviolet rays** [physics] **U**: 17
 Astronomy (The electromagnetic spectrum) **A**: 839; (Ultraviolet astronomy) **A**: 844
 Cancer (Avoiding carcinogens) **C**: 171
 Color *diagram* on **Ci**: 818
 Electromagnetic waves (Uses of electromagnetic waves) **E**: 202 *with diagram*
 Hubble Space Telescope (How the telescope works) **H**: 403
 Light (Electromagnetic waves) **L**: 285
 Ozone **O**: 894
 Radiation (Electromagnetic radiation) **R**: 75-76 *with picture*
 Southern Ocean (Scientific research) **So**: 688b
 Sun (Energy output) **So**: 976
 Sun lamp **So**: 988
 Telescope (What telescopes do) **T**: 102-103; (Other telescopes) **T**: 108
 Weather (Air temperature) **W**: 157
- Ultraviolet telescope**
 Telescope (Ultraviolet telescopes) **T**: 108
- Ulu** [tool]
 Inuit (Food) **I**: 354b
- Ulubamba** [people] *See* Bemba *in this index*
- Ulufa'alu, Bartholomew** [Solomon Islands political leader]
 Solomon Islands (History) **So**: 586
- Uluru** [rock] *See* Ayers Rock *in this index*
- Uluru-Kata Tjuta National Park** [Australia]
 National park (table) **N**: 42f
- Ulyanov, Alexander** [brother of]
 Lenin, V. I. (Education) **L**: 192
- Ulyanov, Ilya Nikolayevich** [father of]
 Lenin, V. I. (Boyhood) **L**: 191
- Ulyanov, Vladimir Ilyich** *See* Lenin, V. I. *in this index*
- Ulysses** [book by Joyce]
 Irish literature (James Joyce) **I**: 432
 Joyce, James J.: 177
 Novel (New directions in the novel) **N**: 573-574
- Ulysses** [insect]
 Butterfly *picture* on **B**: 737
- Ulyssas** [legendary figure] **U**: 18
 Achilles **A**: 26
 Aeolus **A**: 85
 Circe **Ci**: 557
 Cyclops **Ci**: 1204
 Mentor **M**: 411
 Odyssey **O**: 675
 Penelope **P**: 238
 Sirens **S**: 475
 Troy (The legendary Troy) **T**: 454
- "Ulysses"** [poem by Tennyson]
 Tennyson, Lord (His poems) **T**: 169-170
- Ulyssas** [space probe]
 European Space Agency **E**: 418
 Heliosphere (Probing the heliosphere) **H**: 175
 Jupiter (Flights to Jupiter) **J**: 201
 Space exploration (Solar probes) **So**: 710
 Sun (History of modern solar study) **So**: 986
- Ulysses S. Grant Home** [Galena]
 Illinois (Places to visit) **I**: 62
- Ulysses S. Grant National Historic Site**
 [Missouri]
 National Park System (table: National historic sites) **N**: 52-54
- Uma** [Hindu goddess]
 Hinduism (Divinities) **H**: 236
- Umar** [Muslim ruler]
 Muhammad (His religious life) **M**: 910-911
 Muslims (The early caliphs) **M**: 964b
- Umayyad dynasty** [Arab history]
 Arabs (The rise and spread of Islam) **A**: 588
 Damascus (History) **D**: 23
 Muslims (The Muslim Empire) **M**: 964c
 World, History of the (The Islamic world) **W**: 434
- Umbel** [botany]
 Inflorescence **I**: 268b *with picture*
- Umbel** [pigment] **U**: 18
- Umbilical cord** [anatomy] **U**: 18
 Baby (The developing baby) **B**: 4-5 *with diagram*; (Birth) **B**: 6; (Bathing the baby) **B**: 10
 Childbirth (The birth process) **C**: 456
 Placenta **P**: 505
 Reproduction, Human (Nourishing the embryo) **R**: 247
- Umbilicus** [anatomy]
 Umbilical cord **U**: 18
- Umbo** [zoology]
 Shell *diagram* on **S**: 385
- Umbra** [light]
 Penumbra **P**: 276 *with diagram*
 Shadow **S**: 341 *with diagrams*
 Sunspot **So**: 992
- Umbrella** **U**: 18
- Umbrella ant** *See* Parasol ant *in this index*
- Umbrella bird** *See* Umbrellabird *in this index*
- Umbrella mouth gulper eel**
 Fish *picture* on **F**: 156
- Umbrella tent**
 Tent (Kinds of tents) **T**: 171
- Umbrella tree** [tree]
 Magnolia **M**: 63
- Umbrellabird** **U**: 19 *with picture*
- Umeki, Miyoshi** [Japanese actress]
 Motion picture (Best performance by an actress in a supporting role: 1957) **M**: 863
- Umiak** [boat]
 Inuit (Transportation) **I**: 354c *with picture*
- Umm al Qaywayn** [state]
 United Arab Emirates **U**: 43
- Umm Nasan** [island, Bahrain]
 Bahrain (Land and climate) **B**: 30 *with map*
- Umma** [ancient city]
 Sumer (History) **So**: 972
- Umpire** [sports]
 Baseball (Player positions) **B**: 127; (Umpires) **B**: 130
 Basketball (The officials) **B**: 145
 Cricket (Umpires) **Ci**: 1133; *picture* on **Ci**: 1135
 Football (The officials) **F**: 362
 Tennis (Officials) **T**: 165
- Umpqua River** [Oregon]
 Jetty *picture* on **J**: 116
- Umstead, William B.** [American political leader]
 North Carolina (table) **N**: 490
- UMW** *See* United Mine Workers of America *in this index*
- UN** *See* United Nations *in this index*
- "Un bel di"** [aria]
 Opera (*Madama Butterfly*) **O**: 804-805
- UN Monthly Chronicle**
 United Nations (Publications and information services) **U**: 86-87
- Una** [magazine]
 Davis, Paulina Wright **D**: 49
- Una ...**
Titles beginning Una appear under their key words, as in Voce poco fa, Una
- Unabomber** [American terrorist] *See* Kaczynski, Theodore J. *in this index*
- Unalachtigo Indians** [American Indians]
 Delaware Indians **D**: 114
- Unalaska** [island, Alaska]
 Aleutian Islands **A**: 340
- Unam Sanctem** [religious document]
 Church and state (The Middle Ages) **C**: 542
 Pope (The peak of papal power) **P**: 663-664
 Roman Catholic Church (Boniface VIII) **R**: 408
- Un-American Activities Committee** [U.S.] **U**: 19
 Academic freedom (The 1900's) **A**: 20
 Hiss, Alger *picture* on **H**: 259
 Nixon, Richard Milhous (U.S. representative) **N**: 430
- Unami Indians** [American Indians]
 Delaware Indians **D**: 114
- Unamuno, Miguel de** [Spanish author] **U**: 19
 Spanish literature (The Generation of 1898) **So**: 762
- Unangan** *See* Aleuts *in this index*
- Unanimous consent agreement**
 Congress of the United States (Passing a bill) **Ci**: 945
 Senate (Considering legislation) **S**: 295
- Unau** [animal]
 Sloth **S**: 508a
- Unbearable Bassington, The** [book by Munro]
 Munro, Hector Hugh **M**: 928
- Uncas** [American Indian chief] **U**: 19
 Connecticut (Early days) **Ci**: 968
 Mohegan Indians **M**: 688
- Uncas** [literary figure]
 Uncas **U**: 19
- Uncertainty principle** [physics]
 Heisenberg, Werner **H**: 167
 Quantum mechanics (The uncertainty principle) **Q**: 6
- Uncial** [writing]
 Alphabet (Small letters) **A**: 383
 Type (Classes of type) **T**: 537
- Uncirculated coin**
 Coin collecting (Starting a coin collection) **Ci**: 757
- Uncle**
 Family (Family relationships) **F**: 21
- Uncle Dan** [nickname]
 Beard, Daniel Carter **B**: 187
- Uncle Remus** [literary figure]
 Harris, Joel Chandler **H**: 68
- Uncle Sam** **U**: 19 *with picture*
 New York (Interesting facts) **N**: 291 *with picture*
- Uncle Tom's Cabin** [book by Stowe] **U**: 20
 American literature (The sentimental novel) **A**: 415
 Stowe, Harriet Beecher **So**: 916
 United States, History of the (Social disorder) **U**: 174
- Uncle Tom's Children** [book by Wright]
 Wright, Richard W.: 508
- Uncle Vanya** [play by Chekhov]
 Chekhov, Anton C.: 396
- UNCLOS** [treaty]
 Law of the Sea Convention **L**: 141
- Uncommon Women and Others** [play by Wasserstein]
 Wasserstein, Wendy W.: 112
- Unconditional Surrender** [book by Waugh]
 Waugh, Evelyn W.: 149
- Unconditional Surrender** [U.S. history]
 Grant, Ulysses S. ("Unconditional Surrender" Grant) **G**: 314
- Unconditioned reflex** *See* Reflex action *in this index*
- Unconscious** [psychology] **U**: 20
 Jung, Carl Gustav (His theories) **J**: 195
 Mental illness (table) **M**: 405
 Mythology (Mythology and the individual) **M**: 988-989
 Psychoanalysis (Psychoanalytic theory) **P**: 846
 Psychology (Psychoanalysis) **P**: 850
- Unconsciousness** [disorder]
 Fainting **F**: 6 *with picture*
- Unconstitutionality** [law]
 Government (The U.S. Constitution) **G**: 286
 Law (Public law) **L**: 130-131
 Supreme Court of the United States (Authority of the Supreme Court) **So**: 998
- Uncontested divorce**
 Divorce (Fault divorce) **D**: 253
- UNCTAD** *See* United Nations Conference on Trade and Development *in this index*
- Unction** *See* Anointing of the sick *in this index*
- Under Milk Wood** [play by Thomas]
 Thomas, Dylan T.: 261
- Under Our Skin: Kids Talk About Race** [book by Birdseye]
 Literature for children (Information books) **L**: 359-360
- Under Pressure** [book by Herbert]
 Herbert, Frank H.: 197
- Under the Net** [book by Murdoch]
 Murdoch, Iris M.: 930
- Under the Volcano** [book by Lowry]
 Lowry, Malcolm L.: 511
- Undercarriage** *See* Landing gear *in this index*
- Undercoater** [paint]
 Paint (Household paints) **P**: 23-24
- Undercover agent**
 Police (Criminal intelligence) **P**: 621
- Undercut** [logging]
 Lumber (Cutting down trees) **L**: 518
- Underdeveloped country** [economics] *See* Developing country *in this index*
- Underdogs, The** [book by Azuela]
 Latin-American literature (The early 1900's) **L**: 113
- Underfur** [zoology]
 Fur **F**: 561 *with picture*
- Underglaze**
 Porcelain (Painting) **P**: 676; *picture* on **P**: 675
- Undergraduate**
 Universities and colleges (The student body) **U**: 208; (Undergraduate study) **U**: 209
- Underground** [transportation]
 London (Transportation) **L**: 438 *with picture*
- Underground** [warfare] **U**: 20
 Guerrilla warfare **G**: 419
- Underground City**
 Montreal (Downtown Montreal) **M**: 769 *with picture*; *picture* on **M**: 770
- Underground mine**
 Coal (Underground mining) **Ci**: 722 *with diagrams*
 Gold (Mining) **G**: 252
 Iron and steel (Mining and processing iron ore) **I**: 438-439
 Uranium (Mining uranium) **U**: 215
- Underground newspaper**
 Los Angeles (Communication) **L**: 465
- Underground railroad** [U.S. history] **U**: 21 *with map*
 Abolition movement (In the United States) **A**: 12-13
 Civil War (The Compromise of 1850) **Ci**: 616
 Douglass, Frederick **D**: 314
 Massachusetts (Places to visit) **M**: 280
 Museum of African American History **M**: 940
 Ohio *picture* on **O**: 701
 Slavery (Conditions of slavery) **S**: 503
 Tubman, Harriet T.: 480
- Underground railway** *See* Subway *in this index*
- Underground storage**
 Global warming (Limiting global warming) **G**: 232a
- Underground survey**

- Surveying (Other surveys) So: 1011
- Underhair** [zoology]
Mammal (Skin and hair) M: 118
- Underhand loop** [knot]
Knots, hitches, and splices (The language of knots) K: 356
- Underhead engine**
Gasoline engine (Valve arrangement) G: 64
- Undernutrition**
Food (How the body uses food) F: 330
- Undershot wheel**
Water wheel W: 141
- Underspin**
Tennis (The ball in play) T: 163
- Understory** [forest]
Forest (The understory) F: 392 *with picture*
Rain forest (Structure and growth) R: 126a
- Underwater archaeology**
Archaeology (Working underwater) A: 597 *with picture*
- Underwater diving** See Diving, Underwater in this index
- Underwater Society of America** [organization]
Skin diving (History) S: 494
- Underwater storage**
Global warming (Limiting global warming) G: 232a
- Underway replenishment ship**
Navy (Auxiliary ships) N: 78
Navy, United States (Auxiliary ships) N: 84
- Underwing moth**
Moth (Kinds of moths) M: 840 *with pictures*
- Underwood, Cecil H.** [American political leader]
West Virginia (table) W: 225
- Underwood Tariff Act** [1913]
Income tax (History of U.S. income taxes) I: 105
Wilson, Woodrow (Legislative program) W: 322
- Underworld**
Crime (Organized crime) Ci: 1136
Styx So: 936
- Underwriters Laboratories, Inc.** [organization]
Consumerism (The right to safety) Ci: 1018
Safety (Safety with electricity) S: 11
- Underwriting** [finance]
Underwriting U: 21
- Underwriting** [insurance] U: 21
Insurance (Careers in the industry) I: 315
- Undesirable discharge**
Military discharge M: 543
- Undocumented alien** See Illegal alien in this index
- UNDP** See United Nations Development Program in this index
- Undset, Ingvald** [Norwegian archaeologist]
Undset, Sigrid U: 22
- Undset, Sigrid** [Norwegian author] U: 21
- Undulant fever** See Brucellosis in this index
- Unearned income**
Income (Sources of income) I: 101
- Unearned increment** [real estate]
Single tax S: 473
- UNEF** [UN] See United Nations Emergency Force in this index
- Unemployment** U: 22
African Americans (Disappointments and controversy) A: 136q
Automation (Automation and jobs) A: 945
Depression D: 150
Ford, Gerald Rudolph (The national scene) F: 376-378
Great Depression G: 338
Hispanic Americans (Employment) H: 257
Homelessness (Current causes and conditions) H: 302
Indian, American (Social and economic progress) I: 180-181
Indian reservation (Description) I: 188-189
Industry (Unemployment) I: 260
Inflation (Fiscal policy) I: 268
Money (The role of the Federal Reserve System) M: 716
North American Free Trade Agreement N: 470
Poverty (The causes of poverty) P: 724
Technology (Challenges of technology) T: 76-77
United States, History of the (The underprivileged) U: 179-180; (The depression and the people) U: 188
Works Progress Administration W: 405
- Unemployment insurance** U: 24
Depression (Causes and prevention) D: 150-151
Insurance (Social insurance) I: 314
Poverty (Social welfare programs) P: 725
Social security (Unemployment insurance) So: 555; (Social security in Canada) So: 556
- Unemployment Insurance Act** [Canada]
Social security (Social security in the United States and Canada) So: 556
- Unequal treaties** [Chinese history]
China (Clash with the Western powers) C: 502
Japan (Renewed relations with the West) J: 56
- UNESCO** [U.N.] U: 24
Huxley, Sir Julian Sorell H: 459
Library (International library programs) L: 254
National park (International concern for national parks) N: 42j
Wildlife conservation (International cooperation) W: 305
- Uneven parallel bars** [sports]
Gymnastics (Women's events) G: 449 *with picture*
- Unfair labor practices** [labor]
Taft-Hartley Act T: 13
- Unfinished Symphony** [music by Schubert]
Schubert, Franz Peter (His works) S: 187
- Unfinished Tales** [book by Tolkien]
Tolkien, J. R. R. T: 322
- Unforgiven** [film]
Motion picture (Best picture: 1992) M: 861
- Unfortunate Traveller, The** [book by Nashe]
Nashe, Thomas N: 22
English literature (Elizabethan fiction) E: 317
- Unfunded mandate** [program]
State government (State finances) So: 865
- Ungaretti, Giuseppe** [Italian poet]
Italian literature (The 1900's) I: 495
- Ungraded school**
Elementary school (Kinds of elementary schools) E: 224-225
School (Elementary schools) S: 181
- Ungulate** [zoology] U: 25 *with picture*
Hoof H: 324
See also the list of Related Articles in the Ungulate article
- Unhairing** [industrial process]
Leather (Preparing the hides) L: 167
- Unholy Loves** [book by Oates]
Oates, Joyce Carol O: 639
- Uniate Churches** [religion] See Eastern Catholic Churches in this index
- Unicameral legislature** [government]
Legislature L: 184
Nebraska (Legislature) N: 110 *with picture*
- UNICEF** U: 26
Halloween (Trick-or-treating) H: 24-24b
Nobel Prizes (Peace: 1965) N: 448
United Nations (Aid to children) U: 88 *with picture*
- Unicorn** [mythology] U: 26 *with picture*
- Unicorn and Other Poems, The** [book by Lindbergh]
Lindbergh, Anne Morrow L: 330
- Unicorn at the Fountain, The** [tapestry]
Tapestry picture on T: 39
- Unicycle** U: 26 *with picture*
- Unidentified flying object** U: 27
Roswell R: 485
- Unidirectional microphone**
Microphone M: 516
- UNIDO** See United Nations Industrial Development Organization in this index
- Unification Church**
Cult (Modern cults) Ci: 1185
- Unified field theory** [physics]
Einstein, Albert (Further scientific work) E: 146b
- Unified Team**
Olympic Games (The recent games) O: 753
- Uniform** [clothing]
Air Force, United States *pictures on* A: 189
Army, United States *pictures on* A: 730, A: 732
Girl Scouts (Uniforms) G: 198
Marine Corps, United States *pictures on* A: 207, A: 209
Navy, United States *pictures on* N: 86
- Uniform Code of Military Justice** [U.S.] U: 27
Articles of War A: 759
Court-martial Ci: 1104
- Uniform Commercial Code** [law]
Negotiable instrument N: 119
Product liability suit P: 810
- Uniform corrosion**
Corrosion Ci: 1072 *with picture*
- Uniform Crime Reports** [publication]
Federal Bureau of Investigation (Other services) F: 62
- Uniform Determination of Death Act** [1980]
Death (Defining death) D: 61
- Uniform Partnership Act** [U.S. history]
Partnership (Changing or ending a partnership) P: 188
- Uniform resource locator** [electronics]
Berners-Lee, Tim B: 270
Computer (The World Wide Web) Ci: 921
- Internet (How the Internet works) I: 350c
Web site W: 175
- Uniform Small Loan Law** [1916]
Loan company L: 404
- Uniform velocity** [physics]
Velocity (Types of velocity) V: 297
- Uniformed Division of the Secret Service**
Secret Service, United States S: 278
- Unincorporated Services Retirement System** [U.S.]
Pension (Military pensions) P: 273
- Uniformitarianism, Principle of** [geology]
Archaeology (The 1800's) A: 599
Geology (The rock dispute) G: 98-99
Hutton, James H: 458
Lyell, Sir Charles L: 533
- Uniformity, Act of** [1549]
Elizabeth I (Problems at home and abroad) E: 238-239
- Unigov** [government]
Metropolitan area (Metropolitan federation) M: 444
- Unilever** [corporation]
Manufacturing (table) M: 170
- Unimak** [island, Alaska]
Aleutian Islands A: 340
- Unincorporated proprietary insurer**
Insurance (Types of insurance companies) I: 315
- Uninsured motorists coverage**
Insurance (Automobile insurance) I: 313
- Union** [design]
Flag (table) F: 193
- Union** [labor] See Labor union in this index
- Union** [mathematics]
Set theory (Using set theory) S: 322 *with diagrams*
- Union, Act of** [1536]
Wales (Union with England) W: 13
- Union, Act of** [1543]
Wales (Union with England) W: 13
- Union, Act of** [1707]
England (The Augustan Age) E: 309
Scotland (Union with England) S: 220
United Kingdom (History) U: 67
- Union, Act of** [1801]
George III G: 107
Grattan, Henry G: 330
Ireland (Union with Britain) I: 426
Pitt, William, the Younger P: 500a
United Kingdom (Troubles with Ireland) U: 68
- Union, Act of** [1840] U: 27
Canada, History of (Lord Durham's report) C: 146
Confederation of Canada (Lord Durham's Report) Ci: 933
Ontario (Political unrest) O: 786
Rebellions of 1837 (Results) R: 174
- Union, Articles of**
Constitution Ci: 995
- Union, Labor** See Labor union in this index
- Union, Lake** [Washington]
Seattle (The city) S: 272
- Union, Plan of** [U.S. history]
Franklin, Benjamin (Organizing the new nation) F: 490
- Union Bag and Paper Company**
Paper bag P: 138
- Union Catalog, National** [U.S.]
Library (Research libraries) L: 247
- Union Catalogue, Canadian**
Library (Canadian government libraries) L: 249
- Union Civica** [Argentine history]
Argentina (Reform movements) A: 658
- Union Colony** [U.S. history]
Colorado *picture on* Ci: 846
Greeley, Horace (His political role) G: 379
- Union Flag** [Great Britain]
Flag *picture on* F: 195
- Union for French Democracy** [political party]
France (Politics) F: 455
- Union for National Progress** [political party]
Burundi (History) B: 713-714
- Union Government** [Canadian history]
Meighen, Arthur (Entry into public life) M: 385-386
- Union Institute** [former name]
Duke University D: 380
- Union Internationale des Marionnettes**
Puppet (Organizations for puppeteers) P: 906
- Union Jack** [flag] U: 27
- Union label** [manufacturing]
Labor movement (The first nationwide labor organizations) L: 9-10
- Union Nationale Party** [political party]
Trudeau, Pierre Elliott (Entry into public life) T: 462
- Union of American Hebrew Congregations**
Synagogue Council of America So: 1067

Union of Banana Exporting Countries

Banana (The banana industry) B: 73

Union of Concerned Scientists [organization]

Kendall, Henry Way K: 258

Union of European Football Associations Cup [award]

Soccer (International competition) So: 548

Union of International Motorboating

Motorboat racing M: 876

Union of Myanmar See Myanmar *in this index***Union of Needletrades, Industrial and Textile Employees U:** 27

Labor movement (table) L: 8

Union of Orthodox Jewish Congregations

Synagogue Council of America So: 1067

Union of South Africa

South Africa (The Union of South Africa)

So: 618

Smuts, Jan Christiaan S: 522

Union of Soviet Socialist Republics U: 28 *with pictures and maps*See also Russia *in this index*

Asia (Way of life in North Asia) A: 790; (The spread of Communism) A: 809-810

Collective farm Ci: 775

Europe E: 382

Flag pictures on F: 217, F: 218

Jews (The Jews today) J: 125

Ruble R: 508

Russian language R: 557

Soros, George So: 597

Arts

Union of Soviet Socialist Republics (The arts) U: 33

Ballet (Ballet in Russia) B: 52-53

Motion picture (Filmmaking in Europe)

M: 866-867

Russian literature R: 558

Defense

Arms control (History of arms control) A: 721-722

Guided missile (Postwar developments) G: 427

Hot line H: 374a

North Atlantic Treaty Organization N: 471

Nuclear weapon (Nuclear weapons in military planning) N: 599-600; (Control of nuclear weapons) N: 600; (The Cold War) N: 601

Strategic Arms Limitation Talks So: 919

Strategic Arms Reduction Treaty So: 919

Submarine (Nuclear submarines) So: 943

War (The United Nations) W: 25; (The Cold War era) W: 26

Warsaw Pact W: 39

Government

Union of Soviet Socialist Republics (Government) U: 29

Communism (Restrictions on personal freedom) Ci: 891-892; (Communism in the Soviet Union) Ci: 892; (The Soviet Union under Gorbachev) Ci: 895

Concentration camp (Other concentration camps) Ci: 927

Democracy (Constitutional government) D: 121

Dictatorship D: 191

Five-year plan F: 191

Freedom of assembly (In other countries) F: 504

International relations (The collapse of the Soviet Union) I: 346

Marx, Karl (Marx's influence) M: 238

Politburo P: 627

Privatization P: 808b

Technology and science

Astronaut (The cosmonauts) A: 833

Mir M: 613

Astronaut A: 828

Space exploration So: 694 *with pictures*

Sputnik So: 810

World historyUnion of Soviet Socialist Republics (History) U: 35 *with pictures*Afghanistan (The Soviet invasion) A: 96 *with picture*

Air force (Air forces in the nuclear age) A: 186

Alaska (The Russian era) A: 301

Angola (History) A: 465-466

Arab-Israeli conflict (The Suez crisis of 1956) A: 582

Armenia A: 718

Astana A: 823

Azerbaijan A: 996

Baltic States B: 65

Belarus (History) B: 224b-224c

Berlin (History) B: 264

Berlin Airlift B: 266

Bush, George Herbert Walker (U.S.-Soviet relations) B: 721

Caucasus C: 317

Chechnya C: 390

China (Break with the U.S.S.R.) C: 505

Cold War Ci: 762; (The great blocs split)

Ci: 768; (The Cold War after 1980)

Ci: 770

Cossacks Ci: 1079

Cuba (History) Ci: 1175-1178

Cuban missile crisis Ci: 1180

Czechoslovakia (Communist rule) Ci: 1216

Estonia (History) E: 362-363

Foreign aid (Other countries' aid programs) F: 384

Georgia (History) G: 111

Helsinki Accords H: 180

Hungary (History) H: 445-447

Inuit (New ways of life) I: 354g

International relations (History) I: 345

Katyn Massacre K: 249

Kazakhstan (History) K: 251

Kennedy, John Fitzgerald (Arms control) K: 266

Korea (A divided nation) K: 376

Khrushchev, Nikita Sergeyevich K: 308b

Kyrgyzstan (History) K: 400

Latvia L: 118

League of Nations (Disagreement among members) L: 160

Lenin, V. I. L: 191; (Death) L: 195

Leningrad, Siege of L: 195

Lithuania (History) L: 389-390

Manchuria (History) M: 134

Moldova (History) M: 690a

Moscow M: 823

Olympic Games (The modern games)

O: 750-752

Pashtuns P: 190

Poland (History) P: 611-613

Reagan, Ronald Wilson (Foreign affairs) R: 168

Romania R: 416; (Communist control) R: 425

Roosevelt, Franklin Delano (Relations with the Soviet Union) R: 458

Russia (Civil war and the formation of the U.S.S.R.) R: 553; (The breakup of the U.S.S.R.) R: 554

Russo-Finnish wars R: 565

Russo-Turkish wars R: 567

Socialism (The Cold War) So: 561; (The fall of the Soviet Union) So: 562

Spanish Civil War (Foreign assistance) So: 756a

Suaz crisis So: 958

Tajikistan T: 18

Trudeau, Pierre Elliott (Foreign affairs) T: 463-464

Turkistan (History) T: 501

Turkmenistan T: 514

Ukraine U: 5; (Economy) U: 10-11; (Soviet rule) U: 12-13

United Nations (The end of the Cold War) U: 92

United States, History of the (The threat of Communism) U: 190; (The easing of Cold War tensions) U: 195

Uzbekistan (People) U: 253

Warsaw (History) W: 38-39

Women's movements (In Eastern Europe and the former Soviet republics) W: 387

World, History of the (The rise of Communism) W: 446; (The easing of Cold War tensions) W: 448

World War I (The Eastern Front) W: 456; (Eastern Europe) map on W: 459-460; (Destruction and casualties) W: 464

World War II (The rise of dictatorships) W: 469-470; (table: The Allies) W: 471; (The invasion of the Soviet Union)

W: 477; (On the Soviet front) W: 479

with pictures; (The Soviet advance)

W: 484; (In other countries) W: 495;

(New power struggles) W: 496; (table:

Military casualties) W: 497

See also the list of Related articles in the Union of Soviet Socialist Republics article

Union of Soviet Writers

Russian literature (The period of socialist realism) R: 564

Union of Utrecht [1579]

Netherlands (Freedom from Spain) N: 148

Union of Utrecht [1889]

Old Catholic churches O: 740

Union Pacific Railroad

Cowboy (The growth of the cattle industry) Ci: 1111-1112

Credit Mobilier of America Ci: 1125

Omaha (History) O: 756-757

Railroad (Railroad systems) R: 112; (The first transcontinental rail lines) R: 116 *with picture*

Western frontier life in America (East meets West) W: 234

Wyoming (Indian and settler conflicts) W: 534; (Territorial progress) W: 534

Union Party [Canada]

Borden, Sir Robert Laird (Conscription crisis) B: 486

Union Party [U.S.]

Johnson, Andrew (Vice-President) J: 139

Republican party (The Civil War) R: 254

Union republic

Union of Soviet Socialist Republics U: 28

Union security

Labor movement (Arranging contracts) L: 4

Union shop [labor] U: 42

Closed shop Ci: 685

Taft-Hartley Act T: 13

Union song

Folk music (Kinds of folk music) F: 321

Union states [U.S. history]

Reconstruction R: 176

Union Station [Indianapolis]

Indianapolis (Recreation) I: 222

Union Station [Kansas City]

Kansas City (History) K: 243

Union Station [Los Angeles]

Los Angeles (Transportation) L: 465

Union Station [Washington, D.C.]

Washington, D.C. (Union Station) W: 71; map on W: 76; (Transportation) W: 85

Union Stock Yards [Chicago]

Chicago (The South Side) C: 424-425; (Industry)

C: 431-432; (Growth as a city) C: 435

Unionist Party [Northern Ireland]

Northern Ireland (The division of Ireland) N: 524

Unions, Labor See Labor union *in this index***Unique Forms of Continuity in Space** [sculpture by Boccioni]Sculpture (Form and treatment) S: 230-231 *with picture*; (Cubism and futurism) S: 257**Unisex style**

Hairdressing (The 1900's) H: 12-13

Unison

Piano (The strings) P: 446

Unit [measurement] U: 42

Weights and measures W: 184

Unit cellMineral (Mineral crystals) M: 567-570 *with diagram*

Pyroxene P: 920

Quasicrystal Q: 9

Unit commander

Army, United States (A typical day) A: 734

Unit fraction [mathematics]

Fraction (History) F: 450

Unit-letter system

Encyclopedia (Arrangement of content) E: 266

Unit of account

Money M: 704

Unit pricing

Consumerism (The right to information) Ci: 1018

Unit production cost

Marketing (Pricing) M: 214

Unit rule [U.S. history] U: 42**Unit shop**

Industrial arts (Industrial arts courses) I: 242

Unit trainCoal (Shipping coal) Ci: 727 *with picture*Railroad (Freight operations) R: 109-110 *with picture***UNITA** [political group] See National Union for the Total Independence of Angola *in this index***Unità, L'**

Rome (Economy) R: 430

Unitarian Universalist Association [religious group] U: 42**Unitarians** [literature]

Homer (Analysts and unitarians) H: 303

Unitarians [religious group] U: 42

Congregationalists Ci: 941

Unitary system [political science]

Federalism F: 66

Government (Systems of government) G: 287

Italy (Local government) I: 499

Local government (Unitary systems) L: 408

Political party (Organizing the government) P: 632

State government So: 862

Unitas, John [American football player] U: 43

UNITE (labor union) See Union of Needletrades, Industrial and Textile Employees in this index

Unite [money]

Pound P: 721

United Arab Emirates U: 43 with pictures and map

Flag picture on F: 205

United Arab Republic U: 45 with map

Arabs (Since independence) A: 589

Egypt (The United Arab Republic) E: 132

Nasser, Gamal Abdel N: 24

Syria (Independence) So: 1075

United Arab States [former name]

United Arab Republic U: 46

United Artists

Motion picture (Movies become big business) M: 866

United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the U.S. and Canada

Labor movement (table) L: 8

United Australia Party [political party]

Menzies, Sir Robert Gordon M: 411

United Automobile, Aerospace and

Agricultural Implement Workers of

America, International Union of See

United Automobile Workers in this index

United Automobile Workers [labor union] U: 46

American Federation of Labor and Congress of Industrial Organizations (History) A: 410

Labor movement (table) L: 8

Michigan (Depression and recovery) M: 509-511

Reuther, Walter Philip R: 266

United Bowmen of Philadelphia

Archery (History) A: 603-604

United Brotherhood of Carpenters and Joiners of America

Carpenters and Joiners of America, United Brotherhood of C: 246

Labor movement (table) L: 8

United Cerebral Palsy Associations

Disabled (table) D: 222

United Church of Canada [religious group]

U: 46 with picture

United Church of Canada Act [1924]

United Church of Canada (Doctrine and organization) U: 46

United Church of Christ [religious group] U: 47

United Colonies of New England

New England Confederation N: 204 with map

United Daughters of the Confederacy

Daughters of the Confederacy, United D: 43

United Empire Loyalists [American history] U: 47

Canada, History of (The United Empire Loyalists) C: 144 with picture

Ontario (Early settlement) O: 784

United Farm Workers of America [labor union] U: 47

Chavez, Cesar Estrada C: 389

Huerta, Dolores Fernandez H: 408

Labor movement (table) L: 8; (New groups become unionized) L: 14

United Farm Workers Organizing Committee

Chavez, Cesar Estrada C: 389

United Farmers of Alberta

Alberta (A new province) A: 329

United Federation of Teachers [union]

Shanker, Albert S: 372

United Food and Commercial Workers

International Union U: 47

Labor movement (table) L: 8

United Fruit Company

Guatemala (Independence) G: 417

United Irishmen

Ireland (Union with Britain) I: 426

United Israel Appeal [organization]

United Jewish Communities U: 47

United Jewish Appeal [organization]

United Jewish Communities U: 47

United Jewish Communities [organization]

U: 47

United Kennel Club U: 47

United Kingdom U: 48 with pictures and map

See also England; Great Britain; Northern Ireland; Scotland; Wales in this index

Art and architecture

United Kingdom (The arts) U: 58

Theater (Britain) T: 247 with picture

Communications and mass media

United Kingdom (Communication) U: 66

British Broadcasting Corporation B: 611

Newspaper (In Europe) N: 386

Postal services (The creation of the Penny Post) P: 706 with picture

Radio (Government regulation of radio) R: 91

Television (In Europe) T: 116

Defense

United Kingdom (Armed forces) U: 54

Air force (The British Air Force) A: 184

Army (The British Army) A: 726; picture on A: 724

Marine (Marines of other lands) M: 203-204

Navy (Major navies of the world) N: 78-79

Education

United Kingdom (Education) U: 56 with picture

Library (Western Europe) L: 252

Finance and banking

Bank (Europe) B: 92

Government

United Kingdom (Government) U: 49 with picture

Bill of rights (English Bill of Rights) B: 302

British-Irish Council B: 632

Civil service (Civil service in other lands)

Ci: 613

Corn Laws Ci: 1064

Constitution Ci: 995

Democracy (Constitutional government)

D: 121

Devolution D: 175

Freedom of assembly (In other countries)

F: 504; (History) F: 504

Home rule H: 301

House of Commons H: 384

Labour Party L: 16

Law (Public law) L: 130-131

Order in Council O: 825

Parliament (The British Parliament) P: 172

with pictures

Police (In other countries) P: 623

Speaker (In Britain) So: 768

Welfare state W: 192

Health and welfare

Abortion (In other countries) A: 16

Managed care plans (In other countries) M: 131

Medicine (The United Kingdom) M: 366

Welfare (Welfare around the world) W: 190

History

United Kingdom (History) U: 67

Abolition movement (In the United

Kingdom) A: 13

Afghanistan (History) A: 95

Arabs (Ottoman and European rule) A: 588

Asia (The Western conquest of Asia) A: 806

Bahrain (History) B: 30-31

Belize (History) B: 238

Berlin Airlift B: 266

Brunei (History) B: 651

Canada, History of (Threats to expansion)

C: 142; (British conquest and rule

(1689-1815)) C: 143

Cold War Ci: 762

Colonial life in America Ci: 786

Colonialism (History of colonialism) Ci: 813-814

Cyprus (History) Ci: 1207

Egypt (British control) E: 131;

(Independence) E: 132

Falkland Islands F: 15

French and Indian wars F: 511

Gandhi, Mohandas Karamchand G: 24

Gibraltar G: 186

Great Irish Famine G: 343

Hong Kong H: 316

India (British India) I: 130-131

Indian, American (In Canada) I: 178

Indonesia (Indonesia under Sukarno) I: 238

Industrial Revolution I: 246

International relations (From the 1500's to

the 1900's) I: 345

Iraq (British rule) I: 413

Ireland (Union with Britain) I: 426

Irish Republican Army I: 433

Jerusalem (British rule) J: 101

Kenya (British rule) K: 303

Laurier, Sir Wilfrid (Relations with Britain)

L: 126

Malaysia (History) M: 101

Malta (History) M: 113-114

Maori M: 175

Monroe Doctrine (Origins) M: 739

Myanmar (British conquest and rule)

M: 970d

Nepal (History) N: 126-127

New France (The British conquest) N: 205

Nigeria (The coming of the Europeans)

N: 417; (Independence) N: 417 with

picture

North Atlantic Treaty Organization (History)

N: 471

Pakistan (Colonialism) P: 99

Palestine (World War I and the Balfour

Declaration) P: 105; (World War II and

the division of Palestine) P: 105

Prince Edward Island (History) P: 791

Revolutionary War in America R: 270

School (History of Canadian schools) S: 185

Seychelles (History) S: 340

Sikkim (History) S: 456

Slavery (The decline of slavery) S: 504

South Africa (History) So: 617-618

Spanish Civil War (Foreign assistance)

So: 756a

Sudan (Egyptian and British control)

So: 955-956

Suez Canal (History) So: 958

Suez crisis So: 958

Trimble, David T: 445

Ulster Unionist Party U: 15

United Arab Emirates (History) U: 45

United Arab Republic U: 45

United States, History of the (The English

and French) U: 151; (The movement for independence) U: 156

War of 1812 W: 28

Webster-Ashburton Treaty W: 178

World War I (A system of military alliances)

W: 454-455

World War II (table: The Allies) W: 471; (The

Battle of Britain) W: 475 with pictures;

(Fighting in Africa) W: 476; (table:

Military casualties) W: 497

Yemen (Formation of Yemen (Aden)) Y: 563

Zionism (The Balfour Declaration) Z: 599

Language and literature

United Kingdom (Language) U: 55

See also English language; English literature in this index

People

United Kingdom (People) U: 54 with picture

Census (Modern censuses) C: 350

Installment plan (How the plan works) I: 304

Standard of living (table) So: 834

Social and cultural life

Christmas (In England, Ireland, Scotland,

and Wales) C: 530 with picture

Flag pictures on F: 195, F: 207

Halloween (Halloween customs and sym-

bols) H: 24a; (Halloween around the

world) H: 25

Knighthood, Orders of (Honorary orders)

K: 347 with pictures

Knights and knighthood K: 348

Nobility (In the United Kingdom) N: 450

Penny P: 271

Prince P: 781

Prince of Wales P: 794

Remembrance Day R: 229

Tea (History) T: 63-64

Valentine's Day (In Europe) V: 261

Technology and science

Medicine (Financing advanced medical care) M: 377

Metric system (Acceptance of the metric system) M: 441

See also the list of Related articles in the United Kingdom article

United Kingdom of Great Britain and Ireland

[British history]

Grattan, Henry G: 330

Great Irish Famine G: 343

Ireland (Union with Britain) I: 426

Pitt, William, the Younger P: 500a

United Kingdom (Troubles with Ireland)

U: 68

United Kingdom of Great Britain and Northern Ireland See United Kingdom in this index

United Kingdom Overseas Territory

Commonwealth of Nations (Dependencies) Ci: 876

United Left [political party]

Spain (Political parties) So: 733

United Malays National Organization [political party]

Malaysia (Political parties) M: 98b

United Methodist Church [religious group] U: 75

Methodists M: 434; (Social change and divi-

sion) M: 435

United Mine Workers of America U: 75

Labor movement (table) L: 8

Coal (Labor unions) Ci: 728

Lewis, John L. L: 220

Roosevelt, Theodore (Friend of labor) R: 468

United

United States) A: 54
Adoption (International adoptions) A: 66
AIDS (Public awareness) A: 164b
Census C: 346
Cyprus (History) Ci: 1207
Environmental pollution (Government action) E: 335-336
Flag picture on F: 216
Globalization (Features of globalization) G: 233
Human rights H: 428
Human Rights, Universal Declaration of H: 428b
International Labour Organization I: 340
International Monetary Fund I: 343
Law (Developments in international law) L: 137
Law of the Sea Convention L: 141
Library picture on L: 250
MacArthur, Douglas (The Korean War) M: 4
Mubarak, Suzanne M: 908
Nobel Prizes (Peace) N: 449
Ocean (Who owns the ocean?) O: 665
UNESCO U: 24
UNICEF U: 26
Water (The challenge of today) W: 132
World picture on W: 406
World Bank W: 450
Founding
United Nations (The founding of the UN) U: 94
Dumbarton Oaks D: 382
International relations (Collective security) I: 345 *with picture*
Lie, Trygve L: 270
San Francisco Conference S: 99
Truman, Harry S. (The end of World War II) T: 469 *with picture*
World War II (Birth of the United Nations) W: 497
Economic and technical assistance
United Nations (Economic and technical aid) U: 87
Food supply (Food supply programs) F: 350
Women's movements (In developing nations) W: 387
International diplomacy
Arabs (Since independence) A: 589
Aristide, Jean-Bertrand A: 662
Arms control (History of arms control) A: 721-722
Bosnia-Herzegovina (History) B: 492-493
Cambodia (History) C: 73-74
Cold War (The Korean War) Ci: 764; (Trouble at Suez) Ci: 765; (Africa) Ci: 766
Congo (Kinshasa) (Civil disorder) Ci: 940e
East Timor E: 40; (History) E: 41
Indonesia (Indonesia under Sukarno) I: 238
International Court of Justice I: 342
International law (After World War II) I: 342
International relations (International conferences and organizations) I: 344; (History) I: 345 *with picture*
Iraq (The Persian Gulf War) I: 414; (Recent developments) I: 415
Jerusalem (British rule) J: 101
Korea (A divided nation) K: 376
Korean War K: 379
Middle East (Palestine) M: 533
Neutrality (Neutrality today) N: 154
Palestine (World War II and the division of Palestine) P: 105
Persian Gulf War (The world's reaction) P: 300b
Qadhafi, Muammar Muhammad al- Q: 2
Sanctions, Economic S: 106
Somalia (History) So: 589-590
Truman, Harry S. (The Korean War) T: 471
United States, History of the (The conflict over weapons inspections) U: 195
War (Recent developments) W: 24-25; (Preventing war) W: 25
World, History of the (The world wars) W: 446
Organization and administration
United Nations (The General Assembly) U: 78 *with picture*; (The Security Council) U: 82; (The Secretariat) U: 83; (Other main organs) U: 84; (Specialized agencies) U: 85
Big Five B: 297
Cold War (The troika proposal) Ci: 766
War crime (World War II) W: 27; (The United Nations and war crimes) W: 27
Nobel Prizes (Peace) N: 448
Roosevelt, Franklin Delano (America goes to war) R: 460-461
See also the List of Related Articles in the United Nations article

United Nations Charter [1945]
United Nations U: 76; (The charter) U: 78; (The San Francisco Conference) U: 95
Human rights (The development of human rights) H: 428-428a
San Francisco Conference S: 99
United Nations Children's Fund See UNICEF *in this index*
United Nations Commission on Human Rights U: 96
United Nations (Human rights) U: 88
United Nations Conference on International Organization See San Francisco Conference *in this index*
United Nations Conference on Trade and Development
Foreign aid (Technical assistance and relief) F: 384-385
United Nations (Economic and technical aid) U: 87
United Nations Convention on the Law of the Sea (treaty) See Law of the Sea Convention *in this index*
United Nations Day [UN]
United Nations (The San Francisco Conference) U: 95
United Nations Development Programme
Foreign aid (Technical assistance and relief) F: 384
United Nations (Economic and technical aid) U: 87; (Fighting hunger) U: 89; *picture on* U: 90
United Nations Disarmament Conference
Myrdal, Alva Reimer M: 971
United Nations Disengagement Observer Force
United Nations (Peacekeeping operations) U: 90-91
United Nations Educational, Scientific, and Cultural Organization See UNESCO *in this index*
United Nations Emergency Force
United Nations (Peacekeeping operations) U: 90-91
United Nations Environment Programme
Mediterranean Sea (History of the Mediterranean) M: 382
United Nations (Important dates in UN history) U: 94
United Nations High Commissioner for Refugees
Nobel Prizes (Peace: 1954) N: 448; (Peace: 1981) N: 449
United Nations (Important dates in UN history) U: 94
United Nations Industrial Development Organization U: 97
Foreign aid (Technical assistance and relief) F: 384
United Nations (Economic and technical aid) U: 87
United Nations Interim Force in Lebanon
Lebanon (War and terrorism) L: 173
United Nations (Peacekeeping operations) U: 90-91
United Nations International Children's Emergency Fund See UNICEF *in this index*
United Nations peacekeeping forces
Nobel Prizes (Peace: 1988) N: 449
United Nations Relief and Rehabilitation Administration
United Nations (Aid to refugees) U: 88
World War II (Displaced persons) W: 496
United Nations Relief and Works Agency for Palestine Refugees in the Middle East
United Nations (Aid to refugees) U: 88
United Nations Truce Supervision Organization
United Nations (Peacekeeping operations) U: 90-91
United Nations Trusteeship Council
Trust territory T: 474
United Nations University U: 97
United Nations War Crimes Commission
War crime (World War II) W: 27
United Negro College Fund U: 97
United Neighborhood Centers of America
Settlement house S: 324
United Network for Organ Sharing [organization]
Transplant (Qualifying for a transplant waiting list) T: 379-380
United Paramount Network
Television (The national networks) T: 114
United Parcel Service, Inc. [company] U: 97
Postal services (Competition and privatization) P: 707
United Presbyterian Church

Presbyterian Church (U.S.A.) P: 756a
United Press International [news agency] U: 97
Newspaper (News services) N: 383
Scripps, Edward Wyllis S: 227
United Productions of America [studio]
Animation (Animation in the mid-1900's) A: 514a
United Provinces of Central America See Central America, United Provinces of *in this index*
United Provinces of La Plata [Argentina history]
Argentina (Independence) A: 656-657 *with map*
United Republic of Tanzania See Tanzania *in this index*
United Self-Defense Forces of Colombia
Colombia (Recent developments) Ci: 784
United Service Organizations U: 97
United Services College
Kipling, Rudyard (Childhood) K: 334
United Soccer Leagues
Soccer (In North America) So: 548
United Society of Believers in Christ's Second Appearing [religious group]
Shakers S: 343
United Somali Congress [political party]
Somalia (History) So: 589-590
United Spanish War Veterans
Veterans' organizations (In the United States) V: 344
United States U: 98 *with pictures and maps*
Art and architecture
Ballet (Ballet in the United States) B: 53
Painting (The 1900's in North America) P: 82 *with pictures*
Defense
Nuclear weapon (Nuclear weapons in military planning) N: 599-600; (Control of nuclear weapons) N: 600
See also Air Force, United States; Army, United States; Marine Corps, United States; Navy, United States *in this index*
Government
See United States, Government of the; United States foreign policy *in this index*
Health and welfare
Life expectancy L: 280
Managed care plans (In the United States) M: 131
Medicine (The United States) M: 367; (Financing advanced medical care) M: 377
Red Cross (In the United States) R: 187
Welfare (Welfare in the United States) W: 190
History
See United States, History of the *in this index*
Manufacturing
Aluminum (In the United States) A: 396
Automobile (The automobile industry) A: 958
Cotton (Leading cotton-producing countries) Ci: 1089 *with map*
Electronics (Manufacturing and sales) E: 214
Iron and steel (In the United States) I: 449 *with map*
Petroleum (The petroleum industry) P: 345
Rubber (The rubber industry) R: 501-502
Trade (Trade in the United States) T: 363
Natural resources
Coal (Location of U.S. and Canadian reserves) Ci: 718 *with map*; (Developments in North America) Ci: 732
Copper (Leading producers) Ci: 1042 *with diagram*
Energy supply (The 1900's) E: 280
Forest (Forests of the United States and Canada) F: 394 *with map*
Petroleum (The United States and Canada) P: 333
Water (World distribution of water) W: 122 *with map*
Parks and monuments
See National park; National Park System *in this index*
People
Adoption (The adoption process) A: 66
African Americans A: 136b
Asian Americans A: 812b
Census (United States censuses) C: 346; *map on* C: 348
Divorce (Grounds for divorce) D: 253; (The U.S. divorce rate) D: 254-255
Freedom of religion (In the United States) F: 505
Hispanic Americans H: 244
Immigration (Immigration to the United

States) I: 81 *with pictures*
 Income (Distribution of income) I: 101
 Income tax (Federal income taxes in the United States) I: 104
 Indian, American (Social and economic progress) I: 180-181
 Jews (The Jews today) J: 125
 Marriage (Laws concerning marriage) M: 220
 Metropolitan area M: 442
 National income (table) N: 38
 New Year's Day (Modern customs) N: 289
 Population (United States population) P: 673
 Poverty (Who are the poor?) P: 723
 Races, Human (The social significance of race) R: 59
 School S: 180 *with pictures*
 Standard of living (table) So: 834
 Teaching (Becoming a teacher) T: 67
Technology and science
 International Space Station I: 346b
 Metric system (Acceptance of the metric system) M: 441
 Telephone (The telephone industry) T: 99
See also the list of Related Articles in the United States article
United States (frigate)
 Navy, United States (The earliest colonial warships) N: 85-88; (Undeclared war with France) N: 88
United States (ocean liner)
 Ship (Ocean liners) S: 415-417, *picture on S: 413*
 Virginia (Interesting facts) V: 399
United States, Center of the
 Geographic center of the United States G: 91
 United States *map on U: 120*
United States, Government of the U: 136 with pictures
 Cabinet (Cabinet of the United States) C: 3
 Economics (Government and the U.S. economy) E: 62-63
 Election (Elections in the United States) E: 159
 Food (Government regulations) F: 335
 Freedom of the Press (In the United States) F: 507
 Great Depression (New government policies) G: 342
 Money (The first United States currency) M: 708
 North American Free Trade Agreement N: 470
 Pioneer life in America (Government) P: 484
 Political science (American government and politics) P: 638
 President (Types of presidential government) P: 756b
 Taxation (Taxation in the United States) T: 54
 Territory (In the United States) T: 176
 United States, History of the (Roosevelt, recovery, and reform) U: 189
 Washington, D.C. W: 70
See also Constitution of the United States in this index, and the list of Related Articles in the United States, Government of the article
United States, History of the U: 148 with pictures and maps
 Abortion (Abortion in the United States) A: 15
 Automobile (History of the automobile) A: 962
 Aviation (History of the aviation industry) A: 986
 Bank (History of U.S. banking) B: 92
 Berlin Airlift B: 266
 Black Seminole B: 391
 Colonialism (Later colonialism) Ci: 814
 Concentration camp (Other concentration camps) Ci: 927
 Conservation (Conservation in the United States) Ci: 985 *with pictures*
 Environmental pollution (History) E: 338
 Evangelicalism E: 422
 Flag (Flags of the United States and Canada) F: 208 *with pictures*
 Freedom of speech (In the United States) F: 506
 Fur trade F: 564
 Gay Nineties G: 71 *with pictures*
 Great Depression G: 338
 High school (Development of U.S. high schools) H: 228
 Homestead Act H: 304
 Immigration (Immigration to the United States) I: 81
 Indian, American (Indians of the Northeast) I: 154; (Indians of the Southeast) I: 157; (Indians of the Plains) I: 158; (Indians of the Northwest Coast) I: 161-162; (Indians

of California) I: 163; (Indians of the Great Basin) I: 164; (Indians of the Plateau) I: 165; (Indians of the Southwest) I: 166; (The destruction of Indian America) I: 177-178; (Indians in the early and mid-1900's) I: 178b-179; (Social and economic progress) I: 180-181
 Industrial Revolution (The United States) I: 254
 International relations (History) I: 345
 Iran-contra affair I: 407
 Iraq (The Persian Gulf War) I: 414
 Jews (Jews in America) J: 123
 Korea (A divided nation) K: 376; (North-South relations) K: 378
 Labor movement (Development of the American labor movement) L: 9-14 *with pictures*
 Latin America (Latin America and the United States) L: 109 *with pictures*
 Libya (Strained relations with the United States) L: 268
 Mass production M: 269
 Mexico M: 471
 National park (The early national parks) N: 42j
 Nuclear weapon (World War II) N: 601
 Pearl Harbor P: 218
 Persian Gulf War P: 300a
 Philippines (History) P: 379-380
 Progressive movement P: 813
 Prohibition (Prohibition in the United States) P: 815
 Radicalism (In the United States) R: 82
 Roaring Twenties R: 363 *with pictures*
 Roman Catholic Church (In the United States) R: 412
 Slavery (Slavery in the United States) S: 502 *with picture and map*
 Suez crisis So: 958
 Trail of Tears T: 368
 Union of Soviet Socialist Republics (History) U: 35-37
 Vietnam V: 364, (History) V: 369-371
 Webster-Ashburton Treaty W: 178
 Welfare (History) W: 191
 Whiskey rebellion W: 282
 Women's movements (The beginnings of women's movements) W: 385
 World, History of the (Imperialism) W: 445; (The rise of Communism) W: 446
 World War I (The United States enters the war) W: 462
 World War II (The United States enters the war) W: 477
See also the list of Related Articles in the United States, History of the article, and the History sections of individual state articles
United States Adopted Name
 Drug (Drug names) D: 356
United States Air Force *See* Air Force, United States *in this index*
United States Air Force Academy U: 197 *with pictures*
 Cadet C: 11
 Colorado (Places to visit) Ci: 836 *with picture*
United States Air Force Museum
 Ohio (Places to visit) O: 690 *with picture*
United States Air Forces in Europe
 Air Force, United States (Combat commands) A: 192-193
United States Amateur Ballroom Dancers Association
 Ballroom dancing B: 63
United States Army *See* Army, United States *in this index*
United States Army War College U: 198
 Root, Elihu R: 475
United States Auto Club
 Automobile racing (Racing organizations) A: 976
United States Bank *See* Bank of the United States *in this index*
United States Border Patrol *See* Border Patrol, United States *in this index*
United States Botanic Garden [Washington D. C.] *See* Botanic Garden, United States *in this index*
United States budget
 Budget (Government budgets) B: 671
 National budget N: 30
United States capitals U: 198
United States Catholic Conference *See* Catholic Conference, United States *in this index*
United States Championship
 Tennis (table: U.S. Open) T: 167
United States Civil Service Commission
 Civil service (History) Ci: 613

United States Claims Court [law]
 Court (Federal courts) Ci: 1102
United States Coast Guard *See* Coast Guard, United States *in this index*
United States Coast Guard Academy U: 199 *with pictures*
 Coast Guard, United States (Careers in the Coast Guard) Ci: 736; (Training an officer) Ci: 736
 Connecticut (The early 1900's) Ci: 970
United States Congress *See* Congress of the United States *in this index*
United States Constitution *See* Constitution of the United States *in this index*
United States Copyright Office
 Library (United States government libraries) L: 248
United States Department of ...
Departments appear under their key words, as in State, Department of
United States Employment Service *See* Employment Service, United States *in this index*
United States Fencing Association
 Fencing (Fencing organizations) F: 71
United States Field Hockey Association
 Field hockey (History) F: 93
United States Fire Administration
 Fire department (Recent developments) F: 128-129
United States flag *See* Flag, United States *in this index*
United States Food Administration [U.S. history]
 Hoover, Herbert Clark (Food administrator) H: 328
United States foreign policy
See also Foreign policy in this index
 Arms control (History of arms control) A: 721
 Central Intelligence Agency C: 356
 Cold War Ci: 762
 Franklin, Benjamin (Serving in France) F: 490-491
 Gay Nineties (A growing world power) G: 73
 Iran-contra affair I: 407
 Monroe Doctrine M: 739
 Pan-American conferences P: 113
 Panama (Colombian rule) P: 120; (Relations with the United States) P: 121
 Peace Corps P: 207
 President of the United States (Foreign policy director) P: 765
 State, Department of So: 858
 Taiwan (History) T: 18
 United States, History of the (Foreign affairs) U: 162; (Foreign affairs) U: 183; (The threat of Communism) U: 190; (International cooperation) U: 195
See also sections in the articles on the Presidents, such as Truman, Harry S. (Foreign Affairs)
United States Forest Service *See* Forest Service *in this index*
United States Gemini Program
 National Optical Astronomy Observatories N: 42
United States Geological Survey *See* United States Geological Survey *in this index*
United States Golf Association
 Golf (Beginnings) G: 264
United States government *See* United States, Government of the *in this index*
United States Government Manual, The [reference]
 A Guide to Research Skills Research Guide: 34
United States Handball Association
 Handball H: 42
United States history *See* United States, History of the *in this index*
United States Holocaust Memorial Museum [Washington, D. C.] *See* Holocaust Memorial Museum, United States *in this index*
United States Housing Authority
 Housing and Urban Development, Department of (History) H: 393
United States Information Agency U: 200
 Propaganda (After World War II) P: 825
 Voice of America V: 437
United States Information Service
 United States Information Agency U: 200
United States International Trade Commission
 International Trade Commission, United States I: 349
United States Jaycees
 Jaycees J: 67

- United States Marine Band**
Marine Corps, United States M: 206
- United States Marine Corps** See Marine Corps, United States *in this index*
- United States Marine Corps War Memorial**
Washington, D.C. (Marine Corps War Memorial) W: 78 *with picture*
- United States marshal** [government official]
Marshal M: 228
- United States merchant marine**
Merchant marine (The United States merchant marine) M: 413
Ship (The United States merchant marine) S: 425
- United States Merchant Marine Academy**
U: 200 *with pictures*
- United States Military Academy** U: 201 *with pictures*
West Point W: 205
Cadet C: 11
New York *picture on* N: 297
Thayer, Sylvanus T: 231
- United States National Museum**
National Museum of American History N: 41
- United States Naval Academy** U: 203 *with pictures*
Cadet C: 11
Maryland *picture on* M: 249
- United States Naval Observatory**
Naval Observatory, United States N: 70
- United States Navy** See Navy, United States *in this index*
- United States note**
Money (The rebirth of paper money) M: 709 *with picture*; (United States currency today) M: 709-712
- United States Pacific Command**
Camp H. M. Smith C: 90
- United States Postal Service** See Postal Service, United States *in this index*
- United States President** See President of the United States *in this index*
- United States Range** [mountains, Nunavut]
Nunavut (Land and resources) N: 608-609 *with map*
- United States Reports** [magazine]
Supreme Court of the United States (Written opinions) So: 999
- United States Seal** See Great Seal of the United States *in this index*
- United States Secret Service** See Secret Service, United States *in this index*
- United States Senate** See Senate, United States *in this index*
- United States Shipping Board**
Merchant marine (The United States merchant marine) M: 413
- United States Soccer Federation**
Soccer (History) So: 549
- United States Steel Corporation** U: 204
Gary G: 47
Indiana (The early 1900's) I: 216
Iron and steel (In the United States) I: 449, (Growth of the steel industry) I: 451-452
Manufacturing (table) M: 170
Morgan, John Pierpont M: 802
- United States Supreme Court** See Supreme Court of the United States *in this index*
- United States Tariff Commission**
International Trade Commission, United States I: 349
- United States Tennis Association**
Tennis (The spread of tennis) T: 165
- United States Trade Representative, Office of the**
President of the United States (The executive branch) P: 764
- United States Trotting Association**
Harness racing (Regulation) H: 64
- United States Weather Bureau** See Weather Service, National *in this index*
- United States Youth Soccer Association**
Soccer (In North America) So: 548
- United Steelworkers of America** See Steelworkers of America, United *in this index*
- United Synagogue of America** [organization]
Synagogue Council of America So: 1067
- United Technologies Corporation**
Aviation (Aircraft manufacturing) A: 984
- United Transportation Union**
Labor movement (table) L: 8
Railway brotherhoods R: 122
- United Way of America** [organization] U: 204
Foundations (Public and society benefit) F: 431
- Uniting Church**
Australia (Religion) A: 905
- Unitized body construction**
Automobile (The support system) A: 954, *picture on* A: 956
- Unity** [design]
Design (Unity) D: 157 *with picture*
- Unity** [political party]
Russia (Politics) R: 531-532; (Recent developments) R: 555-556
- Unity** [space module]
International Space Station (History) I: 346b
- Unity of opposites** [philosophy]
Heraclitus H: 194
- Unity Temple** [Oak Park, Illinois]
Architecture (Frank Lloyd Wright) A: 629-630
- UNIVAC** [computer]
Computer (The first electronic computers) Ci: 924b-924c
Eckert, J. Presper, Jr. E: 50
Mauchly, John William M: 312
- Univalve** [zoology] See Gastropod *in this index*
- Universal** [philosophy]
Age of Reason (The worship of reason) A: 138
Metaphysics (Universals and particulars) M: 430
- Universal Automatic Computer** See UNIVAC *in this index*
- Universal bank**
Bank (Europe) B: 92
- Universal constant** [physics]
Science (Using logic) S: 194
- Universal Copyright Convention** [1952]
Copyright (International copyright) Ci: 1048
- Universal Declaration of Human Rights** See Human Rights, Universal Declaration of *in this index*
- Universal gas constant**
Gas [physics] (Gas laws) G: 48-49
- Universal gas law**
Gas [physics] (Gas laws) G: 48-49
- Universal History** [book by Ibn Khaldun]
Ibn Khaldun I: 3
- Universal House of Justice** [religion]
Bahá'ís B: 27
- Universal language** U: 204
Language (Universal languages) L: 66
- Universal life insurance**
Insurance (Main kinds of life insurance) I: 309-310
- Universal motor**
Electric motor (Universal motors) E: 181
- Universal Orlando** [Orlando]
Florida (Places to visit) F: 252
- Universal Postal Congress**
Postal Union, Universal P: 708
- Universal postal service**
Postal services P: 702
- Universal Postal Union** See Postal Union, Universal *in this index*
- Universal priesthood** [religion]
Calvin, John (Calvinism) C: 71
- Universal Product Code**
Bar coding B: 102
- Universal set** [mathematics]
Set theory (Kinds of sets) S: 321 *with diagram*
Boolean algebra B: 474 *with diagram*
- Universal Studios** [Los Angeles]
Los Angeles (Visitor's guide) L: 468 *with picture*
- Universal Theater of Criticism** [book by Feijoo]
Spanish literature (The 1700's) So: 760
- Universal Time Coordinated**
Time (Worldwide time zones) T: 292
Chronometer C: 539
- Universal truth** See Necessary truth *in this index*
- Universalist Church of America**
Unitarian Universalist Association U: 42
Unitarians (Organization) U: 43
- Universe** [astronomy] U: 205
Astronomy A: 834
Big bang B: 296
Cosmology Ci: 1078
Earth E: 16
Exobiology E: 437
Galaxy G: 8 *with pictures*
Matter (Dark matter) M: 311
- Universe** [mathematics]
Public opinion poll (Defining the goals) P: 862
- Universities and colleges** U: 206 *with pictures*
Academic freedom A: 20
Address, Forms of (Other forms) A: 54
Baby boom generation (Effects of the baby boom) B: 11
Caps and gowns C: 199 *with pictures*
Careers (Colleges and universities) C: 217; (Teaching) C: 231
College entrance examination Ci: 775
Education (The organization of U.S. education) E: 89-91, (The federal government and education) E: 92-94, (The rise of the universities) E: 99
Extension programs E: 456
History (History in the universities) H: 262
Library (College and university libraries) L: 246 *with pictures*; (Medieval collections) L: 259-260
Middle Ages (Learning and the arts) M: 527
Physical education (University and college programs) P: 432
Scholarship (Private colleges and universities) S: 178; (State colleges and universities) S: 178
School (Colleges and universities) S: 182
Student government So: 932
Teaching (Teacher-training programs) T: 67
Women's movements (In Western societies) W: 386
See also the list of Related Articles in the Universities and Colleges article
- Universities Research Association, Incorporated**
Fermi National Accelerator Laboratory F: 74
- University City** [district, Philadelphia]
Philadelphia (Residential districts) P: 360
- University extension**
Correspondence school Ci: 1072
Extension programs E: 456
- University of ...**
Universities appear under their key words, as in Chicago, University of
- University Park** [community]
Dallas (The city) D: 11
- University Settlement** [New York]
Settlement house S: 324
- University Wits** [literary group]
English literature (Elizabethan drama) E: 317
Greene, Robert G: 382
Nashe, Thomas N: 22
- University Women, American Association of**
See American Association of University Women *in this index*
- UniverSoul Circus**
Circus (The circus today) Ci: 564-565 *with picture*
- Univision** [network]
Television (The national networks) T: 114
- Unix** [operating system]
Computer (Operating system software) Ci: 916-917
- Unkei** [Japanese sculptor]
Sculpture (Japan) S: 239 *with picture*
- Unknown number**
Algebra A: 350
- Unknown soldier** U: 211 *with picture*
Arlington National Cemetery A: 717
- Unlimited presidency**
President (Types of presidential government) P: 756b
- Unmanned aerial vehicle**
Aircraft, Military A: 201, (Special-mission aircraft) A: 203
Helicopter (Recent developments) H: 174
- Unmyelinated axon** [anatomy]
Nervous system (The axon) N: 133-134
- UNRRA** See United Nations Relief and Rehabilitation Administration *in this index*
- UNRWA**
United Nations (Aid to refugees) U: 88
- Unsafe at Any Speed** [book by Nader]
Automobile (The growth of government regulation) A: 971
Consumerism (Growth of the movement) Ci: 1019
- Unsaturated compound** [chemistry]
Hydrogenation H: 470
- Unsaturated fat**
Fat (Structure) F: 52
- Unsaturated polyester** [plastic]
Plastics (table) P: 556; (Growth of the plastics industry) P: 560
Polyester P: 649
- Unser, Al, Jr.** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Unser, Al, Sr.** [American race driver] U: 212
Automobile race driver (table: Indianapolis 500 winners) A: 980
- Unser, Bobby** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Unsoeld, William F.** [American mountain climber]
Mount Everest M: 884
- Unstable equilibrium** [physics]
Gravity, Center of G: 333
- Unter den Linden** [street, Berlin]
Berlin (The city) B: 260

Unterseeboote [ship] See U-boat in this index

Untouchable [sociology]

Caste C: 279

Hinduism (Caste) H: 236-237

India (Social structure) I: 116

Untouchables [U.S. history]

Ness, Eliot N: 136

UNTSO [UN] See United Nations Truce

Supervision Organization in this index

Unvanquished, The [book by Faulkner]

Faulkner, William F: 55

Unveiling of the Statue of Liberty, The [painting by Moran]

Statue of Liberty picture on So: 877

Unwanted child infanticide [homicide]

Infanticide I: 264

Unwanted sound

Noise N: 451

Unwin, Mary [friend of]

Cowper, William Ci: 1113

Unwritten constitution [government]

United Kingdom (National government) U: 49

Up Country [region]

South Carolina So: 640; picture on So: 641

Up from Slavery [book by Washington]

American literature (Nonfiction writers) A: 420

Washington, Booker T. W: 88

Up quark [physics]

Quark Q: 7

Subatomic particle (Elementary particles)

So: 937; (Theoretical research) So: 938

Up the River [film]

Tracy, Spencer T: 361

Upnishads [religious writings] U: 212

India (The Aryans) I: 128

Sanskrit literature (The Vedic period) S: 112

Vedas V: 291

Upas [tree] U: 212

UPC See Universal Product Code in this index

Udike, John [American author] U: 213

American literature (Fiction and other prose)

A: 424

Udraft

Glider G: 228

Upfield, Arthur [Australian author]

Australia (Literature) A: 906

Upham, James B. [American author]

Pledge of Allegiance P: 572

Upham, William H. [American political leader]

Wisconsin (table) W: 365

Upholstery [furniture]

Needle picture on N: 118

UPI [organization] See United Press International in this index

Upland cotton

Cotton (New World cotton) Ci: 1088 with pictures

Upland cress [plant]

Cress Ci: 1127

Upland District [region]

Finland (Land regions) map on F: 113

Upland plover [bird] See Upland sandpiper in this index

Upland sandpiper [bird] U: 213 with picture

UPN [network] See United Paramount Network in this index

Upolu [island, Pacific]

Samoa S: 80 with map

Upper

Shoe (The shoe industry in the United States) S: 431

Upper Aulaqi [sheikdom]

South Arabia, Federation of So: 639

Upper Aulaqi [sultanate]

South Arabia, Federation of So: 639

Upper Canada [Canadian history]

Canada, History of (The United Empire Loyalists) C: 144 with map; (The struggle for responsible government) C: 145-147

Confederation of Canada (Early colonies of Canada) Ci: 933

Ontario (Upper Canada) O: 784; (Political unrest) O: 786

Quebec (The 1700's) Q: 36-37

Rebellions of 1837 (In Upper Canada) R: 174

Union, Act of U: 27

Upper Canada Gazette, or American Oracle

Ontario (Communication) O: 782

Upper Canada Village

Ontario (Places to visit) O: 774

Upper class [sociology]

City (The people) Ci: 578-580

Gay Nineties (The privileges of wealth) G: 72

with picture

Industrial Revolution (The middle and upper classes) I: 252

Social class So: 550

Upper Cliffs, The [book by Pereda]

Spanish literature (The 1800's) So: 762

Upper Creek Indians

Creek Indians Ci: 1126

Upper Delaware Scenic and Recreational River

National Park System (table: National parkways and other national parklands) N: 56

Upper-division university [education]

Community college (Importance to community) Ci: 899

Upper East Side [district]

New York City (Manhattan) N: 323-325

Upper Egypt

Egypt, Ancient (Beginnings) E: 142; map on E: 136

World, History of the (The Nile Valley) W: 424

Upper Fort Garry [Manitoba]

Winnipeg (History) W: 341-342

Upper house [government]

Parliament (The House of Lords) P: 173

Upper Lake [lake, Ireland]

Lakes of Killarney L: 49 with map

Upper Loop [road]

Yellowstone National Park (Touring Yellowstone) Y: 558 with map

Upper Palatinate [German history]

Palatinate P: 101

Upper Paleolithic Period

Prehistoric people (Physically modern human beings) P: 750

Upper Peninsula

Michigan (Land regions) M: 500 with map; picture on M: 488

Upper Peru

Bolivia (Colonial rule) B: 446

Upper stocks

Clothing (The Renaissance) Ci: 700

Upper Volta See Burkina Faso in this index

Upper West Side [district]

New York City (Manhattan) N: 323-326

Uppercut

Boxing picture on B: 528

Uppers [drugs] See Amphetamine in this index

Uppsala, University of

Sweden (Education) So: 1024-1025

Upright piano

Piano (Upright pianos) P: 447 with picture

Upright tuba [musical instrument]

Tuba T: 477

Upright vacuum cleaner

Vacuum cleaner V: 257 with picture

Uprising, The [painting by Daumier]

Painting (People) P: 31 with picture

Uprising of 2nd May, The [painting by Goya]

Goya, Francisco G: 295

UPS [company] See United Parcel Service, Inc. in this index

Upshur, Abel P. [American government official]

State, Department of (table) So: 860

Tyler, John (table) T: 534

Upside-down catfish

Fish (Bony fish) F: 147

Upsilon [letter]

V picture on V: 255

Upsilon Andromedae [star]

Planet (The first discoveries) P: 512

Upsilon particle [physics]

Hadron H: 5

Meson M: 421

Upslope fog

Fog F: 314 with diagram

Upturn

Business cycle B: 727

UPU See Postal Union, Universal in this index

Upward Bound

Universities and colleges (Recent developments) U: 211

Upwelling [ocean]

Fishing industry (Ocean fisheries) F: 181

Ocean (Currents) O: 658 with diagram

Pacific Ocean (Ocean life) P: 15

Ur [ancient city] U: 213

Abraham A: 16

City pictures on Ci: 579

Sumer (History) So: 972

Woolley, Sir Leonard W: 402

Ur-Nammu [king of Ur]

Law (Early developments in the East) L: 133

Uracil [biochemistry]

Heredity (How proteins are made) H: 206-208

RNA R: 357

Ural Mountains [Russia] U: 213

Russia (The Ural Mountains) R: 540 with map

Ural River [Russia-Kazakhstan] U: 214

Uralic languages

Japanese language J: 61

Language (Other language families) L: 65 with map

Urania [Greek mythology]

Aphrodite A: 565

Muses M: 937

Mythology picture on M: 980

Uraninite [mineral]

Pitchblende P: 498

Carnotite C: 244

Uranium [element] U: 214 with picture and map

Australia (Recent developments) A: 925

Curie, Marie Skłodowska Ci: 1194

Isotope (Separating isotopes) I: 476

Nuclear energy (Nuclear fission) N: 582; (How nuclear energy is produced) N: 584

Radiation (Naturally radioactive substances)

R: 77; (Discovery of radioactivity) R: 80; diagram on R: 79

Radiogeology R: 98

Radium (How radium forms and breaks down) R: 100

Saskatchewan (Economic changes) S: 147

Uranium dioxide [chemical]

Nuclear energy (Power reactors) N: 584-585; (Fuel preparation) N: 586

Uranium (Refining and processing uranium ore) U: 215

Uranium hexafluoride [chemical]

Uranium (Refining and processing uranium ore) U: 215

Uranium isotope

Uranium isotopes appear under their abbreviated forms, as in U-233

Uranus [Greek mythology] U: 217

Mythology (The Creation myth) M: 978

Titans T: 300

Uranus [planet] U: 217 with pictures

Astronomy (Finding new planets) A: 848

Herschel, Sir William H: 216

Planet P: 507 with pictures

Satellite (The middle-sized icy satellites)

S: 150a; (table: Satellites of the solar system) S: 150b; (History of satellite study) S: 150c-150d

Space exploration (Probes to Jupiter and beyond) So: 710

Voyager V: 451

Uranyl salts [chemistry]

Uranium (Properties of uranium) U: 214

Urartu [ancient kingdom]

Armenia (History) A: 718b

Urban, Georges [French chemist]

Lutetium L: 527

Terbium T: 172

Urban I, Saint [pope]

Pope (table) P: 666

Urban II [pope] U: 219

Crusades (How the Crusades began) Ci: 1159-1160

Sculpture (The 1000's) S: 249

Urban VI [pope] U: 219

Clement VII Ci: 662

Urban VIII [pope]

Pope (table) P: 666

Urban America, Inc. [U.S.]

Urban Coalition, National U: 219

Urban blight

Conservation (Urban conservation) Ci: 984

Urban center

City (The 100 largest urban centers in the world) Ci: 576

Urban Coalition [U.S.]

Urban Coalition, National U: 219

Urban Coalition, National [U.S.] U: 219

Urban design

City planning (Proposals of the plan) Ci: 599-601

Urban Development Action Grants

Urban renewal (History) U: 220

Urban geography

Conservation (Careers in conservation) Ci: 990

Geography (Human geography) G: 94

Urban homesteading

Urban renewal (History) U: 220

Urban League [organization] U: 219

Jacob, John Edward J: 19

Johnson, Charles Spurgeon J: 142

Jordan, Vernon Eulion, Jr. J: 166

Price, Hugh Bernard P: 775

Urban life

Air pollution A: 197 with pictures

Bus B: 714

United States (Urban life) **U**: 110 *with picture*
 United States, History of the (Urban unrest)
U: 192

Urban park
 Park (Kinds of parks) **P**: 168 *with picture*

Urban planning See City planning *in this index*

Urban redevelopment See Urban renewal *in this index*

Urban renewal **U**: 220
 Baltimore (Recent developments) **B**: 70
 City (Description) **Ci**: 589
 City planning **Ci**: 598; (Governmental authority)
Ci: 601
 Conservation (Urban conservation) **Ci**: 984
 Housing and Urban Development, Department
 of (Functions) **H**: 393
 Philadelphia (Urban renewal) **P**: 367

Urban Renewal Administration
 Urban renewal (History) **U**: 220

Urban sprawl
 Conservation (Urban conservation) **Ci**: 984

Urban terrorism
 Guerrilla warfare **G**: 419

Urbánek, Karel [Czech political leader]
 Czechoslovakia (The Velvet Revolution)
Ci: 1216

Urbanization [sociology]
 City (Population growth) **Ci**: 578
 Local government (Population changes) **L**: 407
 Population (Urban and rural population) **P**: 673

Urd [Norse mythology]
 Norns **N**: 457

Urdu [language]
 India (New Constitution) **I**: 132

Urea [physiology] **U**: 220
 Elimination **E**: 236
 Fertilizer (Inorganic fertilizers) **F**: 79

Uremia [disorder] **U**: 221
 Nephritis **N**: 128

Uremic poisoning See Uremia *in this index*

Ureter [anatomy]
 Bladder **B**: 395 *with diagram*
 Human body (The urinary system) **H**: 424; *dia-*
gram on H: 422
 Kidney (How the kidneys produce urine)
K: 311-312 *with diagram*

Urethra [anatomy]
 Bladder **B**: 395
 Gonorrhea **G**: 268
 Human body (The urinary system) **H**: 424-425;
diagram on H: 422
 Incontinence **I**: 106
 Kidney (How the kidneys produce urine)
K: 311-312 *with diagram*
 Prostate cancer **P**: 829
 Prostate gland **P**: 830
 Reproduction, Human (The human reproduc-
 tive system) **R**: 244-246 *with picture*
 Vagina **V**: 259

Urethral sphincter [anatomy]
 Bladder **B**: 395
 Incontinence **I**: 106

Urethritis [disease]
 Chlamydia **C**: 516

Urey, Harold Clayton [American chemist]
U: 221
 Deuterium (Discovery) **D**: 172
 Life (Modern theories) **L**: 278-279
 Moon (Describing lunar evolution) **M**: 794
 Szilard, Leo *picture on So*: 1077

Urga
 Ulan Bator **U**: 15

Urgel [diocese, Spain]
 Andorra (Government) **A**: 454; (History) **A**: 455

Urgel, Count of [Spanish nobleman]
 Andorra (History) **A**: 455

Uri [canton]
 Switzerland (The struggle for freedom)
So: 1059

Uriah [Biblical figure]
 Hittites (History) **H**: 269-270

Uriel [animal]
 Sheep (Wild sheep) **S**: 380-381

Uribe Velez, Alvaro [Colombian political leader]
 Colombia (Recent developments) **Ci**: 784

Uric acid [physiology] **U**: 221
 Urine **U**: 221
 Gout **G**: 281

"Uriel" [poem by Emerson]
 Emerson, Ralph Waldo (His poetry) **E**: 259

Urinary bladder See Bladder *in this index*

Urinary incontinence See Incontinence *in this index*

Urinary system [anatomy]
 Cancer (table) **C**: 170
 Human body (The urinary system) **H**: 424
 Circumcision **Ci**: 561

Urination [physiology]

Elimination **E**: 236
 Gonorrhea **G**: 268
 Incontinence **I**: 105
 Prostate cancer **P**: 829

Urine [physiology] **U**: 221
 Bladder **B**: 395
 Diabetes (Symptoms) **D**: 179
 Diuretic **D**: 240
 Drug testing **D**: 366
 Elimination **E**: 236
 Human body (The urinary system) **H**: 424
 Incontinence **I**: 105
 Kidney **K**: 311

Urique River
 Mexico (The Plateau of Mexico) **M**: 460-462

Uris, Leon [American author] **U**: 221

Uris Center
 Metropolitan Museum of Art (The Uris Center)
M: 444

URL [computing] See Uniform resource locator
in this index

Urology
 Medicine (table) **M**: 369

Uropeltidae [zoology]
 Snake (Shield-tailed snakes) **S**: 535

Uropygial gland
 Goose (The body of a goose) **G**: 270

Urquiza, Justo José de [Argentine political
 leader]
 Argentina (Forming a national government)
A: 657; (The Constitution of 1853) **A**: 657

Ursa Major [constellation]
 Big and Little Dippers (The Big Dipper) **B**: 296

Ursa Minor [constellation]
 Big and Little Dippers (The Little Dipper)
B: 296
 North Star **N**: 518

Ursinus [antipope]
 Pope (table) **P**: 666

Ursuline Convent [Quebec]
 Quebec (Churches) **Q**: 36

Ursulines [religious group]
 Religious life (Religious life in the 1500's and
 1600's) **R**: 227

Urticaria [disorder]
 Hives **H**: 270

Uruguay **U**: 222 *with pictures and maps*
 Latin America (Border disputes) **L**: 108
 World War II (table: The Allies) **W**: 471

Uruguay [poem by Gama]
 Latin-American literature (Colonial literature)
L: 111-112

Uruguay River [South America] **U**: 229

Uruguay Round [trade negotiations]
 General Agreement on Tariffs and Trade **G**: 83

Uruk [ancient city]
 Architecture (Mesopotamian architecture)
A: 611
 Sumer (History) **So**: 972-973

U.S. See United States *in this index*

U.S. Nationals
 Automobile racing (Drag racing) **A**: 978-979

U.S. News & World Report
 Magazine (table) **M**: 45

U.S. 101 [highway]
 California (Places to visit) **C**: 46

U.S. Open [tournament]
 Bowling (table) **B**: 524
 Golf (U.S. Open) **G**: 265
 Tennis (table: U.S. Open) **T**: 167

U.S. Soccer [organization]
 Soccer (Soccer competition) **S**: 548

U.S. Term Limits v. Thornton [U.S. history]
 Supreme Court of the United States (table)
So: 1002

U.S. 30 [highway]
 Lincoln Highway **L**: 327

U.S. Women's Open [tournament]
 Golf (U.S. Women's Open) **G**: 265

U.S.A. See United States *in this index*

U.S.A. [trilogy by Dos Passos]
 American literature (Realist fiction) **A**: 422
 Dos Passos, John **D**: 311

USA DanceSport [organization] See United
 States Amateur Ballroom Dancers
 Association *in this index*

USA Gymnastics [organization]
 Gymnastics (Organization) **G**: 450

USA Hockey [organization]
 Hockey (Amateur organization) **H**: 280;
 (Amateur development) **H**: 281-282

USA Table Tennis [organization]
 Table tennis **T**: 3

USA Wrestling [organization]
 Wrestling (Amateur wrestling) **W**: 504-505

USAC
 Automobile racing (Racing organizations)
A: 976

Usage [language]
 Dictionary (VWhat a dictionary tells you) **D**: 193
 Grammar (Grammar and usage) **G**: 304

USAID [agency] See Agency for International
 Development *in this index*

USC [political group] See United Somali
 Congress *in this index*

USDA See Agriculture, Department of *in this index*

Useful arts
 Art and the arts **A**: 745; *picture on A*: 747

USENET [computer network]
 Internet (History of the Internet) **I**: 350e

Usery, W. J., Jr. [American government official]
 Ford, Gerald Rudolph (table) **F**: 378
 Labor, Department of (table) **L**: 2

USES See Employment Service, United States
in this index

USFA
 Fire department (Recent developments)
F: 128-129

USGA
 Golf (Beginnings) **G**: 264

USHA See United States Housing Authority *in this index*

Ushant [book by Aiken]
 Aiken, Conrad Potter **A**: 165

Usher, John P. [American government official]
 Interior, Department of the (table) **I**: 325
 Lincoln, Abraham (table) **L**: 323

Usherwood, Edith Hilda [British chemist]
 Ingold, Sir Christopher **I**: 270

Ushuaia [Tierra del Fuego]
 Argentina (Patagonia) **A**: 654 *with picture*
 South America *picture on So*: 629
 Tierra del Fuego **T**: 283

USIA See United States Information Agency *in this index*

Usman dan Fodio [African religious leader]
 Nigeria (Early kingdoms) **N**: 417

USNSA [organization]
 Student government **So**: 932

USO See United Service Organizations *in this index*

USPS eBillPay [service]
 Postal Service, United States (Electronic ser-
 vices) **P**: 700

USS Arizona National Memorial [Hawaii]
 National Park System (table: National memori-
 als) **N**: 54

U.S.S. Constellation [aircraft carrier]
 Warship *picture on W*: 40

U.S.S. Elliott [ship]
 Destroyer *picture on D*: 162

Ussher, James [Irish clergyman]
 Creationism (Early theories about the Creation)
Ci: 1123

U.S.S.R. See Union of Soviet Socialist Republics
in this index

Ussuri River [Asia]
 Cold War (The great blocs split) **Ci**: 768

USTA [organization]
 Harness racing (Regulation) **H**: 64

Ustinov, Peter [British actor] **U**: 229
 Motion picture (Best performance by an actor
 in a supporting role: 1960, 1964) **M**: 863

Usumbura
 Bujumbura **B**: 686

Usury [law] **U**: 229
 Interest (Regulation of interest rates) **I**: 323;
 (History) **I**: 323

USWA See Steelworkers of America, United *in this index*

USX Corporation See United States Steel
 Corporation *in this index*

Utah [state] **U**: 230 *with pictures and maps*
 Westward movement in America (Utah)
W: 249
 Young, Brigham **Y**: 571
 See also the list of Related Articles in the
 Utah article

Utah, University of **U**: 250

Utah Jazz [team]
 Basketball (table) **B**: 150
 Malone, Karl **M**: 111

Utah Lake
 Utah (Rivers and lakes) **U**: 242

Utah War [1857-1858]
 Mormons (The Mormons in Utah) **M**: 809
 Utah (Territorial days and statehood) **U**: 246-
 248 *with picture*
 Young, Brigham (Settles in Utah) **Y**: 571

Utamaro [Japanese printmaker] **U**: 250
 Japanese print (The master print artists) **J**: 63
with picture

UTC See Universal Time Coordinated *in this index*

Ute Black Hawk War [1865-1867]

Indian wars (The Southern Plains) I: 194
Ute Indians [American Indians] U: 250 *with picture*
 Indian wars (The Southern Plains) I: 194
 Pueblo P: 870
Utensil
 Colonial life in America (Furnishings) Ci: 797
 Folk art (Household objects) F: 318 *with pictures*
 Pioneer life in America (Furniture and household utensils) P: 481
Uterine tube [anatomy] See Fallopian tube *in this index*
Uterus [anatomy] U: 251
 Baby (Before birth) B: 4 *with diagrams*
 Cancer (Classification by primary body site) C: 167-168; (table) C: 170
 Cervical cancer C: 364
 Childbirth C: 456
 Endometriosis E: 272
 Hormone replacement therapy H: 338
 Human body (The reproductive system) H: 425; *diagram on* H: 422
 Hysterectomy H: 482
 Menstruation M: 404 *with pictures*
 Pelvic inflammatory disease P: 232
 Placenta P: 505
 Pregnancy P: 734a; (Changes in the uterus) P: 734b
 Progesterone P: 811
 Reproduction, Human (The human reproductive system) R: 244-245 *with diagram*
 Sexuality (Biological factors) S: 337
 Tamoxifen T: 23
Uther Pendragon [legendary figure]
 Arthur, King A: 757
 Round Table (Origin) R: 490-491
Uthman [Muslim ruler]
 Muslims (Muhammad) M: 964-964a; (The early caliphs) M: 964a-964b
Uthman [Ottoman sultan] See Osman I *in this index*
Utica [New York] U: 251
Utica [ancient city] U: 251
Utilitarianism [book by Mill]
 Mill, John Stuart M: 552
Utilitarianism [philosophy] U: 251
 Bentham, Jeremy B: 254
 Ethics (Bentham and Mill) E: 367
 Hedonism H: 165
 Mill, Harriet Taylor M: 552
 Mill, James M: 552
 Mill, John Stuart M: 552
 Philosophy (Terms used in philosophy) P: 384; (Modern philosophy) P: 387-390
Utility [economics]
 Marshall, Alfred M: 228
 Value (Value and utility) V: 267
Utility, Public See Public utility *in this index*
Utility airports
 Airport (General aviation airports) A: 243
Utility Average [investment]
 Dow Jones averages D: 315
Utility grade
 Beef (Grades of beef) B: 209
Utility meter
 Electric meter (Utility meters) E: 177 *with pictures*
Utility patent [law]
 Patent P: 194
Utility trailer [vehicle]
 Trailer (Utility trailer) T: 369
Utopia [book by More]
 More, Saint Thomas (Character and writings) M: 802
 Renaissance (Christian humanism) R: 237-238
 Science fiction (Forerunners of science fiction) S: 205
 Utopia U: 252
Utopia [philosophy] U: 252
 Owen, Robert (New Harmony) O: 882
 Science fiction (The early 1900's) S: 205
Utopia [ship]
 Shipwreck (table: Major shipwrecks) S: 428
Utopian community
 Family (Varieties of families) F: 20-21
Utrecht [The Netherlands] U: 252
Utrecht, Peace of [1713] U: 252
 Acadia A: 21
 French and Indian wars (Queen Anne's War) F: 512
 Gibraltar (History) G: 186
 New Brunswick (French rivals) N: 196
 Newfoundland and Labrador (War with France) N: 375
 Nova Scotia (The struggle in Acadia) N: 568
 Succession wars (The War of the Spanish Succession) So: 950

Utrecht, Union of See Union of Utrecht *in this index*
Utricle [anatomy]
 Ear (The inner ear) E: 8 *with diagram*
Utrillo, Maurice [French painter] U: 252 *with picture*
Uttar Pradesh [state, India]
 India (Religious and ethnic unrest) I: 134
Uttaranchal [state, India]
 India (Recent developments) I: 134
Utter, George H. [American political leader]
 Rhode Island (table) R: 311
Utzon, Jern [Danish architect]
 Denmark (Arts) D: 136
UUCP [computer network]
 Internet (History of the Internet) I: 350e
UUP [organization] See Ulster Unionist Party *in this index*
Uvarovite [gem]
 Garnet G: 45
Uveal tract [anatomy]
 Eye (The uveal tract) E: 460; (Diseases of the uveal tract) E: 467
Uveitis [disease]
 Eye (Diseases of the uveal tract) E: 467
Uvula [anatomy]
 Palate P: 101 *with diagram*
Uygurs [people]
 Asia (The people) A: 791
 China (Nationalities) C: 481 *with map*
 Turkestan (Chinese Turkestan) T: 501
Uzbekistan [country, Asia] U: 253 *with picture and map*
 Flag picture on F: 205
Uzbeks [people]
 Uzbekistan (People) U: 253; (History) U: 254
 Kyrgyzstan (History) K: 400
 Tajikistan (People) T: 18a; (History) T: 18b
 Union of Soviet Socialist Republics (People) U: 31
Uzhgorod [Ukraine]
 Ruthenia R: 568

V

V [letter] V: 255 *with pictures*
V [symbol]
 Vanadium V: 269
 Volt V: 446
V [book by Pynchon]
 Pynchon, Thomas P: 915
V-1 [weapon]
 Guided missile (The first guided missiles) G: 427
 World War II (The air war) W: 481
V-2 [weapon]
 Exploration (Space exploration) E: 452
 Guided missile (The first guided missiles) G: 427; *picture on* G: 428
 Rocket (Rockets of the early 1900's) R: 390
 Space exploration (The first space rockets) So: 706 *with picture*
 World War II (The air war) W: 481
V-8 [engine]
 Ford, Henry (Industrial accomplishments) F: 379-380
V-bottom hull
 Motorboat racing (Hull designs) M: 876 *with picture*
V. C. Sumner Nuclear Power Plant [South Carolina]
 South Carolina *picture on* So: 657
V-chip [electronics]
 Television (Regulating U.S. television) T: 118
V-E Day [World War II] V: 256
V for Victory
 Churchill, Sir Winston Leonard Spencer (The Battle of Britain) C: 548
V-J Day [World War II] V: 256
 Eisenstaedt, Alfred *picture on* E: 155
V-Letter and Other Poems [book by Shapiro]
 Shapiro, Karl Jay S: 373
V-shaped comb
 Chicken (Kinds of chickens) C: 441 *with picture*
V-type engine
 Automobile (The engine) A: 949
 Gasoline engine *picture on* G: 64
VA See Veterans Affairs, Department of *in this index*
Vaal River [South Africa]
 South Africa (Rivers) So: 615 *with map*
 Transvaal T: 401
Vaalsar Berg [mountain]
 Netherlands (The Southern Uplands) N: 145
Vaca, Álvarez Núñez Cabeza de See Cabeza de

Vaca, Álvarez Núñez *in this index*
Vacation Bible school
 Religious education (Private education) R: 225
Vaccine [medicine]
 Bacteria (Protection against harmful bacteria) B: 20
 Bacteriology (Controlling bacterial diseases) B: 22
 BCG B: 178
 Cold, Common (Prevention) Ci: 761
 Drug (Vaccines) D: 351
 Immune system (Active immunity) I: 88b-88c; (Early discoveries) I: 88d
 Immunization (Active immunization) I: 89
 Influenza (Prevention and treatment) I: 268b
 Jenner, Edward (Jenner's work) J: 91
 Pasteur, Louis (His work in medicine) P: 193
 Pet (Preventing illness) P: 322
 Poliomyelitis (Prevention of poliomyelitis) P: 626
 Salk, Jonas Edward S: 68 *with picture*
 Smallpox S: 513
 Typhoid fever (Treatment and prevention) T: 539
 Virus (Virus diseases in human beings) V: 426-427; (Development of vaccines and other drugs) V: 428
Váci Útca [district]
 Budapest (Economy) B: 666
 Hungary *picture on* H: 441
Vacuola [biology]
 Ameba A: 406
 Cell *diagram on* C: 329
 Paramecium P: 152
 Sap (Cell sap) S: 121
Vacuum V: 256 *with pictures*
 Falling bodies, Law of F: 17 *with diagram*
 Vacuum bottle V: 257
 Vacuum cleaner V: 257
Vacuum aspiration [surgery]
 Abortion (Abortion methods) A: 14
Vacuum bottle [container] V: 256 *with diagram*
 Insulation (Insulation to control heat flow) I: 306
 Vacuum V: 256
Vacuum braille former [machine]
 Braille B: 550
Vacuum cleaner V: 257 *with pictures*
Vacuum gauge [instrument]
 Gauge (Vacuum gauges) G: 69
Vacuum packing
 Meat (Kinds of meat) M: 347
Vacuum pan process [industrial process]
 Rillieux, Norbert R: 341
Vacuum printing frame
 Photoengraving and photolithography (Transferring the image) P: 406
Vacuum pump
 Pump (Jet pumps) P: 899
Vacuum trap [machine]
 Crime laboratory (Collecting the evidence) Ci: 1140-1141
Vacuum tube V: 258 *with pictures*
 Communication (The development of electronics) Ci: 883-884
 De Forest, Lee D: 89
 Electricity (The electronic age) E: 198 *with picture*
 Electronics (Electron tubes) E: 210; (The development of electronics) E: 215 *with picture*
 Hearing aid (History) H: 130
 Invention (The early and middle 1900's) I: 363
Vaduz [city, Liechtenstein] V: 259
 Liechtenstein L: 272
Vaduz [former region]
 Liechtenstein (History) L: 273
Vagabond
 Vagrancy V: 260
Vagabondia series [poems by Carman and Hovey]
 Carman, Bliss C: 240
Vágar [island]
 Faroe Islands F: 47
Vagina [anatomy] V: 259
 Baby (Birth) B: 6
 Childbirth C: 456
 Human body (The reproductive system) H: 425; *diagram on* H: 422
 Menstruation M: 404
 Reproduction, Human (The human reproductive system) R: 244-245 *with diagram*; (The stages of labor) R: 249
 Sexuality (Biological factors) S: 337
 Vaginitis V: 259
Vaginal sponge
 Birth control (Methods of birth control) B: 378-379
Vaginitis [disorder] V: 259
Vagrancy [law] V: 260
Vail, Alfred [American inventor]

- Morse, Samuel Finley Breese (Morse as inventor) **M**: 818-819
 Telegraph (The Morse telegraph) **T**: 90
- Vail, Theodore N.** [American businessman]
 Junior Achievement **J**: 196
- Vailima** [estate]
 Stevenson, Robert Louis (The South Seas)
 So: 897-898 *with picture*
- Vair** [fur]
 Heraldry *picture on* **H**: 195
- Vaisheska** [philosophy]
 Hinduism (The six schools of philosophy)
H: 236
- Vaisya** [sociology]
 Caste **C**: 279
 Hinduism (Caste) **H**: 236-237
- Vajiravudh** [king of Thailand]
 Thailand (Modernization) **T**: 227
- Vajont Dam** [Italy]
 Dam (table) **D**: 18
- Vajpayee, Atal Bihari** [Indian political leader]
V: 260
- Valcin, Gerard** [Haitian painter]
 Latin America *picture on* **L**: 103
- Valdemar II** [king of Denmark]
 Flag **F**: 194
- Valdés, Alfonso de** [Spanish author]
 Spanish literature (The 1500's) **So**: 758
- Valdés, Juan de** [Spanish author]
 Spanish literature (The 1500's) **So**: 758
- Valdés, Juan Meléndez** [Spanish poet]
 Spanish literature (The 1800's) **So**: 761
- Valdivia, Pedro de** [Spanish explorer]
 Chile (Spanish conquest) **C**: 468
- Vale of Kashmir** [region]
 Kashmir **K**: 248
- "Valediction: Forbidding Mourning, A"** [poem
 by Donne]
 Donne, John (His poetry) **D**: 308
- Valedictorian** [education]
 Graduation **G**: 297
- Valence** [chemistry] **V**: 260
 Atom (Chemical behavior) **A**: 872
 Chemistry (Development of organic chemistry)
C: 404
 Faraday, Michael **F**: 28
- Valencia** [Spain] **V**: 260
- Valencia orange** [tree]
 Orange (Sweet oranges) **O**: 815
- Valenciennes lace** [fabric]
 Lace *picture on* **L**: 21
- Valens** [Roman emperor]
 Rome, Ancient (table) **R**: 447
- Valens, Ritchie** [American musician]
 Rock music (Artistic decline) **R**: 378
- Valentine** [literary figure]
 Shakespeare, William (*The Two Gentlemen of Verona*) **S**: 357
- Valentine** [pope]
 Pope (table) **P**: 666
- Valentine** [book by Sand]
 Sand, George **S**: 106
- Valentine, Saint** [Christian martyr] **V**: 260
 Valentine's Day (Beginnings) **V**: 261
- Valentine Museum** [Richmond]
 Virginia (Libraries and museums) **V**: 402-403
- Valentine's Day** [custom] **V**: 261 *with pictures*
- Valentine's Day Massacre** [1929]
 Capone, Al **C**: 197
- Valentinian I** [Roman emperor] **V**: 264
- Valentinian II** [Roman emperor]
 Rome, Ancient (table) **R**: 447
 Theodosius I **T**: 252
- Valentinian III** [Roman emperor] **V**: 264
 Attila **A**: 879
- Valentino, Rudolph** [American actor] **V**: 264
with picture
 Hairdressing (The 1900's) **H**: 12-13
- Valenzuela, Luisa** [Argentine author]
 Novel (The novel today) **N**: 575
- Valera, Eamon de** See De Valera, Eamon *in this index*
- Valera, Juan** [Spanish author]
 Spanish literature (The 1800's) **So**: 761-762
- Valerian** [Roman emperor]
 Gallienus **G**: 15
 Rome, Ancient (table) **R**: 447
- Valerian** [botany] **V**: 264
- Valerius Babrius** [Greek author]
 Aesop's fables **A**: 90
- Valéry, Paul** [French poet] **V**: 265
 French literature (The four masters) **F**: 522
- Valery, Violetta** [opera character]
 Opera (*Traviata, La*) **O**: 807-808 *with picture*
- Valet**
 Knights and knighthood (The squire) **K**: 348
- Valet service**
 Hotel **H**: 377
- Valhalla** [Norse mythology] **V**: 265
 Mythology (Mythical places) **M**: 974
 Odin **O**: 674
 Vikings (Religion) **V**: 379-380
- Validity**
 Deductive method **D**: 81
 Logic **L**: 425
- Valiente, Doreen** [British author]
 Witchcraft (Witchcraft in modern times)
W: 373
- Valira River**
 Andorra (Land) **A**: 455
- VALIS** [book by Dick]
 Dick, Philip K. **D**: 186
- Valium** [medication]
 Benzodiazepine **B**: 256
 Drug abuse (table: Some commonly abused drugs) **D**: 363
 Tranquilizer **T**: 370
- Valjean, Jean** [literary figure]
 Hugo, Victor Marie (His works) **H**: 410
- Valkyrie** [opera] See Walküre, Die *in this index*
- Vallandigham, Clement Laird** [American political leader] **V**: 265
 Ohio (The Civil War) **O**: 702
- Valle, José Cecilio Del** [Central American patriot] **V**: 265
- Valle del General** [region]
 Costa Rica (The Central Highlands) **Ci**: 1082
- Valle-Inclán, Ramón del** [Spanish author]
 Spanish literature (The Generation of 1898)
So: 762
- Valle y Caviedes, Juan del** [Peruvian author]
 Latin-American literature (Colonial literature)
L: 111-112
- Vallejo, Antonio Buero** [Spanish dramatist]
 Spanish literature (Spanish literature today)
So: 763
- Vallejo, César** [Peruvian author]
 Latin-American literature (The early 1900's)
L: 113
- Valles Marineris** [natural feature]
 Mars (Canyons) **M**: 226 *with picture*
- Valletta** [Malta] **V**: 265
 Malta **M**: 113 *with picture*
- Vallette, Jean de la** [Maltese religious leader]
 Malta (History) **M**: 113-114
- Valley** [natural feature] **V**: 265
 Mars (Channels, valleys, and gullies) **M**: 226
with picture
 Ocean (The land at the bottom of the sea)
O: 659-660 *with map*
- Valley Forge** [Pennsylvania] **V**: 266 *with picture*
 Revolutionary War in America (Valley Forge)
R: 283 *with picture*
 Washington, George (Shortage of supplies)
W: 99 *with picture*
- Valley Forge National Historical Park**
 [Pennsylvania]
 National Park System (table: National historical parks) **N**: 57
 Valley Forge (Valley Forge National Historical Park) **V**: 266
- Valley glacier**
 Glacier (Kinds of glaciers) **G**: 203 *with picture*
- Valley Island**
 Hawaii (Maui) **H**: 100
- Valley network** [natural feature]
 Mars (Channels, valleys, and gullies) **M**: 226
- Valley of Fire State Park**
 Nevada (Places to visit) **N**: 164 *with picture*
- Valley of Ten Thousand Smokes**
 Alaska (Land regions) **A**: 292-294
 Katmai National Park **K**: 249
- Valley of the Fallen** [mausoleum]
 Spain (Architecture) **So**: 739
- Valley of the Kings** [region, Egypt] **V**: 266
 Egypt, Ancient (Learning about ancient Egypt)
E: 144
 Thebes **T**: 251
- Valley of the Tombs of the Kings** See Valley of the Kings *in this index*
- Valley of the Vine** See Barossa Valley *in this index*
- Valley of Virginia**
 Virginia (Land regions) **V**: 410
- Valley Pike** [U.S. history]
 Shenandoah Valley **S**: 395
- Valmiki** [Indian poet]
 Ramayana **R**: 133
- Valmy, Battle of** [1792]
 French Revolution (The Legislative Assembly)
F: 526
- Valois** [French history] **V**: 266
 France (A period of wars) **F**: 473
- Valparaíso** [Chile] **V**: 267
- Valproic acid** [drug]
 Anticonvulsant **A**: 553
- Valse, La** [music by Ravel]
 Ravel, Maurice **R**: 151
- Value** [color]
 Color (The Munsell Color System) **Ci**: 824 *with diagrams*
- Value** [economics] **V**: 267
 Money (The value of money) **M**: 714
- Value added by manufacture** [economics]
V: 267
 Input-output analysis (Input-output tables)
I: 276
- Value-added reseller** [sales method]
 Computer (Sales) **Ci**: 924a
- Value-added tax** **V**: 267
 Sales tax **S**: 66
 Taxation (Taxes on transactions) **T**: 53
- Values** [ethics]
 Moral education **M**: 799
 Careers (Values) **C**: 215
 Debate (Propositions) **D**: 63
 Moral education (Methods of moral education)
M: 799; (Value analysis) **M**: 800
- Valve** [anatomy]
 Heart **H**: 132; (Chambers, valves, and inner lining) **H**: 133 *with pictures*; (The work of the heart) **H**: 135 *with diagram*; (Blockage of blood flow) **H**: 141; (Valve disease) **H**: 141
- Valve** [mechanics] **V**: 267 *with diagrams*
 Gasoline engine (Valves) **G**: 64 *with pictures*
- Valve** [zoology]
 Clam (The body of a clam) **Ci**: 637
 Mussel **M**: 966
 Oyster (Shell) **O**: 890
- Valve-in-head engine** [mechanics]
 Buick, David Dunbar **B**: 681
- Valve seat**
 Plumbing (How faucets work) **P**: 579 *with diagram*
- Valve trombone** [musical instrument]
 Trombone **T**: 449
- Vampire** [superstition] **V**: 268
 Dracula **D**: 317
 Transylvania **T**: 402
- Vampire bat** [animal] **V**: 268 *with picture*
 Bat (Some kinds of bats) **B**: 161
- Van** [vehicle]
 Recreational vehicle (Van conversions) **R**: 184
 Truck **T**: 456; *pictures on* **T**: 459
- Van ...**
Names beginning with Van are alphabetized as single words or under their key word. Van Eyck, Jan appears after Vandal, and Beethoven, Ludwig van appears after Beet yellows
- Van conversion**
 Recreational vehicle (Van conversions) **R**: 184, *picture on* **R**: 183
- Vanadinite** [mineral]
 Vanadium **V**: 268
- Vanadium** [element] **V**: 268
- Vanadium oxytrichloride** [chemical]
 Vanadium **V**: 268
- Vanadium pentoxide** [chemical]
 Vanadium **V**: 268
- Van Alen, James I.** [American lawyer]
 Van Buren, Martin (Childhood and education)
V: 270-271
- Van Allen, James Alfred** [American physicist]
V: 269
- Van Allen belts** [physics] **V**: 269
 Magnetic storm **M**: 57
- Van Allsburg, Chris** [American author] **V**: 269
 Literature for children *picture on* **L**: 370
 Regina Medal (table: 1993) **R**: 206
- Vanbrugh, Sir John** [English author] **V**: 269
 Architecture (Baroque architecture) **A**: 622
- Van Buren, Abigail** [American journalist] **V**: 269
with portrait
 Landers, Ann **L**: 57
- Van Buren, Abraham** [father of]
 Van Buren, Martin (Childhood and education)
V: 270
- Van Buren, Abraham** [son of]
 Van Buren, Martin (Van Buren's family) **V**: 271
- Van Buren, Angelica Singleton** [daughter-in-law of]
 Van Buren, Martin (Life in the White House)
V: 272 *with portrait*
 White House hostesses **W**: 291
- Van Buren, Hannah Hoes** [wife of]
 Van Buren, Martin (Van Buren's family) **V**: 271
- Van Buren, John** [American political leader]
 Van Buren, Martin (Van Buren's family) **V**: 271
- Van Buren, Maria Hoes** [mother of]
 Van Buren, Martin (Childhood and education)
V: 270
- Van Buren, Martin** [U.S. President] **V**: 270 *with pictures*

- Free Soil Party **F**: 499
 Harrison, William Henry (Elections of 1836 and 1840) **H**: 75
 Jackson, Andrew (The spoils system) **J**: 10
 Kitchen Cabinet **K**: 337
 Polk, James Knox (Election of 1844) **P**: 642
 United States, History of the (Politics after Jackson) **U**: 170-171
 Vice President of the United States (table) **V**: 351
- Vance, Cyrus Roberts** [American government official] **V**: 273
- Vance, Dazzy** [American baseball player]
 Baseball (table: Hall of Fame) **B**: 135
- Vance, Joseph** [American political leader]
 Ohio (table) **O**: 699
- Vance, Philo** [literary figure]
 Detective story (The pattern) **D**: 162-163
- Vance, Zebulon Baird** [American political leader] **V**: 273
 North Carolina (table) **N**: 490
- Vancoumycin** [medication]
 Antibiotic (Antibacterial antibiotics) **A**: 550;
 (table) **A**: 551
- Vancouver** [British Columbia] **V**: 274 *with pictures and map*
 British Columbia (Population) **B**: 616; (Visitor's guide) **B**: 620 *with pictures*; (table: Average monthly weather) **B**: 624, *picture on B*: 613
 Canada *picture on C*: 98
 Park *picture on P*: 168
- Vancouver** [Washington] **V**: 277
- Vancouver, George** [British explorer] **V**: 277 *with portrait*
 Puget, Peter **P**: 886
 Washington (Discovery and exploration) **W**: 66; *picture on W*: 67
- Vancouver Canucks**
 Hockey (table: National Hockey League) **H**: 281
 Vancouver (Sports) **V**: 277
- Vancouver Foundation**
 Foundations (Canadian foundations) **F**: 431;
 (table) **F**: 430
- Vancouver Island** [island, British Columbia] **V**: 278 *with map*
 British Columbia (Land regions) **B**: 622
- Vancouver Museum**
 Vancouver (Museums) **V**: 276
- Vancouver Public Aquarium**
 Vancouver (Parks) **V**: 276
- Vandalia** [colony]
 West Virginia (White settlement) **W**: 226
- Vandalia** [Illinois]
 Illinois (Early statehood) **I**: 74
 National Road **N**: 60
- Vandalia State House**
 Illinois (Places to visit) **I**: 62
- Vandalism** [crime] **V**: 278
- Vandals** [people] **V**: 278
- Van de Graaff, Robert Jemison** [American physicist] **V**: 279
 Van de Graaff generator **V**: 279
- Van de Graaff generator** [machine] **V**: 279
 Particle accelerator (How accelerators work) **P**: 184
- Vandenberg, Hoyt Sanford** [American military leader]
 Vandenberg Air Force Base **V**: 279
- Vandenberg Air Force Base** [California] **V**: 279
- Vandenberg Center**
 Grand Rapids **G**: 309
- Vander Zalm, William N.** [Canadian political leader]
 British Columbia (table) **B**: 627
 Campbell, Kim (Provincial legislator) **C**: 90c
- Vanderbilt, Cornelius** [American businessman] **V**: 279
- Vanderbilt, Cornelius, II** [American businessman]
 Rhode Island (Places to visit) **R**: 304; *picture on R*: 296
- Vanderbilt, William Harry** [American political leader]
 Rhode Island (table) **R**: 311
- Vanderbilt Cup races**
 Automobile racing (Growth of organized automobile racing) **A**: 979-980
- Vanderbilt Mansion National Historic Site**
 [Hyde Park, New York]
 National Park System (table: National historic sites) **N**: 52-54
- Vanderbilt University** **V**: 279
 Tennessee *picture on T*: 135
 Vanderbilt, Cornelius **V**: 279
- Van der Donck, Adriaen** [Dutch colonist]
 Yonkers **Y**: 568
- Van der Goes, Hugo** [Flemish painter] **V**: 280 *with picture*
- Vanderhoof, John D.** [American political leader]
 Colorado (table) **Ci**: 844
- Vander Horst, Arnoldus** [American political leader]
 South Carolina (table) **So**: 658
- Vanderlyn, John** [American painter]
 Fulton, Robert *picture on F*: 555
- Van der Meer, Simon** [Dutch physicist]
 Nobel Prizes (Physics: 1984) **N**: 441
- Vandermeersch, Bernard** [French anthropologist]
 Prehistoric people (table) **P**: 752
- Van der Noot, Henri** [Belgian lawyer]
 Belgium (The Brabant Revolution) **B**: 233
- Van der Waals forces** [physics]
 Materials (Physical bonds) **M**: 301
 Molecule (Molecules and matter) **M**: 693
- Van der Weyden, Rogier** [Flemish painter] **V**: 280 *with picture*
 Painting (The northern Renaissance) **P**: 57 *with picture*
- Van Devanter, Willis** [American jurist]
 Supreme Court of the United States (table) **So**: 1000
- Van Diemen's Land** [Tasmanian history]
 Australia (European discovery) **A**: 922
 Tasmania (History) **T**: 49
- Van Dine, S. S.** [American author] **V**: 280
- Vandiver, Ernest** [American political leader]
 Georgia (table) **G**: 130
- Vandiver, William Duncan** [American political leader]
 Missouri **M**: 651
- Van Doren, Carl** [American author] **V**: 280
- Van Doren, Mark** [American author] **V**: 281
- Van Dorn, Earl** [Confederate general]
 Civil War (The war in the West—1862-1864) **Ci**: 629
- Van Drebbel, Cornelius** [Dutch scientist]
 Submarine (Early submarines) **So**: 942
- Van Druten, John William** [British dramatist] **V**: 281
- Van Duyn, Mona** [American poet]
 Poet laureate (table: Poets laureate of the United States) **P**: 590
- Van Dyck, Sir Anthony** [Flemish painter] **V**: 281 *with picture*
 Clothing *pictures on Ci*: 700, **Ci**: 701
 Painting (Baroque) **P**: 58-61 *with picture*
- Vandyke**
 Beard **B**: 187
- Van Dyke, Nicholas** [American political leader]
 Delaware (table) **D**: 109
- Vane** [feather]
 Archery (Arrows) **A**: 602 *with diagram*
 Feather (Kinds and parts of feathers) **F**: 59 *with diagram*
- Vane** [mechanical device]
 Transmission (A torque converter) **T**: 377
- Vane, John Robert** [British chemist]
 Nobel Prizes (Physiology or medicine: 1982) **N**: 445
- Vänern, Lake**
 Sweden (The Swedish Lowland) **So**: 1028 *with map*
- Vanessa** [opera by Barber]
 Barber, Samuel **B**: 106
- Van Eyck, Hubert** [brother of]
 Van Eyck, Jan **V**: 282
- Van Eyck, Jan** [Flemish painter] **V**: 282 *with picture*
 Jerome, Saint *picture on J*: 93
 Painting (Religious subjects) **P**: 32; (The northern Renaissance) **P**: 57
 Renaissance *picture on R*: 238
- Van Fleet, James Alward** [American general]
 Korean War (The "Battle for the Hills") **K**: 382
- Van Fleet, Jo** [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1955) **M**: 863
- Vanga** [ancient kingdom]
 Bangladesh (Early history) **B**: 85
- Van Gennep, Arnold** [French anthropologist]
 Rite of passage **R**: 350
- Van Gogh, Vincent** [Dutch painter] **V**: 282 *with portrait*
 Derain, André **D**: 152
 Expressionism **E**: 455
 Letter writing *picture on L*: 209
 Painting (Texture) **P**: 35 *with picture*; (Postimpressionism) **P**: 75
 Vlamincq, Maurice de **V**: 433
- Vanguard 1** [spacecraft]
 Satellite, Artificial (History) **S**: 150g
 Space exploration (The space race begins) **So**: 707-708
- Van Houtt's spiraea** [shrub]
 Spiraea **So**: 795
- Vanier, Georges-Philias** [Canadian statesman] **V**: 283
 Diefenbaker, John George **D**: 196
- Vanier Cup**
 Football (Canadian football) **F**: 364-365
- Vanilla** [plant] **V**: 283
- Vanilla extract**
 Vanilla **V**: 283
- Vanir** [Norse mythology]
 Frey **F**: 531
 Freyja **F**: 531
- Vanishing point** [art]
 Perspective **P**: 304
- Vanity Fair** [book by Thackeray]
 English literature (Early Victorian literature) **E**: 321
 Thackeray, William Makepeace (Later career) **T**: 220
- Vanity Fair** [magazine]
 Magazine (History) **M**: 43-45
- Vanity of Human Wishes, The** [poem by Johnson]
 Johnson, Samuel (Early years) **J**: 153
- Van Lang** [kingdom]
 Vietnam (History) **V**: 369
- Van Lawick-Goodall, Jane** [British zoologist]
 See Goodall, Jane *in this index*
- Van Leeuwenhoek, Anton** See Leeuwenhoek, Anton *van in this index*
- Van Leyden, Lucas** [Dutch artist] **V**: 283 *with picture*
- Van Loon, Hendrik Willem** [American author]
 Newbery Medal (table) **N**: 359
- Van Ness, Cornelius** [American political leader]
 Vermont (table) **V**: 333
- Vanoise National Park** [France]
 National park (table) **N**: 42f
- Van Rensselaer, Kiliaen** [Dutch businessman] **V**: 284
 Antirenters **A**: 558
 New York (Exploration and settlement) **N**: 314
- Van Rijn, Rembrandt Harmenszoon** See Rembrandt *in this index*
- Van Roosevelt, Klaes Martensen** [American colonist]
 Roosevelt, Franklin Delano (Boyhood) **R**: 453
 Roosevelt, Theodore (Boyhood and education) **R**: 464-465
- Van Sant, Samuel R.** [American political leader]
 Minnesota (table) **M**: 602
- Van't Hoff, Jacobus Henricus** [Dutch chemist]
 Chemistry (Development of physical chemistry) **C**: 404
 Nobel Prizes (Chemistry: 1901) **N**: 442
- Van Trump, P.B.** [American mountain climber]
 Mount Rainier **M**: 887
- Vanua Levu** [island]
 Fiji **F**: 97 *with map*
- Vanuatu** **V**: 284 *with picture and map*
 Flag *picture on F*: 205
- Van Vleck, John Hasbrouck** [American physicist]
 Nobel Prizes (Physics: 1977) **N**: 441
- Van Wagoner, Murray D.** [American political leader]
 Michigan (table) **M**: 507
- Van Winkle, Rip** See Rip Van Winkle *in this index*
- Van Zandt, Charles C.** [American political leader]
 Rhode Island (table) **R**: 311
- Vanzetti, Bartolomeo** [American public figure]
 Sacco-Vanzetti case **S**: 4
- Vapor** [physics] **V**: 285
 Boiling point **B**: 439
 Combustion **Ci**: 867
 Evaporation **E**: 422
 Steam **So**: 879
 Water (The properties of water) **W**: 129
- Vapor barrier**
 Insulation (In buildings) **I**: 306
- Vapor capacity** [meteorology]
 Air (Moisture in the air) **A**: 167
- Vapor heating**
 Heating (Heat pumps) **H**: 159
- Vapor lock** **V**: 285
 Gasoline (Gasoline blends and additives) **G**: 61
- Vapor pressure**
 Boiling point **B**: 439
 Evaporation (How evaporation occurs) **E**: 422-423
- Vapor trail**
 Contrail **Ci**: 1023
- Vaporization** [physics]
 Distillation **D**: 238
 Evaporation **E**: 422

- Fallout (How fallout is produced) F: 18
 Vapor V: 285
 Vapor lock V: 285
- Vaquero**
 Cowboy (A cowboy's gear) Ci: 1108
- Vaquero of the Brush Country, A** [book by Dobie]
 Dobie, J. Frank D: 259
- Vara**
 Bullfighting (The order of the bullfight) B: 695-696
- Varanasi** [city, India] V: 285
 India *picture on* I: 124
 Religion *picture on* R: 217
- Varangian Russes** [people]
 Russia (Early days) R: 547
- Vardaman, James Kimble** [American political leader]
 Mississippi (table) M: 640
- Varenes, Pierre Gaultier de** See La Vérendrye, Sieur de *in this index*
- Varenyky** [food]
 Ukraine (Food and drink) U: 8
- Varèse, Edgard** [French-American composer] V: 285
- Vargas, Diego de** [Spanish military leader]
 Indian wars (The Pueblo revolt) I: 191-192
- Vargas, Getúlio Dornellas** [Brazilian political leader]
 Brazil (Birth of the republic) B: 585; (The Vargas dictatorship) B: 585; (Return to constitutional government) B: 585
 São Paulo (History) S: 119
- Vargas Llosa, Mario** [Peruvian novelist] V: 285
 Latin-American literature (Recent developments) L: 113
 Peru (The arts) P: 310-311
- Vargueno**
 Furniture (Spain) F: 573 *with picture*
- Variable**
 Algebra (Sets and variables) A: 350
- Variable annuity**
 Insurance (Annuities) I: 311
- Variable-area sound recording**
 Motion picture (The sound track) M: 858-859
- Variable life insurance**
 Insurance (Main kinds of life insurance) I: 309-310
- Variable-rate mortgage** [economics]
 Mortgage M: 821
- Variable resistor** [electrical component]
 Electricity (Controlling electric current) E: 195
- Variable star** [astronomy]
 Andromeda Galaxy A: 457
 Hogg, Helen Sawyer H: 288
 Payne-Gaposchkin, Cecilia Helena P: 204
 Shapley, Harlow S: 373
- Variable-sweep wing**
 Aircraft, Military (Fighters) A: 203
- Variable transformer** [electricity]
 Transformer T: 372
- Variable velocity** [physics]
 Velocity (Types of velocity) V: 297
- Variance** [statistics]
 Statistics (Probability) So: 868-869
- Variation** [compass]
 Compass (Variation) Ci: 902b
- Variation** [genetics]
 Races, Human (Alternatives to racial classification) R: 55
- Variation** [music] V: 286
 Classical music (Variation) Ci: 644
- Varicella** [disease] See Chickenpox *in this index*
- Varicella zoster** [virus]
 Chickenpox C: 446
 Shingles S: 401
- Varicose vein** [disorder] V: 286
 Vein V: 295
- Varied widow**
 Spider So: 782
- Varietal**
 Wine (Where wine comes from) W: 336-337
- Variety** [biology]
 Classification, Scientific (Groups in classification) Ci: 654-656
 Races, Human R: 53
- Variety Lights** [film]
 Fellini, Federico F: 68
- Variety meats** [food]
 Meat (Kinds of meat) M: 347
 Meat packing (By-products) M: 351
- Variety show** [theater]
 Vaudeville V: 290
- Viola major** [virus]
 Smallpox S: 513
- Variometer** [instrument]
 Glider (Flying a glider) G: 229
- Variorum edition**
 Shakespeare, William (Editions of the 1700's and 1800's) S: 368
- Various Disputations** [work by Duns Scotus]
 Duns Scotus, John D: 386
- Varley, Fred** [Canadian painter]
 Group of Seven G: 402
- Varmus, Harold Eliot** [American physiologist]
 Nobel Prizes (Physiology or medicine: 1989) N: 445
- Varna** [Hinduism]
 Hinduism (Caste) H: 236-237
 India (Social structure) I: 116
- Varnish** V: 286
 Lacquer L: 23
 Shellac S: 391
- Varnish tree** See Lacquer tree *in this index*
- Varro, Marcus Terentius** [Roman author]
 Encyclopedia (The first reference works) E: 268a
 Latin literature (The age of Cicero) L: 115-116
- Varsity Scout**
 Boy Scouts (Boy Scouting) B: 537-540
- "Vårt Land"** [poem by Runeberg]
 Finland (The arts) F: 112
- Varying hare** See Snowshoe hare *in this index*
- Vas deferens** [anatomy]
 Human body *diagram on* H: 422
 Prostate gland P: 830
 Reproduction, Human (The human reproductive system) R: 244-245 *with diagram*
 Vasectomy V: 287
- Vasa, House of** [Swedish history]
 Gustav I Vasa G: 443
- Vasa Race**
 Sweden (Recreation) So: 1025 *with picture*
- Vasari, Giorgio** [Italian author]
 Biography (The Renaissance) B: 313
- Vasco Da Gama** See Da Gama, Vasco *in this index*
- Vasconelos, José** [Mexican scholar]
 National Council of La Raza N: 32
- Vascons** [people]
 Gascony G: 60
- Vascular plant**
 Plant (Parts of plants) P: 529; (Early plants) P: 540; (Classification of plants) P: 546 *with pictures*
- Vascular ring** [botany]
 Potato (The potato plant) P: 712 *with picture*
- Vascular sap**
 Sap (Vascular sap) S: 121 *with diagram*
- Vascular tissue** [botany]
 Plant (Bryophytes) P: 522; (Parts of plants) P: 529
- Vase** V: 286
- Vase sponge**
 Animal *picture on* A: 506
 Ocean *picture on* O: 656
- Vasectomy** [surgery] V: 287
 Birth control (Methods of birth control) B: 378
 Surgery (Some common surgical operations) So: 1006
- Vaseline** [medication]
 Petrolatum P: 329
- Vasodilator**
 Drug (Drugs that affect the heart and blood vessels) D: 351
 Heart (Heart failure) H: 143
- Vasopressin** [hormone]
 Hypothalamus H: 481
 Pituitary gland P: 502
- Vásquez de Ayllón, Lucas** [Spanish settler] See Ayllón, Lucas Vásquez de *in this index*
- Vásquez de Coronado, Francisco** See Coronado, Francisco Vásquez de *in this index*
- Vassal** [European history]
 Feudalism F: 81
 Homage H: 299
 Middle Ages (The Carolingian Empire) M: 524; (Feudalism) M: 524
 World, History of the (Medieval Europe) W: 432
- Vassar, Matthew** [American businessman] V: 287
- Vassar College** V: 287
 Coeducation Ci: 752
 Education *picture on* E: 104
 Vassar, Matthew V: 287
- Vat dye**
 Indigo I: 223
- Vatican City** V: 287 *with picture*
 Flag *picture on* F: 207
 Italy (Religion) I: 503
 Papal States P: 133
 Pope P: 660
 Rome R: 429 *with map*; (Italy's capital) R: 435
- Vatican Council I** V: 289
- Pius IX P: 503
 Roman Catholic Church (Vatican Council I) R: 410
- Vatican Council II** V: 289
 Cardinal C: 211
 John XXIII [pope] J: 132
 Nun N: 608
 Paul VI P: 200
 Protestantism (The unity movement [the 1800's and 1900's]) P: 835
 Religion (Religion today) R: 223
 Religious life (Religious life in the 1900's) R: 227
 Roman Catholic Church (Bishop and diocese) R: 405; (Vatican Council II) R: 410 *with picture*
- Vatican Library**
 Library (Western Europe) L: 252 *with picture*; (Renaissance collections) L: 260
- Vatican Palace**
 Vatican City (Vatican Palace) V: 287 *with picture*
 Pope P: 660; (The 1700's and 1800's) P: 665
 Rome (Museums and art galleries) R: 429
- Vatnajökull Glacier**
 Icecap I: 19
 Iceland (The inland plateau) I: 22
- Vättern, Lake**
 Sweden (The Swedish Lowland) So: 1028 *with map*
- Vaudeville** [theater] V: 290
 Peoria P: 277
 Popular music (Vaudeville and musical comedy) P: 670
- Vaughan, Arky** [American baseball player]
 Baseball (table: Hall of Fame) B: 134-135
- Vaughan, Sarah** [American singer] V: 290 *with portrait*
 Jazz (The swing era) J: 71
- Vaughan Williams, Ralph** [British composer] V: 291
- Vault** [architecture] V: 291
 Architecture (table) A: 608-609 *with picture*; (Roman architecture) A: 616; *picture on* A: 615
 Hagia Sophia H: 6
 Rome, Ancient (Architecture and engineering) R: 440-441
- Vault** [gymnastics]
 Gymnastics (The horse vault) G: 448; (The vault) G: 449 *with picture*
- Vauquelin, Louis Nicolas** [French chemist]
 Chromium C: 538
- Vaux, Calvert** [American landscaper]
 Landscape architecture (History) L: 59
 Olmsted, Frederick Law O: 745
 Park (History) P: 168-169
- Vaux, William** [American educator]
 Wyoming (Schools) W: 520
- Vaux's swift** [bird]
 Swift So: 1038
- Vava'u** [islands]
 Tonga (Land) T: 328
- Vayu** [Hindu god]
 Janus J: 31
- Vazov, Ivan** [Bulgarian writer]
 Bulgaria (The arts) B: 690-691
- VCR** See Videocassette recorder *in this index*
- Ve** [Norse mythology]
 Mythology (The creation of life) M: 984
- Veadar** [month]
 Calendar (The Hebrew calendar) C: 29
- Veal** [food] V: 291
 Cattle (Dual-purpose cattle) C: 311
- Vealer** [animal]
 Veal V: 291
- Veazey, Thomas W.** [American political leader]
 Maryland (table) M: 255
- Veblen, Thorstein Bunde** [American economist] V: 291
 American literature (Nonfiction writers) A: 420
 Chicago, University of (Research program) C: 438
- Vecellio, Tiziano** See Titian *in this index*
- Vector** [biochemistry]
 Heredity (The era of genetic engineering) H: 209
- Vector** [physics]
 Force (Characteristics of force) F: 369
 Velocity V: 297
- Vector magnetometer** [device]
 Magnetometer M: 62
- Vedanta**
 See also Upanishads *in this index*
 Hinduism (The six schools of philosophy) H: 236
- Vedas** [religious books] V: 291
 Hinduism (Sacred writings) H: 236

- India (Literature) I: 120; (The Aryans) I: 128
 Mithra M: 679
 Sanskrit literature (The Vedic period) S: 112
 Upanishads U: 212
- Veddahs** [people]
 Sri Lanka (People) So: 817-818; (History) So: 819
- Vedic** [language]
 Sanskrit language S: 111
- Vedic period** [Hindu history]
 Religion (Hinduism) R: 220
- Vedrine, Jules** [French aviator]
 Airplane (table) A: 232
- Veck, Bill** [American baseball executive]
 Baseball (table: Hall of Fame) B: 135
- Veep, The** [name for]
 Barkley, Alben William B: 111
- Veery** [bird]
 Thrush T: 271
- Vega** [airplane]
 Airplane (The golden age) A: 235-236; picture on A: 233
- Vega** [star] V: 291
 North Star N: 518
 Solar system (Other solar systems) So: 581
 Star (table: The 10 brightest stars as seen from Earth) So: 842
- Vega, Garcilaso de la** [Spanish poet]
 Spanish literature (The 1500's) So: 758
- Vega, Garcilaso de la [El Inca]** [Latin American author]
 Latin-American literature (Colonial literature) L: 111
- Vega, Lope de** [Spanish dramatist] V: 292
 Drama (Secular drama) D: 333
 Spanish literature (The 1500's) So: 758-759; (The 1600's) So: 759
- Vega Real** [region, Dominican Republic]
 Dominican Republic (Land) D: 304
- Vegan**
 Vegetarianism V: 294
- Vegetable** V: 292 with pictures
 Antioxidant A: 557
 Cooking (Methods of cooking) Ci: 1028
 Farm and farming (Specialized crop farms) F: 30-31 with picture
 Flavonoid F: 230
 Food (Food from plants) F: 329
 Food, Frozen (Preparing foods for freezing) F: 338-339 with picture
 Gardening (Food gardens) G: 31 with picture; (table) G: 32 with diagram
 Nutrition (Carbohydrates) N: 625; (Nutrition guidelines) N: 626
 Truck farming T: 458
 See also the list of Related Articles in the Vegetable article
- Vegetable ivory** [tree product]
 Doum palm D: 314
 Ivory palm I: 522 with picture
- Vegetable oil** V: 294
 Margarine M: 198
 Olive oil O: 744
 Soybean (Soy oil) So: 691
 See also the list of Related articles in the Vegetable oil article
- Vegetable parchment**
 Parchment P: 155
- Vegetable tanning**
 Leather (Tanning) L: 167
- Vegetarianism** V: 294
- Vegetation** See Plant in this index
- Vegetative organ** [botany]
 Grass (The grass plant) G: 324
- Vegetative part** [botany]
 Plant (Parts of plants) P: 529
- Vegetative propagation** [botany]
 Plant (How plants reproduce) P: 532; (Vegetative propagation) P: 535 with diagrams
 Clone Ci: 684
 Reproduction (Through asexual reproduction) R: 242
 Spanish moss So: 764
 Tree (How trees reproduce) T: 419
- Vehicle** [chemistry]
 Ink I: 272
 Paint P: 23
- Vehicle computer** [computer]
 Ignition (The direct fire ignition system) I: 49
- Vehicle license**
 License L: 268
- Veil** [botany]
 Mushroom (Parts of a mushroom) M: 941
- Veil** [clothing]
 Clothing (Why clothing varies) Ci: 690
- Veil** [gem]
 Emerald E: 257
- Vein** [anatomy] V: 295
 Angiography A: 461
 Blood (What blood does in the body) B: 408
 Circulatory system (The blood vessels) Ci: 559 with picture
 Heart H: 132 with diagram; (Blood vessels) H: 135 with diagram
 Hemorrhoids H: 183
 Human body (The blood vessels) H: 421; diagram on H: 422
 Jugular vein J: 186 with diagram
 Phlebitis P: 391
 Varicose vein V: 286
- Vein** [botany]
 Leaf (The blade) L: 153-154 with pictures
 Plant (Leaves) P: 530 with picture
 Tree (Leaves) T: 417 with diagrams
- Vein** [entomology]
 Butterfly (The thorax) B: 738 with diagram
- Vein** [geology]
 Coal (How coal was formed) Ci: 717
 Gold (Types of deposits) G: 252
 Mining (Mining terms) M: 577
 Ore O: 825
- Veitchiana** [plant]
 Gardenia G: 29
- Vela Supernova Remnant**
 Star picture on So: 851
- Velasco Alvarado, Juan** [Peruvian political leader]
 Peru (Socialistic reforms) P: 315-316
- Velasco Ibarra, José María** [Ecuadorian political leader]
 Ecuador (The 1900's) E: 73
- Velázquez, Diego** [Spanish colonial leader]
 Cortés, Hernando (Early life) Ci: 1073
 Mexico (The Spanish conquest) M: 469
- Velázquez, Diego** [Spanish painter] V: 295 with picture
 Baroque (Baroque painting) B: 117
 Painting (The Spanish masters) P: 64 with picture
- Velcro** [fastener] V: 296 with picture
- Veld** [geography]
 Prairie P: 731
- Veliger** [zoology]
 Clam (The life of a clam) Ci: 637
 Larva L: 78
 Oyster (Young) O: 891
- Velikiy Novgorod** [city, Russia] V: 296
 Icon I: 25
 Russia (Early days) R: 547
- Vellum** [parchment]
 Manuscript M: 172
 Parchment P: 155
- Velociraptor** [dinosaur] V: 296 with picture
 Dinosaur (True dinosaurs) D: 206b-211; picture on D: 207
- Velocity** [physics] V: 297
 Einstein, Albert (Famous theories) E: 146-146a
 Falling bodies, Law of F: 17
 Force (Characteristics of force) F: 369; [physics] G: 2
 Mass M: 268
 Metric system (Kinds of metric units) M: 436; (Space and time) M: 437
 Motion (Velocity) M: 844
 Relativity (Galilean relativity) R: 209; (Time dilation) R: 211
 Satellite, Artificial (Satellite orbits) S: 150d
- Velocity mode** [weather]
 Weather (Weather radar) W: 162
- Velodrome**
 Bicycle racing (Track races) B: 293; picture on B: 294
- Veloso, Caetano** [Brazilian musician]
 Brazil (The arts) B: 576-577
- Velour** [fabric]
 Textile (table: Textile terms) T: 213
- Veltman, Martinus J. G.** [Dutch physicist]
 Nobel Prizes (Physics: 1999) N: 442
- Velvet** [fabric] V: 297
- Velvet** [zoology]
 Deer (Antlers) D: 83
- Velvet ant** [insect]
 Ant A: 521
 Wasp W: 110
- Velvet leaf** [plant] See Velvetleaf in this index
- Velvet Revolution** [Czechoslovak history]
 Czech Republic (The Velvet Revolution) Ci: 1214
 Czechoslovakia (The Velvet Revolution) Ci: 1216
 Slovakia (The Velvet Revolution) S: 509
- Velvet rug**
 Rugs and carpets (Weaving) R: 515
- Velvetleaf** [plant] V: 297
- Vena cava** [anatomy]
 Abdomen A: 9
 Heart (Blood vessels) H: 135 with picture
 Human body (The blood vessels) H: 421
- Venator** [literary figure]
 Walton, Izaak W: 21
- Vendetta** [sociology]
 Mafia M: 41
- Vending machine** V: 297
- Veneer** [stone]
 House (Building materials) H: 380
- Veneer** [wood]
 Forest products (Plywood) F: 401
 Furniture (Louis XIV furniture) F: 575
 Lumber (Composite lumber) L: 518
 Plywood P: 585
- Veneman, Ann M.** [American government official]
 Agriculture, Department of (table) A: 161
 Bush, George Walker (table) B: 723
- Venera** [space probes]
 Venus (Flights to Venus) V: 313
 Space exploration (Probes to Venus) So: 710
- Venerable Bede, The** [English historian] See Bede, Saint in this index
- Veneral disease** See Sexually transmitted disease in this index
- Venesecion**
 Bloodletting B: 417
- Venetian glass**
 Glass (The Middle Ages) G: 218
 Italy picture on I: 505
- Venetian lace**
 Lace picture on L: 21
- Venetian Life** [book by Howells]
 Howells, William Dean H: 402
- Venetians** [people]
 Venice (The people) V: 307
- Venezia** See Venice in this index
- Venezuela** V: 298 with pictures and maps
 Bolívar, Simón B: 441
 Christmas (In Latin America) C: 532
 Cleveland, Grover (Foreign affairs) Ci: 673
 Columbus, Christopher (Third voyage westward) Ci: 862
 Immigration (Latin America) I: 84
 Indian, American (Indians of the Caribbean) I: 172; (Indians of the Tropical Forest) I: 175
 Organization of the Petroleum Exporting Countries O: 854
 Standard of living (table) So: 834
 World War II (table: The Allies) W: 471
 Yanomami Indians Y: 552
 See also the list of Related Articles in the Venezuela article
- Venezuela Affair** [1902]
 Roosevelt, Theodore (Foreign policy) R: 469
- "Veni, vidi, vici"** [quotation]
 Caesar, Julius (Last victories) C: 13
- Venice** [Italy] V: 306 with pictures and map
 City (The people) Ci: 582; (Economy) Ci: 584
 Crusades (The Fourth Crusade) Ci: 1161
 Doge D: 283
 Europe picture on E: 381
 Exploration (The great age of European exploration) E: 442-443
 Flag picture on F: 217
 Glass (The Middle Ages) G: 218
 Gondola G: 268 with picture
 Italy picture on I: 510
 Navy (The beginning of modern navies) N: 79
 Painting (The Renaissance in Venice) P: 55 with pictures
 Renaissance (The Italian Renaissance) R: 233 with map
 World, History of the picture on W: 438
- Veniot, Peter J.** [Canadian political leader]
 New Brunswick (table) N: 196
- Venison** [food]
 Deer D: 82d
- Venizelos, Eleutherios** [Greek political leader]
 V: 308
 Greece (George I) G: 362
- Venn diagram** [mathematics]
 Set theory S: 321
- Venom** [poison] V: 308
 Hornet H: 340
 Reptile (Internal organs) R: 251
 Snake S: 525; (Fangs and venom glands) S: 528
 Snakebite S: 536
- Venous blood** [physiology]
 Vein V: 295
- Vent** [oceanography] See Hydrothermal vent in this index
- Vent** [plumbing]

- House (Plumbing) H: 382
 Plumbing (The drainage system) P: 578
- Vent** [zoology]
 Bird (The digestive system) B: 365-366 *with diagram*
 Snake (Internal organs) S: 527
- Ventilation V: 309**
 Air conditioning (Circulating the air) A: 179
 Fire department (Firefighting) F: 123-124 *with picture*
- Ventilator**
 Respirator R: 262
- Ventral abdominal vein**
 Frog *picture on F: 537*
- Ventral margin**
 Shell *diagram on S: 385*
- Ventricle** [heart]
 Artificial heart A: 759 *with picture*
 Heart (Chambers, valves, and inner lining)
 H: 133-135 *with picture*; (The work of the heart) H: 135 *with diagram*; (Abnormal openings in the heart) H: 141; (Blockage of blood flow) H: 141; (Abnormal heart rhythms) H: 142; (Hearts of animals) H: 146
Ventricular fibrillation [disorder]
 Heart (Diagnosis and treatment) H: 139
 Defibrillator D: 88
Ventricular septal defect [disorder]
 Heart (Abnormal openings in the heart)
 H: 141; (Blockage of blood flow) H: 141
Ventriloquism V: 309 *with picture*
 Puppet (Dummies) P: 906
- Ventris, Michael George Francis** [British architect] V: 309
 Greek language (Development of ancient Greek) G: 376
- Ventura, Jesse** [American political leader]
 Minnesota (table) M: 602
- Venturer** [rank]
 Boy Scouts (Venturing) B: 540, *picture on B: 539*
 Scouts Canada (Age groups) S: 224
- Venturi, Robert** [American architect] V: 310 *with picture*
 Architecture (Architecture today) A: 632-633
 Furniture (Postmodern design) F: 585; *picture on F: 586*
 Postmodernism P: 709
- Venturi meter**
 Water meter W: 135
- Venturi tube**
 Carburetor C: 208
- Venule** [anatomy]
 Vein V: 295
- Venus** [planet] V: 310 *with pictures*
 Astronomy (How the planets move) A: 835
 Evening star E: 423
 Lucifer L: 514
 Planet P: 507 *with pictures*
 Radar (In scientific research) R: 67-68 *with picture*
 Space exploration (Space between the planets) So: 696; (Probes to Venus) So: 710, *picture on So: 709*
 Transit T: 374
- Venus** [Roman mythology] V: 310
See also Aphrodite in this index
 Mythology (table) M: 980; *picture on M: 987*
 Painting (The 1400's) P: 52-53 *with picture*
 Tannhäuser T: 29
 Vulcan V: 453
- Venus, Mother of Aeneas** [painting by Poussin]
 Mythology *picture on M: 987*
- Venus and Adonis** [poem by Shakespeare]
 English literature (Elizabethan poetry) E: 316-317
 Shakespeare, William (His first poems) S: 347; (The narrative poems) S: 366
- Venus de Milo** [sculpture] V: 314
 Milos M: 556
 Paris (Museums and art galleries) P: 164 *with picture*
- Venus' girdle** [animal]
 Animal *picture on A: 506*
- Venus' hair**
 Hairdressing (The Renaissance) H: 11-12
- Venus Observed** [play by Fry]
 Fry, Christopher F: 549
- "Venus of Ille, The"** [story by Mérimée]
 Mérimée, Prosper M: 418
- Venus of Willendorf** [sculpture]
 Sculpture (Prehistoric sculpture) S: 233 *with picture*
- Venus Plus X** [book by Sturgeon]
 Sturgeon, Theodore S: 934
- Venus With a Mirror** [painting by Velázquez]
 Velázquez, Diego V: 296
- Venus's-flower-basket** [sea animal]
 Sponge (Kinds of sponges) So: 800
- Venus's-flytrap** [plant] V: 314 *with picture*
 Carnivorous plant C: 243
 Plant (Insect-eating plants) P: 542 *with picture*
- Venus's-girdle** [sea animal]
 Ctenophore Ci: 1167
- Veracruz** [city, Mexico] V: 314
 Mexico (The Spanish conquest) M: 469
- Verb** [grammar] V: 314
 Adverb (Verb-adverb combinations) A: 71
 Conjugation Ci: 950
 Participle P: 184
 Person P: 301
 Sentence (Subject and predicate) S: 303
 Tense T: 170
- Verbal memory**
 Reading (Comprehending what is perceived) R: 157
- Verbena** [plants] V: 315 *with picture*
- Verchères, Marie Madeleine Jarret de** [French-Canadian public figure] V: 315
- Verd antique** [stone]
 Serpentine S: 318
- Verdandi** [Norse mythology]
 Norns N: 457
- Verdi, Giuseppe** [Italian composer] V: 316
 Opera (Giuseppe Verdi) O: 798; (*Aida*) O: 801; (*Rigoletto*) O: 806; (*Traviata, La*) O: 807-808 *with picture*; (*Trovatore, Il*) O: 808
- Verdict** [law]
 Jury (Petit juries) J: 202
 Trial (Reaching a verdict) T: 437
- Verdin** [bird] V: 316 *with picture*
- Verdun, Battles of V: 316**
 Pétain, Henri Philippe P: 323
 World War I (The Battle of Verdun) W: 458
- Verdun, Treaty of** [843] V: 316
 Burgundy B: 705
 Charles II [of France] C: 380
 Germany (The breakup of Charlemagne's empire) G: 162
- Vere, Edward de** [English nobleman]
 Shakespeare, William (The anti-Stratfordians) S: 349
- Vereeniging, Treaty of** [1902]
 Boer War B: 436
- Vérendrye, Sieur de la** *See* La Vérendrye, Sieur de *in this index*
- Verga, Giovanni** [Italian author] V: 317
 Italian literature (Romanticism) I: 495
- Verge**
 Clock (Mechanical clocks) Ci: 682]
- Vergennes, Count de** [French government official]
 Adams, John (Diplomat) A: 36
 Revolutionary War in America (Diplomatic triumphs) R: 280
- Vergil** *See* Virgil *in this index*
- Vergoose, Elizabeth** [American author]
 Mother Goose (Who was Mother Goose?) M: 842
- Verifiability criterion of meaning** [philosophy]
 Philosophy (Modern philosophy) P: 387-390
 Positivism (Logical positivism) P: 697
- Verigin, Peter** [Russian religious leader]
 Doukhobors D: 314
- Verismo** [literature]
 Italian literature (Romanticism) I: 495
- Verismo opera**
 Leoncavallo, Ruggiero L: 202
 Mascagni, Pietro M: 263
 Opera (Verismo opera) O: 799
- Verity, C. William** [American government official]
 Commerce, Department of (table) Ci: 871
- Verizon Communications** [company]
 Telephone (In the United States) T: 99
- Verlaine, Paul** [French poet] V: 317
 French literature (Symbolism) F: 522
 Rimbaud, Arthur R: 341
- Vermear, Jan** [Dutch painter] V: 317 *with picture*
 Painting (The Dutch masters) P: 62-63 *with picture*
- Vermicelli** [food]
 Pasta P: 192
- Vermiculite** [mineral] V: 317
 Plaster P: 552
- Vermiform appendix** [anatomy] *See* Appendix *in this index*
- Vermilion** [pigment] V: 317
- Vermilion flycatcher** [bird]
 Flycatcher F: 311
- Vermilion Range** [Minnesota]
 Minnesota (Industrial development) M: 604
- Vermilion Sea**
 Gulf of California G: 437
- Vermis** [anatomy]
 Brain (The cerebellum) B: 550b-551
- Vermont V: 318** *with pictures and maps*
See also the list of Related Articles in the Vermont article
- Vermont, University of V: 338**
- Vermont Gazette, The** [newspaper]
 Vermont (Communication) V: 332
- Vermont Historical Society Museum** [Montpelier]
 Vermont (Museums) V: 322
- Vermont Piedmont** [Vermont]
 Vermont (Land regions) V: 328
- Vermouth**
 Alcoholic beverage (Gin) A: 336
 Wine (Types of wine) W: 336
- Vernacular** [language]
 Italian literature (The Middle Ages) I: 494
 Language (Linguistic terms) L: 63
 Latin language (Development) L: 114
 Middle Ages (The growth of humanism) M: 528
 Romance languages R: 415
 Vatican Council II (The work of the council) V: 289
- Vernacular Latin**
 Spanish literature So: 757
- Vernal equinox** [astronomy]
 Equinox E: 348 *with diagram*
 March M: 194
 Season S: 271
 Sidereal time S: 449
 Time (Measuring time by the stars) T: 288
- Vernal Falls** [waterfall, California]
 Waterfall (table: Famous waterfalls of North America) W: 142
 Yosemite National Park (Waterfalls) Y: 570
- Vernam, Gilbert S.** [American engineer]
 Codes and ciphers (History) Ci: 751
- Verne, Jules** [French author] V: 338 *with portrait*
 Science fiction (The first science fiction) S: 205
 Space exploration *picture on So: 706*
- Vernier** [measuring device] V: 338 *with picture*
- Vernier, Pierre** [French mathematician]
 Vernier V: 338
- Vernon, Edward** [British admiral]
 Mount Vernon (The buildings) M: 888
- Vernon, Mount** *See* Mount Vernon *in this index*
- Verny** [former name]
 Almaty A: 380
- Veronal** [drug]
 Barbiturate B: 107
- Veronese, Paolo** [Italian painter] V: 338
 Painting (The Renaissance in Venice) P: 55-56 *with picture*
- Verrazano-Narrows Bridge** [bridge, New York City]
 Bridge (table: Suspension) B: 603
 Brooklyn B: 640
 New York City (Statens Island) N: 330; (Transportation) N: 334-335
 Staten Island So: 866 *with picture*
- Verrazzano, Giovanni da** [Italian navigator] V: 338
 Cartier, Jacques C: 261
 Exploration *map on E: 443*; (The search for a northern passage) E: 446
 New York (Exploration and settlement) N: 314
 New York City (Exploration) N: 340
 North Carolina (Exploration and settlement) N: 490
 Northwest Passage N: 528
 Nova Scotia (Exploration and settlement) N: 568; *picture on N: 569*
 Rhode Island (Exploration) R: 312
- Verrocchio, Andrea del** [Italian artist] V: 338
 John the Baptist, Saint *picture on J: 135*
 Leonardo da Vinci (Early career) L: 199; (Paintings) L: 200b
 Renaissance *picture on R: 232*
 Sculpture (Early Renaissance) S: 252
- Versailles, Palace of** [France] V: 339 *with picture*
 Architecture (Baroque architecture) A: 622
 Coysevox, Antoine Ci: 1114
 Fountain *picture on F: 432*
 Louis XIV L: 475
- Versailles, Treaty of** [1919] V: 339
 Congress of the United States (Approving treaties) Ci: 946
 France (Between World Wars) F: 475
 Germany (World War I) G: 167
 Hitler, Adolf (The road to war) H: 268
 Poincaré, Raymond P: 599
 United States, History of the (The peace conference and treaty) U: 185
 War crime (World War I) W: 27

- World War I (The Paris Peace Conference)
W: 465; (Provisions of the treaties)
W: 466
- World War II W: 469
- Verse** [poetry]
Poetry (Rhythm and meter) P: 591-593;
(Forms) P: 595
Ballad B: 43
Ballade B: 43
Meter M: 433
Nursery rhyme (Types) N: 614
- Verse epistle** [poetry]
Epistle E: 344
- Verse**
Book (Inside a book) B: 464
- Vert**
Heraldry picture on H: 195
- Vertebra** [anatomy]
Cartilage C: 263
Frog picture on F: 537
Human body diagram on H: 422
Mammal (Skeleton) M: 118-119
Spine So: 792 with picture
- Vertebrate** [zoology] V: 340
Animal (Kinds of animals) A: 472;
(Invertebrates and vertebrates) A: 488
with diagram
Brain (The brain in animals) B: 558 with pic-
tures
Cartilage C: 263
Chordate C: 522
Circulatory system (Vertebrates) Ci: 561
Fever F: 83
Nervous system (In vertebrates) N: 136
Prehistoric animal (The first animals with back-
bones) P: 737
Rib R: 320
Sleep (Sleep among animals) S: 506
Territoriality T: 176
- Vertebrate paleontology**
Paleontology P: 103
- Vertex** [geometry]
Angle A: 463
Geometry (Congruence) G: 102
Polygon P: 650 with diagram
Polyhedron P: 650 with diagrams
Triangle T: 438 with diagram
- Vertical equity** [economics]
Taxation (Equity) T: 54
- Vertical file**
A Guide to Research Skills Research
Guide: 30
- Vertical integration** [economics]
Industry (Industrial organization) I: 261
Motion picture (Movies become big business)
M: 866; (Postwar American movies)
M: 870
- Vertical lift bridge**
Bridge (Moveable bridges) B: 602 with dia-
gram
- Vertical line** [navigation]
Inertial guidance I: 263
- Vertical merger** [economics]
Merger M: 418
- Vertical nystagmus** [disorder]
Nystagmus N: 633
- Vertical piano**
Piano (Upright pianos) P: 447 with picture
- Vertical/Short Take-Off and Landing** [aircraft]
See V/STOL in this index
- Verticality**
Ballet B: 44
- Vertigo** [disorder]
Dizziness D: 255
- Vertisol** [soil]
Soil (How soils are classified) So: 575-576
with map
- Vervain** [plant]
Verbena V: 315
- Vervet** [animal]
Guenon G: 419 with picture
Mammal picture on M: 126
Monkey picture on M: 729
- Verwoerd, Hendrik** [South African political
leader]
South Africa (Apartheid) So: 619
- Very high frequency waves** [communications]
V: 341
Television (Broadcasting) T: 122-123
- Very Large Array** [telescope]
Astronomy (Radio astronomy) A: 843; pictures
on A: 840
National Radio Astronomy Observatory N: 59
Observatory (Ground-based observatories)
O: 644-645
Telescope (Types of radio telescopes) T: 106-
107 with picture
- Very Large Telescope**
Telescope (Reflecting telescopes) T: 104-105
- Very Long Baseline Array Telescope**
Astronomy (Radio astronomy) A: 843
Telescope (Types of radio telescopes) T: 106-
107
- Very Rich Hours, The** [book by Limbourg] See
Très Riches Heures in this index
- Vesalius, Andraas** [Flemish anatomist] V: 341
Anatomy A: 448b
Biology (The Renaissance) B: 318 with picture
Medicine picture on M: 373
Science (The rebirth of science) S: 197; pic-
ture on S: 199
Zoology (History) Z: 610
- Vasey, Denmark** [American social reformer]
V: 341
- Vasical** [medication]
Spanishfly So: 764
- Vasicle** [lunar feature]
Moon (Core) M: 791
- Vasicular ringworm** [disease]
Ringworm R: 344
- Vespasian** [Roman emperor] V: 341
- Vespasianus, Titus Flavius** See Vespasian in
this index
- Vesper sparrow** [bird]
Bird (Birds of grasslands) B: 336 with picture
- Vespers** [music by Monteverdi]
Monteverdi, Claudio M: 764b
- Vespucci, Amerigo** [Italian explorer] V: 341 with
picture and map
America A: 407
Columbus, Christopher (Third journey to the
west) Ci: 862
Exploration map on E: 443; (Exploring the
New World) E: 444
Latin America (European discovery and explo-
ration) L: 104-105
- Vessel** [botany]
Wood (Wood figure) W: 390
- Vessels, Billy** [American football player]
Football (table) F: 363
- Vessey, John W., Jr.** [American military leader]
Joint Chiefs of Staff (table) J: 156
- Vassay, Robert S.** [American political leader]
South Dakota (table) So: 680
- Vasta** [Roman mythology] V: 342
Fire (Fire in legend and religion) F: 122
- Vastal Virgin** [religion]
Romulus and Remus R: 450
Vesta V: 342
- Vasted rights** [law]
Pension (Private pension plans) P: 273
- Vesterålen Islands** [Norway]
Norway (Coast and islands) N: 542 with map
- "Vesti la giubba"** [aria]
Opera (*Pagliacci*) O: 806
- Vestibular nerve** [anatomy]
Ear (The inner ear) E: 8-9; (The response to
movement) E: 11
- Vestibular organs** [anatomy]
Ear (The inner ear) E: 8-9
Motion sickness M: 874
Space exploration (Microgravity) So: 701-702
- Vestibule** [anatomy]
Ear (The inner ear) E: 8 with diagram
- Vestigial organ** [biology]
Evolution (Vestigial organs) E: 431
- Vestmannaeyjar** [Iceland]
Iceland (The inland plateau) I: 22
- Vestment**
Pope (Titles, clothing, and symbols) P: 661
- Vastryman** [office]
Colonial life in America (Local government)
Ci: 794
- Vesuvius** [volcano, Italy] V: 342 with picture
Herculaneum H: 198
Mountain (table) M: 894 with diagram
Naples (The city) N: 13 with picture
Pompeii P: 653 with picture
Volcano (table) V: 441
- Vesuvius Room** [cave]
Cave picture on C: 319
- Vetch** [plant] V: 343
- Veteran**
American GI Forum of the United States
A: 411
American Legion A: 412
Civil service (Federal civil service) Ci: 612
Red Cross (Armed Forces Emergency
Services [AFES]) R: 185
Scholarship (Grants to veterans) S: 178
Veterans Affairs, Department of V: 343
Vietnam War (Effects in the United States)
V: 377
- Veterans Affairs, Department of** [U.S.] V: 343
with picture
Disabled (table) D: 222
- Mortgage M: 821
Washington, D.C. map on W: 76
- Veterans affairs, Minister of** [office]
Canada, Government of (The Cabinet) C: 132;
diagram on C: 137
- Veterans Affairs, Secretary of** [office]
Flag (Flags of the armed forces) picture on
F: 211
- Veterans' bonus**
Hoover, Herbert Clark (The "Bonus Army")
H: 330
- Veterans Bureau** [U.S. history]
Veterans Affairs, Department of (History)
V: 343-344
- Veterans Day** [holiday] V: 344
- Veterans of Foreign Wars of the United
States** V: 344 with picture
- Veterans' organizations** V: 344
- Veterans' Readjustment Act** [1966]
Veterans Affairs, Department of (Benefits and
other services) V: 343
- Veterans' Readjustment Assistance Act** [1952]
Veterans Affairs, Department of (Benefits and
other services) V: 343
- Veterinarian** [career]
Veterinary medicine (Careers in veterinary
medicine) V: 346 with pictures
Address, Forms of (Other forms) A: 54
Careers picture on C: 223
Zoo (Medical care) Z: 607; picture on Z: 609
- Veterinary Medical Association, American**
Veterinary medicine (Careers in veterinary
medicine) V: 346
- Veterinary medicine** V: 345 with pictures
- Vetluga** [river, Russia]
Volga River V: 444
- Veto** [government] V: 346
Congress of the United States (From bill to
law) Ci: 945-946; (Continued struggle for
power) Ci: 948
Constitution of the United States (Article I,
Section 7) Ci: 1006
Government (Presidential government) G: 288
Plebians P: 572
Pork barrel P: 679
President of the United States (Legislative
leader) P: 765
United Nations (Voting) U: 82-83
United States, Government of the (The presi-
dency) U: 140; (Action by the President)
U: 144
Washington, George (First veto) W: 104
- Vettisfoss** [falls, Norway]
Waterfall (table: Famous waterfalls of the
world) W: 143 with picture
- Vexillology**
Flag (table) F: 193
- Vexillum** [Roman Empire]
Flag F: 195; picture on F: 216
- Vézelay Abbey** [France]
Sculpture (The importance of sculpture) S: 228
with picture; (The peak of architectural
sculpture) S: 249
- VFR map**
Map (Navigation maps) M: 177-178
- VFW**
Veterans of Foreign Wars of the United States
V: 344
- VHF band** [communications]
Communications satellite (How communica-
tions satellites work) Ci: 888b
- VHF wave** See Very high frequency waves in
this index
- VHS** [recording system]
Videotape recorder (History) V: 361
- VHS-C** [recording format]
Camcorder (Types of camcorders) C: 76
- Via del Corso** [street]
Rome R: 429
- Via Dolorosa** [road]
Jerusalem (Christian sites) J: 96 with map;
picture on J: 98
- VIA Rail Canada**
Canada (Transportation) C: 125-126
Railroad (In Canada) R: 113
- Viability of fetus** [law]
Abortion (Abortion in the United States) A: 15
- Viaduct** [engineering] V: 347
- Viagra** [drug]
Impotence I: 94
- Viana, Javier de** [Uruguayan author]
Latin-American literature (Realism) L: 112
- Vibraphone** [musical instrument] V: 347
Hampton, Lionel H: 36
Jazz (Other instruments) J: 69
- Vibrating device**
Deafness (Special devices) D: 58
- Vibration** V: 347

Harmonics H: 62 *with diagrams*
Pitch P: 498
Sound So: 598 *with picture*

Vibrato
Music (table) M: 954
Singing (Training the voice) S: 472

Vibrio [bacteriology]
Bacteria (The structure of bacteria) B: 20 *with picture*

Vibrio cholerae [bacteria]
Cholera C: 519

Vibrissa [zoology]
Cat (Senses) C: 287-290
Mammal (Skin and hair) M: 118

Vibroseis truck
Gas [fuel] (Exploring for gas) G: 53

Vic [horse]
Horse (table: Famous horses in history and legend) H: 361

Vic-Wells Ballet
De Valois, Ninette D: 173

Vicar of Christ [title]
Pope (The peak of papal power) P: 663-664

Vicar of St. Peter [title]
Pope (The peak of papal power) P: 663-664

Vicar of Wakefield, The [book by Goldsmith]
Goldsmith, Oliver G: 259
English literature (The Johnson circle) E: 319

Vice admiral
Admiral A: 58
Rank, Military (table) R: 140

Vice president [office] V: 347
Address, Forms of (Officials of the United States) A: 53
Parliamentary procedure (Officers) P: 175

Vice President of the United States V: 348 *with pictures*
Congress of the United States (The Senate) Ci: 942; (Handling presidential election results) Ci: 946
Constitution of the United States (Article I, Section 3) Ci: 1005; (Amendment 12) Ci: 1013
Flag *picture on* F: 211
Political convention P: 628
Polk, James Knox (Election of 1844) P: 642
Presidential succession P: 771
Senate (Organization of the U.S. Senate) S: 294
Tyler, John T: 532
United States, Government of the (The presidency) U: 140

Vice squad
Police (Investigations of crimes) P: 621

Vicentino, Antonio [Italian painter]
Navy *picture on* N: 80

Viceroy [insect]
Butterfly (Brush-footed butterflies) B: 734, (How butterflies protect themselves) B: 742
Mimicry M: 561
Protective coloration P: 831

Viceroy [title] V: 354
India (British India) I: 130

Viceroy of the Indies [title]
Columbus, Christopher *picture on* Ci: 861

Viceroyalty of New Granada
Colombia (Spanish rule) Ci: 783

Viceroyalty of the Río de la Plata [South American history]
Argentina (Colonial days) A: 656 *with map*
Paraguay (Independence) P: 149

Vichy [France] V: 354
World War II (The fall of France) W: 474

Vichy government [French history]
Vichy V: 354
France (World War II) F: 475 *with map*
Laval, Pierre L: 128
Pétain, Henri Philippe (Collaborator) P: 323

Vickrey, William Spencer [American economist]
Nobel Prizes (Economics: 1996) N: 449

Vicksburg [Mississippi] V: 354
Mississippi *picture on* M: 641

Vicksburg, Battle of [1863]
Civil War (table) Ci: 624; (Siege of Vicksburg) Ci: 630
Mississippi (The Civil War and Reconstruction) M: 642 *with picture*

Vicksburg National Military Park [Mississippi]
Mississippi (Places to visit) M: 632 *with picture*
National Park System (table: National military parks) N: 55

Victim, The (book by Bellow)
Bellow, Saul B: 244

Victimless crime
Crime (Crimes against public order) Ci: 1136

Victor I, Saint [pope]
Pope (table) P: 666

Victor II [pope]
Pope (table) P: 666

Victor III [pope]
Pope (table) P: 666

Victor IV [antipope]
Alexander III A: 341
Pope (table) P: 666

Victor Amadeus II [king of Sardinia]
Sardinia, Kingdom of S: 125

Victor Emmanuel II [king of Italy] V: 355
Italy (Italy united) I: 515; (The Kingdom of Italy) I: 516
Papal States P: 132
Rome (Italy's capital) R: 435
Sardinia, Kingdom of S: 125
Sicilies, Kingdom of the Two S: 447

Victor Emmanuel III [king of Italy] V: 355
Italy (Italy under Mussolini) I: 517; (The Italian republic) I: 517

Victor Emmenueal Monument
Rome *picture on* R: 428

Victor Talking Machine Company
Recording industry (History) R: 182

Victoria [British queen] V: 355 *with portrait*
Albert, Prince A: 311
India (British India) I: 130-131
United Kingdom (The Victorian Age) U: 68

Victoria [mother of]
Wilhelm II W: 305

Victoria [state, Australia] V: 356 *with picture*

Victoria [city, British Columbia] V: 357 *with picture*
British Columbia (Population) B: 616; (Visitor's guide) B: 620 *with picture*
Christmas *picture on* C: 529

Victoria [city, Seychelles]
Seychelles S: 339 *with picture*

Victoria [ship, 1500's]
Exploration (Magellan's globe-circling expedition) E: 445
Magellan, Ferdinand (The voyage begins) M: 46

Victoria [vehicle]
Carriage C: 248

Victoria, Guadalupe [Mexican political leader]
V: 358
Mexico (Independence) M: 471

Victoria, Lake *See* Lake Victoria *in this index*

Victoria, Manuel [Mexican government official]
California (Mexican rule) C: 60

Victoria and Albert Museum [London] V: 358

Victoria Cross
Medals, decorations, and orders (table) M: 359; (Europe) M: 358 *with picture*

Victoria crowned-pigeon
Pigeon (The body of a pigeon) P: 458-459 *with picture*; (Wild pigeons) P: 460

Victoria Day [holiday] V: 358

Victoria Desert [region, Australia]
Great Victoria Desert G: 349

Victoria Falls [falls, Zambia-Zimbabwe] V: 358
Exploration (The exploration of Africa) E: 449
National park (Other interesting national parks) N: 42g-42h
Seven Natural Wonders of the World (Victoria Falls) S: 324b *with picture*
Waterfall (table: Famous waterfalls of the world) W: 143 *with picture*

Victoria Falls National Park [Zambia-Zimbabwe]
National park (table) N: 42f; (Other interesting national parks) N: 42e-42h

Victoria Gazette [newspaper]
British Columbia (Communication) B: 627

Victoria Harbour [Hong Kong]
Hong Kong (The major cities) H: 316 *with picture*

Victoria Maria Louise [mother of]
Victoria (Early years) V: 355

Victoria Memorial
Kolkata (The city) K: 362

Victoria Nyanza *See* Lake Victoria *in this index*

Victoria Park [Regina]
Saskatchewan *picture on* S: 141

Victoria Peak [mountain, Belize]
Belize (Land and climate) B: 237 *with map*

Victoria Peak [mountain, Hong Kong] *See* Tai Ping Shan *in this index*

Victorian Age [British history]
English literature (Victorian literature) E: 320
Poetry (Victorian poetry) P: 597
United Kingdom (The Victorian Age) U: 68
Victoria V: 355

Victorian Arts Centre
Melbourne (The city) M: 388

Victorio [Indian chief]

New Mexico (Territorial days) N: 275

Victory [book by Conrad]
Conrad, Joseph Ci: 973

Victory [ship]
Nelson, Horatio (Victory at Trafalgar) N: 122

Victory Bond [World War II]
Morgenthau, Henry, Jr. M: 805

Victory dance [custom]
Indian, American *picture on* I: 160

Victory in Europe Day
V-E Day V: 256

"Victory of Jewry over Germandom, The"
[pamphlet by Marr]
Anti-Semitism A: 559

Victory Over Japan Day
V-J Day V: 256

Victory ship
Ship (General cargo ships) S: 417-418

Vicuña [animal] V: 358 *with picture*
Alpaca A: 381
Animal *picture on* A: 474

Vida Breve, La [opera by Falla]
Falla, Manuel de F: 16

Vidal, Gore [American author] V: 359

Video, Music *See* Music video; Rock video *in this index*

Video assist
Motion picture (Shooting the movie) M: 853-854

Video camera
Videotape recorder V: 360

Video cassette recorder *See* Videocassette recorder *in this index*

Video CD [recording]
Compact disc (Other formats) Ci: 902

Video entertainment system
Television (Video entertainment systems) T: 110c

Video game V: 359 *with picture*
Computer (Dedicated computers) Ci: 910; (Games software) Ci: 919 *with picture*
Game (Electronic games) G: 22
Interactive program I: 320
Television (Video entertainment systems) T: 110c

Video head [electronic device]
Camcorder (How a camcorder works) C: 75 *with diagram*

Video paint box [machine]
Television (Computer-generated video) T: 122

Video-production system
Audio-visual materials (Multisensory materials) A: 883 *with picture*

Video projector [machine]
Audio-visual materials (Multisensory materials) A: 883

Video recorder *See* Videocassette recorder; Videotape recorder *in this index*

Video thoracoscopy [medicine]
Lung cancer L: 525

Videocassette
Camcorder (How a camcorder works) C: 75 *with diagram*

Videocassette recorder [machine]
Audio-visual materials (Multisensory materials) A: 883
Camcorder (Types of camcorders) C: 76
Motion picture (Distribution) M: 860
Television (Video entertainment systems) T: 110c
Videotape recorder (Types of videotape recorders) V: 360 *with picture*

Videconferencing
Television (Closed-circuit television) T: 110b-110c

Videodisc
Audio-visual materials (Multisensory materials) A: 883
DVD D: 393
Television (Video entertainment systems) T: 110c

Videophone [machine]
Telephone (Videophones) T: 98 *with picture*

Videotape
Audio-visual materials (Multisensory materials) A: 883
Camcorder C: 75
Copyright (Users' rights) Ci: 1047-1048
Journalism (Television journalism) J: 175
Television (Putting a show on the air) T: 111-113; (Other production methods) T: 113; (Videotape recording) T: 122; (Technological advances) T: 125
Videotape recorder V: 360; (How videotape recorders work) V: 361

Videotape recorder V: 360 *with pictures*
Audio-visual materials (Multisensory materials) A: 883 *with picture*

- Communication (The development of television) **Ci**: 885
Television (Videotape recording) **T**: 122
Videotex [interactive video]
Library (The growth of information and technology) **L**: 238
Television (Televised information services) **T**: 110c
Videotext [service] *See* Videotex in this index
Vidicon tube
Television (The television camera) **T**: 121
Vidigueira, Count of
Da Gama, Vasco (Later life) **D**: 4
Vieau, Jacques [American settler]
Milwaukee (Early development) **M**: 561
Vieira, João Bernardo [Guinea-Bissau political leader]
Guinea-Bissau (History) **G**: 434
Vienna [Austria] **V**: 362 with pictures
Austria **A**: 928 with pictures
Vienna, Battle of [1683]
Poland (The decline of Poland) **P**: 612
Vienna, Congress of [1814-1815] **V**: 363
Ambassador **A**: 404
Austria (Metternich and revolution) **A**: 938
Germany (The Congress of Vienna) **G**: 165
Italy (The French Revolution and Napoleon) **I**: 514-515
World, History of the (The rise of democracy and nationalism) **W**: 443-444
Vienna, University of
Vienna (Education and cultural life) **V**: 362
Vienna Basin [region, Austria]
Austria (Land regions) **A**: 934
"Vienna Blood" [music by Strauss]
Strauss, Johann, Jr. **So**: 921
Vienna Circle
Positivism (Logical positivism) **P**: 697
Vienna lake [dye]
Lake **L**: 35
Vienna sausage [food]
Sausage **S**: 163
Vienna Secession
Architecture (Early modern architecture in Europe) **A**: 627-628
Klimt, Gustav **K**: 344
Vienna State Opera House [Austria]
Austria picture on **A**: 933
Viennese waltz [dance]
Ballroom dancing **B**: 63
Strauss, Johann, Sr. **So**: 921
Strauss, Johann, Jr. **So**: 921
Waltz **W**: 22
Vientiane [Laos] **V**: 363
Indochina (A new kingdom) **I**: 225
Laos **L**: 70 with map
Vieques [island, Puerto Rico]
Puerto Rico (Puerto Rico today) **P**: 885
Viet Cong [political group]
Cold War (The death of Stalin) **Ci**: 764-765;
(The Vietnam War) **Ci**: 769
Vietnam War **V**: 373
Viète, François [French mathematician]
Mathematics (The Renaissance) **M**: 306
Vietminh [Vietnamese history]
Asia (The spread of Communism) **A**: 809
Geneva Accords **G**: 87
Indochina (Independence) **I**: 225
Vietnam **V**: 364; (The August Revolution of 1945) **V**: 370
Vietnam War (The Indochina War) **V**: 373
Vietnam V: 364 with pictures and maps
See also North Vietnam; South Vietnam in this index
Asia (The spread of Communism) **A**: 809 with picture
Asian Americans (Arrivals of the late 1900's) **A**: 812f
Cambodia (History) **C**: 72-74
Communism (Expansion in Southeast Asia) **Ci**: 894
France (The Fourth Republic) **F**: 475-476
Geneva Accords **G**: 87
Ho Chi Minh **H**: 270
Indochina **I**: 224 with map
Thailand (History) **T**: 226-227
Vietnam Peace Talks *See* Paris Peace Talks in this index
Vietnam Veterans Memorial [Washington, D.C.] **V**: 372
National Park System (table: National memorials) **N**: 54
Washington, D.C. (The Vietnam Veterans Memorial) **W**: 73 with picture; map on **W**: 76
Vietnam War V: 372 with pictures and map
Ace **A**: 24
Agent Orange **A**: 140
Air force (Air forces in limited wars) **A**: 186-187
Air Force, United States (The Vietnam War) **A**: 195
Army (Armies in the nuclear age) **A**: 728
Army, United States (The Vietnam War [1957-1975]) **A**: 739
Asia (The spread of Communism) **A**: 809; picture on **A**: 810
Asian Americans (Arrivals of the late 1900's) **A**: 812f
Bomb (History) **B**: 452
Cambodia (History) **C**: 72-73
Central Intelligence Agency **C**: 357
Coast Guard, United States (The Coast Guard since World War II) **Ci**: 738
Cold War (The death of Stalin) **Ci**: 764-765;
(The Vietnam War) **Ci**: 769 with picture
Communism (Expansion in Southeast Asia) **Ci**: 894 with picture
Congress of the United States (Continued struggle for power) **Ci**: 948
Ford, Gerald Rudolph (Foreign affairs) **F**: 378
Geneva Accords **G**: 88
Hanoi **H**: 53
Herbicide (Hazards of herbicides) **H**: 198
Hmong **H**: 270
Ho Chi Minh **H**: 270
Ho Chi Minh City **H**: 271
Indochina (Independence) **I**: 225; (The Geneva Accords) **I**: 225
International relations (The Vietnam War) **I**: 345
Johnson, Lyndon Baines (Foreign affairs) **J**: 149;
(The widening Vietnam War) **J**: 150-151;
(Johnson declines to run) **J**: 151
Kennedy, John Fitzgerald (Other developments) **K**: 266
Kissinger, Henry Alfred **K**: 337
Laos (History) **L**: 71-72
McCarthy, Eugene Joseph **M**: 331
McNamara, Robert Strange **M**: 344
Navy, United States (The Vietnam War [1957-1975]) **N**: 89
Nixon, Richard Milhous (Foreign policy) **N**: 432-433; (Foreign affairs) **N**: 435
President of the United States (The Vietnam War) **P**: 769
Prisoner of war **P**: 808a
Red Cross (In the United States) **R**: 187
Southeast Asia Treaty Organization **So**: 687
Students for a Democratic Society **So**: 932
Television (The 1960's) **T**: 119; picture on **T**: 121
Thailand (History) **T**: 226-227
United States, History of the (The Vietnam War) **U**: 193
Unknown soldier **U**: 212
Vietnam **V**: 364; (The Vietnam War) **V**: 371
Vietnam Veterans Memorial **V**: 372
War (Popular support) **W**: 25; (table) **W**: 25
War correspondent **W**: 27
War crime (The Vietnam War) **W**: 27
Vietnamese [people]
Vietnam (People) **V**: 365 with picture
Vietnamization [U.S. history]
Cold War (The Vietnam War) **Ci**: 769
Nixon, Richard Milhous (Foreign policy) **N**: 432-433
Vietnam War (Vietnamization) **V**: 376
Viets [people]
Indochina (The Viets) **I**: 224
Vieux Carré *See* French Quarter in this index
Vieux-Montréal [district] *See* Old Montreal in this index
View
Mechanical drawing (Information in the drawing) **M**: 353
View camera
Camera (View cameras) **C**: 83 with picture
View from Saturday, **The** [book by Konigsburg]
Konigsburg, Elaine **K**: 365
View of Bethlehem, **A** [engraving by Garrison]
Colonial life in America picture on **Ci**: 792
View of Genoa [painting by Corot]
Corot, Camille picture on **Ci**: 1069
View of the English Stage, **A** [book by Hazlitt]
Hazlitt, William **H**: 123
View of the Thames [painting by Kokoschka]
Kokoschka, Oskar picture on **K**: 362
View of Toledo [painting by El Greco]
Greco, El **G**: 351 with picture
Viewdata [service] *See* Videotex in this index
Viewfinder
Camcorder (How a camcorder works) **C**: 75
Camera (How a camera works) **C**: 80; diagram on **C**: 82
Television (Planning and preparation) **T**: 110c-111
Viewing screen [camera]
- Photography (Focusing) **P**: 414-415
Viewpoint
Public opinion **P**: 859
Viganò, Salvatore [Italian choreographer]
Ballet (Ballet d'action) **B**: 51
Vigée, Louis [French painter]
Vigée-Lebrun, Elisabeth **V**: 378
Vigée-Lebrun, Elisabeth [French painter] **V**: 378
Painting (Rococo painting) **P**: 65
Vigeland, Gustav [Norwegian sculptor]
Norway (Arts) **N**: 541 with picture
Vigil [ritual]
Knights and knighthood picture on **K**: 351
Vigilance, Central Office of
Vatican City (Armed forces) **V**: 288
Vigilante [U.S. history] **V**: 378
Montana **M**: 742
Vigile [police]
Fire department (History) **F**: 128
Police (History) **P**: 623-624
Vigilius [pope]
Pope (table) **P**: 666
Vigny, Alfred de [French poet] **V**: 378
French literature (Romantic poetry) **F**: 521;
(Romantic drama) **F**: 521
Vijaya [Indian prince]
Sri Lanka (History) **So**: 819
Viking [rocket]
Rocket (High-altitude rockets) **R**: 390
Viking [space probes]
Exobiology **E**: 438
Life (The search for life on other planets) **L**: 279
Mars (Observation by spacecraft) **M**: 226;
picture on **M**: 226
Space exploration (Probes to Mars) **So**: 710
Viking long ship [sailing vessel]
Ship, Model picture on **S**: 428
Viking Ship Museum
Denmark (Libraries and museums) **D**: 136
Vikings [people] **V**: 378 with pictures and map
Anglo-Saxons **A**: 464
Atlantic Ocean (Exploration) **A**: 867
Canada, History of (Early European exploration) **C**: 140-141
Denmark (Early days) **D**: 139
England (The Anglo-Saxon period) **E**: 304-305
English language (Old English) **E**: 313
Exploration (Viking exploration) **E**: 442 with map
Flag picture on **F**: 209
Greenland (History) **G**: 385
Ireland (The Viking raiders) **I**: 425
Navy (Navies in the Middle Ages) **N**: 79
Normans **N**: 456
Norway (The Viking period) **N**: 545 with picture
Nunavut (Arrival of the Europeans) **N**: 611
Russia (Early days) **R**: 547
Ship (Viking ships) **S**: 406 with pictures
Sweden (The Swedish Vikings) **So**: 1032 with picture
United States, History of the (America before colonial times) **U**: 150; (The Vikings) **U**: 150
Warship (Early warships) **W**: 41; picture on **W**: 42
Vikings, Minnesota *See* Minnesota Vikings in this index
Vilas, William F. [American government official]
Cleveland, Grover (table) **C**: 671
Interior, Department of the (table) **I**: 325
Vili [Norse mythology]
Mythology (The creation of life) **M**: 984
Villa [home]
Pompeii (Early days) **P**: 653-654
Villa, Pancho [Mexican general] **V**: 384 with picture
Mexico (The Constitution of 1917) **M**: 472-473
Pershing, John Joseph (Mexican campaign) **P**: 296
Wilson, Woodrow (Crisis in Mexico) **W**: 323
Villa Ada [park, Rome]
Rome (Parks and gardens) **R**: 429
Villa Borghese [park, Rome]
Rome (Parks and gardens) **R**: 429
Villa Giulia, National Museum of the [museum, Rome]
Rome (Museums and art galleries) **R**: 429
Villa Glori [park, Rome]
Rome (Parks and gardens) **R**: 429
Villa Hammerschmidt [Bonn, Germany]
Bonn (The city) **B**: 460-461 with picture
Villa Lobos, Heitor [Brazilian composer] **V**: 384
Brazil (The arts) **B**: 576-577
Latin America (Music) **L**: 102-103
Villa Rotonda [Vicenza, Italy]
Architecture (Later Renaissance architecture) **A**: 621 with picture
Monticello **M**: 767
Villa Savoye [Poissy, France]
Architecture picture on **A**: 632

- Villa Sciarra** [park, Rome]
Rome (Parks and gardens) R: 429
- Village** [political unit] V: 384
City government Ci: 594
India (Village life) I: 114; *picture on* I: 116
Local government L: 407
Metropolitan area M: 442
Nigeria (Way of life) N: 413 *with picture*
Thailand (Local government) T: 221
- Village in Berry** [painting by Rousseau]
Barbizon School *picture on* B: 108
- Village Landscape in the Morning Light** [painting by Friedrich]
Painting (Romanticism) P: 68 *with picture*
- Village weaver** [bird]
Bird (Birds of Africa) B: 348 *with picture*
Weaver W: 173
- Village woodlot**
Forestry (Community forestry) F: 406
- Villancico** [music]
Hispanic Americans (In Mexico) H: 247
- Villanelle**
Poetry (table) P: 594
- Villard, Paul** [French scientist]
Gamma rays G: 23
- Villasur, Pedro de** [French explorer]
Nebraska (Exploration) N: 111
- Ville-Marie**
Montreal (French settlement) M: 777
- Villeda Morales, Ramón** [Honduran political leader]
Honduras (Revolutions and reforms) H: 313
- Villehardouin, Geoffroy de** [French author]
French literature (Early prose) F: 519
- Villein** [European history] V: 384
- Villella, Edward Joseph** [American dancer]
V: 385
- Villemaire, Yolande** [Canadian poet]
Canadian literature (Modern Canadian poets) C: 160-161
- Villena, Luis Antonio de** [Spanish poet]
Spanish literature (Spanish literature today) So: 763
- Villeneuve, Jacques** [Canadian automobile racer]
Automobile racing (table: Grand Prix world champions) A: 980; (table: Indianapolis 500 winners) A: 980
- Villeneuve, Jean M. Cardinal** [Canadian religious leader]
Cardinal (table: Canadian cardinals) C: 211
- Villeneuve, Pierre Charles Jean Baptiste Sylvestre de** [French admiral]
Trafalgar, Battle of T: 366
- Villéré, Jacques** [American political leader]
Louisiana (table) L: 496
- Villette** [book by Brontë]
Brontë sisters (Their works) B: 637
- Villi** [anatomy]
Alimentary canal A: 368
Blood (Transporting nutrients and wastes) B: 408 *with diagram*
Human body *picture on* H: 420
Intestine (The small intestine) I: 352
Placenta P: 505
- Villi, Le** [opera by Puccini]
Puccini, Giacomo P: 870
- Villiers, George** [English general]
Buckingham, Duke of B: 663
- Villiers de l'Isle-Adam, Comte de** [French writer] V: 385
- Villita, La** [district]
San Antonio (The city) S: 84
- Villon, François** [French poet] V: 385
Ballade B: 43
French literature (Lyric poetry) F: 518
- Vilnius** [Lithuania] V: 385
Lithuania L: 388 *with picture and map*
- Vilsack, Tom** [American political leader]
Iowa (table) I: 391
- Vimeiro, Battle of** [1808]
Wellington, Duke of (Peninsular War) W: 194
- Vimeur, Jean Baptiste Donatien de See** Rochambeau, Comte de *in this index*
- Viminal Hill** [Rome]
Rome R: 429
- Vimy** [airplane]
Alcock and Brown A: 334
- Vimy Ridge, Battle of** [1917] V: 385
- Viña del Mar** [Chile]
Viña Del Mar V: 385
Chile (Recreation) C: 462
- Vinaya** [religion]
Monasticism (Non-Christian monasticism) M: 701
- Vincennes** [Indiana] V: 385
- Vincennes** [ship]
Reagan, Ronald Wilson (Persian Gulf conflicts) R: 170
- Vincennes, Battles of** [1778-1779]
Revolutionary War in America (Fighting in the West) R: 283
- Vincent, George E.** [American sociologist]
Chicago, University of (Research program) C: 438
- Vincent, John H.** [American religious leader]
Adult education (During the 1800's) A: 69
Chautauqua (The Chautauqua Institution) C: 389
- Vincent de Paul, Saint** [French religious leader]
V: 386
Roman Catholic Church (Catholic revival in France) R: 409
- Vincent of Beauvais** [French religious leader]
Encyclopedia (From the 1200's to the 1600's) E: 268a
- Vincentians** [religious group]
Vincent de Paul, Saint V: 386
- Vincenzio** [literary figure]
Shakespeare, William (*Measure for Measure*) S: 362
- Vincent's infection** See Trench mouth *in this index*
- Vinci, Leonardo da** See Leonardo da Vinci *in this index*
- Vindication of the Rights of Woman, A** [book by Wollstonecraft]
Wollstonecraft, Mary W: 379
Feminism F: 69
Women's movements (Forces of change) W: 384
- Vindobona**
Vienna (History) V: 363
- Vine** [botany] V: 386
Ivy I: 522 *with pictures*
- Vine cactus** [shrub]
Ocotillo O: 669 *with picture*
- Vine snake**
Snake *picture on* S: 526
- Vinegar** V: 386
Acetic acid A: 25
Antiseptic (History) A: 559
- Vinegar eel** [animal] V: 386
- Vinegar fly** [insect]
Fly (Head) F: 309
Fruit fly F: 549
- Vinegar Joe** [nickname]
Stilwell, Joseph Warren So: 901
- Vineland** [book by Pynchon]
Pynchon, Thomas P: 915
- Viner, Charles** [British jurist]
Blackstone, Sir William B: 394
- Vineyard**
Grape G: 319 *with picture*
- Vinland** [North American history] V: 386
Ericson, Leif E: 350
Exploration (Viking exploration) E: 442
Vikings (The Norwegian Vikings) V: 382
- Vinson** [ship] See Carl Vinson *in this index*
- Vinson, Frederick Moore** [American jurist] V: 387
Truman, Harry S. (table) T: 469
- Vinson Massif** [mountain, Antarctica]
Antarctica (Land regions) A: 532-534
- Vintage**
Wine (How wine is made) W: 337
- Vinyl**
Interior design (Choosing patterns and textures) I: 332-333
Plastics (Making synthetic resins) P: 556-557
- Viol** [musical instrument] V: 387
Violin (History) V: 390
- Viola** [literary figure]
Shakespeare, William (*Twelfth Night*) S: 360
- Viola** [musical instrument] V: 387 *with picture*
Music (Stringed instruments) M: 948-949 *with picture*
- Violence**
Child (Serving as models of appropriate behavior) C: 453
Death (Attitudes about death) D: 62
Domestic violence D: 301
Gun control (Approaches to gun control) G: 440-441
Pacifism P: 18
Television (Effects on learning) T: 117; (The 1960's) T: 119
Terrorism T: 177
Video game (Controversy) V: 359
- Violence Against Women Act** [1994]
Domestic violence D: 301
- Violent Land, The** [book by Amado]
Amado, Jorge A: 399
Latin-American literature (The early 1900's) L: 113
- Violent rebellion**
War W: 23
- Violet** [color]
Color (The relation between color and light
- Ci: 817-818 *with diagram*
- Violet** [plant] V: 388 *with picture*
Flower (Garden perennials) F: 278 *with picture*; F: 301 *with picture*
- Violet plantain-eater** [bird]
Toucan T: 346
- Violin** [musical instrument] V: 388 *with pictures*
Amati family A: 401
Jazz (Other instruments) J: 69
Music (Stringed instruments) M: 948-949 *with picture*
Suzuki method So: 1013
Williamsburg *picture on* W: 313
- Violin and Palette** [painting by Braque]
Painting (Cubism) P: 77-78 *with picture*
- Viollet-le-Duc, Eugène Emmanuel** [French architect]
Notre Dame, Cathedral of N: 550
- Violoncello** [musical instrument] See Cello *in this index*
- Viotti, Giovanni** [Italian violinist]
Violin (History) V: 390
- Viper** [automobile]
Sports car (History) So: 803
- Viper** [snake] V: 390 *with picture*
Adder A: 46 *with picture*
Bushmaster B: 724
Snake (Vipers) S: 535 *with pictures*
Snakebite (Types of poisonous snakes) S: 536
- Viperfish** [fish]
Deep sea (Fish) D: 82b-82c *with picture*
- Viper's bugloss** [plant] V: 391
- Vire** [music]
Portugal (The arts) P: 689-690
- Viracocha** [Inca god]
Inca (Religion) I: 96
- Viral hepatitis** [disease] See Hepatitis *in this index*
- Viral meningitis** [disease]
Meningitis (Symptoms and diagnosis) M: 401
- Virchow, Rudolf** [German pathologist] V: 391
Biology (Materialistic physiology and the cell theory) B: 319
- Vireo** [bird] V: 391 *with picture*
Bird (Birds of forests and woodlands) B: 334 *with picture*
- Virgil** [Roman poet] V: 391
Aeneid A: 84
Classicism (Rome) Ci: 653
Divine Comedy D: 242
Latin literature (The Augustan Age) L: 116
Poetry (Ancient poetry) P: 595-596
Rome, Ancient *picture on* R: 445
- Virgin and Child Enthroned with Angels and Saints** [icon]
Painting (Early Christian and Byzantine art) P: 49 *with picture*
- Virgin and Child with Saint Anne, The** [painting by Leonardo]
Leonardo da Vinci (Paintings) L: 200b; *picture on* L: 200
- Virgin Birth** [religion]
Immaculate Conception I: 79
- Virgin Gorda** [island]
Virgin Islands, British V: 397
- Virgin in Majesty, The** [fresco by Martini]
Simone Martini S: 467
- Virgin Islands** [Caribbean] V: 392 *with pictures and map*
Flag *picture on* F: 213
Territory (In the United States) T: 176; (American territorial government) T: 177
- Virgin Islands, British** [British dependency]
V: 397
Virgin Islands V: 392 *with map*
- Virgin Islands Coral Reef National Monument** [Virgin Islands]
National Park System (table: National monuments) N: 52
- Virgin Islands National Park** V: 397
National Park System (table: National parks) N: 48
- Virgin Lands project** [Soviet history]
Kazakhstan (History) K: 251-252
- Virgin Mary** See Mary *in this index*
- Virgin of Guadalupe**
Guadalupe Day G: 408
- Virgin olive oil**
Olive oil O: 744
- Virgin Queen**
Virginia V: 398
- Virgin River**
Nevada (Rivers and lakes) N: 166
- Virgin Soil Upturned** [book by Sholokhov]
Sholokhov, Mikhail S: 433
- Virgin Spring, The** [film]
Bergman, Ingmar B: 257
- Virgin with Saint Inés and Saint Tecla, The** [painting by El Greco]

- Madonna and Child (Types of Madonna paintings) M: 38
- Virgin wool**
Wool (Types of wool) W: 399
- Virginal** [musical instrument] V: 397
- Virginia** [ironclad]
Civil War (First battle between ironclads)
Ci: 626 with picture; (The peninsular campaign) Ci: 626
Monitor and Merrimack M: 724
- Virginia** [ship]
Maine (Exploration and settlements) M: 89
- Virginia** [state] V: 398 with pictures and maps
American literature (Colonial literature [1608-1764]) A: 414
Colonial life in America (Development of the Thirteen Colonies) Ci: 789 with map
Randolph, Peyton R: 137
United States, History of the (Virginia and Maryland) U: 152-153
See also the list of Related Articles in the Virginia article
- Virginia, University of** V: 423
Jefferson, Thomas (University founder) J: 87 with picture
Virginia picture on V: 399
- Virginia, Valley of**
Virginia (Land regions) V: 410
- Virginia Beach** [Virginia] V: 423 with picture
Virginia (Visitor's guide) V: 408
- Virginia bluebell** [plant]
Bluebell B: 421
Cowslip Ci: 1113
- Virginia City** [Nevada] V: 424
Nevada N: 156; (Visitor's guide) N: 164 with picture; (The Comstock Lode) N: 174
Western frontier life in America (The search for gold and silver) W: 233-234; (Frontier towns) W: 236-237 with picture
- Virginia Colony** [U.S. history]
Colonial life in America (Geographic divisions) Ci: 789 with map
West Virginia (White exploration) W: 226
- Virginia Company** [U.S. history]
Bermuda (History) B: 268
Colonial life in America (Early English settlements) Ci: 788
Jamestown J: 28
London Company L: 445
Virginia (The Jamestown settlement) V: 418
- Virginia Company of Plymouth, The**
Plymouth Company P: 584
- Virginia Conventions** [U.S. history]
Jefferson, Thomas (Revolutionary leader) J: 78-79
- Virginia cowslip** [plant]
Bluebell B: 421
Cowslip Ci: 1113
- Virginia creeper** [plant] V: 424 with picture
Ivy I: 522
- Virginia Declaration of Rights** [1776]
Constitution of the United States (The Bill of Rights) Ci: 1001
Williamsburg W: 312
- Virginia deer** See White-tailed deer in this index
- Virginia Dynasty** [U.S. history]
Virginia (The Mother of Presidents) V: 421
- Virginia Gazette** [newspaper]
Virginia (Communication) V: 416
Williamsburg (Early days) W: 312
- Virginia Museum of Fine Arts** [Richmond]
Virginia (Libraries and museums) V: 402-403 with picture
- Virginia pine** [tree]
Pine (Southeastern pines) P: 468
- Virginia Plan** [U.S. history]
Constitution of the United States (The compromises) Ci: 1000
Randolph, Edmund R: 137
- Virginia rail** [bird]
Rail R: 103 with picture
- Virginia Resolutions** See Kentucky and Virginia Resolutions in this index
- Virginia Resolves** [U.S. history]
Virginia (The course toward independence) V: 420
- Virginia snakeroot**
Snakeroot S: 537
- Virginian, The** [film]
Cooper, Gary Ci: 1034
- Virginian stock** [plant]
Stock So: 902
- Virginium** [former name, francium]
Francium F: 482
- Virginus Affair** [1873] V: 424
- Virgin's-bower** [plant]
Clematis Ci: 661
- Virgo** [astrology] V: 425 with picture
- Zodiac (The zodiac in astrology) Z: 601 with picture
- Viridiana** [film]
Buñuel, Luis B: 700
- Viroid** V: 425
Microbiology (Microorganisms) M: 513
- Virology**
See also Virus in this index
Biology (table) B: 317
- Virtanen, Artturi Ilmari** [Finnish biochemist]
Nobel Prizes (Chemistry: 1945) N: 443
- Virtual environment** [electronics] See Virtual reality in this index
- Virtual image** [optics]
Lens (A virtual image) L: 196b with diagram
Magnifying glass M: 62
Mirror (Plane mirrors) M: 616
- Virtual reality** [electronics] V: 425 with picture
Computer (Monitors) Ci: 916; (Virtual reality [VR] software) Ci: 919
Computer graphics Ci: 924f; (How a computer creates images) Ci: 924g-924h
- Virtue** [philosophy]
Ethics (Ancient ethics) E: 366
Philosophy (Ancient philosophy) P: 386-387
- Virtue Party**
Turkey (Political changes) T: 512
- Virtuoso concerto** [music]
Concerto Ci: 928
- Virunga Mountains**
Rwanda (Land) R: 571
- Virunga National Park** [Congo (Kinshasa)]
National park (table) N: 42f
- Virus** V: 426 with pictures
AIDS A: 163 with picture
Antiviral drug A: 560
Cancer (Viruses) C: 171
Canine parvovirus C: 177
Cell (Virus diseases) C: 336
Cold, Common C: 760
Disease (Viral diseases) D: 227; (Medical treatment) D: 232-233; picture on D: 229
Electron microscope picture on E: 205
Epstein-Barr virus E: 345
Food poisoning F: 340
Hantavirus H: 54
Hepatitis H: 192
Herpes, Genital H: 214
Herpesvirus H: 214
Immune system I: 87
Influenza (How influenza spreads) I: 268b
Interferon I: 324
Löffler, Friedrich August Johannes L: 420
Microbiology (Microorganisms) M: 513
Plant (Diseases) P: 543
Pneumonia (How pneumonia develops) P: 586
Rabies (Cause) R: 49
Science picture on S: 191
Sexually transmitted disease S: 338b
Smallpox S: 513
Viroid V: 425
Wart W: 44
Xenotransplant X: 544
See also the list of Related articles in the Virus article
- Virus, Computer** See Computer virus in this index
- Visa** [document] V: 428
Immigration (The fourth wave) I: 83
Passport P: 192
- Visayan Islands** [Philippines]
Philippines (The main islands) P: 376 with map
- Visceral pleura** [membrane]
Lungs (Parts of the lungs) L: 523
Pleura P: 573
- Visconti, Tedaldo** See Gregory X in this index
- Viscose**
Cellophane C: 340
Cellulose (Industrial uses) C: 341
- Viscose process**
Rayon (How rayon is made) R: 153 with diagram
- Viscosity** [physics] V: 428 with picture
Aerodynamics (Principles of aerodynamics) A: 85
Superfluid So: 993 with diagram
- Viscount** [title] V: 429
Nobility (In the United Kingdom) N: 450
- Viscountess** [title]
Lady L: 25
Nobility (In the United Kingdom) N: 450
- Viscous fluid**
Fluid F: 304
- Vise**
Tool (Woodworking tools) T: 330
- Vishnu** [Hindu god] V: 429 with picture
Hinduism (Divinities) H: 236
India (Hinduism) I: 116; picture on I: 119
Krishna K: 388
- Rama R: 132
Sculpture (India) S: 236-237
- Vishtaspa** [king of Persia]
Zoroastrianism (History) Z: 611-612
- Visibility, Distance of**
Horizon H: 335 with diagram
- Visible Human Project** [medicine]
Medicine (Computers and electronic communication) M: 370; picture on M: 376
- Visible light**
Light L: 282
- Visible load** [geology]
River (River systems) R: 351
- Visible spectrum** [light]
Color (The relation between color and light) Ci: 817-818 with diagram
Light (Electromagnetic waves) L: 285 with diagram
- Optics (Basic principles of optics) O: 813
- "Visible Speech"**
Bell, Alexander Graham (His early life) B: 240
- Visible World** [book by Comenius]
Literature for children (Early children's literature) L: 361
- VisiCalc** [spreadsheet program]
Computer (Spreadsheet programs) Ci: 917-918
Spreadsheet So: 805
- Visigoths** [people]
Goths G: 279
Rome, Ancient (Decline and fall) R: 448
Spain (Germanic rule) So: 746
Theodosius I T: 252
- Vision**
See also Eye; Vision test in this index
Animal (Adaptations for sensing the environment) A: 492-493
Artificial intelligence (Computer vision) A: 760
Bird (Sight) B: 365 with pictures
Blind spot B: 400
Color (How we see color) Ci: 818-819 with picture
Color blindness Ci: 827
Compound eye Ci: 906 with diagram
Contact lens Ci: 1020
Dog (Senses) D: 265
Hawk picture on H: 112
Insect (Sight) I: 290 with pictures
Mammal (Senses) M: 120
Optical illusion O: 812
Optometry O: 814
Perception (Factors affecting perception) P: 282-283 with pictures
Reading (How we read) R: 156; (Physical disabilities) R: 162
Senses S: 301
- Vision, A** [book by Yeats]
Yeats, William Butler Y: 555
- Vision After the Sermon, The** [painting by Gauguin]
Painting (Postimpressionism) P: 75 with picture
- Vision engineer** [career] See Technical director in this index
- Vision mixer** [machine] See Switcher in this index
- Vision of Piers Plowman, The** [poem]
Langland, William L: 60
English literature (The age of Chaucer) E: 316
Robin Hood R: 367
- Vision of Sir Launfal, The** [poem by Lowell]
Launfal, Sir L: 121
Lowell, James Russell (Literary success) L: 510
- Vision quest** [religion]
Indian, American (Religion) I: 146-147; (Before European contact) I: 165-166
- Vision test**
Blind spot B: 400
Color blindness Ci: 827 with pictures
Eye (Receiving regular eye examinations) E: 469
- "Visionary Letter"** [poem by Rimbaud]
Rimbaud, Arthur R: 341
- Visions** [book by Quevedo]
Quevedo, Francisco de Q: 41
- Visit, The** [play by Dürrenmatt]
Dürrenmatt, Friedrich D: 390
- "Visit from Saint Nicholas, A"** [poem]
Moore, Clement Clarke M: 796
Christmas (Other customs) C: 536
Santa Claus (Santa's appearance) S: 114
- Visitation group** [sculpture]
Sculpture (The peak of architectural sculpture) S: 249-250 with picture
- Visitation Order** [religious group]
Francis de Sales, Saint F: 481
- Visiting nurse**
Nursing (Community health nurses) N: 618
- Visiting the Art Museum** [book by Brown and Brown]

- Literature for children *picture on L*: 383
- Visor**
Armor *picture on A*: 720
- Visscher, Claes Jansz** [Dutch engraver]
Shakespeare, William *picture on S*: 352
- "Vissi d'arte"** [aria]
Opera (*Tosca*) O: 807
- Vistula** [former city]
Toledo (Government and history) [Ohio] T: 321
- Vistula River** [Poland] V: 429
Oder River O: 674
Poland (Rivers and canals) P: 609
- Visual acuity**
Blindness B: 401
Eye (Receiving regular eye examinations) E: 469
- Visual arts**
Fine arts F: 104
- Visual cue**
Butterfly (The life cycle of butterflies) B: 739-740
- Visual Flight Rules** [navigation]
Map (Navigation maps) M: 177-178
- Visual illusion** *See* Optical illusion *in this index*
- Visual induction**
Perception (Principles of perception) P: 284
- Visual materials**
Audio-visual materials (Visual materials) A: 882 *with picture*
- Visual mixing**
Color *diagram on Ci*: 820
- Visual purple** [pigment]
Eye (The retina) E: 462
- Visual rhyme**
Rhyme R: 320
- Visual sensory memory**
Memory (Sensory memory) M: 392
- Visual signal**
Deafness (Special devices) D: 58
- Visual telegraph**
Communication (During ancient times) Ci: 879;
(The 1700's) Ci: 880-881 *with picture*
- Visual vibration**
Color *diagram on Ci*: 820
- Visualization** [psychology]
Imagination I: 79
- Vita Nuova, La** [poems by Dante]
Dante Alighieri (His works) D: 34
- Vital records**
Genealogy G: 82
- Vital statistics** V: 429
Population (Census) P: 673
Public health (Collecting vital statistics) P: 856
- Vital Statistics Division, National**
Vital statistics (Collecting and publishing vital statistics) V: 429-430
- Vitalian, Saint** [popel]
Pope (table) P: 666
- Vitalism** [chemistry]
Chemistry (Development of organic chemistry) C: 404
- Vitamin** V: 430
Baby (Vitamins and iron) B: 9
Cancer (Alternative medicine) C: 173
Diet (Normal diet) D: 200
Dietary supplement D: 200
Food (Regulating body processes) F: 331
Food additive (Kinds of additives) F: 339
Health food (Types of health foods) H: 129
Liver (Digestion and use of food) L: 394
Meat (Food value of meat) M: 346
Medicine (The medical revolution) M: 376
Milk (Vitamins) M: 546
Nutrition (Kinds of nutrients) N: 625;
(Deficiency diseases) N: 630; (Evaluate claims about foods and dietary supplements carefully) N: 630
- Vitamin A**
Vitamin (Vitamin A) V: 430
Baby (Vitamins and iron) B: 9
Eye (Adaptation to light and dark) E: 464;
(Disease of the retina) E: 467-468
Lipid L: 344
Milk (Fortification) M: 548
Nutrition (Vitamins) N: 626
Wald, George W: 7
- Vitamin B complex**
Vitamin (Vitamin B complex) V: 430
Folic acid F: 315
Pellagra P: 232
- Vitamin B₁**
Vitamin (Vitamin B complex) V: 430
Beriberi B: 258
Nutrition (Vitamins) N: 626
- Vitamin B₂**
Vitamin (Vitamin B complex) V: 430
Nutrition (Vitamins) N: 626
Seafood S: 265
- Vitamin B₆**
Nutrition (Vitamins) N: 626
Seafood S: 265
Vitamin (Vitamin B complex) V: 430-431
- Vitamin B₁₂**
Vitamin (Vitamin B complex) V: 430-431
Anemia (Insufficient production of red blood cells) A: 458
Cobalt (Uses) Ci: 741
Nutrition (Vitamins) N: 626
Seafood S: 265
Vegetarianism V: 295
- Vitamin C**
Vitamin (Vitamin C) V: 431
Acerola A: 24
Antioxidant A: 557
Baby (Vitamins and iron) B: 9
Nutrition (Vitamins) N: 626; (Deficiency diseases) N: 630-631
Scurvy S: 261
- Vitamin D**
Vitamin (Vitamin D) V: 432; (How vitamins work) V: 432
Baby (Vitamins and iron) B: 9
Lipid L: 344
Milk (Fortification) M: 548
Nutrition (Vitamins) N: 626; (Deficiency diseases) N: 630-631
Races, Human (Climatic adaptations) R: 58
Rickets R: 335
Ultraviolet rays (Uses of ultraviolet rays) U: 17
- Vitamin D₂**
Vitamin (Vitamin D) V: 432
- Vitamin D₃**
Vitamin (Vitamin D) V: 432
- Vitamin deficiency**
Malnutrition M: 111
Nutrition (Deficiency diseases) N: 630
Vitamin V: 430
- Vitamin E**
Vitamin (Vitamin E) V: 432
Antioxidant A: 557
Lipid L: 344
Nutrition (Vitamins) N: 626
- Vitamin K**
Vitamin (Vitamin K) V: 432
Lipid L: 344
Nutrition (Vitamins) N: 626
- Vitamin P** [former name]
Citrus Ci: 573
- Vitellina membrane**
Egg (The yolk) E: 117 *with diagram*
- Vitellius** (Roman emperor)
Rome, Ancient (table) R: 447
- Viti Levu** [island]
Fiji F: 97 *with map*
- Vitiligo** [disease] V: 432
Skin (Other skin disorders) S: 491
- Vitis vinifera** [plant]
Wine (Where wine comes from) W: 336
- Vitrectomy** [medicine]
Eye (Diseases of the retina) E: 467
- Vitreous humor** [physiology]
Blindness (Diseases) B: 401
Eye (Parts of the eye) E: 460 *with picture*;
(Diseases of the retina) E: 467
- Vitrification** [freezing technique]
Cryobiology Ci: 1165
- Vitrinellid** [animal]
Shell S: 384
- Vitro fertilization** [reproduction] *See* In vitro fertilization *in this index*
- Vitruvian man** [drawing by Leonardo]
Leonardo da Vinci (Drawings and scientific studies) L: 200-200a; *picture on L*: 200b
- Vitruvius** (Roman architect)
Leonardo da Vinci (Drawings and scientific studies) L: 200-200a
- Vitry, Philippe de** [French composer]
Classical music (Secular music) Ci: 646
- Vittoria, Alessandro** (Italian sculptor)
Sculpture (Michelangelo) S: 252-253
- Vittorini, Elio** [Italian author]
Italian literature (The 1900's) I: 495
- Vivace**
Music (table) M: 954
- Vivaldi, Antonio** [Italian composer] V: 433
- Vivanco, Luis Falipa** [Spanish poet]
Spanish literature (The Generation of 1927) So: 763
- Vivax, P.** [protozoan]
Malaria (Symptoms) M: 96
- Vives, Juan Luis** [Spanish author]
Spanish literature (The 1500's) So: 758
- Vivian, John C.** [American political leader]
Colorado (table) Ci: 844
- Viviani, Emilia** [Italian public figure]
Shelley, Percy Bysshe (His writings) S: 391
- Viviparous animal** [zoology] V: 433
Oviparous animal O: 882
Reptile (Reproduction) R: 252
- Viviparous Quadrupeds of North America, The** [book by Audubon and Bachman]
Audubon, John James (His works) A: 884
- Vivisection** [biology]
Animal experimentation A: 510
- Vixen** [animal]
Fox (The life of a fox) F: 439 *with pictures*
- Vizcaino, Sebastián** [Spanish explorer]
California (Spanish and English exploration) C: 60
Monterey M: 764
- Vizier** [title] V: 433
Egypt, Ancient (Government) E: 139
- Vizsla** [dog] V: 433 *with picture*
Dog *picture on D*: 269
- VLA** [telescope] *See* Very Large Array Telescope *in this index*
- Vlaacq, Adriaen** [Dutch mathematician]
Logarithms (History) L: 424
- Vlad Tepes** [prince of Walachia]
Dracula D: 317
Vampire V: 268
- Vladimir I** [Grand Prince of Kiev] V: 433
Russia (Architecture) R: 536; (The state of Kievan Rus) R: 547-548
Ukraine (Kievan Rus) U: 12
- Vladivostok** [city, Russia] V: 433
- Vlaminck, Maurice de** [French painter] V: 433
- VLBA** [telescope] *See* Very Long Baseline Array Telescope *in this index*
- VLCC** [ship]
Tanker (Kinds of tankers) T: 28
- VLT** [telescope] *See* Very Large Telescope *in this index*
- VOA** *See* Voice of America *in this index*
- Voaden, Herman** [Canadian author]
Canadian literature (Literature between the world wars) C: 159-160
- Vocabulary** V: 434
English language (Vocabulary) E: 312
- Vocal cord** [anatomy]
Larynx L: 79
Music (Musical instruments) M: 948
Singing (How people sing) S: 472
Sound (The human voice) So: 598
Voice (The human voice) V: 436 *with diagrams*
- Vocal music**
Classical music (Vocal music) Ci: 644
- Vocal sac** [zoology]
Frog (Voice) F: 537-538 *with picture*
- Vocalizing**
Speed reading So: 774
- Vocation**
Career education C: 213
Careers C: 214 *with pictures*
For a list of articles on career opportunities, see the Related Articles in the Careers article
- Vocational blindness**
Blindness B: 401
- Vocational education** V: 434 *with picture*
See also Career education *in this index*
Careers (Vocational schools) C: 217
Education (Kinds of education) E: 88
Germany (Education) G: 151-152
School (High schools) S: 181
- Vocational Education, Federal Board for** [U.S. history]
Veterans Affairs, Department of (History) V: 343-344
- Vocational Education Act** [1963]
Vocational education (The 1900's) V: 435
- Vocational Education Amendments** [1968]
Vocational education (The 1900's) V: 435
- Vocational guidance**
Career education C: 213
Guidance (Vocational or career guidance) G: 422
For a list of articles on career opportunities, see the Related Articles in the Careers article
- Vocational high school**
Vocational education (Public high schools) V: 434
- Vocational rehabilitation** V: 435
- Vocational Rehabilitation of Disabled Parsons Act** [1961]
Vocational rehabilitation V: 436
- Vocational training**
Disabled (Vocational training) D: 220 *with picture*
- Vocative case** [grammar]
Case (Cases in Latin) C: 272
- "Voca poco fa, Una"** [aria]
Opera (*Barber of Seville, The*) O: 801
- Vodka**

- Alcoholic beverage (Vodka) **A**: 336
Vogelweide, Walther von der [Austrian poet]
See Walther von der Vogelweide in this index
Vogt, Steven S. [American astronomer]
 Planet (The first discoveries) **P**: 512
Voice [grammar] **V**: 437
Voice [sound] **V**: 436 *with diagrams*
 Larynx **L**: 79
 Singing **S**: 472
 Sound (The human voice) **So**: 598
 Speech therapy (Types and causes of speech defects) **So**: 773
 Theater (Body and voice) **T**: 237; (Creating a role) **T**: 238
 A Guide to Speaking Skills Research Guide: 23
See also the list of Related Articles in the Voice article
Voice box *See* Larynx in this index
Voice coil [electricity]
 Radio (The speaker) **R**: 89
 Speaker **So**: 768
Voice mail [recording system]
 Telephone (Business services) **T**: 98
Voice of America [communications] **V**: 437
 Foreign policy (Public opinion) **F**: 387
 Radio (The Golden Age of Broadcasting) **R**: 92-93
 United States Information Agency **U**: 200
Voice of Scotland [religious group]
 Scotland (Religion) **S**: 215
Voice of the City, The [book by O. Henry]
 Henry, O. (His works) **H**: 189
Voice-recognition software
 Computer (A microphone) **Ci**: 915
Voice vote
 Congress of the United States (Passing a bill) **Ci**: 945
 Parliamentary procedure (Voting on motions) **P**: 177
Voiceprint **V**: 437 *with picture*
Voices in the Park [book by Browne]
 Literature for children *picture on* **L**: 354
Voices of the Night [poems by Longfellow]
 Longfellow, Henry Wadsworth (Professor and family man) **L**: 449
Void [astronomy]
 Galaxy (Groups of galaxies) **G**: 8a
Voight, Jon [American actor]
 Motion picture (Best performance by an actor: 1978) **M**: 862-863
Voigt, Cynthia [American author]
 Newbery Medal (table) **N**: 359
Voile [fabric] **V**: 437
Voinovich, George Victor [American political leader]
 Ohio (table) **O**: 699
Voinovich, Vladimir [Soviet author]
 Russian literature (Modern Soviet literature) **R**: 564-565
Voir dire [law]
 Jury (Petit juries) **J**: 202
Voisin, Charles [French aviator]
 Aviation (Beginnings) **A**: 986
Voisin, Gabriel [French aviator]
 Aviation (Beginnings) **A**: 986
Voivodship [province]
 Poland (Local government) **P**: 605
Vojvodina [province]
 Yugoslavia (Local government) **Y**: 577
 Serbia (History) **S**: 314-315
Volapük [language]
 Universal language **U**: 205
Volatile oil
 Oil (Volatile oils) **O**: 707
Volatility [physics]
 Evaporation (How evaporation occurs) **E**: 422-423; (Uses of evaporation) **E**: 423
Volcán Barú [mountain, Panama]
 Panama (The Central Highland) **P**: 119
Volcán Tajumulco [mountain]
 Guatemala (The Highlands) **G**: 414
Volcanic ash
 Volcano (Rock fragments) **V**: 439
Volcanic bomb
 Rock (Extrusive rock) **R**: 371
 Volcano (Rock fragments) **V**: 439
Volcanic breccia
 Rock (Extrusive rock) **R**: 371
Volcanic dust
 Dust (Influence on climate) **D**: 390
 Rock (Extrusive rock) **R**: 371
 Volcano (Rock fragments) **V**: 439
Volcanic island
 Island (Kinds of islands) **I**: 471-472 *with diagram*
 Seamount **S**: 269
Volcanic mountain
 Mountain (Volcanic mountains) **M**: 892
Volcanic rock
 Basalt **B**: 123
 Earth (Igneous rocks) **E**: 21
 Igneous rock **I**: 48
Volcanic tuff
 Volcano (Rock fragments) **V**: 439
Volcano **V**: 438 *with pictures and map*
 Coral reef (Kinds of coral reefs) **Ci**: 1048a-1048b
 Climate (Volcanic eruptions) **Ci**: 676d
 Crater **Ci**: 1121
 Disaster (table) **D**: 223
 Hot spot **H**: 374a
 Io **I**: 370
 Island (Volcanic islands) **I**: 472
 Lake (How lakes are formed) **L**: 32 *with picture*
 Lava **L**: 127
 Life (Modern theories) **L**: 278-279 *with picture*
 Magnetism (The magnetism of the earth) **M**: 60c
 Mars (Volcanoes) **M**: 226; (The Amazonian Period) **M**: 226c
 Moon (Rilles) **M**: 790; (Mantle) **M**: 791
 Mount Saint Helens **M**: 888 *with picture*
 Mountain (Volcanic mountains) **M**: 892
 Ocean (The land at the bottom of the sea) **O**: 559-660
 Plate tectonics **P**: 561; (Evidence of plate movement) **P**: 563
 Ring of Fire **R**: 342
 Seamount **S**: 268 *with picture*
 Tsunami **T**: 475
Volcano Islands [islands, Pacific]
 Iwo Jima **I**: 523
Volcano Lover, The [book by Sontag]
 Sontag, Susan **So**: 594
Volcano rabbit [rabbit]
 Rabbit (The body of a rabbit) **R**: 47
Volcanoes National Park [Rwanda]
 National park (table) **N**: 42f
Volcanology
 Volcano (The study of volcanoes) **V**: 442
Volcker, Paul Adolph [American government official] **V**: 443
Vole [animal] **V**: 443 *with picture*
 Arctic (Animal life) **A**: 638
Volga-Baltic Waterway [Russia]
 Canal (table) **C**: 164
Volga-Don Canal [Russia]
 Canal (table) **C**: 164
 Russia (Transportation and communication) **R**: 546
Volga Germans [people]
 Minority group (Minority groups in other countries) **M**: 610
Volga River [Russia] **V**: 444
 River (table) **R**: 352
 Russia (Rivers and lakes) **R**: 541; *picture on* **R**: 545
Volgograd [city, Russia] **V**: 444
Volhynia [region, Europe]
 Ukraine (Lithuanian and Polish rule) **U**: 12
Volkov, Vladislav N. [Soviet cosmonaut]
 Astronaut (Accidents in space) **A**: 830; (table) **A**: 830
 Space exploration (Salyut and Skylab) **So**: 721
Volkswagen **V**: 444
 Automobile (Major producing countries and companies) **A**: 955-956; (The rise of international automaking) **A**: 972; *picture on* **A**: 969
 Manufacturing (table) **M**: 170
Volley [sports]
 Soccer (table) **So**: 546
Volleyball [sport] **V**: 444 *with pictures*
 Beach volleyball **B**: 179 *with picture*
 Massachusetts (Interesting facts) **M**: 271
 Olympic Games (Summer Olympic Games) **O**: 746a-749
Vollmer, August [American criminologist]
 Police (Law and order in America) **P**: 624
Volodymyr I [Grand Prince of Kiev] *See* Vladimir I in this index
Volos [Greece]
 Thessaly **T**: 258
Volpe, John Anthony [American political leader]
 Massachusetts (table) **M**: 288
 Transportation, Department of (table) **T**: 400
Volpone [play by Jonson]
 Jonson, Ben **J**: 160
Volscians [ancient people]
 Coriolanus, Gaius Marcius **Ci**: 1053
Volstead Act [1919] **V**: 445
 Prohibition (The movement toward prohibition) **P**: 815
Volsunga Saga [Icelandic literature]
 Brunhild **B**: 652
 Mythology (Teutonic heroes) **M**: 985
Volt [electricity] **V**: 446
 Decibel **D**: 70
 Electric current (Conductors and insulators) **E**: 168
 Electromotive force **E**: 203
 Metric system (Electricity) **M**: 440
Volta, Alessandro [Italian inventor] **V**: 446
 Electricity (Experiments with electric charge) **E**: 196-197
 Physics (Developments in the 1800's) **P**: 440
Volta, Lake
 Lake Volta **L**: 48 *with map*
 Ghana (Land) **G**: 179 *with map*
Volta Laboratory [organization]
 Bell, Alexander Graham (His later life) **B**: 241
Voltage [electricity]
 Electricity (Electrical safety) **E**: 195
 Battery (Types of batteries) **B**: 168
 Electrolysis (Laws of electrolysis) **E**: 201-202
 Electronics **E**: 206; (Electronic circuits) **E**: 208
 Electric generator (A simple generator) **E**: 170-171
 Volt **V**: 446
Voltaic [people]
 Burkina Faso (People) **B**: 706
Voltaic pile
 Electricity (Experiments with electric charge) **E**: 196-197 *with picture*
Voltaire [French author] **V**: 446 *with portrait*
 Age of Reason **A**: 138
 Black humor **B**: 389
 Châtelet, Marquise Du **C**: 387
 Democracy (French contributions to democracy) **D**: 123
 Freethinker **F**: 509
 French literature (The Age of Reason) **F**: 520
 Peace (From the 1400's to the 1700's) **P**: 206
 Philosophes **P**: 382
 Science fiction (Forerunners of science fiction) **S**: 205
 Sculpture (European sculpture) **S**: 253-254 *with picture*
Voltaire [sculpture by Houdon]
 Sculpture (European sculpture) **S**: 253-254 *with picture*
Voltmeter [instrument]
 Electric meter **E**: 176
 Thermocouple **T**: 253
 Thermometer (Thermocouple thermometers) **T**: 254
Volume [art]
 Sculpture (Form and treatment) **S**: 230
Volume [measurement] **V**: 447
 Archimedes (His discoveries) **A**: 605
 Cube **Ci**: 1180
 Cylinder **Ci**: 1205
 Density **D**: 142
 Metric system (Space and time) **M**: 437; (The metric system at a glance) **M**: 438 *with pictures*; (Metric conversion table) **M**: 439 *with pictures*
 Weights and measures (table: Volume and capacity) **W**: 186
Voluntary act [psychology]
 Behavior (Types of behavior) **B**: 221
Voluntary chain
 Chain store **C**: 369
Voluntary manslaughter
 Manslaughter **M**: 167
Voluntary muscle [anatomy]
 Human body (Skeletal muscles) **H**: 419
 Muscle (Skeletal muscles) **M**: 933-934
 Paralysis **P**: 152
Volunteer fire department
 Fire department (Volunteer departments) **F**: 127
 Fire Department (Fire protection in North America) **F**: 128
Volunteer State
 Tennessee **T**: 134
Volunteers of America [organization] **V**: 447
Volute [architecture]
 Column (The Greek orders) **Ci**: 865
Volva [botany]
 Mushroom (Parts of a mushroom) **M**: 941; *picture on* **M**: 942
Volvox [alga]
 Algae *picture on* **A**: 349
 Protozoan (Flagellates) **P**: 837
Vomer bone [anatomy]
 Face **F**: 3
Vomiting **V**: 447
 Alkalosis **A**: 369
 First aid (Swallowed poisons) **F**: 137
 Motion sickness **M**: 874
 Nausea **N**: 69
Von ...
Names beginning with Von are alphabetized either as single words or under their key words. Von Neumann, John appears after

- Vonnegut, Kurt and Papen, Franz von
appears after Papeete
- Von Békésy, Georg** [American physicist]
Nobel Prizes (Physiology or medicine) 1961)
N: 445
Sound (Modern acoustics) So: 606
- Von Braun, Wernher** [German-American engineer] V: 447
Rocket (Rockets of the early 1900's) R: 390
Space exploration (The first space rockets)
So: 706
- Vonck, Jén** [Belgian lawyer]
Belgium (The Brabant Revolution) B: 233
- Vondel, Joost van den** [Dutch author]
Netherlands (Arts) N: 142
- Von Hohenheim, Theophrastus Bombastus**
See Paracelsus, Philippus Aureolus *in this index*
- Von Klitzing, Klaus** [German physicist]
Nobel Prizes (Physics: 1985) N: 441
- Vonnegut, Kurt** [American author] V: 448
American literature (Experimental styles)
A: 424 *with portrait*
- Von Neumann, John** [Hungarian-American mathematician] V: 448
Computer (The first electronic computers)
Ci: 924b
Game theory G: 22
- Von Recklinghausen's disease**
Neurofibromatosis N: 152
- Von Sternberg, Josef** [American director] V: 448
Dietrich, Marlene D: 201
- Von Steuben, Friedrich Wilhelm** [German-American general] See Steuben, Baron von
in this index
- Von Willebrand's disease** V: 448
Hemophilia (Major types of hemophilia) H: 183
- Voodoo** [magic] V: 448 *with picture*
Doll (Doll festivals and customs) D: 287
Duvalier, François D: 393
Haiti (People) H: 14
Magic (Contagious magic) M: 50
- Voorhees, Foster M.** [American political leader]
New Jersey (table) N: 249
- Voorhis, Jerry** [American political leader]
Nixon, Richard Milhous (Career in Congress)
N: 430
- VOR** [radio]
Airplane (Radio navigation) A: 227 *with picture*
- Vorder Rhine** [river, Switzerland]
Rhine River (The course of the Rhine) R: 292
with map
- Vorster, Balthazar Johannes** [South African political leader] V: 449
South Africa (Apartheid) So: 619-620
- VORTAC** [radio]
Airplane (Radio navigation) A: 227
- Vortex** [physics]
Glider (The wings) G: 228
Superfluid So: 994
- Vortex, The** [book by Rivera]
Latin-American literature (The early 1900's)
L: 113
- Vortex, The** [play by Coward]
Coward, Noël Ci: 1107
- Vortice** [physics]
Aerodynamics (Induced drag) A: 87
- Vorticella** [microorganism]
Protozoan (Ciliates) P: 837
- Vortigern** [English king]
Anglo-Saxons A: 464
- Voskhod program**
Astronaut (Achievements in space) A: 829;
picture on A: 833
Space exploration (Voskhod and Gemini: The first multiperson space flights) So: 714
with picture
- Voss** [book by White]
White, Patrick W: 284
- Vostok program** [space exploration]
Astronaut (Achievements in space) A: 829
Exploration (Space exploration) E: 452
Gagarin, Yuri Alekseyevich G: 5
Space exploration (Vostok and Mercury: The first human beings in space) So: 711 *with pictures; picture on* So: 698
- Vote of confidence**
Prime minister P: 778c
- Vote of no confidence**
Prime minister of Canada (How the prime minister is chosen) P: 778d
- Voter registration**
United States, History of the *picture on* U: 175
Voting (Registration) V: 449
- Voting** V: 449
African Americans (During the early 1900's)
A: 136j; (Political gains) A: 136n
Apportionment A: 574
- Ballot B: 63
Canada, Government of C: 130
Citizenship (The duties of citizens) Ci: 569
Colonial life in America (Government and law enforcement) Ci: 794
Congress of the United States (Passing a bill)
Ci: 945
Constitution of the United States (Amendment 14) Ci: 1014; (Amendment 15) Ci: 1014; (Amendment 19) Ci: 1015; (Amendment 23) Ci: 1015-1016; (Amendment 24) Ci: 1016; (Amendment 26) Ci: 1016
Election E: 158
Election campaign (Getting out the vote) E: 160
Electoral College E: 161
Fifteenth Amendment F: 95
Gerrymander G: 174
Grandfather clause G: 310
Hispanic Americans (Political developments)
H: 255
Initiative and referendum I: 271
League of Women Voters L: 161
Nixon, Richard Milhous (The national scene)
N: 433-434
Parliamentary procedure (Voting on motions)
P: 177
Poll tax P: 644
Recall R: 174
Reconstruction (The Republicans in the South)
R: 179; (Effects of Reconstruction)
R: 179-180
Scalwags S: 169
Sex discrimination (Changes in laws) S: 335
Voting machine V: 451
Woman suffrage W: 380
Woodhull, Victoria Claflin W: 393
- Voting in presidential elections**
Political convention P: 628
- Voting machine** V: 451 *with picture*
Edison, Thomas Alva (Telegraph innovator) E: 78
Voting (Methods of voting) V: 450
- Voting Rights Act of 1965**
African Americans (Political gains) A: 136n
Great Society (Legislation) G: 349
King, Martin Luther, Jr. (The growing movement) K: 321-322
National Association for the Advancement of Colored People (Activities) N: 29
- Votive figures** [art]
Sculpture (Middle Eastern) S: 233 *with picture*
- Voucher system** [education]
Education (Who should choose a child's school?) E: 106
Parochial school P: 178
- Vouli** [parliament]
Greece (Government) G: 352-353
- Voussoir** [architecture]
Arch A: 593 *with diagram*
- Vow of Louis XIII, The** [painting by Ingres]
Ingres, Jean Auguste Dominique I: 271
- Vowel** [speech] V: 451
Hebrew language H: 162 *with pictures*
- Vowel point** [diacritical mark]
Hebrew language H: 162 *with picture*
- Voyage, The** [opera by Glass]
Glass, Philip G: 224
- Voyage of Discovery, A** [book by Vancouver]
Vancouver, George V: 278
- Voyage of Life, The** [paintings by Cole]
Cole, Thomas Ci: 771
- Voyage of the Vega** [book by Nordenskjöld]
Nordenskjöld, Nils Adolf Erik N: 453
- Voyager** [space probes] V: 451
- Voyager 1** [space probe]
Exploration (Space exploration) E: 452
Heliosphere (Probing the heliosphere) H: 175
Jupiter (Flights to Jupiter) J: 201
Saturn (Flights to Saturn) S: 153
Space exploration (Probes to Jupiter and beyond) So: 710
with picture
- Titan T: 299
Van Allen belts V: 269
Voyager V: 451
- Voyager 2** [space probe]
Exploration (Space exploration) E: 452
Heliosphere (Probing the heliosphere) H: 175
Jupiter (Flights to Jupiter) J: 201
Neptune (Satellites and rings) N: 129 *with picture*
- Observatory *picture on* O: 646
Planet (The planets of our solar system)
P: 510-511
Satellite (History of satellite study) S: 150c
Saturn (Flights to Saturn) S: 153
Space exploration (Probes to Jupiter and beyond) So: 710, *pictures on* So: 708, So: 709
Titan T: 299
- Triton T: 448
Uranus U: 218
Van Allen belts V: 269
Voyager V: 451 *with picture*
- Voyages of Doctor Dolittle, The** [book by Lofting]
Lofting, Hugh L: 420
- Voyages of William Baffin, The** [book by Markham]
Baffin, William B: 25
- Voyages on the River Saint Lawrence** [book by Mackenzie]
Mackenzie, Sir Alexander M: 23
- Voyageur** [Canadian history]
Drummond, William Henry D: 368
- Voyageurs National Park** [Minnesota] V: 452
National Park System (table: National parks)
N: 49
- Voyaging: Southward from the Strait of Magellan** [book by Kent]
Kent, Rockwell K: 271
- Voysey Inheritance, The** [play by Granville-Barker]
Granville-Barker, Harley G: 319
- Voznesensky, Andrey** [Soviet poet]
Russian literature (Modern Soviet literature)
R: 564
- VR** [electronics] See Virtual reality *in this index*
- Vranitzky, Franz** [Austrian political leader]
Austria (Recent developments) A: 940
- Vroom, Peter D.** [American political leader]
New Jersey (table) N: 249
- VSD** [medicine] See Ventricular septal defect *in this index*
- V/STOL** [aircraft] V: 452
Airplane (Special-purpose planes) A: 212-213
with picture
Aviation (Internationalization) A: 991
Navy (Aircraft carriers) N: 78; *picture on* N: 76
- VTOL** [aircraft]
V/STOL V: 452
- VTR** See Videotape recorder *in this index*
- Vucetich, Juan** [Argentine criminologist]
Fingerprinting (History) F: 107
- Vuia, Trajan** [Romanian inventor]
Airplane (Other pioneer planes and fliers) A: 233
- Vuillard, Edouard** [French painter] V: 452
- Vukovar** [city, Croatia]
Yugoslavia *picture on* Y: 581
- Vukovich, Bill** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Vulcan** [Roman mythology] V: 453
- Vulcan** [sculpture]
Birmingham (Education and cultural life) B: 376
- Vulcan aircraft cannon**
Machine gun (Aircraft weapons) M: 16
- Vulcanian eruption**
Volcano (Classifying volcanic eruptions)
V: 442
- Vulcanization** [Industrial process]
Connecticut (The 1800's) Ci: 970
Goodyear, Charles G: 270
Invention (The inventive process) I: 355-357
Rubber (Discovery of vulcanization) R: 501; (Vulcanization) R: 505
Tire (Assembling a tire) T: 297
- Vulcano** [island, Mediterranean]
Volcano V: 438
- Vulgate** [Bible] V: 453
Bible (The first translations) B: 285-286
Jerome, Saint J: 93
Old Testament (Translations) O: 741
- Vulgate Cycle** [books]
Galahad, Sir G: 7
- Vulnerable species** See Threatened species *in this index*
- Vulpius, Christiane** [wife of]
Goethe, Johann Wolfgang von (Late years)
G: 247
- Vulture** [bird] V: 453 *with pictures*
Animal *picture on* A: 477
Buzzard B: 746
Condor Ci: 929 *with pictures*
Ear *picture on* E: 13
Eye (Eyes of animals) E: 469
- Vultures, The** [play by Becque]
French literature (Naturalism) F: 522
- Valva** [anatomy]
Reproduction, Human (The human reproductive system) R: 245 *with diagram*
- Vuntut National Park** [Yukon Territory]
Canada (table: National parks and national park reserves) C: 113
- Vyasa** [legendary figure]
Mahabharata M: 64
- Vychegda River** [Russia]
Dvina River D: 394

W

W [letter] **W**: 1 *with pictures*

W [symbol]

Tungsten **T**: 487

W boson

Physics (Physics today) **P**: 442-443

Standard Model **So**: 833

W. K. Kellogg Foundation *See* Kellogg

Foundation in *this index*

W. R. Grace and Company

Peru (The growth of U.S. influence) **P**: 315

Waals, Johannes Diderik van der [Dutch physicist]

Nobel Prizes (Physics: 1910) **N**: 440

Wabash and Erie Canal [waterway, Indiana]

Toledo (Government and history) **T**: 321

Wabash River [river, Indiana-Ohio] **W**: 2

Wabokieshiek [American Indian chief]

Winnebago Indians **W**: 339

Wabush [city, Newfoundland]

Labrador (People and economy) **L**: 18

WAC [U.S.] *See* Women's Army Corps in *this index*

WAC Corporal [rocket]

Rocket (High-altitude rockets) **R**: 390

Space exploration (The first space rockets)

So: 706-707 *with picture*

Wace [Norman poet]

English literature (The development of English romances) **E**: 315

Knights and knighthood (Knighthood in literature) **K**: 351

Round Table (Origin) **R**: 490

Wachusett Reservoir

Massachusetts (Rivers and lakes) **M**: 284-285

Waco [Texas] **W**: 2 *with picture*

Wacousta [book by Richardson]

Canadian literature (Early English-Canadian literature) **C**: 157; *picture on C*: 159

Wacousta [play by Reaney]

Reaney, James **R**: 173

Waddell, Hugh [American military leader]

North Carolina (Colonial days) **N**: 492

Waddell, Rube [American baseball player]

Baseball (table: Hall of Fame) **B**: 135

Waddington, Mount

British Columbia (Land regions) **B**: 622

Wade, Abdoulaye [Senegalese political leader]

Senegal (History) **S**: 299-300

Wade, Sir Thomas [British linguist]

Chinese language (Development) **C**: 511

Wade-Giles system [linguistics]

China (Languages) **C**: 481-482

Chinese language (Development) **C**: 511

Wadi [geology]

Egypt (The Eastern Desert) **E**: 126

Wadsworth, James J. [American diplomat]

United Nations (table) **U**: 86

Wadsworth, Joseph [American colonial leader]

Charter Oak **C**: 386

Wadsworth-Longfellow House [Portland]

Maine (Places to visit) **M**: 78 *with picture*

WAF [U.S. history]

Air Force, United States (Air Force women)

A: 190

Wafer-tumbler lock

Lock (Mechanical locks) **L**: 411

Wage and Price Stability, Council on [U.S.]

Ford, Gerald Rudolph (The national scene)

F: 376-377

Wage base

Social security (Financing Social Security)

So: 555

Wage-index

Social security (Old-age, survivors, and disability insurance) **So**: 553-555

Wage laborer

Plantation ("Free"-labor plantations) **P**: 550-

551

Wage-price controls [economics]

Inflation (Wage and price controls) **I**: 268a

Nixon, Richard Milhous (Inflation) **N**: 434;

(Events at home) **N**: 435-436

Price control **P**: 775

Wage-price spiral [economics]

Inflation (The cost-push theory) **I**: 268

Wager [gambling] **W**: 2

Wager of battle [European history] *See* Trial by combat in *this index*

Wages and hours **W**: 2

Capitalism (Capitalism in its ideal form) **C**: 194

Careers (Probable earnings) **C**: 216; (table:

Average starting salaries in the United

States) **C**: 216

Child labor (Early child labor laws) **C**: 455

Cost of living **Ci**: 1079

Labor movement (Arranging contracts) **L**: 6-5

Minimum wage **M**: 573

President of the United States (Salary and other allowances) **P**: 762

Profit sharing **P**: 811

Sex discrimination (Persistence of sex discrimination) **S**: 335; (Changes in laws) **S**: 335

Wagner, Cosima von Bülow [wife of]

Wagner, Richard (Later career) **W**: 4

Wagner, Honus [American baseball player] **W**: 3

with portrait

Baseball (The early 1900's) **B**: 135-136; (table:

Hall of Fame) **B**: 135

Wagner, Otto [Austrian architect]

Architecture (Early modern architecture in

Europe) **A**: 627-628

Wagner, Richard [German composer] **W**: 4 *with*

portrait

Classical music *picture on Ci*: 650

Fafnir **F**: 5

Flagstad, Kirsten **F**: 224

Flying Dutchman **F**: 311

Germany (Music) **G**: 153; *picture on G*: 154

Liszt, Franz (His life) **L**: 349-350

Ludwig II **L**: 515

Opera (Richard Wagner) **O**: 798 *with pictures*;

(*Ring of the Nibelung, The*) **O**: 806-807

Overture **O**: 882

Tannhäuser **T**: 29

Wagner, Robert Ferdinand [American political

leader] **W**: 5

National Labor Relations Act **N**: 39

Wagner Act *See* National Labor Relations Act in *this index*

Wagner-Jauregg, Julius [Austrian neurologist]

Nobel Prizes (Physiology or medicine: 1927)

N: 444

Wagon [scenery]

Theater (Changing scenery) **T**: 240

Wagon [vehicle] **W**: 5 *with pictures*

Wagon train

Pioneer life in America (Crossing the Plains)

P: 485-486; *picture on P*: 476

Western frontier life in America

(Transportation) **W**: 238

Wagoner [constellation] *See* Auriga in *this index*

Wagoner, Porter [American singer]

Parton, Dolly **P**: 188

Wagtail [bird]

Bird *picture on B*: 361

Wahhabis [religious group]

Qatar (History) **Q**: 3

Saudi Arabia (Religion) **S**: 158; (The founding

of Saudi Arabia) **S**: 161

Wahid, Abdurrahman [Indonesian political

leader]

Indonesia (Recent developments) **I**: 239

Wahidi [sultanate]

South Arabia, Federation of **So**: 639

Wahl, Arthur Charles [American chemist]

Plutonium **P**: 581

Wahlöö, Per [Swedish author]

Sweden (Literature) **So**: 1026-1027

Wahlstatt, Prince of *See* Blücher, Gebhard

Leberecht von in *this index*

Wahoo [fish] **W**: 6 *with picture*

Wahunsenacock *See* Powhatan in *this index*

Waialeale, Mount *See* Mount Waialeale in *this index*

Waianae Range [mountain]

Hawaii (Oahu) **H**: 102

Waiblingen [estate]

Guelphs and Ghibellines **G**: 419

Waihee, John [American political leader]

Hawaii (table) **H**: 105

Waikato Basin

New Zealand (The North Island) **N**: 351

Waikiki [district]

Honolulu (Economy) **H**: 321 *with picture*

Wailing Wall [shrine, Jerusalem] *See* Western

Wall in *this index*

Waimaa Canyon

Hawaii (Places to visit) **H**: 98 *with picture*;

(Kauai) **H**: 102

United States *picture on U*: 126

Wainwright, Jonathan Mayhew [American

general] **W**: 6

Bataan Peninsula **B**: 162

Philippines (Japanese control) **P**: 380

Wainwright Building [Saint Louis]

Sullivan, Louis Henri **So**: 970

Adler, Dankmar **A**: 58

Architecture (Early modern architecture in

America) **A**: 629

Waist [entomology]

Ant (The metasoma) **A**: 522 *with picture*

Waistcoat

Clothing (The 1600's) **Ci**: 701 *with picture*

Waitangi, Treaty of [1840]

Maori **M**: 175

New Zealand (European colonization) **N**: 355;

(Maori-Pakeha relations) **N**: 356

Waitangi Tribunal [New Zealand history]

New Zealand (Maori-Pakeha relations) **N**: 356

Waite, Davis H. [American political leader]

Colorado (table) **Ci**: 844

Waite, Morrison Remick [American jurist] **W**: 6

Waiting for Godot [play by Beckett]

Beckett, Samuel Barclay **B**: 196

Drama (Theater of the absurd) **D**: 340 *with picture*

Waiting for Laffy [play by Odets]

Odets, Clifford **O**: 674

Waitomo Caves [New Zealand]

Cave (table) **C**: 320

Wajed, Sheikh Hasina [Bangladeshi political

leader]

Bangladesh (Recent developments) **B**: 86

Wake [funeral] **W**: 6

Funeral customs (Preparation of the body)

F: 557

Wake Island [Pacific] **W**: 6

Wake-robin [plant]

Trillium **T**: 445

"Wakefield" [story by Hawthorne]

Hawthorne, Nathaniel (His stories and sketches) **H**: 114

Wakefield, Battle of [1460]

York **Y**: 568

Wakefield, Edward Gibbon [British business-

man]

New Zealand (European colonization) **N**: 355

Wakeups [drugs] *See* Amphetamine in *this*

index

Waking, The [poems by Roethke]

Roethke, Theodore **R**: 400

Wakonda [religion]

Indian, American (Beliefs) **I**: 147

Waksman, Selman Abraham [American biolo-

gist] **W**: 6

Antibiotic (History) **A**: 552

Streptomycin **So**: 926

Wakulla Springs

Florida (Rivers, lakes, and springs) **F**: 256

Wal-Mart Stores

Walton, Sam **W**: 21

Walachia [region]

Romania (Land regions) **R**: 420 *with map*;

(Unification movement) **R**: 423; (Ottoman

rule) **R**: 423

Walata [former city] **W**: 7

Walcott, Derek [West Indian poet] **W**: 7

Nobel Prizes (Literature: 1992) **N**: 446

Walcott, Joe [American boxer]

Marciano, Rocky **M**: 196

Walcott, Louis Eugene [American religious

leader] *See* Farrakhan, Louis in *this index*

Wald, George [American biochemist] **W**: 7

Wald, Lillian D. [American social worker] **W**: 7

- Mythology (Celtic mythology) M: 983; (Welsh myths) M: 984
- Parliament (The House of Commons) P: 172
- United Kingdom U: 48 *with picture*; (Regional government) U: 50; (Wales) U: 59; (Long-standing conflicts) U: 73
- See also the list of *Related articles in the Wales article*
- Wales, Prince of** See Prince of Wales *in this index*
- Wales, University of**
- Wales (Education) W: 10
- Wałęsa, Lech** [Polish political leader] W: 13 *with portrait*
- Jaruzelski, Wojciech J: 64
- Poland (History) P: 611-614
- Wali** [title]
- Algeria (Local government) A: 361
- Walk** [gait]
- Horse (Gaits) H: 353-354 *with picture*
- Walk** [sports]
- Baseball (Reaching base) B: 129; (Rule changes) B: 133
- Walk on the Wild Side, A** [book by Algren]
- Algren, Nelson A: 366
- Walkem, George A.** [Canadian political leader]
- British Columbia (table) B: 627
- Walken, Christopher** [American actor]
- Motion picture (Best performance by an actor in a supporting role: 1978) M: 863
- Walker** [American Indian chief]
- Utah (Indian relations) U: 246
- Walker, Alice** [American author] W: 14
- African American literature (Recent developments) A: 136a
- African Americans (Achievements) A: 136p
- American literature (Works by minority writers) A: 425
- Walker, Clifford** [American political leader]
- Georgia (table) G: 130
- Walker, Daniel** [American political leader]
- Illinois (table) I: 71
- Walker, David** [American social reformer] W: 14
- Walker, David S.** [American political leader]
- Florida (table) F: 260
- Walker, Doak** [American football player]
- Football (table) F: 363
- Walker, Frank C.** [American government official]
- Roosevelt, Franklin Delano (table) R: 458
- Truman, Harry S. (table) T: 469
- Walker, George** [American comedian]
- Williams, Bert W: 310
- Walker, George** [American musician]
- African Americans (Achievements) A: 136p-136q
- Walker, George F.** [Canadian playwright]
- Canadian literature (Modern Canadian drama) C: 161
- Walker, George H.** [American settler]
- Milwaukee (Early development) M: 561
- Walker, Gilbert C.** [American political leader]
- Virginia (table) V: 417
- Walker, Herschel** [American football player]
- Football (table) F: 363
- Walker, Sir Hovenden** [British admiral]
- Quebec (The 1700's) Q: 36
- Walker, James** [American painter]
- United States, History of the *picture on* U: 172
- Walker, James John** [American political leader]
- W: 14
- Walker, Jimmy** [American political leader] See Walker, James John *in this index*
- Walker, John** [Early lexicographer]
- Dictionary (Early English dictionaries) D: 194
- Walker, John** [British pharmacist]
- Fire (Methods of starting fires) F: 121
- Match (The first matches) M: 300
- Walker, John Ernest** [British chemist]
- Nobel Prizes (Chemistry: 1997) N: 443
- Walker, Joseph Marshall** [American political leader]
- Louisiana (table) L: 496
- Walker, Joseph Reddeford** [American frontiersman]
- Nevada (Exploration) N: 173
- Walker, Leroy Pope** [Confederate political leader] W: 14
- Walker, Madam C. J.** [American business-woman] W: 14 *with portrait*
- Walker, Maggie Lena** [American business-woman]
- National Park System (table: National historic sites) N: 52-53
- Walker, Mary Edwards** [American doctor]
- W: 14
- Civil War (Hospitals) Ci: 630
- Walker, Mickey** [American boxer]
- Boxing (The golden age of U.S. boxing) B: 533-534
- Walker, Robert J.** [American government official]
- Polk, James Knox (table) P: 643
- Treasury, Department of the (table) T: 407
- Walker, Sarah Breedlove** [American business-woman] See Walker, Madam C. J. *in this index*
- Walker, Thomas** [American pioneer]
- Kentucky (Exploration and early settlement) K: 291
- Walker, Walton Harris** [American general]
- Korean War (Outbreak) K: 379-380; (The Pusan Perimeter) K: 381; (The Allies retreat) K: 382
- Walker, William** [American adventurer] W: 15
- Granada G: 304
- Mora, Juan Rafael M: 799
- Nicaragua (Independence) N: 398-400
- Walker Agent**
- Walker, Madam C. J. W: 14
- Walker Art Center** [Minneapolis]
- Minnesota (Museums) M: 589
- Walker Law** [1920]
- Boxing (The golden age of U.S. boxing) B: 533
- Walker River** [river, California-Nevada]
- Nevada (Rivers and lakes) N: 166
- Walker Tariff Act** [1846]
- Polk, James Knox (Tariff reduction) P: 642
- Tariff (United States tariffs) T: 44
- Walker War** [1853-1854]
- Indian wars (The Southern Plains) I: 194
- Utah (Indian relations) U: 246
- Walkie-talkie** [radio] W: 15
- Radio (In public safety) R: 84 *with picture*
- Walking**
- Hiking H: 230
- Insect (Legs) I: 287
- Transportation (Land transportation) T: 383-384 *with picture*
- Walking** [sport] W: 15
- Track and field (Walking races) T: 355; (World track and field records) T: 358
- Walking catfish**
- Catfish C: 301
- Fish *picture on* F: 145
- Walking fish** See Climbing perch *in this index*
- Walking leaf**
- Leaf insect L: 158 *with picture*
- Walking plow**
- Plow (Kinds of plows) P: 575
- Walkingstick** [insect] W: 15 *with pictures*
- Animal *picture on* A: 479
- Insect (Protection from enemies) I: 297; *picture on* I: 278
- Leaf insect L: 158
- Walkout** [labor]
- Labor movement (Handling labor disputes) L: 6-7
- Strike (Kinds of strikes) So: 928
- Walküre, Die** [opera by Wagner]
- Opera (*Ring of the Nibelung, The*) O: 806-807
- Wagner, Richard (Later career) W: 4
- Wall** [architecture]
- House (The frame) H: 382 *with diagram*; (Interior construction) H: 382 *with diagram*
- Middle Ages *picture on* M: 528
- Wall, Garret D.** [American political leader]
- New Jersey (table) N: 249
- Wall cloud**
- Tornado (The story of a tornado) T: 333-334 *with pictures*
- Wall coverings**
- Interior design (Choosing patterns and textures) I: 332-333
- Wall frame**
- House (The frame) H: 382
- Wall of China** See Great Wall of China *in this index*
- Wall painting**
- Mural M: 928 *with picture*
- Wall Street** [film]
- Stone, Oliver So: 909
- Wall Street** [New York City] W: 15
- New York City (Settlement) N: 341
- New York Stock Exchange N: 345
- United States, History of the *picture on* U: 187
- Wall Street Journal, The** [newspaper]
- New York (Communication) N: 312
- New York City (Communications) N: 335
- Wall tent**
- Tent (Kinds of tents) T: 171
- Wall-to-wall carpeting**
- Interior design (Planning on paper) I: 330-331
- Wallaby** [animal]
- Kangaroo (Other macropods) K: 215
- Animal *picture on* A: 499
- Marsupial (Kinds of marsupials) M: 232 *with picture*
- Wallace, Alfred Russel** [British naturalist] W: 15
- Darwin, Charles Robert (The influence of Darwin's ideas) D: 40
- Evolution (Darwin's theory) E: 432
- Natural selection N: 65
- Wallace, Bobby** [American baseball player]
- Baseball (table: Hall of Fame) B: 135
- Wallace, Cornelia Ellis Snively** [wife of]
- Wallace, George Corley W: 16
- Wallace, David** [American political leader]
- Indiana (table) I: 214
- Wallace, Elizabeth "Bess"** [wife of Harry Truman] See Truman, Bess *in this index*
- Wallace, George Corley** [American political leader] W: 16
- Alabama (table) A: 274; (The mid-1900's) A: 278
- American Party A: 428
- Nixon, Richard Milhous (The 1968 election) N: 432
- States' rights (Later developments) So: 866-867
- Wallace, Henry Agard** [American political leader] W: 16 *with portrait*
- Truman, Harry S. (Vice President) T: 468; (table) T: 469
- Vice President of the United States (table) V: 351
- Wallace, Henry Cantwell** [American government official]
- Agriculture, Department of (table) A: 161
- Coolidge, Calvin (table) Ci: 1032
- Harding, Warren Gamaliel (table) H: 58
- Wallace, Henry Agard W: 16
- Wallace, Jonathan H.** [American lawyer]
- McKinley, William (Congressman) M: 339
- Wallace, Lew** [American author] W: 16
- New Mexico (Territorial days) N: 275
- Western frontier life in America (Crime) W: 238
- Wallace, Lurleen** [American political leader]
- Wallace, George Corley W: 16
- Alabama (table) A: 274
- Wallace, Rusty** [American race car driver]
- Automobile racing (table: NASCAR Winston Cup champions, 1989) A: 981
- Wallace, William** [American lawyer]
- Harrison, Benjamin (Army commander) H: 71
- Wallace, Sir William** [Scottish patriot] W: 17
- Edward I E: 112
- Scotland (Fight for independence) S: 219
- Wallace v. Jaffree** [U.S. history]
- School prayer S: 186
- Wallace's flying frog**
- Frog (True frogs) F: 540
- Wallace's Line** [biology]
- Wallace, Alfred Russel W: 16
- Wallach, Otto** [German chemist]
- Nobel Prizes (Chemistry: 1910) N: 442
- Waller, Lee** [American race driver]
- Automobile racing (table: Indianapolis 500 winners) A: 980
- Wallboard** [building material] W: 17
- House (Interior construction) H: 382
- Wallcrawler**
- Bird (Birds of Europe and Asia) B: 346 *with picture*
- Walled city**
- Babylon *picture on* B: 12
- Middle Ages (Medieval towns) M: 527
- Wallenberg, Raoul** [Swedish diplomat] W: 17
- Wallenstein** [play by Schiller]
- Schiller, Johann Christoph Friedrich von S: 175
- Wallenstein, Albrecht Wenzel Eusebius von W: 17
- Wallenstein, Albrecht Wenzel Eusebius von** [Bohemian military leader] W: 17
- Thirty Years' War (The Danish period) T: 260; (The Swedish period) T: 260
- Waller, Fats** [American composer] W: 17
- Waller, Thomas M.** [American political leader]
- Connecticut (table) Ci: 967
- Waller, William** [American political leader]
- Mississippi (table) M: 640
- Walleye**
- Fish *picture on* F: 158
- Perch P: 284
- Pike P: 461
- Walleye** [disorder]
- Eye (Strabismus) E: 466
- Walleye pollock** [fish]
- Pollock P: 646
- Walleyed pike** See Walleye *in this index*
- Wallflower** [plant] W: 18 *with picture*

- Flower picture on F: 287
Wallgren, Monrad C. [American political leader]
 Washington (table) W: 65
Wallhanging
 Rugs and carpets picture on R: 517
 Tapestry T: 39 with pictures
Wallis, Samuel [British explorer]
 Exploration (Exploring the Pacific) E: 448
 Society Islands So: 563
 Tahiti T: 14
Wallonia [region, Belgium]
 Belgium (Regions and language communities) B: 227
 Walloons W: 18
Walloons [people] W: 18
 Belgium B: 226; (Population and ancestry) B: 229; (Independence) B: 233-234; (After World War II) B: 235
 Flemings F: 233
Wallowa Lake [Oregon]
 Oregon (Rivers, waterfalls, and lakes) O: 840
Wallpaper W: 18
 Interior design (Choosing patterns and textures) I: 332-333
 Paperwork (Wallpaper) P: 138
Walls, Carlotta [American social reformer]
 Spingarn Medal (table: 1958) So: 793
Walnut [tree] W: 18 with picture
 Tree pictures on T: 424
 Wood picture on W: 389
Walnut Canyon National Monument [Arizona]
 W: 19
 National Park System (table: National monuments) N: 50-52
Walnut comb
 Chicken (Kinds of chickens) C: 441 with picture
Walnut Street Jail [Philadelphia]
 Prison (Early prison reform) P: 807
Walnut Street Theatre
 Philadelphia (The arts) P: 363
Walpole, Horace [British author] W: 19
 English literature (Romantic prose) E: 320
 Gothic novel G: 279
Walpole, Hugh Seymour [British author] W: 19
Walpole, Sir Robert [English political leader]
 W: 19
 Fielding, Henry (His life) F: 94
 Pitt, William P: 499
 United Kingdom (The beginning of cabinet government) U: 67
Walpurgis Night [custom] W: 20
Walras, Léon [French economist]
 Econometrics E: 57
 Economics (New solutions for old problems) E: 65
Walrus [animal] W: 20 with picture
 Animal picture on A: 485
 Mammal (In water) M: 122 with diagram
 Seal S: 265
Walrus Island [Bering Sea]
 Pribilof Islands P: 774
Walsh, David J. [American political leader]
 Massachusetts (table) M: 288
Walsh, Donald [American military leader]
 Exploration (Deep-sea exploration) E: 451
 Pacific Ocean (Scientific research) P: 15
 Piccard, Jacques P: 450
Walsh, Ed [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Walsh, Lawrence E. [American jurist]
 Iran-contra affair (Charges and court actions) I: 407
Walsin-Esterhazy, Marie Charles Ferdinand
 [French soldier]
 Dreyfus affair (Efforts to clear Dreyfus's name) D: 347
Walt Disney Company W: 20
 Animation (The animation revival) A: 514b
Walt Disney Pictures [company]
 Walt Disney Company W: 20
Walt Disney World Resort [Florida]
 Florida (Places to visit) F: 252 with picture
 Graves, Michael G: 330 with picture
 Orlando O: 856
 Walt Disney Company W: 20
Walt Whitman [painting by Eakins]
 Eakins, Thomas E: 6
Walter, Bruno [German-American conductor]
 W: 21
Walter, Lucy [mother of]
 Monmouth, Duke of M: 730
Walter, Thomas Ustick [American architect]
 W: 21
Walter Reed Army Medical Center
 [Washington, D.C.] W: 21
Walters, David [American political leader]
 Oklahoma (table) O: 730
Walters, Vernon A. [American diplomat]
 United Nations (table) U: 86
Walters Art Gallery
 Baltimore (Museums) B: 68
Walther von der Vogelweide [Austrian poet]
 W: 21
 German literature (The minnesingers) G: 139
Walther with the Strong Hand [poem]
 German literature (Early German literature) G: 139
Walton, Bill [American basketball player]
 Basketball picture on B: 153
Walton, Ernest Thomas Sinton [Irish physicist]
 W: 21
 Particle accelerator (How accelerators work) P: 184
Walton, Frederick [British inventor]
 Linoleum L: 338
Walton, George [American patriot] W: 21
 Georgia (table) G: 130
Walton, Izaak [English author] W: 21
 Biography (The 1600's) B: 313
Walton, John C. [American political leader]
 Oklahoma (table) O: 730; (The 1920's) O: 732
Walton, Sam [American businessman] W: 21
Walton, Sir William [British composer] W: 22
Waltrip, Darrell [American race driver]
 Automobile racing (table: NASCAR Winston Cup champions, 1981, 1982, 1985) A: 981
Waltz W: 22
 Ballroom dancing B: 63
 Dance (Social dances) D: 29 with picture
 Strauss, Johann, Sr. So: 921
 Strauss, Johann, Jr. So: 921
Waltz Dream, A [operetta by Straus]
 Straus, Oscar So: 921
Waltz King See Strauss, Johann, Jr. in this index
Waltz of the Toreadors, The [play by Anouilh]
 Anouilh, Jean A: 519
"Waltzing Matilda" [song]
 Australia (Language) A: 901
Walvis Bay [Namibia] W: 22
 Namibia (History) N: 9-10
Walz, Carl [American astronaut]
 Astronaut (table) A: 830
Wampanoag Indians
 Massasoit M: 295
 Philip, King P: 370
 Plymouth Colony (Later years) P: 584
Wampler, Joseph [American astronomer]
 Lick Observatory L: 270
Wampum [money] W: 22 with picture
 Colonial life in America (Money) Ci: 811
 Indian, American (Money) I: 149; picture on I: 156
 Money (History of United States currency) M: 707 with picture
 Shell (Uses of shells) S: 389-390
Wamsutta [American Indian chief]
 Massasoit M: 296
WAN [computing] See Wide area network in this index
Wan-Chun Cheng [Chinese botanist]
 Sequoia (The dawn redwood) S: 311
Wanamaker, John [American businessman]
 Philadelphia (A growing city) P: 367
Wananga [school]
 New Zealand (Education) N: 349
Wanderers [art history]
 Painting (Painting outside France) P: 72
Wandering albatross
 Albatross A: 310 with picture
Wandering Jew [legendary figure] W: 22
Wandering-jew [plant] W: 23
 Spiderwort So: 791
Wandering Song [poems by Dario]
 Dario, Rubén D: 37
Wanders of Oisín, The [poem by Yeats]
 Irish literature (The Irish literary revival) I: 431-432
Waner, Lloyd [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Waner, Paul [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Wang Kon [Korean ruler]
 Korea (Early years) K: 375-376
Wang Mang [Chinese emperor]
 China (The early empire) C: 501
 Han dynasty H: 38
Wang Meng [Chinese artist]
 Painting (Chinese painting) P: 44-46
Wang Shifu [Chinese dramatist]
 Chinese literature (Drama and fiction) C: 512
Wang Wei [Chinese painter] W: 23 with picture
 Chinese literature (Poetry) C: 511
Wang Yangming [Chinese philosopher]
 Confucianism (Later Confucianism) Ci: 937
Wang Yinglin [Chinese scholar]
 Encyclopedia (From the 1200's to the 1600's) E: 268a
Wangara [people]
 Ghana Empire map on G: 180
Waning moon
 Moon (Phases) M: 783-784
Waning of the Middle Ages, The [book by Huizinga]
 Huizinga, Johan H: 411
Wankel, Felix [German engineer]
 Rotary engine R: 485
Wankel engine See Rotary engine in this index
Want ad
 Advertising (Newspapers) A: 74
 Careers (Finding job opportunities) C: 217
 Newspaper (Preparing advertisements) N: 383
Wantage Community [religious group]
 Religious life (table) R: 227
Wanuskewin Heritage Park [Saskatoon]
 Saskatchewan (Places to visit) S: 136 with picture
Wapiti [animal]
 Elk (The American elk) E: 241 with picture
 Red deer R: 188
Wapshot Chronicle, The [book by Cheever]
 Cheever, John C: 396
Wapshot Scandal, The [book by Cheever]
 Cheever, John C: 396
Wapsipinicon River
 Iowa (Rivers and lakes) I: 386
Wapusk National Park [Manitoba]
 Canada (table: National parks and national park reserves) C: 113
Waqf [foundation]
 Jerusalem (Culture) J: 99-100
War W: 23
 Army A: 724; (Prevention of war) A: 725
 Balloon (Balloons in war) B: 61 with picture
 Battering ram B: 167
 Catapult C: 298
 Conscientious objector Ci: 974
 Contraband Ci: 1023
 Flag F: 193
 Guided missile G: 423 with pictures
 Indian, American (Warfare) I: 144 with pictures; (Indians of the Northeast) I: 154-155; (Indians of the Southwest) I: 166-168
 Infantry (History) I: 265
 Inflation (Theories about the causes of inflation) I: 268
 Kellogg-Briand Pact K: 256
 Logistics L: 426
 Middle Ages (Feudal Europe) M: 524
 Napalm N: 12
 National debt (Causes of national debt) N: 32
 Pacifism P: 18
 Painting (Romanticism) P: 68-69
 Post-traumatic stress disorder P: 710
 Rationing R: 148
 Right of search R: 340
 Slavery (Development of slavery) S: 501
 Yanomami Indians Y: 552
 See also the list of Related articles in the War article
War, Articles of [U.S. history]
 Articles of War A: 759
War, Department of [U.S. history]
 Defense, Department of (History) D: 88
 Eckert, J. Presper, Jr. E: 50
War, Nuclear
 Nuclear winter N: 602
War, Prisoner of See Prisoner of war in this index
War Admiral [horse]
 Kentucky Derby (table) K: 296
War Against Jugurtha [book by Sallust]
 History (The ancient Greeks and Romans) H: 261-262
War and Ordinance, Board of [U.S. history]
 Army, United States (The Continental Army) A: 738
War and Peace [book by Tolstoy]
 Novel (Russia) N: 573
 Russian literature (The 1860's and 1870's) R: 562
 Tolstoy, Leo (His masterpieces) T: 323
War and Peace [opera by Prokofiev]
 Caldwell, Sarah C: 28
 Prokofiev, Sergei Sergeyevich P: 817
War and Remembrance [book by Wouk]
 Wouk, Herman W: 502
War Between the States See Civil War in this index
War club

- Indian, American *picture on* I: 139
War correspondent [career] W: 27
War Cries [poem by Núñez de Arce] Spanish literature (The 1800's) So: 761
War crime W: 27
 Civil War (Prisons) Ci: 631
 Crime (War crime) Ci: 1137
 Eichmann, Adolf E: 145
 Genocide G: 90
 Human rights (Criminal trials) H: 428a
 International law (Violations) I: 341
 Law (Developments in international law) L: 137
 Milošević, Slobodan M: 556
 Nanking Massacre N: 11
 Nuremberg Trials N: 612
 War (Ethical and legal aspects of war) W: 24
 World War II (Peace with Germany) W: 497
War Crimes Commission [UN]
 War crime (World War II) W: 27
War debt
 Virginia (The Civil War and Reconstruction) V: 421-422
War Democrats [political party]
 Democratic Party (The slavery issue) D: 125
War eagle See Golden eagle *in this index*
War guilt [political science]
 Versailles, Treaty of (Effects of the treaty) V: 340
War Hawks [U.S. history]
 War of 1812 (The War Hawks) W: 30
 Clay, Henry (National leader) Ci: 658
 United States, History of the (The War of 1812) U: 164
War in Heaven [play by Barry]
 Barry, Philip B: 119
War in the Pacific National Historical Park [Guam]
 National Park System (table: National historical parks) N: 56-57
War Industries Board [U.S. history]
 World War I (The United States enters the war) W: 462
War Information, Office of
 Propaganda (During World War II) P: 825
 World War II (Propaganda) W: 493
War Is Kind [poems by Crane]
 Crane, Stephen Ci: 1120
War lord
 Beijing (History) B: 224
 China (The war lord period) C: 504
War Measures Act
 Canada, History of (The separatist threat) C: 153
War of 1812 [1812-1814] W: 28 *with pictures*
 Army, United States (The War of 1812) A: 738; *picture on* A: 730
 Black Hawk B: 387
 Canada, History of (The War of 1812) C: 145
 Ghent, Treaty of G: 181
 Illinois (Early national period) I: 72-74
 Indian, American (After European contact) I: 156-157
 Indian wars (Other Midwestern conflicts [1775-1832]) I: 192-193
 Laffite, Jean L: 28
 Madison, James (Progress of the war) M: 35 *with picture*
 Marine Corps, United States (The early Marine Corps) M: 208; *picture on* M: 207
 Maryland (The War of 1812 and industrial development) M: 258
 Milan Decree M: 541
 Navy, United States (The War of 1812 [1812-1814]) N: 88
 Ontario (Upper Canada) O: 784
 Potawatomi Indians P: 714
 Secord, Laura Ingersoll S: 278
 Uncle Sam U: 19
 United States, History of the (The War of 1812) U: 164 *with picture*
 War (table) W: 25
 Washington, D.C. (Slow beginnings) W: 86
 See also the list of Related Articles in the War of 1812 article
War of opportunity
 War (Struggles over power) W: 24
War of Secession See Civil War *in this index*
War of the American Revolution See Revolutionary War *in America in this index*
War of the Austrian Succession See Succession wars *in this index*
War of the Bavarian Succession See Succession wars *in this index*
War of the End of the World, The [book by Vargas Llosa]
 Latin-American literature (Recent developments) L: 113
 Vargas Llosa, Mario V: 286
War of the League of Augsburg [1689-1697]
 French and Indian wars (King William's War) F: 512
War of the Newts, The [book by Čapek]
 Čapek, Karel C: 191
War of the Polish Succession See Succession wars *in this index*
War of the Reform [1858-1860]
 Juárez, Benito Pablo J: 178
 Mexico (Reform) M: 472
War of the Sons of Light Against the Sons of Darkness [document]
 Dead Sea Scrolls D: 56
War of the Spanish Succession See Succession wars *in this index*
War of the Thousand Days [1899-1902]
 Colombia (Political disorder) Ci: 783
War of the Three Henrys [1585-1589]
 Henry III (of France) H: 186
War of the Triple Alliance See Triple Alliance, War of *the in this index*
War of the Worlds, The [book by Wells]
 Science fiction (The first science fiction) S: 205
 Welles, Orson W: 194
 Wells, H. G. W: 195
War of the Worlds, The [radio broadcast]
 Radio (The Golden Age of Broadcasting) R: 92-93
War on Poverty [U.S. history]
 Great Society (Legislation) G: 349
 Head Start H: 124
 Johnson, Lyndon Baines (The national scene) J: 148
 United States, History of the (The civil rights movement) U: 192
War Powers Act See War Powers Resolution *in this index*
War Powers Resolution [1973] W: 33
 Congress of the United States (Continued struggle for power) Ci: 948
 Nixon, Richard Milhous (Events at home) N: 435-436
War prisoner See Prisoner of war *in this index*
War Requiem [music by Britten]
 Britten, Benjamin B: 634
War Risk Insurance Act [1914]
 Veterans Affairs, Department of (History) V: 343-344
War savings stamp
 Stamp So: 829
War service medal See Campaign medal *in this index*
Warbeck, Perkin [English pretender] W: 34
Warble [disorder]
 Warble fly W: 34
Warble fly W: 34 *with picture*
 Bot fly B: 507
Warbler [bird] W: 34 *with pictures*
 Bird (Birds of forests and woodlands) B: 334 *with picture*
Warburg, Otto Heinrich [German physiologist]
 Nobel Prizes (Physiology or medicine: 1931) N: 444
Warburton, Alexander B. [Canadian political leader]
 Prince Edward Island (table) P: 791
Warburton, Peter Egerton [British explorer]
 Australian Desert A: 927
 Exploration map on E: 448
Ward [law] W: 35
 Feudalism (The principles of feudalism) F: 82
 Foster care F: 429
 Guardian G: 411
Ward [political division]
 Ward W: 35
 Tokyo (The city) T: 313
Ward [religion]
 Mormons (Church organization) M: 807
Ward [structure]
 Castle (Structure) C: 280 *with picture*
Ward, Aaron Montgomery [American businessman] W: 35
Ward, Artemus [American humorist] W: 35
Ward, Barbara [British economist] W: 35
Ward, Charlie [American football player]
 Football (table) F: 363
Ward, Douglas Turner [American author]
 African American literature (The 1900's) A: 136a
Ward, Ferdinand [American businessman]
 Grant, Ulysses S. (Later years) G: 317
Ward, John M. [American baseball player]
 Baseball (table: Hall of Fame) B: 135
Ward, Joseph [American religious leader] W: 35
Ward, Lynd Kendall [American artist] W: 36
 Regina Medal (table: 1975) R: 206
Ward, Marcus L. [American political leader]
 New Jersey (table) N: 249
Ward, Montgomery See Ward, Aaron Montgomery *in this index*
Ward, Rodger [American race driver]
 Automobile racing (table: Indianapolis 500 winners) A: 980
Ward, Samuel A. [American composer]
 America the Beautiful A: 407
Warded lock
 Lock (Mechanical locks) L: 411
Warden [prison]
 Prison (The prison staff) P: 806
Warden, The [book by Trollope]
 Trollope, Anthony T: 449
Wards Island [New York]
 New York City (Small islands) N: 330
Ware, Andre [American football player]
 Football (table) F: 363
Ware, Charles Pickard [American publisher]
 Spiritual So: 796
Ware the Hawk [poem by Skelton]
 Skelton, John S: 481
Warehouse [storage facility]
 Bonded warehouse B: 455
Warens, Louise de [friend of]
 Rousseau, Jean-Jacques (Early life) R: 492
Warfare See War *in this index*
Warfield, Edwin [American political leader]
 Maryland (table) M: 255
Warhead [weapon]
 Ammunition (Destroying the attackers) A: 436 *with diagram*
 Bomb B: 450
 Guided missile (The warhead) G: 423 *with diagrams*
 Nuclear weapon (Strategic nuclear weapons) N: 599; *picture on* N: 599
 Submarine (Ballistic missile submarines) So: 941
 Torpedo (How a torpedo works) T: 340-340b *with diagram*
Warhol, Andy [American artist] W: 36 *with picture*
 Painting (Pop art) P: 86
 Pop art P: 659
Warlock
 Witchcraft W: 371
Warlocks [musical group]
 Grateful Dead G: 330
Warm-air furnace
 Heating (Warm-air heating) H: 159; *diagram on* H: 158
Warm-blooded animal W: 36
 Animal (Some common ways of grouping animals) A: 472
 Bird B: 329
 Dinosaur (How dinosaurs lived) D: 211;
 (Reproduction and growth) D: 211
 Fish F: 145
 Mammal M: 117
 Prehistoric animal (The Age of Mammals) P: 740-741
 Temperature, Body T: 130
Warm front [weather]
 Weather (Synoptic-scale systems) W: 159-160 *with diagram*
Warm Springs [spring, Idaho]
 Idaho (Rivers, waterfalls, springs, and lakes) I: 38
Warm Springs Foundation, Georgia
 Roosevelt, Franklin Delano (The Warm Springs Foundation) R: 455
Warmerdam, Cornelius "Dutch" [American athlete]
 Track and field (The early and mid-1900's) T: 357
Warmoth, Henry C. [American political leader]
 Louisiana (table) L: 496; (The Civil War and Reconstruction) L: 498
 Pinchback, P. B. S. P: 466
Warner, Charles Dudley [American author]
 Twain, Mark (Productive years in Hartford) T: 529
Warner, Fred M. [American political leader]
 Michigan (table) M: 507
Warner, Glenn Scobey [American football coach] See Warner, Glenn Scobey *in this index*
Warner, Pop [American football coach] W: 36
Warner, Seth [American general] W: 36
 Allen, Ethan A: 371
 Green Mountain Boys G: 380
 Vermont (The Revolutionary War in America) V: 334
Warner, W. Lloyd [American anthropologist]

- Social class **So**: 550
Warner, Mark R. [American political leader]
 Virginia (table) **V**: 417
Warner Brothers [company]
 Motion picture (Movies become big business)
M: 866
Warner Brothers Television Network
 Television (The national networks) **T**: 114
Warning
 Civil defense (Civil defense in action) **Ci**: 605
Warning coloration
 Butterfly (How butterflies protect themselves)
B: 742
 Protective coloration **P**: 832 *with picture*
Warning signal
 Boating (Buoys and other safety aids) **B**: 430
with pictures
Warp [weaving]
 Weaving (Types of weaves) **W**: 173 *with pictures*;
 (How a loom works) **W**: 174 *with picture*
 Basket making (Methods) **B**: 141 *with diagrams*
 Rugs and carpets (Weaving) **R**: 515 *with pictures*
 Satin **S**: 150h
 Tapestry (How tapestries are made) **T**: 39
 Textile (Woven fabrics) **T**: 214
 Velvet **V**: 297
Warp beam
 Weaving (How a loom works) **W**: 174
Warp knitting
 Knitting machine **K**: 354
 Textile (Knitted fabrics) **T**: 214
Warping [industrial process]
 Cotton (Spinning) **Ci**: 1091; *picture on Ci*: 1092
Warrant [law] **W**: 37
 Arrest **A**: 743
 Law enforcement (Arrest) **L**: 141
Warrant officer [rank]
 Army, United States (Training an officer)
A: 734
 Navy, United States (Training an officer) **N**: 83;
pictures on N: 86
 Rank, Military (table) **R**: 140; **R**: 139
Warranty
 Consumerism (The right to quality) **Ci**: 1018
 Guaranty **G**: 411
 Product liability suit **P**: 810
Warranty deed [real estate]
 Deed **D**: 81
Warrego River [Australia]
 Queensland (Location, size, and surface features)
Q: 39-40
Warren [animal home]
 Rabbit (Homes) **R**: 48
Warren, Sir Charles [British government official]
 Jack the Ripper **J**: 3
Warren, Earl [American jurist] **W**: 37 *with portrait*
 California (table) **C**: 59
 Kennedy, John Fitzgerald *picture on K*: 264
 Warren Report **W**: 37
Warren, Francis E. [American political leader]
 Wyoming (table) **W**: 532; (Statehood) **W**: 536
Warren, Fuller [American political leader]
 Florida (table) **F**: 260
Warren, John Collins [American physician]
 Morton, William Thomas Green **M**: 821
Warren, Joseph [American colonial leader]
W: 37
 Revere, Paul (Paul Revere's ride) **R**: 267
 Revolutionary War in America (Lexington and Concord)
R: 274
Warren, Mercy Otis [American author] **W**: 37
Warren, Robert Penn [American author] **W**: 37
 American literature (Modernist poetry) **A**: 421;
 (Poetry) **A**: 423
 Poet laureate (table: Poets laureate of the United States)
P: 590
Warren, William [American businessman]
 Ford, Gerald Rudolph (Marriage) **F**: 375
Warren Air Force Base
 Cheyenne (History) **C**: 417-418
 Wyoming (Service industries) **W**: 530; (The mid-1900's)
W: 536
Warren Report [U.S. history] **W**: 37
 Kennedy, John Fitzgerald (The assassination controversy)
K: 268
 Oswald, Lee Harvey **O**: 869
Warrior
 Knights and knighthood **K**: 348
Warriors, Golden State
 Basketball (table) **B**: 150
Wars of Religion [European history]
 Roman Catholic Church (The Counter Reformation)
R: 408-409
Wars of succession See Succession wars *in this index*
Wars of the Roses [1455-1485] **W**: 38
 Edward IV **E**: 112
 England (The Wars of the Roses) **E**: 306
 Henry VII [king of England] **H**: 187
 Lancaster **L**: 55
 Shakespeare, William (The English ruler)
S: 351
 Tudor, House of **T**: 481
 York **Y**: 568
Warsaw [Poland] **W**: 38 *with picture*
 Poland *picture on P*: 604
Warsaw, Grand Duchy of [Polish history]
 Poland (The partitions) **P**: 612
Warsaw ghetto
 Jews (The Holocaust) **J**: 124
 Warsaw (History) **W**: 38-39
Warsaw Pact [alliance] **W**: 39
 Cold War (The death of Stalin) **Ci**: 764
 Communism (The Cold War) **Ci**: 895
 Europe (The Cold War) **E**: 415
 Germany (East Germany) **G**: 170
 International relations (The Cold War begins)
I: 345
 North Atlantic Treaty Organization **N**: 471
 Organization for Security and Cooperation in Europe
O: 853
Warszawski, V. I. [fictional character]
 Paretzky, Sara **P**: 159
Warship **W**: 39 *with picture*
 See also Ship *in this index*
 Navy **N**: 76 *with pictures*; (Engineering advances)
N: 79
 Navy, United States (Combat ships) **N**: 84
 Ship (Phoenician and Greek ships) **S**: 405 *with picture*;
 (East Indiamen) **S**: 409 *with picture*; *picture on S*: 406
 Vikings (The Vikings as shipbuilders) **V**: 381
 See also the list of Related Articles in the Warship article
Warszawa [Poland] See Warsaw *in this index*
Wart [disorder] **W**: 44 *with picture*
 Skin (Tumors) **S**: 491
 Toad **T**: 303
Wart hog **W**: 44 *with picture*
Wart snake See File snake *in this index*
Warta River [river, Poland]
 Oder River **O**: 674
Warted gourd
 Gourd *picture on G*: 281
Wartime Prices and Trade Board [Canada]
 World War II (In the United States and Canada)
W: 494-495
Warton, Thomas [British poet]
 Poet laureate (table: Poets laureate of the United Kingdom)
P: 590
Warwick [city, Rhode Island] **W**: 44
Warwick [city, Virginia]
 Newport News **N**: 379
Warwick, Earl of [1428-1471, English political leader]
W: 44
Warwick, Guy of [legendary figure]
 Guy of Warwick **G**: 445
Warwick Academy
 Bermuda (Education) **B**: 268
Warwick Castle
 England *picture on E*: 293
Warwick Patent [U.S. history]
 Plymouth Colony (Life in Plymouth Colony)
P: 583
Wasatch Range [mountains, Idaho-Utah] **W**: 44
 Salt Lake City **S**: 76 *with picture*
 Utah (Land regions) **U**: 240
Wascana Centre
 Regina (The city) **R**: 204-205
Wash [art]
 Drawing (Materials and techniques) **D**: 342-343
 Painting (Water-color painting) **P**: 39
Wash, The [bay, England]
 England (The English Lowlands) **E**: 300-301
 United Kingdom (The English Lowlands)
U: 59-61 *with map*
Wash and wear fabric
 Clothing (The 1900's) **Ci**: 703
Wash mill [machine]
 Rubber (Plasticization) **R**: 504
Washakie [American Indian chief] **W**: 45
Washburn, Bradford [American explorer]
 King Peak **K**: 328
Washburn, Cadwallader Colden [American political leader]
 Wisconsin (table) **W**: 365
Washburn, Cephas [American educator]
 Arkansas (Schools) **A**: 699
Washburn, Emory [American political leader]
 Massachusetts (table) **M**: 288
Washburn, Henry D. [American government official]
 National Park System (History) **N**: 58
 Yellowstone National Park (History) **Y**: 559-560
Washburn, Israel, Jr. [American political leader]
 Maine (table) **M**: 87
Washburn, Peter T. [American political leader]
 Vermont (table) **V**: 333
Washburn, William B. [American political leader]
 Massachusetts (table) **M**: 288
Washburne, Elihu Benjamin [American political leader]
 Grant, Ulysses S. (Return to the Army) **G**: 314;
 (table) **G**: 316
 State, Department of (table) **So**: 860
Washer [hardware]
 Plumbing (How faucets work) **P**: 579 *with diagram*
Washerless faucet
 Plumbing (How faucets work) **P**: 579
Washerwoman, The [painting by Daumier]
 Realism *picture on R*: 171
Washing machine **W**: 45 *with diagrams*
Washing soda
 Soda **So**: 569
Washington [state] **W**: 46 *with pictures and maps*
Washington, D.C. **W**: 70 *with pictures and maps*
 City planning (The Renaissance) **Ci**: 602-603
 Constitution of the United States (Amendment 23)
Ci: 1015
 Daughters of the American Revolution **D**: 43
with picture
 Kelly, Sharon Pratt **K**: 257
 Subway **So**: 949 *with picture*
 United States, History of the (The War of 1812)
U: 164 *with picture*
 United States capitals **U**: 198
 Van Buren, Martin **V**: 270
 See also the list of Related Articles in the Washington, D.C. article
Washington [Missouri]
 Missouri (Interesting facts) **M**: 651
Washington, Augustine [half brother of George Washington]
 Ohio Company (The first Ohio Company)
O: 705
Washington, Booker T. [American educator]
W: 88 *with portrait*
 African Americans (The rise of new black leaders)
A: 136j *with picture*
 American literature (Nonfiction writers) **A**: 420
 Du Bois, W. E. B. **D**: 372
 Niagara Movement **N**: 394
 Tuskegee University **T**: 525
Washington, Bushrod [American jurist]
 Supreme Court of the United States (table)
So: 1000
Washington, Denzel [American actor] **W**: 89
with portrait
 Motion picture (Best performance by an actor: 2001)
M: 863; (Best performance by an actor in a supporting role: 1989)
M: 863
Washington, Dinah [American singer]
 Jazz (The swing era) **J**: 71
Washington, George [U.S. President] **W**: 90
with pictures
 Adams, John (Vice President) **A**: 37
 Brother Jonathan **B**: 642
 Cornwallis, Charles **C**: 1066 *with picture*
 Executive order **E**: 436
 French and Indian wars (The French and Indian War)
F: 512
 Genét, Edmond Charles Édouard **G**: 84
 Greenough, Horatio **G**: 386
 Houdon, Jean Antoine **H**: 378 *with picture*
 Jefferson, Thomas (Secretary of state) **J**: 81
with picture
 Masonry *picture on M*: 267
 Mount Rushmore National Memorial **M**: 887
with picture
 New Jersey (The Revolutionary War) **N**: 250
with picture
 New York *picture on N*: 317
 Paine, Thomas (American revolutionary) **P**: 22
 Pittsburgh (Early days) **P**: 501
 President of the United States (The founding of the presidency)
P: 767
 Presidents' Day **P**: 771
 Princeton University (Campus buildings)
P: 795
 Revolutionary War in America (The Continental Army)
R: 275; (The campaign in New York)
R: 280 *with picture*; (Trenton and

- Princeton) **R**: 281 *with picture and map*; (Brandywine and Germantown) **R**: 282; (France's entry into the Revolutionary War) **R**: 283; (Surrender at Yorktown) **R**: 285
- Ross, Betsy **R**: 483
- Sculpture *picture on* **S**: 256
- Stuart, Gilbert Charles **So**: 931
- Thanksgiving Day (Later Thanksgiving Days in the United States) **T**: 230
- Trenton (Government and history) **T**: 436
- United States, History of the (Setting up the government) **U**: 162
- Valley Forge **V**: 266 *with picture*
- Virginia (Interesting facts) **V**: 399 *with picture*
- Washington, D.C. **W**: 70; (History) **W**: 85
- Washington, Martha Custis **W**: 108
- William and Mary, College of **W**: 309
- See also the list of Related Articles in the*
Washington, George, *article*
- Washington, Harold** [American political leader] **W**: 108
- Chicago (Political developments in the late 1900's) **C**: 436
- Washington, John Augustine, Jr.** [great grand-nephew of George Washington] **W**: 890
- Mount Vernon (A national shrine) **M**: 890
- Washington, Lake** [lake, Washington] **W**: 108
- Seattle (The city) **S**: 272
- Washington, Lawrence** [ancestor of George Washington] **W**: 968
- Sulgrave Manor **So**: 968
- Washington, Lawrence** [half-brother of] **W**: 888
- Mount Vernon (The buildings) **M**: 888
- Ohio Company (The first Ohio Company) **O**: 705
- Washington, George (Development of character) **W**: 92; (Only foreign trip) **W**: 93
- Washington, Martha Custis** [wife of George Washington] **W**: 108
- Mount Vernon (The grounds and the tomb) **M**: 890
- Washington, George (Marriage) **W**: 95 *with picture*; (Life in the Executive Mansion) **W**: 101; *pictures on* **W**: 104, **W**: 107
- Washington, Mount** *See* Mount Washington *in this index*
- Washington, Robert** [ancestor of George Washington] **W**: 968
- Sulgrave Manor **So**: 968
- Washington, Treaty of** [1871] **W**: 109
- Alabama **A**: 255
- Fish, Hamilton **F**: 175
- Grant, Ulysses S. (Foreign relations) **G**: 316
- Macdonald, Sir John Alexander (Completing the Dominion) **M**: 8-9
- Washington, University of** **W**: 109
- Washington, Walter E.** [American political leader] **W**: 87
- Washington, D.C. (Government changes) **W**: 87
- Washington and Lee University** **W**: 178-179
- Lee, Robert Edward (Last years) **L**: 178-179
- Washington Area Metropolitan Transit Authority** **W**: 84
- Washington, D.C. (Transportation) **W**: 84
- Washington Capitals** **W**: 84
- Hockey (table: National Hockey League) **H**: 281
- Washington Cathedral** [Washington, D.C.] **W**: 109
- Washington, D.C. (Architectural styles) **W**: 78
- Washington College** [Virginia] **W**: 178-179
- Lee, Robert Edward (Last years) **L**: 178-179
- Washington Conference** [1921-1922] **W**: 109
- Arms control (History of arms control) **A**: 721
- Harding, Warren Gamaliel (Return to normalcy) **H**: 58
- Meighen, Arthur (First term) **M**: 386
- Navy, United States (World War I [1914-1918]) **N**: 88-89
- Washington Crossing the Delaware** [painting by Leutze] **W**: 216 *with picture*
- Leutze, Emanuel Gottlieb **L**: 216 *with picture*
- Washington District** [U.S. history] **W**: 113
- Watauga Association **W**: 113
- Washington Heights** [district] **W**: 323-326
- New York City (Manhattan) **N**: 323-326
- Washington Library Center** **W**: 437
- Chicago (New construction) **C**: 437
- Washington-Lincoln Day** [holiday] *See* Presidents' Day *in this index*
- Washington Lodge** [organization] **W**: 673
- Odd Fellows, Independent Order of (The American order) **O**: 673
- Washington Monument** [Baltimore] **W**: 69
- Baltimore (Other interesting places to visit) **B**: 69
- Washington Monument** [Washington, D.C.] **W**: 109
- Engineers, Corps of **E**: 291
- Mills, Robert M. **M**: 555
- National Park System (table: National memorials) **N**: 54
- Obelisk **O**: 642
- Washington, D.C. (Washington Monument) **W**: 73, *map on* **W**: 76
- Washington Naval Conference of 1921-1922** *See* Washington Conference *in this index*
- Washington of South America** [nickname] **W**: 441
- Bolívar, Simón **B**: 441
- Washington-on-the-Brazos** [former town] **W**: 206
- Texas (The Texas revolution) **T**: 206
- Washington Post, The** [newspaper] **W**: 300
- Graham, Katharine **G**: 300
- Washington Public Power Supply System** **W**: 68
- Washington (Recent developments) **W**: 68
- Washington Redskins** **W**: 364
- Football (National Football League) **F**: 364
- Washington State University** **W**: 110
- Washington Times-Herald** [newspaper] **W**: 761
- Onassis, Jacqueline Kennedy **O**: 761
- Washington University** **W**: 654
- Missouri *picture on* **M**: 654
- Washington Wizards** [basketball team] **W**: 150
- Basketball (table) **B**: 150
- Washingtonia palm** [tree] **W**: 108
- Palm *picture on* **P**: 108
- Washington's Birthday** [holiday] **W**: 110
- Washita Battlefield National Historic Site** [Oklahoma] **W**: 52-54
- National Park System (table: National historic sites) **N**: 52-54
- Washita River** [Arkansas-Louisiana] **W**: 878
- Ouachita River **O**: 878
- Washkansky, Louis** [patient of] **W**: 114
- Barnard, Christian Neethling **B**: 114
- Washoe** *See* Washoe Indians *in this index*
- Washoe Indians** [American Indians] **W**: 110
- Waskey, Frank H.** [American political leader] **W**: 110
- Alaska (The early 1900's) **A**: 301
- Wasp** [insect] **W**: 110 *with pictures*
- Ant **A**: 520
- Fig **F**: 96
- Insect (Protection from enemies) **I**: 297 *with picture*; (Why insects behave as they do) **I**: 298; *pictures on* **I**: 290
- Orange (Pests and diseases) **O**: 815
- Spider (Enemies) **S**: 791
- WASP** [U.S. history] *See* Women Airforce Service Pilots *in this index*
- Wassail** [drink] **W**: 530
- Christmas (In England, Ireland, Scotland, and Wales) **C**: 530
- Wassermann, August von** [German bacteriologist] **W**: 112
- Wasserstein, Wendy** [American dramatist] **W**: 340-341
- Drama (Later United States drama) **D**: 340-341
- Wassily chair** **W**: 582-583
- Furniture (The Bauhaus) **F**: 582-583 *with picture*
- Waste** [biology] *See* Elimination *in this index*
- Waste, Pretreatment of** **W**: 138
- Water pollution (Pretreatment of wastes) **W**: 138
- Waste disposal** **W**: 112
- Energy supply (Solid and liquid wastes) **E**: 279
- Environmental pollution (Types of pollution) **E**: 331-334; (Controlling pollution) **E**: 335
- Garbage disposer **G**: 28
- Incinerator **I**: 99
- Nuclear energy (Wastes and waste disposal) **N**: 588
- Ocean (Marine pollution) **O**: 664
- Packaging (The packaging industry) **P**: 18-19
- Plastics (Plastics and the environment) **P**: 560
- Plumbing (The drainage system) **P**: 578-579
- Recycling **R**: 184
- Sanitation **S**: 111
- Space exploration (Meeting basic needs in space) **S**: 703
- Technology (Benefits of technology) **T**: 76 *with picture*
- Thermal pollution **T**: 253
- See also* Environmental pollution; Sewage *in this index*
- Waste Land, The** [poem by Eliot] **W**: 237
- Eliot, T. S. (His works) **E**: 237
- American literature (Modernist poetry) **A**: 421
- English literature (Poetry between the wars) **E**: 322
- Poetry (Poetry of the 1900's) **P**: 597
- Wastes** [biology] **W**: 138
- Blood (Transporting nutrients and wastes) **B**: 408 *with diagram*
- Wastewater** **W**: 329
- Sewage **S**: 329
- Thermal pollution **T**: 253
- Wasting syndrome** [disorder] **W**: 163
- AIDS (Symptoms) **A**: 163
- Wat** [temple] **W**: 222
- Thailand (Way of life) **T**: 222 *with picture*
- Wat Phrathat Doi Suthep** [temple] **W**: 222
- Thailand *picture on* **T**: 222
- Wat Tyler's Rebellion** [1381] **W**: 113
- England (The Hundred Years' War) **E**: 306
- Richard II **R**: 329
- Watauga Association** [U.S. history] **W**: 113
- Tennessee (Early settlement) **T**: 153
- Watch** [clock] **W**: 114 *with pictures*
- See also* Clock *in this index*
- Quartz (Properties and uses) **Q**: 8
- Switzerland *picture on* **S**: 1057
- Watch** [military] **W**: 379
- Hour **H**: 379
- Navy, United States (A typical day) **N**: 83
- Ship (Nautical terms) **S**: 416
- Submarine (Life aboard a submarine) **S**: 941
- Watch on the Rhine** [play by Hellman] **W**: 178
- Hellman, Lillian **H**: 178
- Watch That Ends the Night, The** [book by MacLennan] **W**: 25
- MacLennan, Hugh **M**: 25
- Watch Tower Bible and Tract Society** [organization] **W**: 88
- Jehovah's Witnesses **J**: 88
- Watchful waiting** [U.S. history] **W**: 323
- Wilson, Woodrow (Crisis in Mexico) **W**: 323
- Watchtower, The** [magazine] **W**: 89
- Jehovah's Witnesses **J**: 89
- Water** **W**: 116 *with pictures and maps*
- See also* Water pollution *in this index*
- Alchemy **A**: 334
- Compound **C**: 906
- Disease (Spread of infectious diseases) **D**: 228
- Earth (The hydrosphere) **E**: 20; *picture on* **E**: 22
- Electrolysis (How electrolysis works) **E**: 200-201
- Empedocles **E**: 261
- Fluoridation **F**: 305
- Ground water **G**: 402
- Human body (Chemical elements and molecules) **H**: 417
- Hydrology **H**: 470
- Hydrosphere **H**: 472
- Hydrotherapy **H**: 472
- Irrigation **I**: 456 *with pictures*
- Leaf (Obtaining the raw materials) **L**: 155
- Life (The chemical basis of life) **L**: 277
- Mars (Surface features) **M**: 225; (Possibility of Life) **M**: 226c
- Molecule *diagram on* **M**: 693
- Moon **M**: 783
- Nutrition (Kinds of nutrients) **N**: 625
- Ocean **O**: 650
- Plant (Plants and the cycle of nature) **P**: 518; (Aquatic regions) **P**: 528; (Water movement) **P**: 537; (Factors affecting plant growth) **P**: 538; (Water storage) **P**: 541 *with picture*
- Sanitation (Water treatment) **S**: 111
- Soil (Water) **So**: 573
- Sound (table) **So**: 601
- Space exploration (Meeting basic needs in space) **S**: 703
- Technology (Benefits of technology) **T**: 76
- Temperature **T**: 130
- Thirst **T**: 259
- Tree (How a tree grows) **T**: 418
- Waves **W**: 150
- World (Physical features of the world) **W**: 415
- See also the list of Related Articles in the*
Water *article*
- Water arum** [plant] **W**: 66
- Calla **C**: 66
- Water Babies, The** [book by Kingsley] **W**: 331
- Kingsley, Charles **K**: 331
- Water ballast** **W**: 251
- Airship (Control) **A**: 251
- Water ballet** **W**: 1047 *with picture*
- Swimming (Synchronized swimming) **S**: 1047 *with picture*
- Water based paint** **W**: 23
- Paint (Household paints) **P**: 23
- Water basket** [container] **W**: 139
- Indian, American (Crafts and weapons) *picture on* **I**: 139
- Water bad** **W**: 817
- Bed (Types of beds) **B**: 817

- Water beech** [tree]
Ironwood I: 454
- Water beetle W:** 133 *with picture*
Beetle (Predacious diving beetles) B: 217; *pictures on B:* 218
- Water bird**
Bird (Birds of inland waters and marshes) B: 340 *with pictures*; (Birds of the sea-coasts) B: 342 *with pictures*
Lake (The lake habitat) L: 33
National Wildlife Refuge System *picture on N:* 61
- Water boa** [snake]
Anaconda A: 447 *with picture*
- Water boatman**
Insect (Beneficial insects) I: 284; *picture on I:* 294
Water bug W: 133; *picture on W:* 134
- Water brash** [physiology]
Heartburn H: 147
- Water buffalo** [animal] W: 133 *with picture*
Animal *picture on A:* 471
- Water bug W:** 133 *with picture*
Insect *picture on I:* 281
- Water caltrop** [plant]
Water chestnut W: 134
- Water chestnut** [plant] W: 134 *with picture*
- Water chinquapin** [plant]
Lotus L: 473
- Water clock W:** 134
Clock (History) Ci: 683
- Water color** [art]
Painting (Materials and techniques) P: 36; (Water-color painting) P: 39
- Water conservation** See Conservation in this index
- Water conveyance canal**
Canal C: 162
- Water-cooled engine**
Gasoline engine (Cooling) G: 64
- Water cress** [plant]
Cress Ci: 1127
- Water culture** [agriculture]
Hydroponics (Methods of hydroponics) H: 472 *with diagram*
- Water cycle**
Evaporation (Uses of evaporation) E: 423
Hydrology H: 470
Water (Nature's water cycle) W: 120 *with diagram*
- Water distillation**
Water (Distillation) W: 127; *diagram on W:* 128
- Water drive** [drilling]
Petroleum (Primary recovery) P: 342 *with picture*
- Water erosion** [conservation]
Erosion (How erosion occurs) E: 355
- Water extinguisher**
Fire extinguisher (Water extinguishers) F: 130
- Water flea W:** 134
Crustacean Ci: 1162
Egg (Other kinds of eggs) E: 116
- Water frame** [machine]
Arkwright, Sir Richard A: 716
Industrial Revolution (Spinning machines) I: 248-249
Spinning (The water frame) So: 794
- Water gap** [geology]
Gap G: 27
Appalachian Mountains (Physical features) A: 567
West Virginia (Land regions) W: 218
- Water garden**
Gardening (Ornamental gardens) G: 31
- Water gas**
Carbon monoxide C: 207
Gas [fuel] (How gas is manufactured) G: 57
- Water glass** [chemical]
Grinding and polishing (Grinding wheels) G: 395
- Water hazard**
Golf (Hazards) G: 261 *with picture*
- Water heater**
Plumbing (The water supply system) P: 577-578 *with diagram*
- Water hemlock** [plant]
Poisonous plant (Some poisonous plants) P: 602
- Water hog**
Capybara C: 200 *with picture*
- Water hyacinth W:** 134
Invasive species (How invasive species affect habitats) I: 354j *with picture*
- Water jacket** [engine]
Automobile (The cooling system) A: 952
- Water-level gauge**
Gauge (Water-level gauges) G: 69
- Water Lilies** [painting by Monet]
Monet, Claude *picture on M:* 703
- Water lily W:** 135 *with picture*
Flower *picture on F:* 285
Leaf L: 151
Lotus L: 473 *with picture*
Plant *diagram on P:* 528
- Water line**
Ship (Nautical terms) S: 416 *with diagram*
- Water management**
Farm and farming (Water management) F: 33
- Water Margin** [book]
Chinese literature (Drama and fiction) C: 512
- Water mass**
Pacific Ocean (Water masses) P: 15
Southern Ocean (Water masses) So: 688b
- Water meter W:** 135 *with pictures*
Plumbing (The water supply system) P: 577 *with diagram*
- Water-Method Man, The** [book by Irving]
Irving, John I: 459
- Water milfoil**
Plant *diagram on P:* 528
- Water moccasin W:** 135 *with picture*
Snake *picture on S:* 527
Viper V: 391
- Water mold**
Mold M: 689
- Water Music** [music by Handel]
Handel, George Frideric (His work) H: 42-43
- Water of crystallization** [chemistry]
Hydrate H: 462
- Water of hydration** [chemistry]
Hydrate H: 462
- Water ouzel** [bird]
Dipper D: 217 *with picture*
- Water pig**
Capybara C: 200 *with picture*
- Water plant W:** 136
Aquarium, Home (Choosing fish and plants) A: 578a *with picture*
Lake (The lake habitat) L: 33
Plant (Aquatic regions) P: 528 *with pictures*
See also the list of Related Articles in the Water plant article
- Water pollution W:** 136 *with diagram*
See also Environmental pollution in this index
Arctic Ocean (Pollution) A: 644
Atlantic Ocean (Pollution) A: 867
City (Physical problems) Ci: 590-591
Conservation (Water conservation) Ci: 977-978 *with picture*; (Ocean conservation) Ci: 978 *with picture*
Environmental pollution (Water pollution) E: 334, *picture on E:* 330
Eutrophication (Eutrophication and water pollution) E: 421
Fertilizer (Problems of the fertilizer industry) F: 80
Fishing industry (Government regulation) F: 187
Great Lakes (Water quality) G: 346
Ground water G: 402
Lake Erie L: 38
Minnesota (Recent developments) M: 606
Missouri (Recent developments) M: 672
National park (Changes in the environment) N: 42h
Nitrogen (Nitrogen and pollution) N: 426
Ocean (Marine pollution) O: 664 *with picture*
Pacific Ocean (Offshore pollution) P: 17
Rain (Characteristics of rain) R: 122-123
Seal (Threats to seal populations) S: 268
Sewage S: 329
Tanker (Oil spills) T: 28
Thermal pollution T: 253
Water hyacinth W: 135
- Water polo W:** 139 *with picture*
- Water power W:** 139
Dam (What does a dam do?) D: 17
Electric power (Hydroelectric power plants) E: 184 *with diagram*
Energy supply (Water power) E: 278; (Tidal energy) E: 279
Grand Coulee Dam G: 308
Turbine (Water turbines) T: 496-497 *with diagrams*
Water wheel W: 141 *with picture*
- Water pressure**
Water (Distributing water) W: 127 *with diagram*
- Water Project** [conservation]
Nevada (The mid-1900's) N: 176
- Water purification**
Water (Purifying and treating water) W: 126
Ice (Ice "cages") I: 5
Kuwait (Land and climate) K: 395
- Water-retting** [industrial process]
Flax (Growing and processing fiber flax) F: 230-231 *with picture*
Linen (Preparing the fibers) L: 334
- Water rights**
Colorado (Natural resources) Ci: 841
- Water safety**
Boating (Boating safety programs) B: 429-431 *with pictures*
Swimming (Water safety) So: 1042 *with picture*
- Water scavenger beetle**
Water beetle W: 133 *with picture*
- Water scorpion** [insect]
Water bug W: 133
- Water shrew**
Shrew S: 440
- Water-skiing W:** 140 *with picture*
- Water snake**
Snake *pictures on S:* 532
- Water softening** [water treatment] W: 140
- Water-soluble vitamin**
Vitamin (Kinds of vitamins) V: 430
Nutrition (Vitamins) N: 626
- Water spaniel** [dog]
American water spaniel A: 430
- Water spider**
Animal *picture on A:* 491
Spider (Water spiders) So: 787 *with picture*; (table) So: 790
- Water sports**
Safety (In water sports) S: 13 *with picture*
- Water stone** [rock]
Geode G: 91
- Water strider**
Water bug W: 133
- Water supply**
Water W: 116
Aqueduct A: 580
Conservation (Water conservation) Ci: 977
Desert D: 155
Food supply (Limited agricultural resources) F: 348
Forestry (Managing other forest resources) F: 406
Lake (Water supply) L: 34
Plumbing (The water supply system) P: 577 *with diagram*
Reservoir R: 258
- Water table** [geology]
Cave (How caves are formed) C: 319 *with diagram*
Drainage D: 320
Ground water G: 402
Irrigation (Bringing irrigation water to farms) I: 457
Water (Sources of supply) W: 124
Well (Water wells) W: 192-193
- Water Tower Place** [shopping center]
Chicago (New construction) C: 437
- Water trap**
Plumbing (The drainage system) P: 578
- Water-tube boiler**
Boiler B: 439
- Water tupelo** [tree]
Tupelo T: 492 *with picture*
- Water turbine**
Electric power (Hydroelectric power plants) E: 184 *with diagram*
Turbine (Water turbines) T: 496-497 *with diagrams*
- Water vapor**
Cloud (How clouds form) Ci: 711
Distillation D: 238
Fog F: 314
Greenhouse effect (The natural greenhouse effect) G: 382-383
Humidity H: 433
Rain R: 122 *with diagrams*; (Formation of rain) R: 123
Water (The properties of water) W: 129-130
Weather (What causes weather) W: 157
- Water-vascular system** [zoology]
Echinoderm E: 49
- Water vole**
Vole V: 444
- Water wall**
Well (Water wells) W: 193 *with diagrams*
- Water wheel W:** 141 *with picture*
Syria *picture on So:* 1073
Turbine (History) T: 498
Water power W: 139
- Water witch** [bird]
Grebe G: 351
- Waterbuck**
Antelope (Habits and appearance) A: 542; (Kinds of antelope) A: 542-543

- Mammal picture on M: 127
Waterbury [Connecticut] W: 141
Waterfall W: 141 *with pictures*
 Fall line F: 15
 Oregon (Rivers, waterfalls, and lakes) O: 840
 River (Waterfalls and rapids) R: 352 *with diagram*
 Water picture on W: 116
 Water power (The mechanics of water power) W: 139
 Water wheel W: 141
See also the list of Related Articles in the Waterfall article
Waterfall [print by Escher]
 Escher, M. C. picture on E: 357
Waterford [city, Ireland] W: 144
Waterford glass
 Glass (Types of art glass) G: 221 *with picture*
Waterfowl *See Water bird in this index*
Waterfront Redevelopment project
 Buffalo (History) B: 678
Watergate [U.S. history] W: 144
 Bush, George Herbert Walker (Republican Party chairman) B: 718
 Congress of the United States (Continued struggle for power) Ci: 948
 Mitchell, John Newton M: 677
 Nixon, Richard Milhous N: 428; (Events at home) N: 435-436
 President of the United States (The Watergate scandal) P: 769
 Richardson, Elliot Lee R: 330
 United States, History of the (Political scandals) U: 194 *with picture*
Watergate Complex [Washington, D.C.]
 Washington, D.C. (Watergate) W: 75
Watering
 Lawn (Watering) L: 144
Waterland [book by Swift]
 Novel (The novel today) N: 575
Waterloo [Ontario]
 Kitchener K: 338
Waterloo, Battle of [1815] W: 145
 Blücher, Gebhard Leberecht von B: 419
 Napoleon I (The Hundred Days and Waterloo) N: 18
 Wellington, Duke of (Victory at Waterloo) W: 194-195
Waterloo Village [Stanhopel]
 New Jersey (Places to visit) N: 240 *with picture*
Waterman, Robert W. [American political leader]
 California (table) C: 59
Watermark [manufacturing] W: 145
 Paper (Special kinds of paper) P: 136
 Stamp collecting (Paper) So: 830
Watermelon W: 146 *with picture*
Watermelon tourmaline [mineral]
 Tourmaline T: 348
Waterproof match
 Match (The invention of book matches) M: 300a
Waterproofing W: 146
 Lacquer L: 23
 Rubber (Uses of rubber) R: 500; (First uses) R: 500
 Silicone (Uses) S: 458
Waters, Ethel [American actress] W: 146
Waters, Muddy [American musician] W: 146
Waters of Kronos, The [book by Richter]
 Richter, Conrad R: 334
Watershed [geography]
 Forestry (Water) F: 406
Watershed management
 Conservation (Water conservation) Ci: 977-978
Waterspout [architecture]
 Gargoyle G: 43 *with picture*
Waterspout [weather] W: 147 *with picture*
 Tornado T: 333
Waterton-Glacier International Peace Park
 [Alberta-Montana] W: 147
 Glacier National Park G: 205
Waterton Lakes National Park [Alberta]
 Canada (table: National parks and national park reserves) C: 113
 Glacier National Park G: 205
Waterway [transportation]
 Canal C: 162 *with pictures*
 Industrial Revolution (Waterways) I: 250
 Inland waterway I: 273
Waterweed [plant]
 Elodea E: 246
Waterwheel Falls
 Yosemite National Park (Hetch Hetchy Valley) Y: 570
Watery Path [painting by Pollock]
 United States picture on U: 116
Watie, Stand [Confederate general] W: 147
Watkins, David O. [American political leader]
 New Jersey (table) N: 249
Watkins, Frances Ellen [American poet]
 Harper, Frances Ellen Watkins H: 65 *with portrait*
Watkins, James D. [American political leader]
 Energy, Department of (table) E: 276
Watkins Glen [New York]
 Finger Lakes F: 104
Watkins Glen State Park
 New York (Places to visit) N: 302
Watling Street
 England (The Roman conquest) E: 303-304
Watson, C. S. [American inventor]
 Envelope E: 328
Watson, Doctor John [literary figure]
 Detective story (History) D: 163
 Holmes, Sherlock H: 295
Watson, Homer [Canadian painter] W: 147
Watson, James Dewey [American biologist]
 W: 147
 Biology (The growth of modern biology) B: 319-320
 Cell (The 1900's) C: 337-338
 Heredity (The chemistry of genes) H: 209
 Science (Achievements of the mid-1900's) S: 202 *with picture*
 Wilkins, Maurice Hugh Frederick W: 306
Watson, John Broadus [American psychologist]
 W: 147
 Behavior (Behaviorism) B: 221
 Emotion (Early theories about emotions) E: 261
 Psychology (Behaviorism) P: 849
 Tolman, Edward Chace T: 322
Watson, John Christian [Australian political leader]
 Australia (table) A: 925
Watson, Sheila [Canadian author]
 Canadian literature (Modern English-Canadian fiction) C: 160
Watson, Thomas Augustus [American inventor]
 Bell, Alexander Graham (The Boston teacher) B: 240-241
 Telephone (Bell's invention) T: 99
Watson, Thomas Edward [American political leader] W: 148
Watson, Thomas John [American businessman] W: 148
Watson, W. Marvin [American government official]
 Johnson, Lyndon Baines (table) J: 151
Watson, William T. [American political leader]
 Delaware (table) D: 109
Watson-Crick model [genetics]
 Cell (The 1900's) C: 337-338 *with picture*
 Watson, James Dewey W: 147
Watson Memorial Library [Lawrence]
 Kansas (Libraries) K: 221
Watson-Watt, Sir Robert Alexander [Scottish engineer] W: 148
 Radar (The first uses of radar) R: 71
Watt [unit of measure] W: 148
 Kilowatt K: 316
 Lighting (Quantity of light) L: 297
 Metric system (Mechanics) M: 437-440
 Power P: 727
Watt, James [Scottish engineer] W: 148 *with picture*
 Automation (History of automation) A: 945
 Flour (History) F: 269
 Horsepower H: 367
 Industrial Revolution (The steam engine) I: 249
 Invention (The Industrial Revolution) I: 361, *picture on I: 359*
 Ship (The age of engine-powered ships) S: 411
 Steam engine (Watt's engine) So: 881
Watt, James G. [American government official]
 Interior, Department of the (table) I: 325
 Reagan, Ronald Wilson (table) R: 169
Watteau, Antoine [French painter] W: 149
 Painting (Rococo painting) P: 65 *with picture*
Watteau, Louis Joseph [French painter]
 Clothing picture on Ci: 702
Wattle [plant]
 Australia (Native plants) A: 914; *picture on A: 916*
 Tree picture on T: 427
Wattle [zoology]
 Chicken (The body of a chicken) C: 440 *with pictures*
 Turkey (The body of a turkey) T: 513
 Umbrellabird U: 19

Wattle hut

El Salvador (Housing) E: 249 *with picture; picture on E: 251*

Wattmeter [instrument] W: 149

Electric meter E: 176

Watts [district, Los Angeles]

California (The mid-1900's) C: 62-63

Los Angeles (Social problems) L: 464; (South-Central Los Angeles) L: 460

Riot (During the 1900's) R: 349

Watts, Charlie [British musician]

Rolling Stones R: 403

Watts, Isaac [English religious leader] W: 149

Hymn (Words and music) H: 474; (History) H: 474

Watts, J. C., Jr. [American political leader]
 W: 149

Watts, Julius Caesar, Jr. [American political leader] *See Watts, J. C., Jr. in this index*

Watts, Thomas Hill [American political leader]

Alabama (table) A: 274

Watusi [people] *See Tutsi in this index*

Waud, Alfred R. [American artist]

Civil War picture on Ci: 623

Waugh, Evelyn [British author] W: 149

English literature (Fiction between the wars) E: 322

Novel (After World War II) N: 574

Waulking [weaving]

Tweed T: 530

Wave *See Waves in this index*

Wave front [physics]

Telescope (Optical telescopes) T: 103

Lens (Creating an image) L: 196

Waves (Diffraction) W: 153

Wave front sensor [astronomy]

Telescope (Adaptive optical systems) T: 106

Wave mechanics [physics]

Born, Max B: 489

Wave-particle duality [physics]

Quantum mechanics (Wave-particle duality) Q: 6

Wave theory [physics]

Light (Early ideas about light) L: 292; (The electromagnetic theory) L: 292

Physics (Developments in the 1800's) P: 440

Radiation (Electromagnetic radiation) R: 75; (The quantum theory) R: 81

Huygens, Christiaan H: 459

Wavelength [physics]

Waves (Measuring waves) W: 152; *diagram on W: 150*

Aberration (Chromatic aberration) A: 11

Astronomy (Electromagnetic radiation) A: 838

Electromagnetic waves E: 202

Electron microscope E: 204

Infrared rays I: 269

Laser (Characteristics of laser light) L: 84

Light (The nature of light) L: 284 *with diagram*

Radiation (Electromagnetic radiation) R: 75

Redshift R: 191

Seismograph (Detecting earthquakes) S: 288

Sound (Wavelength) So: 600 *with diagram*

Spectrum So: 772

Telescope (What telescopes do) T: 102-103

Ultraviolet rays U: 17

X rays X: 540; (Wavelength) X: 541

Wavelet [physics]

Waves (Diffraction) W: 153

Waverley [book by Scott]

Scott, Sir Walter (The Waverley novels) S: 222

Waverley novels [books by Scott]

Scott, Sir Walter S: 222

Waves [physics] W: 150 *with diagrams*

See also Electromagnetic waves; Shock wave in this index

Diffraction D: 201

Hertz H: 217

Interference I: 323 *with diagram*

Light (The nature of light) L: 284 *with diagram*; (Interference) L: 286 *with diagrams*; (Early ideas about light) L: 292; (The electromagnetic theory) L: 292

Ocean (Waves) O: 659 *with diagram*

Polarized light (How light is polarized) P: 617

Quantum mechanics (Wave-particle duality) Q: 6

Radar R: 64; (How radar works) R: 68

Reflection R: 194

Seiche S: 287

Sound (The nature of sound) So: 599 *with diagram*

Tsunami T: 475

WAVES [U.S.]

Navy, United States (Women in the Navy)

N: 85

McAfee, Mildred Helen M: 330

- Waves, Seismic** [geology] See Seismic waves in this index
- Waves of compression** [astronomy]
Galaxy (Evolution of spiral galaxies) **G: 9**
- Waw** [letter]
V **F: 255**
- Wawasee, Lake**
Indiana (Rivers, lakes, and waterfalls) **I: 208**
- Wax W: 153**
See also Beeswax in this index
Candle **C: 175**
Ester **E: 360**
Painting (Encaustic painting) **P: 36**
- Wax bean**
Bean (Kinds of beans) **B: 181**
- Wax begonia** [plant]
Flower picture on **F: 292**
Gardening (Some popular house plants) **G: 37** with picture
- Wax doll**
Doll (Wax dolls) **D: 290** with picture
- Wax museum**
Museum (Other types of museums) **M: 938**
- Wax myrtle** [shrub] **W: 153**
- Wax tablet**
Manuscript (Wax tablets) **M: 172**
- Waxing moon**
Moon (Phases) **M: 783-784**
- Waxwing** [bird] **W: 153** with picture
Bird (Kinds of food) **B: 350** with picture
- Waxy corn**
Corn (Kinds of corn) **Ci: 1058-1059**
- Way of All Flesh, The** [book by Butler]
Butler, Samuel **B: 729**
- Way of an Indian, The** [book by Remington]
Remington, Frederic **R: 230**
- Way of the Elders** [religion]
Buddhism (The Theravada) **B: 669**
- Way of the World, The** [play by Congreve]
Congreve, William **Ci: 949**
- "Way to Wealth, The"**
Poor Richard's Almanac **P: 659**
- Way West, The** [book by Guthrie]
Guthrie, A. B., Jr. **G: 444**
- Wayang** [Indonesian shadow drama]
Indonesia (The arts) **I: 232**
Puppet (Shadow plays) **P: 905-906** with picture
- Wayang wong** [dance]
Dance (Asian theatrical dance) **D: 30**
- Waybill** [shipping]
Bill (In transportation) **B: 301**
- Wayles, John** [American lawyer]
Jefferson, Thomas (Jefferson's family) **J: 78**
- Waymouth, George** [English explorer]
Maine (Exploration and settlements) **M: 89**
- Wayne, Anthony** [American general] **W: 154** with portrait
Fort Wayne **F: 417**
Indian wars (Other Midwestern conflicts) **I: 192-193** with picture
Indiana picture on **I: 217**
Little Turtle **L: 392**
Northwest Territory (Settlement) **N: 535**
- Wayne, James M.** [American jurist]
Supreme Court of the United States (table) **So: 1000**
- Wayne, John** [American actor] **W: 154** with portrait
Motion picture (Best performance by an actor: 1969) **M: 863**
- Wayne National Forest** [Ohio]
Ohio (Places to visit) **O: 690**
- Wb** [symbol]
Weber **W: 176**
- WBA** [organization] See World Boxing Association in this index
- WBC** [organization] See World Boxing Council in this index
- WBF** [organization]
Bridge (Regulation of tournaments) **B: 605**
- W.C.T.U.** See Woman's Christian Temperance Union in this index
- We** [book by Lindbergh]
Lindbergh, Charles Augustus (His historic flight) **L: 330**
- We** [book by Zamyatin]
Science fiction (The early 1900's) **S: 205**
- We the Living** [book by Rand]
Rand, Ayn **R: 136**
- We Two** [book by Aberdeen and Ternair]
Aberdeen and Ternair, Marquess of **A: 10**
- Wea Indians** [American Indians]
Miami Indians **M: 482**
- Weak boson** [physics]
Boson **B: 494**
- Weak flour**
Flour (Types of flour) **F: 268**
- Weak force** [physics] See Weak interaction in this index
- Weak interaction** [physics]
Force (The weak force) **F: 371**
Neutrino **N: 154**
Parity [physics] **P: 167**
Physics (Physics today) **P: 442-443**
Quantum field theory **Q: 5**
Standard Model **So: 833**
String theory **So: 929**
Subatomic particle (Fundamental forces) **So: 936**
Subatomic particle (Theories of forces) **So: 937-938**
- Weak isospin** [physics]
Subatomic particle (The Standard Model) **So: 938**
- Weak-mayor system** [government]
City government (The mayor-council form) **Ci: 595** with diagram
- Weak trademark**
Trademark **T: 365**
- Weakfish W: 154**
Drum **D: 367**
- Weakly interacting massive particle** [physics]
Dark matter **D: 38**
- "Wealth"** [article by Carnegie]
Carnegie, Andrew (Retirement) **C: 242**
- Wealth** [economics]
See also Distribution of wealth in this index
Income **I: 100**
- Wealth Against Commonwealth** [book by Lloyd]
Lloyd, Henry Demarest **L: 402**
- Wealth of Nations, The** [book by Smith]
Smith, Adam **S: 515**
Capital **C: 192**
Capitalism (Capitalism in its ideal form) **C: 194**;
(The development of capitalism) **C: 195**
Economics (The classical economists) **E: 65**
- Weaning**
Baby (Feeding procedures) **B: 9**
Mammal (Care of the young) **M: 124**
- Weapon W: 155**
Arms control **A: 721**
Army **A: 724** with pictures
Feudalism (The decline of feudalism) **F: 83**
Indian, American (Weapons) **I: 144** with pictures;
(The first Americans) **I: 151**; pictures on **I: 138**
Infantry (Equipment) **I: 265**
Ordnance **O: 825**
Pirate picture on **P: 494**
War (The basic rules of warfare) **W: 24**; (The history of warfare) **W: 26**
See also the list of Related articles in the Weapon article
- Weapon fire control**
Radar (In the military) **R: 65-67**
- Weare, Meshech** [American political leader]
New Hampshire (table) **N: 223**
- Wearing apparel** See Clothing in this index
- Weasel** [animal] **W: 155** with pictures
Ermine **E: 354**
Grison **G: 396**
Sable **S: 3**
- Weather W: 156** with pictures and maps
See also Meteorology in this index
Climate **Ci: 675**
Environment (Abiotic environment) **E: 329**
Environmental pollution (Air pollution) **E: 331**
Global warming (Weather damage) **G: 232**
Kite (History) **K: 340-341**
Lake (Climate) **L: 33**
Remote sensing **R: 231** with picture
Soil (Effects of climate) **So: 573**
Static **So: 867**
Troposphere **T: 452**
Weather satellite **W: 171**
See also the list of Related articles in the Weather article
- Weather advisory** [meteorology]
Weather (Reporting the weather) **W: 166**
- Weather balloon**
Balloon (Scientific uses) **B: 59**
Telemetry **T: 93**
Weather (Weather balloons, airplanes, and ships) **W: 163** with picture
- Weather bureau** See Weather Service, National in this index
- Weather forecasting**
Meteorology **M: 432**
Weather (Careers in weather) **W: 170**; picture on **W: 156**
- Weather forecasting**
Barometer (Uses) **B: 116**
- Chaos **C: 376**
Isobar **I: 474** with map
Isotherm **I: 475** with map
Meteorology **M: 432**
Ohio (Interesting facts) **O: 681**
Radar (In weather observation and forecasting) **R: 67** with picture
Weather **W: 156**; (Measuring the weather) **W: 162**; (Weather forecasting) **W: 164**; (Careers in weather) **W: 170**
- Weather map**
Weather (Weather maps) **W: 164** with picture
Map (Advances in European cartography) **M: 183-184**
- Weather observer**
Weather (Land-based observation stations) **W: 162**
- Weather radar**
Radar (In aviation) **R: 64-65**
Weather (Weather satellites) **W: 163-164**
- Weather satellite W: 171** with picture
Satellite, Artificial (Types of artificial satellites) **S: 150f** with picture
Weather (Weather satellites) **W: 163**; picture on **W: 166**
- Weather Service, National** [U.S.] **W: 172**
Flood (Reducing flood losses) **F: 238**
Heat index **H: 155**
Hurricane (Forecasting hurricanes) **H: 455-456**
National Oceanic and Atmospheric Administration **N: 42**
Radar (In weather observation and forecasting) **R: 67**
Tornado (Forecasting tornadoes) **T: 334-335**
Weather (Land-based observation stations) **W: 162**; (Reporting the weather) **W: 166** with picture
- Weather vane W: 172**
Folk art (Sculpture) **F: 317** with picture
Weather (Land-based observation stations) **W: 162**
Wind (Wind direction) **W: 330**
- Weather warning** [meteorology]
Weather (Reporting the weather) **W: 166**
- Weather watch** [meteorology]
Weather (Reporting the weather) **W: 166**
- Weathercock** See Weather vane in this index
- Weatherfish** [fish]
Loach **L: 403**
- Weatherford, William** [American Indian chief]
Alabama (Territorial days) **A: 275**
- Weathering** [geology]
Earth (Sedimentary rocks) **E: 21**; picture on **E: 28**
Erosion (How erosion occurs) **E: 355**
Geomorphology **G: 106**
Rock (Clastic sediments) **R: 372**
Sand **S: 106**
Soil (Kinds of parent material) **So: 573**
- Weatherly, Joe** [American race driver]
Automobile racing (table) **NASCAR Winston Cup champions, 1962-63) A: 981**
- Weaver**
Basket making (Methods) **B: 141**
- Weaver** [bird] **W: 172** with picture
Bird (Building a nest) **B: 356-357** with picture
- Weaver, Arthur J.** [American political leader]
Nebraska (table) **N: 110**
- Weaver, Earl** [American baseball manager]
Baseball (table: Hall of Fame) **B: 135**
- Weaver, James B.** [American political leader]
Greenback Party **G: 381**
Harrison, Benjamin (Bid for reelection) **H: 73**
Populism (The People's Party) **P: 674**
- Weaver, Robert Clifton** [American government official] **W: 173**
- Weaver, Warren** [American mathematician]
Molecular biology (The beginning of molecular biology) **M: 691-692**
- Weaver ant**
Ant (Nests) **A: 523-524**; picture on **A: 520**
- Weavers, The** [etching by Kollwitz]
Kollwitz, Käthe picture on **K: 363**
- Weavers, The** [play by Hauptmann]
Hauptmann, Gerhart **H: 86**
German literature (Naturalism) **G: 142**
- Weaver's knot**
Knots, hitches, and splices diagram on **K: 356**
- Weaving** [industrial process] **W: 173** with pictures
Basket making (Methods) **B: 141** with pictures
Beadwork **B: 179** with picture
Clothing (Why clothing varies) **Ci: 690-691**
Cotton (Spinning) **C: 1091**; picture on **Ci: 1092**
Handicraft picture on **H: 45**
Indian, American (Weaving) **I: 146** with picture; picture on **I: 136a**

- Industrial Revolution (Weaving machines) I: 249
Ireland *picture on* I: 425
Islamic art (Textiles) I: 470
Jacquard, Joseph Marie J: 20
Rugs and carpets (Weaving) R: 515 *with pictures*; (History) R: 517
Tapestry (How tapestries are made) T: 39
Textile T: 212 *with pictures*
- Web** [wool]
Wool (Making yarn) W: 400 *with picture*
- Web** [zoology]
Spider (Web-spinning spiders) So: 787-788 *with pictures*
- Web, The** [communications] *See* World Wide Web *in this index*
- Web and the Rock, The** [book by Wolfe]
Wolfe, Thomas Clayton W: 377
- Web browser** [electronics]
Computer (The World Wide Web) Ci: 921
Internet (How the Internet works) I: 350c;
(Glossary of Internet terms) I: 350a
Online service O: 763
World Wide Web W: 499
- Web crawling**
Information retrieval (How information retrieval works) I: 268b
- Web-fed press**
Printing (Methods of printing) P: 798 *with picture*
Offset O: 678
- Web of life** [biology]
Animal (Importance of animals) A: 470 *with picture*
- Web page** [computing]
Computer (The World Wide Web) Ci: 921; *picture on* Ci: 922
Internet I: 350; (Other uses) I: 350c
Web site W: 175
World Wide Web W: 499
- Web site** [electronics] W: 175
Advertising (Internet) A: 76 *with picture*
Computer (The World Wide Web) Ci: 921
Internet I: 350; (Glossary of Internet terms) I: 350a
Newspaper (Online newspapers) N: 381
World Wide Web W: 499
- Web television**
Television (Digital television) T: 126-127
- Webb, Sir Aston** [English architect]
Victoria and Albert Museum V: 358
- Webb, Beatrice Potter** [British social reformer]
Webb, Sidney and Beatrice W: 175
- Webb, Chick** [American musician]
Fitzgerald, Ella F: 190
- Webb, Frank J.** [American author]
African American literature (The 1800's) A: 136a
- Webb, George J.** [American educator]
Mason, Lowell M: 266
- Webb, Lucy Ware** [wife of Rutherford B. Hayes]
See Hayes, Lucy Webb *in this index*
- Webb, Matthew** [British athlete]
English Channel E: 311
- Webb, Phyllis** [Canadian poet]
Canadian literature (Modern Canadian poets) C: 160
- Webb, Sidney and Beatrice** [British social reformers] W: 175
- Webb, Sidney James** [British social reformer]
Webb, Sidney and Beatrice W: 175
- Webb-Kenyon Act** [1913]
Prohibition (The movement toward prohibition) P: 815
- Webbed foot** [zoology]
Bird (Legs and feet) B: 364
Frog (Legs) F: 536
- Webber, Andrew Lloyd** *See* Lloyd-Webber, Andrew *in this index*
- Webber, John** [British painter]
Cook, James *pictures on* Ci: 1025
- Webcasting** *See* Push technology *in this index*
- Webelos** [rank]
Boy Scouts (Cub Scouting) B: 536-537 *with picture*
- Weber** [unit of measure] W: 176
- Weber, Carl Maria von** [German composer]
W: 176
Opera (Romanticism) O: 798
- Weber, Max** [German sociologist] W: 176
Bureaucracy B: 703
Protestant ethic P: 833
Puritans (Puritan influence) P: 910-911
Sociology (Development of social research) So: 566
- Weber, Max** [American painter] W: 176
- Weber, Wilhelm** [German physicist]
Weber W: 176
- Webern, Anton** [Austrian composer] W: 176
Austria (The arts) A: 932-933
- Webisode** [entertainment]
Internet (Push technology) I: 350b-350c
- Webster, Daniel** [American political leader]
W: 176 *with picture*
Dartmouth College case D: 39
Harrison, William Henry (The *Caroline* affair) H: 76
Jackson, Andrew (Election of 1824) J: 9
Nullification N: 603
Tyler, John (Tyler's accomplishments) T: 534
Webster-Ashburton Treaty W: 178
- Webster, Ephraim** [American pioneer]
Syracuse (New York) So: 1069
- Webster, John** [English dramatist] W: 177
English literature (Jacobean drama) E: 317
- Webster, Noah** [American lexicographer] W: 177
Dictionary (Early English dictionaries) D: 194
- Webster, William H.** [American government official]
Federal Bureau of Investigation (History) F: 62-63
- Webster-Ashburton Treaty** [1842] W: 178
Harrison, William Henry (The *Caroline* affair) H: 76
Maine (Statehood) M: 89
- Webster-Hayne Debate**
Hayne, Robert Young H: 122
Webster, Daniel (The U.S. senator) W: 177
- Webster v. Reproductive Health Services**
[U.S. history]
Abortion (Abortion in the United States) A: 15-16
- Webster's Third New International Dictionary**
Dictionary (Modern dictionaries) D: 194
- Weddell, James** [British hunter]
Antarctica (Early exploration) A: 535-536
- Weddell Abyssal Plain**
Southern Ocean (The ocean floor) So: 688a
- Weddell Sea** [bay]
Antarctica (Coastal waters) A: 534
Southern Ocean (Boundaries) So: 688
- Weddell seal**
Seal (Raising young) S: 266-267
- Wedding**
Marriage (Wedding ceremonies and customs) M: 221; *picture on* M: 219
Folklore (Superstitions and customs) F: 325
Gypsies *picture on* G: 451
Pioneer life in America (Social activities) P: 485
Poland P: 607
Sami *picture on* S: 79
- Wedding, The** [ballet] *See* Noces, Les *in this index*
- Wedding anniversary** W: 178
- "Wedding March"** [music by Mendelssohn]
Mendelssohn, Felix (His life) M: 399
- Wedding of St. George and Princess Sabra, The** [painting by Rossetti]
Rossetti, Dante Gabriel *picture on* R: 484
- Wedding of the Gods, The** [opera by Coppola]
Opera *picture on* O: 797
- Wedding ring**
Marriage (Wedding ceremonies and customs) M: 221
Ring R: 342 *with picture*
- Wedding veil**
Marriage (Wedding ceremonies and customs) M: 221
- Wedekind, Frank** [German dramatist] W: 178
- Wedell, James** [American aviator]
Airplane (table) A: 232
- Wedge** [golf club]
Golf (Golf clubs) G: 262 *with picture*
- Wedge** [tool] W: 178
Machine (Wedge) M: 15 *with picture*
- Wedgwood, Josiah** [British businessman]
Coleridge, Samuel Taylor (His life) C: 771
Wedgwood ware W: 178
- Wedgwood ware** [china] W: 178 *with picture*
Porcelain (English porcelain) P: 677
- Wednesday** [day] W: 179
- Wednesday Island**
Torres Strait Islands T: 341
- Wee Willie Winkie** [book by Kipling]
Kipling, Rudyard (Early literary success) K: 334
- Weed** [nickname]
Marijuana M: 201
- Weed** [plant] W: 179
Cotton (Weeds) Ci: 1090
Gardening (Caring for the garden) G: 35-36
Lawn *pictures on* L: 143
See also the list of *Related Articles in the Weed article*
- Weed, Thurlow** [American political leader]
W: 180
- Fillmore, Millard (Political and public career) F: 101
- Weedkiller** *See* Herbicide *in this index*
- Week** W: 180
- Weekend** [film]
Godard, Jean-Luc G: 244
- Weekend college**
Community college (Importance to students) Ci: 899
- Weekly Arizonian** [newspaper]
Arizona (Communication) A: 686
- Weekly Herald** [newspaper]
Edison, Thomas Alva (Boyhood) E: 78
- Weekly Oregonian** [newspaper]
Oregon (Communication) O: 844
- Weeks, Frank B.** [American political leader]
Connecticut (table) Ci: 967
- Weeks, John E.** [American political leader]
Vermont (table) V: 333
- Weeks, John W.** [American government official]
Coolidge, Calvin (table) Ci: 1032
Harding, Warren Gamaliel (table) H: 58
- Weeks, Sinclair** [American government official]
Commerce, Department of (table) Ci: 871
- Weeks Act** [1911]
Conservation (The rise of the conservation movement) Ci: 985-986
Forestry (Laws that protect U.S. forest resources) F: 408
- Weems, Mason Locke** [American author]
W: 180
Adams, John A: 34
Biography (The 1800's) B: 313-314
Lincoln, Abraham (Education) L: 312-313
- Weeping birch**
Birch (Paper birch) B: 327
- Weeping willow**
Tree *pictures on* T: 424
Willow W: 315
- Weevil** [insect] W: 180
Beetle (The bodies of beetles) B: 215 *with picture*; (Weevils) B: 217; *picture on* B: 218
Boll weevil B: 448
Grain weevil G: 302 *with picture*
Pea (Diseases and pests) P: 205
- Weft** [weaving]
Weaving (Types of weaves) W: 173 *with pictures*
Basket making (Methods) B: 141 *with diagrams*
Rugs and carpets (Weaving) R: 515 *with pictures*
Satin S: 150h
Tapestry (How tapestries are made) T: 39
Textile (Woven fabrics) T: 214
- Weft knitting**
Knitting machine K: 354
Textile (Knitted fabrics) T: 214
- Wegener, Alfred Lothar** [German meteorologist]
Plate tectonics (History of tectonic theory) P: 564
- Wegner, Hans** [Danish designer]
Furniture *picture on* F: 583
- Weicker, Lowell P., Jr.** [American political leader]
Connecticut (table) Ci: 967
- Weierstrass, Karl Theodor** [German mathematician]
Fractal F: 443
Mathematics (In the 1800's) M: 307
- Weighing scale**
Scale, Weighing S: 169
- Weight** [measurement] W: 180
Energy (Weight and mass) E: 275
Gravitation (Newton's theory of gravitation) G: 331 *with diagrams*
Kilogram K: 316
Mass (Mass and weight) M: 268
Matter M: 310
Metric system (Mechanics) M: 437; (The metric system at a glance) M: 438-439 *with pictures*
Scale, Weighing S: 169
Weights and measures (table: Weight and mass) W: 187
- Weight, Atomic** *See* Atomic weight *in this index*
- Weight, Tables of**
Growth (Growth rate) G: 405
- Weight allowance**
Horse racing (Allowance races) H: 365
- Weight class**
Boxing (Weight classes) B: 527; (table) B: 530
- Weight control** W: 181
Diet (Diets for losing or gaining weight) D: 200

868 Weight-driven clock

- Nutrition (Do not overeat) N: 630
Overeaters Anonymous O: 881
Pregnancy (Weight gain) P: 734b
- Weight-driven clock**
Clock (Mechanical clocks) Ci: 682j *with diagram*
- Weight-gaining product**
Industry (Management) I: 258
- Weight-losing product**
Industry (Management) I: 258
- Weight-training** [sport] See *Bodybuilding in this index*
- Weighted silk**
Silk (Boiling off and weighting) S: 460
- Weightless Environmental Training Facility**
Astronaut (Basic mission training) A: 832
- Weightlessness** [space exploration]
Aerospace medicine (Space medicine) A: 89
Astronaut *picture on* A: 831
International Space Station (Missions) I: 346b
Relativity (A "thought experiment") R: 212
Space exploration (Living in space) So: 701 *with pictures*
- Weightlifting** [sport] W: 183 *with picture*
Bodybuilding B: 435
Olympic Games (Summer Olympic Games) O: 746e-749
Physical fitness *picture on* P: 434
- Weights and measures** W: 184
See also *Metric system in this index*
Laser (Measuring) L: 83
- Weights and Measures, General Conference on**
Metric system M: 436; (Evolution of the metric system) M: 441
Weights and measures (Measurement systems) W: 184
- Weights and Measures, International Bureau of**
International Bureau of Weights and Measures I: 338
- Weihnachtsmann**
Christmas (In Germany) C: 530
Santa Claus (How the Santa Claus legend began) S: 113
- Weill, Kurt** [German composer] W: 188
- Weimar** [Germany]
Liszt, Franz (His life) L: 349-350
- Weimar Republic** [German history]
Germany (The Weimar Republic) G: 167
- Weimeraner** [dog] W: 188
Dog *picture on* D: 269
- Weinberg, Steven** [American physicist]
Nobel Prizes (Physics) 1979) N: 441
- Weinberger, Casper Willard** [American government official] W: 188
Iran-contra affair (Charges and court actions) I: 407
- Weinke, Chris** [American football player]
Football (table) F: 363
- Weir** [engineering]
Lamprey (Destructiveness) L: 55
- Weir, Bob** [American singer]
Grateful Dead G: 330
- Weir, Robert Stanley** [Canadian judge]
"O Canada" O: 635
- Weir, Walter** [Canadian political leader]
Manitoba (table) M: 159
- Weir Farm National Historic Site** [Connecticut]
National Park System (table: National historic sites) N: 52-54
- Weir of Hermiston** [book by Stevenson]
Stevenson, Robert Louis (Novels) So: 898
- Weirton**
West Virginia (Interesting facts) W: 207
- Weisgard, Leonard** [American artist] W: 188
- Weismann, August** [German biologist] W: 188
- Weiss, Carl A.** [American assassin]
Long, Huey Pierce L: 446
- Weiss, Ehrich** [American magician] See *Houdini, Harry in this index*
- Weiss, George** [American businessman]
Baseball (table: Hall of Fame) B: 135
- Weiss, Peter** [German dramatist]
Drama (Later German-language drama) D: 340
German literature (German literature after 1945) G: 142
- Weissmuller, Johnny** [American swimmer]
Olympic Games (Between the wars) O: 751
Swimming (History) So: 1048
- Weitz, Paul J.** [American astronaut]
Astronaut (Achievements in space) A: 829-830; (table) A: 830
Space exploration (Skylab) So: 721
- Weizmann, Chaim** [Israeli statesman] W: 188 *with portrait*
Israel (Independence and conflict) I: 487
- Welch, James** [American author]
Indian, American (Achievements in the arts) I: 181
- Welch, Joseph** [American lawyer]
Television (Early programs) T: 119
- Welch, Laura Lane** [wife of George W. Bush]
See Bush, Laura Welch *in this index*
- Welch, Mickey** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- "Welcome Back, Kotter"** [television series]
Travolta, John T: 406
- Welcome Monument** [Jakarta]
Indonesia *picture on* I: 226
- Welcome to Hard Times** [book by Doctorow]
Doctorow, E. L. D: 260
- Weld, Theodore** [American social reformer]
Abolition movement (In the United States) A: 12-13
- Weld, William F.** [American political leader]
Massachusetts (table) M: 288
- Welded rail**
Railroad (Tracks) R: 108-109
- Welding** [industrial process] W: 189 *with pictures*
Acetylene A: 25
Helium (Uses) H: 176 *with picture*
Sculpture (The sculptor at work) S: 232 *with picture*
- Welding rod**
Welding (Fusion welding) W: 189 *with picture*
- Welf** [German history]
Guelphs and Ghibellines G: 418
- Welfare** W: 190
Clinton, Bill (National affairs) Ci: 682d
Food Stamp Program F: 344
Foundations (Human services) F: 431
New Deal (Helping the needy) N: 201
State government (State services) So: 864
- Welfare economics**
Arrow, Kenneth Joseph A: 743
Marshall, Alfred M: 228
- Welfare organizations**
CARE C: 213
Catholic Conference, United States C: 303
Family Service America F: 25
- Welfare Party**
Turkey (Political changes) T: 512
- Welfare state** [government] W: 192
Norway (Social welfare) N: 541
United Kingdom (The welfare state) U: 71
Welfare (Welfare around the world) W: 191
- Welford, Walter** [American political leader]
North Dakota (table) N: 513
- Well** W: 192 *with diagrams*
Artesian well A: 751 *with diagram*
Irrigation (Bringing irrigation water to farms) I: 457
- Well-made play**
French literature (Realism) F: 521
Ibsen, Henrik I: 4
- Well of the Saints, The** [play by Synge]
Synge, John Millington So: 1067
- Well-Tempered Clavier** [music by Bach]
Bach, Johann Sebastian (His works) B: 16
- Welland Ship Canal** [Lake Erie-Lake Ontario]
W: 193 *with map*
Canal (table) C: 164
Great Lakes (Water routes to the sea) G: 345
Niagara River (Commerce and industry) N: 395
Ontario *picture on* O: 785
Saint Lawrence Seaway S: 43 *with map*; (Early canals) S: 44
- Wellcome, Sir Henry** [British businessman]
Wellcome Trust W: 193
- Wellcome Trust** W: 193
- Weller, John B.** [American political leader]
California (table) C: 59
- Weller, Thomas Huckle** [American biologist]
Enders, John Franklin E: 272
Nobel Prizes (Physiology or medicine) 1954) N: 444
- Welles, Gideon** [American political leader]
W: 193
Emancipation Proclamation *picture on* E: 254
Lincoln, Abraham (table) L: 323
- Welles, Orson** [American actor] W: 194 *with portrait*
Motion picture (Movies in the 1930's) M: 868-869 *with picture*
Radio (The Golden Age of Broadcasting) R: 92-93
- Wellesley, Arthur** See *Wellington, Duke of in this index*
- Wellesley College** W: 194
- Wellington** [city, New Zealand] W: 194
- Wellington, Duke of** [British general] W: 194
Aix-la-Chapelle, Congress of A: 253
- Napoleon I (The Hundred Days and Waterloo) N: 18
Portugal (A brief revival) P: 694
Waterloo, Battle of (Napoleon returns to France) W: 145
- Wellman, William** [American director]
Motion picture (Movies in the 1930's) M: 868
- Wells, H. G.** [British author] W: 195
English literature (Literature before World War I) E: 322
Science fiction (The first science fiction) S: 205
- Wells, Heber M.** [American political leader]
Utah (table) U: 245
- Wells, Henry** [American businessman]
Wells, Fargo & Company W: 195
- Wells, Henry H.** [American political leader]
Virginia (table) V: 417
- Wells, Herbert George** See *Wells, H. G. in this index*
- Wells, Horace** [American dentist]
Anesthesia (History) A: 459
Dentistry (Modern dentistry) D: 145
Nitrous oxide N: 427
- Wells, James M.** [American political leader]
Louisiana (table) L: 496
- Wells, Samuel** [American political leader]
Maine (table) M: 87
- Wells, William Charles** [British journalist]
Florida (Communication) F: 260
- Wells, Willie** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Wells and Company** [U.S. history]
Fargo, William George F: 28
- Wells-Barnett, Ida Bell** [American social reformer] W: 195
African Americans (The Harlem Renaissance and other achievements) A: 136k-136l
- Wells, Fargo & Company** [U.S. history] W: 195
Fargo, William George F: 28
- Wellwood** [Manitoba]
Manitoba *picture on* M: 144
- Welsbach, Baron von** [Austrian chemist]
Neodymium N: 123
Praseodymium P: 733
- Welsh** [people]
Wales (People) W: 9; (Way of life) W: 9
- Welsh, Jane** [wife of]
Carlyle, Thomas (Early career) C: 239
- Welsh, Matthew E.** [American political leader]
Indiana (table) I: 214
- Welsh Church Act** [1914]
Wales (Religion) W: 10-11
- Welsh corgi** [dog]
Cardigan Welsh corgi C: 210 *with picture*
Pembroke Welsh corgi P: 233
- Welsh language**
United Kingdom (Language) U: 55
Wales (Language) W: 9; (The arts) W: 11
- Welsh National Assembly**
Wales (Government) W: 8
- Welsh pony**
Horse (Ponies) H: 347 *with picture*
- Welsh springer spaniel** W: 195 *with picture*
- Welsh terrier** W: 196
Dog *picture on* D: 272
- Welterweight**
Boxing (table) B: 530
- Weltschmerz**
German literature (Romanticism) G: 141
- Welty, Eudora** [American author] W: 196
American literature (Southern fiction) A: 424
- Welwitsch, Friedrich** [Austrian botanist]
Welwitschia W: 196
- Welwitschia** [plant] W: 196 *with picture*
Africa *picture on* A: 123
Plant *picture on* P: 547
- Wernys, Jean Margaret** See *Laurence, Margaret in this index*
- Wen** [disorder] W: 196
- Wenatchee National Forest** [Washington]
National forest *picture on* N: 35
- Wenceslas Square**
Prague (The city) P: 730
- Wendel, Fritz** [German aviator]
Airplane (table) A: 232
- Wentorf, Robert H., Jr.** [American chemist]
Borazon B: 482
- Wentworth, Benning** [American colonial official]
Vermont (Land disputes) V: 334
- Wentworth, Thomas** See *Strafford, Earl of in this index*
- Wereat, John** [American political leader]
Georgia (table) G: 130
- Werewolf** [legendary creature] W: 196
- Wergeland, Henrik Arnold** [Norwegian author]
W: 196

- Wergeland, Oscar** [Norwegian painter]
Norway picture on N: 546
- Werner, Abraham Gottlob** [German geologist]
W: 197
Asbestos (History) A: 766
Geology (The rock dispute) G: 98
Graphite G: 323
- Werner, Alfred** [Swiss chemist]
Nobel Prizes (Chemistry: 1913) N: 442
- Wernicke, Carl** [German neurologist]
Brain (In the use of language) B: 554
- Wernicke's area**
Brain (In the use of language) B: 554
- Wernigerode** [town, Germany]
Germany picture on G: 151
- Wertheimer, Max** [German psychologist]
Gestalt psychology G: 175
Psychology (Gestalt psychology) P: 850
- Wertmüller, Ulrich** [Swedish painter]
Marie Antoinette picture on M: 200
- Werts, George T.** [American political leader]
New Jersey (table) N: 249
- Wesberry v. Sanders** [U.S. history]
Gerrymander G: 174
- Weser River** [river, Germany] W: 197
Pied Piper of Hamelin P: 452
- Wesley, Charles** [British religious leader] W: 197
Hymn (Words and music) H: 474
Methodists (Early history) M: 434
- Wesley, John** [English religious leader] W: 197
with portrait
Circuit rider Ci: 559
Evangelicalism E: 422
Free Methodist Church F: 499
Methodists M: 434; (Early history) M: 434
Protestantism (The Methodist movement [the 1700's]) P: 835
Wesleyan Church W: 198
Whitefield, George W: 292
- Wesleyan Church** [religious group] W: 198
- Wesleyan Methodist Church** [religious group]
Wesleyan Church W: 198
- Wesleyan Methodist Connection** [religious group]
Methodists (Social change and division) M: 435
- Wesleyan University**
Agricultural experiment station A: 145
- Wesselmann, Tom** [American artist]
Pop art P: 659
- Wessex** [ancient kingdom]
Alfred the Great A: 348
- West** [international relations]
Cold War Ci: 762
- West, American** See *West, The* in this index
- West, Andrew** [American educator]
Wilson, Woodrow (University president) W: 320-321
- West, Benjamin** [American painter] W: 198
Monroe, James picture on M: 736
United States, History of the picture on U: 152
Wolfe, James picture on W: 377
- West, Comet** [astronomy]
Comet (table) Ci: 868
- West, Dick** [American painter]
Indian, American picture on I: 142
- West, Jerry** [American basketball player] W: 198
Basketball picture on B: 153
- West, Jessamyn** [American author] W: 198
- West, John C.** [American political leader]
South Carolina (table) So: 658
- West, Mae** [American actress] W: 198
Fields, W. C. picture on F: 95
- West, Nathanael** [American author] W: 198
- West, Oswald** [American political leader]
Oregon (table) O: 845
- West, Rebecca** [British author] W: 199
- West, Roy O.** [American government official]
Coolidge, Calvin (table) Ci: 1032
Hoover, Herbert Clark (table) H: 330
Interior, Department of the (table) I: 325
- West, The** [U.S. history] W: 199
See also *Pioneer life in America*; *Western frontier life*; *Westward movement in this index*
United States, History of the (Expansion) U: 166 with picture
Westerns W: 242
- West, Thomas** See *De La Warr, Lord* in this index
- West, Togo, Jr.** [American government official]
Clinton, Bill (table) Ci: 682d
Veterans Affairs, Department of (History) V: 344
- West African Economic Community**
Africa (Africa today) A: 135
- West African Studies** [book by Kingsley]
Kingsley, Mary Henrietta K: 331
- West Antarctica**
Antarctica (Land regions) A: 532-534
- West Bank** [territory, Middle East] W: 199 with picture and map
Arab-Israeli conflict (The 1948 war) A: 582; (The 1967 war) A: 582a; (The first intifada) A: 582a; (Peacemaking) A: 582a; (The second intifada) A: 582b
Hebron H: 163
Hussein I H: 457
Israel I: 478; (History) I: 486-488
Jericho J: 93
Jordan J: 160 with map; (History) J: 164-165
Middle East (History) M: 532-533; (History) M: 532-534
Palestine (The continuing conflict and peace efforts) P: 105
Palestine Liberation Organization P: 106
Palestinians P: 107
Rabin, Yitzhak R: 50
- West Bengal** [state, India]
Bengal B: 248
- West Berlin** [Germany] See *Berlin in this index*
- West Block** [building]
Ottawa (The Parliament buildings) O: 872
- West Brant** [painting by Kline]
Abstract expressionism picture on A: 18
- West Coast natives**
Nootka Indians N: 453
- West Edmonton Mall**
Alberta (Interesting facts) A: 313
- West End** [district]
London (Central London) L: 429-430
- West Falkland** [island, Atlantic]
Falkland Islands F: 15
- West Flanders** [province, Belgium]
Flanders F: 227 with map
- West Florida, Republic of** [U.S. history]
Louisiana (Territorial days) L: 498
Mississippi (Exploration and early settlement) M: 641
- West Germany** See *Germany in this index*
- West Gulf Coastal Plain** [region, U.S.]
Louisiana (Land regions) L: 490
- West Highland white terrier** W: 200 with picture
- West India Company, Dutch** See *Dutch West India Company in this index*
- West Indian cherry** [fruit]
Acerola A: 24 with picture
- West Indian chiton** [sea animal]
Shell picture on S: 387
- West Indies** [islands, Caribbean] W: 200 with pictures and maps
Columbus, Christopher (The first landing) Ci: 860 with picture
East Indies E: 40
Latin America (The wars of independence) L: 107-108
See also the list of *Related Articles* in the *West Indies* article
- West Indies, British** [islands, Atlantic]
British West Indies B: 633
- West Indies, University of the**
Jamaica (People) J: 23-24
- West Indies Associated States** [islands, Caribbean]
West Indies (Independence movements) W: 205
- West Indies Federation** [British history]
Barbados (History) B: 104
Jamaica (History) J: 24-25
West Indies (Independence movements) W: 205
- West Indies tree fern**
Tree pictures on T: 413
- West Irian** See *Irian Jaya in this index*
- West Jerusalem**
Jerusalem (West Jerusalem) J: 95
- West Lake** [China]
Hangzhou H: 51
- West Okoboji Lake**
Iowa (Rivers and lakes) I: 386
- West Orange** [New Jersey]
Edison, Thomas Alva (Honors) E: 82 with picture; (Inventor-industrialist of West Orange) E: 80
- West Pakistan** See *Pakistan in this index*
- West Point** [New York] W: 205
Arnold, Benedict (Turns traitor) A: 742
New York (Places to visit) N: 302, picture on N: 297
Thayer, Sylvanus T: 231
United States Military Academy U: 201 with picture
- West Quoddy Head** [region]
Maine M: 68
- West Quoddy Lighthouse** [Maine]
Lighthouse picture on L: 294
- West Roman Empire**
Byzantine Empire (Beginnings) B: 753-754
Goths G: 279
Law (The Middle Ages) L: 134
Rome, Ancient map on R: 447; (Decline and fall) R: 448
- West Roxbury** [district, Boston]
Boston (Hyde Park and West Roxbury) B: 500
- West Shawnee Trail** [U.S. history]
Oklahoma (After the Civil War) O: 731-732
- West Side Story** [film]
Motion picture (Best picture: 1961) M: 861
- West Side Story** [musical]
Bernstein, Leonard B: 271
Dance (European and American theatrical dance) D: 31-32
Musical comedy (The modern musical emerges) M: 960
Robbins, Jerome R: 365
- West Slavs** [people]
Slavs (West Slavs) S: 505
- West Virginia** W: 206 with pictures and maps
Civil War (How the states lined up) Ci: 617
Pierpont, Francis Harrison P: 457
United States picture on U: 120
See also the list of *Related Articles* in the *West Virginia* article
- West Virginia** [ship]
Miller, Dorie M: 553
- West Virginia Independence Hall-Custom House** [Wheeling]
West Virginia (Places to visit) W: 216
- West Virginia University** W: 230
West Virginia picture on W: 211
- West Wind Drift** [current]
Atlantic Ocean (Moving ocean waters) A: 866
- Westbrook, Harriet** [wife of]
Shelley, Percy Bysshe (His life) S: 391
- Westchester County** [New York]
New York City (Metropolitan area) N: 330
- Westcott, Edward Noyes** [American author] W: 230
- Westergaard, Harald Malcolm** [American engineer] W: 230
- Westerly wind**
Climate (Atmospheric circulation) Ci: 676a
Cyclone Ci: 1203
Prevailing westerly P: 773
Weather (Planetary-scale systems) W: 158-159
- Westermarck, Edward Alexander** [Finnish anthropologist] W: 230
- Western** [fiction] See *Westerns in this index*
- Western Addition** [district]
San Francisco (Residential districts) S: 93-94 with map
- Western Australia** [state, Australia] W: 231 with picture
- Western bloc**
Cold War Ci: 762
- Western bluebird**
Bluebird B: 422
- Western Cape** [province, South Africa]
South Africa (Provincial government) So: 609
- Western Carolina University** [Cullowhee]
North Carolina, University of N: 495
- Western Chamber, The** [play by Wang Shifu]
Chinese literature (Drama and fiction) C: 512
- Western chimpanzee**
Chimpanzee C: 471
- Western Church** [European history] W: 231
- Western Coal Field**
Kentucky (Land regions) K: 285-286; (Mining) K: 288
- Western Conference**
Hockey (table: National Hockey League) H: 281
- Western Desert** [North Africa]
Egypt (Recent developments) E: 133-134
See also *Libyan Desert in this index*
- Western Development Museum** [Saskatoon]
Saskatchewan (Museums) S: 133
- Western dewberry** [plant]
Loganberry L: 423
- Western European Union** [alliance] W: 231
European Union (Relations with other countries) E: 419
- Western Federation of Miners** [U.S. history]
Idaho (Early statehood) I: 44
- Western Front**
World War I W: 452; (The Western Front) map on W: 455-456
- Western frontier life in America** [U.S. history] W: 232 with pictures

- See also Pioneer life in America; Westward movement in America in this index
- Bean, Judge Roy B: 182 with picture
- Boom town B: 474
- Buffalo picture on B: 675
- Chisholm Trail C: 515
- Gold rush picture on G: 254
- Kansas (The great cattle towns) K: 237
- Stagecoach picture on So: 821
- United States, History of the (America moves west) U: 166; (The end of the western frontier) U: 179
- See also the Related Articles in the Western frontier Life in America article
- Western gray kangaroo**
- Kangaroo K: 213
- Western Hemisphere** [geography]
- Hemisphere H: 181 with picture
- Western hemlock** [tree]
- Hemlock H: 182 with picture
- Western Isles** [Scotland]
- See also Hebrides in this index
- Western larch** [tree]
- Larch L: 75
- Western lowland gorilla**
- Gorilla G: 275
- Western meadowlark** [bird]
- Meadowlark M: 345
- Western music**
- Music (Western music) M: 955
- Western Plateaus, Basins, and Ranges** [region, U.S.]
- North America (Land regions) N: 462
- United States (The Western Plateaus, Basins, and Ranges) U: 125 with picture; map on U: 122
- Western pygmy blue**
- Butterfly B: 732 with picture
- Western pygmy rattlesnake**
- Snake picture on S: 533
- Western redcedar** [tree]
- Cedar (Scale-leaved cedars) C: 324
- Western Reserve** [U.S. history] W: 241
- Ohio (Exploration and settlement) O: 700
- Western saddle** [riding equipment]
- Horse (The saddle) H: 351 with picture
- Saddle S: 7 with picture
- Western Sahara** [region, Africa] W: 241
- Hassan II H: 82
- Mauritania (History) M: 315
- Morocco (Dispute over Western Sahara) M: 815
- Western Samoa** [territory]
- See also Samoa in this index
- Samoa (History) S: 80a-80b
- Western skink** [reptile]
- Skink picture on S: 494
- Western Star** [poem by Benét]
- Benét, Stephen Vincent B: 248
- Western Sudan** [region, Africa]
- African Americans (The cultural heritage) A: 136c with map
- Western swing** [music]
- Country music (Western swing music) C: 1098a
- Popular music (Other new styles of popular music) P: 671
- Western sword fern** [plant]
- Evolution (Evolution of new species) E: 429-430
- Western tanager**
- Tanager T: 24
- Western Trail** [U.S. history]
- Cowboy (The growth of the cattle industry) C: 1111-1112
- Western frontier life in America (The cattle boom) W: 234
- Western Turkestan**
- Turkestan (Western Turkestan) T: 501
- Western Union** W: 241
- Cornell, Ezra C: 1065
- Dolbear, Amos E. D: 284
- Edison, Thomas Alva (The young telegrapher) E: 78
- Telegraph (Western Union) T: 91; (Service expansion and improvement) T: 91; (Telegraph service today) T: 92
- Telephone (The Bell System) T: 100
- Western Wall** [shrine, Jerusalem] W: 242
- Jerusalem (Jewish sites) J: 95-96 with picture and map
- Jews picture on J: 120; (Roman rule) J: 122
- Western white pine**
- Pine (Western pines) P: 469
- Western wood-pewee** [bird]
- Pewee P: 352
- Western yew** [tree]
- Yew Y: 565
- Westerner, The** [film]
- Cooper, Gary C: 1034
- Westerns** [fiction] W: 242 with picture
- Westhampton College**
- Richmond, University of R: 334
- Westing Game, The** [book by Raskin]
- Raskin, Ellen R: 144
- Westinghouse, George** [American inventor] W: 242
- Railroad (Engineering improvements) R: 117
- Tesla, Nikola (The alternating-current system) T: 180
- Westliche Post** [newspaper]
- Schurz, Carl S: 189
- Westminster** [district]
- London picture on L: 431; (Residential areas and housing) L: 432
- Westminster, City of** [British history]
- London (Central London) L: 429-430
- Westminster, New Palace of** [London]
- Parliament (The Houses of Parliament) P: 174
- London (The Houses of Parliament) L: 435
- Westminster, Statute of** [1931]
- Canada, History of (Independence) C: 150
- Commonwealth of Nations (History) C: 876-877
- Westminster Abbey** [London] W: 242 with picture
- Edward the Confessor E: 114
- London (Churches) L: 435 with picture; (The Middle Ages) L: 439-440; picture on L: 435
- Unknown soldier U: 212
- Westminster Assembly** [English history]
- Presbyterians (History) P: 757-756a
- Westminster Confession of Faith** [religion]
- Baptists (Early history) B: 101
- Westminster Kennel Club Show**
- Dog (Dog competitions) D: 280
- Westminster Palace**
- London (The Middle Ages) L: 439-440
- Parliament (The Houses of Parliament) P: 174
- Westminster School** [England] W: 243
- Westminster Shorter Catechism** [religious book]
- Presbyterians (Teaching and worship) P: 756a
- Westmoreland, William Childs** [American general] W: 243
- Vietnam War (The opposing forces) V: 375
- Weston, Edward** [American inventor] W: 243
- Weston, Edward** [American photographer]
- W: 243
- Photography (The photographic revolution) P: 427
- Weston, James A.** [American political leader]
- New Hampshire (table) N: 223
- Westphalen, Jenny von** [wife of Karl Marx]
- Marx, Karl (Marriage and move to Paris) M: 236
- Westphalia, Peace of** [1648]
- Thirty Years' War (The Peace of Westphalia) T: 260
- Austria (The Habsburgs) A: 937-938
- Germany (The Thirty Years' War) G: 164
- Peace (From the 1400's to the 1700's) P: 206
- Pope (Renaissance and Reformation) P: 664-665
- Roman Catholic Church (The Counter Reformation) R: 408-409
- War (Ethical and legal aspects of war) W: 24
- Westport**
- Kansas City [Missouri] (History) K: 243
- Westward Ho!** [book by Kingsley]
- Kingsley, Charles K: 331
- Westward movement in America** [U.S. history] W: 244 with pictures and map
- See also Pioneer life in America in this index
- Homestead Act (Effects of the law) H: 305
- Lewis and Clark expedition L: 221
- Louisiana Purchase L: 502 with map
- Map (Mapping the Americas) M: 184-185
- Nebraska (Territorial days) N: 112 with picture
- United States, history of the (America moves west) U: 166 with picture
- Western frontier life in America W: 232
- See also the list of Related Articles in Western movement in America article
- Westward the Course of Empire Takes Its Way** [painting by Leutze]
- Leutze, Emanuel Gottlieb L: 216
- Westward the Tide** [book by L'Amour]
- L'Amour, Louis L: 52
- Westwood** [Californian]
- Los Angeles (West Los Angeles) L: 461
- Westwork** [architecture]
- Architecture (Carolingian architecture) A: 618
- Wet-bulb depression** [meteorology]
- Hygrometer (The psychrometer) H: 473-474
- Wet-bulb thermometer**
- Hygrometer (The psychrometer) H: 473
- Wet chinook** [weather]
- Chinook C: 513
- Wet milling** [agriculture]
- Corn (Corn in industry) C: 1061; picture on C: 1063
- Wet steam**
- Steam So: 880
- Wet suit**
- Skin diving (Kinds of skin diving) S: 493 with pictures
- Wet-summer engine**
- Gasoline engine (Lubrication system) G: 66
- Wetherby, Lawrence W.** [American political leader]
- Kentucky (table) K: 290
- Wethered, Joyce** [British golfer]
- Golf (Women's golf) G: 266
- Wetland** [geography] W: 253
- Conservation (Canada) C: 988
- Marsh M: 227
- Wetmore, Andrew R.** [Canadian political leader]
- New Brunswick (table) N: 196; (Confederation and progress) N: 198
- Wetmore, George P.** [American political leader]
- Rhode Island (table) R: 311
- Wetting, George** [American drummer]
- Jazz (The 1920's) J: 70
- WEU**
- Western European Union W: 231
- Weyand, Frederick** [American general]
- Vietnam War (The opposing forces) V: 375
- Weybosset Hill**
- Providence (Government and history) P: 840
- Weyden, Rogier van der** See Van der Weyden, Rogier in this index
- Weyerhaeuser, Frederick** [American businessman] W: 253
- Weyerhaeuser Company**
- Tree farming T: 433
- Weymouth** [Massachusetts] W: 253
- Weyrich, Paul** [American political figure]
- Heritage Foundation H: 211
- Whaam!** [painting by Lichtenstein]
- Painting (Pop art) P: 86 with picture
- Whale** W: 254 with pictures
- Animal (Animal travelers) A: 502; picture on A: 469
- Antarctica (Animal life) A: 534 with pictures
- Atlantic Ocean (Ocean life) A: 866
- Dolphin D: 296 with pictures
- Endangered species (table) E: 270
- Greenpeace G: 386
- Mammal pictures on M: 117, M: 119
- Skull S: 495
- Southern Ocean (Commercial resources) So: 688b
- See also the list of Related Articles in the Whale article
- Whale-headed stork** [bird]
- Shoebill S: 432 with picture
- Whale oil**
- Blubber B: 419
- Whale W: 254
- Whale shark** [fish] W: 265
- Animal picture on A: 487
- Ocean (The nekton) O: 655
- Shark (Kinds of sharks) S: 375-376 with picture
- Whale song** [sounds]
- Humpback whale H: 436
- Whalebone** See Baleen in this index
- Whalesucker** [fish]
- Remora R: 230
- Whaling** [industry]
- Colonial life in America (Fishing and whaling) C: 810
- Conservation (Ocean conservation) C: 978-979
- Greenpeace G: 386
- Inuit (Hunting and fishing) I: 354d-354e; picture on I: 354f
- Whale (The early days of whaling) W: 262 with picture; (Modern whaling) W: 263 with picture; (The future of whales) W: 264
- Whaling Commission, International**
- Whale (The future of whales) W: 264
- Wharton, Edith** [American author] W: 265
- American literature (Women writers) A: 420
- Novel (New directions in the novel) N: 573-574
- Wharton, Thomas, Jr.** [American political leader]

- Pennsylvania (table) P: 263
- Wharton School**
Pennsylvania, University of P: 270
- What Every Woman Knows** [play by Barrie]
Barrie, J. M. B: 118
- "What hath God wrought!** [quotation"]
Telegraph (Construction and growth) T: 91
- What-if scenario** [accounting]
Computer (Spreadsheet programs) Ci: 917-918
- "What is Art?"** [essay by Tolstoy]
Tolstoy, Leo (His conversion) T: 323
- What Is Life? and Other Scientific Essays**
[book by Schrödinger]
Schrödinger, Erwin S: 187
- What Is Property?** [book by Proudhon]
Proudhon, Pierre Joseph P: 838
- What Is the Third Estate?** [book by Sieyès]
Sieyès, Emmanuel Joseph S: 453
- What Is to Be Done?** [pamphlet by Lenin]
Lenin, V. I. (Beginnings of revolution) L: 192
- What Jamie Saw** [book by Coman]
Literature for children (Fiction) L: 358-359
- What Price Glory?** [play by Anderson and Stallings]
Anderson, Maxwell A: 452
- What We Talk About When We Talk About Love** [book by Carver]
Carver, Raymond C: 269
- What's Bred in the Bone** [book by Davies]
Davies, Robertson D: 46
Novel (The novel today) N: 575
- What's Going On** [recording]
Gaye, Marvin G: 73
- What's O'Clock** [book by Lowell]
Lowell, Amy L: 510
- What's Past Is Prologue** [book by Massey]
Massey, Vincent M: 296
- Wheat** [plant] W: 266 *with pictures and maps*
Agriculture (Expansion in the United States) A: 158
Alberta *picture on* A: 324
Australia (Agriculture) A: 919-920 *with picture*
Borlaug, Norman Ernest B: 488
Colonial life in America (Farming) Ci: 809-810
Flour F: 268
Food supply (Making farmland more productive) F: 349
Grain G: 301
Grass (Cereals) G: 326
Kansas (The nation's breadbasket) K: 237
North Dakota (Agriculture) N: 510 *with picture*
Oregon *picture on* O: 827
Russia *picture on* R: 526
Rust R: 567
Saskatchewan (Agriculture) S: 143
Triticale T: 448
See also the list of Related Articles in the Wheat article
- Wheat, Zack** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Wheat bran** [cereal]
Bran B: 562
- Wheat germ**
Wheat (Food for people) W: 266-267
- Wheat pool** [economics]
Cooperative (In Canada) Ci: 1036
- Wheat starch**
Starch (Industrial uses) So: 855
- Wheat State**
Kansas K: 216
- Wheatgrass**
Grass *picture on* G: 325
- Wheatland** [estate]
Buchanan, James (Later years) B: 661-662
- Wheatley, John** [American businessman]
Wheatley, Phillis W: 278
- Wheatley, Phillis** [American poet] W: 278
Colonial life in America (Literature) Ci: 806-807 *with picture*
Columbia Ci: 851
- Wheatstone, Sir Charles** [British inventor]
W: 278
Concertina Ci: 928
Harmonica H: 62
Telegraph (Development of the telegraph) T: 90
- Wheatstone bridge** [instrument] W: 278 *with diagram*
Ohm O: 707
Wheatstone, Sir Charles W: 278
- Wheel**
Automobile (The drive system) A: 953;
(Control systems) A: 953 *with diagram*;
(The support system) A: 954 *with diagram*
City (Economy) Ci: 580-581
Invention (Prehistoric times) I: 357-358
Transportation (The first great civilizations) T: 386
- Wheel** [food]
Cheese (Packaging) C: 394
- Wheel and axle** [mechanics] W: 278
Machine (Wheel and axle) M: 14 *with pictures*
- Wheel animal** *See Rotifer in this index*
- Wheel lock** [gun]
Handgun (Early handguns) H: 45 *with picture*
Harquebus H: 67
Musket M: 962
- Wheel method** [pottery]
Pottery (Shaping the clay) P: 716-717
- Wheel mounted crane** [machine]
Crane Ci: 1119 *with picture*
- Wheel tractor**
Tractor (Types of tractors) T: 360
- Wheelbarrow** W: 279
Transportation (The first great civilizations) T: 386; *picture on* T: 388
- Wheelchair**
Disabled (In community life) D: 220; *pictures on* D: 219
- Wheeler, Burton Kendall** [American political leader] W: 279
- Wheeler, Earle Gilmore** [American general]
Joint Chiefs of Staff (table) J: 156
- Wheeler, George H.** [American inventor]
Escalator E: 356
- Wheeler, Joseph** [Confederate general] W: 279
- Wheeler, William Almon** [American political leader] W: 279
Hayes, Rutherford Birchard (Campaign of 1876) H: 120
Vice President of the United States (table) V: 351; V: 348 *with portrait*
- Wheeler Adjustment** [1874]
Wheeler, William Almon W: 279
- Wheeler Dam** [Tennessee River, Alabama]
Muscle Shoals M: 936
- Wheeler Peak**
New Mexico (Land regions) N: 266
Rocky Mountains (Chief ranges of the Rockies) R: 395
- Wheeling** [city, West Virginia] W: 279
- Wheeling Downs** [race track]
Wheeling W: 279
- Wheeling Island** [Ohio River]
Wheeling W: 279
- Wheelock, Eleazar** [American educator]
Dartmouth College D: 39
- Wheelwright, William** [American businessman] W: 279
- Whelan, Edward** [Canadian political leader]
Confederation of Canada (Fathers of Confederation) Ci: 935
- Whelk** [sea animal] W: 279
Mollusk (Gastropods) M: 695
Shell S: 386 *with picture*
- Whelp**
Dog (table: Dog terms) D: 263
- When Guns Speak, Death Settles Disputes**
[painting by Russell]
Dodge City *picture on* D: 261
- When Harry Met Sally** [film]
Ephron, Nora E: 342
- "When I Consider How My Light Is Spent"**
[poem by Milton]
Milton, John (Middle years) M: 557
- "When Johnny Comes Marching Home"**
[song]
Gilmore, Patrick Sarsfield G: 191
- "When Lilacs Last in the Dooryard Bloom'd"**
[poem by Whitman]
Whitman, Walt (His work) W: 294
- When We Dead Awaken** [play by Ibsen]
Drama (Ibsen) D: 338
Ibsen, Henrik (His plays) I: 4
- When We Were Very Young** [book by Milne]
Literature for children (Poetry) L: 356-357
- When William Came** [book by Munro]
Munro, Hector Hugh M: 928
- Where Are the Children?** [book by Clark]
Clark, Mary Higgins Ci: 642
- Where Do We Come From? What Are We? Where Are We Going?** [painting by Gauguin]
Gauguin, Paul (Gauguin in Tahiti) G: 69-70
- Where Do You Think You're Going, Christopher Columbus?** [book by Fritz]
Literature for children *picture on* L: 379
- "Where Have All the Flowers Gone?"** [song by Seeger]
Seeger, Pete S: 284
- Where I'm Calling From** [book by Carver]
Carver, Raymond C: 269
- Where the Air Is Clear** [book by Fuentes]
- Fuentes, Carlos F: 553
Latin-American literature (Recent developments) L: 113
- Where the Sidewalk Ends** [book by Silverstein]
Silverstein, Shel S: 466
- Where the Wild Things Are** [book by Sendak]
Literature for children *picture on* L: 356
- Whetstone** [tool] W: 280
- Whey**
Cheese (Separating the curd) C: 393; (History) C: 395; *picture on* C: 394
- Whidbey Island** [island, Washington]
Puget Sound P: 886
- Whiffletree** [harness]
Transportation (The Middle Ages) T: 388
- Whig Party** [British history]
United Kingdom (The era of reform) U: 68
Whig Party W: 280
- Whig Party** [U.S. history] W: 280
Harrison, William Henry (Elections of 1836 and 1840) H: 75
National Republican Party N: 60
Raccoon (People and raccoons) R: 51
Tyler, John T: 532
United States, History of the (Politics after Jackson) U: 170-171
Webster, Daniel (The man) W: 177
- Whiggamore** [British history]
Whig Party W: 280
- Whimbrel** [bird]
Curlew Ci: 1195
- Whin** [shrub]
Furze F: 588
- Whip** [cooking]
Cooking (table) Ci: 1029
- Whip** [riding equipment]
Horse (The whip) H: 351
- Whip, Congressional**
Congress of the United States (The Senate) Ci: 942-943
Political party (Organizing the government) P: 632
House of Representatives (The speaker and other leaders) H: 387
Senate (The leaders of the senate) S: 294-295
- Whip grafting**
Grafting (Kinds of grafting) G: 298 *with picture*
- Whiplash** [injury] W: 280 *with picture*
Spine So: 793
- Whiplash curve** [design]
Furniture (Art nouveau) F: 582 *with picture*
- Whipped butter**
Butter B: 730
- Whippet** [dog] W: 281
Dog *picture on* D: 271
- Whipping** [rope]
Knots, hitches, and splices (Preparing rope for knots) K: 356
- Whipping post** [punishment] W: 281
- Whipple, George Hoyt** [American physician]
Nobel Prizes (Physiology or medicine: 1934) N: 444
- Whipple, William** [American patriot] W: 281
- Whippoorwill** [bird] W: 281 *with picture*
- Whipstocking** [drilling]
Petroleum (Methods of drilling) P: 338-339
- Whiptail** [reptile]
Lizard (Defenses) L: 400
- Whirlaway** [horse]
Arcaro, Eddie A: 593
Kentucky Derby (table) K: 296
- Whirligig** [insect]
Beetle *picture on* B: 218
Water beetle W: 133
- Whirling dervishes** [religious group]
Dervish D: 153
- Whirlpool** [geography] W: 281
- Whirlpool bath** [medicine]
Hydrotherapy H: 472
- Whirlpool Rapids** [New York]
Niagara Falls (Description) N: 391
Niagara River (Description) N: 394
- Whirlwind** [weather] W: 282
- Whirlybird**
Helicopter H: 169
- Whisk fern** [plant]
Plant (Classification of plants) P: 547 *with picture*
- Whisker**
See also Barbel in this index
Hair H: 9
Mammal (Senses) M: 120-121
- Whiskey** [drink] W: 282
Alcoholic beverage (Whiskey) A: 336
Distilling D: 239
Kentucky *picture on* K: 273
Pioneer life in America (Food) P: 481-482

872 Whiskey Rebellion

- Whiskey Rebellion** [U.S. history] **W:** 282
United States, History of the (Enforcing federal law) **U:** 162
Washington, George (Whiskey Rebellion) **W:** 106
- Whiskey Ring** [U.S. history] **W:** 282
Grant, Ulysses S. (Government frauds) **G:** 317
- Whiskeytown-Shasta-Trinity National Recreation Area** [California]
National Park System (table: National recreation areas) **N:** 49
- Whispers** [book by Koontz]
Koontz, Dean **K:** 365
- Whist** [game]
Bridge (History) **B:** 605
Hoyle, Edmond **H:** 402
- Whistle** [musical instrument]
Pipe **P:** 488
- Whistle** [sound] **W:** 282
- Whistle-Stop Campaign** [U.S. history]
President of the United States *picture on* **P:** 769
- Whistler** [animal]
Mountain beaver **M:** 897
- Whistler, James Abbott McNeill** [American artist] **W:** 282 *with picture*
Impressionism (American impressionism) **I:** 95
- Whistler's Mother** [painting by Whistler]
Whistler, James Abbott McNeill **W:** 282 *with picture*
- Whitaker's Almanack** [book]
Almanac **A:** 380
- Whitcomb, Edgar D.** [American political leader]
Indiana (table) **I:** 214
- Whitcomb, James** [American political leader]
Indiana (table) **I:** 214
- White** [color]
Light (How light is produced) **L:** 283
- White** [entomology]
Butterfly (Sulfurs and whites) **B:** 734 *with pictures*
- White, Albert B.** [American political leader]
West Virginia (table) **W:** 225
- White, Alfred Holmes** [American engineer]
W: 283
- White, Bill** [American baseball player] **W:** 283
African Americans (Achievements) **A:** 136p
- White, Byron Raymond** [American jurist]
W: 284
Kennedy, John Fitzgerald (Other developments) **K:** 265
- White, Canvass** [American engineer]
Cement and concrete (History) **C:** 345
- White, Charles** [American football player]
Football (table) **F:** 363
- White, Charles** [American painter]
African Americans *picture on* **A:** 136b
- White, Dan** [American assassin]
San Francisco (Political leaders murdered) **S:** 98
- White, E. B.** [American author] **W:** 284
Democracy (Famous quotations about democracy) **D:** 120
Essay (Personal essays) **E:** 359
Thurber, James **T:** 273
- White, Edward D.** [American political leader]
Louisiana (table) **L:** 496
- White, Edward Douglass** [American jurist]
W: 284
- White, Edward Higgins, II** [American astronaut]
W: 284
Astronaut (Achievements in space) **A:** 829;
(Accidents in space) **A:** 830
Space exploration (Voskhod and Gemini: The first multiperson space flights) **So:** 714
with picture; (Making ready) **So:** 715
- White, Elwyn Brooks** See White, E. B. *in this index*
- White, Frank** [American political leader]
North Dakota (table) **N:** 513
- White, Frank D.** [American political leader]
Arkansas (table) **A:** 712
Clinton, Bill (Reelection defeat) **Ci:** 682b
- White, George** [American political leader]
Ohio (table) **O:** 699
- White, Horace** [American political leader]
New York (table) **N:** 313
- White, Hugh L.** [American political leader]
Mississippi (table) **M:** 640
- White, Hugh Lawson** [American political leader]
W: 284
- White, Israel C.** [American geologist]
West Virginia (Industrial growth) **W:** 228-229
- White, James** [American pioneer]
Knoxville **K:** 359
- White, John** [English colonist]
Colonial life in America (Early English settlements) **Ci:** 788
Indian, American *picture on* **I:** 156
Lost Colony **L:** 472
- White, Margaret Bourke-** See Bourke-White, Margaret *in this index*
- White, Mark** [American political leader]
Texas (table) **T:** 203
- White, Patrick** [Australian author] **W:** 284
Australia (Literature) **A:** 906
Novel (The novel today) **N:** 575
- White, Peregrine** [American colonist] **W:** 284
- White, Rex** [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1960) **A:** 981
- White, Robert H.** [American astronaut]
Airplane (Supersonic airplanes) **A:** 238
- White, Stanford** [American architect] **W:** 284
Hall of fame (The Hall of Fame for Great Americans) **H:** 22 *with picture*
- White, Susanna** [American colonist]
White, Peregrine **W:** 284
Winslow, Edward **W:** 342
- White, Tim** [American anthropologist]
Prehistoric people (table) **P:** 752
- White, Walter Francis** [American author]
W: 285
- White, William** [American clergyman]
Anglicans (Episcopalians) **A:** 463-464
- White, William Allen** [American newspaper editor] **W:** 285
- White, William DeKova** [American baseball player] See White, Bill *in this index*
- White egate** [mineral]
Chalcedony **C:** 369
- White Album, The** [book by Didion]
Didion, Joan **D:** 195
- White ant** See Termite *in this index*
- White ash** [tree]
Ash **A:** 767
Tree *pictures on* **T:** 420
- White bellbird**
Bellbird **B:** 243
- White-bellied brant** [bird]
Brant **B:** 564
- White-bellied sea eagle**
Eagle (Other kinds of eagles) **E:** 5
- White birch** See Paper birch *in this index*
- White blood cell**
Blood (The composition of blood) **B:** 407-408
with picture; (Protecting against disease) **B:** 410 *with picture;* (How the body maintains its blood supply) **B:** 410-411; (White-cell abnormalities) **B:** 414
Cell (Death of a cell) **C:** 332; *picture on* **C:** 338
Disease (Immune responses) **D:** 231-232 *with picture*
Human body (The blood) **H:** 421-424 *with picture*
Immune system (Parts of the immune system) **I:** 87
Interleukin **I:** 336
Leukemia **L:** 215
- White Book** [standard]
Compact disc (Video CD's) **Ci:** 902
- White bread**
Bread (The food value of bread) **B:** 589
- White-breasted nuthatch** [bird]
Bird (Birds of forests and woodlands) **B:** 334
with picture
Nuthatch **N:** 622
- White-breasted thrasher** [bird]
Thrasher **T:** 269
- "White Christmas"** [song]
Crosby, Bing **Ci:** 1154
- White Citizens' Council**
Carter, Jimmy (Businessman and civic leader) **C:** 254
- White cliffs of Dover**
Dover **D:** 315
England (The English Lowlands) **E:** 300-301
with picture
- White clover**
Clover (White clover) **Ci:** 713 *with picture*
Leaf (The petiole) **L:** 154 *with picture*
Shamrock **S:** 371
- White-collar crime**
Crime (White-collar crime) **Ci:** 1136
- White-collar worker**
Labor force (Changes in the labor force) **L:** 3
- White-crested laughing thrush** [bird]
Babbler *picture on* **B:** 2
- White croaker**
Drum **D:** 367
- White damp** [gas]
Damp **D:** 24
- White Devil, The** [play by Webster]
Webster, John **W:** 177
- White dwarf** [star] **W:** 285
Chandrasekhar, Subrahmanyan **C:** 374
Magnetism (The magnetism of other astronomical bodies) **M:** 60c
Nova **N:** 553
Sirius **S:** 475
Star **So:** 840; (White dwarf phase) **So:** 849;
(Binary stars) **So:** 852
Sun **So:** 975; (Evolution of the sun) **So:** 982
Supernova **So:** 994
- White elm** [tree] See American elm *in this index*
- White Ensign** [United Kingdom]
Flag *picture on* **F:** 195
- White-eye** [bird] **W:** 285 *with picture*
- White Fang** [book by London]
London, Jack **L:** 444
- White fin dolphin**
River dolphin **R:** 354 *with picture*
- White flag**
Flag of truce **F:** 224
- White Flemish Giant** [rabbit]
Rabbit (The body of a rabbit) **R:** 47
- White flight** [sociology]
Segregation (The beginning of change) **S:** 285-286
- White flour**
Wheat (Food for people) **W:** 266-267
- White-footed mouse** [animal]
Lyme disease **L:** 533
Mouse (Deer mice) **M:** 902; *picture on* **M:** 901
- White Friars** [religious group]
Friar **F:** 532
- White Globe** [onion]
Onion *picture on* **O:** 763
- White Goddess, The** [book by Graves]
Graves, Robert **G:** 331
- White gold**
Gold (Jewelry) **G:** 251
Palladium **P:** 108
Platinum (Production) **P:** 567
- White Guard** [Finnish history]
Finland (The new republic) **F:** 117
- White heart** [plant]
Dutchman's-breeches **D:** 393 *with picture*
- White Holland turkey**
Turkey (Domestic turkeys) **T:** 513
- White horehound** [plant]
Horehound **H:** 334
- White House** [Moscow]
Russia (The new nation) **R:** 555
- White House** [Washington, D.C.] **W:** 286 *with pictures*
Adams, Abigail Smith **A:** 32
Adams, John (Life in the White House) **A:** 38
with picture
National Park System (Areas preserved for historic importance) **N:** 46; (table: National parkways and other national parklands) **N:** 56
President of the United States (The White House) **P:** 766 *with pictures;* *picture on* **P:** 763
Roosevelt, Theodore (Life in the White House) **R:** 470
Truman, Harry S. (Life in the White House) **T:** 471
United States, Government of the *picture on* **U:** 137
Washington, D.C. (White House) **W:** 74 *with picture;* *map on* **W:** 76
See also *The Life in the White House sections of the articles on specific presidents, such as Roosevelt, Franklin Delano (Life in the White House)*
- White House conference** [U.S. history] **W:** 290
- White House Gang**
Roosevelt, Theodore (Life in the White House) **R:** 469
- White House hostesses** **W:** 291
First ladies **F:** 142
- White House of the Confederacy** [Montgomery]
Alabama (Places to visit) **A:** 266 *with picture*
Montgomery *picture on* **M:** 766
- White House of the Confederacy** [Richmond]
Richmond (Other interesting places to visit) **R:** 332 *with picture*
Virginia (Libraries and museums) **V:** 402-403
with picture
- White House Office**
President of the United States (The executive branch) **P:** 764
Presidential assistant **P:** 770
- White House tapes**
Watergate (The tape controversy) **W:** 144
Nixon, Richard Milhous (Events at home) **N:** 435-436

- White-Jacket** [book by Melville]
Melville, Herman (His early life) M: 390
- White jasmine** [plant]
Jasmine J: 64
- White light** [physics]
Holography H: 297 *with picture*
Light (Electromagnetic waves) L: 285 *with diagram*
- White-lined sphinx moth**
Moth *picture on M*: 841
- White-lipped peccary** [animal]
Peccary P: 226
- White magic**
Magic (Kinds of magic) M: 49
- White-marked tussock moth**
Moth *picture on M*: 840
- White marlin** [fish]
Marlin M: 215
- White Masonry**
Masonry (History) M: 267-268
- White matter** [anatomy]
Brain (Brain cells) B: 551-552
Nervous system (The axon) N: 133-134
- White Monkey, The** [book by Galsworthy]
Galsworthy, John G: 17
- White Mountain, Battle of** [1620]
Czech Republic (Habsburg rule) Ci: 1213
Thirty Years' War (The Bohemian period) T: 260
- White Mountain National Forest**
Maine (Places to visit) M: 78
New Hampshire (Places to visit) N: 216
- White Mountain Reservation** [Arizona]
Geronimo G: 173
- White Mountains** [mountains, Maine-New Hampshire] W: 291
Maine (Land regions) M: 80
New Hampshire (Visitor's guide) N: 216;
(Land regions) N: 218; (Mountains) N: 220
- White mulberry** [plant]
Mulberry M: 913
- White mustard** [plant]
Mustard M: 968
- White Nile** [river, Sudan-Uganda]
Nile River (The course of the Nile) N: 422 *with map*
- White oak**
Leaf *picture on L*: 153
Maryland M: 241
Oak (White oaks) O: 635 *with pictures*
- White Oak Dance Project** [dance company]
Ballet (Recent developments) B: 55 *with picture*
- White opal** [gem]
Opal O: 788 *with picture*
- White oryx**
Antelope (Habits and appearance) A: 542
- White Pekin duck** [bird]
Duck (Dabbling ducks) D: 376 *with picture*
- White pepper** [spice]
Pepper P: 277
- White phosphorus** [mineral]
Phosphorus P: 403
- White pine** [tree]
Pine (North American pines) P: 468; *picture on P*: 470
Leaf *picture on L*: 153
- White pine blister rust fungus**
Currant Ci: 1196
- White poplar** [tree]
Poplar P: 668
- White potato**
Potato (The potato plant) P: 712
- White primary** [voting]
African Americans (During the early 1900's) A: 136j; (The Great Depression) A: 136l
- White print process**
Blueprint (Making a blueprint) B: 424
- White rajah**
Borneo (History) B: 490
- White rat**
Rat (Rats and people) R: 146-147 *with picture*
- White Revolution** [Iranian history]
Iran (Reforms and growing unrest) I: 406a
- White rhinoceros**
Rhinoceros (Kinds of rhinoceroses) R: 294-295 *with picture*
- White River** [river, U.S.]
Arkansas *picture on A*: 698
South Dakota (Rivers and lakes) So: 676
- White rose potato**
Potato P: 712; *picture on P*: 711
- White Russians** [Russian history]
Lenin, V. I. (Civil war) L: 194
- White sage** [plant]
Sage S: 18
- White Sands Missile Range** [New Mexico]
W: 291
- White Sands National Monument** [New Mexico] W: 292
National Park System (table: National monuments) N: 50-52
- White Sands Proving Ground**
White Sands Missile Range W: 291
- White Scallop squash**
Squash (Summer squashes) So: 813 *with picture*
- White Sea** [Russia] W: 292
- White Sea-Baltic Canal** [waterway, Russia]
Canal (table) C: 164
- White shark** [fish] W: 292 *with picture*
Animal *picture on A*: 471
Shark (Kinds of sharks) S: 375-376 *with picture*; (How people use sharks) S: 377
- White-sided dolphin** [sea animal]
Dolphin (Other species) D: 297; *picture on D*: 298
- White-sided jack rabbit**
Jack rabbit J: 3
- White Snow, Bright Snow** [book by Tresselt]
Duvoisin, Roger Antoine D: 393
- White Sox, Chicago** See Chicago White Sox *in this index*
- White spruce** [tree]
Spruce (Kinds) So: 809
- White Star Line**
Ship (Passenger vessels) S: 414-415
- White stork**
Animal *picture on A*: 502
Stork So: 911 *with picture*
- White sturgeon** [fish]
Sturgeon So: 934
- White Sulphur Springs** [West Virginia] W: 292
- White-tailed deer**
Animal *picture on A*: 479
Deer (Legs and hoofs) D: 83 *with picture*; (North American deer) D: 85; (table) D: 85
Lyme disease L: 533
- White-tailed eagle**
Eagle (Other kinds of eagles) E: 5
- White-tailed gnu**
Gnu G: 239
- White-tailed jack rabbit**
Jack rabbit J: 3
- White-tailed ptarmigan** [bird]
Ptarmigan P: 853
- White Temple** [Uruk]
Architecture (Mesopotamian architecture) A: 611
- White Tower**
London (The Tower of London) L: 436; (The Middle Ages) L: 439-440
- White trillium** [plant]
Trillium T: 445
- White Volta** [river, Burkina Faso]
Burkina Faso (Land) B: 706
- White walnut** See Butternut *in this index*
- White water**
Rafting R: 102 *with picture*
- White water lily** [plant]
Plant *diagram on P*: 528
- White water racing**
Canoeing (White water racing) C: 181 *with picture*
West Virginia *picture on W*: 217
- White whale**
Whale (Belugas and narwhals) W: 258
- White willow**
Willow W: 315
- White wine**
Wine (Types of wine) W: 336; (How wine is made) W: 337-338
- White Woman of the Genesee**
Jemison, Mary J: 90
- White writing** [art]
Tobey, Mark T: 308
- Whiteaker, John** [American political leader]
Oregon (table) O: 845
- Whitebeet** [food]
Herring (Uses) H: 216
- Whitebark pine**
Pine (Western pines) P: 469
- Whitecap** [wave]
Ocean (Waves) O: 659
- Whiteface**
Cattle (Hereford) C: 309 *with picture*
- Whitefield, George** [British religious leader]
W: 292
Colonial life in America (Religion) Ci: 804-805 *with picture*
Evangelicalism E: 422
Great Awakening G: 335
- Whitefish** W: 292
Fish *picture on F*: 159
- Whitefly** [insect] W: 293 *with picture*
- Whitehall Palace** [London]
Jones, Inigo J: 158 *with picture*
London (Palaces) L: 435
- Whitehead** [disorder]
Acne A: 28
Pimple P: 466
- Whitehead, Alfred North** [British mathematician] W: 293
Logic (Modern logic) L: 425
Mathematics (Philosophies of mathematics) M: 307
- Whitehead, Robert** [Scottish engineer]
Torpedo (History) T: 340c
- Whitehead, William** [British poet]
Poet laureate (table: Poets laureate of the United Kingdom) P: 590
- Whitehorse** [Yukon Territory] W: 293
Yukon Territory Y: 582; (The people) Y: 583 *with picture and map*
- Whitehorse Tavern** [Newport, Rhode Island]
Colonial life in America (Places to visit) Ci: 801
- Whiteman, Paul** [American conductor]
Grofé, Ferde G: 397
- Whitemarked tussock moth**
Tussock moth T: 525
- Whiteoaks of Jalna** [book by de la Roche]
Canadian literature *picture on C*: 159
- Whites** [people]
See also Race relations *in this index*
Race (The three-race theory) R: 53
South Africa (People) So: 609; (Ways of life) So: 611
- Whites** [Russian history]
Lenin, V. I. (Civil war) L: 194
Union of Soviet Socialist Republics (Civil war) U: 36
- Whiteshell Nuclear Research Establishment**
Manitoba (The mid-1900's) M: 162
- Whitotop Mountain** [Virginia]
Virginia (Land regions) V: 410
- Whitewash** [liquid mixture] W: 293
- Whitewater** [U.S. history]
Clinton, Bill (National affairs) Ci: 682d-682e; (Domestic events) Ci: 682f-682g
Reno, Janet R: 240
Starr, Kenneth Winston So: 857
- Whitewater Falls**
North Carolina (Rivers, waterfalls, and lakes) N: 484
- Whitewater kayak**
Kayak K: 250a
- Whitfield, Henry L.** [American political leader]
Mississippi (table) M: 640
- Whitfield, James** [American political leader]
Mississippi (table) M: 640
- Whitfield House** [Guilford]
Connecticut (Places to visit) Ci: 960
- Whiting** [Indiana]
Gary G: 47
Indiana *picture on I*: 197
- Whiting** [chalk]
Chalk C: 370
- Whiting, William F.** [American government official]
Commerce, Department of (table) Ci: 871
Coolidge, Calvin (table) Ci: 1032
Hoover, Herbert Clark (table) H: 330
- Whitlam, Gough** [Australian political leader]
Australia (table) A: 925; (Political crisis) A: 925
- Whitman, Charles S.** [American political leader]
New York (table) N: 313
- Whitman, Christine Todd** [American political leader]
New Jersey (table) N: 249; (Recent developments) N: 253
- Whitman, Marcus** [American missionary]
W: 293
Oregon (Indian wars) O: 846
Whitman, Narcissa W: 293
- Whitman, Narcissa** [American missionary]
W: 293
Whitman, Marcus W: 293
- Whitman, Walt** [American poet] W: 294 *with picture*
American literature (Walt Whitman and Emily Dickinson) A: 419 *with portrait*
Free verse F: 500
Poetry (Beginnings of modern poetry) P: 597
- Whitman massacre** [1847]
Whitman, Marcus W: 293
Indian wars (In California and the Northwest) I: 194
- Whitman Mission National Historic Site**
[Washington] W: 294
National Park System (table: National historic sites) N: 52-54

Whitman Museum [New Jersey]

Camden C: 76

Whitnall Park

Milwaukee (Parks) M: 560

Whitney, Eli [American inventor] **W**: 295 *with portrait*Agriculture *picture on* A: 157

Connecticut (The 1800's) Ci: 970

Cotton (American colonists) Ci: 1092

Cotton gin Ci: 1094

Georgia (Early statehood) G: 132

Invention (Economic needs) I: 355

Mass production M: 269

Spinning (The mule) **So**: 794

Technology (The Industrial Revolution) T: 75

Textile (The Industrial Revolution) T: 219

Whitney, James P. [Canadian political leader]

Ontario (table) O: 783

Whitney, Josiah Dwight [American geologist]

Mount Whitney M: 890

Whitney, Mount *See* Mount Whitney *in this index***Whitney, William C.** [American government official]

Cleveland, Grover (table) Ci: 671

Whitney Museum of American Art [New York City]

W: 295

New York City (Museums) N: 338

Whittaker, Charles Evans [American jurist]

Supreme Court of the United States (table)

So: 1000**Whittaker, James Warren** [American mountain climber]

Mount Everest M: 884

Whitten Brown, Sir Arthur [British aviator]

Alcock and Brown A: 334

Whittier, John Greenleaf [American poet]W: 295 *with portrait*

American literature (Poetry) A: 418

December (Quotations) D: 69

Friedrich, Barbara F: 533

Liberty Party L: 233

Whittle, Chris [American businessman]

Edison Schools E: 83

Whittle, Sir Frank [British inventor]

Jet propulsion (Development of jet propulsion)

J: 114

Turbine (History) T: 498-499

WHO *See* World Health Organization *in this index***Who, The** [musical group] **W**: 296 *with picture*

Townshend, Peter T: 350

Who Framed Roger Rabbit [film]

Animation (The animation revival) A: 514b

"Who Is Sylvia?" [song]Shakespeare, William (*The Two Gentlemen of Verona*) S: 357**Whole Book of Psalms, Faithfully Translated into English Metre, The** *See* Bay PsalmBook *in this index***Whole corn meal**

Corn (The dry-milling industry) Ci: 1061-1062

Whole-grain cereal

Cereal C: 361

Whole-language philosophy

Reading (The whole-language philosophy)

R: 158**Whole life insurance**

Insurance (Main kinds of life insurance) I: 309-310

Whole milk

Milk (Nutrients in milk) M: 545-546

Whole number [mathematics]

Division (Division of decimal fractions) D: 250

Whole tone [music]

Tone T: 327

Whole wheatWheat (Food for people) **W**: 266-267**Whole-word identification** *See* Look-and-say*instruction in this index***Wholemout technique**

Microtomy M: 520

Wholesale tradeTrade (The use of markets) T: 362 *with picture***Wholesaler**

Clothing (Ready-to-wear clothes) Ci: 704-705

Food (Marketing) F: 335 *with picture*

Sales (Wholesaling) S: 62

Trade (The use of markets) T: 362 *with picture***Wholesome Meat Act** [1967]

Meat packing (U.S. government inspection)

M: 352**Wholistic medicine** *See* Holistic medicine *in this index***Whooper** *See* Whooping crane *in this index***Whooper swan**Swan (Kinds) **So**: 1015**Whooping cough** **W**: 296**Whooping crane** **W**: 297

Bird (Endangered species) B: 370

Crane (Kinds) Ci: 1117 *with picture***Whorl** [zoology]Shell *diagram on* S: 385**Whorl pattern**

Fingerprinting (How fingerprints are classified)

F: 106-107 *with picture***Who's Afraid of Virginia Woolf?** [play by Albee]

Albee, Edward A: 311

American literature (Drama) A: 425

Taylor, Elizabeth T: 57 *with picture*Theater *picture on* T: 246**Why Are We in Vietnam?** [book by Mailer]

Mailer, Norman M: 67

Why Come Ye Not to Court? [poem by Skelton]

Skelton, John S: 481

Why England Slept [book by Kennedy]

Kennedy, John Fitzgerald (Education) K: 261-262

Why Mosquitoes Buzz in People's Ears [book by Aardema]Literature for children *picture on* L: 373**Why Not Use the L?** [painting by Marsh]Realism *picture on* R: 172**Why We Fight** [films]

Motion picture (Movies and World War II)

M: 869**Whymper, Edward** [British mountain climber]

Matterhorn M: 312

Whyte, William Pinkney [American political leader]

Maryland (table) M: 255

WIBC [organization] *See* Women's InternationalBowling Congress *in this index***Wicca** [religion]

Witchcraft W: 371

Wichale, Treaty of [1889]

Menelik II M: 400

Wichita [city, Kansas] **W**: 297 *with picture*Kansas *picture on* K: 225**Wichita Art Museum**Kansas *picture on* K: 217**Wichita Falls** [Texas] **W**: 298**Wichita Mountains**

Oklahoma (Land regions) O: 724

Wick

Candle C: 175

Lamp (Fat or oil lamps) L: 52

Wickard, Claude R. [American government official]

Agriculture, Department of (table) A: 161

Roosevelt, Franklin Delano (table) R: 458

Truman, Harry S. (table) T: 469

Wicker [plant product] **W**: 299**Wickersham, George Woodward** [American lawyer]

Justice, Department of (table) J: 203

Taft, William Howard (table) T: 11

Wickersham, James. W. [Alaskan judge]

Alaska (The early 1900's) A: 301

Wicket [sports]Cricket Ci: 1131; (The game) Ci: 1132 *with picture*Croquet Ci: 1154 *with diagram***Wicketkeeper**Cricket (Outs) Ci: 1132-1133 *with picture***Wickford Point** [book by Marquand]

Marquand, John Phillips M: 217

WickiupIndian, American (Shelter) I: 136d; *picture on***I**: 139**Wickliffe, Charles A.** [American political leader]

Kentucky (table) K: 290

Tyler, John (table) T: 534

Wickliffe, Robert C. [American political leader]

Louisiana (table) L: 496

Wide-angle lens

Camera (Single-lens reflex cameras) C: 82-83

Photography (Single-lens reflex cameras)

P: 417; *picture on* P: 418**Wide area network**

Computer (Computer networks) Ci: 920;

(Wide area networks [WAN's]) Ci: 923

Wide ball

Cricket (Scoring) Ci: 1132

Wide receiverFootball (The offensive team) F: 356 *with diagrams***Wide-wale corduroy** [fabric]

Corduroy Ci: 1052

Widjaya, Prince [Javanese ruler]

Indonesia (Hindu and Buddhist kingdoms) I: 236

Widow [title]

Address, Forms of (Other forms) A: 54

Widow [cards]

Pinochle P: 474

Widow Capet

Marie Antoinette (Downfall of the monarchy)

M: 200**Widowers' Houses** [play by Shaw]

Realism (In drama) R: 172

Shaw, George Bernard (Early life) S: 378

Widow's share [law]

Dower D: 316

Wiebe, Rudy [Canadian author]

Canadian literature (Modern English-Canadian fiction) C: 160

Wieck, Clara *See* Schumann, Clara *in this index***Wieck, Friedrich** [German musician]

Schumann, Robert (His life) S: 188

Wieland [book by Brown]

Brown, Charles Brockden B: 642

Wieland, Christoph Martin [German author]

German literature (The enlightenment) G: 140

Wieland, Heinrich Otto [German chemist]

Nobel Prizes (Chemistry: 1927) N: 442

Wieman, Carl Edwin [American physicist]

Nobel Prizes (Physics: 2001) N: 442

Wien *See* Vienna *in this index***Wien, Wilhelm** [German physicist]

Nobel Prizes (Physics: 1911) N: 440

Proton P: 836

Science (Using logic) S: 194

Wiene, Robert [German director]

Motion picture (Filmmaking in Europe) M: 866

*with picture***Wiener** [food]

Sausage S: 163

Wiener, Alexander S. [American physiologist]

Blood (History of blood research) B: 414

Landsteiner, Karl L: 59

Rh factor R: 289

Wiener, Norbert [American mathematician]**W**: 299

Cybernetics Ci: 1203

Wiener schnitzel

Austria (Way of life) A: 931

Wienerwurst

Sausage S: 163

Wies Pilgrimage Church

Architecture (Rococo architecture) A: 623

Germany *picture on* G: 154**Wiesbaden** [city, Germany] **W**: 299**Wieschaus, Eric Francis** [American physiologist]

Nobel Prizes (Physiology or medicine: 1995)

N: 445**Wiesel, Elie** [American author] **W**: 299**Wiesel, Torsten Nils** [Swedish physiologist]

Nobel Prizes (Physiology or medicine: 1981)

N: 445**Wiesenthal, Simon** [Austrian public figure]**W**: 299**Wiesner, David** [American author]

Caldecott Medal (table: 1992, 2002) C: 26

Literature for children *picture on* L: 371**Wiest, Dianne** [American actress]

Motion picture (Best performance by an actress in a supporting role: 1986, 1994)

M: 863**Wife***See also* Divorce; Parent *in this index*

Marriage M: 219

Wife of Bath [literary figure]

Bath B: 163

Wife of Claude, The [play by Dumas]Dumas, Alexandre *fils* D: 382**"Wife of Usher's Well, The"** [poem]

Ballad (The ballad style) B: 43

Wig **W**: 299Clothing (The 1600's) Ci: 701 *with picture*;(The 1700's) Ci: 701-702 *with picture*

Colonial life in America (Clothing) Ci: 799

Egypt, Ancient (Food, clothing, and shelter)

E: 137Hairdressing (Ancient times) H: 11 *with pictures*Williamsburg *picture on* W: 313**Wigeon** [bird] **W**: 299

Bird (Birds of inland waters and marshes)

B: 340 *with picture***Wiggin, Kate Douglas** [American author]**W**: 300**Wiggins, James R.** [American diplomat]

United Nations (table) U: 86

Wigglesworth, Michael [American poet]**W**: 300

American literature (Poetry) A: 414

Wight, Isle of [Island, England] **W**: 300

England (Islands) E: 301

Wightmen, Hazel Hotchkiss [American tennis player]

- Tennis picture on T: 166
- Wigman, Mary** [German choreographer]
Dance (European and American theatrical dance) D: 31-32
Holm, Hanya H: 294
- Wigner, Eugene Paul** [American physicist]
W: 300
Szilard, Leo So: 1077
- Wigwag flag** [communications]
Flag (Flags that talk) F: 208
- Wigwam W: 300**
Indian, American (Shelter) I: 136d; picture on I: 138
Shelter (In early America) S: 394
- Wijetunga, Dingiri Bende** [Sri Lankan political leader]
Sri Lanka (History) So: 819-820
- Wilaye** [province]
Algeria (Local government) A: 361
- Wilberforce, Samuel** [British religious leader]
W: 300
- Wilberforce, William** [British political leader]
W: 300
Abolition movement (In the United Kingdom) A: 13
- Wilberforce University W: 300**
- Wilbur, Curtis D.** [American government official]
Coolidge, Calvin (table) Ci: 1032
Hoover, Herbert Clark (table) H: 330
- Wilbur, Isaac** [American political leader]
Rhode Island (table) R: 311
- Wilbur, Ray L.** [American government official]
Hoover, Herbert Clark (table) H: 330
Interior, Department of the (table) I: 325
- Wilbur, Richard** [American poet] W: 300
Poet laureate (table: Poets laureate of the United States) P: 590
- Wilcken, Anna Magdalena** [wife of]
Bach, Johann Sebastian (His life) B: 15-16
- Wilcox, Howdy** [American race driver]
Automobile racing (table: Indianapolis 500 winners) A: 980
- Wilcox Mansion** [Buffalo]
Buffalo (Other interesting places to visit) B: 678
- Wilczek, Frank A.** [American physicist]
Gluon G: 236
- Wilczek Land** [island, Arctic]
Franz Josef Land F: 494
- Wild, Minnesota** [team]
Hockey (table: National Hockey League) H: 281
- Wild animal**
Circus picture on Ci: 562a
Game G: 21
- Wild ass**
Donkey D: 307
Onager O: 760
- Wild barley** [plant] See Foxtail barley in this index
- Wild boar** See Boar, Wild in this index
- Wild canary**
Canary C: 164
Goldfinch G: 256 with pictures
- Wild carrot W: 301 with picture**
- Wild celery**
Eelgrass E: 115
- Wild cherry** [tree]
Tree T: 421
- Wild Duck, The** [play by Ibsen]
Ibsen, Henrik (His plays) I: 4
- Wild flower**
Flower F: 271 with picture; (Wild flowers) F: 282 with picture; (Studying wild flowers) F: 297
Gardening (Ornamental gardens) G: 31
- Wild Geese** [book by Ostenson]
Canadian literature (Literature between the world wars) C: 159-160
- Wild ginger** [plant]
Ginger G: 191
- Wild Goose-Chase, The** [play by Fletcher]
Fletcher, John F: 234
- Wild hog**
Hog (Wild hogs) H: 286
- Wild horse**
Horse (Wild horses) H: 348 with picture; (Horses and people) H: 360-362
Przewalski's horse P: 844
Tarpan T: 46
- Wild Horse Dam** [Owyhee River, Nevada]
Nevada (Natural resources) N: 169
- Wild indigo**
Flower (Flowers of prairies and dry plains) F: 286-287 with picture
- Wild jalep** [plant] See Mayapple in this index
- Wild leek** [plant]
Ramp R: 133
- Wild lemon** [plant] See Mayapple in this index
- Wild morning-glory**
Bindweed B: 309
- Wild onion**
Ramp R: 133
- Wild rice W: 301**
Rice R: 322
- Wild rose** [plant]
Eglantine E: 119
Rose R: 478
- Wild rye**
Rye R: 572
- Wild silk**
Silk (Wild silk) S: 459
- Wild Strawberries** [film]
Motion picture (The art film revival) M: 870
- Wild turkey**
Turkey (How wild turkeys live) T: 513 with picture
- Wild West** [U.S. history] See West, The in this index
- Wild West show** [entertainment]
Buffalo Bill B: 679
- Wildcat W: 301**
Bobcat B: 432 with picture
- Wildcat bank** [U.S. history] W: 301
Bank (The Wildcat Period) B: 93
- Wildcat currency**
Wildcat bank W: 301
- Wildcat Ridge**
Nebraska (Land regions) N: 104-106
- Wildcat strike**
Strike (Kinds of strikes) So: 928
Coal (Labor unions) Ci: 728-729
Labor movement (Handling labor disputes) L: 6-7
- Wildcat well**
Gas [fuel] (Exploring for gas) G: 53
Petroleum (table) P: 331
Well (Oil and natural gas wells) W: 193
- Wildcatting**
Gas [fuel] (Exploring for gas) G: 53
- Wilde, Oscar** [Irish-British author] W: 301 with portrait
English literature (Later Victorian literature) E: 321-322
Irish literature (Drama) I: 432
Old Bailey O: 740
Opera (*Salome*) O: 807
Queensberry, Marquess of Q: 39
- Wildebeest** See Gnu in this index
- Wilder, Billy** [American director] W: 302
Motion picture (Best achievement in directing: 1945, 1960) M: 862
- Wilder, L. Douglas** [American political leader]
W: 302 with portrait
African Americans (Developments since 1970) A: 136p
Virginia (table) V: 417; (Recent developments) V: 422
- Wilder, Laura Ingalls** [American author] W: 302 with portrait
Laura Ingalls Wilder Award L: 121
- Wilder, Michael** [American chess player]
Chess (United States chess champions) C: 414
- Wilder, Samuel** See Wilder, Billy in this index
- Wilder, Thornton Niven** [American author]
W: 303
American literature (Drama) A: 422-423
Lost Generation L: 472
- Wilderness, Battle of the** [1864]
Civil War (table) Ci: 624; (Battle of the Wilderness) Ci: 631
Lee, Robert Edward (Final engagements) L: 178
- Wilderness: A Journal of a Quiet Adventure in Alaska** [book by Kent]
Kent, Rockwell K: 271
- Wilderness Act** [1964]
Forestry (Laws that protect U.S. forest resources) F: 408
- Wilderness area**
Forestry (Laws that protect U.S. forest resources) F: 408
- Wilderness of Mirrors** [book by Frisch]
Frisch, Max F: 535
- Wilderness Road** [U.S. history] W: 303
Boone, Daniel (The Wilderness Road) B: 477-478
Kentucky (Transportation) K: 289
Pioneer life in America (Crossing the Appalachians) P: 477-478 with map
Tennessee (Early settlement) T: 153
- Wildfire**
Forestry (Fire and forests) F: 407
- Wildlife biologist** [scientist]
Conservation (Careers in conservation) Ci: 990
- Wildlife conservation W: 303**
See also Conservation in this index
Animal (How human beings protect animals) A: 505 with picture
Biodiversity B: 311
Conservation (Biodiversity conservation) Ci: 976 with picture
Darling, Ding D: 38
Endangered species E: 269
Fishing industry F: 181; (Fishery conservation) F: 187
Forestry (Wildlife) F: 406 with picture
Leopold, Aldo L: 203
National park N: 42a; (Challenges for the parks) N: 42h; picture on N: 42g
Primate (Conservation) P: 778c
Salmon (Salmon conservation) S: 70
Tiger (Tigers and people) T: 284
Trapping (Trapping and wildlife conservation) T: 403
Whale (The future of whales) W: 264
Zoo (Wildlife conservation) Z: 604
See also the list of Related articles in the Wildlife conservation article
- Wildlife management** See Wildlife conservation in this index
- Wildlife refuge**
Bird (Bird refuges) B: 368
Hunting (Game laws) H: 450
Miner, Jack M: 565
National Wildlife Refuge System N: 61
- Wildlife Service, Canadian**
Bird (Bird study and protection) B: 367; (Birdbanding) B: 368
- Wildsmith, Brian** [British artist]
La Fontaine, Jean de picture on L: 29
- Wiles, Andrew** [British mathematician]
Fermat, Pierre de F: 73
- Wiley, Harvey W.** [American chemist]
Pure food and drug laws (History) P: 909
- Wilhelm I** [emperor of Germany] W: 305
Bismarck, Otto von (Bismarck's wars) B: 382
Franco-Prussian War (Events leading up to the war) F: 483
Germany (The unification of Germany) G: 165
Prussia (German empire) P: 843
- Wilhelm II** [emperor of Germany] W: 305
Bismarck, Otto von (Bismarck's diplomacy) B: 382
Divine right of kings D: 242
Germany (Foreign policy) G: 166; (The Weimar Republic) G: 167
Hohenzollern H: 289
World War I (How the conflict spread) W: 455; (The fighting ends) W: 463-464
- Wilhelm, Hoyt** [American baseball player]
Baseball (table: Hall of Fame) B: 134-135
- Wilhelm Meister's Apprenticeship** [book by Goethe]
Goethe, Johann Wolfgang von (Middle years) G: 247
- Wilhelm Meister's Journeyman Years** [book by Goethe]
Goethe, Johann Wolfgang von (Late years) G: 248
- Wilhelmina** [queen of the Netherlands] W: 306
Juliana J: 187
Luxembourg (History) L: 531
Netherlands (Independence) N: 149; (Political changes) N: 150
- Wilkes, Charles** [American admiral] W: 306
Antarctica (Early exploration) A: 535-536
Exploration (The exploration of Antarctica) E: 450 with map
Lincoln, Abraham (Foreign relations) L: 322
Trent Affair T: 435
Wake Island W: 6
- Wilkes-Barre** [Pennsylvania]
Wyoming Valley Massacre W: 538
- Wilkes Islet** [Pacific Ocean]
Wake Island W: 6
- Wilkie, Sir David** [Scottish artist]
Painting (Art for a new public) P: 70
- Wilkins, Sir Hubert** [Australian explorer] W: 306
Eielson, Carl Ben E: 145
Exploration (The exploration of Antarctica) E: 450
- Wilkins, Mary Eleanor** [American author]
Freeman, Mary Eleanor Wilkins F: 509
- Wilkins, Maurice Hugh Frederick** [British biophysicist] W: 306
Watson, James Dewey W: 147
- Wilkins, Roy** [American social reformer] W: 306
- Wilkins, William** [American government official]
Tyler, John (table) T: 534

- Wilkinson, Sir Geoffrey** [British chemist]
Nobel Prizes (Chemistry: 1973) N: 443
- Wilkinson, James** [American general]
Burr, Aaron (Tried for treason) B: 711
Jefferson, Thomas (The Burr conspiracy) J: 86
War of 1812 (Campaigns of 1813) W: 31
- Wilkinson, Jeremiah** [American inventor]
Nail (How nails are made) N: 3
- Wilkinson, John** [British inventor]
Industrial Revolution (The steam engine) I: 249
Machine tool (History) M: 20
- Wilkinson, Wallace G.** [American political leader]
Kentucky (table) K: 290
- Will** [law] W: 306
Death (The right to die) D: 61
Executor E: 436
Legacy L: 182
Living will L: 399
Probate P: 809
- Will** [psychology]
Plato (Psychology and politics) P: 568
Free will F: 500
Schopenhauer, Arthur S: 186
- Will-o'-the-wisp** [light] W: 307
- Will Rogers Memorial**
Oklahoma (Places to visit) O: 722 *with picture*
- "Will to Believe, The"** [essay by James]
James, William (His beliefs) J: 27
- Will to power** [philosophy]
Nietzsche, Friedrich (Psychological ideas) N: 407
Philosophy (Modern philosophy) P: 387-390
- Will You Please Be Quiet, Please?** [book by Carver]
Carver, Raymond C: 269
- Will You Sign Here, John Hancock?** [book by Fritz]
Literature for children *picture on* L: 378
- Willamette meteorite**
Meteor *picture on* M: 432
- Willamette River** [river, Oregon] W: 307
Oregon (Rivers, waterfalls, and lakes) O: 840
Portland [Oregon] (History) P: 684
- Willard, Archibald M.** [American painter]
Spirit of Seventy-Six So: 795
- Willard, Ashbel P.** [American political leader]
Indiana (table) I: 214
- Willard, Emme Hert** [American educator]
W: 307
Women's movements (The beginnings of women's movements) W: 385
- Willard, Frances Elizabeth Caroline** [American social reformer] W: 307 *with portrait*
Woman's Christian Temperance Union W: 381
- Willard, Jess** [American boxer]
Dempsey, Jack D: 129
Johnson, Jack J: 143
- Willard, Nancy** [author]
Newbery Medal (table) N: 359
- Willcox and Gibbs**
Sewing machine (History) S: 333-334
- Willemite** [mineral]
Zinc Z: 598
- Willemstad** [Netherlands Antilles] W: 307
Curaçao Ci: 1193
Netherlands Antilles N: 151
- Willet** [bird] W: 307 *with picture*
- Willey, N. B.** [American political leader]
Idaho (table) I: 42
- William I** [emperor of Germany] *See* Wilhelm I [emperor of Germany] *in this index*
- William I** [king of the Netherlands] W: 308
Netherlands (Independence) N: 149
- William I, Prince of Orange** [German prince]
W: 308
Netherlands (Freedom from Spain) N: 148
- William I, the Conqueror** [king of England]
W: 308
Bayeux Tapestry B: 177 *with picture*
Curfew Ci: 1193
Domesday Book D: 300
England (The Norman Conquest) E: 305
Harold II H: 64
Hastings, Battle of H: 83
London (The Middle Ages) L: 439-440
Middle Ages (Feudal government) M: 524
Norman Conquest N: 455
Privy Council P: 808b
Scotland (Struggles with England) S: 219
Trial by combat T: 438
Wales (Revolts against England) W: 12
- William II** [king of England] W: 308
England (Struggles for power) E: 305
- William II** [king of the Netherlands]
William I W: 308
- William III** [king of England] W: 308
Boyne, Battle of the B: 541
England (The Restoration) E: 309; (War with France) E: 309
Furniture (The French influence spreads) F: 575
Glorious Revolution G: 234
Ireland (Religious persecution) I: 426
James II J: 25
Marlborough, Duke of M: 215
Mary II M: 239
Netherlands (Wars with England and France) N: 149
Northern Ireland (Protestant settlement) N: 524
Orange Order O: 817
Penn, William (Arrested again) P: 242
Pennsylvania (Colonial days) P: 264
Postal services (Postal service in the United States) P: 706
Williamsburg (Early days) W: 312
- William III** [king of the Netherlands]
Wilhelm W: 306
- William IV** [British king] W: 309
- William, Prince** [British prince] W: 309 *with portrait*
Charles, Prince C: 382
Diana, Princess of Wales D: 183
Elizabeth II (The royal family) E: 240
- William and Mary, College of** W: 309
Law (Law education) L: 138
Universities and colleges (The oldest U.S. universities and colleges) U: 210
Virginia (Interesting facts) V: 399; (Schools) V: 402 *with picture*
Williamsburg (Early days) W: 312-313
- William Henry Harrison Home** [Vincennes]
Indiana (Places to visit) I: 206
- William Howard Taft National Historic Site** [Ohio]
National Park System (table: National historic sites) N: 52-54
- William Land Park**
Sacramento (Education and cultural life) S: 6
- William M. Jennings Trophy**
Hockey (Professional leagues) H: 279-280
- William of Ockham** [English theologian] W: 309
Scholasticism (History) S: 179
- William of Orange** *See* William III [king of England] *in this index*
- William of Rubruck** [Flemish explorer]
Exploration (European exploration) E: 442
- William of Wied** [German prince]
Albania (Independence) A: 307
- William of Wykeham** [English religious leader]
Winchester College W: 329
- William P. Lane Memorial Bridge**
Maryland *picture on* M: 257
- William Rufus** *See* William II [king of England] *in this index*
- William Shakespeare & the Globe** [book by Aliki]
Literature for children *picture on* L: 381
- William Tell** [opera by Rossini]
Alphorn A: 384
Opera (Grand opera) O: 798
Rossini, Gioacchino Antonio R: 484
Tell, William T: 129
- William Tell** [play by Schiller]
Schiller, Johann Christoph Friedrich von S: 175
Tell, William T: 129
- William the Conqueror** *See* William I, the Conqueror *in this index*
- William the Silent** *See* William I, Prince of Orange *in this index*
- "William Wilson"** [story by Poe]
Poe, Edgar Allan (Fiction and theory of fiction) P: 590
- Williams** [banana]
Banana B: 72
- Williams, Abraham J.** [American political leader]
Missouri (table) M: 668
- Williams, Arnold** [American political leader]
Idaho (table) I: 42
- Williams, Benjamin** [American political leader]
North Carolina (table) N: 490
- Williams, Benjamin F.** [American businessman]
Fairless, Benjamin Franklin F: 9
- Williams, Bert** [American comedian] W: 310
- Williams, Betty** [Irish social reformer]
Nobel Prizes (Peace: 1976) N: 448
- Williams, Billy** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Williams, Charles** [American businessman]
Telephones (Early telephones) T: 100
- Williams, Charles K.** [American political leader]
Vermont (table) V: 333
- Williams, Daniel Hale** [American doctor] W: 310
- Williams, David R.** [American political leader]
South Carolina (table) S: 658
- Williams, Emlyn** [Welsh dramatist] W: 310
- Williams, Eric** [Trinidad political leader]
Trinidad and Tobago (History) T: 446
- Williams, G. Mennen** [American government official]
Michigan (table) M: 507; (The mid-1900's) M: 511
- Williams, George** [British religious leader]
Young Men's Christian Association (History) Y: 573
- Williams, George H.** [American government official]
Grant, Ulysses S. (table) G: 316
Justice, Department of (table) J: 203
- Williams, Greville** [British chemist]
Rubber (The chemistry of rubber) R: 501
- Williams, Hank** [American musician] W: 310
Country music (Emergence of the country music industry) Ci: 1098b-1098c *with picture*
- Williams, James D.** [American political leader]
Indiana (table) I: 214
- Williams, Jared W.** [American political leader]
New Hampshire (table) N: 223
- Williams, Jesse** [American farmer]
Cheese (History) C: 395
- Williams, Jody** [American political activist]
Nobel Prizes (Peace: 1997) N: 449
- Williams, John Bell** [American political leader]
Mississippi (table) M: 640
- Williams, John R.** [American political leader]
Arizona (table) A: 687
- Williams, Joseph H.** [American political leader]
Maine (table) M: 87
- Williams, Paul R.** [American architect]
Spingarn Medal (table: 1953) So: 793
- Williams, R. L.** [American political leader]
Oklahoma (table) O: 730
- Williams, Ralph Vaughan** [British composer]
See Vaughan Williams, Ralph *in this index*
- Williams, Ransome J.** [American political leader]
South Carolina (table) S: 658
- Williams, Raymond** [British cultural critic]
Communication (Communication and culture) Ci: 888
- Williams, Ricky** [American football player]
Football (table) F: 363
- Williams, Robin** [American actor] W: 310
Motion picture (Best performance by an actor in a supporting role: 1997) M: 863
- Williams, Roger** [American colonial leader]
W: 310
Baptists (Baptists in America) B: 101
Cotton, John Ci: 1094
Providence P: 839; (Government and history) P: 840
Rhode Island (Settlement) R: 312; *picture on* R: 314
- Williams, Serena** [American tennis player]
W: 311
Williams, Venus W: 312
- Williams, Smokey Joe** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Williams, Ted** [American baseball player] W: 311
Baseball (table: Hall of Fame) B: 135;
(Depression and war) B: 136 *with picture*
- Williams, Tennessee** [American dramatist]
W: 311
American literature (Drama) A: 425
Drama (Later United States drama) D: 340
- Williams, Thomas Lanier** [American dramatist]
See Williams, Tennessee *in this index*
- Williams, Venus** [American tennis player]
W: 312
Williams, Serena W: 311
- Williams, Walter** [husband of] Evers-Williams, Myrlie E: 425
- Williams, William** [American patriot] W: 312
- Williams, William Carlos** [American poet]
W: 312
American literature (Modernist poetry) A: 421
Poetry (Poetry of the 1900's) P: 597
- Williams, William T. B.** [American educator]
Spingarn Medal (table: 1934) So: 793
- Williams Center** [building]
Tulsa (History) T: 483-484
- Williams-Steiger Occupational Safety and Health Act** [1970]
Occupational Safety and Health Administration O: 648
- Williamsburg** [Virginia] W: 312 *with pictures*
Colonial life in America (Places to visit) Ci: 801

Williamsburg Bridge

New York City (Brooklyn) N: 326-328

Williamson, Hugh [American political leader]
W: 314**Williamson, Isaac H.** [American political leader]
New Jersey (table) N: 249**Williamson, William D.** [American political leader]
Maine (table) M: 87**Willington, Marquess of** [British colonial official] W: 314**Willis, Frank B.** [American political leader]
Ohio (table) O: 699**Willis, John** [British educator]
Shorthand (History) S: 437**Willis, Simeon S.** [American political leader]
Kentucky (table) K: 290**Willis, Vic** [American baseball player]
Baseball (table: Hall of Fame) B: 135**Willis, William** [American adventurer]
Raft R: 102**Williston** [North Dakota]

North Dakota (table: Average monthly weather) N: 509

Williston LakeBritish Columbia (Rivers, waterfalls, and lakes)
B: 624**Willitts house** [Highland Park, Illinois]

Wright, Frank Lloyd (Early career) W: 507

Willkie, Wendell Lewis [American political leader] W: 314 *with portrait*
Roosevelt, Franklin Delano (Election of 1940)
R: 459**Willow** [tree] W: 314

Osier O: 863

Tree pictures on T: 424

Wicker W: 299

Willow herb [plant] See *Fireweed in this index***Willow ptarmigan** [bird]

Bird picture on B: 343

Ptarmigan P: 853

Wills, Helen Newington [American tennis player] W: 315Tennis (The spread of tennis) T: 165-166 *with picture*; (table: U.S. Open) T: 167**Wills, William H.** [American political leader]
Vermont (table) V: 333**Wills, William John** [British explorer]Australia (Exploring the interior) A: 924; *map on A: 923*

Exploration (Exploring Australia's interior)

E: 448; *map on E: 448***Willson, Augustus E.** [American political leader]
Kentucky (table) K: 290**Willson, T. L.** [American chemist]

Calcium carbide C: 21

Willstätter, Richard Martin [German chemist]
Nobel Prizes (Chemistry: 1915) N: 442**Willy Wonka and the Chocolate Factory** [film]
Dahl, Roald D: 5**Wilmington** [city, Delaware] W: 315
Delaware D: 96 *with picture*; (Population)
D: 100

New Sweden N: 286

Wilmington, Earl of [British political leader]

United Kingdom (table: British prime ministers) U: 72

Wilmington and Raleigh Railroad

North Carolina (Transportation) N: 488

Wilmington Oil Field

Long Beach (Economy) L: 447

Wilmot, David [American political leader]

Wilmot Proviso W: 315

Wilmot Proviso [U.S. history] W: 315

Lincoln, Abraham (Congressman) L: 316

Wilm's tumor [disease]

Cancer (Cancer in children) C: 169

Wilmot, Ian [Scottish scientist]

Biology (Current research and issues) B: 320-321

Clone C: 684

Genetic engineering (Uses of genetic engineering) G: 84a-84b

Heredity (The era of genetic engineering)
H: 209**Wilpattu National Park** [Sri Lanka]

National park (table) N: 42f

Wilshire Boulevard

Los Angeles (Central Los Angeles) L: 460

Wilson, Allen B. [American inventor]

Sewing machine (History) S: 333-335

Wilson, Angus [British author] W: 315**Wilson, August** [American playwright] W: 316
African American literature (Recent developments) A: 136a

African Americans (Achievements) A: 136p

American literature (Drama) A: 425

Drama (Later United States drama) D: 340-341
*with picture***Wilson, Brian** [American musician]

Beach Boys B: 179

Wilson, Carl [American musician]

Beach Boys B: 179

Wilson, Charles E. [American government official]

Defense, Department of (table) D: 87

Eisenhower, Dwight David (table) E: 152

Wilson, Charles Thomson Rees [British physicist]

Nobel Prizes (Physics: 1927) N: 440

Wilson, David [American settler]

Wovoka W: 502

Wilson, Dennis [American musician]

Beach Boys B: 179

Wilson, Edith Bolling [wife of WoodrowWilson] W: 316 *with portrait*

First ladies F: 143

Wilson, Woodrow (Remarriage) W: 324 *with picture***Wilson, Edmund** [American author] W: 316

Uncle Tom's Cabin U: 20

Wilson, Edward Osborne [American biologist]
W: 316**Wilson, Ellen Axson** [wife of Woodrow Wilson]

First ladies (table) F: 142

Wilson, Woodrow (Wilson's family) W: 320

*with picture***Wilson, Emanuel W.** [American political leader]

West Virginia (table) W: 225

Wilson, Ethel [Canadian author] W: 317
Canadian literature (Modern English-Canadian fiction) C: 160**Wilson, George A.** [American political leader]
Iowa (table) I: 391**Wilson, H. J.** [British aviator]

Airplane (table) A: 232

Wilson, Hack [American baseball player]

Baseball (table: Hall of Fame) B: 135; (table: Modern major league records) B: 137

Wilson, Harold [British political leader] W: 317

Labour Party (History) L: 16

United Kingdom (Economic recovery—and collapse) U: 72-73

Wilson, Harriet E. [American author]

African American literature (The 1800's)

A: 136a

Wilson, Henry [American political leader]

W: 317

Grant, Ulysses S. (Election of 1872) G: 316-317

Vice President of the United States (table)
V: 351; V: 348 *with portrait***Wilson, Jack** [American Indian religious leader]
See *Wovoka in this index***Wilson, James** [American patriot] W: 317**Wilson, James** [American journalist]

Wilson, Woodrow (Childhood) W: 319

Wilson, James [American government official]

Agriculture, Department of (table) A: 161

McKinley, William (table) M: 342

Roosevelt, Theodore R: 470

Taft, William Howard (table) T: 11

Wilson, James H. [American general]Alabama (The Civil War and Reconstruction)
A: 276**Wilson, James Harold** [British political leader]See *Wilson, Harold in this index***Wilson, John Anthony Burgess** [British author]See *Burgess, Anthony in this index***Wilson, John Lyde** [American political leader]

South Carolina (table) So: 658

Wilson, John Lyman [American settler]

Saint Cloud S: 32

Wilson, Kenneth Geddes [American physicist]

Nobel Prizes (Physics: 1982) N: 441

Wilson, Lanford [American dramatist] W: 317

Drama (Later United States drama) D: 340

Wilson, Lord [British political leader] See*Wilson, Harold in this index***Wilson, Malcolm** [American political leader]

New York (table) N: 313

Wilson, Margaret [daughter of Woodrow

Wilson]

White House hostesses W: 291

Wilson, Pete [American political leader]

California (table) C: 59

Wilson, R. Kenneth [British physician]

Loch Ness monster L: 410

Wilson, Robert [American playwright]

Glass, Philip G: 224

Wilson, Robert Woodrow [American physicist]
Astronomy (Advances in astrophysics) A: 848-849

Big bang B: 297

Galaxy (Origin of galaxies) G: 8b

Nobel Prizes (Physics: 1978) N: 441

Wilson, S. Clay [American cartoonist]

Comics (Comic books) Ci: 870

Wilson, Samuel [American businessman]

New York (Interesting facts) N: 291

Uncle Sam U: 20

Wilson, Stanley C. [American political leader]

Vermont (table) V: 333

Wilson, Teddy [American pianist]

Jazz (The swing era) J: 71

Wilson, William Bauchop [American government official]

Labor, Department of (table) L: 2

Wilson, Woodrow (table) W: 323

Wilson, William L. [American government official]

Cleveland, Grover (table) Ci: 672

West Virginia (Interesting facts) W: 207

Wilson, Woodrow [U.S. President] W: 318 *with pictures*

Congress of the United States (Continued struggle for power) Ci: 948

Democracy (Famous quotations about democracy) D: 120

Democratic Party D: 124; (Wilsonian democracy) D: 127

Fourteen Points F: 437

Haiti (History) H: 15-16

Harding, Warren Gamaliel H: 56

League of Nations L: 159

Marshall, Thomas Riley M: 230

Mexico (The Revolution of 1910) M: 472

Monroe Doctrine (The Roosevelt Corollary)
M: 740New Jersey (table) N: 249; (The early 1900's)
N: 253Nobel Prizes (Peace: 1919) N: 447 *with portrait*

President of the United States (The rebirth of presidential leadership) P: 768-769

Roosevelt, Franklin Delano (Assistant secretary of the Navy) R: 454

United States, History of the (World war I and the peace) U: 184

Versailles, Treaty of V: 339

Villa, Pancho V: 384

Wilson, Edith Bolling W: 316

World War I (The United States enters the war) W: 462; (The peace settlement)
W: 465**Wilson cloud chamber** [physics]

Particle detector (Cloud chambers) P: 186

Wilson cycle [geology]

Earth (The shaping of the continents) E: 24

Wilson Dam [Tennessee River, Alabama]

Tennessee Valley Authority (History) T: 160

Muscle Shoals M: 936

Tennessee River T: 158

Wilson-Gorman Bill [1894]

Cleveland, Grover (Tariff defeat) Ci: 673

Wilson's bird-of-paradise

Bird-of-paradise B: 374

Wilson's Creek [Missouri]

Missouri (The Civil War) M: 671

Wilson's Creek National Battlefield [Missouri]

National Park System (table: National battlefields) N: 55

Wilson's plover [bird]Bird (Birds of the seacoasts) B: 342 *with picture*

Plover P: 574

Wilson's snipe [bird]Snipe S: 538 *with picture***Wilt** [plant disease] W: 328

Alfalfa (Diseases and pests) A: 347

Cotton (Diseases) C: 1090

Pea (Diseases and pests) P: 205

Tomato (Growing, harvesting, and processing)
T: 326

Watermelon W: 146

Wilton

Rugs and carpets (Weaving) R: 515

Wiltz, Louis A. [American political leader]

Louisiana (table) L: 496

Wimbledon [England]

London (Recreation) L: 434

Tennis (Tennis tournaments) T: 165;

(Beginnings) T: 165; (table) T: 166; *picture on T: 161***WIMP** [physics] See *Weakly interacting massive particle in this index***Wimpe**Clothing (The Middle Ages) Ci: 698-699 *with picture***Wimsey, Lord Peter** [literary figure]

Sayers, Dorothy L. S: 168

- Winans, Edwin B.** [American political leader]
Michigan (table) M: 507
- Winant, John Gilbert** [American political leader]
New Hampshire (table) N: 223
- Winch** [machine]
Crane Ci: 1119 *with picture*
Ship (The chief parts of a ship) S: 424-425
- Winchell, Walter** [American journalist] W: 328
- Winchester** [England] W: 328
- Winchester, James** [American general]
Memphis (History) M: 396
- Winchester College** [British secondary school]
W: 328
- Winchester manuscript**
Malory, Sir Thomas M: 112
- Winkelmann, Johann Joachim** [German scholar] W: 329
- Wind** [tile]
Mah-jongg M: 64 *with picture*
- Wind** [weather] W: 329 *with diagram*
Air (Air movement) A: 169 *with picture; picture on A: 167*
Chinook C: 512
Climate (Atmospheric circulation) Ci: 676a
Cyclone Ci: 1203
Energy supply (Wind power) E: 279
Föhn F: 313
Harmattan H: 61
Heat index H: 155
Hurricane H: 452 *with picture*
Mars (Wind) M: 226b
Nuclear weapon (Blast wave) N: 597-598
Ocean (How the ocean moves) O: 658
Pacific Ocean (Climate) P: 14
Seiche S: 287
Tree (How forests spread) T: 429
Weather (table: Weather terms) W: 157;
(Planetary-scale systems) W: 158;
(Synoptic-scale systems) W: 159-161
Weather vane W: 172
Wind chill W: 331
Wind power W: 331
Wind shear W: 332
See also the list of Related Articles in the Wind article
- Wind and Current Charts**
Maury, Matthew Fontaine M: 318
- Wind Cave National Park** [South Dakota]
W: 331
National Park System (table: National parks) N: 49
- Wind chest** [musical instrument]
Organ (Pipe organs) O: 851-852
- Wind chill** [weather] W: 331
Weather (Reporting the weather) W: 166
- Wind ensemble** [music]
Band (Wind ensembles) B: 74
- Wind erosion**
Earth *picture on E: 23*
Dust storm D: 392
- Wind farm**
Environmental pollution (Scientific efforts) E: 336
- Wind gap** [geology]
Gap G: 27
Appalachian Mountains (Physical features) A: 567
- Wind in the Door, A** [book by L'Engle]
L'Engle, Madeleine L: 191
- Wind in the Willows, The** [book by Grahame]
Grahame, Kenneth G: 301
- Wind instrument**
Classical music (Instrumental music) Ci: 643
Music (Wind instruments) M: 949 *with pictures*
- Wind power W: 331** *with picture*
- Wind River Canyon** [Thermopolis]
Wyoming (Places to visit) W: 524
- Wind River Indian Reservation**
Wyoming *picture on W: 534*
- Wind River Range** [mountains]
Wyoming (Land regions) W: 526
- Wind, Sand and Stars** [essays by Saint-Exupéry]
Saint-Exupéry, Antoine de S: 33
- Wind shear** [weather] W: 332
Hurricane (Hurricane conditions) H: 453
Tornado (The story of a tornado) T: 333-334
- Wind tunnel** [machine] W: 333
Aerodynamics (Wind-tunnel testing) A: 88
Airplane (Design and testing) A: 228; *picture on A: 227*
Airplane, Model A: 240
Automobile *picture on A: 955*
Ohio *picture on O: 701*
Streamlining So: 924
- Wind turbine** [machine]
Global warming (Limiting global warming) G: 232a
Turbine (Wind turbines) T: 498 *with picture*
Wind power (Devices that use wind power) W: 331-332
Windmill W: 333
- Wind vane** *See Weather vane in this index*
- Windaus, Adolf Otto** [German chemist]
Nobel Prizes (Chemistry: 1928) N: 442
- Windbreak**
Indian, American (Shelter) I: 136d-141
Shelterbelt S: 394
- Winder, Levin** [American political leader]
Maryland (table) M: 255
- Windermere** [lake, England] W: 333
- Windflower** *See Anemone in this index*
- Windhoek** [Namibia] W: 333
Namibia N: 8 *with picture*
- Windhover** [bird]
Kestrel K: 307
- Winding**
Ignition (Parts of an ignition system) I: 49 *with diagram*
- Windlass** [machine] W: 333
Machine (Wheel and axle) M: 14
- Windmill W: 333** *with picture*
Electric power (Other sources of electric power) E: 184
Netherlands *picture on N: 147*
Turbine (Wind turbines) T: 498 *with picture; (History) T: 498 with pictures*
Wind power (Devices that use wind power) W: 331-332
- Windmill Island** [park]
Holland H: 292
Michigan (Places to visit) M: 498 *with picture*
- Windom, William** [American government official]
Garfield, James Abram (table) G: 42
Harrison, Benjamin (table) H: 72
Treasury, Department of the (table) T: 407
- Window W: 334**
Glass (Early American glass) G: 222; *picture on G: 211*
House (Building materials) H: 380; (Interior construction) H: 382 *with diagram*
Pioneer life in America (A pioneer settlement) P: 479-481
Stained glass So: 821 *with pictures*
- Window** [computing]
Computer (Input devices) Ci: 912-914
Printing (Page makeup) P: 797-798
- Window air conditioner**
Air conditioning (Kinds of air conditioners) A: 179
- Window display**
Advertising (Other ways of advertising) A: 75
- Windows** [computer software]
Gates, Bill G: 67
- Windpipe** [anatomy] *See Trachea in this index*
- Windrow** [agriculture]
Hay H: 115
Rake R: 130 *with picture*
Sugar cane (Harvesting) So: 963
- Winds, Cave of the**
Niagara Falls (Description) N: 391-392
- Winds of War, The** [book by Wouk]
Wouk, Herman W: 502
- Windscale plutonium plant** [England]
Fallout (History) F: 19
- Windsor** [city, Ontario] W: 334
- Windsor** [British history] W: 334
- Windsor, Duchess of** [British public figure] *See Simpson, Wallis Warfield in this index*
- Windsor, Duke of** [British public figure] *See Edward VIII in this index*
- Windsor bean** [plant] *See Broad bean in this index*
- Windsor Castle** [England] W: 335 *with picture*
- Windsurfing** [sport] W: 335 *with picture*
- Windward Islands** [islands, Caribbean] W: 336
Saint George's S: 34
- Windward Maroons** [people]
Maroons M: 217
- Windward side**
Climate (The role of topography) Ci: 676a
Ship (Nautical terms) S: 416
- Windy City**
Chicago (A city reborn) C: 435
- Wine W: 336** *with pictures*
Alcoholic beverage (Wine) A: 336
Antiseptic (History) A: 559
California *picture on C: 56*
Champagne C: 373
France (Agriculture) F: 469; *picture on F: 470*
Grape (Kinds of grapes) G: 319
Invention (Ancient Greece) I: 358-359
- Portugal (Way of life) P: 687
Tartaric acid T: 48
Yeast (How yeast is used) Y: 554-555
- Wine thief** [tool]
Wine picture on W: 337
- "Wine, Women, and Song"** [music by Strauss]
Strauss, Johann, Jr. So: 921
- Wineland** *See Vinland in this index*
- Winema National Forest** [Oregon]
Klamath Indians K: 343
- Winesap**
Apple (table) A: 571 *with picture*
- Winesburg, Ohio** [stories by Anderson]
Anderson, Sherwood A: 452
- Winfield, Dave** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Winfrey, Oprah** [American entertainer] W: 338
with portrait
Spingarn Medal (table: 2000) So: 793
- Winfrid** [English-born religious leader] *See Boniface, Saint in this index*
- Wing** [flying]
Aerodynamics (Lift) A: 85 *with diagrams; (Applying aerodynamic principles) A: 88*
Airplane (The wing) A: 213 *with pictures; (Principles of flight) A: 220 with diagrams; picture on A: 218*
Animal (Wings) A: 488 *with picture*
Bee (Wings) B: 201 *with pictures*
Bird (In the air) B: 352 *with pictures*
Butterfly (The thorax) B: 738 *with pictures*
Daedalus D: 3
Fly (Thorax) F: 309 *with diagram*
Glider (The wings) G: 228 *with pictures*
Helicopter (Lift) H: 171 *with diagram*
Insect (Wings) I: 288
- Wing** [military unit]
Air force (The organization of air forces) A: 183
Air Force, United States (Combat commands) A: 192
- Wing** [theater]
Theater (The stage) T: 233-234
- Wing walker** [acrobat]
Airplane (The golden age) A: 235
- Wingate, Orde Charles** [British general]
Wingate's Raiders W: 339
- Wingate's Raiders** [World War II commandos]
W: 339
- Winged lion** [ancient sculpture]
Assyria *picture on A: 821*
- Winged Victory** [sculpture] W: 339
Hellenistic Age H: 177
- Wingfield, Walter Crompton** [British sportsman]
Tennis (Beginnings) T: 165
- Wings** [film]
Motion picture (Best picture: 1927-28) M: 861
- Wings of the Dove, The** [book by James]
James, Henry (His works) J: 26
- Winkel, Dietrich** [Dutch inventor]
Metronome M: 442
- Winkelried, Arnold von** [legendary figure]
W: 339
- Winkle, Rip van** [literary character] *See Rip Van Winkle in this index*
- Winkler, Clemens** [German chemist]
Germanium G: 143
- Winnebago, Lake** *See Lake Winnebago in this index*
- Winnebago Indians** [American Indians] W: 339
Indian, American (Indians of the Northeast) I: 154-155
Nebraska (Indian days) N: 111
- Winnemucca, Sarah** [American social reformer]
W: 339
- Winnетка Plan** [education] W: 339
- Winnie Mae** [airplane]
Post, Wiley P: 698
- Winnie-the-Pooh** [book by Milne]
Literature for children *picture on L: 363*
Milne, A. A. M: 556
Shepard, Ernest Howard S: 395
- Winnipeg** [city, Manitoba] W: 340 *with picture and map*
Manitoba M: 144 *with picture; pictures on M: 145, M: 148*
- Winnipeg, Lake** *See Lake Winnipeg in this index*
- Winnipeg Art Gallery**
Winnipeg *picture on W: 340*
- Winnipeg Blue Bombers**
Football (Canadian Football League) F: 364
Winnipeg (Cultural life) W: 341
- Winnipeg Commodity Exchange**
Winnipeg (Economy) W: 340
- Winnipeg River** [river, Manitoba-Ontario] W: 342
- Winnipegosis, Lake** [Manitoba]
Lake Winnipegosis L: 48

Manitoba (Rivers and lakes) **M**: 154
Winnepesaukee, Lake
 New Hampshire (Rivers and lakes) **N**: 220-221
Winnepesaukee River
 New Hampshire (Rivers and lakes) **N**: 220
Winnowing [agriculture]
 Threshing machine **T**: 270
 Wheat (The mechanization of wheat farming)
W: 276
Winslow, Edward [American colonial leader]
W: 342
 Cattle (American cattle) **C**: 315
 White, Peregrine **W**: 284
Winslow, Helen Maria [poet]
 August **A**: 887
Winslow, John A. [Union military leader]
 Alabama **A**: 255
Winslow, Warren [American political leader]
 North Carolina (table) **N**: 490
Winsor, Frederick Albert [German businessman]
 Gas [fuel] (First uses of manufactured gas)
G: 58
Winston [former city]
 Winston-Salem **W**: 342
Winston, John Anthony [American political leader]
 Alabama (table) **A**: 274
Winston Churchill Memorial and Library
 [Fulton]
 Missouri (Places to visit) **M**: 660
Winston Cup
 Gordon, Jeff **G**: 273
Winston Drag Racing Championship
 Automobile racing (Drag racing) **A**: 978-979
Winston-Salem [North Carolina] **W**: 342
Winston-Salem State University
 North Carolina, University of **N**: 495
Winter [season] **W**: 342
Winter, Nuclear See Nuclear winter in this index
Winter, William F. [American political leader]
 Mississippi (table) **M**: 640
Winter barley [plant]
 Barley (Cultivation) **B**: 112
Winter bud
 Leaf (A leaf begins its life) **L**: 152 with picture
Winter cress
 Cress **C**: 1127
Winter depression [disorder]
 Seasonal affective disorder **S**: 272
Winter flounder
 Fish picture on **F**: 153
Winter Games of the Cheyenne [painting by West]
 Indian, American picture on **I**: 142
Winter melon
 Casaba **C**: 270
Winter oats
 Oats (Growing oats) **O**: 641
Winter Palace [museum]
 Russia (The October Revolution) **R**: 553
 Saint Petersburg [Russia] (The city) **S**: 54
Winter sleep See Hibernation in this index
Winter solstice [astronomy]
 Season **S**: 271
 Solstice **So**: 587
Winter sports
 Biathlon **B**: 278
 Bobsledding **B**: 433 with picture
 Curling **C**: 1195 with picture
 Hockey **H**: 274
 Ice skating **I**: 10 with pictures
 Iceboating **I**: 18 with pictures
 Safety (Safety in recreation) **S**: 12 with picture
 Skiing **S**: 482 with pictures
 Snowboarding **S**: 541 with picture
 Snowmobiling **S**: 541 with picture
 Tobogganing **T**: 308
Winter War [1939-1940]
 Finland (World War II) **F**: 117 with picture
 Russo-Finnish wars (The Winter War) **R**: 565
Winter wheat [plant]
 Wheat (Winter wheats and spring wheats)
W: 268 with pictures; (Climate conditions)
W: 270
Winter wren [bird]
 Wren **W**: 504; picture on **W**: 503
Winterberry [shrub] **W**: 342
Winterbloom See Witch hazel in this index
Wintergreen [plant] **W**: 343
Winterhoff, Hermann [American inventor]
 Vibraphone **V**: 347
Winterlude [festival]
 Ottawa (Annual events) **O**: 873
Winternationals
 Automobile racing (Drag racing) **A**: 978-979

Winters, Shelley [American actress]
 Motion picture (Best performance by an actress in a supporting role: 1959, 1965)
M: 863
Winter's Tale, The [play by Shakespeare]
 Shakespeare, William (*The Winter's Tale*)
S: 365
 Theater pictures on **T**: 236, **T**: 237, **T**: 239, **T**: 240, **T**: 241
Winterset [play by Anderson]
 Anderson, Maxwell **A**: 452
Winterson, Jeanette [British author]
 Novel (The novel today) **N**: 575
Winterthur Museum [Wilmington, Delaware]
 Delaware (Places to visit) **D**: 102 with picture
Winthrop, John [American colonial leader]
W: 343
 Boston (Early settlement) **B**: 503
 Dudley, Thomas **D**: 378
 Endecott, John **E**: 271
 Massachusetts (Massachusetts Bay Colony)
M: 289
 Massachusetts Bay Colony **M**: 295
Winthrop, John, Jr. [American colonial leader]
W: 343
 Connecticut (Expanding the colony) **C**: 968
Wintun Indians [American Indians] **W**: 343
Winze
 Mining (Mining terms) **M**: 577
Wipe
 Television (Putting a show on the air) **T**: 111-113
Wire See Telegram in this index
Wire [hardware] **W**: 343 with diagrams
 Aluminum (Drawing) **A**: 395
 Cable **C**: 4
 Copper **C**: 1041; (Copper wire) **C**: 1043-1044
 Diamond (Industrial uses) **D**: 182-183
 Electricity (Conductors and insulators) **E**: 193
Wire-command system
 Guided missile (Command guidance) **G**: 426
Wire fox terrier [dog] **W**: 344 with picture
 Dog picture on **D**: 272
Wire gauge
 Wire (Sizes of wire) **W**: 343
Wire rope
 Rope (Wire rope) **R**: 476-477 with picture
Wire service See News service in this index
Wireframe model
 Animation (Computer animation) **A**: 512 with picture
Wiregrass area
 Alabama (Land regions) **A**: 268
Wirehair cat
 Cat (Short-haired breeds) **C**: 290
Wirehaired pointing griffon [dog] **W**: 344 with picture
Wireless
 Radio (Early development) **R**: 91-92; picture on **R**: 92
Wireless communication **W**: 344
Wireless File [news service]
 United States Information Agency **U**: 200
Wireless telegraph
 Communication (The development of electronics) **C**: 883 with picture
 Marconi, Guglielmo **M**: 196
Wireless Telegraph and Signal Company
 Marconi, Guglielmo (Early life) **M**: 196
Wirephoto [machine]
 Fax machine (History) **F**: 58
Wiretapping **W**: 345
Wireworm
 Beetle (Click beetles) **B**: 217
 Click beetle **C**: 674
 Potato (Diseases and insect pests) **P**: 713
Wiring, Electric
 House (Electrical wiring) **H**: 382
Wirt [office]
 Hutterites **H**: 458
Wirt, William [American political leader]
 Adams, John Quincy (table) **A**: 43
 Anti-Masonic Party **A**: 556
 Justice, Department of (table) **J**: 203
Wirt, William Albert [American educator]
 Indiana (Schools) **I**: 200-201
Wirtz, William Willard [American government official]
 Johnson, Lyndon Baines (table) **J**: 151
 Kennedy, John Fitzgerald (table) **K**: 266
 Labor, Department of (table) **L**: 2
Wirz, Henry [Confederate officer]
 Civil War (Prisons) **C**: 631
Wisconsin **W**: 346 with pictures and maps
 United States, History of the (The Progressive Era) **U**: 181-182
 See also the list of Related Articles in the Wisconsin article

Wisconsin [ship]
 Battleship (The modern battleship) **B**: 172-173
Wisconsin, University of **W**: 369 with picture
 Wisconsin (University expansion) **W**: 368; picture on **W**: 350
Wisconsin Dells [region]
 Dells picture on **D**: 16
 Wisconsin (Places to visit) **W**: 356 with picture
Wisconsin ice age [geology]
 Ice age (Evidence of ice ages and their climates) **I**: 6-7
Wisconsin Idea [U.S. history]
 Wisconsin (The Progressive Era) **W**: 366
Wisconsin River [river, Wisconsin] **W**: 370
Wisconsin Territory [U.S. history]
 Wisconsin (Territorial days) **W**: 366
Wisdom [philosophy]
 Ethics (Plato) **E**: 366
Wisdom Books [Old Testament]
 Bible (Books of the Hebrew Bible) **B**: 279-280
 Old Testament (Contents) **O**: 740-741
Wisdom of Jesus the Son of Sirach [book]
 See Ecclesiasticus in this index
Wisdom of Solomon [Bible]
 Bible (Development of the Christian Old Testament) **B**: 282
Wisdom tooth
 Dentistry (Oral surgery) **D**: 144
 Teeth (Permanent teeth) **T**: 79-80 with picture
Wise, Bob [American political leader]
 West Virginia (table) **W**: 225
Wise, Henry A. [American political leader]
 Virginia (table) **V**: 417
Wise, Isaac Mayer [American religious leader]
W: 370
Wise, John [American balloonist]
 Balloon (The growth of ballooning) **B**: 61
Wise, John [American religious leader] **W**: 370
 Congregationalists **C**: 940f
Wise, Robert [American director]
 Motion picture (Best achievement in directing: 1961, 1965) **M**: 862
Wise, Stephen Samuel [American religious leader] **W**: 370
Wise Blood [book by O'Connor]
 O'Connor, Flannery **O**: 668
Wise Men See Magi in this index
Wisecraft [religion]
 Witchcraft **W**: 371
Wisent [animal]
 Belarus (Land) **B**: 224b with picture
 Buffalo (Protection of bison) **B**: 675
Wishart, George [Scottish religious leader]
 Knox, John (Early years) **K**: 358
Wisner, Moses [American political leader]
 Michigan (table) **M**: 507
Wisniewski, David [American author]
 Caldecott Medal (table: 1997) **C**: 26
Wistar, Caspar [American businessman]
 Glass (Early American glass) **G**: 222; (Types of art glass) **G**: 221
Wistar glass
 Glass (Types of art glass) **G**: 221 with picture
Wisteria [botany] **W**: 370 with picture
Wit
 Humor (The types of humor) **H**: 435
Witan [English history]
 Witenagemot **W**: 374
Witch See Witchcraft in this index
Witch Diggers, The [book by West]
 West, Jessamyn **W**: 198
Witch doctor
 Magic (The magician) **M**: 49 with picture
Witch hazel [shrub] **W**: 371 with picture
Witch House [Salem, Massachusetts]
 Colonial life in America (Places to visit) **C**: 801
Witch hunt [religious history]
 Salem witchcraft trials **S**: 61
 Witchcraft (History) **W**: 372
Witch of Blackbird Pond, The [book by Speare]
 Speare, Elizabeth George **S**: 768
"Witch of Coos, The" [poem by Frost]
 Frost, Robert Lee (His poems) **F**: 543
Witchcraft **W**: 371 with pictures
 Colonial life in America (Religion) **C**: 804-805
 Halloween (Halloween symbols) **H**: 24b
 Magic **M**: 49
 Salem (History) **S**: 61
 Salem witchcraft trials **S**: 61
Witchcraft Today [book by Gardner]
 Witchcraft (Witchcraft in modern times)
W: 373
Witches' Sabbath [folklore]
 Walpurgis Night **W**: 20
 Witchcraft picture on **W**: 373
Witenagemot [English history] **W**: 374
With Fire and Sword [book by Sienkiewicz]

- Sienkiewicz, Henryk S: 450
Withdrawal [birth control]
 Birth control (Methods of birth control) B: 378-379
Withdrawal [physiology]
 Alcoholism A: 337
 Benzodiazepine B: 255
 Drug abuse D: 361
 Mental illness (Substance use disorders) M: 406
 Methamphetamine M: 434
Withering, William [British doctor]
 Digitalis D: 203
Withering rack
 Tea (Processing tea) T: 62
Witherite [mineral]
 Barium B: 110
Withers [zoology]
 Horse (Size) H: 348
Witherspoon, John [American patriot] W: 374
Withholding tax
 Income tax (Paying the individual income tax) I: 104
 Internal Revenue Service I: 337
Within a Budding Grove [book by Proust]
 Proust, Marcel P: 838
Withycombe, James [American political leader]
 Oregon (table) O: 845
Witless Bay [Newfoundland and Labrador]
 Newfoundland and Labrador (Places to visit) N: 368
Witness [law] W: 374
 Deposition D: 149
 Trial (Presenting evidence) T: 437
Witness for the Prosecution [play by Christie]
 Christie, Dame Agatha C: 527
Witoto Indians [American Indians]
 Indian, American (Why the Indians fought) I: 144-145, (Before European contact) I: 175-176
Witt, Gustav [German astronomer]
 Eros E: 355
Witt, Katarina [German skater]
 Olympic Games (Charges of steroid use) O: 753
Wittaker, Robert [American ecologist]
 Botany (Later developments) B: 509
Witte Memorial Museum [San Antonio]
 San Antonio (Cultural life) S: 85
Wittelsbach [German history]
 Munich (History) M: 927
Wittenmyer, Annie [American social reformer]
 Woman's Christian Temperance Union W: 381
Wittgenstein, Carolyn von Sayn [German princess]
 Liszt, Franz (His life) L: 349-350
Wittgenstein, Ludwig [Austrian philosopher]
 W: 374
Wittig, Georg [German chemist]
 Nobel Prizes (Chemistry: 1979) N: 443
Wittig, Monique [French author]
 French literature (Recent French literature) F: 523
Witwatersrand [region, South Africa]
 Gold (World gold production) G: 253
 South Africa (The Plateau) So: 614 *with map*
 Transvaal T: 401
Wizard
 Witchcraft W: 371
Wizard Island [Island, Oregon]
 Crater Lake Ci: 1121
Wizard of Menlo Park
 Edison, Thomas Alva (The Wizard of Menlo Park) E: 78
Wizard of Oz, The [book by Baum] See *Wonderful Wizard of Oz, The in this index*
Wizard of Oz, The [film]
 Garland, Judy G: 43 *with picture*
 Motion picture *picture on M: 846*
Wizards, Washington
 Basketball (table) B: 150
WMO [UN] See World Meteorological Organization *in this index*
WOCE [experiment] See World Ocean Circulation Experiment *in this index*
Wodehouse, P. G. [British author] W: 374
 Kern, Jerome K: 306
Woden [Norse god] See Odin *in this index*
Woe from Wit [play by Griboyedov]
 Russian literature (Early romanticism) R: 560-561
Wohelo [slogan]
 Camp Fire Boys and Girls C: 88
Wöhler, Friedrich [German chemist] W: 374
 Aluminum (The first aluminum) A: 397
 Beryllium B: 273
 Chemistry (Development of organic chemistry) C: 404; *picture on C: 402*
 Urea U: 221
Wojciechowska, Maia [American author]
 Newbery Medal (table) N: 359
Wojtyła, Karol Jozef [Polish clergymen] See John Paul II *in this index*
Wok
 Cooking (Frying) Ci: 1028
Wolcott, Oliver [American patriot] W: 374
 Connecticut (table) Ci: 967
Wolcott, Oliver, Jr. [American political leader]
 Adams, John (table) A: 38
 Connecticut (table) Ci: 967
 Treasury, Department of the (table) T: 407
Wolcott, Roger [American political leader]
 Massachusetts (table) M: 288
Wolf [animal] W: 375 *with pictures*
 Dominance *picture on D: 301*
 Ecology (Ecosystems) E: 54-55
 Endangered species (table) E: 270
 Moose (The life of a moose) M: 798
 Mowat, Farley M: 903
 Skull S: 495 *with picture*
 Territoriality T: 176
Wolf [rank]
 Boy Scouts (Cub Scouting) B: 536-537
Wolf, Christa [German author]
 Novel (The novel today) N: 575
Wolf, Friedrich August [German scholar]
 Homer (Analysts and unitarians) H: 303
Wolf, George [American political leader]
 Pennsylvania (table) P: 263
Wolf, Tasmanian See Tasmanian tiger *in this index*
Wolf Cub [rank]
 Scouts Canada (Age groups) S: 224
Wolf fish See *Wolfish in this index*
Wolf in Sheep's clothing [expression]
 Aesop's fables A: 90
Wolf pack
 Wolf (The life of a wolf) W: 375; *picture on W: 376*
Wolf spider
 Animal *picture on A: 475*
 Spider (Wolf spiders) So: 787; (The life of a spider) So: 790; (table) So: 790; *picture on So: 783; picture on So: 785*
Wolf teeth
 Horse (Teeth) H: 350
Wolf Trap Farm Park [Virginia]
 National Park System (Areas preserved for recreational use) N: 46; (table: National parkways and other national parklands) N: 56
Wolfe, James [British general] W: 377 *with picture*
 French and Indian wars (The French and Indian War) F: 512-513
 Quebec (The 1700's) Q: 36
 Quebec, Battle of Q: 37
Wolfe, Nero [literary figure]
 Detective story (The pattern) D: 162-163
 Stout, Rex Todhunter So: 916
Wolfe, Reginald [London printer]
Holinshed's Chronicles H: 292
Wolfe, Thomas Clayton [American author]
 W: 377
 American literature (Realist fiction) A: 422
 Asheville A: 769
Wolfe, Tom [American writer] W: 378
 American literature (Essays) A: 425
Wolff, Alfred R. [American engineer]
 Air conditioning (History) A: 180
Wolff, Caspar Friedrich [German biologist]
 Heredity (Early ideas about heredity) H: 208
Wolff, Patrick [American chess player]
 Chess (United States chess champions) C: 414
Wolfish [fish] W: 378 *with picture*
 Fish *picture on F: 153*
Wolfhound [dog] W: 378
 Dog *pictures on D: 265, D: 270*
Wolfmonth
 January J: 30
Wolfram See Tungsten *in this index*
Wolfram von Eschenbach [German poet]
 W: 378
 Holy Grail H: 298
Wolframite [mineral] W: 378
 Tungsten T: 486
Wolfskill, William [American explorer]
 Nevada (Exploration) N: 173
Wolfsol, Louis E. [American financier]
 Fortas, Abe F: 419
Wollaston, William H. [British chemist]
 Palladium P: 108
 Rhodium R: 318
Wollman, Harvey L. [American political leader]
 South Dakota (table) So: 680
Wollongong [city, Australia] W: 378
Wollstonecraft, Mary [British author] W: 379
with portrait
 Feminism F: 69
 Godwin, William G: 246
 Shelley, Mary Wollstonecraft S: 391
 Women's movements (Forces of change) W: 384
Wolof [people]
 Gambia (People) G: 18
 Senegal (People) S: 297
Woligi Mountains
 Liberia (Land and climate) L: 230
Wolong Natural Reserve [China]
 National park (table) N: 42f; (Other interesting national parks) N: 42e-42h *with picture*
Wolsey, Garnet Joseph [British general]
 Lee, Robert Edward (Last years) L: 178-179
 Red River Rebellion (End of the conflict) R: 189
Wolsey, Thomas Cardinal [English statesman]
 W: 379 *with portrait*
 Cromwell, Thomas Ci: 1152
 England (The English Reformation) E: 307
 Henry VIII [of England] H: 188
Wolszczan, Alexander [American astronomer]
 Planet (The first discoveries) P: 512
 Pulsar P: 898
Wolverine [animal] W: 379 *with picture*
Wolverine State
 Michigan M: 489
Wolverines [band]
 Jazz *picture on J: 70*
Wolverstone, Charles [English colonist]
 Bridgetown B: 607
Woman See Female; Human being; Women *in this index*
Woman, I [painting by De Kooning]
 De Kooning, Willem D: 95
 Painting (Abstract expressionism) P: 84-85
with picture
Woman as Force in History [book by Beard]
 Beard, Charles and Mary B: 187
Woman in Mind [play by Ayckbourn]
 Ayckbourn, Alan A: 995
Woman in the Nineteenth Century [book by Fuller]
 Fuller, Margaret F: 555
Woman in White, The [book by Collins]
 Collins, Wilkie Ci: 776
Woman Is a Woman, A [film]
 Godard, Jean-Luc G: 244
Woman Killed With Kindness, A [play by Heywood]
 Heywood, Thomas H: 221
Woman of No Importance, A [play by Wilde]
 Wilde, Oscar W: 302
Woman suffrage [voting] W: 380 *with map*
 Anthony, Susan Brownell A: 544
 Constitution of the United States (Amendment 19) Ci: 1015
 Davis, Paulina Wright D: 49
 Feminism F: 69; *picture on F: 69*
 League of Women Voters L: 161
 Stanton, Elizabeth Cady So: 839
 United States, History of the (The drive for women's rights) U: 171; (Early reform efforts) U: 181; (Life during the Roaring Twenties) U: 185
 Women's movements (The right to vote) W: 385
Woman Suffrage Association, National American
 Anthony, Susan Brownell A: 545
 United States, History of the (Early reform efforts) U: 181
 Woman suffrage (Growth of the movement) W: 380
Woman Warrior, The [book by Kingston]
 American literature (Works by minority writers) A: 425
Woman with Suitcases [sculpture by Hanson]
 Sculpture (Since the mid-1900's) S: 259 *with picture*
Woman Without a Shadow, The [opera by Strauss]
 Strauss, Richard So: 922
Woman's Christian Temperance Union [organization] W: 381
 Prohibition (The movement toward prohibition) P: 815
 Willard, Frances Elizabeth Caroline W: 307
Woman's Day

- Magazine (table) M: 45
Woman's Life, A [book by De Maupassant]
 De Maupassant, Guy D: 119
Woman's Medical College
 Philadelphia (Education) P: 362
Woman's Relief Corps, National W: 382
 Grand Army of the Republic G: 305
Woman's Share in Social Culture (book by Spencer)
 Spencer, Anna Garlin So: 777
Woman's State Temperance Society of New York
 Anthony, Susan Brownell A: 544
Woman's Work [painting by Sloan]
 Ashcan School *picture on A:* 768
Womb See Uterus *in this index*
Wombat (animal) W: 382 *with picture*
 Marsupial (Kinds of marsupials) M: 232
Women
 See also Women's movements *in this index*
 Abortion A: 14
 Afghanistan (Way of life) A: 92a-93 *with picture*
 Arabs (Family life) A: 586
 Asia (Country life) A: 778-779
 Culture (Forming patterns) Ci: 1187
 Domestic violence D: 301
 Egypt, Ancient (Family life) E: 136;
 (Government) E: 139
 France (Politics) F: 455
 Greece, Ancient (Family life) G: 367
 Japan (Gender roles) J: 41
 Labor force (Changes in the labor force) L: 3
 Libya (Way of life) L: 265
 Marriage M: 219
 Middle East (Way of life) M: 530
 Muslims (The Muslim world today) M: 965-966
 Navy (Women in the Navy) N: 85
 Painting (Women artists) P: 73; (Nonobjective painting in Russia) P: 79; (Symbolism) P: 76
 Parent (Changes in parenthood) P: 156
 Physical education (During the 1900's) P: 433
 Police (In the United States since the mid-1900's) P: 624-625
 Poverty (The causes of poverty) P: 724
 Saudi Arabia (Way of life) S: 156
 Soap opera So: 543
 Supreme Court of the United States (Civil rights) So: 1001; (table) So: 1002
 Syria (People) So: 1071
 Teaching (Job opportunities) T: 68
 Turkey (Ways of life) T: 505
 World War II (In the United States and Canada) W: 494 *with picture*
 Wyoming (Territorial progress) W: 534
Women, The [play by Luce]
 Luce, Clare Boothe L: 513
Women Airforce Service Pilots
 Air Force, United States (Air Force women) A: 190
 Cochran, Jacqueline Ci: 743
Women and Birds in the Night [painting by Miró]
 Miró, Joan *picture on M:* 616
Women and Economics [book by Gilman]
 Gilman, Charlotte Perkins G: 190
Women in Love [book by Lawrence]
 Lawrence, D. H. L: 145
Women of Algiers, The [painting by Delacroix]
 Delacroix, Eugène D: 95
 Painting (Romanticism) P: 68-70 *with picture*
Women Professional Bowlers Association
 Bowling (Professional bowling) B: 524
Women soldiers
 Army, United States (World War II) A: 739
Women Strike for Peace [organization]
 Abzug, Bella Savitzky A: 19
Women's Action Alliance
 Steinem, Gloria So: 886
Women's Action Committee for Victory and a Lasting Peace
 Catt, Carrie Chapman C: 305
Women's American ORT W: 382
Women's Army Auxiliary Corps
 Army, United States (World War II) A: 739
Women's Army Corps [U.S.]
 Air Force, United States (Air Force women) A: 190
 Army, United States (World War II) A: 739
 Hobby, Oveta Culp H: 273
Women's Bible See *Teserene in this index*
Women's Bureau [U.S.] W: 382
Women's Clubs, General Federation of W: 382
Women's Equity Action League
 Women's movements (Women's organizations) W: 386
Women's Franchise League
 Pankhurst, Emmeline Goulden P: 131
Women's International Bowling Congress
 W: 382
 Bowling (The 1900's) B: 525
Women's International Commission for Permanent Peace
 Balch, Emily Greene B: 38
Women's International League for Peace and Freedom
 Addams, Jane A: 46
 Balch, Emily Greene B: 38
Women's liberation movement See Feminism;
 Women's movements *in this index*
Women's magazine
 Magazine (Consumer magazines) M: 42
Women's movements W: 383 *with pictures*
 Abortion (Abortion in the United States) A: 15
 Civil rights (The struggle for women's rights) Ci: 609-610
 Coeducation Ci: 752
 Colonial life in America (Voting and other rights) Ci: 794
 Davis, Paulina Wright D: 49
 Dickinson, Anna Elizabeth D: 190
 Equal Rights Amendment E: 345
 Feminism F: 69
 Greece, Ancient (Family life) G: 367
 Greer, Germaine G: 387
 History (Approaches to history) H: 261
 Lockwood, Belva Ann Bennett L: 413
 Muslims (Reform and renewal) M: 965
 National Organization for Women N: 42
 Pankhurst, Emmeline Goulden P: 131
 Rich, Adrienne R: 328
 Rose, Ernestine Potowski R: 479
 Sex discrimination S: 335
 Shaw, Anna Howard S: 377
 Stanton, Elizabeth Cady So: 839
 Stone, Lucy So: 908
 United States, History of the (The drive for women's rights) U: 171; (Life during the Roaring Twenties) U: 185; (The spreading drive for equality) U: 193
 Woman suffrage W: 380
 Woodhull, Victoria Claflin W: 393
 See also *the list of Related articles in the Women's movements article*
Women's National Basketball Association
 Basketball (Professional competition) B: 151
Women's Political Caucus, National
 Friedan, Betty F: 533
 Steinem, Gloria So: 886
Women's Relief Society
 Mormons (Church organization) M: 807
Women's rights See Women's movements *in this index*
Women's Rights Convention [1848]
 Mott, Lucretia Coffin M: 880
 Stanton, Elizabeth Cady So: 839
 Woman suffrage (Beginnings of the movement) W: 380
Women's Rights National Historical Park
 (New York)
 National Park System (table: National historical parks) N: 56-57
Women's Strike for Equality
 Friedan, Betty F: 533
Women's Temperance Crusade [1873]
 Woman's Christian Temperance Union W: 381
Women's Tennis Association
 Tennis (Professional tennis) T: 165
Women's Trade Union League of America, National [labor history]
 O'Reilly, Leonora O: 851
Women's U.S. Open
 Bowling (table) B: 524
Wonder, Stevie [American musician] W: 389
with portrait
 Gordy, Berry, Jr. G: 273
 Rock music (Expanding styles and sounds) R: 378-379
Wonder Book for Boys and Girls, A [book by Hawthorne]
 Hawthorne, Nathaniel (His stories and sketches) H: 114-115
Wonder drug See Antibiotic *in this index*
Wonderful Adventures of Nils, The [book by Lagerlöf]
 Lagerlöf, Selma L: 30
Wonderful Town [musical]
 Bernstein, Leonard B: 271
Wonderful Wizard of Oz, The [book by Baum]
 Baum, L. Frank B: 174
 Literature for children (Fiction) L: 358 *with picture*
Wonderland [book by Oates]
- Oates, Joyce Carol O: 639
Wonders, Palace of [Zanzibar]
 Tanzania *picture on T:* 35
Wonders of the World See Seven Natural Wonders of the World; Seven Wonders of the Ancient World *in this index*
Wonsan (Korea)
 Korean War (Naval warfare) K: 382
Wood W: 389 *with pictures*
 See also Lumber *in this index*
 Energy supply (Wood) E: 278
 Forest (Economic value) F: 391
 Forest products (Wood products) F: 400 *with pictures*; (Fuel products) F: 402
 Lignin L: 302
 Lignum-vitae L: 302
 Materials (Biological materials) M: 300d *with picture*
 Painting (Supports) P: 36
 Plastics (To replace wood and stone) P: 555
 Plywood P: 585 *with picture*
 Shelter (Building methods and materials) S: 392
 Sound (table) So: 601
 Stain So: 821
 Termite (Life and habits) T: 173-174
 Tree (Wood products) T: 412 *with picture*
 Woodworking W: 396
Wood [club]
 Golf (Golf clubs) G: 262 *with pictures*
Wood, Annie [British social reformer] See Besant, Annie Wood *in this index*
Wood, George T. [American political leader]
 Texas (table) T: 203
Wood, Grant [American painter] W: 390
 Painting (Regionalism) P: 83 *with picture*
Wood, James [American political leader]
 Virginia (table) V: 417
Wood, John [American political leader]
 Illinois (table) I: 71
Wood, Leonard [American general] W: 390
 Fort Leonard Wood F: 414
 Harding, Warren Gamaliel (The smoke-filled room) H: 57
 Rough Riders R: 490
 Spanish-American War (Land battles) So: 754
Wood, Reuben [American political leader]
 Ohio (table) O: 699
Wood, Ron [British guitarist]
 Rolling Stones R: 403
 Rock music *picture on R:* 376
Wood alcohol See Methanol *in this index*
Wood anemone [plant]
 Plant *picture on P:* 519
Wood-block print See Woodcut *in this index*
Wood Buffalo National Park [Alberta-Northwest Territories]
 Bird (Bird refuges) B: 368
 Canada (table: National parks and national park reserves) C: 113
 Lake Athabasca L: 35 *with map*
 National park (table) N: 42g
 Northwest Territories (The land) N: 530-531
Wood-burning stove
 Heating (Wood-burning stoves) H: 160
Wood carving [art] See Woodcarving *in this index*
Wood chips
 Lumber L: 517
Wood drill
 Drill (Wood drills) D: 348
Wood duck [bird] W: 391
 Duck (Food) D: 375, *picture on D:* 374
Wood engraving [art] See Woodcut *in this index*
Wood frog
 Animal *picture on A:* 478
Wood girder bridge
 Bridge (Girder bridges) B: 600-601
Wood ibis [bird]
 Stork So: 911
Wood lily [plant]
 Lily L: 304 *with picture*
Wood lizard [reptile]
 Lizard L: 399
Wood louse [animal] W: 391 *with picture*
Wood nymph [insect]
 Butterfly (Satyrs and wood nymphs) B: 735-736 *with pictures*
Wood oil [tree product]
 Tung oil T: 486
Wood pewee [bird]
 Pewee P: 352 *with picture*
Wood pulp [tree product]
 Lumber L: 517
 Paper (Raw materials) P: 134
 Textile (Manufactured fibers) T: 213

- Tree (Wood products) T: 412
Wood rat See Woodrat in this index
Wood rosin [by-product]
 Rosin R: 482
Wood screw
 Screw (Uses) S: 225 with pictures
Wood smoke
 Food preservation (Curing) F: 341
Wood sorrel [plant]
 Shamrock S: 371
Wood stein
 Paint (Industrial paints) P: 24
Wood stork [bird]
 Stork So: 911
Wood tar
 Tar T: 41
Wood thrush [bird]
 Thrush T: 271 with picture
Wood tick [animal]
 Tick T: 279
 Rocky Mountain spotted fever R: 394
Wood turpentine [tree product]
 Turpentine T: 519
Woodbine [plant name]
 Honeysuckle H: 316
 Virginia creeper V: 424 with picture
Woodbridge, William [American political leader]
 Michigan (table) M: 507
Woodbury, Levi [American jurist]
 Jackson, Andrew (table) J: 11
 New Hampshire (table) N: 223
 Supreme Court of the United States (table)
 So: 1000
 Treasury, Department of the (table) T: 407
 Van Buren, Martin (table) V: 273
Woodbury, Urban A. [American political leader]
 Vermont (table) V: 333
Woodcarving W: 391 with diagrams
 Canada picture on C: 105
 Indian, American picture on I: 136a
 New Zealand picture on N: 348
Woodchuck [animal] W: 392 with picture
 Marmot M: 216
Woodcock [bird] W: 392 with picture
 Animal picture on A: 492
 Bird (Sight) B: 365 with picture
Woodcock, Katherine [wife of]
 Milton, John (Middle years) M: 557
Woodcock, Leonard [American labor leader]
 W: 392
Woodcraft Indians [organization]
 Seton, Ernest Thompson S: 323
Woodcut [art] W: 392 with pictures
 Block printing B: 406
 Hokusai H: 289 with picture
 Japan (Painting) J: 44 with picture; (Tokugawa period) J: 55-56
 Japanese print J: 62 with pictures
 Tokyo picture on T: 319
Wooden, John [American basketball coach]
 W: 393
Wooden doll
 Doll (The history of dolls) D: 288 with picture
Wooden shoe
 Netherlands (Rural life) N: 141
Woodhouse's toad
 Toad (Kinds of toads) T: 304
Woodhull, Victoria Clefflin [American social reformer] W: 393 with portrait
Woodin, William H. [American government official]
 Roosevelt, Franklin Delano (table) R: 458
 Treasury, Department of the (table) T: 407
Woodland caribou
 Caribou C: 237
Woodlands Cree Indians [American Indians]
 Cree Indians Ci: 1125
 Manitoba (Indian days) M: 160
Woodlands Indians
 Iowa (Indian days) I: 393
Woodleigh Replicas and Gardens
 Prince Edward Island (Places to visit) P: 788 with picture
"Woodnotes" [poem by Emerson]
 Emerson, Ralph Waldo (His poetry) E: 259
Woodpecker [bird] W: 393 with pictures
 Animal picture on A: 479
 Bird (Birds of the desert) B: 339 with picture;
 (Other means of communication) B: 354;
 (Building a nest) B: 356-357 with picture;
 (Bills) B: 362 with pictures
 Sapsucker S: 123
 Yellowhammer Y: 557
Woodrat W: 395
Woodring, Harry H. [American political leader]
 Kansas (table) K: 234
 Roosevelt, Franklin Delano (table) R: 458;
 (Election of 1940) R: 459
Woodrow Wilson House [Washington, D.C.]
 Washington, D.C. (Other Washington museums) W: 75
Woodrow Wilson International Center for Scholars
 Smithsonian Institution (Affiliated institutions) S: 519
Woodrow Wilson School
 Princeton University (Educational program) P: 795
Woodruff, Rollin S. [American political leader]
 Connecticut (table) Ci: 967
Woodruff, Wilford [American religious leader]
 Illinois (Places to visit) I: 62
 Utah (Territorial days and statehood) U: 246-248
Woodruff, William [American librarian]
 Arkansas (Libraries) A: 699
Woodruff Foundation, Robert W.
 Foundations (table) F: 430
Woods, Eldrick [American golfer] See Woods, Tiger in this index
Woods, George L. [American political leader]
 Oregon (table) O: 845
Woods, Granville T. [American inventor] W: 395
Woods, Lake of the [Canada-U.S.]
 Lake of the Woods L: 42 with map
Woods, Rex [Canadian artist]
 Canada, History of pictures on C: 140
Woods, Tiger [American golfer] W: 395
 Golf (Golf today) G: 267 with picture
Woods, William B. [American jurist]
 Supreme Court of the United States (table) So: 1000
Woods Cree Indians [American Indians] See Woodlands Cree Indians in this index
Woods Hole Oceanographic Institution [Massachusetts] W: 395
Wood's metal
 Alloy (Other alloys) A: 378
Woodsia scopulina [plant]
 Arkansas (Plant and animal life) A: 708
Woodside National Historic Site [Ontario]
 Canada (table: National historic sites) C: 114
Woodson, Carter Goodwin [American historian] W: 395
 Association for the Study of African-American Life and History A: 820
 Black History Month B: 388
Woodson, Charles [American football player]
 Football (table) F: 363
Woodson, Silas [American political leader]
 Missouri (table) M: 668
Woodstock [film]
 Woodstock festival W: 395
Woodstock festival [U.S. history] W: 395 with picture
 Rock music (Growing social significance) R: 379 with picture
Woodstock Nation
 Woodstock festival W: 395
Woodsworth, James Shaver [Canadian social reformer] W: 396
Woodward, Artemus [American manufacturer]
 Brush B: 652
Woodward, Arthur Smith [British anthropologist]
 Prehistoric people (table) P: 752
Woodward, Bob [American journalist]
 Watergate (The break-in and cover-up) W: 144
Woodward, Calvin M. [American educator]
 Industrial arts (Beginnings) I: 243
 Vocational education (Early vocational education in schools) V: 435
Woodward, Joanne [American actress]
 Motion picture (Best performance by an actress: 1957) M: 862
 Newman, Paul N: 379
Woodward, William H. [American educator]
 Dartmouth College case D: 39
Woodwind instrument [music]
 Music (Wind instruments) M: 949 with pictures
 Orchestra O: 820 with pictures
Woodwind section [music]
 Orchestra (The musicians) O: 820
Woodworkers of America, International [labor union]
 Carpenters and Joiners of America, United Brotherhood of C: 246
Woodworking [handicraft] W: 396 with pictures
 Careers (Production) C: 229
 Industrial arts (Industrial arts courses) I: 242-243
 Tool (Woodworking tools) T: 330
 United States picture on U: 113
Woody nightshade [plant]
 Bittersweet B: 384
Woody stem
 Leaf (A leaf begins its life) L: 152
 Plant (Stems) P: 530 with picture
 Stem (Woody stems) So: 887-888 with diagram
Wool
 Weaving (Types of weaves) W: 173 with pictures
Woofers [electronics]
 Speaker S: 768
Wool W: 399 with pictures
 Clothing (Clothing materials) Ci: 704;
 (Protecting the public) Ci: 705
 Fiber (Animal fibers) F: 87 with picture
 Goat (Products) G: 240
 Interior design (Choosing patterns and textures) I: 332
 Rugs and carpets (Materials used in rugs and carpets) R: 513-514
 Sheep (Raising sheep) S: 383
 Textile (Natural fibers) T: 212-213
 See also the list of Related Articles in the Wool article
Wool, John E. [American military leader]
 Lee, Robert Edward (The Mexican War) L: 177
Wool fat See Lanolin in this index
Wool maggot [insect]
 Blow fly B: 419
Wool Products Labeling Act [1939]
 Clothing (Protecting the public) Ci: 705
 Textile (In the United States and Canada) T: 218
Woolaroc Museum
 Oklahoma (Places to visit) O: 722
Woolen [yarn]
 Wool (Making yarn) W: 400
Woolf, Leonard [British author]
 Woolf, Virginia W: 401
Woolf, Virginia [British author] W: 401
 Bloomsbury Group B: 418
 English literature (Literature before World War I) E: 322
 Novel (New directions in the novel) N: 573-574
Woolleston, Toss [New Zealand painter]
 New Zealand (The arts) N: 349
Woolley, Sir Leonard [British archaeologist]
 W: 402
Woolley, Mary Emma [American educator]
 W: 402
Woolly bear [insect] See Woollybear in this index
Woolly daisy
 Flower picture on F: 290
Woolly loco [plant]
 Locoweed L: 418
Woolly mammoth [extinct animal]
 Mammoth M: 130
 Fossil (Other processes) F: 425-426 with picture
Woolly monkey W: 402
 Animal picture on A: 481
 Monkey pictures on M: 728
Woolly-necked stork
 Stork So: 911
Woollybear [insect] W: 402 with picture
 Insect picture on I: 282
 Moth (Tiger moths) M: 840-841 with picture
Woolman, John [American religious leader]
 W: 402
Woolrich, Cornell [American author] W: 402
Woolworth, Charles S. [American businessman] W: 403
Woolworth, Frank Winfield [American businessman] W: 403
Woolworth Company, F. W.
 Woolworth, Charles S. W: 403
 Woolworth, Frank Winfield W: 403
Wootz steel
 Iron and steel (The first steel) I: 451
Worcester [Massachusetts] W: 403
Worcester Art Museum
 Massachusetts (Museums) M: 275 with picture
Worcester porcelain
 Porcelain (English porcelain) P: 677
Worcester v. Georgia [U.S. history]
 Jackson, Andrew (The Indian issue) J: 13
Word [electronics]
 Computer chip (Word length) Ci: 924e
Word [language] See Words in this index
Word order
 Adjective (The position of adjectives) A: 57
 Grammar (Principles of English grammar) G: 303; G: 303

- Language (The makeup of language) L: 62-63
- Word processing W: 403**
 Computer (Dedicated computers) Ci: 910;
 (Applications software) Ci: 917
 Office work (Recording information) O: 677
 Teaching (Guiding and assisting student learning) T: 66
- Word processor** [machine]
 Word processing W: 403
- Word-recognition strategy**
 Reading (Comprehending what is perceived) R: 157
- Worden, Alfred Merrill** [American astronaut] W: 404
- Words**
 Dictionary D: 192
 Etymology E: 375
 Language L: 62
 Parts of speech P: 189
 Pronunciation P: 820
 Semantics S: 290
 Slang S: 499
 Spelling So: 775
 Vocabulary V: 434
- Wordsworth, William** [British poet] W: 404
 Coleridge, Samuel Taylor (His life) Ci: 771
 English literature (Romantic poetry) E: 320
 Lake Poets L: 44
 Poetry (Rhythm and meter) P: 591-594;
 (Romantic poetry) P: 597
 Romanticism (Romanticism in literature) R: 427
- Work** [employment] See Careers; Employment in this index
- Work** [physics] W: 404
 Calculus (Integral calculus) C: 23
 Energy E: 273
 Foot-pound F: 353
 Machine M: 13
 Metric system (Mechanics) M: 437-440
 Power P: 727
 Thermodynamics T: 253
- Work, Hubert** [American government official]
 Coolidge, Calvin (table) Ci: 1032
 Interior, Department of the (table) I: 325
- Work credit**
 Social security (Old-age, survivors, and disability insurance) So: 553
- Work day**
 Serf S: 316
- Work force**
 Labor force L: 3
- Work of cohesion** [physics]
 Cohesion Ci: 756
- Work print**
 Motion picture (Shooting the movie) M: 853-854; (Preliminary steps) M: 854
- Work Projects Administration** [U.S. history]
 See Works Progress Administration in this index
- Work-release program**
 Criminal justice system (Problems in the correctional system) Ci: 1144
 Prison (Special facilities and services) P: 806
- Work rule** [labor relations]
 Railroad (Railroad systems) R: 112-113
- Work school** [education]
 Alternative school (Features of alternative schools) A: 388-389
- Work shoe**
 Shoe (Kinds of shoes) S: 431 with picture
- Work song**
 Folk music (Kinds of folk music) F: 321
- Work-study**
 Cooperative education Ci: 1037
- Worked lumber**
 Lumber (Kinds of lumber) L: 517
- Worker** [entomology]
 Ant (Life in an ant colony) A: 523; (The bodies of ants) A: 521 with picture
 Bee (The honey bee colony) B: 201 with pictures; (Division of labor) B: 205 with pictures
 Insect (Family life) I: 294-295
 Termite (Life and habits) T: 173
 Wasp (Group life) W: 111
- Workers, Women**
 Women's movements (Women's status through the ages) W: 383-384
- Workers' compensation W: 405**
 Insurance (Social insurance) I: 314
 Social security (Workers' compensation) So: 555
- Workers' Party** [Brazil]
 Brazil (Politics) B: 569
- Workers' Party** [North Korea]
 Kim Jong Il K: 317
- Workhouse** [English history]
 Welfare (Early welfare laws) W: 191
- Working beam** [mechanical device]
 Watt, James W: 148
- Working capital** [economics]
 Industry (Capital) I: 257
- Working class**
 Industrial Revolution (The working class) I: 251
 Marx, Karl (Marx's ideas) M: 237
 Social class So: 550
 World, History of the (The Industrial Revolution) W: 444-445
- Working conditions**
 Careers (Working conditions) C: 215
 Workers' compensation W: 405
- Working dog**
 Dog (Working dogs) D: 266 with pictures
- Working memory**
 Memory (Long-term memory) M: 392
- Workingmen's Association, International** [European history] See International Workingmen's Association in this index
- Workers' Compensation Act** [1915]
 Indiana (The early 1900's) I: 216
- Workpiece**
 Machine tool M: 17 with pictures
- Workplace**
 Occupational medicine O: 647
- Workplace literacy**
 Reading (The importance of reading) R: 155-156
- Works**
 Clock (Kinds of clocks) Ci: 682i with diagrams
- Works and Days** [poem by Hesiod]
 Greek literature (Epic poetry) G: 377
 Hesiod H: 218
- Works made for hire** [law]
 Copyright (Owners' rights) Ci: 1047
- Works of John Wesley, The** [book by Wesley]
 Wesley, John (Leadership of the Methodist societies) W: 197-198
- Works Progress Administration** [U.S. history]
 W: 405
 Adult education (In the 1900's) A: 69
 New Deal (table) N: 201; (Works Progress Administration) N: 201
 Nursery school (History) N: 616
 Roosevelt, Franklin Delano (The New Deal) R: 457
 South Dakota (Boom-and-bust economy) So: 684
- Worksheet** [spreadsheet]
 Spreadsheet So: 805
- Workstation** [electronics]
 Computer (Personal computers) Ci: 909
- World W: 406 with pictures and maps**
 See also Earth in this index
 Economics (The world economy) E: 63
 Gas [fuel] map on G: 55
 Literacy (Literacy in other countries) L: 352
 Income (Distribution of income) I: 101
 Population (World population) P: 672
 Time (World time zones) map on T: 290-291
 See also the list of Related Articles in the World article
- World, History of the W: 420 with pictures and maps**
 Races, Human (The three-race theory) R: 53
 Writing W: 512
 See also Civilization in this index, and the list of Related Articles in the World, History of the article
- World According to Garp, The** [book by Irving]
 Irving, John I: 459
- World AIDS Day**
 AIDS (Public awareness) A: 164b
- World Alliance of Reformed Churches**
 Presbyterians P: 756a
- World Almanac, The** [book]
 Almanac A: 379
- World Anti-Slavery Convention** [1840]
 Stanton, Elizabeth Cady So: 839
- World as Will and Representation, The** [work by Schopenhauer]
 Schopenhauer, Arthur S: 186
- World Association of Girl Guides and Girl Scouts**
 Girl Scouts G: 196; (In other countries) G: 199
- World Bank** [U.N.] W: 450
 Bank (Multilateral development banks) B: 90-91
 Bretton Woods B: 594
 Food supply (Food supply programs) F: 350
 Foreign aid (Worldwide lending programs) F: 385
 International Finance Corporation I: 340
 International Monetary Fund I: 343
- New Hampshire (The mid-1900's) N: 226-227
- World Book Dictionary, The**
 Dictionary (Modern dictionaries) D: 194
- World Book Encyclopedia, The**
 Encyclopedia (How a World Book article is prepared) E: 267 with pictures; (Today's encyclopedias) E: 268b-269
 Blindness picture on B: 402
- World Book Information Finder, The** [software]
 Encyclopedia (Today's encyclopedias) E: 268b-269
- World Book Multimedia Encyclopedia, The** [software]
 Computerized instruction (Types of programs) Ci: 924h
 Encyclopedia (Today's encyclopedias) E: 268b-269
- World Book New Illustrated Information Finder, The** [software]
 Encyclopedia (Today's encyclopedias) E: 268b-269
- World Book Online**
 Encyclopedia (Today's encyclopedias) E: 268b-269
- World Boxing Association**
 Boxing (Regulation) B: 532
- World Boxing Council**
 Boxing (Regulation) B: 532
- World Bridge Federation**
 Bridge (Regulation of tournaments) B: 605
- World Calendar, The**
 Calendar (Calendar reform) C: 32
- World Community of Al-Islam in the West**
 See Black Muslims in this index
- World Council of Churches W: 450**
 Christianity (Christianity today) C: 527
 Missionary (Organization) M: 621
 Protestantism (The unity movement [the 1800's and 1900's]) P: 835
- World Court** [UN] See International Court of Justice in this index
- World Crisis** [book by Churchill]
 Churchill, Sir Winston Leonard Spencer (Between wars) C: 547
- World Cup** [skiing]
 Skiing (Skiing as a sport) S: 486
- World Cup** [soccer] W: 450
 Soccer So: 544; (International competition) So: 548; (table: World Cup championship games) So: 549; (History) So: 549
- World Day for Water**
 Water (The challenge of today) W: 132
- World Drivers' Championship**
 Automobile racing (Formula One racing) A: 976-977; (Growth of organized automobile racing) A: 979-980
- World Enough and Time** [book by Warren]
 Warren, Robert Penn W: 37
- World Federation of Occupational Therapists**
 Occupational therapy (History) O: 649
- World Federation of Trade Unions**
 Labor movement (International organizations) L: 15
- World Festival of the Circus of Tomorrow**
 Circus (Places to visit and annual events) Ci: 566
- World Food Conference** [UN]
 United Nations (Fighting hunger) U: 89
- World Food Programme**
 Food and Agriculture Organization F: 340
 Food supply (Food aid programs) F: 351
- World Football League**
 Football (New professional leagues) F: 368
- World Golf Championships**
 Golf (Golf today) G: 267
- World Health Organization** [UN] W: 450
 Disease D: 226
 Foreign aid (Technical assistance and relief) F: 384
 Globalization (Features of globalization) G: 233
 Health H: 125
 Medicine (Medical organizations) M: 370; (The medical revolution) M: 366-377
 Smallpox S: 513
- World Heritage List**
 National park (International concern for national parks) N: 42j
 Northwest Territories (The land) N: 530-531
- World Hockey Association**
 Hockey (Developments in the late 1900's) H: 282
- World Ice Hockey Championship**
 Hockey (The World Ice Hockey Championships) H: 282
- World Island**
 Geopolitics G: 106

World Jewish Congress [organization] W: 450

World League of American Football

Football (New professional leagues) F: 368

World map

See also *Globe in this index*

World map on W: 410

World Medical Association W: 451

Medicine (Medical organizations) M: 370

World Meteorological Organization [UN]

W: 451

Hurricane (Tropical storm) H: 453-454

Weather (Measuring the weather) W: 162

World Methodist Council

Methodists M: 434

World ocean

Ocean (The world ocean) O: 651

World Ocean Circulation Experiment

Atlantic Ocean (New techniques) A: 867

Pacific Ocean (Scientific research) P: 15

World of Apu, The [film]

Ray, Satyajit R: 152

World of Dreams, The [book by Ellis]

Ellis, Havelock E: 243

World of Wonders [book by Davies]

Davies, Robertson D: 46

World of Yesterday, The [book by Zweig]

Zweig, Stefan Z: 614

World politics

Geopolitics G: 106

World renewal ceremony

Indian, American (Before European contact)

I: 163-164

World Scout Conference

Boy Scouts (Scouting throughout the world)

B: 540

World Series

Baseball (table) B: 131; (Major leagues) B: 130;

(Recent developments) B: 137-139

Massachusetts (Interesting facts) M: 271

World Ski Championships

Skiing (Skiing as a sport) S: 486

World soul [philosophy]

Philosophy (Ancient philosophy) P: 386-387

World Tomorrow [periodical by Thomas]

Thomas, Norman Mattoon T: 262

World trade See *International trade in this index*

World Trade Center [building, New York City]

W: 51 with picture

See also September 11 terrorist attacks in this index

Bush, George Walker (Bush's administration)

B: 722f

Hijacking H: 230

Hudson River tunnels (The PATH tunnels)

H: 406

New York (Interesting facts) N: 291; (The early

2000's) N: 320

New York City (Manhattan) N: 323-324;

(Recent developments) N: 342-343 with

picture

September 11 terrorist attacks S: 310 with

picture

Terrorism (History of terrorism) T: 179; picture

on T: 177

United States, History of the (Recent events)

U: 195-196 with picture

World Trade Organization W: 451

China (Recent developments) C: 507

General Agreement on Tariffs and Trade G: 82

Globalization (Features of globalization) G: 233

International trade (Government trade policies)

I: 348-349

Tariff (Modern tariff policies) T: 44

World War I [1914-1918] W: 452 with pictures

and maps

Ace A: 24

Air force (World War I) A: 185

Aircraft, Military (World War I) A: 204 with pictures

Airplane (World War I [1914-1918]) A: 234

with picture

Airship (World War I) A: 252

American literature (The world wars and

depression [1914-1945]) A: 420

Army (Armies in the two world wars) A: 728

Automobile (World War I and the Roaring

Twenties) A: 966

Aviation (World War I [1914-1918]) A: 987

Balkans (World War I [1914-1918]) B: 42

Balloon (Balloons in war) B: 61

Bomb (History) B: 452

Bosnia-Herzegovina (History) B: 492-493

Caroline Islands C: 244

Coast Guard, United States (World War I)

Ci: 737

Code talkers Ci: 749

Codes and ciphers (History) Ci: 751

Communism (Before 1917) Ci: 892

Depth charge D: 152

Draft, Military (Military drafts throughout history) D: 318

Guerrilla warfare (History) G: 420

Guided missile (The first guided missiles) G: 427

Hitler, Adolf (Corporal Hitler) H: 265

Homing pigeon (History) H: 306

Imperialism (History) I: 93

International relations (Collective security) I: 345

Krupp K: 389

Lenin, V. I. (Outcast) L: 193

Logistics L: 426

Mercier, Désiré Joseph Cardinal M: 413

Middle East (World War I) M: 533

Mine warfare (History) M: 565

Navy (World War I) N: 80

Neutrality (World War I) N: 153

Nicholas II (czar) N: 402

Novel (The modern novel) N: 573

Pacifism P: 18

Palestine (World War I and the Balfour

Declaration) P: 105

Pershing, John Joseph (World War I) P: 296

Peter I P: 323

Propaganda (During World War I) P: 825

Quebec (World War I) Q: 32

Red Cross (In the United States) R: 187

Socialism (World Wars I and II) So: 561

South Africa (The Union of South Africa)

So: 618-619

Statue of Liberty (Growth as a symbol)

So: 878

War (table) W: 25

Warship (Warships in the two world wars)

W: 41; picture on W: 43

World, History of the (The world wars)

W: 446; picture on W: 421

Allies

Air Force, United States (World War I) A: 194

Army, United States (World War I) A: 739; picture on A: 730

Australia (World War I) A: 924

Belgium (The world wars) B: 234

Canada, History of (World War I and independence) C: 149

Foreign Legion F: 386

Italy (World War I) I: 516

Marine Corps, United States (The 1900's) M: 209; picture on M: 207

Navy, United States (World War I [1914-1918]) N: 88

North Sea N: 518

Russia (World War I) R: 552

United Kingdom (World War I) U: 70

Syria (World War I to independence) So: 1075

United States, History of the (War clouds in Europe) U: 183; (A new place in the

world) U: 184 with picture

War (The world wars) W: 26

Central Powers

Austria (Austria-Hungary) A: 939

Austria-Hungary A: 941

Bulgaria (The world wars) B: 693

Germany (World War I) G: 166 with picture and map

Battles

Helgoland H: 168

Paris (Paris in wartime) P: 166

Reims R: 208

Verdun, Battles of V: 316

Vimy Ridge, Battle of V: 385

Aftermath

Arms control (History of arms control) A: 721

Fascism (History) F: 49

Fourteen Points F: 437

National debt (Causes of national debt) N: 32

Nazism (The birth of Nazism) N: 92

Refugee R: 203

Unknown soldier U: 211

Versailles, Treaty of (Background of the treaty) V: 340

War (The building and collapse of nations) W: 25

War crime (World War I) W: 27

See also the list of *Related Articles in the World War I article*

World War II [1939-1945] W: 468 with pictures and maps

Ace A: 24

African Americans (World War II [1939-1945]) A: 1361 with picture

Air force (World War II) A: 185

Aircraft, Military (World War II [1939-1945])

A: 205 with pictures

Airplane (During World War II [1939-1945])

A: 238

Airship (World War II to the present) A: 252

Amphibious warfare A: 442

Army (Armies in the two world wars) A: 728

Asian Americans (Japanese internment)

A: 812e with picture

Automobile (World War II and the postwar years) A: 968 with picture

Aviation (World War II [1939-1945]) A: 990

Babi Yar B: 3

Baby boom generation (Causes of the baby boom) B: 11

Balkans (World War II [1939-1945]) B: 42

Balloon (Balloons in war) B: 61 with picture

Bomb (History) B: 452

Coast Guard, United States (World War II) Ci: 738

Code talkers Ci: 749

Codes and ciphers (Later developments) Ci: 751

Colonialism (Decolonization) Ci: 814

Concentration camp Ci: 927

Draft, Military (Military drafts throughout history) D: 318

Family (Changes) F: 23-24

Foreign aid (United States aid programs) F: 383

Great Depression G: 339

Guerrilla warfare (History) G: 420

Guided missile (The first guided missiles) G: 427

Hiroshima H: 243

Hispanic Americans (Effects of World War II) H: 252

Holocaust H: 296

Homelessness (History) H: 302

Human rights (The development of human rights) H: 428-428a

Indochina (World War II) I: 225

International relations (Collective security) I: 345

Invention (Military needs) I: 355

Katyn Massacre K: 249

Krupp K: 389

Leningrad, Siege of L: 195

Lidice L: 270

Logistics L: 426

London (The Blitz) L: 442 with picture

Maginot Line M: 53

Mauldin, Bill M: 313

Moscow (Early 1900's) M: 827

Navy (World War II) N: 80

Neutrality (World War II) N: 154

Nuclear weapon (World War II) N: 601

Pearl Harbor P: 218

Philippines (Japanese control) P: 380

Poland (World War II) P: 613

Prisoner of war P: 808a

Propaganda (During World War II) P: 825

Quebec (World War II) Q: 32; (The early 1900's) Q: 37

Radar (Advances during World War II) R: 72

Radio (The Golden Age of Broadcasting) R: 92-93

Rationing R: 148

Red Cross (In the United States) R: 187

Salazar, António de Oliveira S: 60

Schindler, Oskar S: 175

School (The mid-1900's) S: 184

Skiing (The middle and late 1900's) S: 487

Socialism (World Wars I and II) So: 561

South Africa (The rise of Afrikaner nationalism) So: 619

Switzerland (Neutrality in the world wars) So: 1060

Tokyo (World War II) T: 319

Tokyo Rose T: 320

Truck (History) T: 458

Union of Soviet Socialist Republics (World War II) U: 37 with picture

United States, History of the (The United States in World War II) U: 189 with pictures

War (Information and intelligence) W: 24; (table) W: 25; (The world wars) W: 26

Warship (Warships in the two world wars) W: 41-42 with pictures

World, History of the (The world wars) W: 446

Allies

Air Force, United States (World War II) A: 195

Army, United States (World War II) A: 739; picture on A: 730

- Australia (World War II) A: 925
 Belgium (The world wars) B: 234
 Canada, History of (World War II) C: 150
 China (War with Japan) C: 504-505
 Churchill, Sir Winston Leonard Spencer (Wartime prime minister) C: 547 *with pictures*
 De Gaulle, Charles André Joseph Marie (Leader of the Free French) D: 90
 Foreign Legion F: 386
 France (World War II) F: 475 *with picture and map*
 India (World War II [1939-1945]) I: 132
 Indian, American (In the United States) I: 179
 Luxembourg (History) L: 531
 Marine Corps, United States (The 1900's) M: 209
 Navy, United States (World War II [1939-1945]) N: 89
 Netherlands (World War II) N: 149 *with picture*
 New Zealand (World War II) N: 355
 North Sea N: 518
 Roosevelt, Franklin Delano (America goes to war) R: 460 *with pictures*
 Russia (World War II) R: 554
 Stalin, Joseph (World War II) So: 827
 Tehran Conference T: 88
 United Kingdom (World War II) U: 70
- Axis**
 Axis A: 994
 Berlin (World War II) B: 264 *with picture*
 Bulgaria (The world wars) B: 693
 Finland (World War II) F: 117 *with picture*
 Germany (World War II) G: 168 *with picture and map*
 Hitler, Adolf (World War II) H: 268
 Hungary (World War II) H: 446
 Italy (World War II) I: 517 *with picture*
 Japan (World War II) J: 58
 Kamikaze K: 212
 Mussolini, Benito (World War II) M: 967
 Nazism (Expansion, war, and collapse) N: 93
 Prussia (Decline of Prussia) P: 843
 World War II (table: The Axis) W: 471
- Battles**
 Caroline Islands C: 244
 Gdańsk G: 74
 Helgoland H: 168
 Malta (History) M: 113-114
 Paris (Paris in wartime) P: 166
 Reims R: 208
- Aftermath**
 Arms control (History of arms control) A: 721-722
 Cold War (The coming of the Cold War) Ci: 762-763
 Communism (The spread of Communism) Ci: 893
 Disabled (Attitudes toward people with disabilities) D: 221
 Helsinki Accords H: 180
 National debt (Causes of national debt) N: 32
 Palestine (World War II and the division of Palestine) P: 105
 Refugee R: 203
 United Nations (The founding of the UN) U: 94
 Unknown soldier U: 212
 War crime (World War II) W: 27
 Women's movements (Decline after 1920) W: 385-386
See also the list of Related Articles in the World War II article
- World Wide Fund for Nature** [organization]
 Wildlife conservation (International cooperation) W: 305
 World Wildlife Fund W: 500
- World Wide Web** [computer network] W: 499
 Advertising (Internet) A: 76; (Recent developments) A: 80-81
 Berners-Lee, Tim B: 270
 Communication (The development of the Internet) Ci: 886
 Computer (The World Wide Web) Ci: 921
 Distance learning D: 238
 E-commerce (Business-to-consumer transactions) E: 2
 Information retrieval I: 268b
 Internet I: 350; (History of the Internet) I: 350e
 Invention (Recent developments) I: 364
 Journalism (Online journalism) J: 172; (Journalism today) J: 175
 Online service O: 763
 Remote control (History) R: 231
 Technology (The computer age) T: 75
 Telephone (Modems) T: 97-98
 Television (Digital television) T: 126-127
 Web site W: 175
- World Wildlife Fund** W: 500
 Wildlife conservation (International cooperation) W: 305
- World Zionist Organization**
 Weizmann, Chaim W: 188
- WorldCom, Inc.** [company]
 Business (Recent developments) B: 726
- WORLDNET** [television network]
 United States Information Agency U: 200
- World's Columbian Exposition** [Chicago]
 Chicago (A city reborn) C: 435 *with picture*
 Chicago, University of C: 437
 City planning (The Industrial Revolution) Ci: 603
 Ferris wheel F: 77 *with picture*
 Hagenbeck, Carl H: 5
 Painting (Women artists) P: 73
- World's fair** W: 500
- Worm** [animal] W: 500 *with pictures*
 Deep sea (Invertebrates) D: 82a *with picture*
 Flatworm F: 229 *with diagram*
 Schistosomiasis S: 176
- Worm** [computer]
 Computer (Computer security) Ci: 924
 Internet (Security) I: 350e
- Worm gear**
 Gear G: 75
- Worm lizard** [reptile] *See* Amphisbaenian *in this index*
- Worm snake** *See* Thread blind snake *in this index*
- Worms** [city, Germany] W: 501
- Worms** [disorder]
 Cat (Veterinary care) C: 295
 Disease (Other infectious diseases) D: 227
 Dog (Medical care) D: 279
- Worms, Concordat of** [1122]
 Church and state (In early times) C: 542
- Worms, Diet of** [1521]
 Luther, Martin (The Diet of Worms) L: 528
 Worms W: 501
 Worms, Edict of W: 502
- Worms, Edict of** [European history] W: 501
 Luther, Martin (The Diet of Worms) L: 528
 Reformation (Martin Luther) R: 197
- Worms Cathedral** [Germany]
 Architecture *picture on* A: 619
- Wormwood** [plant] W: 502
- Worry**
 Anxiety A: 562
- Worship** [religion]
 Religion (Religious rituals) R: 217
 Bible (The Bible in worship) B: 287
 Colonial life in America (Religious and political reasons) Ci: 788
 Dance (Why people dance) D: 25-26
 Idolatry I: 47
 Judaism (Worship) J: 181
 Prayer P: 734
 Protestantism (Worship and liturgy) P: 834
 Sculpture (Early medieval sculpture) S: 248
 Sun worship So: 988
- Worsted** [yarn]
 Wool (Making yarn) W: 400
- Wort**
 Brewing (Mashing) B: 595
- Worth, Jonathan** [American political leader]
 North Carolina (table) N: 490
- Worth, William Jenkins** [American general]
 Fort Worth F: 417
- Wörther, Lake** [Austria]
 Austria *picture on* A: 932
- Worthington, Thomas** [American political leader]
 Ohio (table) O: 699
- Wotan** [mythology] *See* Odin *in this index*
- Wotan** [opera character]
 Opera (*Ring of the Nibelung, The*) O: 806-807
- Wouk, Herman** [American author] W: 502
- Wound** [injury]
 First aid (First aid for bleeding) F: 136
 Tetanus T: 182
- Wound and the Bow, The** [book by Wilson]
 Wilson, Edmund W: 316
- Wound capacitor** [electricity]
 Capacitor C: 186
- Wound diphtheria** [disease]
 Diphtheria (Cause, symptoms, and complications) D: 215-216
- Wounded Knee** [South Dakota] W: 502
 American Indian Movement A: 412
 Sioux Indians S: 474
 South Dakota (The mid-1900's) So: 684
- Wounded Knee, Battle of** [1890]
 Ghost Dance G: 182
 Indian, American (After European contact) I: 159-160
 Indian wars (The Sioux wars) I: 194
 South Dakota (Territorial days) So: 681-683; *picture on* So: 682
 Wounded Knee (The 1890 massacre) W: 502
 Wovoka W: 502
- Wovoka** [American Indian religious leader]
 W: 502
 Indian, American (Prophets) I: 148
 South Dakota (Territorial days) So: 681-683
- Woyzeck** [play by Büchner]
 Büchner, Georg B: 663
 Opera (*Woyzeck*) O: 808
- Wozniak, Stephen G.** [American engineer]
 Computer (The personal computer) Ci: 924c *with picture*
- Wozzeck** [opera by Berg]
 Berg, Alban B: 257
 Classical music *picture on* Ci: 651
 Opera (The search for new forms) O: 799-800; (*Wozzeck*) O: 808
- WPA** [U.S. history] *See* Works Progress Administration *in this index*
- WPP Group** [company]
 Advertising (Advertising in other countries) A: 78
- Wrangell Mountains** [Alaska]
 Alaska (Land regions) A: 292
- Wrangell-St. Elias National Park** [Alaska]
 W: 502
 National Park System N: 43; (table: National parks) N: 49 *with picture*
- Wrangell-St. Elias National Preserve** [Alaska]
 National Park System (table: National preserves) N: 58
- Wrangler**
 Cowboy (The trail drive) Ci: 1111
- Wrapped art**
 Christo C: 537
- Wrapping paper**
 Paperwork (Wrapping paper) P: 138
- Wrasse** [fish] W: 503
 Fish *pictures on* F: 144, F: 155, F: 168
- Wreath** [decoration]
 Christmas (Christmas decorations) C: 535
 Holly H: 292
- Wren** [bird] W: 503 *with pictures*
 Animal *picture on* A: 483
 Bird (Birds of urban areas) B: 333 *with picture*; (Birds of Australia and the Pacific Islands) B: 349 *with picture*
- Wren, Sir Christopher** [English architect]
 W: 504 *with picture*
 Architecture (Baroque architecture) A: 622 *with picture*
 England (The arts) E: 298-299
 London (Churches) L: 435; (Other places of interest) L: 437; (Rebuilding the City) L: 441
 Urban renewal (History) U: 220
- Wrench**
 Tool (Metalworking tools) T: 331
- Wrentit** [bird]
 Babbler B: 2
- Wrestling** [sport] W: 504 *with pictures*
 Olympic Games (Summer Olympic Games) O: 746e-749 *with picture*
- Wretched of the Earth, The** [book by Fanon]
 Fanon, Frantz Omar F: 27
- Wriggler**
 Fly (Larva) F: 310 *with picture*
 Insect (Complete metamorphosis) I: 293
 Mosquito (Larva) M: 833
- Wright, Charles H.** [American physician]
 Museum of African American History M: 940
- Wright, Fielding L.** [American political leader]
 Dixiecrat Party D: 255
 Mississippi (table) M: 640
- Wright, Frances** [American social reformer]
 W: 506 *with portrait*
 Owen, Robert Dale O: 883
- Wright, Frank Lloyd** [American architect]
 W: 507 *with pictures*
 Architecture (Frank Lloyd Wright) A: 629; *picture on* A: 631
 Chicago (Architecture) C: 428
 Florida *picture on* F: 246
 Furniture (Organic design) F: 583 *with picture*
 Guggenheim Museum G: 422
 Pennsylvania (Places to visit) P: 254
 United States *picture on* U: 117
 Wisconsin (Places to visit) W: 356
- Wright, George** [American baseball player]
 Baseball (table: Hall of Fame) B: 135

- Wright, Harold Bell** [American author]
Branson B: 564
- Wright, Harry** [American sportsman]
Baseball (table: Hall of Fame) B: 135
- Wright, James Claude, Jr.** [American political leader] W: 508
Congress of the United States (Congressional ethics) Ci: 948
- Wright, John Joseph Cardinal** [American religious leader]
Cardinal (table: American cardinals) C: 211
- Wright, Joseph A.** [American political leader]
Indiana (table) I: 214
- Wright, Louis T.** [American doctor]
Spingarn Medal (table: 1940) So: 793
- Wright, Luke E.** [American government official]
Roosevelt, Theodore (table) R: 470
- Wright, Orville** [American inventor] See Wright brothers *in this index*
- Wright, Philemon** [American businessman]
Ottawa (Early days) O: 874
- Wright, Richard** [American author] W: 508
African American literature (The 1900's) A: 136a
American literature (Realist fiction) A: 422
- Wright, Robert** [American political leader]
Maryland (table) M: 255
- Wright, Sewall** [American biologist]
Evolution (The synthetic theory) E: 432
- Wright, Silas** [American political leader]
New York (table) N: 313
Polk, James Knox (Election of 1844) P: 642
Vice President of the United States (Nomination) V: 350
- Wright, Teresa** [American actress]
Motion picture (Best performance by an actress in a supporting role: 1942) M: 863
- Wright, W. Aldis** [British scholar]
Shakespeare, William (Editions of the 1700's and 1800's) S: 368
- Wright, Wilbur** [American inventor] See Wright brothers *in this index*
- Wright, Willard H.** [American author] See Van Dine, S. S. *in this index*
- Wright A flyer** [airplane]
Aircraft, Military picture on A: 204
- Wright brothers** [American inventors] W: 508 *with pictures*
Air Force, United States (Early years) A: 194 *with picture*
Airplane (The Wright brothers) A: 231 *with pictures*; (Other pioneer planes and fliers) A: 233-234
Aviation A: 984; (History of the aviation industry) A: 986
Curtiss, Glenn Hammond Ci: 1199
Glider (Early days) G: 230 *with picture*
Invention (The inventive process) I: 355-357
Kite (History) K: 340-341
Ohio picture on O: 701
Transportation (The beginnings of modern transportation) T: 390
- Wright Brothers National Memorial** [North Carolina]
National Park System (table: National memorials) N: 54
Wright brothers (After Wilbur's death) W: 510
- Wright Company**
Aviation (History of the aviation industry) A: 986-987
Wright brothers (First airplane) W: 509-510
- Wright-Patterson Air Force Base** [Ohio]
Ohio (Places to visit) O: 690 *with picture*
- Wrinkle in Time, A** [book by L'Engle]
L'Engle, Madeleine L: 191
- Wrinkle ridge** [astronomy]
Moon (Wrinkle ridges) M: 790
- Wriothesley, Henry** [English public figure]
Shakespeare, William (His first poems) S: 347-348
- Wrist** W: 510 *with diagram*
Carpal tunnel syndrome C: 245 *with diagram*
Hand (Parts of the hand) H: 40
- Wrist watch**
Watch (History) W: 115 *with pictures*
- Writ** [law] W: 510
- Writ of assistance** [law] W: 510
Otis, James O: 870
- Writ of attachment** [law]
Attachment A: 878
- Writ of certiorari** See Certiorari, Writ of *in this index*
- Writ of error** [law]
Writ W: 510
- Writ of habeas corpus** [law]
Habeas corpus H: 2
- Writ of mandamus** [law]
Mandamus M: 135
- Writ of replevin** [law]
Writ W: 510
- Writ of summons**
Nobility (The creation of peerages) N: 450
- Writer**
Television (Planning and preparation) T: 110c-110d
- Writer, The** [magazine]
Writing (Free-lance markets) W: 511
- Writer's Digest** [magazine]
Writing (Free-lance markets) W: 511
- Writer's Market** [book]
Writing (Free-lance markets) W: 511
- Writing** [career] W: 511
History (The writing) H: 261
Literature L: 352
Newspaper (The editorial department) N: 381
Television (Planning and preparation) T: 110c-110d
See also the list of Related Articles in the Writing article
- Writing** [communication] W: 512
Alphabet A: 381
Communication (Early writing systems) Ci: 879 *with pictures*
Education (The beginning of formal education) E: 97
Handwriting H: 46 *with pictures*
Hieroglyphics H: 225
Indian, American (Writing) I: 150 *with picture*
Invention (The first civilizations) I: 358
Language (How language began) L: 63-64
Library (History) L: 257
Manuscript M: 172
Maya (Communication and learning) M: 324 *with picture*
Newspaper (Writing and editing stories) N: 383
Prehistoric people P: 743; (The end of prehistoric times) P: 753
Scribe S: 226
Spelling So: 775
Sumer So: 972 *with pictures*
- Writing** [skill]
See also Composition *in this index*
Literacy L: 350
Reading (The whole-language philosophy) R: 158
A Guide to Writing Skills Research Guide: 6
- Writing paper**
Paper (Special kinds of paper) P: 136
- Writings** [religious book]
Bible (Books of the Hebrew Bible) B: 279-280; (Development of the Hebrew Bible) B: 281-282
Old Testament (Contents) O: 740-741
- Wroclaw** [Poland] W: 513
Poland picture on P: 609
Silesia S: 457
- Wrong font** [printing]
Proofreading (Proofreaders' marks) P: 822
- Wroth, Lady Mary** [British author]
English literature (Prose writings) E: 317
- Wrought iron**
Iron and steel (Kinds of iron and steel) I: 437; (Making iron products) I: 441-442
Ironwork, Decorative pictures on I: 454
- Wryneck** [bird] W: 513 *with picture*
- WSB** [radio station]
Georgia (Communication) G: 129
- WSM** [radio network]
"Grand Ole Opry" G: 308
"WSM Barn Dance" [radio program]
"Grand Ole Opry" G: 308
- WTO** [organization] See World Trade Organization *in this index*
- Wu, Chien-shiung** [American physicist] W: 514
Parity [physics] P: 167
- Wu Chen** [Chinese artist]
Painting (Chinese painting) P: 44-46
- Wu Cheng'en** [Chinese author]
Chinese literature (Drama and fiction) C: 512
- Wu Daozi** [Chinese painter] W: 514
- Wu Tao-tzu** [Chinese painter] See Wu Daozi *in this index*
- Wu-Ti** [Chinese emperor] See Wudi *in this index*
- Wu Xinzhi** [Chinese anthropologist]
Prehistoric people (table) P: 752
- Wuchang** [China]
Wuhan W: 514
- Wuchereria bancrofti** [animal]
Filaria F: 99
- Wudi** [Chinese emperor]
Exploration (The Chinese) E: 441
Han dynasty H: 38
- Wuerffel, Danny** [American football player]
Football (table) F: 363
- Wuhan** [China] W: 514
- Wundt, Wilhelm** [German philosopher] W: 514
Psychology (Psychology becomes a science) P: 849
Science (Scientific advances of the 1800's) S: 200-201
- Wupatki National Monument** [Arizona] W: 514
National Park System (table: National monuments) N: 50-52
- Würm ice age** [geology]
Ice age (Evidence of ice ages and their climates) I: 6-7
- Wuthering Heights** [book by Brontë]
Brontë sisters (Their works) B: 637
- WWF** [organization] See World Wildlife Fund *in this index*
- WWJ** [radio station, Detroit]
Radio (The start of broadcasting) R: 92
- Wyandot City** [former city]
Kansas City [Kansas] (Government and history) K: 240
- Wyandot Indians** [American Indians]
Kansas City [Kansas] (Government and history) K: 240
- Wyandotte** [breed]
Chicken (table) C: 443
- Wyandotte** [former city]
Kansas City [Kansas] (Government and history) K: 240
- Wyandotte Cave** [Indiana]
Indiana (Places to visit) I: 206 *with picture*
- Wyatt, Hattie**
Caraway, Hattie Ophelia Wyatt C: 203 *with portrait*
- Wyatt, John** [British inventor]
Industrial Revolution (Spinning machines) I: 248-249
- Wyatt, Sir Thomas** [English poet] W: 514
English literature (Elizabethan poetry) E: 316-317
Poetry (Renaissance poetry) P: 596
Sonnet So: 593
Surrey, Earl of So: 1010
- Wyatt's Rebellion** [English history]
Elizabeth I (Early years) E: 238
- Wycherley, William** [English dramatist] W: 514
- Wycliffe, John** [English religious leader] W: 514
Hus, John H: 456
John of Gaunt J: 134
Lollards L: 426
Puritans (Puritan beliefs) P: 910
- Wye** [river, Great Britain]
Wales (Rivers and coastline) W: 11
- Wye River Memorandum** [peace agreement]
Israel (Recent developments) I: 489
- Wyeth, Andrew** [American painter] W: 515 *with picture*
Painting (Space) P: 35; (Tempera) P: 38-39 *with picture*
- Wyeth, N. C.** [American artist]
Coronado, Francisco Vázquez de picture on C: 1068
Knights and knighthood picture on K: 350
Literature for children picture on L: 364
Pyle, Howard P: 915
Robin Hood picture on R: 367
Wyeth, Andrew W: 515
- Wyeth, Nathaniel J.** [American pioneer]
Lee, Jason L: 176
Oregon Trail O: 850
- Wyler, William** [American director] W: 515
Motion picture (Best achievement in directing: 1942, 1946, 1959) M: 862
- Wylie, Elinor** [American poet] W: 515
- Wyman, Bill** [British musician]
Rolling Stones R: 403
- Wyman, Jane** [American actress]
Motion picture (Best performance by an actress: 1948) M: 862
Reagan, Ronald Wilson (Family life) R: 166
- Wynette, Tammy** [American singer]
Country music (Modern country music) Ci: 1098c
- "Wynken, Blynken, and Nod"** [poem by Field]
Field, Eugene F: 92
- Wynn, Early** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Wynne, Arthur** [American journalist]
Crossword puzzle Ci: 1157
- Wynne, Robert J.** [American government official]
Roosevelt, Theodore (table) R: 470
- Wyoming** W: 516 *with pictures and maps*
Laramie, Jacques L: 75
See also the list of Related Articles in the Wyoming article

Wyoming, University of W: 538
Wyoming (Libraries and museums) **W:** 520-521 *with picture*

Wyoming State Library [Wyoming]
Wyoming (Libraries and museums) **W:** 520-521

Wyoming Stock Growers Association
Wyoming (Statehood) **W:** 536

Wyoming Territorial Library [Cheyenne, Wyoming]
Wyoming (Libraries and museums) **W:** 520-521

Wyoming Valley [region, Pennsylvania] **W:** 538

Wyoming Valley Massacre [1778] **W:** 538
Pennsylvania (The Revolutionary War) **P:** 265-267

Wyse, Lucien Napoleon Bonaparte [French businessman]
Panama Canal (The French failure) **P:** 125

Wyspiański, Stanisław [Polish dramatist]
Poland (The arts) **P:** 607

Wyss family [Swiss authors] **W:** 538

Wyss, Johann David [Swiss author]
Wyss family **W:** 538

Wyss, Johann Emmanuel [Swiss author]
Wyss family **W:** 538

Wyss, Johann Rudolph [Swiss author]
Wyss family **W:** 538

Wyszyński, Stefan Cardinal [Polish religious leader]
Poland (Communist rule) **P:** 613-614

Wythe, George [American patriot] **W:** 538
Jefferson, Thomas (Education) **J:** 77; (Lawyer) **J:** 78

X

X [letter] **X:** 539 *with pictures*

X, Malcolm [American social reformer] *See* Malcolm **X** *in this index*

X-1 [aircraft]
Jet propulsion (Development of jet propulsion) **J:** 114-115
Rocket (Rocket-powered airplanes) **R:** 391

X-15 [aircraft]
Airplane (Supersonic airplanes) **A:** 238
Rocket (Atmospheric research) **R:** 386;
(Rocket-powered airplanes) **R:** 391

X-axis *See* X-coordinate *in this index*

X chromosome [genetics]
Heredity (Chromosomes and sexual determination) **H:** 202; (Sex-linked genes) **H:** 202

X-coordinate
Algebra (Working with equations) **A:** 356 *with pictures*

X-linked gene [genetics]
Heredity (Sex-linked genes) **H:** 202

X-linked recessive disorder
Genetic testing (Genes associated with disease) **G:** 85-86

X-ray astronomy
Astronomy (X-ray astronomy) **A:** 844

X-ray binary [astronomy]
Star (Binary stars) **So:** 852
X rays (In outer space) **X:** 543

X-ray diffraction [physics]
Diffraction (Uses of diffraction) **D:** 201
Biophysics **B:** 326
Molecule (Studying molecules) **M:** 693;
M: 693 *with picture*

X-ray laser [physics]
Laser (Other kinds of lasers) **L:** 85

X-ray pulsar [star]
Binary star **B:** 308

X-ray telescope
Telescope (X-ray telescopes) **T:** 109; *picture on* **T:** 107
X rays (Penetrating power) **X:** 541

X-ray tube
X rays (How X rays are produced) **X:** 542; *diagram on* **X:** 541

X rays [radiation] **X:** 540 *with pictures*
Angiography **A:** 461
Astronomy (The electromagnetic spectrum) **A:** 839; (X-ray astronomy) **A:** 844
Atom (How scientists study atoms) **A:** 874
Beryllium **B:** 273
Black hole (Galactic black holes) **B:** 388
Cancer (Radiation) **C:** 170; (Cancer checkups) **C:** 171 *with picture*; (Radiation therapy) **C:** 172
Computed tomography **Ci:** 907
Electromagnetic waves (Uses of electromagnetic waves) **E:** 202 *with diagram*

Electronics (Medicine and research) **E:** 207;
(Early experiments) **E:** 215
Fluoroscopy **F:** 306 *with picture*
Invention (The late 1800's) **I:** 362
Light (Electromagnetic waves) **L:** 285
Mammography **M:** 130
Medicine *picture on* **M:** 364; *picture on* **M:** 376
Metallography **M:** 426
Mineral (Determining the structure of crystals) **M:** 571
Moseley, Henry Gwyn-Jeffreys **M:** 828
Particle accelerator (Uses of accelerators) **P:** 184
Radiation (In medicine) **R:** 74;
(Electromagnetic radiation) **R:** 75-76 *with picture*; (Causes of radiation) **R:** 78-79;
(Dose) **R:** 79
Radiology **R:** 98 *with picture*
Roentgen, Wilhelm Conrad **R:** 400
Siegbahn, Karl Manne Georg **S:** 450
Sun (Energy output) **So:** 976
Surgery (Instruments) **So:** 1005
Technology (Emerging technologies) **T:** 75-76
Teeth (Dental checkups) **T:** 82 *with picture*
Telescope (What telescopes do) **T:** 102-103;
(Other telescopes) **T:** 108
Thulium **T:** 272

Xanax [drug]
Drug abuse (table: Some commonly abused drugs) **D:** 363
Benzodiazepine **B:** 256
Tranquilizer **T:** 370

Xanthippe [wife of Socrates]
Socrates (Socrates' life) **So:** 567

Xanthippus [Spartan general]
Regulus, Marcus Atilius **R:** 207

Xanthophyll [pigment]
Leaf (The leaf changes color) **L:** 152

Xanthus [legendary animal]
Horse (table: Famous horses in history and legend) **H:** 361

Xavier, Saint Francis [Spanish missionary]
X: 543
Japan (Warring states period) **J:** 54

Xe
Xenon **X:** 543

Xenacanthus [fish]
Prehistoric animal *picture on* **P:** 738

Xenarthra [zoology]
Mammal (table) **M:** 128 *with picture*

Xenograft [medicine]
Skin grafting **S:** 494

Xenon [element] **X:** 543

Xenon rocket
Rocket (Electric rockets) **R:** 389

Xenopeltidae [zoology]
Snake (Sunbeam snakes) **S:** 535

Xenophobia [psychology]
Phobia **P:** 392

Xenophon [Greek historian] **X:** 543

Xenotime [mineral]
Ytterbium **Y:** 574

Xenotransplant [surgery] **X:** 544
Transplant (Sources of donor organs) **T:** 380

Xerography
Copying machine (Electrostatic copying) **Ci:** 1045
Office work (Distributing information) **O:** 677
Xerox Corporation **X:** 544

Xerophyte
Plant (Deserts) **P:** 525

Xerox Corporation X: 544

Xerxes I [king of Persia] **X:** 544
Greece, Ancient (The Persian wars) **G:** 373
Leonidas I **L:** 202
Persia, Ancient (The Achaemenid Empire) **P:** 298-299
Thermopylae **T:** 255

XFL *See* Extreme Football League *in this index*

XFY-1 [airplane]
Airplane *picture on* **A:** 236
V/STOL **V:** 452

Xhosa [people] **X:** 544 *with picture*
South Africa (People) **So:** 609; (History) **So:** 617-618
Zulu **Z:** 612

Xi Jiang [river, China] **X:** 545
Asia (Rivers) **A:** 793
China (The Southern Uplands) **C:** 494

Xi Lake [China]
Hangzhou **H:** 51

Xia Gui [Chinese painter]
Ma Yuan **M:** 2
Taoism (Taoism as a philosophy) **T:** 36

Xiamen [China] **X:** 545

Xi'an [China] **X:** 545

Han dynasty **H:** 38
Tang dynasty **T:** 25

Xiao [belief]
Asian Americans (Who Asian Americans are) **A:** 812b

Xilingshi [wife of Huangdi]
Silk (Discovery of silk) **S:** 461

Ximenes, Francisco [Spanish religious leader]
Counter Reformation (Catholic reform) **Ci:** 1096

Xin dynasty [Chinese history]
China (The early empire) **C:** 501
Han dynasty **H:** 38

Xingu River [river, Brazil]
Amazon River (The course of the Amazon) **A:** 403

Xinjiang [region, China] **X:** 545
Asia (Way of life in Central Asia) **A:** 790-791
China (The Xinjiang-Mongolian Uplands) **C:** 491; *picture on* **C:** 492
Turkistan (Chinese Turkistan) **T:** 501

Xipe Tótec [Aztec god]
Aztec (Religion) **A:** 1000; *picture on* **A:** 1002
Mythology *picture on* **M:** 973

Xiuhtecuhtli [Aztec god]
Aztec (Religion) **A:** 1000

Xmas
Christmas **C:** 529

XMM-Newton [spacecraft]
Astronomy (X-ray astronomy) **A:** 844-845

Xochimilco [lake, Mexico]
Lake Xochimilco **L:** 48

Xuanzang [Chinese explorer]
Exploration (Chinese exploration) **E:** 442

Xuanzong [emperor of China]
Tang dynasty (The middle years) **T:** 26

Xunzi [Chinese philosopher] **X:** 546
Confucianism (Early Confucianism) **Ci:** 936

Xupu Bridge [China]
Bridge (table: Cable-stayed) **B:** 603

Xylem [botany]
Plant (Parts of plants) **P:** 529; (Stems) **P:** 530 *with diagram*
Root (The core) **R:** 474 *with diagrams*
Sap (Vascular sap) **S:** 121 *with diagram*
Stem (Herbaceous stems) **So:** 887
Tissue (Plant tissues) **T:** 299
Tree (Trunk and branches) **T:** 416 *with diagram*

Xylophone [musical instrument] **X:** 546 *with picture*
Music (Percussion instruments) **M:** 950

XYZ Affair [U.S. history] **X:** 546
Adams, John (Difficulties with France) **A:** 37-38
Marshall, John (Political career) **M:** 229-230
Pinckney, Charles Cotesworth **P:** 467
Talleyrand (Joins Napoleon) **T:** 20
United States, History of the (Foreign affairs) **U:** 162-163

Y

Y [letter] **Y:** 547 *with pictures*

Y [symbol]
Yttrium **Y:** 575

Y-axis *See* Y-coordinate *in this index*

Y chromosome [genetics]
Heredity (Chromosomes and sexual determination) **H:** 202

Y-coordinate
Algebra (Working with equations) **A:** 356 *with pictures*

Y-gun [weapon]
Depth charge **D:** 152

Y-Indian Guides [organization] **Y:** 548

Y-Indian Maidens [organization] **Y:** 548

Y-Indian Princesses [organization] **Y:** 548

Y-Teens [organization] **Y:** 548

Yabloko [political party]
Russia (Politics) **R:** 531-532

Yablonovy Mountains [mountains, Siberia]
Y: 548

Yacht
America's Cup **A:** 431
Boating (Types of boats) **B:** 428; *picture on* **B:** 430

Yacht club
Boating (Boating safety programs) **B:** 431;
(The development of pleasure boating) **B:** 431

Yachting
America's Cup **A:** 431

Yacyreta Dam [Paraguay/Argentina]
Dam (table) **D:** 18

- Yad Vashem** [museum]
Jerusalem (West Jerusalem) J: 95 *with map, picture on J*: 100
- Yadin, Yigael** [Israeli archaeologist]
Masada M: 262
- Yaeyama Islands** [islands, Pacific]
Ryukyu Islands R: 574
- Yafu** [town, Israel]
Tel Aviv T: 88
- YAG crystal** [electronics]
Laser (Solid-state lasers) L: 85
- Yagua Indians**
Indian, American *pictures on I*: 140
- Yahgan Indians**
Indian, American *picture on I*: 140
- Yahola, Archie** [American Indian leader]
Tulsa (History) T: 483
- Yahoos** [fictional people]
Swift, Jonathan (*Gulliver's Travels*) So: 1040
- Yahrzeit** [custom]
Judaism (Special occasions) J: 181-182
- Yahweh** [Hebrew god]
Jehovah J: 88
God G: 243
- Yahya ibn Khalid** [Muslim leader]
Harun al-Rashid H: 80
- Yahya Khan** [Pakistani political leader]
Bangladesh (East Pakistan) B: 85
Pakistan (Civil war) P: 99-100
- Yajur-Veda** [religious book]
Hinduism (Sacred writings) H: 236
Vedas V: 291
- Yak** [animal] Y: 548 *with picture*
Animal *picture on A*: 475
Nepal (Land and climate) N: 126
Tibet (The people and their work) T: 276-277
- Yakima Indians**
Indian, American (In the United States) I: 179
- Yakub-al-Mansur** [Berber leader]
Rabat R: 46
- Yakub Beg** [king of Turkestan]
Turkestan (History) T: 501
- Yakuts** [people]
Arctic (In the Siberian arctic) A: 639 *with picture*
Lena River L: 190
- Yala National Park** [Sri Lanka]
National park (table) N: 42f
- Yale, Elihu** [English philanthropist] Y: 548
Yale University (History) Y: 549
- Yale, Linus, Jr.** [American inventor] Y: 549
Lock (The development of the lock) L: 412
- Yale Center for British Art and British Studies**
Yale University (The Yale campus) Y: 549
- Yale University** Y: 549
Bush, George Walker (College and military service) B: 722c
Connecticut (Schools) Ci: 956; *picture on Ci*: 953
Rowing (History) R: 494
Rudolph, Paul R: 509 *with picture*
Universities and colleges (The oldest U.S. universities and colleges) U: 210
- Yale University Art Gallery** [New Haven]
Yale University (The Yale campus) Y: 549
- Yale University Library** [New Haven]
See also Beinecke Rare Book and Manuscript Library *in this index*
Connecticut (Libraries) Ci: 956
Yale University (The Yale campus) Y: 549
- Yelow, Rosalyn Sussman** [American physiologist]
Nobel Prizes (Physiology or medicine: 1977) N: 445
- Yalta** [city, Ukraine] Y: 549
Crimea *picture on Ci*: 1142
Ukraine *picture on U*: 11
- Yalta Conference** [1945] Y: 549
Cold War (The coming of the Cold War) Ci: 762-763
Roosevelt, Franklin Delano (Yalta Conference) R: 462 *with picture*
United Nations (The Dumbarton Oaks Conference) U: 94-95
World War II (The Allies attack in Europe and Northern Africa) W: 478-479
- Yalu River** [Korea-China] Y: 550
Korea (The Northern Mountains) K: 373
- Yam** [plant] Y: 550 *with picture*
- Yam bean** See Jicama *in this index*
- Yamaguchi, Kristi** [American skater]
Asian Americans (Individual achievements) A: 812c
- Yamamadi Indians**
Indian, American *picture on I*: 140
- Yamamoto, Isoroku** [Japanese admiral] Y: 550
- Yamesaki, Minoru** [American architect]
World Trade Center W: 451
- Yamashita, Tomoyuki** [Japanese general] Y: 550
- Yamato** [ship]
Battleship (The modern battleship) B: 172-173
- Yamato-a**
Painting (Japanese painting) P: 47
- Yamato period** [Japanese history] See Kofun era *in this index*
- Yaméogo, Maurice** [African political leader]
Burkina Faso (History) B: 707
- Yamoussoukro** [city, Côte d'Ivoire] Y: 550
Côte d'Ivoire Ci: 1084a; *picture on Ci*: 1084b
- Yamuna River** [India] Y: 550
- Yancey, William Lowndes** [Confederate political leader] Y: 550
Alabama (Early statehood) A: 275-276
- Yáñez, Augustín** [Mexican author]
Latin-American literature (The mid-1900's) L: 113
- Yang**
Acupuncture A: 31
Medicine (China and India) M: 372
Taoism *picture on T*: 36
- Yang, Chen Ning** [American physicist] Y: 551
Parity (physics) P: 167
- Yang Chien** [Chinese emperor] See Yang Jian *in this index*
- Yang di-pertuan agong** [office]
Malaysia (Government) M: 98a
- Yang Jian** [Chinese emperor]
Sui dynasty So: 964
- Yang-na** [former village]
Los Angeles (Exploration) L: 469
- Yangcheng** [China] See Guangzhou *in this index*
- Yangdi** [Chinese emperor]
Sui dynasty So: 964
- Yangon** [Burma] Y: 551 *with picture*
Myanmar M: 970 *with picture*
- Yangpu Bridge** [Shanghai, China]
Bridge (table: Cable-stayed) B: 603
- Yangshao culture** [Chinese culture]
China (Beginnings of Chinese civilization) C: 500
- Yangtze Kiang** See Yangtze River *in this index*
- Yangtze River** [China] Y: 551
Asia (Rivers) A: 793
China (The Eastern Lowlands) C: 492; (Recent developments) C: 507
River (table) R: 352
Three Gorges Dam T: 270
- Yangtze Valley** [region, China]
Asia (The Huang He and Yangtze valleys) A: 805
- Yankee** [U.S. history] Y: 552
- Yankee City Series** [book by Warner]
Social class So: 550
- Yankee Division of Massachusetts** [U.S. Army]
Massachusetts (The early 1900's) M: 293
- "Yankee Doodle"** [song] Y: 552
- Yankee Doodle Dandy** [film]
Cagney, James C: 14 *with picture*
- Yankee peddler** [U.S. history]
Connecticut (Colonial life) Ci: 968-970
- Yankee Stadium** [New York City]
New York City (Sports) N: 338
Ruth, Babe R: 568
- Yankee terrier** [dog] See American Staffordshire terrier *in this index*
- Yankees, New York** See New York Yankees *in this index*
- Yankton Indians**
Sioux Indians S: 474
- Yankton Press and Dakotan** [newspaper]
South Dakota (Communication) So: 679
- Yankton Sioux, Treaty of**
South Dakota (Agricultural settlement) So: 681
- Yanoama** See Yanomami Indians *in this index*
- Yanomama** See Yanomami Indians *in this index*
- Yanomami Indians** [South America] Y: 552
Indian, American (Current issues) I: 182-183
Rain forest (The Americas) R: 126b
- Yanomamö** See Yanomami Indians *in this index*
- Yao** [people]
Laos (People) L: 70
- Yao** [people]
Tanzania (The development of trade) T: 34
- Yaoundé** [Cameroon] Y: 552
Cameroon (People) C: 85 *with picture*
- Yap Islands** [Pacific] Y: 552
Caroline Islands C: 244
Micronesia, Federated States of (Government) M: 515
Pacific Islands, Trust Territory of the P: 13
- Yapok** [animal]
Opussum O: 811
- Yaqui Indians** Y: 553
- Yarborough, Cale** [American race driver]
Automobile racing (table: NASCAR Winston Cup champions, 1976-78) A: 981
- Yard** [architecture]
Drama (Elizabethan theaters) D: 331
- Yard** [unit of measure] Y: 553 *with picture*
Foot F: 352
- Yard line**
Football (The field) F: 354-355 *with diagram*
- Yard-long bean** [plant]
Cowpea Ci: 1113
- "Yardley Oak"** [poem by Cowper]
Cowper, William Ci: 1113
- Yarmouth bloater** [food]
Herring (Uses) H: 216
- Yarmulka**
Judaism (Orthodox Judaism) J: 180
- Yarn** [thread]
Clothing Ci: 687
Cotton (Spinning) Ci: 1091
Dye (Dyeing textiles) D: 396 *with picture*
Textile T: 212; (Making the yarn) T: 215 *with picture*; *pictures on T*: 216
Thread T: 269 *with picture*
Wool (Making yarn) W: 400 *with picture*
- Yarn dyeing**
Wool (Making fabric) W: 401
- Yarra** [river, Australia]
Melbourne (The city) M: 388 *with picture*
- Yasa** [Mongol history]
Genghis Khan G: 88
- Yasak** [Mongol history]
Genghis Khan G: 88
- Yasgur, Max** [American farmer]
Woodstock festival W: 395
- Yasnaya Polyana** [estate]
Tolstoy, Leo (Early life and works) T: 322
- Yasodhara** [wife of]
Buddha (Early life) B: 667
- Yastrzemeski, Carl** [American baseball player]
Baseball (table: Hall of Fame) B: 135
- Yasukuni Shrine**
Tokyo (Shrines and temples) T: 316
- Yates, Elizabeth** [American author] Y: 553
- Yates, Joseph C.** [American political leader]
New York (table) N: 313
- Yates, Richard** [1815-1873, American political leader]
Grant, Ulysses S. (Return to the Army) G: 314
Illinois (table) I: 71
- Yautia** [plant] See Taro *in this index*
- Yaw**
Airplane (Basic movements and controls) A: 222 *with diagrams*
- Yawar Fiesta** [book by Arguedas]
Latin-American literature (The early 1900's) L: 113
- Yawkey, Tom** [American sportsman]
Baseball (table: Hall of Fame) B: 135
- Yawl**
Boating (Sailboats) B: 429
Sailing (Yawls, ketches, and schooners) S: 24 *with picture*
- Yawning** Y: 553
- Yaws** [disease] Y: 553
- Yayoi** [Japanese history]
Japan (Ancestry) J: 35; (Early days) J: 52-53
- Yazid** [Muslim ruler]
Muslims (The Muslim Empire) M: 964c
- Yazidis** [religious group]
Devil worship D: 175
- Yazoo Fraud** [U.S. history] Y: 554
- Yazoo River** [river, Mississippi]
Mississippi (Rivers and lakes) M: 634 *with picture*
- Yb**
Ytterbium Y: 574
- Ybor, Vincenta Martinez** [American businesswoman]
Tampa (History) T: 23-24
- Ybor City** [district]
Tampa (Description) T: 23
- Yding Skovhøj** [hill]
Denmark (The land) D: 137
- Yeager, Charles Elwood** [American aviator] Y: 554
Rocket (Rocket-powered airplanes) R: 391
- Year** [time] Y: 554
Earth (How Earth moves) E: 17 *with diagram*
Hipparchus H: 239
Leap year L: 162
- Year day**
Calendar (Calendar reform) C: 32
- Year-end bonus**
Bonus B: 463
- Year of confusion** [46 B.C.]
Calendar (The Julian calendar) C: 31

Year of Decisions [book by Truman]
Truman, Harry S. (Elder statesman) T: 472

Yeardley, Sir George [American colonial leader]
House of Burgesses H: 384

Yearling [horse]
Horse (table: Horse terms) F: 343
Horse racing (Thoroughbred horses) H: 363-364

Yearling, The [book by Rawlings]
Rawlings, Marjorie Kinnan R: 152

Years of Trial and Hope [book by Truman]
Truman, Harry S. (Elder statesman) T: 472

Years of Upheaval [book by Kissinger]
Kissinger, Henry Alfred K: 337

Yeast [book by Kingsley]
Kingsley, Charles K: 331

Yeast [fungus] Y: 554 *with pictures*
Bread (How yeast bread is made) B: 588
Fermentation F: 73
Food preservation (How food spoils) F: 341
Fungi (The importance of fungi) F: 559
Wine (How wine is made) W: 337-338

Yeast bread [food]
Bread (Kinds of bread) B: 588 *with pictures*

Yeast infection [disease]
AIDS (Opportunistic illnesses) A: 163

Yeats, William Butler [Irish author] Y: 555 *with portrait*
Irish literature (The Irish literary revival) I: 431-432
Pound, Ezra Loomis P: 721
Rhyme R: 320

Yegorov, Boris B. [Soviet cosmonaut]
Space exploration (Vostok and Gemini: The first multiperson space flights) So: 714

Yehoshua, A.B. [Israeli author]
Hebrew literature (A new generation of Hebrew writers) H: 163

Yekaterinburg [city, Russia] Y: 556

Yekuno Amlak [king of Ethiopia]
Ethiopia (The Zagwé dynasty) E: 371

Yell, Archibald [American political leader]
Arkansas (table) A: 712

Yellow [color]
Color *diagrams* on Ci: 821
Printing (Process color printing) P: 802 *with picture*

Yellow arc speed [aviation]
Airplane (Measuring flying speed) A: 225-226

Yellow-bellied sapsucker [bird]
Bird *picture* on B: 351
Sapsucker S: 123

Yellow-bellied see snake
Snake *picture* on S: 526

Yellow-billed cuckoo
Bird (Birds of forests and woodlands) B: 334 *with picture*
Cuckoo Ci: 1182

Yellow birch [tree]
Birch (Yellow birch) B: 327

Yellow Book [recording standard]
Compact disc (CD-ROM's) Ci: 902

Yellow Christ, The [painting by Gauguin]
Gauguin, Paul (Early career) G: 69 *with picture*

Yellow crookneck squash
Squash (Summer squashes) So: 813 *with picture*

Yellow daisy [plant]
Black-eyed Susan B: 386 *with picture*

Yellow-dog contracts [labor history]
Labor movement (Organizing workers) L: 4;
(The Great Depression) L: 12
Norris-La Guardia Act N: 457

Yellow-eyed junco [bird]
Junco J: 191

Yellow fever [disease] Y: 556
Finlay, Carlos Juan F: 118
Immune system (Active immunity) I: 88b
Lazear, Jesse William L: 148
New Orleans (The *Paris of America*) N: 284
Panama Canal (Victory over disease) P: 126
Reed, Walter R: 194
Tennessee (Reconstruction) *picture* on T: 154

Yellow garden spider [spider]
Spider *picture* on So: 789; (table) So: 790

Yellow Globe Onion
Onion (Cultivation) O: 763 *with picture*

Yellow gold
Alloy (Costly and ornamental alloys) A: 378
Gold (Jewelry) G: 251

Yellow Hat [religious sect]
Dalai Lama D: 9

Yellow-headed Amazon
Parrot *picture* on P: 180

Yellow-headed blackbird
Blackbird B: 392

Yellow-headed vulture

Vulture (New World vultures) V: 453

Yellow Jack [play by Howard]
Howard, Sidney H: 400

Yellow jacket [insect] Y: 556 *with picture*
Wasp W: 110 *with picture*

Yellow journalism
Journalism (The age of sensationalism) J: 174-175
Hearst, William Randolph H: 131
Outcault, Richard Felton O: 879
Pulitzer, Joseph (His career) P: 887
Spanish-American War (American intervention) So: 753

Yellow Kid [cartoon character]
Comics (Comic strips) Ci: 869 *with picture*
Outcault, Richard Felton O: 879

Yellow map lichen [plant]
Lichen *picture* on L: 269

Yellow pages [advertising]
Advertising (Other ways of advertising) A: 75-76

Yellow perch
Perch P: 284

Yellow pine [tree]
Pine (North American pines) P: 468

Yellow-poplar [tree] Y: 556 *with picture*
Tree *pictures* on T: 424

Yellow race [theory]
Races, Human (The three-race theory) R: 53

Yellow River See Huang He *in this index*

Yellow-rumped warbler
Warbler W: 35 *with picture*

Yellow Sea Y: 557
Huang He H: 403

Yellow-shafted flicker
Bird (Birds of forests and woodlands) B: 334 *with picture*
Flicker F: 234
Yellowhammer Y: 557

Yellow Submarine [film]
Beatles B: 190

Yellow Tavern, Battle of [1864]
Civil War (Cavalry maneuvers) Ci: 632

Yellow-throated vireo [bird]
Vireo V: 391 *with picture*

Yellow warbler
Warbler W: 35 *with picture*
Cowbird Ci: 1107

Yellow water buttercup [plant]
Buttercup B: 731

Yellow water lily [plant]
Lotus L: 473

Yellowcake [refining]
Uranium (Refining and processing uranium ore) U: 215

Yellowfin [fish]
Tuna T: 485 *with picture*

Yellowhammer [bird] Y: 557
Flicker F: 235

Yellowhammer State [name for]
Alabama A: 257

Yellowknife [Northwest Territories] Y: 557
Northwest Territories (The Mackenzie Valley) N: 530-531 *with picture*; (People) N: 532;
(The early and middle 1900's) N: 533-534
Nunavut (Establishment of Nunavut) N: 612

Yellowlegs [bird] Y: 557 *with picture*

Yellows [disease]
Jaundice J: 66

Yellowstone [steamboat]
South Dakota (Exploration and fur trade) So: 681; *picture* on So: 682

Yellowstone Lake [lake, Wyoming]
Yellowstone National Park (The Lower Loop) Y: 558-559 *with picture and map*
Yellowstone River Y: 560

Yellowstone Lower Falls [Wyoming]
Waterfall (table: Famous waterfalls of North America) W: 142 *with picture*
Wyoming (Rivers and lakes) W: 528 *with picture*

Yellowstone National Park [U.S.] Y: 557 *with pictures and maps*
Colter, John Ci: 850
Montana (Places to visit) M: 750
National park (Management of fire and wildlife) N: 42i *with picture*
National Park System (Areas preserved for natural features) N: 43; (table: National parks) N: 49
Rocky Mountains (Chief ranges of the Rockies) R: 395
United States *picture* on U: 99
Wyoming W: 516; (Places to visit) W: 524;
(Territorial progress) W: 534; *picture* on W: 535

Yellowstone River [Montana-Wyoming] Y: 560

Lewis and Clark expedition (The homeward journey) L: 223
Montana *picture* on M: 754

Yellowtail [fish]
Amberjack A: 405

Yellowtail Dam [Bighorn River, Montana]
Montana (Rivers and lakes) M: 752-754; (The mid-1900's) M: 760

Yellowthroat [bird] Y: 560 *with picture*

Yeltsin, Boris Nikolayevich [Russian political leader] Y: 560 *with portrait*
Chechnya C: 390
Chernomyrdin, Viktor Stepanovich C: 408
Cold War (The Cold War after 1980) Ci: 770
Putin, Vladimir Vladimirovich P: 913
Russia (National government) R: 531; (The breakup of the U.S.S.R.) R: 554 *with picture*; (The new nation) R: 555 *with picture*
Rutskoi, Alexander Vladimirovich R: 570
TASS T: 50
Union of Soviet Socialist Republics (Threats to unity) U: 40-41

Yellville [Arkansas]
Arkansas *picture* on A: 705

Yemen [country] Y: 561 *with pictures and map*
Egypt (The United Arab Republic) E: 132-133
Flag *picture* on F: 205
Saudi Arabia (The new kingdom) S: 161
South Arabia, Federation of So: 639
United Arab Republic U: 46

Yemen (Aden)
Yemen Y: 561; (Formation of Yemen [Aden]) Y: 563-564

Yemen Arab Republic
Yemen (Formation of Yemen [Sanaa]) Y: 564

Yemen (Sanaa)
Yemen Y: 561; (Formation of Yemen [Sanaa]) Y: 564

Yemeni Socialist Party
Yemen (Formation of Yemen [Aden]) Y: 563-564

Yemin Moshe [community]
Jerusalem (Muslim rule) J: 101

Yen [money] Y: 564
Money *picture* on M: 704

Yenisey River [river, Siberia] Y: 564

Yenjing See Beijing *in this index*

Yeoman [English history] Y: 564

Yeoman [U.S.]
Yeoman Y: 564

Yeoman Warder [soldier]
Yeoman Y: 564
Tower of London T: 349

Yeomen of the Guard [English history]
Yeoman Y: 564

Yeomen of the Guard, The [operetta by Gilbert and Sullivan]
Gilbert and Sullivan G: 190

Yerba Buena
San Francisco (Settlement by Europeans) S: 97

Yerba maté [drink]
Maté M: 300a

Yerevan [city, Armenia] Y: 564
Armenia A: 718 *with picture*

Yergen, Max [American social reformer]
Spingarn Medal (table: 1933) So: 793

Yerkes, Charles T. [American businessman]
Yerkes Observatory Y: 565

Yerkes, Robert Mearns [American psychologist] Y: 565

Yerkes Observatory [Williams Bay, Wisconsin] Y: 565

Yerkes Primate Research Center [Atlanta]
Chimpanzee (Chimpanzees and people) C: 473

Yerma [play by García Lorca]
Spanish literature (Drama) So: 763

Yermak [Cossack adventurer]
Siberia (History) S: 446

Yermolinsky, Alex [American chess player]
Chess (United States chess champions) C: 414

Yerovi Indaburu, Clemente [Ecuadorian political leader]
Ecuador (The 1900's) E: 73

Yersinia pestis [bacteria]
Plague P: 505

Yeshiva [school]
Jerusalem (Culture) J: 99-100
Jews (The Talmudic period) J: 122
Rabbi R: 46

Yeşilköy Airport
Istanbul (Economy) I: 491

Yeti See Abominable Snowman *in this index*

Yeutter, Clayton K. [American government official]
Agriculture, Department of (table) A: 161

Yevtushenko, Yevgeny [Russian poet] Y: 565
Babi Yar B: 3

Russian literature (Modern Soviet literature)
R: 564

Yew [tree] Y: 565 *with picture*
Poisonous plant (Some poisonous plants)
P: 602
Taxol T: 56
Tree (Needleleaf trees) T: 414; *picture on*
T: 417

Yggdrasil [Norse mythology]
Mythology (The construction of the world)
M: 984-985

Yi dynasty [Korean history] *See* Choson dynasty
in this index

Yi Song-gye [Korean ruler]
Korea (History) K: 375-376
Seoul (History) S: 307

Yiddish language Y: 565
Hebrew language H: 162
Jerusalem (The people of Jerusalem) J: 96-98

Yiddish literature Y: 566

Yield grade
Beef (Grades of beef) B: 209

Yield stress
Materials (Properties of materials) M: 300b

Yihequan [Chinese history]
Boxer Rebellion B: 526

Yin
Acupuncture A: 31
Medicine (China and India) M: 372
Taoism *picture on* T: 36

Yiri [dwellings]
Burkina Faso (People) B: 706

YM
Magazine (table) M: 45

YMCA *See* Young Men's Christian Association *in*
this index

YMHA *See* Young Men's Hebrew Association *in*
this index

Ymir [Norse mythology]
Mythology (The creation of life) M: 984; (The
construction of the world) M: 984;
(Jensen's theory) M: 988; *picture on*
M: 975
Odin O: 674

Yo-yo [toy] Y: 566

Yocto [measurement]
Metric system (Metric prefixes) M: 439
Yoga [philosophy] Y: 566 *with picture*
Asia (The arts) A: 783
Hinduism (The six schools of philosophy)
H: 236
India (Hinduism) I: 116
Upanishads U: 212

Yoghurt [food] *See* Yogurt *in this index*

Yogi [religion]
Hinduism (Worship of saints) H: 237

Yoga Y: 566 *with picture*

Yogin [religion]
Yoga Y: 566

Yogurt [food] Y: 567
Ice cream (The composition of ice cream) I: 8
Yohkoh [satellite]
Astronomy (X-ray astronomy) A: 844-845
Corona C: 1067

Yoho National Park
Canada (table: National parks and national park
reserves) C: 113

Yoke [instrument]
Airplane (The controls and instruments) A: 217
with picture; (Basic movements and con-
trols) A: 222-223 *with picture*

Yoknapatawpha County [fictional place]
Faulkner, William F: 55

Yokohama [city, Japan] Y: 567

Yokuts Indians [American Indians] Y: 568

Yolen, Jane [American author]
Regina Medal (table: 1992) R: 206

Yolk [egg]
Egg (The yolk) E: 117 *with diagram*; (Uses of
eggs) E: 118

Yolk [wool]
Wool (Types of wool) W: 399

Yolk sac [anatomy]
Reproduction, Human *diagram on* R: 247

Yom Kippur [religion] Y: 568
Fast F: 52

Feasts and festivals (In Judaism) F: 58
Judaism (The High Holidays) J: 181
Rosh Ha-Shanah R: 482

Yomiuri Giants [sports]
Tokyo (Recreation) T: 316

Yomiuri Shimbun [newspaper]
Newspaper (In Asia) N: 386

Yonge Library of Florida History [Gainesville]
Florida (Libraries) F: 247

Yonker Ramp and His Sweetheart [painting by
Hals]
Hals, Frans *picture on* H: 27

Yonkers (New York) Y: 568

Yorick [literary figure]
Jester J: 103

Yorinks, Arthur [author]
Literature for children *picture on* L: 371

Yoritomo [Japanese government official] *See*
Minamoto Yoritomo *in this index*

York [England] Y: 568

York [Pennsylvania]
United States capitals U: 199

York [English history] Y: 568
England (The Wars of the Roses) E: 306;
(table) E: 308
Henry VI [of England] H: 187

Plantagenet P: 550
Wars of the Roses W: 38

York [former name]
Toronto (Early settlement) T: 340-340a

York, Alvin Cullum [American soldier] Y: 569
with portrait

York, Cape [region, Greenland]
Cape York C: 191

York, Jeremy [pen name]
Creasey, John C: 1123

York, Sergeant
York, Alvin Cullum Y: 569 *with portrait*

York Imperial
Apple (table) A: 571 *with picture*

York Redoubt National Historic Site [Nova
Scotia]
Canada (table: National historic sites) C: 114

York Rite
Masonry (The lodges and degrees of
Masonry) M: 267; (Organization) M: 267

York Tea Party [U.S. history]
Maine (The Revolutionary War) M: 89

Yorkshire hog
Hog (American breeds) H: 285 *with picture*,
(table) H: 286

Yorkshire pudding
England (Food and drink) E: 295-296

Yorkshire terrier Y: 569
Dog *picture on* D: 274

Yorktown [Virginia] Y: 569

Yorktown [ship]
Midway Island M: 536

Yorktown, Battle of [1781]
Cornwallis, Charles C: 1066 *with picture*
Lafayette, Marquis de (Service to the United
States) L: 27-28
Revolutionary War in America (table) R: 276;
(Surrender at Yorktown) R: 285; *picture on*
R: 286
Washington, George (Winning the war) W: 99

Yorkville [Toronto]
Ontario *picture on* O: 768

Yoruba [people] Y: 569
Benin B: 250

God (Gods of nature) G: 243-244
Ife I: 47

Nigeria (People) N: 411; (The arts) N: 414
Sculpture (Personal sculpture) S: 241

Tribe T: 440

Yosemite Creek [river, California]
Yosemite National Park (Waterfalls) Y: 570

Yosemite Falls [falls, California] Y: 569
Waterfall (table: Famous waterfalls of North
America) W: 142 *with pictures*

Yosemite National Park (Waterfalls) Y: 570
with picture

Yosemite Indians [American Indians]
Yosemite National Park (Yosemite Valley)
Y: 570

Yosemite National Park [California] Y: 569 *with*
picture
California (Rivers, waterfalls, and lakes) C: 50-
51; *picture on* C: 36
Conservation *picture on* C: 986

National Park System (Crowds) N: 47; (table:
National parks) N: 49; *picture on* N: 43

Ribbon Falls R: 321

Yosemite National Park Bill [1890]
Muir, John M: 912

Yosemite Valley [region, California]
Yosemite National Park (Yosemite Valley)
Y: 570

Yoshida Kenko [Japanese author]
Japanese literature (The medieval period)
J: 62

Yoshihito [emperor of Japan]
Hirohito (Before World War II) H: 242

Yosippon [literature]
Hebrew literature (Medieval works) H: 162

Yost, Charles W. [American diplomat]

United Nations (table) U: 86

Yotta [measurement]
Metric system (Metric prefixes) M: 439

You and I [play by Barry]
Barry, Philip B: 119

"You Bet Your Life" [television show]
Marx brothers M: 238

You Can't Go Home Again [book by Wolfe]
Wolfe, Thomas Clayton W: 377

You Can't Take It with You [film]
Motion picture (Best picture: 1938) M: 861

You Can't Take It With You [play by Kaufman
and Hart]
Hart, Moss H: 77

Kaufman, George S. K: 250
You Know Me, Al [book by Lardner]
Lardner, Ring L: 76

You Never Can Tell [play by Shaw]
Theater *picture on* T: 249

Young, Andrew Jackson, Jr. [American govern-
ment official] Y: 570 *with portrait*

Atlanta (The late 1900's) A: 861
United Nations (table) U: 86

Young, Arthur [English author]
Industrial Revolution (The working class) I: 251

Young, Brigham [American religious leader]
Y: 571 *with portrait*

Illinois (Places to visit) I: 62
Mormons (The Mormons in Utah) M: 809

Nevada (Early settlement) N: 174
Salt Lake City (History) S: 76a

Utah (The Mormons) U: 246

Young, Charles [American social reformer]
Spingarn Medal (table: 1916) So: 793

Young, Clement C. [American political leader]
California (table) C: 59

Young, Coleman Alexander [American political
leader] Y: 572

Detroit (The late 1900's) D: 171

Young, Cy [American baseball player] Y: 572
Baseball (The early 1900's) B: 135-136; (table:
Hall of Fame) B: 135; (table: Modern
major league records) B: 137

Young, Ed [American author]
Caldecott Medal (table: 1990) C: 26

Literature for children *picture on* L: 357

Young, Edward [English poet] Y: 572

Young, Gig [American actor]
Motion picture (Best performance by an actor
in a supporting role: 1969) M: 863

Young, John [American businessman]
Youngstown Y: 574

Young, John [American political leader]
New York (table) N: 313

Young, John [Canadian statesman]
Lisgar, Baron L: 349

Young, John Watts [American astronaut] Y: 572
Astronaut (Achievements in space) A: 829-
830; (table) A: 830

Space exploration *picture on* So: 694;
(Voskhod and Gemini: The first multiper-
son space flights) So: 714; (Other moon
landings) So: 719; (The shuttle era begins)
So: 723 *with picture*

Young, Lester Willis [American saxophonist]
Y: 572

Basie, Count B: 140
Jazz (Cool jazz) J: 72

Young, Loretta [American actress]
Motion picture (Best performance by an
actress: 1947) M: 862

Young, Samuel B. M. [American general]
Army, United States (The early 1900's) A: 739

Young, Thomas [British physicist]
Color (The three-component theory) C: 826

Interferometer I: 324
Light (Interference) L: 286; (Early ideas about
light) L: 292

Physics (Developments in the 1800's) P: 440
Radiation (Early theories and discoveries)
R: 80

Young, Thomas L. [American political leader]
Ohio (table) O: 699

Young, Whitney Moore, Jr. [American social
reformer] Y: 572

Young adult *See* Adolescent; Teen age *in this*
index

Young American Medal for Bravery
Medals, decorations, and orders (table) M: 357
with picture; (Civilian awards) M: 355

Young American Medal for Service
Medals, decorations, and orders (table)
M: 357; (Civilian awards) M: 355

Young and the Damned, The [film]
Buñuel, Luis B: 700

"Young Artist Auditions"
Music Clubs, National Federation of M: 958

Young Belgium [literary group]
Belgium (The arts) B: 230

Young Democrats-Hungarian Civic Party, Federation of [political party]
Hungary (Politics) H: 439, (Recent developments) H: 448

Young Farmers' Club
Agricultural education (In other countries) A: 145

Young Germans [literature]
Heine, Heinrich H: 167

Young Girl of Perth, The [opera by Bizet]
Bizet, Georges B: 385

"Young Goodman Brown" [story by Hawthorne]
Hawthorne, Nathaniel (His stories and sketches) H: 114

Young-Helmholtz theory
Color (The three-component theory) Ci: 826

Young Italy [Italian history]
Mazzini, Giuseppe M: 330

Young Lions, The [book by Shaw]
Shaw, Irvin S: 378

Young Lonigan [book by Farrell]
Farrell, James T. F: 48

Young Manhood of Studs Lonigan, The [book by Farrell]
Farrell, James T. F: 48

Young Men's Christian Association Y: 572
Hi-Y club H: 221

Young Men's Hebrew Association
Jewish community centers J: 119

Young Offenders Act [1984]
Juvenile court (In Canada) J: 205

Young Person's Guide to the Orchestra, The [music by Britten]
Britten, Benjamin B: 634

Young Plan [German history]
Dawes Plan D: 51

Hitler, Adolf (Rise of the Nazis) H: 266

Young Pretender [Scottish history] See Stuart, Charles Edward *in this index*

Young Turks [Turkish history]
Turkey (The Young Turks) T: 510

Young Woman Reading a Letter [painting by Vermeer]
Painting (The Dutch masters) P: 62-63 *with picture*

Young Women's Christian Association Y: 573

Young Women's Hebrew Association
Jewish community centers J: 119

Youngdahl, Luther W. [American political leader]
Minnesota (table) M: 602

Younger Edda [book by Snorri]
Edda E: 74

Youngs, Ross [American baseball player]
Baseball (table: Hall of Fame) B: 135

Youngstown [Ohio] Y: 574

Youngstown steel strike [1916]
Riot *picture on* R: 348

Yount, Robin [American baseball player]
Baseball (table: Hall of Fame) B: 135

"You're the Top" [song by Porter]
Porter, Cole P: 682

Youth See Adolescent; Teen age *in this index*

Youth [book by Tolstoy]
Tolstoy, Leo (Early life and works) T: 322

"Youth" [story by Conrad]
Conrad, Joseph Ci: 973

Youth Aliyah
Hadassah H: 3

Szold, Henrietta So: 1078 *with picture*

Youth culture [U.S. history]
Baby boom generation (Effects of the baby boom) B: 11

Youth for Christ International [organization]
Y: 574

Youth hostel [travel] Y: 574

Youville, Saint Marguerite d' [Canadian religious leader] Y: 574

Ypres [Belgium] Y: 574

Ypres, Earl of [British general]
French, John Denton Pinkstone F: 511

Ypres, First Battle of [1914]
World War I (The Western Front) W: 455-456

Ypres, Second Battle of [1915]
World War I (Trench warfare) W: 457-458

Ypres, Third Battle of [1917]
World War I (Allied failures) W: 461

Yr Wyddfa [mountain] See Snowdon *in this index*

Ysleta [Texas]
El Paso (History) E: 247

Ytterbium [element] Y: 574
Lutetium L: 527

Yttrium [element] Y: 575

Yuan [government]
Taiwan (Government) T: 15

Yuan [money] Y: 575

Yuan dynasty [Chinese history]
Beijing (History) B: 223-224
China (Mongol rule) C: 502 *with map*
Kublai Khan K: 391
Mongol Empire (Kublai Khan) M: 721
Painting (Chinese painting) P: 44-46
World, History of the (China) W: 435

Yuen Shikai [Chinese political leader]
China (The early republic) C: 503-504
Sun Yat-sen (The Kuomintang Party) So: 989

Yuca [shrub] See Cassava *in this index*

Yucatán Channel
Caribbean Sea C: 237 *with map*
Gulf of Mexico G: 437

Yucatán Peninsula [region, Mexico] Y: 575 *with maps*
Asteroid (Asteroid collisions) A: 824 *with map*
Chichén Itzá C: 439
Cortés, Hernando (Early life) Ci: 1073
Exploration (Spain's conquests in the New World) E: 445
Mexico (The Yucatán Peninsula) M: 463 *with picture*; (The Spanish conquest) M: 469

Yucatecos [people]
Yucatán Peninsula Y: 575

Yucca [tree] Y: 575
Flower (Cross-pollination) F: 295-296; *picture on* F: 271
Tree (Palm, pandanus, and lily trees) T: 415

Yucca House National Monument [Colorado]
National Park System (table: National monuments) N: 50-52

Yuchi Indians [American Indians]
Creek Indians Ci: 1126

Yugoslavia Y: 576 *with pictures and maps*
Albania (Communist control) A: 308
Automobile (Economic importance) A: 959-960
Balkans (Recent developments) B: 42
Bosnia-Herzegovina (History) B: 492-493
Clinton, Bill (International affairs) Ci: 682f
Cold War (The Iron Curtain descends) Ci: 763;
(The Containment Policy) Ci: 763-764;
(The great blocs split) Ci: 768
Europe (The breakup of Communism) E: 416
International relations (The Balkan conflicts) I: 346
Kosovo K: 385
Meštrović, Ivan M: 424
North Atlantic Treaty Organization (History) N: 471
Sarajevo S: 123
Serbia S: 313
Serbia and Montenegro S: 315
Slovenia S: 510
United Nations (Membership questions) U: 95
See also the list of Related Articles in the Yugoslavia article

Yuit [people]
Inuit I: 354

Yukawa, Hideki [Japanese physicist] Y: 581
Meson M: 421
Physics (Uncovering the secrets of the atom) P: 442

Yukon-Charley Rivers National Preserve [Alaska]
National Park System (table: National preserves) N: 58

Yukon Delta National Wildlife Refuge
Alaska (Federally protected lands) A: 294
National Wildlife Refuge System N: 61

Yukon River [Alaska-Yukon Territory] Y: 582 *with picture and map*
Alaska (Rivers and lakes) A: 294
Canada (Rivers, waterfalls, and lakes) C: 118-120

Yukon Territory [Canada] Y: 582 *with pictures and map*
Territory (Territories in Canada) T: 177

Yule Y: 586

Yule log [custom]
Christmas (Other customs) C: 536
Yule Y: 586

Yuma [city, Arizona] Y: 586
Arizona (table: Average monthly weather) A: 682

Yuma Indians [American Indians] See Quechan
Indians *in this index*

Yungas [region, Bolivia]
Bolivia (The Yungas) B: 445; (Climate) B: 445

Yupik [language]
Inuit I: 354

Yuri [Russian nobleman]
Russia (The rise of Moscow) R: 548

Yuri Gagarin Russian State Scientific-Research Test Center of Cosmonaut Training
Astronaut A: 828

Yurok Indians [American Indians] Y: 586

Yurt [tent]
Asia *picture on* A: 791
Kazakhstan (People) K: 250a-250b
Kyrgyzstan (People) K: 398-399
Mongol Empire M: 720 *with pictures*
Mongolia (The people) M: 722-723 *with picture*
Turkmenistan (People) T: 514

Yushen National Park [Taiwan]
National park (table) N: 42f

Yvain [poem by Chrétien de Troyes]
Hartmann von Aue H: 79

YWCA See Young Women's Christian Association *in this index*

YWHA See Young Women's Hebrew Association *in this index*

Z

Z [letter] Z: 587 *with pictures*

Z boson
Physics (Physics today) P: 442-443
Standard Model So: 833
Subatomic particle (Elementary particles) So: 937

Zabara, Ibn [Hebrew author]
Hebrew literature (Medieval works) H: 162

Zaccaro, John A. [American businessman]
Ferraro, Geraldine Anne F: 76

Zachary, Saint [pope]
Pope (table) P: 666

"Zadonshchina" [poem]
Russian literature (The literature of Tatar captivity) R: 559

Zafy, Albert [Madagascar political leader]
Madagascar (History) M: 28-29

Zagreb [city, Croatia] Z: 588
Croatia Ci: 1148 *with picture*

Zagros Mountains
Iran (The Mountains) I: 403
Iraq (The mountains) I: 411

Zagwé dynasty
Ethiopia (The Zagwé dynasty) E: 371

Zaheris, Babe Didrikson [American athlete]
Z: 588 *with portrait*
Golf (U.S. Women's Open) G: 265; (Women's golf) G: 266
Olympic Games (Between the wars) O: 751; *picture on* O: 752

Zahir Shah, Muhammad [king of Afghanistan]
Afghanistan (Independence) A: 96; (Recent developments) A: 97 *with picture*

Zeibatsu [Japanese history]
Japan (Meiji era) J: 56

Zaire [former country] See Congo (Kinshasa) *in this index*

Zaire [play by Voltaire]
Voltaire (Exile and return to France) V: 446

Zakat [religion]
Islam (The Five Pillars of Islam) I: 463-464

Zakouma National Park
Chad (Land and climate) C: 366-367

Zele, Tony [American boxer]
Boxing (The golden age of U.S. boxing) B: 533-534

Zema, Battle of [202 B.C.]
Hannibal (The turning point) H: 52
Punic Wars (The Second Punic War) P: 903
Scipio Africanus, Publius Cornelius S: 208

Zambezi River [Mozambique-Zambia] Z: 588
River (table) R: 352
Stanley and Livingstone (Livingstone's discoveries) So: 837 *with map*
Victoria Falls V: 358

Zambia Z: 588 *with picture and map*
Bemba B: 246
Flag *picture on* F: 200
Rhodesia and Nyasaland, Federation of R: 318

Zambia, University of
Zambia (People) Z: 588-589

Zambo [people]
Colombia (Ancestry) Ci: 779

Zamboanga [city, Philippines] Z: 590

Zamenhof, Ludovic L. [Polish linguist]
Esperanto E: 358

Zamia [plant]
Cycad Ci: 1203

Zamyatin, Yevgeny [Russian author]
Science fiction (The early 1900's) S: 205

- Zamzam** [well]
Islam (The Five Pillars of Islam) I: 463-464
Muslims (Before Muhammad) M: 964
- Zanamivir** [drug]
Antiviral drug A: 560
- Zand dynasty** [Iranian history]
Iran (The Qajar dynasty) I: 406
- Zane, Ebenezer** [American settler]
Wheeling W: 279
- Zane's Trace** [road]
Ohio (Transportation) O: 698
- Zangara, Giuseppe** [American assassin]
Roosevelt, Franklin Delano (Election of 1932) R: 455-456
- Zanjón, Pact of** [1878]
Cuba (Struggle against Spain) Ci: 1176
- Zante** [island, Greece]
Ionian Islands I: 373 *with map*
- Zante currant** [raisin]
Raisin (Varieties of raisins) R: 130
- ZANU-PF** [political party]
Zimbabwe (History) Z: 597-598
Mugabe, Robert Gabriel M: 909
- Zanzibar** [city, Tanzania] Z: 590
- Zanzibar** [islands, Tanzania]
Tanzania T: 30; (The coastal lowlands and islands) T: 33 *with map*; (The development of trade) T: 34 *with pictures*
- Zapata, Emiliano** [Mexican political leader] Z: 590
Indian, American (In Latin America) I: 178b
Mexico (The Constitution of 1917) M: 472-473 *with picture*; *picture on* M: 459
Zapatista Army of National Liberation Z: 590
- Zapata Off-Shore Company**
Bush, George Herbert Walker (Independent oilman) B: 718
- Zapateado** [dance]
Latin America (Dancing) L: 103
- Zapatista Army of National Liberation** [Mexican political group] Z: 590
Indian, American (Current issues) I: 182-183
Mexico (Recent developments) M: 474
- Zapatistas** [political group] *See* Zapatista Army of National Liberation *in this index*
- Zapotec Indians** [American Indians] Z: 590
Indian, American (Before European contact) I: 169
Mexico (The Classic Period) M: 468
Mixtec Indians M: 680
Monte Albán M: 762
Oaxaca O: 642
Rivera, Diego *picture on* R: 355
- Žapotocký, Antonín** [Czechoslovak political leader]
Czechoslovakia (Communist rule) Ci: 1215-1216
- ZAPU** *See* Zimbabwe African People's Union *in this index*
- Zaragoza** [Spain] *See* Saragossa *in this index*
- Zaragoza, Puebla de** [city, Mexico]
Puebla P: 870
- Zaramo** [people]
Tanzania (The arts) T: 32
- Zarathustra** [religious leader]
Persia, Ancient (Religion) P: 297
Zoroastrianism Z: 611
- Zarya** [newspaper]
Lenin, V. I. (Beginnings of revolution) L: 192
- Zarya** [space module]
International Space Station (History) I: 346b
Space exploration (The International Space Station) So: 722
- Zarzuela** [music]
Spain (Music) So: 739
- Žátopek, Emil** [Czechoslovak runner]
Olympic Games (The postwar games) O: 751-752
Track and field (The early and middle 1900's) T: 357
- Zauberflöte, Die** [opera] *See* Magic Flute, The *in this index*
- Zawditu** [empress of Ethiopia]
Ethiopia (Menelik II) E: 371
- Zaydis** [Muslim sect]
Yemen (People) Y: 562
- Zdákov Bridge** [Czech Republic]
Bridge (table: Steel arch) B: 603
- Zdarsky, Mathias** [Austrian skier]
Skiing (The development of modern skiing) S: 487
- Zealots** [Jewish history]
Barabbas B: 102
Jerusalem (Roman rule) J: 101
Jews (Roman rule) J: 122
Masada M: 262
- Zeami Motokiyo** [Japanese dramatist]
Japanese literature (The medieval period) J: 62
- Zebra** [animal] Z: 591 *with picture*
Animal *picture on* A: 476
Kenya *picture on* K: 298
Lion *pictures on* L: 343
Tanzania *picture on* T: 33
- Zebra mussel** [sea animal] Z: 591 *with pictures*
Animal (Introduction of new species) A: 505
Invasive species (How species become invasive) I: 354j
- Zebra swallowtail** [insect]
Butterfly (Swallowtails) B: 736
- Zebu**
Cattle (Other beef cattle) C: 309
- Zebulun** [Old Testament] Z: 592
- Zechariah** [Biblical figure]
Elizabeth, Saint E: 241
Zechariah, Book of Z: 592
- Zechariah, Book of** [Old Testament] Z: 592
- Zed** [letter]
Z Z: 587
- Zedillo Ponce de León, Ernesto** [Mexican political leader] Z: 592
Mexico (Recent developments) M: 474-475
- Zeeman, Pieter** [Dutch physicist] Z: 592
Lorentz, Hendrik Antoon L: 454
Zeeman effect Z: 592
- Zeeman effect** [physics] Z: 592
Lorentz, Hendrik Antoon L: 454
- Zeidler, Frank P.** [American political leader]
Milwaukee (The 1900's) M: 561
- Zeisberger, David** [American settler]
Ohio (Schools) O: 684; (Exploration and settlement) O: 700
- Zeiss Works** [company] *See* Carl Zeiss *in this index*
- Zeitglockenturm** [clock tower]
Bern (The city) B: 269 *with picture*
- Zelaya, José Santos** [Nicaraguan political leader]
Nicaragua (The United States and Nicaragua) N: 400
- Zelazny, Roger** [American author]
Science fiction (Growing popularity) S: 205-206
- Zelinsky, Paul O.** [American author]
Caldecott Medal (table: 1998) C: 26
- Zelle, Margaretha Gertrud** [German spy]
Mata Hari M: 299
- Zelotes** [Jewish history] *See* Simon, Saint *in this index*
- Zelter, Carl Friedrich** [German musician]
Mendelssohn, Felix (His life) M: 399
- Zemach, Margot** [American artist]
Caldecott Medal (table: 1974) C: 26
- Zemeckis, Robert** [American director]
Motion picture (Best achievement in directing: 1994) M: 862
- Zemi** [religion]
Indian, American (Before European contact) I: 172-173
- Zemskii Sobor** [Russian history]
Russia (The Time of Troubles) R: 549
- Zen** [religion] Z: 593
Asia (Life in Japan) A: 788
Buddhism (Zen) B: 669
New Age movement N: 178
Painting (Chinese painting) P: 44-46
- Zener, Karl E.** [American psychologist]
Extrasensory perception (ESP research) E: 458
- Zener card**
Extrasensory perception (ESP research) E: 458
- Zanger, John Peter** [American journalist] Z: 593
Freedom of the press (In the United States) F: 507-508
Mount Vernon M: 890
New York (Under British rule) N: 314-315; *picture on* N: 317
- Zenith** [astronomy] Z: 593
Nadir N: 2
- Zeno** [East Roman emperor]
Odoacer O: 674
Theodoric T: 252
- Zeno of Citium** [Greek philosopher] Z: 593
Cynic philosophy C: 1205
Philosophy (Ancient philosophy) P: 386-387
Stoic philosophy So: 906
- Zeno of Elea** [Greek philosopher] Z: 593
- Zeno of Sidon** [Phoenician philosopher]
Phoenicia (Decline) P: 395
- Zenobia** [Palmyrene ruler]
Palmyra P: 111
- Zeolite** [mineral] Z: 594
Water softening W: 140
- Zephaniah, Book of** [Old Testament] Z: 594
- Zephyr** [train]
Locomotive (History) L: 417 *with picture*
Railroad (The 1920's and the Great Depression) R: 118
- Zephyrinus, Saint** [pope]
Pope (table) P: 666
- Zeppelin**
Airship (Rigid airships) A: 250; (The zeppelins) A: 252, (World War I) A: 252
Transportation *picture on* T: 390
World War I (The war in the air) W: 460-461
Zeppelin, Ferdinand von Z: 594
- Zeppelin, Ferdinand von** [German engineer] Z: 594
Airship (Rigid airships) A: 250, (The zeppelins) A: 252
- Zepto** [measurement]
Metric system (Metric prefixes) M: 439
- Zerbo, Saye** [African political leader]
Burkina Faso (History) B: 707
- Zernike, Frits** [Dutch physicist]
Nobel Prizes (Physics: 1953) N: 441
Optics (History) O: 813
- Zero** [number] Z: 594
Arabic numerals A: 584
Decimal system (Invention of the decimal system) D: 73
Multiplication (Multiplying by zero) M: 923
Numeration systems (The Hindu-Arabic numeral system) N: 607
- Zero, Absolute**
Absolute zero A: 17
- Zero, Mr.** [literary figure]
Rice, Elmer R: 328
- Zero-base budgeting** [economics]
Sunset laws So: 992
- Zero gravity** *See* Microgravity *in this index*
- "Zero Hour"** [broadcasts]
Tokyo Rose T: 321
- Zero population growth** [demography]
Population (Population control) P: 674
Birth and death rates B: 377
Ehrlich, Paul Ralph E: 145
- Zero-pressura balloon**
Balloon (Gas balloons) B: 58-59 *with picture*
- Zero-sum game**
Game theory G: 22
- Zero-tillage** [agriculture]
Conservation (Soil conservation) Ci: 979-980
- Zeroual, Liamine** [Algerian political leader]
Algeria (Recent developments) A: 365
- Zetta** [measurement]
Metric system (Metric prefixes) M: 439
- Zeus** [Greek mythology] Z: 594
See also Jupiter [Roman mythology] *in this index*
Apollo A: 566
Athena A: 853
Atlas A: 869
Big and Little Dippers (The Little Dipper) B: 296
Cornucopia Ci: 1066
Cronus Ci: 1152
Dionysus D: 215
Endymion E: 273
Europa E: 379
Ganymede G: 27
God (Cosmic Gods) G: 243
Hades H: 4
Helen of Troy H: 168
Hera H: 193
Hercules (Early life) H: 198
Hesperides H: 218
Io I: 369 *with picture*
Mount Olympus M: 886
Mythology (Comparing myths) M: 975; (Greek mythology) M: 978 *with picture*; (table) M: 980
Prometheus P: 817
Rhea R: 290
Tantalus T: 29
Titans T: 300
- Zeus, Statue of** [ancient Greece]
Seven Wonders of the Ancient World (The statue of Zeus) S: 325; *picture on* S: 326
- Zevi, Shabbetai** [Jewish religious leader]
Jews (Eastern European religious movements) J: 123
- Zewail, Ahmed H.** [American chemist]
Nobel Prizes (Chemistry: 1999) N: 444
- Zhang Heng** [Chinese astronomer]
Map (Ancient maps) M: 181-182
- Zhang Qian** [Chinese explorer]
Exploration (The Chinese) E: 441 *with map*
- Zhao Tuo** [Vietnamese ruler]
Vietnam (Nam Viet) V: 369
- Zhao Ziyang** [Chinese government official] Z: 594

- China (Deng Xiaoping) C: 506
Zhelev, Zhelyu [Bulgarian political leader]
 Bulgaria (Political changes) B: 693
Zheng He [Chinese explorer]
 Exploration (Chinese exploration) E: 442
Zhivkov, Todor [Bulgarian political leader]
 Bulgaria (Political changes) B: 693;
 (Communist rule) B: 693
Zhongguo
 China C: 474
Zhou dynasty [Chinese history] Z: 595
 Asia (The Huang He and Yangtze valleys)
 A: 805
 China (Sculpture and pottery) C: 489 *with picture*;
 (Beginnings of Chinese civilization)
 C: 500
 World, History of the (The unification of China)
 W: 431
 Xi'an X: 545
Zhou Enlai [Chinese statesman] Z: 595 *with portrait*
 China (The beginning of Communist rule)
 C: 505
 Trudeau, Pierre Elliott *picture on* T: 463
Zhu Jiang [river, China]
 Guangzhou G: 410 *with picture*
Zhu Rongji [Chinese political leader]
 China (Recent developments) C: 507
Zhu Xi [Chinese philosopher]
 China (The Song dynasty) C: 502
 Confucianism (Later Confucianism) Ci: 937
Zhuangzi [Chinese philosopher] Z: 595
 Chinese literature (Beginnings) C: 511
Zhuangzi [book by Zhuangzi]
 Zhuangzi Z: 595
Zhukov, Georgi Konstantinovich [Soviet general] Z: 595
Zhukovsky, Vasili [Russian poet]
 Russian literature (Preromanticism) R: 560
Zia, Khaleda [Bangladeshi political leader]
 Bangladesh (The new nation) B: 86
Zia-ul-Haq, Mohammed [Pakistani political leader]
 Pakistan (Struggle for democracy) P: 100
 Bhutto, Benazir B: 278
Ziaur Rahman [Bangladeshi political leader]
 Bangladesh (The new nation) B: 86
Zidovudine [drug]
 AIDS (Treatments) A: 164
Ziegfeld, Florenz [American producer] Z: 595
Ziegfeld Follies [musical]
 Ziegfeld, Florenz Z: 595
Ziegler, Karl [German chemist]
 Nobel Prizes (Chemistry: 1963) N: 443
ZIFT [reproduction] See Zygote intrafallopian transfer *in this index*
Zigeunerbaron, Die [operetta by Strauss]
 Strauss, Johann, Jr. So: 921
Ziggurat [architecture]
 Architecture (Mesopotamian architecture)
 A: 611 *with picture*
 Babylon (The New Babylonian Empire) B: 12
 Babylonia (Way of life) B: 13
 City *picture on* Ci: 579
 Tower of Babel T: 349 *with picture*
 World, History of the (The Tigris-Euphrates Valley) W: 422-424
Zigzag sewing machine
 Sewing machine (Kinds of sewing machines)
 S: 333
Zijin Mountain [China]
 Nanjing (The city) N: 10 *with picture*
Zijlaard, Leontien [Dutch athlete]
 Olympic Games *picture on* O: 749
Ziklag [ancient city]
 Amalekites A: 399
Zildjian Company
 Cymbal Ci: 1205
Zilla [political unit]
 Bangladesh (Local government) B: 79
Zillions [magazine]
 Literature for children (The middle and late 1900's) L: 364-365
Zimbabwe Z: 595 *with picture and map*
 Flag *picture on* F: 200
 Guerrilla warfare (History) G: 420-421
 Mozambique (History) M: 905-906
 Mugabe, Robert Gabriel M: 909
 United Kingdom (Decline of the empire)
 U: 71
 Zambia (History) Z: 589-590
 See also the list of Related articles in the Zimbabwe article
Zimbabwe [former city]
 World, History of the (African civilizations)
 W: 437
 Zimbabwe (History) Z: 597
Zimbabwe African National Union [political party]
 Zimbabwe (History) Z: 597
Zimbabwe African National Union-Patriotic Front See ZANU-PF *in this index*
Zimbabwe African People's Union [political party]
 Zimbabwe (History) Z: 597
Zimmerman, Fred R. [American political leader]
 Wisconsin (table) W: 365
Zimmerman, Robert Allen See Dylan, Bob *in this index*
Zimmermann, Arthur [German diplomat]
 Codes and ciphers (History) Ci: 751
Zimmermann, Dominikus [German architect]
 Architecture (Rococo architecture) A: 623
Zimmermann note [1917]
 World War I (The United States enters the war) W: 462
Zinc [element] Z: 598
 Alaska *picture on* A: 297
 Aluminum (Properties of aluminum alloys)
 A: 391-392
 Brass B: 565
 Cadmium C: 12
 Cold, Common (Treatment) Ci: 760
 Plant (Nutrient deficiencies) P: 543
 Sphalerite So: 779
 Trace elements T: 353
Zinc blende [mineral]
 Sphalerite So: 779
 Zinc Z: 598
Zinc chloride [chemical]
 Zinc Z: 598
Zinc oxide [chemical]
 Zinc Z: 598
Zinc sulfate [chemical]
 Sulfate So: 966
Zinc sulfide [chemical]
 Zinc Z: 598
Zincite [mineral]
 Zinc Z: 598
Zinfandel
 Grape (European grapes) G: 319
Zinjanthropus [anthropology] Z: 598
 See also Australopithecus boisei *in this index*
Zinkernagel, Rolf M. [Swiss physiologist]
 Nobel Prizes (Physiology or medicine: 1996)
 N: 445
Zinnemann, Fred [American director] Z: 598
 Motion picture (Best achievement in directing: 1953, 1966) M: 862
Zinnia [plant] Z: 599 *with pictures*
 Flower *picture on* F: 276
Zinoviev, Grigori [Soviet political leader]
 Union of Soviet Socialist Republics (Stalin gains power) U: 36
Zinzendorf, Count Nicholas von [German religious leader]
 Moravian Church M: 801
Ziolkowski, Korczak [American sculptor]
 South Dakota (Places to visit) So: 672
Zion [religion] Z: 599
Zion Canyon [region, Utah]
 Zion National Park Z: 599
Zion Christian Church
 South Africa (Religion) So: 612
Zion Investment Associates
 Sullivan, Leon Howard So: 969
Zion National Park [Utah] Z: 599
 National Park System (table: National parks)
 N: 49
Zionism [Jewish history] Z: 599
 Anti-Semitism A: 559
 Arab-Israeli conflict (Historical background)
 A: 582
 Begin, Menachem B: 219
 Dreyfus affair (The result of the Dreyfus affair)
 D: 348
 Haskalah H: 82
 Hebrew literature (Modern Hebrew literature)
 H: 162-163
 Herzl, Theodor H: 217
 Holocaust (After the Holocaust) H: 296b
 Israel I: 478
 Jerusalem (British rule) J: 101
 Jews (The Zionist movement) J: 123
 Minority group (Results of minority status)
 M: 609-610
 Palestine (The Zionist movement) P: 105
 Palestinians P: 107
ZIP Code Z: 600
 Postal Service, United States (Classes of mail)
 P: 699
Zipper Z: 600 *with picture*
 Sewing (Fastenings) S: 333
Zipporah [Biblical figure]
- Moses (Early life) M: 828-829
Zircaloy [metal]
 Zirconium Z: 600
Zircon [gem] Z: 600
 Diamond (Imitation diamonds) D: 183
 Earth (Earth's early development) E: 26 *with picture*
 Gem *picture on* G: 78
Zirconium [element] Z: 600
Zither [musical instrument] Z: 601 *with picture*
Zn
 Zinc Z: 598
Zócalo [Mexico City]
 Mexico City (Downtown) M: 476-476a
Zodiac [astrology] Z: 601 *with pictures*
 Astrology (The zodiac) A: 827
 Horoscope (Parts of a horoscope) H: 341
 Planet (Observing the planets) P: 507-508
Zodiacal light Z: 602
Zog I [king of Albania]
 Albania (Independence) A: 307
Zohar [religious book]
 Hebrew literature (Medieval works) H: 162
 Kabbalah K: 208
Zoisite [mineral]
 Tanzanite T: 36
Zola, Émile [French author] Z: 602
 Dreyfus, Alfred (Efforts to clear Dreyfus's name) D: 347
 French literature (Naturalism) F: 522
 Naturalism (Naturalism in fiction) N: 65
 Novel (France) N: 573
Zöllner, Heinrich [German composer]
 Opera (*Faust*) O: 804
Zollverein [organization]
 Customs union Ci: 1201
Zolotow, Charlotte [American author]
 Regina Medal (table: 2002) R: 206
Zona pellucida [anatomy]
 Reproduction, Human (Fertilization) R: 246
Zond program
 Space exploration (Soviet attempts to reach the moon) So: 720-721
Zone [astronomy]
 Jupiter (Physical features of Jupiter) J: 198 *with picture*
Zone [military]
 Rank, Military (Promotion) R: 140
Zone defense
 Basketball (Defensive strategies) B: 147
 Football (The defensive team) F: 357-358
Zone melting [industrial process] Z: 602
Zonians [people]
 Panama Canal Zone P: 127
Zoning [air conditioning]
 Air conditioning (Kinds of air conditioners)
 A: 179
Zoning [law] Z: 602
 Housing (Local housing controls) H: 391
 Building permit B: 684
 City planning (Governmental authority) Ci: 601
Zoning Improvement Plan See ZIP Code *in this index*
Zoo Z: 603 *with pictures*
Zoogeography
 Geography (Physical geography) G: 93
Zooid [biology]
 Bryozoan B: 657
Zoological garden See Zoo *in this index*
Zoological Society of London
 Aquarium, Public (History) A: 580
Zoologist [occupation]
 Animal (The scientific classification of animals)
 A: 472
 Careers (Life, physical, and social sciences)
 C: 225
 Zoo (Scientific studies) Z: 604
 Zoology (Careers in zoology) Z: 611
Zoology Z: 610
 See also Animal *in this index*
 Biology (table) B: 317
 Careers (Life, physical, and social sciences)
 C: 225
 Life L: 274
 Reproduction R: 242
 See also the list of Related Articles in the Zoology article
Zoom lens
 Camcorder (How a camcorder works) C: 75 *with diagram*
 Camera (Single-lens reflex cameras) C: 82-83
 Photography (Single-lens reflex cameras)
 P: 417
 Television (Putting a show on the air) T: 111-112
Zoonosis [disease]
 Veterinary medicine V: 345

Zooplankton

- Environmental pollution (Water pollution) E: 334
 Ocean (The plankton) O: 655; (The food cycle) O: 655 *with pictures*
 Pacific Ocean (Ocean life) P: 15
 Plankton P: 515
- Zoospore** [biology]
 Spore So: 801
- Zooxanthella** [alga]
 Coral (Stony corals) Ci: 1048
 Coral reef (Life on coral reefs) Ci: 1048b-1049
- Zorba the Greek** [book by Kazantzakis]
 Kazantzakis, Nikos K: 252
- Zori**
 Japan (Clothing) J: 39
- Zorn, Anders Leonhard** [Swedish painter]
 Sweden (Fine arts) So: 1027 *with picture*
- Zoroaster** [Persian prophet] See Zarathustra in *this index*
- Zoroastrianism** [religion] Z: 611 *with picture*
 Fast F: 52
 Fire worship F: 132
 India (Other religions) I: 117
 Magi M: 48
 Mithra M: 679
 Persia, Ancient (Religion) P: 297
- Zorrilla, José** [Spanish dramatist]
 Don Juan D: 306
 Spanish literature (The 1800's) So: 761
- Zorrilla de San Martín, Juan** [Uruguayan author]
 Latin-American literature (Romanticism) L: 112
- Zoser** [king of ancient Egypt]
 Egypt, Ancient (The Old Kingdom) E: 142 *with picture*
 Imhotep I: 79
 Pyramids (The first pyramids) P: 916
- Zoshchenko, Mikhail** [Russian author]
 Russian literature (World War II) R: 564
- Zosimus, Saint** [pope]
 Pope (table) P: 666
- Zosterophyllophyte** [plant]
 Plant (Early plants) P: 540
- Zouaoua** [people]
 Zouaves Z: 612
- Zouaves** [soldiers] Z: 612
- Zoysia grass**
 Lawn (Planting the grass) L: 142-144
- ZPG** [demography] See Zero population growth in *this index*
- ZPG-3W**
 Airship (Nonrigid airships) A: 250; (World War II to the present) A: 252
- Zr** [symbol]
 Zirconium Z: 600

- ZrSiO₄**
 Zircon Z: 600
- Zsigmondy, Richard** [Austrian chemist]
 Nobel Prizes (Chemistry: 1925) N: 442
- Zucchini** Z: 612 *with picture*
 Squash (Summer squashes) So: 813 *with picture*
- Zuccone, Lo** [sculpture by Donatello]
 Donatello D: 307
- Zuckerman Unbound** [book by Roth]
 Roth, Philip R: 487
- Zuckmayer, Carl** [German dramatist]
 German literature (German literature after 1945) G: 142
- Zugspitze** [mountain]
 Germany (The Bavarian Alps) G: 157
- Zuider Zee** [bay]
 Netherlands N: 138
- Zukerman, Pinchas** [Israeli violinist] Z: 612
- Zuleika Dobson** [book by Beerbohm]
 Beerbohm, Max B: 212
- Zulkadah** [month]
 Calendar (The Islamic calendar) C: 29
- Zulu** [African people] Z: 612
 Africa *picture on A*: 117
 Bantu B: 99
 Inkatha Freedom Party I: 273
 Mythology (African mythology) M: 982
 Shaka S: 343
 South Africa (People) So: 609; (Political parties) So: 609; (History) So: 617-618
 Xhosa X: 544
- Zululand** [region, South Africa]
 Natal N: 25
- Zuma** [rock]
 Abuja A: 19
- Zuni Indians** [American Indians] Z: 613
 Cibola, Seven Cities of Ci: 551
 Coronado, Francisco Vázquez de Ci: 1067
 Indian, American *picture on I*: 167
 Sculpture (As a record of history) S: 228-229;
 (The European impact) S: 244 *with picture*
 Tribe T: 440
- Zunz, Leopold** [German scholar] Z: 613
- Zurbarán, Francisco de** [Spanish painter] Z: 613
 Moors *picture on M*: 797
 Painting (The Spanish masters) P: 64 *with picture*
- Zurich** [Switzerland] Z: 613 *with picture*
 Lake dwelling L: 37
- Zurich, University of**
 Switzerland (Education) So: 1053-1054
- Zurich-London Agreements** [1959]
 Cyprus (History) Ci: 1207
- Zurich Novellas** [book by Keller]
 Keller, Gottfried K: 254

- Zurkhaneh** [athletic club]
 Iran (Recreation) I: 402 *with picture*
- Zuse, Konrad** [German inventor]
 Computer (The first electronic computers) Ci: 924b
- Zvezda** [spacecraft]
 International Space Station (History) I: 346b *with picture*
- Zwaanendael**
 Delaware (Exploration and early settlement) D: 110
- Zwaanendael Museum** [Lewes]
 Delaware (Places to visit) D: 102
- Zwecker, Johann** [American artist]
 Indian, American *picture on I*: 177
- Zweig, George** [American physicist]
 Atom (Recent discoveries) A: 876
 Physics (Advances in the mid-1900's) P: 442
 Quark Q: 7
- Zweig, Stefan** [Austrian author] Z: 614
- Zwiliich, Ellen Taaffe** [American composer]
 Z: 614
 Classical music (Classical music today) Ci: 651
- Zwinger** [museum]
 Dresden D: 346
- Zwingli, Huldreich** [Swiss religious leader]
 Z: 614
 Protestantism (The conservative reform movements [the 1500's]) P: 834
 Reformation (Zwingli and the Anabaptists) R: 197
 Switzerland (Religious civil wars) So: 1060
- Zworykin, Vladimir Kosma** [Russian-American physicist] Z: 614
 Electronics (The vacuum tube era) E: 215; *picture on E*: 216
 Iconoscope I: 25
 Television (Early development) T: 125
- Zygomatic bone**
 Face F: 3
 Head *diagram on H*: 123
- Zygote** [reproduction]
 Alternation of generations A: 388
 Embryo E: 257
 Fern (Life cycle of a fern) F: 75
 Fertilization F: 78
 Moss (How mosses live) M: 834-835
 Multiple birth (How multiple births occur) M: 920
 Reproduction, Human (How sex is determined) R: 246
- Zygote intrafallopian transfer** [reproduction]
 Infertility (Treatment) I: 265
- Zyrians** [people]
 Arctic (In the European arctic) A: 639

WITHDRAWN

No longer
Boston Public Library
Sale of this material benefited the Library

BOSTON PUBLIC LIBRARY



3 9999 04651 922 7

WITHDRAWN

No longer the property of the
Boston Public Library.

Sale of this material benefited the Library.

